Reading the Gendered Body in Early America

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For decades, scholars have described the nineteenth century as an era of "separate spheres." During the early national period, they have shown, Americans defended gender hierarchies by arguing that "the sexes" were inherently different beings who should occupy distinct realms within society. Peddling a "cult of true womanhood," early American authors suggested that home and family constituted the woman's domain, while politics was the province of men. Recent histories have complicated this narrative in productive ways, pointing out that "separate spheres" and "true womanhood" were rhetorical constructs rather than accurate depictions of people's lived experiences. Even when gender ideologies were stark and rigid, people's identities and behaviors inevitably varied according to race, class, and region. Scholars have nonetheless agreed on two major points: Americans embraced increasingly inflexible ideas about gender by the early decades of the nineteenth century, and they rationalized these ideas, at least in part, with the help of science.[1]

Both Americans and Europeans did indeed begin to think about sex and gender in new ways by the end of the eighteenth century. In the sixteenth and seventeenth centuries, scientists conceptualized women as inferior, underdeveloped versions of men. This "one-sex model" of humanity, as the historian Thomas Laqueur so famously put it, envisioned male and female bodies as essentially the same—different in degree but not in kind. Over the course of the eighteenth century, though, a new conception of sexual difference emerged.[2]

With the rise of Enlightenment rationalism, Europeans and Americans could no longer rationalize gender hierarchies by merely invoking a divinely sanctioned hierarchy of humanity. Existing inequities seemed

to necessitate more empirical explanations, and physicians and anatomists stepped in with answers. Placing new emphasis on skeletons and reproductive organs, they argued that men and women were unique and complementary beings with distinct brains, bodies, and behaviors. This "two-sex model" posited that male and female bodies were innately, unalterably, and unmistakably different. If male and female bodies were opposites, the thinking went, then perhaps biology—not theology—justified existing gender relations.

Early American historians have generally agreed that these new scientific understandings of the body provided a conceptual bedrock for the restrictive gender ideologies which came to predominate by the mid-nineteenth century. As Rosemarie Zagarri argued, Americans were temporarily willing to embrace a more expansive political role for women during the revolutionary era. Yet by the early nineteenth century, this spirit of egalitarian possibility largely dissipated. Zagarri suggested that the two-sex model constituted part of the logic for this "revolutionary backlash" against women's political activism. As Americans came to view women and men as incommensurable opposites, she asserted, "the body became the basis for exclusion from the polity." John Wood Sweet similarly contended that "new anatomical understandings of male and female bodies helped justify the exclusion of women across the country from the emerging public sphere." Clare A. Lyons too showed that Americans found ways to "reconceptualize gender" in the post-Enlightenment era "by positing radical differences between men and women and fixing them in the anatomical body."[3]

This narrative is tidy and compelling: as gender ideologies became more rigidly defined, so too did scientific ideas about the body. On its own, though, the prevailing interpretation fails to fully explain how early Americans understood sex and gender in a practical sense. For one, much existing scholarship in the history of science and medicine focuses on the works of elite European naturalists. When gender historians cite this work, they typically imply that novel scientific theories shaped American society and politics, rather than demonstrating precisely *how* this happened. We know a great deal about how transatlantic intellectuals viewed anatomy and physiology. But how did the general population make meaning from the human body? Did they care about science? If so, what discourses and disciplines did they find most compelling? Where

did people access scientific knowledge? How did Americans interpret bodies, on the ground, in everyday life? In other words, how did people see gender?

To answer those questions, we need to look beyond the two-sex model—and away from a study of European naturalists—and turn our attention to disciplines like phrenology, a popular science rooted in a simple assumption: that people's faces and skulls revealed their character and personality. Nowadays, we dismiss phrenology as the quintessential example of pseudoscientific quackery. But in the decades between the American Revolution and the Civil War, people perceived it quite differently. At a time before modern neuroscience and psychology existed—and when the boundary between popular and professional science proved murky at best—phrenology became one of the most popular and accessible tools that Americans had for understanding human minds and bodies.[4]

By focusing on phrenology, we can rethink established historiographical interpretations of sex, gender, and science in early America. It is certainly true that physicians and naturalists began describing bodies in new ways by the late eighteenth century. But when ordinary people interpreted bodies, they rarely engaged in abstruse debates about skeletons, gametes, and gonads. Rather than looking below the belt, they stared above the shoulders. Through phrenology, they fashioned a practical method for mapping cultural ideas about race and gender onto the human body. In the process, they developed a much more flexible understanding of sexual difference than most scholarship has acknowledged.

While the two-sex model depicted male and female bodies as incommensurable opposites, phrenologists popularized what I call the "one-brain model." The two-sex model emphasized the distinct and complementary reproductive systems of men and women: men had testes, women had ovaries; men had penises, women had vaginas; men had sperm, women had eggs. The one-brain model, by contrast, highlighted the basic similarity of all human beings. Like the older one-sex model, the one-brain model posited that men and women were different in *degree* rather than in *kind*. Shifting their focus from the genitals to the cranium, phrenologists saw the brain as the entity that made individuals who they fundamentally were as people. This made the brain the most important determinant of one's gender identity.

Phrenologists did not ignore bodily differences. In fact, they consistently emphasized "natural" distinctions between male and female forms. Yet they also repeated a constant refrain: all human beings shared more similarities than differences. They maintained that all people's brains contained the same basic organs, faculties, and propensities, regardless of race, sex, or ethnicity. This allowed phrenologists to make a clever (if sometimes confounding) argument. Even as they portrayed men and women as opposite sexes, they made allowances for individuals who eluded these binary categories. Such a framing created space for gender fluidity and allowed individuals to see themselves as potential exceptions to established gender stereotypes. Phrenology, in other words, encouraged all Americans to imagine themselves as cognitively distinctive beings who were naturally endowed with both feminine and masculine characteristics. By validating an older, more flexible conception of the human body, phrenology created space for Americans to challenge newly restrictive ideologies of gender complementarity, even as it provided a scientific foundation for those same ideas.

Phrenological theory rested on a few basic assumptions. First, practitioners claimed that the brain functioned as both the "dome of thought" and the "palace of the soul." Second, phrenologists argued that the brain was not a monolithic entity but rather a collection of distinct "organs" that controlled different aspects of character or personality. Third, they suggested that the brain quite literally imprinted itself on the skull, molding the skeletal structure from the inside out. In the phrenological worldview, the best way to understand the human mind was by analyzing the size and shape of the cranium.

The simplicity and practical elegance of phrenological theories made the science appealing in both popular culture and exclusive intellectual circles. Phrenology started as an elite European science in the 1790s but became ubiquitous in American society between the 1830s and 1850s. By midcentury, phrenological imagery saturated the nation's novels, newspapers, and magazines. Traveling lecturers conveyed cranial doctrines to rural and urban areas alike. Children learned about phrenology in school. Adults talked about it in public places and at private parties. Particularly for literate Americans, the science became an inescapable part of the nation's cultural fabric. Not everyone agreed with phrenological theories. Countless Americans ridiculed the science as "humbuggery" or

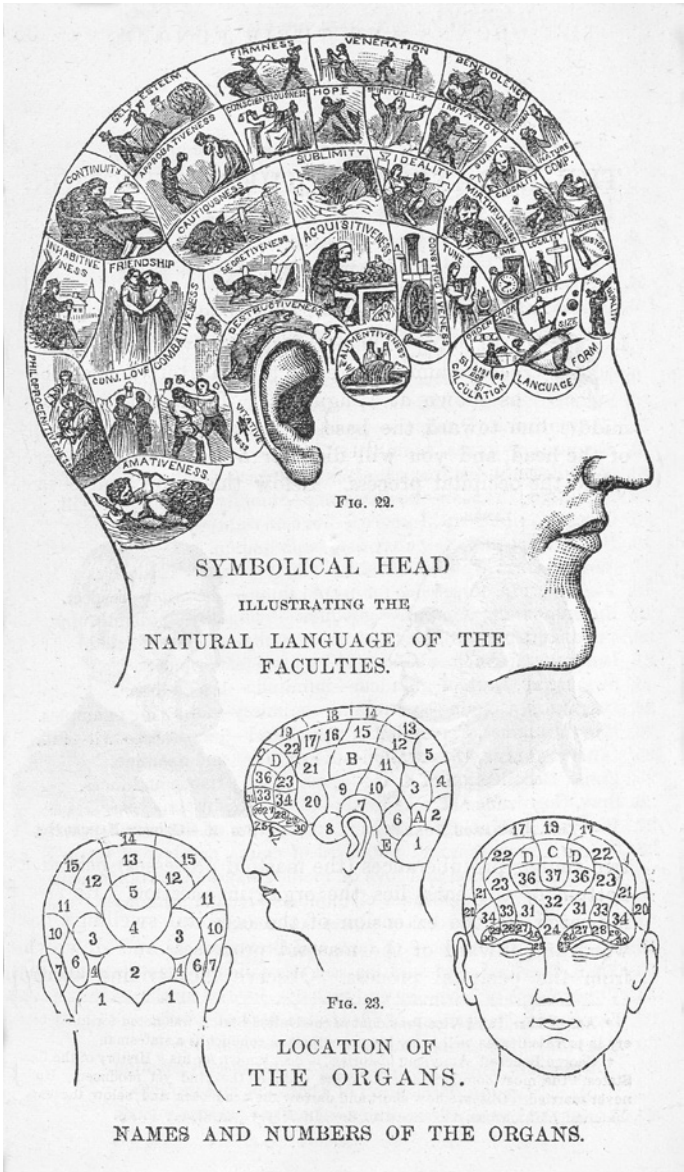

Fig. 1. "Symbolical Head Illustrating the Natural Language of the Faculties," in Samuel Wells, *How to Read Character: A New Illustrated Handbook of Phrenology and Physiognomy* (New York: Fowler and Wells, 1882), 36. (Courtesy, American Antiquarian Society)

"bumpology." Still, even the most skeptical dabblers attained at least a basic fluency in the language of skulls. The science became inescapable, if not irrefutable—compelling, if not universally convincing.[5]

What, then, made phrenology so popular? Part of its allure was its pledge to make the invisible visible. Phrenology suggested that bodies hid secrets in plain sight—and that people could uncover those secrets through empirical investigation. The practical benefits seemed limitless. Desperate for knowledge about themselves, Americans wondered, How smart am I? Am I generous? Thoughtful? Kind? Do I have a propensity for violence? Would I make a good parent? Could I become a famous writer? Am I a budding entrepreneur? Phrenology provided answers. It helped people believe, as one nineteenth-century woman put it, that "the whole map of the mind is drawn in legible marks on the skull." This was a beguiling promise. Science had taken a mysterious entity—the human mind—and made it finally seem "legible."[6]

Phrenology started as an elite science. Although always controversial, it initially garnered adherents from some of the most prominent intellectual circles in the transatlantic world. Yet phrenology soon developed into a more practical discipline that required neither a university education nor expensive medical training. It became quite simply a science of the people. At a time when "metaphysicians" and "mental philosophers" engaged in impenetrable debates about human cognition, phrenological apostles proclaimed that anyone could become an expert in cranial interpretation. They published cheap, user-friendly guidebooks with instructions on how to read heads and faces. Rather than excluding the working classes, White women, or people of color from scientific knowledge, they encouraged a diverse array of individuals to study the human mind. After all, everyone could stare at someone's skull or attend a free lecture. For a nominal fee, Americans could even get their heads examined or purchase a cranial bust. Mary Virginia Montgomery, for instance, was a young Black woman who not only subscribed to the *American Phrenological Journal* but also acquired a plaster bust to become a more proficient skull reader. Despite being born enslaved, she eventually became a free woman and an autonomous cranial interpreter. Phrenology was beyond useful. It was *accessible*.[7]

Mastering the phrenological method was relatively simple. The first step required learning about the tripartite division of the human brain. Phrenologists associated the frontal lobe with intellectual functions like

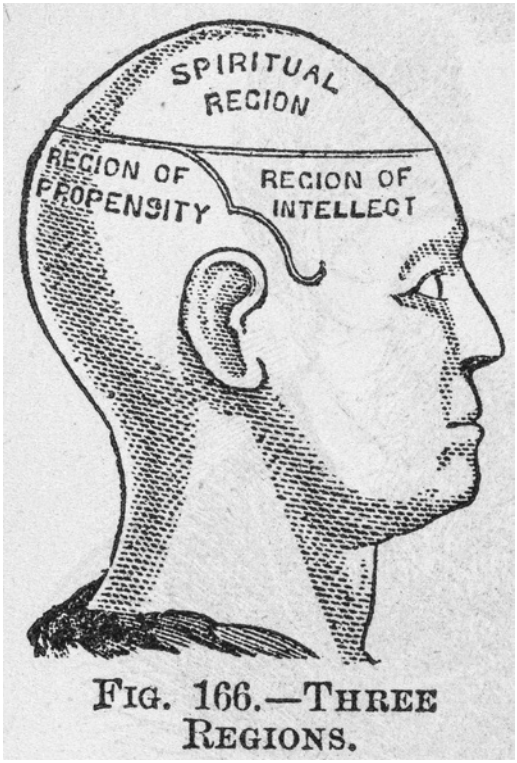

FIG. 2. "Three Regions," in Samuel Wells, *How to Read Character: A New Illustrated Hand-book of Phrenology and Physiognomy* (New York: Fowler and Wells, 1882), 124. (Courtesy, American Antiquarian Society)

reason, perception, and deliberation. In a smart person, they argued, the front part of the brain would grow strong and powerful, producing a robustly developed forehead or a "high brow." If a person lacked sophistication or refinement, though, they would exhibit a wide head that bulged out above the ears and at the base of the neck. This was because the lateral and posterior parts of the brain allegedly controlled the "animal propensities," which included characteristics like "combativeness," "destructiveness," and the visceral yearning for food and sex. By contrast, the brain's upper regions housed the "moral sentiments." In a person of particular benevolence, virtue, or religiosity, the crown of the head signaled a superior morality.[8]

Beyond these general rules, phrenological doctrines proved adaptable and malleable. Two individuals might look at the same head—and perhaps even agree about the size and shape of the organs—but come to radically

different conclusions about a person's character. A large organ of "combativeness" could expose someone as unreasonably argumentative, but it might simply suggest their willingness to fight for their principles. A large organ of "acquisitiveness" might indicate a ravenous appetite for hoarding worldly possessions, but when tempered by strong intellectual faculties and moral sentiments, that organ might signal an admirable desire to establish personal independence through property ownership. Phrenology privileged the observations of the analyzer. Still, cranial subjects—who were themselves versed in the tenets of phrenology—could always contest the findings of their skull interpreters. In the end, every person held the power to decode the human brain.

The intellectual flexibility of phrenological doctrines allowed Americans to rationalize potentially contradictory propositions. On one hand, the science presumed the constitutional inequality of people's brains, bodies, and characters, suggesting that there were winners and losers in the hereditarian lottery. On the other hand, phrenology gave Americans hope that craniums did not invariably dictate one's destiny. Embedded within phrenological doctrines was the optimistic message that every human being could improve. As people refined their mental faculties and moral sentiments, their brains would develop, pressing on the skull in all the right areas until their internal reformation became palpably visible on their bodies.[9]

The *American Phrenological Journal* cited Laura Bridgman as a paradigmatic example of this phenomenon. After studying with Samuel Gridley Howe at the Perkins Institution for the Blind, she purportedly experienced a "perceptible change . . . in the size and shape of her head" and "a marked increase in the size of the forehead." The institution apparently misplaced the preliminary measurements of Bridgman's cranium, so they relied on anecdotal impressions of her mental and skeletal progress. For phrenological enthusiasts like Dr. Howe, the missing data was no problem. As he saw it, Bridgman's anatomical metamorphosis was dramatic enough to verify that the brain was not merely a gelatinous mass of mental activity but also a malleable and powerful organ that dictated the very shape of the skull.[10]

Phrenologists understood the brain as a formidable entity that both shaped people's character and determined their gender identities. In *The Phrenological Almanac for 1841,* one of the United States' most influential phrenologists, Lorenzo Fowler, articulated a theory about the gendered

brain. Phrenology, he argued, was the best tool for understanding the "difference between the sexes" because even the briefest introduction to "phrenological principles" allowed someone to spot the distinctions between male and female craniums. For starters, men generally had bigger brains and broader heads with "a higher and deeper forehead." Since phrenologists associated the depth and breadth of the forehead with intelligence, they generally considered men to be smarter than women. At the very least, men's expansive foreheads meant their minds were more powerful. Female skulls, by contrast, appeared "higher and fuller in the coronal or upper region." Because the top of the skull revealed benevolence, virtue, and religiosity, women's soaring coronal regions allegedly illustrated their "stronger feelings and moral sentiments." In other words, men were thinkers while women were feelers, and men were more intelligent while women were more virtuous. How could one argue with a human skull?[11]

Following nineteenth-century gender conventions, phrenologists contended that men's skulls displayed a boldness and combativeness that female craniums lacked, whereas women's skulls revealed a natural propensity for rearing children. Yet even as phrenologists laid out such gendered expectations, they insisted those rules did not apply in every instance. Yes, women *generally* acted more virtuous, submissive, and caring than men. But some women were sneaky, assertive, violent, or aloof. Although most women could not match masculine genius, some possessed powerful brains and the cranial conformations to match. For instance, when the phrenologist Nelson Sizer analyzed Susan B. Anthony's skull in 1853, he complimented her exceptional brain: "Your intellect is active," he declared, "and your mind more naturally runs in the channel of intellect than of feeling." He then postulated that Anthony's "reasoning organs" were improving, becoming more powerful than her "perceptions." Through these remarks, he articulated a coded argument about gender.[12]

Nineteenth-century scientists regularly argued that women were excellent perceivers and imitators but not profound deliberators or inventive reasoners. Sizer reinforced the message with Anthony's diagnosis, though only in part: "At fifteen your mind was devoted to facts and phenomena; of late years you have been thinking of principles and ideas." Sizer ultimately concluded that Anthony's faculties had improved over time, setting her on the path toward masculine genius. At the very least, she was doing better than a Pennsylvania man named John Bancroft, who

solicited an exam from Sizer just a year later. Although Bancroft had a good "knowledge of facts" and could "pick up practical information," he was not particularly impressive: "Your intellect is not naturally strong," Sizer penned. Anthony, by contrast, was a thinker. Through skull readings such as these, phrenologists simultaneously confirmed and counteracted scientific truisms about masculine and feminine brains.[13]

In cranial analysis, phrenologists allowed for exceptions to the gendered rules and made room for a person's individuality to shine through. Such a reality allowed phrenologists to simultaneously articulate antithetical arguments. For example, phrenologists maintained that the heads of the sexes were always distinguishable, boasting that when given a random skull, they could easily determine the gender. And yet, the one-brain model suggested that male and female brains were marked by "a difference in *degree,* although none in *kind*."[14] Men and women exhibited all the same organs, just in different proportions. This held true even for the most dramatically gendered organs: "amativeness" (the desire for sex) and "philoprogenitiveness" (the love of children). Regardless of a person's sex or gender identity, these two organs existed in every human skull. It was not as if women had no libido and men felt zero love for their children. Phrenologists simply concluded that women typically had larger organs of philoprogenitiveness—making them more devoted parents—while men displayed larger organs of amativeness. Still, the rules were not universal. When a man named Thomas (his last name is illegible) got his head examined, he discovered that his organ of philoprogenitiveness was "VERY LARGE": a "7" on a "1" to "7" scale. The examiner concluded that Thomas would "be apt to spoil children."[15]

Phrenologists willingly admitted that their guidelines might not ring true for every individual. Any person's head could flout phrenological rules without undermining the science. This point became especially clear in the case of Phoebe George Bradford, a socialite from Wilmington, Delaware. Bradford solicited a cranial examination from Orson Fowler in 1838. During the reading, she learned that her organ of "Order" was "unusually developed," meaning that she liked to have "a place for everything" and that she always put "everything in its place." Bradford disagreed. "Quite a mistake," she declared in her journal. Still, she concurred with plenty of Fowler's other claims. The phrenologist told her that she was kind, honest, confident, energetic, and persevering. She accepted these conclusions without complaint. He also guessed that Bradford was

a flighty individual who struggled to "think long on any subject," instead preferring to "fly from one thought to another." She conceded that "in this, he hit the truth exactly." Bradford did not hesitate to critique elements of Fowler's diagnosis. She nonetheless found herself "much amused" by her cranial adventures and carefully recorded the phrenologist's comments in her journal. Her case illustrates a phenomenon that many Americans experienced: they happily accepted the parts of phrenology that resonated with them, even when they rejected the conclusions that failed to match their personal beliefs.[16]

What makes Bradford's reading so compelling, though, is its depiction of how phrenologists used science to convey messages about gender, power, and proper womanhood. After reading Bradford's head, Fowler informed her that she was unique. She had the organ of "self esteem fully developed," when "not one woman in fifty has this organ even moderate." Such a skeletal conformation indicated that she was "entirely independent" in her viewpoints and firm to the point of "obstinacy." These might have been perceived as positive traits for a man, but as historian Barbara Welter so powerfully demonstrated, cheerful submission was an essential tenet of "true womanhood" during the mid-nineteenth century. Bradford thus flouted established gender roles through her firmness and unapologetic self-confidence.[17] Fowler reinforced this point when speculating about the gender dynamics in Bradford's home. After describing his client as an "ardent" lover and "a kind, but not indulgent parent," Fowler deduced that she must "love to command and not brook submission." He then suggested that her "husband was a meek, quiet man who was silent when [his wife] was finding fault." Bradford did not refute these suppositions, but she added a parenthetical disclaimer: "(not always the case certainly)."[18]

Based purely off Phoebe Bradford's cranium, Fowler felt comfortable dissecting the power dynamics of her marriage. The phrenologist never analyzed Mr. Bradford's head. He simply assumed that Phoebe's husband was "a meek, quiet man." After all, her skull suggested that she was obstinate, energetic, and eager to command. Such a cranium marked a woman who would "not brook submission." Fowler then formulated his hypothesis: if Bradford was failing to submit to her husband, then her husband must be submitting to her. Such role reversal violated nineteenth-century gender ideals, which required women to be docile, domestic, and solicitous of their husbands' needs. Intriguingly, though,

Fowler never criticized Bradford for her boldness. He merely noted it and moved on. Perhaps this was because of his own familiarity with spirited and independent women. His sister Charlotte Fowler Wells spearheaded the family's business empire throughout much of the nineteenth century, while his sister-in-law Lydia Folger Fowler became the second woman to earn a medical degree in the United States (behind only Elizabeth Blackwell). At a time when popular newspapers, magazines, and advice books lambasted "strong-minded women," American phrenologists instead nurtured the boldness of female activists and intellectuals.[19]

Phrenologists created space for women to buck existing gender conventions, despite reinforcing those conventions in their published works. Orson Fowler, for instance, published scores of books, articles, and almanacs declaring that men had greater firmness and self-esteem than women. This did not stop him from casually informing Phoebe Bradford that she was bolder, firmer, and more self-assured than her husband. While maintaining that established norms remained true in the aggregate, phrenologists suggested that any individual woman could defy expectations. Women in the abstract might be less profound, more sexually restrained, and less aggressive than men. Yet some women exhibited soaring brows (signaling impressive rational faculties), wide heads (revealing destructive tendencies), or large protuberances at the napes of their neck (exposing a propensity for amatory indulgence). Because each person's head was distinctive, there were unlimited potential permutations of faculties and propensities. As historian Carla Bittel argued, "Gender differences were made visible and tangible" through cranial analysis, but they were always "subject to negotiation." Phrenological doctrines were elastic enough to allow for versatile understandings of the gendered mind.[20]

Cranial theory encompassed similarly contradictory ideas about race and ethnicity. As a rule, phrenologists advocated for a one-brain model of human difference, which emphasized the common humanity of all individuals. Yet on numerous occasions they hinted that people of different ancestries were inherently dissimilar, suggesting that an experienced skull interpreter could identify the racial or ethnic background of a cranium without ever meeting the person. In an article on "The Superiority of the Caucasian Race," the *American Phrenological Journal* matter of factly asserted that Anglo-Saxon "brains are superior in size, and more perfect in figure, than the brains of any other variety." Orson

Fowler likewise contended that Black Americans had "small reasoning organs," which left "them but little depth and strength of intellect, and a feeble judgment." Phrenologists often proclaimed that Black Americans possessed receding foreheads and protruding jaws (traits that allegedly signaled weak intellects and high animal propensities). And while most phrenologists in the United States opposed slavery, some used the science to defend the institution.[21]

Phrenological doctrines were nonetheless malleable enough to allow for exceptions to these racist rules. When the influential Fowler family analyzed the head of Sarah Margru Kinson Green, a captive from the *Amistad* who went on to study at Oberlin College, they described her as exceptional—in both senses of the word. She had "unusual intellectual powers," which were visible in her "broad and high" forehead. Yet she was not merely an extraordinary human being in the general sense. She was, they claimed, "far superior to Africans generally." Through these few short sentences, the Fowlers deployed an insidious rhetorical strategy: they acknowledged Green's intelligence, only to suggest that she was different—better somehow—than other Black people. The sleight of hand allowed them to cling to racist ideas while elevating certain individuals as models of Black excellence. In the end, phrenology reinforced prevailing racial and gender stereotypes by suggesting that White men were smarter—and stronger—than all women, that White Americans were more intelligent and more capable than Black Americans, and that White women were more beautiful than women of color.[22]

Women of color, understandably, developed a fraught relationship with phrenology. Unlike White women and Black men, Black women did not seem to write publicly about the science. Yet that did not mean that they were unaware of or uninterested in it. In the years following her emancipation, Mary Virginia Montgomery "studied Bumpology," "enjoyed" reading her "Phren Journal," and "had a lively time" examining the heads of her fellow classmates at Oberlin College.[23] Journals of the poet, teacher, and abolitionist Charlotte Forten likewise show familiarity with phrenology.[24] Famous Black abolitionist and women's rights activist Sojourner Truth became a curious phrenological dabbler when she solicited a skull reading from Nelson Sizer (who analyzed Susan B. Anthony's skull in 1853). An abolitionist himself, Sizer declared that Truth was "ingenious" and lauded her "courage," "moral firmness," and "love of justice." Unlike white feminists, though, Truth never published her

results.[25] The influential journalist and anti-lynching activist Ida B. Wells stayed similarly silent about phrenology in public, although she casually discussed the science with one of her romantic interests in 1886.[26] As all these examples show, Black women clearly knew about phrenology and sometimes used it to evaluate themselves and others. Yet doing so required trudging through a morass of discriminatory discourses that marked them as doubly inferior.

Phrenological texts were riddled with racial and gender biases. The science nonetheless achieved enormous popularity among abolitionists and women's rights activists. Why? Part of the reason lay in the fact that phrenologists self-identified as reformers, forging friendships with some of the era's most prominent activists and intellectuals. Perhaps more importantly, phrenologists presented the American public with a philosophy of mind that emphasized universal humanity—and improvability. In response, abolitionists and women's rights activists tended to embrace phrenology as a practical and potentially radical science that might support their crusades for social justice. Susan B. Anthony, Elizabeth Cady Stanton, Sojourner Truth, Theodore Dwight Weld, Abby Kelley Foster, Lucretia Mott, and William Lloyd Garrison comprise just a small sampling of the abolitionists who commissioned cranial examinations. This was of course a common thing to do in mid-nineteenth-century America. Soliciting a skull reading did not necessarily signal a sincere or lasting dedication to phrenology. Even so, many of these activists publicly discussed their fondness for the science. Garrison was so impressed with phrenology that he published his diagnosis in *The Liberator,* marveling that Lorenzo Fowler sketched his character with "striking accuracy" despite being "entirely ignorant of the person whose head he was examining." The article concluded that the precision of Garrison's skull reading could not "be accounted for in any other way, than by supposing the science of Phrenology to be founded in truth." Although Garrison's editorial team acknowledged that many people dismissed phrenology as "a humbug," they mused that even if it were a quack science, "Mr. Fowler beats all other yankees at *guessing!*"[27]

Garrison's fondness for phrenology was hardly unique within his social and political circles. The woman's rights activist and dress reformer Amelia Bloomer published laudatory articles and advertisements about phrenology in her newspaper, *The Lily.* Harriet Beecher Stowe used phrenological imagery in her antislavery novels. Her brother, the famous

minister Henry Ward Beecher, became a dedicated phrenological enthusiast who incorporated cranial doctrines into his sermons. In fact, it was Beecher who first got Orson Fowler interested in the science (they were college roommates). Black abolitionists such as Frederick Douglass, William J. Wilson, and William Wells Brown deployed phrenological language to advocate for racial justice, while Quaker abolitionists like Lucretia Mott, Abby Kelley Foster, and William Bassett invoked the science to physiologically rationalize their dedication to the antislavery crusade. Making the connection between science and politics explicit, Abby Kelley once lauded the "blunt radicalism" of phrenological thought.[28]

Elizabeth Cady Stanton became similarly enamored with phrenology, seeing it as a rational philosophy that might eventually demonstrate the intellectual equality of women and men. In a speech that she "delivered several times immediately after the first Woman's Rights Convention," Stanton discussed the one-brain model: "The Phrenologist says that woman's head has just as many organs as man's and that they are similarly situated," she explained, noting that phrenologists "do not divide heads according to sex." She also pointed to an exciting tenet of phrenology: people could improve their minds and bodies with cultivation. She saw this as a hopeful doctrine for women, who lacked the same educational opportunities as their male counterparts. Stanton nonetheless understood problems that phrenology posed for women. Phrenologists, she griped, had a habit of labeling "all the fine heads masculine and all the ill shaped feminine, for when a woman presents a remarkable large well developed intellectual region, they say she has a masculine head, as if there could be nothing remarkable of the feminine gender." Stanton grumbled that phrenologists gave "all the glory to masculinity," even when talking about female skulls. By contrast, whenever they encountered a man with "a small head very little reasoning power and the affections inordinately developed they say he has a woman's head." None of this dissuaded her from using the science. Despite its problems, phrenology provided Stanton with an expansive vision of the gendered mind.[29]

Abolitionists and women's rights activists must have been encouraged when the most famous phrenologists in the United States expressed sympathy for their political crusades. The influential Fowler and Wells family stayed cravenly silent on the question of slavery for the most part, but they also employed men such as John Brown Jr. (son of the famous abolitionist) and Nelson Sizer (who praised the Underground Railroad

and reviled "pro-slavery sharks").[30] In a more direct way, the Fowler and Wells publishing house explicitly fashioned itself as an advocate of the "rights of woman" that aspired to use the power of science to expand "woman's sphere." Women, members of the family argued, should have access to scientific knowledge, be able to cultivate a profession, engage in political activism, attend college, and fully develop their mental faculties. The Fowlers even argued in favor of female suffrage and developed friendly professional relationships with feminist activists.[31]

By the 1850s, the Fowler and Wells firm had begun dutifully chronicling all the triumphs and tribulations of the women's rights movement in the pages of the *American Phrenological Journal.* Its editors printed flattering sketches of female suffragists and White abolitionists (though they conspicuously eschewed positive portrayals of most Black activists). They also published Elisha Hurlbut's treatise on human rights, which made a vociferous craniological argument for women's enfranchisement. The book presented readers with a rousing vindication of the one-brain model: "It is established by phrenological science," Hurlbut proclaimed, "that woman is endowed with precisely the same mental faculties as man—that, nevertheless, she enjoys some of these in a higher and some in a less degree than her sturdy brother." He never argued that male and female brains were exactly alike. In fact, he contended that women might indeed be intellectually inferior to men. Hurlbut nevertheless claimed that the minds of men and women were more similar than different, and he therefore saw no logical or scientific reason to prohibit women from voting. Through such publications, influential phrenologists provided Americans with innovative ways of thinking about gender difference, as well as a scientific rationale for women's political advancement. Not surprisingly, then, many female activists embraced cranial analysis.[32]

Even when they were skeptical of phrenology, women used the science to make sense of their gender identities in very practical and quotidian ways. In May 1841, the Transcendentalist, author, and women's rights activist Caroline Healey visited her dentist "to have some teeth filled." As a Dr. Keep worked on her mouth, he broached the subject of phrenology. Healey expressed ambivalence, positing that it might well be a "charlatan faith." Still, she talked about phrenology with ease and had no trouble launching into a detailed discussion of her own organs. At one point, she mentioned that her closest friend and fellow New Englander

Martha Choate had urged her to get her head examined by one of the Fowler brothers. Healey balked. "I esteemed him one of many quacks," she recalled.[33]

Her dentist expressed greater enthusiasm. He felt sure that Fowler would give Healey "a fine head," adding that he himself had been captivated by her cranium. Declaring that "he was phrenologist enough" to diagnose her character, Keep noted Healey's enormously large organs of "self-esteem" and "Firmness," interpreting them to mean that she was both self-confident and resolute. Despite these strengths, her musical talents apparently left much to be desired. Her organ of "Tune" was only a "3" on a scale that ran from "1" (very small) to "7" (very large). The dentist ranked Healey higher in other areas. Her organs of "Caution" and "Secretiveness" were quite large, and her "intellectual development was very wonderful." Keep nonetheless questioned the power of Healey's mind. She apparently lacked the dogged temperament of her father, which meant that she would struggle to achieve great things. Healey both internalized this message and scoffed at it: "Dr Keep—gave me—little mathematical genius—which was wrong—I have a great deal." Even so, her confidence coexisted with nagging doubts about her own capacities. If she indeed possessed all the "magnificent powers" that the dentist identified in her skull, then why did she always "sink" whenever she encountered "a difficulty"? Her current struggles seemed to belie his pronouncements.[34]

At least the dentist graciously eschewed a discussion of her "passions," which would have been "somewhat embarrassing." Knowing herself, Healey assumed that her "amativeness" (sexual drive) and "philoprogenitiveness" (love of children) were "both at 7." Thankfully, the dentist stayed mum on the subject. In the privacy of her own journal, though, Healey felt comfortable tackling it. Her entry is a fascinating mix of frankness and coded language. When she speculated about her amativeness and philoprogenitiveness, Healey exhibited knowledge of phrenological principles. She knew that her skull marked her as a lover of children (and thus a model of proper womanhood). But she also bluntly admitted something that others might have found indecorous: she had a high sex drive and was fond of male company. For that reason, she breathed a sigh of relief when her dentist avoided a discussion of her passions. Other women were not so lucky.[35]

In a cautionary tale about what could happen when women submitted their skulls for examination, Healey told the story of "H," a local woman

who was outed as having a healthy appetite for male attention. Referring to this embarrassing episode, one of Healey's friends expressed anxiety about "what might be said" about her own character if she risked a cranial reading. Then, she turned the inquisition onto Healey. Why, this woman wondered, was Healey so hesitant to have her "head publicly examined"? Was she also "afraid" that the examiner would expose her bulging organ of amativeness to a live audience? "I told her no!" Healey exclaimed. If phrenology was a "just" science, then it would correctly identify "the strength of my passions—if only to add—that they are in the strong check of Reason."[36]

By carefully distinguishing between her animal propensities and the rational faculties that governed them, Healey repeated a common phrenological argument. Just because one possessed a powerful libido—or a tendency toward gluttony, destructiveness, or secrecy—it did not mean that one was ruled by those traits or unable to regulate them. In fact, phrenologists argued that there were no inherently bad characteristics. Everyone had the same organs after all. The goal was a "well-balanced head." So long as moral sentiments and intellectual faculties remained strong enough to govern baser passions, then it was perfectly fine to have robust amorous tendencies. Seizing on this argument, Healey willingly acknowledged the potency of her animal propensities, but in the same breath she insisted that her mental and moral developments were stronger. In any case, phrenology might turn out to be humbuggery. If that were true, she reasoned, "what should I care to be told as H. was the other day, that I could not exist out of the society of the other sex?"[37]

Healey's entry makes it clear that women used phrenology to assess and disclose their anxieties and self-doubts. Healey, for instance, was both confident and insecure. She believed she possessed "mathematical genius" and strong rational faculties. Yet she worried that her animal nature was too strong. Healey insisted that she was unashamed by the marks of libidinal appetite on her skull and maintained that she refused to allow Fowler to examine her head because she "did not care to encourage" a quack scientist. Even so, her hesitancy clearly sprung—at least in part—from fear of public exposure. She admitted that it would have been "somewhat embarrassing" to have her dentist expounding on her amorous tendencies. Surely it would have been more embarrassing to have those tendencies revealed before a live audience? Despite her protestation

that she "need not fear the truth," Healey was evidently nervous about subjecting herself to a public examination.[38]

Healey's private musings reveal that early Americans thought about their identities in phrenological terms. She might have denounced phrenology as a "charlatan faith," but that did not stop her from using the science to analyze her own capacities. She also assumed that others would use phrenology to evaluate her. Healey might not have expected to have her character laid bare by her family dentist when she walked in for a filling. But she was neither surprised nor offended by the intrusion. After all, she had already been conversing about her phrenological organs with her friends.

Beyond giving people a way to make sense of their gendered identities, phrenology furnished Americans with a scientific language for discussing sex and desire. At a time when the nation's leading moralists insisted that women were fundamentally "passionless," phrenologists encouraged women to imagine themselves not just as wives and mothers but also as sexual beings.[39] As historian Carla Bittel brilliantly argued, phrenologists urged men and women to think about "cranial compatibility" when searching for a spouse. During the 1850s, the Fowler and Wells publishing house regularly printed courtship advice and provided readers with guidance on how to find someone with complementary phrenological endowments. It even allowed subscribers to write to the journal editors and ask for advice on what sorts of skeletal conformations they should seek in a potential partner.[40]

Some women took this advice seriously. In 1843, the influential abolitionist and women's rights activist Abby Kelley read Lorenzo Fowler's book on phrenology and matrimony while courting her fellow abolitionist Stephen Symonds Foster. She gave it a positive review and asked her partner to procure a copy as soon as he could.[41] Rachel Bowman similarly used phrenology to navigate her romantic pursuits. Bowman earned a degree from Otterbein University in Ohio during an era when higher education was inaccessible for most women. She met her future husband, Samuel Eckerman Cormany, while completing her studies. During their courtship, Rachel spent an evening poring over "a Phrenalogical Journal." She "found some good pieces, marked some," and thought about sending them to her beloved "S. E. C." She held back, though, worrying "that he would think me rather too fast." What did she mean? Why

would phrenological articles mark her as "too fast"? The answer becomes clear in a later entry, where she mentioned that she had been "reading extensively" about phrenology and matrimony. If Rachel refrained from sending certain excerpts to Samuel, it was likely because they contained material about sex, the skull, and the phrenological foundations for marriage. Luckily, the match worked out. Rachel and Samuel were happily wedded in November 1860. Then, just a few months after the ceremony, they went to get their heads examined together.[42]

Phrenology ultimately gave women a language for talking about their bodies, brains, and gender identities. Regardless of whether they trusted in its scientific infallibility, they used it to evaluate others and make sense of their own identities and desires. In a very practical way, it furnished Americans with a method for reading the people they encountered each day.

American women continued to rely on phrenology to understand their minds and bodies, long after most elite scientists turned their noses up at the science. Emily Hawlie Gillespie, for instance, was an Iowa feminist, wife, and mother who attended phrenological lectures and subscribed to the *American Phrenological Journal* well into the latter decades of the nineteenth century. In both 1882 and 1883, Gillespie took her children to get their heads examined. Each experience delighted her. Her son Henry received "a model Chart." Whether he chose a career as a mechanic, doctor, photographer, merchant, or dentist, his head predicted success. "All of it was good," Gillespie buoyantly recounted. She was also thrilled with her daughter Sarah's reading: "I *am* so *glad* she has got it, it is a splendid examination." When the phrenologist told Sarah that her daughter should go into medicine, Gillespie could barely contain her excitement: "Only think of it both my Children *Doctors*—well I am proud of it & will help them all I can."[43]

Despite being fiercely proud of her children, Gillespie could not help but wonder what she might have achieved had she not become a mother. When one phrenologist told her that she had "the most remarkable head he ever examined," she sunk into wistful melancholy. "I could be one of the finest poets, one of the best authors, & in the finest arts I could have reached the very highest," Gillespie lamented. Of course, she never reached such heights. She had given up the dream of literary fame to care for her family. Her cranium only revealed the disjuncture between her

extraordinary capabilities and what she had in fact accomplished. Finding another way to mobilize her literary talents, Gillespie paraphrased the famous poet John Greenleaf Whittier: "The saddest words from tongue or pen, / Are these—it might have been." Phrenology brought both joy and sadness into Gillespie's life. On the one hand, it assured her of her family's exceptionality. On the other hand, it reminded her of all the dreams she had forsaken. What good was it to know that you could have been one of the world's most impressive poets if you abandoned your literary ambitions for motherhood? "All is well," she insisted. "My Children amply repay me for all I have been obliged to—well—give up." It was an unconvincing attempt at cheerful resignation.[44]

Gillespie penned these words in 1885, long after phrenology had receded in popularity. Although elite White men had once embraced phrenology, the United States' medical and scientific establishment no longer considered it a legitimate discipline by the late nineteenth century. In the 1850s and 1860s, these men had started aggressively distinguishing themselves from the phrenological "quacks" of the past and began forming societies that emphasized the value of professional credentials and university degrees. Turning away from phrenology, they embraced disciplines like craniology, evolutionary biology, physical anthropology, and eugenics. In the process, they ignored how foundational phrenology had been for their own intellectual development in the preceding decades. But even as professional men abandoned the more flexible phrenological model of the early national and antebellum decades, women like Emily Gillespie held onto it.[45]

Phrenology appealed to American women not only because they saw it as a tool of self-knowledge but also because it provided the intellectual flexibility to craft and negotiate their own gender identities. At a time when scientists and political thinkers insisted that men and women were innately distinct beings who should occupy "separate spheres," phrenologists encouraged women to see themselves as neurologically distinctive individuals who might be anyone, go anywhere, and do anything they desired. They laid out a series of gendered rules, to be sure, but they also made it clear that women could break those rules when necessary. Women who were happy with existing norms could take comfort in their "feminine" identities, but those who resented societal expectations could emphasize their distinctiveness or relish how their craniums contradicted dominant stereotypes.

Until recently, historians of gender in the early republic have mostly ignored the study of phrenology. When they grapple with it at all, they largely denounce it as harmful to women—an early form of biological essentialism or, at the very least, a science that strengthened society's commitment to theories like "separate spheres" and gender complementarity. Early American women, though, saw something in phrenology that scholars are just beginning to take seriously. Phrenology was clearly a problematic and discriminatory science, but it was also a flexible discipline that allowed women to think creatively about their gender identities and envision alternate possibilities for their lives. By examining women's uses of this science, scholars can reconstruct an early American world where gender ideologies were not as rigid or confining as we often assume.

Of course, twenty-first-century historians should not romanticize phrenology. At best, it was a misguided method for studying human character and cognition. At worst, it was a toxic discipline that weaponized the rhetoric of empirical discovery and deployed it to perpetuate gender and racial discrimination. Phrenology rested on a series of problematic assumptions: that external beauty revealed internal character, that some brains were inherently superior to others, and that social inequities could be legitimate—so long as they reified the "natural" differences that already divided human beings. Phrenology helped both elite thinkers and ordinary people make excuses for scientific racism and gender essentialism. It not only set the stage for later forms of biological determinism and eugenics; it also helped make these concepts popular.

Despite its many problems, phrenology appealed to scores of women in the early United States—particularly those who self-identified as intellectuals, abolitionists, and women's rights activists. These women saw phrenology as a flawed but flexible science that gave women a nuanced and practical method for thinking about human difference and gender identity and armed them with tools to carve out a place in the world. Through intimate and personalized cranial readings, phrenologists highlighted women's strengths and idiosyncrasies, assuring them that they were unique and special, confident and intelligent, firm and bold, and perhaps even masculine. For those who felt trapped by existing gender conventions, phrenology must have been liberating. By confirming that everyone's brain was unique, the science assured Americans that there was more than one way to be a "true woman."

Questions to Consider

1. How did Americans use phrenology to think about gender identity in the early republic?
2. What problems did phrenology pose for women? What possibilities did it open for those who wanted to challenge prevailing gender stereotypes?

Notes

1. For rigidity of nineteenth-century gender ideologies, see Barbara Welter, "The Cult of True Womanhood: 1820–1860," *American Quarterly* 18, no. 2 (Summer 1966): 151–74; Nancy F. Cott, *The Bonds of Womanhood: "Woman's Sphere" in New England, 1780–1835* (New Haven, CT: Yale University Press, 1977); and Jeanne Boydston, *Home and Work: Housework, Wages, and the Ideology of Labor in the Early Republic* (New York: Oxford University Press, 1990). For intersections between science and gender, see Carroll Smith-Rosenberg and Charles Rosenberg, "The Female Animal: Medical and Biological Views of Woman and Her Role in Nineteenth-Century America," *Journal of American History* 60, no. 2 (September 1973): 332–56; Elizabeth Fee, "Nineteenth-Century Craniology: The Study of the Female Skull," *Bulletin of the History of Medicine* 53, no. 3 (Fall 1979): 415–33; Cynthia Eagle Russett, *Sexual Science: The Victorian Construction of Womanhood* (Cambridge, MA: Harvard University Press, 1989); Carla Bittel, *Mary Putnam Jacobi and the Politics of Medicine in Nineteenth-Century America* (Chapel Hill: University of North Carolina Press, 2009); and Kimberly A. Hamlin, *From Eve to Evolution: Darwin, Science, and Women's Rights in Gilded Age America* (Chicago: University of Chicago Press, 2014). For "separate spheres" and the "cult of true womanhood" reflecting ideology rather than lived reality, see Linda K. Kerber, "Separate Spheres, Female Worlds, Woman's Place: The Rhetoric of Women's History," *Journal of American History* 75, no. 1 (June 1988): 9–39; Carol Lasser, "Beyond Separate Spheres: The Power of Public Opinion," *Journal of the Early Republic* 21, no. 1 (Spring 2001): 115–23; and Cathy N. Davidson and Jessamyn Hatcher, eds., *No More Separate Spheres! A Next Wave American Studies Reader* (Durham, NC: Duke University Press, 2002).
2. Thomas Laqueur, *Making Sex: Body and Gender from the Greeks to Freud* (Cambridge, MA: Harvard University Press, 1990), 4, 149. See also Londa Schiebinger, "Skeletons in the Closet: The First Illustrations of the Female Skeleton in Eighteenth-Century Anatomy," *Representations* 14 (Spring

1986): 42–82; Ludmilla Jordanova, *Sexual Visions: Images of Gender in Science and Medicine Between the Eighteenth and Twentieth Centuries* (Madison: University of Wisconsin Press, 1989); Schiebinger, *The Mind Has No Sex? Women in the Origins of Modern Science* (Cambridge, MA: Harvard University Press, 1989); and Schiebinger, *Nature's Body: Gender in the Making of Modern Science* (Boston: Beacon Press, 1993). For scholars who have challenged or provided more nuance for Laqueur's argument, see Michael Stolberg, "A Woman down to Her Bones: The Anatomy of Sexual Difference in the Sixteenth and Early Seventeenth Centuries," *Isis* 94, no. 2 (June 2003): 274–99; Karen Harvey, "The Substance of Sexual Difference: Change and Persistence in Representations of the Body in Eighteenth-Century England," *Gender and History* 14, no. 2 (December 2002): 202–23; and Helen King, *The One-Sex Body on Trial: The Classical and Early Modern Evidence* (New York: Routledge, 2013).

3. Rosemarie Zagarri, *Revolutionary Backlash: Women and Politics in the Early American Republic* (Philadelphia: University of Pennsylvania Press, 2007), 184; John Wood Sweet, *Bodies Politic: Negotiating Race in the American North, 1730–1830* (Baltimore: Johns Hopkins University Press, 2003), 296; Clare A. Lyons, *Sex Among the Rabble: An Intimate History of Gender and Power in the Age of Revolution, Philadelphia, 1730–1830* (Chapel Hill: University of North Carolina Press, 2006), 2. See also Bruce Burgett, *Sentimental Bodies: Sex, Gender, and Citizenship in the Early Republic* (Princeton, NJ: Princeton University Press, 1998), 95; Kirsten Fischer, *Suspect Relations: Sex, Race, and Resistance in Colonial North Carolina* (Ithaca, NY: Cornell University Press, 2001), 4; Catherine Kerrison, *Claiming the Pen: Women and Intellectual Life in the Early American South* (Ithaca, NY: Cornell University Press, 2006), 55–56; Sheila L. Skemp, *First Lady of Letters: Judith Sargent Murray and the Struggle for Female Independence* (Philadelphia: University of Pennsylvania Press, 2009), 307; Donald Ratcliffe, "The Right to Vote and the Rise of Democracy, 1787–1828," *Journal of the Early Republic* 33, no. 12 (Summer 2013): 246; and Susan Ware, *American Women's History: A Very Short Introduction* (New York: Oxford University Press, 2015), 23.
4. I use the word "science" deliberately. As numerous scholars have argued, "pseudoscience" is a problematic word. It suggests that disciplines like phrenology do not count as real sciences, simply because they were later discredited. Phrenology was always a contested form of knowledge, but elite thinkers and ordinary people took it seriously in the nineteenth century. On the overlap between "popular" and "proper" science in the nineteenth century, see Richard Yeo, *Defining Science: William Whewell, Natural Knowledge and Public Debate in Early Victorian Britain* (New

York: Cambridge University Press, 1993); Daniel Patrick Thurs, *Science Talk: Changing Notions of Science in American Culture* (New Brunswick, NJ: Rutgers University Press, 2007); Ralph O'Connor, "Reflections on Popular Science in Britain: Genres, Categories, and Historians," *Isis* 100, no. 2 (June 2009): 333–45; Katherine Pandora, "Popular Science in National and Transnational Perspective: Suggestions from the American Context," *Isis* 100, no. 2 (June 2009): 346–58; Sherrie Lynne Lyons, *Species, Serpents, Spirits, and Skulls: Science at the Margins in the Victorian Age* (Albany: SUNY Press, 2009); and Britt Rusert, *Fugitive Science: Empiricism and Freedom in Early African American Culture* (New York: New York University Press, 2017).

5. On European origins, see Roger Cooter, *The Cultural Meaning of Popular Science: Phrenology and the Organization of Consent in Nineteenth-Century Britain* (New York: Cambridge University Press, 1984). On rising popularity in the United States, see John D. Davies, *Phrenology, Fad and Science: A 19th-Century American Crusade* (New Haven, CT: Yale University Press, 1955); Madeleine Stern, *Heads and Headlines: The Phrenological Fowlers* (Norman: University of Oklahoma Press, 1971); Cynthia S. Hamilton, "'Am I Not a Man and a Brother?' Phrenology and Anti-Slavery," *Slavery and Abolition* 29, no. 2 (June 2008): 173–87; Carla Bittel, "Woman, Know Thyself: Producing and Using Phrenological Knowledge in 19th-Century America," *Centaurus* 55, no. 2 (May 2013): 104–30; Susan Branson, "Phrenology and the Science of Race in Antebellum America," *Early American Studies* 15, no. 1 (Winter 2017): 164–93; James Poskett, *Materials of the Mind: Phrenology, Race, and the Global History of Science, 1815–1920* (Chicago: University of Chicago Press, 2019); Bittel, "Testing the Truth of Phrenology: Knowledge Experiments in Antebellum American Cultures of Science and Health," *Medical History* 63, no. 3 (July 2019): 352–74; Courtney E. Thompson, *An Organ of Murder: Crime, Violence, and Phrenology in Nineteenth-Century America* (New Brunswick, NJ: Rutgers University Press, 2021); Rachel E. Walker, "Facing Race: Popular Science and Black Intellectual Thought in Antebellum America," *Early American Studies* 19, no. 3 (Summer 2021): 601–40; and Walker, *Beauty and the Brain: The Science of Human Nature in Early America* (Chicago: University of Chicago Press, 2022).
6. Rebecca Gratz to Maria Gist Gratz, 9 March 1834, in *Letters of Rebecca Gratz,* ed. David Philipson (Philadelphia: Jewish Publication Society, 1929), 195.
7. Mary Virginia Montgomery, diary, in *We Are Your Sisters: Black Women in the Nineteenth Century,* ed. Dorothy Sterling (New York: Norton, 1984), 462–72.

8. For an early articulation of such ideas in American phrenological thought (built on and replicating conclusions of European thinkers such as Franz Gall, Johann Gaspar Spurzheim, and George Combe), see Orson Squire Fowler, *Fowler's Practical Phrenology* (Philadelphia: O. S. Fowler and L. N. Fowler, 1840).
9. To improve patients' craniums and characters, phrenologists encouraged deliberate "mental exercise"; see "Mental Exercise as a Means of Health," *American Phrenological Journal* 2, no. 2 (November 1839): 85–93. Rebecca Gratz, a Jewish educator and philanthropist, articulated this idea in her private manuscripts; see Rebecca Gratz to Maria Gist Gratz, 9 March 1834.
10. "The Case of Laura Bridgman," *American Phrenological Journal* 3, no. 12 (September 1841): 563. On Howe's relationship to phrenology, see Harold Schwartz, "Samuel Gridley Howe as Phrenologist," *American Historical Review* 57, no. 3 (April 1952): 644–51. See also Ernest Freeberg, *The Education of Laura Bridgman: First Deaf and Blind Person to Learn Language* (Cambridge, MA: Harvard University Press, 2001).
11. Lorenzo N. Fowler, *The Phrenological Almanac for 1841* (New York: W. J. Spence, 1840), 8.
12. "Phrenological Reports, 1853," in *The Elizabeth Cady Stanton and Susan B. Anthony Reader: Correspondence, Writings, Speeches,* ed. Ellen Carol Dubois (1981; rpt. Boston: Northeastern University Press, 1992), 275–76. On cranial interpretations of women as having superior minds, see, for example, "Phrenological Developments of Gottfried, a Murderess," *American Phrenological Journal* 2, no. 12 (September 1840): 542–44.
13. "Phrenological Reports, 1853," 275–76; Nelson Sizer Phrenological Character of Mr. John B. Bancroft, 24 February 1854, Historical Medical Library, College of Physicians of Philadelphia.
14. Elisha Hurlbut, *Essays on Human Rights and Their Political Guaranties* (New York: Fowlers and Wells, 1845), 12.
15. Adeline Barnes, a woman who solicited a cranial reading around the same time, had only a "LARGE" development of this organ, coming in at a "6." Both readings appeared in marked-up copies of *Fowler's Practical Phrenology* (1840) held by the Library Company of Philadelphia.
16. Phoebe George Bradford, diary, 20 December 1838, in *Phoebe George Bradford Diaries,* ed. W. Emerson Wilson (Wilmington: Historical Society of Delaware, 1975), 87–88.
17. Welter, "The Cult of True Womanhood," 152.
18. For further discussion, see Bittel, "Testing the Truth of Phrenology."
19. Phoebe George Bradford, diary, 20 December 1838, 87–88. For critiques of strong-minded women and laudatory portrayals of female modesty, see J. C., "The Blue-Stocking," *New World: A Weekly Family Journal of Popular*

Literature, Science, Art and News 2, no. 11 (13 March 1841): 171; "My Cousin Nell," *Journal of Agriculture* 2, no. 11 (2 June 1852): 83–86; "Strong-Minded Women," *Gleason's Pictorial Drawing-Room Companion* 5, no. 2 (9 July 1853): 29; Horace Greeley, "A Fable for Strong-Minded Women: Respectfully Addressed to Lucy Stone," *Prisoner's Friend: A Monthly Magazine Devoted to Criminal Reform, Philosophy, Science, Literature, and Art* 7, no. 11 (1 July 1855): 372; and Genio C. Scott, "For the Home Journal: Interesting to Ladies," *Home Journal* 26, no. 542 (28 June 1856): 4. For phrenologists' defenses of intellectual women, see "Sketchings," *The Crayon* 2, no. 2 (11 July 1855): 24–25, and "High Foreheads, Beauty, and Intellect," *American Phrenological Journal* 23, no. 3 (March 1856): 61–62.

20. Carla Bittel, "Unpacking the Phrenological Toolkit: Knowledge and Identity in Antebellum America," in *Working with Paper: Gendered Practices in the History of Knowledge,* ed. Carla Bittel, Elaine Leong, and Christine von Oertzen (Pittsburgh: University of Pittsburgh Press, 2019), 107.
21. "The Superiority of the Caucasian Race," *American Phrenological Journal* 3, no. 3 (December 1840): 124–26; Fowler, *Fowler's Practical Phrenology,* 32. Also see "The Negro and Caucasian Brain Compared," *American Phrenological Journal* 3, no. 6 (March 1841): 282–83, and O. S. and L. N. Fowler, *New Illustrated Self-Instructor in Phrenology and Physiology* (New York: Fowlers and Wells, 1854), 41. Charles Caldwell, an enslaver and early phrenological expert, used phrenology to support slavery. For analysis, see Branson, "Phrenology and the Science of Race in Antebellum America," and Hamilton, "'Am I Not a Man and a Brother?'" For Black intellectuals embracing and repurposing phrenology, see Rusert, *Fugitive Science,* 121–26, and Walker, "Facing Race."
22. "Sarah Kinson, or Margru," *American Phrenological Journal* 12, no. 1 (1 July 1850): 231, reprinted in *The Illustrated Phrenological Almanac for 1851* (New York: Fowler and Wells, 1850), 30. See also Thompson, *An Organ of Murder,* 24, and Poskett, *Materials of the Mind,* 62.
23. Mary Virginia Montgomery, diary, entries for 29 March, 24, 30 November 1872, in Sterling, ed., *We Are Your Sisters,* 462–72.
24. Forten extolled Nathaniel Hawthorne's "splendid head" and said it bore "the unmistakeable impress of genius and superior intellect"; see entry for 10 July 1854, in *The Journals of Charlotte Forten Grimké,* ed. Brenda Stevenson (New York: Oxford University Press, 1988), 84.
25. For Sojourner Truth's relationship to phrenology, see Darcy Grimaldo Grigsby, *Enduring Truths: Sojourner's Shadows and Substance* (Chicago: University of Chicago Press, 2015), 13–14, and Margaret Washington, *Sojourner Truth's America* (Urbana: University of Illinois Press, 2009), 179.

26. Ida B. Wells, journal, entries for 21–28 January 1886, in Sterling, ed., *We Are Your Sisters,* 481–82.
27. For William Lloyd Garrison's relationship with phrenology, see Goldwin Smith, ed., *The Moral Crusader: William Lloyd Garrison—A Biographical Essay* (New York: Funk and Wagnalls, 1892), 115. For Garrison's phrenological reading, see "Miscellaneous," *The Liberator* (Boston, MA), 21 September 1838. Also see "Prospectus of the American Phrenological Journal and Miscellany," *The Liberator,* 16 November 1838, and "Phrenology," *The Liberator,* 29 November 1839.
28. Abby Kelley to Stephen S. Foster, 30 January 1843, Abigail Kelley Foster Papers, American Antiquarian Society, Worcester, MA. For examples of phrenology in *The Lily,* see "The Phrenological and Water Cure Journals," *The Lily* (Seneca Falls, NY), 1 May 1853; Senex, "Harper's Editor and the Women. No. VI," *The Lily* (Mount Vernon, Ohio), 15 August 1854; and "What Woman Needs," *The Lily* 6, no. 12 (Mount Vernon, Ohio), July 1854. For Henry Ward Beecher's relationship with phrenology, see T. J. Ellinwood, ed., *Autobiographical Reminiscences of Henry Ward Beecher* (New York: Frederick A. Stokes, 1898), 38. For physiognomy and phrenology in *Uncle Tom's Cabin,* see Harriet Beecher Stowe, *Uncle Tom's Cabin; or, Life Among the Lowly,* 2 vols. (Boston: John P. Jewett, 1852), 1:13–14, 16, 40–41, 98, 133, 184, 211–12, 229, 269; 2:12, 32, 70, 102, 112, 114, 164, 166, 181, 189. On Black intellectuals and popular sciences, see Walker, "Facing Race." On Quakers using phrenology to understand political radicalism, see Lucretia Mott to George Combe, 13 June 1839, in *Selected Letters of Lucretia Coffin Mott,* ed. Beverly Wilson Palmer (Urbana: University of Illinois Press, 2002), 53. See also William Bassett to Abby Kelley, 12 November 1838, and Kelley to Mr. and Mrs. Hudson, 12 April 1841, Abigail Kelley Foster Papers.
29. "Address by ECS on Woman's Rights," in *The Selected Papers of Elizabeth Cady Stanton and Susan B. Anthony: In the School of Anti-Slavery, 1840 to 1866,* ed. Ann D. Gordon (New Brunswick, NJ: Rutgers University Press, 1997), 103. For Stanton's phrenological analysis (and Susan B. Anthony's), see "Phrenological Reports, 1853," 269–76. For Stanton's response, see *Elizabeth Cady Stanton as Revealed in Her Letters, Diary and Reminiscences,* ed. Harriet Stanton Blatch and Theodore Stanton, 2 vols. (New York: Harper and Brothers, 1922), 2:46–47. For Stanton's relationship to phrenology, see also Bittel, "Woman, Know Thyself," 118–19, and Walker, *Beauty and the Brain,* 134–35.
30. See Samuel Wells to John Brown Jr., 2 March 1854; Nelson Sizer to Brown, 26 March 1860, Charles E. Frohman Collections, Rutherford B. Hayes Presidential Library, Fremont, OH.

31. For examples, see "The Worcester Female Convention," *American Phrenological Journal* 12, no. 9 (September 1850): 291–92; "Reform in the Condition of Woman," *American Phrenological Journal* 12, no. 10 (October 1850): 318–22; Peggoty, "Woman's Rights," *American Phrenological Journal* 14, no. 4 (October 1851): 89–90; "Woman's Rights Convention," *American Phrenological Journal* 14, no. 4 (October 1851): 90; Anna, "Woman! Her Rights and Duties," *American Phrenological Journal* 14, no. 6 (December 1851): 127–28; "Woman's Rights Convention," *American Phrenological Journal* 15, no. 4 (October 1852): 91–92; and "Woman's Rights Convention," *American Phrenological Journal* 17, no. 2 (February 1853): 43–44. For the journal's glowing profiles of female activists, see "Character and Biography of Amelia Bloomer: Biographical Sketch," *American Phrenological Journal* 17, no. 3 (March 1853): 50–53; "Biography: Paulina Wright Davis," *American Phrenological Journal* 17, no. 6 (June 1853): 11–13; "Biography: Elizabeth Oakes Smith," *American Phrenological Journal* 18, no. 5 (November 1853): 109–11; "Grace Greenwood: A Portrait, Biography, and Phrenological Character," *American Phrenological Journal* 19, no. 1 (January 1854): 5–8; and "The Champions of Social Reform," *American Phrenological Journal* 49, no. 3 (March 1869): 93–96.
32. Hurlbut, *Essays on Human Rights,* 113. The Fowler and Wells publishing house gave both material and intellectual support to the suffrage movement and forged friendships with leading activists. Stanton and her coeditors enlisted the aid of Charlotte Fowler Wells when publishing the first volume of *The History of Woman Suffrage;* see Elizabeth Cady Stanton, Susan B. Anthony, and Matilda Joslyn Gage, eds., *The History of Woman Suffrage, 1848–1861,* 6 vols. (New York: Fowler and Wells, 1881), 2:45.
33. Entry for 13 May 1841, in *Selected Journals of Caroline Healey Dall,* ed. Helen R. Deese (Charlottesville: University of Virginia Press, 2006), 1:79–80.
34. Entry for 13 May 1841, in Deese, ed., *Selected Journals of Caroline Healey Dall,* 1:79–80.
35. Entry for 13 May 1841, in Deese, ed., *Selected Journals of Caroline Healey Dall,* 1:79–80.
36. Entry for 13 May 1841, in Deese, ed., *Selected Journals of Caroline Healey Dall,* 1:79–80.
37. Entry for 13 May 1841, in Deese, ed., *Selected Journals of Caroline Healey Dall,* 1:79–80.
38. Entry for 13 May 1841, in Deese, ed., *Selected Journals of Caroline Healey Dall,* 1:79–80.
39. Nancy F. Cott, "Passionlessness: An Interpretation of Victorian Sexual Ideology, 1790–1850," *Signs* 4, no. 2 (Winter 1978): 219–36. See also Helen

Lefkowitz Horowitz, *Rereading Sex: Battles over Sexual Knowledge and Suppression in Nineteenth-Century America* (New York: Knopf, 2002), 115–18, 328–31, and April R. Haynes, *Riotous Flesh: Women, Physiology, and the Solitary Vice in Nineteenth-Century America* (Chicago: University of Chicago Press, 2015), 145–46.

40. Carla Bittel, "Cranial Compatibility: Phrenology, Measurement, and Marriage Assessment," *Isis* 112, no. 4 (December 2021): 795–803.
41. Abby Kelley to Stephen S. Foster, 30 January 1843, Abigail Kelley Foster Papers.
42. Rachel Bowman Cormany, diary, entries for 10 October 1859, 26 March 1860, March 1861, in *The Cormany Diaries: A Northern Family in the Civil War,* ed. James C. Mohr (Pittsburgh: University of Pittsburgh Press, 1982), 38–39, 68, 136.
43. Entries for 18 July 1882 and February 1883, in *A Secret to Be Buried: The Diary and Life of Emily Hawley Gillespie, 1858–1888,* ed. Judy Nolte Lensink (Iowa City: University of Iowa Press, 1989), 469, 481.
44. Entry for 8 June 1885, in Lensink, ed., *A Secret to Be Buried,* 540.
45. Russett, *Sexual Science,* 16–48.