are paleontologists delighting in the scientific biography of a man they conclude was "sex, dinosaurs, and science all wrapped around an enigmatic private life" (p. 302). The authors of Barnum Brown are not shy about proclaiming the significance of their biographical subject, calling him "the greatest dinosaur collector of all time" (p. xi), and, indeed, a thorough treatment of Brown is long overdue. Their adventure-oriented biography, deeply rooted in archival research, is valuable for the history of paleontology, given its strong fieldwork orientation, and especially for telling the life history and career of someone such as Brown who excelled in fieldwork, mixing paleontological knowledge with practical know-how. In Dingus and Norell's narrative, which unfolds in a straightforward chronological account organized primarily around Brown's globe-trotting fieldwork—with the occasional distracting excursus—we follow the intrepid paleontologist from the interior American West, not only to Canada but to Africa, Asia, and the islands of the Caribbean and the Mediterranean, and finally back to the American West once again.

Dingus and Norell adhere rather closely to their primary source material, with many lengthy quotations that, on the one hand, memorably reveal the texture of Brown's colorful career, but, on the other hand, sometimes make it difficult to transcend the narrative detail to grasp the larger historical context. This is not to say that Barnum Brown lacks thematic threadwork, though some of this connective tissuefor example, the recurring fixation on Brown's extramarital affairs—seems to derive mainly from Brown's reputation and lore among paleontologists, which could, in turn, sustain some further cultural analysis. Still, there is ample grist here for the historian's mill, and it is especially gratifying to have a thoroughly researched account of such a noteworthy scientific life in the field. Like Brinkman's authoritative The Second Jurassic Dinosaur Rush, then, this comprehensive biography of Barnum Brown should take its place on the shelf of every serious historian of paleontology.

JEREMY VETTER

**B. Ricardo Brown.** *Until Darwin: Science, Human Variety, and the Origins of Race.* viii + 199 pp., illus., tables, bibl., index. London: Pickering & Chatto, 2010. \$99 (cloth).

B. Ricardo Brown is a sociologist and Associate Professor of Cultural Studies at Pratt Institute.

His Until Darwin: Science, Human Variety, and the Origins of Race sketches, in the Foucauldian tradition of understanding concepts as instruments of power and as embedded in ideologies, the history of ideas on race. Brown begins his narrative by briefly describing how the ancients conceptualized human variety and then moves on to the primary focus of his book, an examination of the monogenesis and polygenesis debate in the nineteenth century and the rise of Darwinian evolution, which resolved the debate. For Brown, "race" is not to be understood in merely intellectual terms; rather, it has to be understood as part of the "ways and systems of classification that we have used in order to create, in terms of the production of knowledge, a metaphysical construction of human bodies" (p. vii). Brown, therefore, outlines the development of modern classification systems from Linnaeus to Darwin. His history, however, concentrates on the classification of humans; it is also largely innocent of any of the vast literature on biological classification that has been produced in the past few decades. The book will be a frustrating text for historians of the life sciences. More attention is paid to Jefferson than to Buffon, and references are made to private diaries that were not part of the contemporary public discourse and are therefore of questionable relevance.

From a general discussion of classification, Brown narrows his attention to the debate, during the two decades before Darwin's Origin, over mono/polygenesis: whether human races have a single origin or if they constitute separate species. He accepts the notion that, aside from some individual accomplishments by men such as Jefferson and Franklin, the polygenesis theory was the first real triumph of American science. To be sure, some Americans in the nineteenth century may have thought and said so, but in fact polygenesis was a theory that had a short, limited, and, for the most part, ignoble life. Brown claims that it was an important milestone in science because it rejected the biblical chronology of Earth. In so doing, he overlooks the long tradition in geology that did just that, as well as the more important influences of Cuvier and, especially, Lyell.

Brown covers the standard story of polygenesis—focusing on Samuel Morton, Josiah Nott, and Louis Agassiz. He tries to downplay the importance of slavery in the formulation of the theory; but given that polygenesis was so tied to the slavery cause in the American South, he has little evidence to support his

position other than that a few abolitionists, like John Bachman, accepted it.

Brown constructs his treatment of Darwin on long-outmoded positions, like the idea that the Origin was "in the air" or that the life sciences in the nineteenth century underwent a transition from natural history to biology. His narrative is also flawed by unsubstantiated claims, such as that human variation served as the model for all other "populations" of animals and plants (p. 103). Brown accepts Adrian Desmond and James Moore's contention, made in their 2009 book Darwin's Sacred Cause (Houghton Mifflin Harcourt), that Darwin's abolitionist background served as an important motivation for his acceptance of monogenesis. However, Brown gives the debate over polygenesis more weight in forming the structure of the discourse on race and human origins than Desmond and Moore do.

Brown concludes *Until Darwin* by attempting to demonstrate how the study of the history of classification illustrates broader themes in the study of race and how the concepts of the human and the biological were intertwined. He uses Foucault's problematic history of the study of nature's order to frame his conclusion that the study of race needs to be seen in the context of scientific ideology. While few doubt that science has a deep social context, it needs to be remembered that the story does not end there and that science also has a significant empirical base. The study of variation presents a complex and rich story that emerges from the examination of the extraordinary diversity of life forms on our planet, not just the much narrower, if socially important, variation found among groups of humans across the globe.

PAUL LAWRENCE FARBER

**John Laurence Busch.** Steam Coffin: Captain Moses Rogers and the Steamship Savannah Break the Barrier. 726 pp., illus., bibl., indexes. New Canaan, Conn.: Hodos Historia, 2010. \$35 (cloth).

Robert Fulton's *North River Steam Boat* demonstrated, in 1807, that steam-powered vessels could keep a schedule and turn a profit in sheltered waters like rivers and bays. Isambard Kingdom Brunel's *Great Western* demonstrated, in 1838, that they could do so on the open sea. Midway between them came the *Savannah*, which became—in the spring of 1819—the first vessel to use steam power on a North Atlantic crossing. Built in New York as a conventional three-masted sailing ship, *Savannah* was fitted with an auxiliary steam engine and a

pair of sixteen-foot-diameter paddle wheels as an afterthought. The engine was intended to be used only in light winds and calm seas; only eighty hours of the ship's twenty-nine-day crossing from Savannah to Liverpool (and even less of the forty-day return crossing) were made under steam power. Having served as proof-of-concept for oceangoing steamships to come, *Savannah* was sold to new owners within months of her return and stripped of her engine. She operated as a sailing packet between New York and her namesake city until November 1821, when she was wrecked off the coast of Long Island.

Steam Coffin, John Laurence Busch's exhaustive account of the Savannah, is clearly an amateur historian's labor of love. Its six hundred pages of text are dense with names, dates, quotations, and minutely detailed descriptions of events, interspersed with beautifully reproduced period illustrations and excellent maps. The list of sources at the end of the book includes the national archives of virtually every country where the Savannah made port (England, Scotland, Sweden, Denmark, and Russia, as well as the United States), the archives of a dozen state and local historical societies, and the archives of the Peabody Essex Museum and Mystic Seaport. No detail of the ship, her captain, her owners, and her voyages is omitted. It is hard to imagine that anything significant about the Savannah or anyone connected with her remains to be discovered or that a more comprehensive book on the ship will—or could—ever be writ-

Busch ultimately fails, however, to shape this mass of hard-won information into an engaging book. Event follows event, each one given attention equal to the one before and the one after, until whatever inherent drama the story of the Savannah may have possessed is smothered beneath the sheer weight of detail. Steam Coffin narrates events, but it fails to shape them into a narrative. Worse still, from the perspective of professional historians interested in mining the book for information, its lack of scholarly apparatus makes that nearly impossible. The seventy pages of "source notes" at the back of the book are keyed to phrases in the text rather than endnote numbers or even page numbers. They are also maddeningly incomplete. References to contemporary periodicals do not list article headlines or page numbers, and references to archival sources only occasionally give box and file numbers. The index includes ten-and-a-half pages of individuals' names, two-and-a-half pages of ships' names, and a sparse page-anda-half of "subjects," most of which are place