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(1856–1928) built his entire career. Quinlan's claim that the postrevolutionary form of medical literary engagement differed from that of later French authors such as Émile Zola by being more dialogic would likely not be accepted by Zola literary specialists, who have often rejected the view of him as merely transmitting medical concepts in a one-way fashion. It is also not clear that all the medical undercurrents Quinlan identifies needed the postrevolutionary context to propagate: Pierre Roussel's immensely influential *Système physique et moral de la femme* (Vincent, 1775), which initiated the entire genre of the "natural history of women" on which Chapter 3 of *Morbid Undercurrents* focuses (pp. 68–94), predated the Revolution; while the popular medical hygiene current that flourished in Paris in the early nineteenth century had its obvious roots in mid-eighteenth-century Montpellier vitalist thought, as Quinlan acknowledges. Nonetheless, the book's central argument that the postrevolutionary context provided a particularly fertile ground for the proliferation of such attempts to reconceive medicine as "for the people" is elegantly illustrated in a diverse array of fascinating source examples that Quinlan brings to life vividly and evocatively.

## Alison Downham Moore

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Andreas Mayer. The Science of Walking: Investigations into Locomotion in the Long Nineteenth Century. Translated by Tilman Skowroneck and Robin Blanton. 232 pp., illus., notes, bibl., index. Chicago/London: University of Chicago Press, 2020. \$50 (cloth); ISBN 9780226328355. E-book available.

If there is a well-known poetics of walking as a symbol of freedom and resistance to an accelerating world, Andreas Mayer brings to light the existence of a science of walking that was previously unknown. This book reconstructs the history, in the nineteenth century, of scientific theories and practices aimed at unlocking the secret of bodies in motion, often in order to control them, to normalize them, and to make them more efficient. The human gait is thus a scientific, moral, and political object.

However, it is not in the direction of a microphysics of power applied to the walking body that the author commits himself, since he immediately distances himself from the history and sociology of the body influenced by Michel Foucault, as represented in particular by Georges Vigarello's work on the upright body. Instead, Mayer is working along the lines of Lorraine Daston and her writings on the historicity of objectivity. But—and this is one of the main strengths of the book—the history of the walking body as an object of science is not, as one might expect, that of a progressive objectification, going hand in hand with the triumph of mechanization. On the contrary, the author presents walking as a recalcitrant scientific object, at the border of the physiological and the psychological, knowledge of which requires a complex set of experimental techniques that threaten to distort it. As a result, the mundane activity of walking on two legs still remains somewhat mysterious.

The Science of Walking does not trace the history of an accumulation of knowledge but, rather, one of the constitution of a problem, starting from the distinction between a mechanics of walking, which conceives of the body as a machine, and a semiotics of walking, which conceives of the body as the indication of a type or a general characteristic (for example, the body of the marching soldier can signify military virtue). In a series of four chronologically ordered chapters, these two approaches are shown to be at first interdependent, in the practical knowledges from education, medicine, and military marching that valued walking at the end of the eighteenth century. They are still interdependent in the vitalist physiology of the French *"science de l'homme"* at the beginning of the nineteenth century. Then the mechanics and the semiotics of walking were dissociated. In Germany, brothers Wilhelm and Edouard Friedrich Weber apprehended the

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bipedal body as a functional machine (which they referred to as "the human walking apparatus"; 1836) obeying the principle of the pendulum. In France in the second half of the nineteenth century, in parallel to the study of the "animal machine" in Étienne-Jules Marey's experimental physiology, a clinical semiotics of human walking was developed by orthopedic surgeons and neurologists.

In order to define the walking body as an object of science, Mayer calls on a wide variety of primary sources, hitherto little studied and often unexpected: he draws not only from physiology and neurology but also from equestrian art, military tactics, and fine arts, as well as literature, with Honoré de Balzac and his *Théorie de la démarche*. The book also contains numerous illustrations that show the astonishing inventiveness of the techniques deployed to pierce the secret of human walking, from stroboscopic disks to experimental shoes to Marey's famous chronophotographs. These texts and images do not compose a heterogeneous whole: they allow us to grasp the epistemic specificity of the field through its oddities.

If the richness of the sources mobilized is more than enough to feed the analysis, one may be surprised that some choices made are not further justified. Why restrict the corpus to France and Germany? Why exclude comparative anatomy, when Georges Cuvier's study of locomotor function could be usefully understood from the standpoint of the distinction between the mechanics and the semiotics of walking? Why devote only a few lines to physical anthropology, despite its major contribution to the understanding of human walking? One may also be a bit puzzled by the link outlined in the book between the physiology of locomotion and the emergence of the human sciences: Should we conclude that there is a definitive split between a semiotic paradigm, adopted in anthropology and psychology, and a mechanical paradigm, adopted in biomechanics and the simulation of movement? These questions do not point to shortcomings. They arise from the multiple ramifications that this fascinating book draws out in reconstructing the history of human walking as a scientific issue.

## Mathilde Lequin

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David A. Guba, Jr. Taming Cannabis: Drugs and Empire in Nineteenth-Century France. (Intoxicating Histories.) 384 pp., notes, index. Montreal: McGill-Queen's University Press, 2020. \$37.95 (paper); ISBN 9780228001201. Cloth and e-book available.

While the racialized "war on drugs" in the United States is perhaps better known than its European counterparts, David A. Guba's book *Taming Cannabis* illuminates the global nature of racially motivated antidrug legislation. In the case of France, contemporary policy governing the cultivation, sale, and consumption of cannabis has its origins in nineteenth-century French imperial ventures in Egypt and Algeria. As Guba notes in the book's conclusion, cannabis use in France exceeds that in other European countries, while France has been the slowest to decriminalize or medicalize marijuana use in the twentieth and twenty-first centuries. Much like in the United States, ongoing prohibitions of the drug have been disproportionately used to target minority communities: Black and Arab Parisians are, respectively, six and eight times more likely to be arrested for marijuana possession than white Parisians. In order to understand the legislative, medical, and philosophical foundations of present-day French interdictions on marijuana use, Guba takes us on a tour of nineteenth-century Egypt, France, and Algeria to show readers just how cannabis came—quite wrongly—to be associated with the "hash-crazed Muslim assassin" (p. 221).

While the book follows a loosely chronological structure, the time periods covered by the six chapters overlap in a way that reflects the oftentimes fragmented nature of this story. Policies and perceptions related