be told that "playing with Frankenstein figures or games provides children and adults opportunities to continuously transform and adapt the . . . story" (p. 167)?

Richard C. Sha

Richard C. Sha is the author, most recently, of Imagination and Science in Romanticism *(Johns Hopkins, 2018), which was short-listed for the British Society for Literature and Science Prize (2018) and which won the Jean-Pierre Barricelli Prize for the best book published on Romanticism (2018).*

Anna Lindemann. *Sigmund Freud, das "Cocain" und die Morphinisten: Ein Beitrag zur Geschichte der wissenschaftlichen und klinischen Praxis im Umgang mit Suchtmitteln (1850–1890).* (Abhandlungen zur Geschichte der Medizin und der Naturwissenschaft, 111.) 329 pp., bibl. Husum: Matthiesen Verlag, 2018. €49 (paper). ISBN 9783786841111.

By the mid-nineteenth century, coca, the "divine plant of the Incas," was lauded for its stimulant effects by inhabitants of the Americas and Europeans alike. Despite this interest and the popularization of coca wines like Vin Mariani, it was not until 1884 that coca and its most important alkaloid, cocaine—isolated in 1859 by the Göttingen chemist Albert Niemann—became sought-after medicines. The experimental claim in 1884 by the Austrian surgeon Karl Koller that cocaine was an excellent ophthalmic anesthetic and the cocaine papers of Sigmund Freud set the stage for the growing demand for cocaine. Cocaine became one of the first modern panaceas of Western medicine, produced and marketed by pharmaceutical companies like Merck and Gehe in Germany and Parke, Davis and Company in the United States.

Drawing extensively on a combination of German and English primary sources, Anna Lindemann provides an exciting new window on the early medical trajectory of cocaine, with a focus on Freud. She also drops the occasional hint about the nonmedical trajectory of cocaine as both a recreational drug and a performance-enhancing one. The book demonstrates that cocaine as a modern drug follows a Seige cycle of initial enthusiasm and therapeutic optimism, with a growing range of therapeutic indications (see Stephen Snelders, Charles Kaplan, and Toine Pieters, "On Cannabis, Chloral Hydrate, and Career Cycles of Psychotropic Drugs in Medicine," *Bulletin of the History of Medicine*, 2006, 80:95–114, esp. p. 97); subsequent negative appraisals; and, finally, sustained limited use as a local anesthetic, along with increasing legislative scrutiny as an addictive substance. Lindemann shows that the trajectory is a product of contingent and complex interactions between science, medicine, industry, and society. The trajectory of cocaine is also closely intertwined with the careers of other drugs like morphine and should be studied from a comparative perspective. What I like most about Lindemann's study is its uncompromising fact-checking, regardless of the reputations of academic predecessors and their claims about cocaine and Freud. We learn that Freud's series of self-experimentations with coca leaf extracts and cocaine was in line with the $n = 1$ observational methodology practiced by most of his scientific colleagues in Europe and the United States. Furthermore, Freud's optimism about the medical potential of cocaine in terms of a "wonderous Coca effectiveness (*wunderbaren Cocawirkung*)" (p. 80) was part and parcel of the Seige-cycle enthusiasm that neutralized early criticism. Lindemann succeeds in restoring the importance of Freud's contribution, although it is an overstatement to call him the founder of psychopharmacology. But Freud certainly can be considered a cocaine pioneer who was prepared to act as a trustworthy medical spokesperson for the burgeoning pharmaceutical industry in Germany and the United States.

The numerous coca and cocaine experimenters on both sides of the Atlantic, including the American Indians, did not necessarily agree on the best way to harvest, identify, isolate, evaluate, and use the coca leaves or their active ingredient, cocaine. But these disagreements, as the author indicates, were instrumental in the co-production of knowledge regarding the questions of classifying, qualifying, and applying

coca leaves, coca extracts, and, finally, the new chemically isolated drug cocaine. For the reader with a strong interest in the history of drugs and addiction, Lindemann provides an interesting glimpse into the world of early addiction science. She describes the heroic efforts of nineteenth-century doctors to understand the patterns and mechanisms of, among other addictions, alcoholism and morphinism. Those doctors already acknowledged the importance of both inheritance and environment, applied multimodality treatments, and tried to cope with the rather demoralizing challenge of frequent relapse. Cocaine, like other new psychotropic drugs before and since, was embraced opportunistically to treat the medical diagnosis of addiction. At the end of the Seige cycle, alcoholism and morphinism would be followed by cocainism and other isms. But, interestingly, we see that already during the first opiate crisis doctors knew that cold-turkey treatment was a high-risk endeavor that should be avoided in order to reduce physical harm and untimely death.

However rich the empirical material, Lindemann does not succeed in answering convincingly the more fundamental epistemological questions of the production of medical knowledge within the German context in the late nineteenth century. Yes, the experimental practices were heterogeneous in nature, but in what ways was this heterogeneity typical for late nineteenth-century German medical science, and how exactly should we understand objectivity as it was understood by those under discussion? Despite this shortcoming, *Sigmund Freud, das "Cocain" und die Morphinisten* can be considered an empirical treasure trove.

Toine Pieters

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Jennifer Wallis. *Investigating the Body in the Victorian Asylum: Doctors, Patients, and Practices*. (Mental Health in Historical Perspective.) xvi + 276 pp., app., bibl., index. Cham, Switzerland: Palgrave Macmillan, 2017. €30 (cloth). ISBN 9783319567136.

Jennifer Wallis's *Investigating the Body in the Victorian Asylum: Doctors, Patients, and Practices* is a valuable contribution to the history of psychiatry but also, more widely, the history of medicine in the nineteenth and early twentieth centuries. As with other studies on psychiatry and the asylum, Wallis focuses her monograph predominantly on a single institution—the West Riding Pauper Lunatic Asylum in Wakefield (West Yorkshire)—and on one condition—general paralysis of the insane (GPI). However, throughout its five chapters, Wallis's book looks far beyond this institution and this condition, crafting a very engaging analysis of the role and significance of medical research on the bodily fabric of the patient within the asylum. At the end of the nineteenth century it was believed that the cause of mental disease was to be found within the body of the patient. A series of examinations was, therefore, conducted on patients both during their stays in the asylum and after their deaths. Wallis's book looks at how these investigations of mental disease went beyond the study of just the skull and the brain. Research also involved examinations of the skin, bones, muscles, hearts, faces, and fluids of the patients. Indeed, as Wallis clearly explains, in the nineteenth century the study of the body and its different parts became a matter of "consistent interest" for doctors in the asylum.

Chapter 1, "Skin," starts by looking at a photographic record of asylum patients collected at the time. By discussing the importance of such sources, Wallis provides an overview of how the skin was analyzed and treated by doctors in reconstructing the effect that GPI had on the patient's body and life. The use of photographic evidence is also questioned and discussed in relation to contemporary ethical issues associated with