

place” (331). This book enters a gap in the critical landscape by focusing specifically on the relationships between image and word in Victorian and neo-Victorian graphic texts. In doing so, it does not set out a prescriptive agenda for writers that will follow. Rather it offers a useful and pliable paradigm in the shape of the palimpsest and allows its authors freedom to play with and modulate the concept in light of their particular and specific concerns.

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LARA KARPENKO and SHALYN CLAGGETT, eds. *Strange Science: Investigating the Limits of Knowledge in the Victorian Age*. Ann Arbor: University of Michigan Press, 2017. Pp. 293. \$60.00 (cloth).
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Strange Science: Investigating the Limits of Knowledge in the Victorian Age lives up to its name. The collection, edited by Lara Karpenko and Shalyn Claggett, explores a range of quirky, often obscure, and always fascinating subjects. Its contents are loosely grouped into three sections: on plants, bodies, and energies. The adjective “strange,” Karpenko and Claggett explain, is meant to convey both “the astonishment and awe that the possibilities of science inspired” in the Victorian public and a twenty-first-century reader’s sense of the radical difference between some Victorian scientific practices and “the highly professionalized science of today” (3). As historians of science have been telling us for some time, in the nineteenth century, boundaries separating science, pseudoscience, and the occult were porous, contested, and differently located than they are now. All of the authors contributing to the volume are keenly aware of these shifting boundaries, and many explore other forms of boundary crossing—between disciplines, species, literary forms, modes of perception, the mechanical and organic, and consciousness and matter. Some of them focus on investigators who themselves crossed beyond their areas of expertise into what we would consider other disciplines. For example, Meegan Kennedy explores the intellectual and institutional reasons why the botanist Edward Forbes recommended in 1843 that botany, rather than anatomy, should be the foundation of a medical education. Tamara Ketabgian analyzes *The Unseen Universe* (1875), a speculative text by two Scottish physicists who hoped that multiple universes in more than three dimensions could both convert entropic heat into usable energy and reconcile science with Christianity. The opposite discipline crossing—from the metaphysical to the scientific—is the focus of Sumangala Bhattacharya’s essay on theosophist Annie Besant, who used clairvoyant meditation to study the structures of atoms.

Rather than dismiss various strange sciences as misguided, the contributors treat their subjects as serious epistemological investigations and connect them to mainstream developments in Victorian science, literature, and culture. Many of the essays claim that a fringe figure or text anticipates or influences later intellectual developments. Lynn Voskuil suggests that because Victorian orchid enthusiasts saw species boundaries as fluid and unstable, they offer “a prescient example of interspecies awareness” (20). James Emmott reminds us that “phonography” initially referred to methods for transcribing vocal sounds, argues that Alexander Melville Bell’s system of phonetic transcription was a precursor to Edison’s mechanical phonograph, and shows that both meanings of phonography influence George Bernard Shaw’s *Pygmalion* (1913). Literature is a frequent topic in the essays; the majority trace the influence of science on literature, but Danielle Coriale’s and L. Anne Delgado’s contributions present

examples of literature influencing science. Coriale demonstrates that Francis Galton read passages in nineteenth-century poetry literally rather than figuratively to claim that “sensations can originate within the mind” rather than with external stimuli (118). Delgado argues that the British Society for Psychical Research’s attempt to classify ghosts scientifically, *Phantasms of the Living* (1886), “reanimated the ‘true ghost story’ genre” of short fiction near the century’s end (248). Painting and illustration are also recurrent subjects, and are most strongly foregrounded in Narin Hassan’s study of Marianne North, who travelled extensively to paint plants in their natural habitats and discovered several species.

The essays in *Strange Science* create generative juxtapositions, discover surprising connections, and offer compelling insights, but occasional moments are less persuasive or less precise when incorporating scientific discourse. Suzanne Raitt makes a strong case that Oscar Wilde’s *Dorian Gray* “is simultaneously artist, scientist and experiment, instigator and victim of his desire for self-substitution” (170), but she is less convincing in claiming that *The Picture of Dorian Gray* (1890) was influenced by cell theory’s emphasis on a balance between waste and repair, rather than (or in addition to) discussions of biological and cultural degeneration. Barri J. Gold examines what she calls “chaotic fictions”—attempts to understand “natural systems whose apparent randomness, disproportionate effects, and unpredictability baffle traditional mathematics and science” (183). She analyzes some fascinating Victorian examples of small things having huge effects, but in some cases her label of “chaotic” seems misleading, since they are not “chaotic” systems in the mathematical sense. (A hair-trigger is not equivalent to a chaotic sensitive dependence on initial conditions.) Elizabeth Chang’s essay on carnivorous plants stretches the category a bit too far when she includes an example from *The War of the Worlds* (1897), since H. G. Wells’s Red Weed is not carnivorous and does not display intentionality as strongly as do the plants in other stories she analyzes.

In other respects, though, Chang’s essay is one of the highlights of the volume. She discusses both scientific inquiries into actual insectivorous plants and early science fiction stories that imagine sentient plants killing and feeding upon humans. Granting “narrative agency” to a plant is disruptive, Chang argues, because it “blur[s] distinctions between character and setting” (83), confuses ontological categories, and triggers colonialist anxieties. Lara Karpenko’s analysis of mesmerism in Charles Adams’s *Notting Hill Mystery* (1862–63) is an especially strong entry in the section on “Strange Bodies.” In the sensational plot of Adams’s novel, the villain uses mesmerism to commit murder, vicariously poisoning a woman by actually poisoning her twin sister while they are mesmerically connected. Unlike other sensation novels, *Notting Hill Mystery* ends without restoring order and punishing the criminal. As Karpenko argues, Adams emphasizes the physicality of sympathy in both mesmerism and sensation fiction, and exposes sympathy as “destabiliz[ing] the ... domestic world and ultimately the coherence and form of the novel itself” (147). In the “Strange Energies” section, Jones traces an especially intricate and unexpected series of connections between Baconian induction and the occult in Edward Bulwer-Lytton’s essay collection *Caxtoniana* (1864) and his occult novel *Zanoni* (1842). Bulwer-Lytton claimed that both artistic imagination and scientific hypotheses were forms of clairvoyance, Jones finds, yet Bulwer-Lytton also emphasized an author’s inability to predict or control readers’ reception of his or her work. Readers of *Strange Science* will each have different assessments of what is most useful and compelling in this wide-ranging volume, but the essays will certainly be valuable to scholars working on nineteenth-century literature and science, and they will surprise, delight, and instruct a diverse audience.

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