



PROJECT MUSE®

The Birth of Energy: Fossil Fuels, Thermodynamics, and the Politics of Work by Cara New Daggett (review)

Kameron Sanzo

Victorian Review, Volume 45, Number 2, Fall 2019, pp. 333-336 (Review)

Published by Johns Hopkins University Press

DOI: <https://doi.org/10.1353/vcr.2019.0065>



➔ *For additional information about this article*

<https://muse.jhu.edu/article/757847>

biographers who have come before her, although she is careful to loop in J.K. Rowling (who famously said: “I identify with E. Nesbit more than any other writer” [qtd. in 329]). She is also rather quick to position Nesbit as a lone pioneer in a world of chintz and bombazine: in an exasperating aside in the introduction, she observes that Nesbit “came of age in the Victorian era, but she did not leave us more of the stiff, moralizing tales that characterized the nineteenth century” (x). Still, *The Life and Loves of E. Nesbit* is a worthwhile contribution to Victorian studies, one of interest to scholars of turn-of-the-century literary, political, and periodical culture especially. It weaves a readable story around its subject and makes one more serious effort to bring Nesbit back to critical and popular acclaim. I hope it succeeds; Nesbit’s wit, charm, and imaginative power are worthy of wider study.

SARAH BILSTON
Trinity College, Hartford



The Birth of Energy: Fossil Fuels, Thermodynamics, and the Politics of Work

by Cara New Daggett; pp. 280.

Duke UP, 2019. \$99.95 cloth

AS OIL and gas companies increasingly brand themselves as “energy” companies rather than fossil fuel extraction companies, it is worthwhile to ask why “energy” signifies an uncontested concept of freedom and better quality of life. Cara New Daggett’s *The Birth of Energy* approaches this question by undertaking what she calls a “genealogy of energy,” tracing the emergence of a dominant Western energy logic that was first informed by nineteenth-century thermodynamics. Although “energy” may feel timeless and cosmic, it is a term whose modern definition emerged in the Victorian period and whose thermodynamic associations have been used to tether work to fuel and productivity. Daggett argues that industrializing Western empires leveraged the energy–work nexus as natural law to “put the world’s materials to use for human profit” (102). Because energy and work remain coupled, eco-accountability debates often focus on market-based solutions that maintain capitalism’s status quo rather than envision post-carbon futures. Daggett hopes to help shift this mindset by unsettling energy’s largely uncontested and poorly historicized logics.

The Birth of Energy contributes to Victorian studies’ increased interest in eco-criticism. Daggett agrees with scholars such as Allen MacDuffie and Timothy Morton that we can extend the Anthropocene into the Victorian period and that doing so emphasizes the unbalanced culpability for ecological damage between actors in the global north and global south. Indeed, the book’s

focus on exclusively Western energy logics is meant to underscore how dominant and naturalized the Victorian-born energy concept has become. Although Daggett encourages other scholars to research alternative energy concepts, the scope of her project is limited to Western energy's genealogy: "the Anglo work of Great Britain and the United States, and to a period that ranges from the mid-nineteenth century, from the 'discovery' of energy to the peak decades of new imperialism" (7).

The book is organized into two sections. Part 1 narrates the history of classical thermodynamics, covering the etymology of "energy" and the term's appropriation by North British Presbyterian scientists who connected an emerging "geo-theology" to moral ethics of sin and laziness (54). Daggett delays providing a formal definition of the two laws of thermodynamics until the book's second chapter, preferring instead a genealogy to emerge through her narration of energy's "discovery" in the Victorian era. By doing so, she both foregrounds energy's long history as a humanistic and multi-valent term and resists buttressing preconceived notions of energy with its naturalized position in science. Part 2 applies nineteenth-century energy science to Britain's logic of domination during the age of new imperialism. The *Birth of Energy's* latter chapters will be of interest to global nineteenth-century scholars, especially those whose work examines imperial applications of sciences like biology and organicism.

While Daggett concedes that thermodynamics has received less critical attention as an imperial science than its contemporaries such as evolution, she posits that energy was subsumed into other scientific logics. For instance, organicism's emphasis on the social body produces political questions of metabolism that involve work/waste exchanges. Similarly, energy was deployed alongside biological metaphors to discuss how certain civilizations achieved developmental success by maximizing work productivity and minimizing waste (110). By viewing the nation as an organism whose growth depended on metabolism and therefore waste production, it was possible to conceive of ways to extend the nation by sending waste "away," somewhere outside the bounds of the organism. Imperialism therefore collapsed natural growth with increased fossil fuel use, as well as applying the logic of engine efficiency to the humans and non-humans whose work would extend the nation (118).

Growing Western empires encountered labour challenges during the late nineteenth century. *The Birth of Energy* elegantly sutures the scientific definition of energy as work to colonial labour by arguing that colonial subjects, human and non-human, who resisted dominant energy logics were subjected to governance and discipline under the "gospel of labour." Daggett focuses her analysis on the so-called scramble for Africa: African men became wage labourers, and African land was seized not only through tactics such as physical violence and expropriation but also through measures such as the census and taxes. These efforts meant to destabilize native subsistence

economies and transform resistant bodies into productive energetic subjects. As Daggett explains, such a gospel of work and waste was necessary both at home and abroad because “fossil fuels necessitate waged or forced labour” (135), and industrial capitalism’s constant expansion necessitated fossil fuels. Additionally, it was easy for colonizers to collapse the value of land, resources, and bodies they governed under a rubric that classed, gendered, and racialized subjects according to energetic stereotypes. Africans and their warm climate, for instance, were low-energy subjects in need of European management (145). Waste, then, was not only a physical by-product of energetic work but also an actively produced social category (156). Those who did not labour, or who could not manage resources responsibly, were considered a public charge.

The book’s final chapter explores the popularization of the Western energy concept through the uptick in scientific and technical education institutions. By the end of the nineteenth century, the professional engineer emerged as a new vocation designed to manage industrial labour and energy flows (169). Daggett emphasizes engineering’s position at the nexus of scientific or natural law and capitalism, where the gospel of labour’s role in maintaining capitalism’s status quo folds into natural law. The focus of Daggett’s technical education discussion is on the growth and spread of industrial schools in the United States, whose empire began to challenge Britain’s. Besides engineering, second-tier industrial education was designed to subjugate people of colour, particularly during Civil War reconstruction, when the United States faced a labour shortage. Daggett similarly discusses how thermodynamic language was used to manage the students of Native American missionary schools, in which students were hired out as cheap labour (183).

The Birth of Energy’s conclusion is ambitious, exploring “one possible path toward living energy otherwise, and toward resisting fossil fuel cultures: putting post-carbon movements into conversation with the post-work political tradition” (190). Daggett considers current debates on climate change, positing why many environmentalists and eco-modernists espouse the continuation of consumerism and productivism, rather than post-carbon alternatives. She argues that until environmentalists decouple wage labour and economic growth from our dominant energy concept, they too must work within the same logics that tether quality of life, job security, and freedom to fossil fuels. Impressively, Daggett even suggests one option of such a post-work politics. Daggett modifies Kathi Weeks’s argument in *The Problem with Work* (2011) to recommend a “feminist post-work politics” (196) that does not centre on asceticism and fear of recession, but rather carves out its own politics of pleasure in a post-carbon future.

Daggett’s *The Birth of Energy* is an impressive book, timely in our political and ecological climate and thorough in its systematic narration of energy in the Victorian period. In her research, Daggett engages with a wide variety

of interlocutors across disciplines such as Victorian studies, history, post-colonial theory, and political science. The book will therefore appeal to a range of scholars, including those interested in the history of science, the energy humanities, global nineteenth-century studies, and post-colonial studies.

KAMERON SANZO
University of California, Riverside



Bram Stoker and the Late Victorian World

edited by Matthew Gibson and Sabine Lenore Muller;
pp. 256. Clemson UP, 2018. \$148.58 cloth.

TO SAY that Bram Stoker is predominately remembered for his novel *Dracula* (1897) is somewhat of an understatement. From F.W. Murnau's *Nosferatu* (1922) to Bela Lugosi in 1931, Christopher Lee's incarnations of *Dracula* during the 1950s–70s, Gary Oldman in 1992 and more recently in *Dracula Untold* (2014), and *Castlevania* (2017–present), it is evident the name Stoker is synonymous with *Dracula*. Yet, as Matthew Gibson and Sabine Lenore Muller astutely note in the preface to this collection, “Interest in the fiction he [Stoker] wrote besides *Dracula* has been steadily increasing over time” (1). This is due, in part, to the attention given to Stoker's wider body of works in William Hughes's *Beyond Dracula* (2000) and Carol Senf's *Science and Social Science in Bram Stoker's Fiction* (2002). Given this increased level of interest, the question remains, What new insight or discoveries are there to be gained from another study of Stoker?

In the brief and somewhat underwhelming preface, Gibson and Muller attempt to answer this question, noting “The aim has been to ground the study of Stoker's fictional and nonfictional work empirically against the background of the late Victorian world” (2). The book is divided into three sections, “Professions,” “Science, Technology and Ideas,” and “Politics and Society,” and each chapter approaches Stoker's life and works from a seemingly different perspective. However, the numerous examples taken from art, literature, journals, and letters provide many interesting connections that illustrate that “almost all Stoker's novels are capable of reflecting the topical zeitgeist” (5) and expose the contradictory nature of Stoker's beliefs.

In part 1, Terry Hale's chapter is noteworthy for its scrutiny of Stoker's legal education and its impact on the shaping of *Dracula*. Asserting that *Dracula* is a “novel that only a barrister could have written” (11), Hale briefly outlines Stoker's reasons for reading for the bar, the nature of his training, and several areas in which his legal knowledge proved essential for his work at

Reproduced with permission of copyright owner.
Further reproduction prohibited without permission.