

**Diffusive Energies: Fictions of Non-Productivity in Victorian Science and Culture**

by

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**Abstract**

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**Chair: Martha J. Vicinus**

This dissertation examines theories of non-productivity in Britain between 1850 and 1880, focusing upon parallel developments in science, social commentary, and realist novels. In the middle decades of Victoria's reign, scientists shifted focus from romantic concepts of organic unity—the watch-like regularities of God's laws—to newly-perceived patterns of slippage, asymmetry, and waste. I attend specifically to the role of the individual exception, the part at odds with the productive workings of the whole. While prodigal and purposeless, I show how novelists seized upon this figure in order to represent positive social change. In doing so, Victorian narratives not only challenged assumptions about organic form, but also about the social utility of the aesthetic itself. In the texts that I consider, the very powerlessness of the novel—its dangerously distracting, wasteful effects upon readers—came to constitute its political purpose.

The introduction situates theories of non-productivity in relation to inherited ideas of organic order. Whereas early nineteenth-century thinkers had stressed the reciprocal relations between part and whole, I show how Victorian scientists turned toward excessive elements that could not be incorporated into the aggregate. Chapter one examines Charles Kingsley's *Alton Locke* (1850) and the erosion of older natural theodicies. While working to reveal God's laws to ordinary workers, Kingsley's sympathy with the plight of the poor led him in another direction, so as to stress the very inefficiencies and flaws in natural design. Chapter two considers new theories of non-reproductive sexuality, and charts the conjunction between Charles Darwin's musings on sexual sterility and Charles Dickens's depiction of male bachelors in *Dombey and Son* (1848). Chapter three attends to neurological concepts of sensory delay in the context of Wilkie Collins's sensation fiction, focusing upon *Armadale* (1866). Chapter four analyses George Eliot's engagement with the second law of thermodynamics, the theory of entropy, in *Middlemarch* (1872). Far from signaling the pessimism of her later fiction, thermodynamics led Eliot to a renewed moral and social philosophy. The conclusion considers the ways in which models of non-productivity shifted after 1880, and reflects upon the dominant aims and assumptions of the dissertation.