

Robert Mitchell, *Experimental Life: Vitalism in Romantic Science and Literature*. Baltimore: Johns Hopkins University Press, 2013. Pp. 309. ISBN 9781421410883.

Everyone who has read *Frankenstein* knows that a preoccupation with the principle of life was characteristic of the Romantic era. Literary and scientific thinkers were fascinated by the question of what kind of vital power had to be added to bare matter to make living organisms. Mary Shelley's readers will recall that the 'spark of being' Frankenstein imparted to his creation was never explicitly specified. And indeed it continued to elude those who were seeking it in the laboratories and anatomy theatres of the time. In *Experimental Life*, Robert Mitchell tracks the elusive principle through a wide range of poetic, philosophical, and scientific writings of the period. His capacious and learned survey displays a vitality of its own, as it breathes life into dead texts and exhibits them in sometimes startling juxtapositions.

Mitchell takes some of his leading themes from recent work in science studies. He identifies experimentation as a feature of both the sciences and the arts in this period, and he adopts from Bruno Latour and Hans-Jörg Rheinberger the idea of 'ontogenesis' – the notion that experiments produce the novel entities that they also isolate for study. Borrowing from the historians of science Steven Shapin, Simon Schaffer, and Peter Dear, he argues that Wordsworth and Coleridge were engaged in an original and hybrid form of poetic experimentation in their *Lyrical Ballads* (1798), which both reflected and manipulated contemporary understandings of scientific experiment. He applies the label of 'abandoned experiment' to an unfinished essay by Coleridge on the theory of life, setting the 1816 essay against the background of the well-known dispute between the surgeons John Abernethy and William Lawrence, a celebrated confrontation between vitalist and materialist perspectives.

In a chapter on suspended animation, Mitchell describes the work of the surgeon John Hunter and the campaign to revive victims of drowning. He sketches the background of the developments in physiological theory that had led to the identification of sensitivity as a property of living matter. He then makes a rather surprising turn to argue that suspended animation was paralleled by the literary technique of suspension deployed in poems by John Keats and Percy Shelley. A chapter on the notion of medium or milieu discusses the ideas of Jean-Baptiste Lamarck and others on the relations between organisms and the circumstances in which they live. Another rather abrupt detour plunges Mitchell into the thickets of Hegel's philosophy – more deeply than I, for one, can follow him. The dialectical scheme into which he tries to fit the writings of Lamarck, Hegel, and the surgeon Richard Saumarez does not seem to fit with the chronological order of the texts under discussion. More straightforwardly, Mitchell's final chapter examines the fascination with plant life – its uncanny vitality and strange intertwining with human existence – in the poetry of Shelley and Wordsworth.

Some readers are likely to be unsettled by the more unpredictable turns of Mitchell's argument. He is clearly not interested in a chronological narrative of the development of ideas, but nor does he seem to be systematically exploring links between different discursive domains. He almost seems averse to taking the obvious path or illuminating the more apparent connections. Thus, in his fourth chapter, he introduces Thomas Trotter's book of 1807 on the 'nervous temperament', a slightly paranoid screed on the imported foodstuffs the author believed were sapping the digestive fortitude of the nation. Mitchell mentions in a footnote the writings of George Cheyne, who had explored the links between nervous sensitivity and exotic diets a few decades earlier. But, instead of delineating the genealogy of Trotter's work, he leaps to William

Godwin's rather different species of paranoid fantasy, *Caleb Williams* (1794), and then to a speech made by Coleridge around the same time denouncing the slave trade. The links between these texts seem tenuous on the level of ideas, although Mitchell fastens on their metaphorical dimension to draw out an implicit connection.

It is not obvious to me what more historically-minded readers will make of this. Mitchell's virtuosity is remarkable, his range is deeply impressive, and his readings of all the texts are original and creative. But he sometimes seems to be straining to find the parallels he is looking for, and it is often not clear why he chooses particular works to juxtapose with one another. It is gratifying to find that he has been stimulated by the work of historians of science, but my guess is that they will find his book difficult to assimilate in return. Generically, it may well appear to them as a bit of a monster.

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