DANIEL BROWN. **The Poetry of Victorian Scientists: Style, Science and Nonsense.**

Pp. xii + 310 (Cambridge Studies in Nineteenth-Century Literature and Culture 83).

Cambridge: Cambridge University Press, 2013. Cloth, £60.

The word ‘nonsense’ in the subtitle of Daniel Brown’s book will perhaps take prospective readers by surprise: nonsense might seem to be the antithesis of the systematic organisation of verifiable knowledge that characterises ‘science’, especially nineteenth-century science. In his first chapter, however, Brown argues that nonsense and science are brought together through their shared commitment to literalism. ‘Like enlightenment science,’ he writes, ‘nonsense is predicated upon an antipathy to the semantic instability of metaphor’ (p. 16). This opposition between science and nonsense on the one hand and metaphor on the other is problematic – nonsense, it could be argued, generates its own forms of semantic instability by highlighting the contradictions within literal language – and over the course of this monograph Brown unpicks it and incorporates it into a more intricate and comprehensive argument, one encapsulated in the other word in his subtitle: ‘style’. Victorian scientists wrote poetry, he suggests, in order to expose and to analyse some of the instabilities which ran through their profession and their methods in the nineteenth century. The formal and linguistic style of their poetry, its recourse to nonsense and to ‘the unruly play of the pun, the tense relation of analogy, and the variegated repetition of rhyme’, offered scientists ‘a model of lively knowledge’ (p. 261), an alternative form of thought and expression in which they could interrogate specific intellectual controversies and the state of science more generally.

The book argues persuasively for the importance of poetry to a number of Victorian scientific figures, including John Tyndall, the nonsense writer and

ornithological illustrator Edward Lear, the mathematicians William Rowan Hamilton and James Joseph Sylvester, and, most significantly for Brown's argument, James Clerk Maxwell. *The Poetry of Victorian Scientists* does valuable work in mapping and contextualising the various poetic writings of these figures, and it represents a major contribution to scholarship on poetry by nineteenth-century scientists, which tends to focus primarily on Romantic-era figures such as Humphry Davy. Brown adroitly considers the ways in which Victorian scientists employed poetry to think through the moral or epistemological implications of their scientific work, but perhaps the most striking aspect of the book is its attention to poetry as a vehicle for public contestation rather than private reflection. Many of the poems discussed by Brown were published in *Nature* or circulated in letters between scientists, and many of them were written in response to debates held at the annual meetings of the British Association for the Advancement of Science. As Brown demonstrates, scientists used verse to defend their positions and to satirise their opponents in a series of overlapping disputes and controversies, about the professionalization of science, the alleged materialism of Tyndall and Thomas Henry Huxley, the relations between science and mathematics, the relative merits of Euclidean and non-Euclidean geometries, and the role of the imagination in scientific method.

As this list suggests, *The Poetry of Victorian Scientists* is wide-ranging in its concerns and in its coverage. Although it is elegantly written throughout, its ambitious scope, combined with the diverse range of scientists and poems discussed, makes it a dense and at times frustrating read. For the most part, the book amply repays the close attention it demands, but there are some scientific concepts and issues which remain under-examined and to some extent unclear. One notable example is the absence of any sustained consideration of the links (whatever they might be) between Maxwell's

poetry and ‘Maxwell’s demon’, his famous thought experiment concerning the second law of thermodynamics. On a broader, structural level, the book would have benefitted from clearer signposting of its main arguments, to help the reader navigate its difficult terrain. There is no conventional introduction here to set out these key arguments, and it proves hard, amid Brown’s erudite and fast-moving discussions of various scientists and scientific controversies, to maintain a sense of the shape and progression of the book as a whole.

The decision to do without a separate introduction also means that questions of methodology and rationale, of what can be learned from reading and studying Victorian scientists’ poetry in particular, are only partly addressed. This is not really an issue in relation to the scientific significance of the poetry: Brown convincingly shows how the poems of Sylvester, Maxwell, and others register profound shifts in their writers’ conceptions of their own scientific practice and of science as a discipline. Chapter 6 of the book, for example, starts with an assertion that ‘the 1870s presented something of a crisis of legitimacy for British professional science, which centred on the place of imagination in science’ (p. 144), and proceeds to examine how Maxwell develops through his poetry a sharp critique of Tyndall’s 1870 lecture ‘On the Scientific Use of the Imagination’. The book skilfully demonstrates, then, what scientists’ poetry can reveal about Victorian science, but it seems less certain of what this body of work can reveal about Victorian poetry.

This is not a matter of close reading: Brown’s discussions of particular poems consistently make room for incisive analyses of scientists’ handling of poetic form, their deployment of metaphors and puns, and their movement between nonsense and scientific language. However, because the book’s focus is on positioning the poems in relation to debates within Victorian science, the close readings are not typically

incorporated into a broader assessment of the ways in which scientists' poetry might have responded to or participated in Victorian debates about poetics (debates in which the influence of science on poetry was often an important issue). Brown makes some illuminating observations about scientists' engagement with certain literary models, particularly those of Lucretius and Tennyson, but the question of why and how scientists' poems should be read as poetry, rather than as indices to shifting scientific concerns, remains tantalisingly unanswered, or half-answered. Nonetheless, in its focused attention on and comprehensive analysis of the poetic writings of scientists, this monograph represents an important contribution to the interdisciplinary study of literature and science in the nineteenth century.

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