

Reviews

Dennis Danielson, *Paradise Lost and the Cosmological Revolution* (Cambridge: Cambridge University Press, 2014). ISBN: 978-1107033603. 246 pp.

Dennis Danielson's *Paradise Lost and the Cosmological Revolution* discusses the changes in cosmological modelling wrought by the new schools of astronomers in the sixteenth and seventeenth centuries, unpacking the implications of their observations and speculations for the dialogues and cosmic portraiture of John Milton's *Paradise Lost*. Danielson is Professor of English at the University of British Columbia, and has long been a formidable Miltonist, with important books like *Milton's Good God* (1980) and *The Cambridge Companion to Milton* (1989), and a writer on the history of cosmology with essays like 'The Great Copernican Cliché' (2001), an anthology of cosmological writings (*The Book of the Cosmos*, 2000), and a biography on Georg Joachim Rheticus (*The First Copernican*, 2006). *Paradise Lost and the Cosmological Revolution* is a culmination bringing together Danielson's two major scholarly interests from his earlier and more recent work: the English epic poet and the history of cosmology. Notably, Danielson's book occurs in the wake of substantial scholarly works on the new astronomy and Milton, particularly Malabika Sarkar's *Cosmos and Character in Paradise Lost* (2012), John Leonard's *Faithful Labourers* (2013), and Karen Edwards' article in the *Cambridge Companion to Paradise Lost* (2014), all reacting to centuries of Milton critics who thought of Milton as an undecided semi-Ptolemaist.

Danielson begins by discussing the demands of pre-Copernican cosmology ('uniform, circular motion, upon crystalline spheres, turning about a universal center point, which, for reasons of heaviness, is occupied by an immobile Earth') and the basic diagrammatic elements, as well as how early astronomers made astronomical predictions and judgments with it. The remainder of the book is a systematic demonstration of how Milton's depiction of the cosmos is not Ptolemaic. Danielson launches these chapters with a discussion of Milton's perspectives on creation and matter, indicating the extraneousness to 'our' universe of Milton's chaos and hell, and the possibility of a multiverse in *Paradise Lost*. Afterwards, he treats 'cosmological bricoleurs' – sixteenth century astronomers (Copernicus, Brahe, Digges, and others – considering early theories of heliocentrism, writings on the supernova of 1572, magnetism and geostatic

theories which nevertheless allowed diurnal rotation. The next two chapters make connections between Milton and Galileo, exploring these writers' shared delight in mutability and generation, provide a presentation of reflected light from the earth and a universe of dispersed stars, each with potentially new centres, as well as a concern with the relative magnitude and importance of the sun and the earth among the units of the universe. The next chapter considers sunspots and the theological and cosmological parallel between Milton's and Kepler's ideas and attitudes concerning the sun, especially on magnetism and solar glorification. The final two chapters ask '(1) What kind of place is Earth and (2) what kind of place is the Universe?' (p. 155). The first indicates the new cosmology's (and Milton's) appreciation of stellar earth, newly adopted into the dance of the stars, and the second addresses astronomers and Milton's speculation on other life in outer space and the nature and possibility of movement outside of earth.

If I have laid out a straightforward organization of Danielson's book, there is considerable obliquity and piecemeal in his approach. When one reads a book on Milton and astronomy, one expects prompt and straightforward explication of Raphael's discourse on astronomy from Book VIII of *Paradise Lost*. However, Danielson waits until near the end of his book (Chapter 7) for a first extensive treatment of this passage from the poem. In this way, Danielson thwarts easy and quick answers, and builds his argument with thick bonds of contextual material to an eventual argumentative climax. Chapter 2 is something of a readerly surprise, introducing a topic which is initially difficult to relate to the first chapter and the enterprise laid out in the preface and book jacket. Moreover, chapter two almost exclusively addresses Milton, while chapter three does not even mention Milton, so Danielson's method and synthesis function differently throughout the monograph. His treatment of Galileo gets two specific chapters, but arguably the most sumptuous connection to Milton is made in Chapter 7 (on planet earth). One hoping to understand the extent to which *Paradise Lost* was informed by Galilean perspectives might find the titles of these chapters a bit cryptic: 'Milton and Galileo revisited (1): "Incredible delight"' and 'Milton and Galileo revisited (2): "What if?"'. Moreover, they may press on only to be dizzied by quite extensive discussions about Francis Bacon, and then about how Milton's hesitation to endorse one cosmological system explicitly over another has perhaps less to do with the intellectual equality of the Ptolemaic model than with the strength and currency of Tycho Brahe's ideas. Although moderate in length, not all of the book is easeful reading, and the chapter headings and

epigraphs do not fully prepare one for the range of topics or authors covered in some chapters. Danielson is interested in bringing strong nuance to the critical discussion of Milton, which sometimes leads him to make scrupulous distinctions and introduce obscure texts, and at other times, produce straightforward propositions about well-known and utterly canonical texts. His introduction to the Ptolemaic cosmos in Chapter 1, as well as and his constant 'asides' to the twenty-first century reader (usually alerted by Danielson's frequent use of 'still today' or 'even today') sometimes feel at odds with his subsequent name-dropping and subtle differentiations between Renaissance cosmographies.

My chief complaint with his book is that it does not consider astrology ('astrology' is not even indexed), but seems only to use the monolithic term more acceptable to modern sensibilities, 'astronomy'. Astrological predictions were the motivation for most 'astronomical' work, and in reality there was limited distinction between the two. The nature, function and importance of the zodiac are not mentioned at all in *Paradise Lost and the Cosmological Revolution*, in spite of making an appearance in *Paradise Lost*. The silence on astrology is particularly surprising given that the first chapter is a namesake of C. S. Lewis's *The Discarded Image*, a text which considers astrology at some length. Danielson has numerous other opportunities to bring up astrology: in his discussion of planetary influence and the reality of earthshine, in his bringing up of Platonism (but eliding the hermetic traditions) and even famous astrologers like Marsilio Ficino. Perhaps Danielson's book moves along more smoothly without diverting to consider astrology, but the result feels a tad omissive.

In the main, Danielson's arguments are shatteringly strong and the connections he makes perspicuous and unforgettable for any re-reading of *Paradise Lost*; so much so, that to think that the counter-view held a moderate consensus in the past is baffling. Furthermore, a noble endeavour throughout Danielson's book is an unrelenting critique of the 'smug hindsight' associated with a 'unidirectional cosmological revolution' that does not see 'the necessity of piecemeal model-making' (p. 74). Particularly strong are Chapters 7 and 8 (on planet earth, ET, and space travel), which deal with topics almost untouched by Milton critics. Danielson's sources are numerous but uncumbersome, and his passionate debunking of popular myths results in a delightfully polemic tone, which transitions into an exuberant show-and-tell of the possible in Chapter 8. Considering the book at large, one gets the sense that Danielson has researched multifarious scholarly debates on the many matters which the book touches, though he is not overbearing with footnotes, and reserves

quotation almost exclusively to primary texts, which agrees spiritually with the remarkably brief ‘Bibliographical note’ that concludes the book: ‘If one wishes to explore the history of astronomy and cosmology further, one cannot do better than to sample the writings of the great astronomers themselves: Copernicus, Tycho Brahe, Kepler, Galileo’ (p. 215). In summary, *Paradise Lost and the Cosmological Revolution* should be a permanent must-read for any serious Milton critic, and a prime text for Renaissance scholars interested in seeing how the cosmological changes wrought in the sixteenth and seventeenth centuries informed literary productions.

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Luís Rodolfo Vilhena, *The World of Astrology: An Ethnography of Astrology in Contemporary Brazil*, trans. Graham Douglas (Ceredigion: Sophia Centre Press, 2014). ISBN: 978-1-907767-04-3. Illustrated, 244 pp.

The author of this book, Luís Rodolfo Vilhena, was a promising Brazilian anthropologist who died tragically young in 1997 at the age of thirty-three. *The World of Astrology*, based upon his research for a Masters degree at the University of Rio de Janeiro, was originally published in Portuguese in 1990. Its chance discovery (as we say) by Graham Douglas in a Lisbon bookshop inspired him to produce this excellent translation, and both he and the Sophia Centre Press are to be congratulated for the resulting new addition to the Anglophone world of scholarship and research into modern astrology.

Douglas also contributes a helpful preface in which he situates Vilhena’s work in a double context: influences on that work, especially Claude Lévi-Strauss, and subsequent research in English conducted independently, especially by Alie Bird, Kirsten Munk, Bridget Costello, Bernadette Brady and Nicholas Campion. Their work comprises a mixture of ethnography, anthropology more broadly, and sociology.¹

Vilhena’s subjects are members of the urban middle classes in Rio de Janeiro with varying degrees of involvement in astrology, from professional practitioners to those who only consult astrologers. They are also involved with astrology in ways and for reasons which differ. The

¹ Much of it, although by no means all, is available at <http://www.the9thhouse.org/index.htm> [accessed 29 September 2016].

period is the 1980s, but surprisingly little seems to have changed. Some informants value astrology as a spiritual path (although not formally religious), some as a psychotherapeutic practice allied with Jung's analytical psychology, and some as an esoteric knowledge resisting the scientific materialism of modernity. The only thing missing here is the subsequent rise of astrology as divination which, because it doesn't fall neatly into any of those categories, has complicated them in an interesting and potentially fruitful way.

The strength of Vilhena's approach follows from his adherence to Lévi-Strauss's structuralism, which reveals the scope, sensitivity and flexibility of astrology as a classificatory system, based on synchronic binary oppositions, with which to make sense of experience, social relationships and the world. The ultimate development of this kind of astrology is perhaps in the orientations it enables towards the modern world as such, in tandem with the way its academic study can reveal those orientations.

Vilhena shows convincingly, for example, that rather than rejecting science outright, some of his astrologers are trying to spiritualise it. Others are working to the same end using psychology as a project that is, for them, both scientific and spiritual. That was precisely Jung's hope, of course. (The result can equally be seen as a disingenuous attempt to disguise its real nature, a muddled but pragmatic compromise, or a promising new synthesis.) Still others reject modern materialism altogether, taking refuge in astrology as an ancient esoteric and occult 'science' of the kind defended by the rebarbative René Guénon. But as Vilhena points out, both that rejection and the presumptive remedy are themselves thoroughly modern responses.

Vilhena makes the related point (as have others) that astrology's emphasis on exact astronomical positions, mathematical calculations and a complex set of theoretical rules for interpretation potentially position it as a scientific and/or objective enterprise, while the irreducibility of qualitative planetary principles, never far removed from divinities, equally mark it as 'magical'. Again, it offers, or seems to offer, a solution to the question of how to be in the modern world but not of it.

It seems worth adding that magic in fact offers a deeply compromised way to oppose the modern world. Although 'spiritual', a great deal of it is already implicated in the mode of instrumental power-knowledge that is so central to modernity: aiming for mastery, manipulating 'energies', using the will to bring about desired changes (whether 'subjective' or 'objective'). That which is radically non-modern, and which therefore marks its limits, is something else: enchantment. (Although, confusingly,

the same word – magic – is often used to describe it). But wonder cannot be used, let alone organised, and with that realisation, people who mainly want power lose interest.²

Vilhena works hard to relate the various positions taken to the social classes and relationships of their takers, and with some success. It's odd, though, that he doesn't seem to have been aware of T. W. Adorno's early and influential writings on astrology based on the *L.A. Times*' sun-sign column and its readers in the 1950s.³ Amid Adorno's dollops of Marxism and psychoanalysis and his wildly speculative conclusions are some valuable insights, especially the idea that astrology, in any depth beyond sun-sign columns, appeals mostly to the 'semi-erudite'. By this, Adorno meant those sufficiently well educated to follow its sometimes intellectually demanding complexities, but not so well-educated that they have thereby succumbed to the intellectual elite's metaphysical worldview. (Since the late seventeenth century, that has been one which excludes even the possibility that astrology is true or real.) Of course, this concept is also too crude, but it is at least interesting and potentially fruitful.

Although it's not a serious omission, the commentary here might also have mentioned Bauer and Durant's 1997 empirical study 'Belief in Astrology', which follows up Adorno's work. It broadly supports the conclusions in this book.⁴

Not surprisingly, the weakness of Vilhena's work also follows from the source of his insights, namely its structuralism. That commitment means, as he says, that 'I approached astrology as a whole principally in terms of its beliefs' (p. 103). Belief and knowledge are functions of epistemology. As such, they encourage a neglect of how astrology works as ontology: a way of life, not only a way of knowing, in which working with symbolism, arguably the heart of astrology, is central. We learn much about various worldviews and their social dimension, but it is possible to miss a close

² I explore this and related issues in 'Enchantment and Modernity', *PAN: Philosophy, Activism, Nature* 9 (2012): pp. 76–89, available at <http://arrow.monash.edu.au/vital/access/manager/Repository/monash:85446> [accessed 29 September 2016].

³ T. W. Adorno, 'The stars down to earth: The Los Angeles Times astrology column, a study in secondary superstition', *Jahrbuch für Amerikastudien* 2 (1957): pp. 19–88, reprinted in T. W. Adorno, *The stars down to earth and other essays on the irrational in culture*, ed. Stephen Crook (London and New York: Routledge, 1994).

⁴ Martin Bauer and John Durant, 'Belief in Astrology: A Social-Psychological Analysis', *Culture and Cosmos* 1 (1997): pp. 55–72.

study of how astrological symbolism itself works when it is an essential part of lived experience. For that – not as a replacement for Vilhena’s sociology and social anthropology, but as a necessary complement – a more phenomenological and/or hermeneutic approach is necessary.

Such a call by no means rules out anthropology, which is a very roomy (and contested) discipline. It does, however, move in the direction of the humanities and away from the social sciences. A start, and good example, is provided by an MPhil thesis briefly mentioned in Douglas’s preface: Lindsay Radermacher’s ‘The Role of Dialogue in Astrological Divination’ (2011).⁵

It also follows, I think, that to understand what it’s like to be a practising astrologer (including, but not only, what it feels like), one needs to at least have had the experience of being one.⁶ Vilhena studied astrology but mainly, it seems, as a ‘system’ which one ‘applies’ to generate meaning. It is that, and an admirable and fascinating one, as this fine study shows; but it is far from only that.

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⁵ Lindsay Radermacher, ‘The Role of Dialogue in Astrological Divination’ (MPhil, University of Kent, 2011), available at <http://www.the9thhouse.org/docs/Lindsay%20Radermacher%20MPhil%20Thesis%202011.pdf> [accessed 29 September 2016].

⁶ I address this issue in relation to the history of astrology in ‘The Historiography of Astrology: A Diagnosis and a Prescription’, in *Horoscopes and Public Spheres: Essays on the History of Astrology*, ed. K. von Stuckrad, G. Oestmann, and H. D. Rutkin (Berlin and New York: Walter de Gruyter, 2005), pp. 261–74.