BOOK REVIEW: Green Planets: Ecology and Science Fiction, ed. Gerry Canavan and Kim Stanley Robinson. (Middletown, CT: Wesleyan UP). ISBN 978-0-8195-7427-5 (PB) \$27.95 [Matthew Griffiths]

As a number of contributors to *Green Planets* point out, science fiction has long been interested in what we now understand as ecology, in both its scientific and socio-political senses. Indeed, in the interview of one editor by another that concludes the book, Kim Stanley Robinson comments that 'pretty prominent in science fiction is a body of work that concerns itself with planets and how humans live on them, and these stories are always ecological in some loose sense' (252). It might thus seem surprising that the discipline of environmental literary criticism – ecocriticism, as it has rather grudgingly come to be known – has only recently begun to consider the genre of science fiction comprehensively, as it does in this volume of essays.

We should bear in mind that ecocriticism was relatively late to the table of literary theory, emerging around a quarter of a century ago from readings of such authors as Thoreau in the United States and the Romantics in Britain. The increasing urgency of environmental concerns and the push to give ecocriticism some theoretical rigour have seen a considerable expansion of the discipline's bibliography, but it still remains in the shadow of better-established approaches, such as Marxist, feminist and postcolonial critiques – which are all in evidence in Green Planets. For instance, Gerry Canavan opens his Preface by declaring that 'this volume was first inspired by Mark Bould and China Miéville's Red Planets: Marxism and Science Fiction' (ix), while Robinson identifies 'Marxist critical theory' as one of his own touchstones (256-7). This does mean that several of Green Planets' thirteen essays present a distinctly eco-socialist perspective; still, there is sufficient diversity across the book to show the breadth of approaches that go by the name of ecocriticism, with Timothy Morton's contemplation of Avatar perhaps the most intellectually challenging and adventurous of these, opening up the levels on which we can consider that film.

Canavan's ranging and incisive Introduction to the volume attempts to categorise these essays according to three different types – 'Arcadias and New Jerusalems', 'Brave New Worlds and Lands of the Flies' and 'Quiet Earths, Junk Cities, and the Cultures of the Afternoon'. This offers a productive way to think about potential human, and nonhuman futures, given that it allows for both pastoral and technological utopias and dystopias of varying degrees; it will certainly resonate with readers who are interested in Wells's utopian writings. However, despite the promise of Canavan's Introduction, a different pair of categories suggested themselves to me as I worked my way through the book: pieces that affirm the relevance of particular texts to our understanding of 'the environment'; and essays that actually consider the opportunities science fiction presents to investigate, question and challenge this understanding.

The opening couple of chapters fall into the former category, suggesting that the book as a whole might be no more than an annotated bibliography of fiction that fulfils standard ecocritical nostra. (Much more successful at this endeavour is the book's nineteen pages 'Of Further Interest', which list a sizeable number of novels, films and television and pithily identify their ecocritical relevance.) Christina Alt's chapter on Wells might thus, for readers of this journal, be disappointing; she compares The War of the Worlds to Men Like Gods to distinguish the author's earlier evolutionary pessimism from his altogether more anthropocentric later work. Identifying that bacteria rather than human wiles overcome the Martians, Alt argues that the first novel takes an implicitly ecological position because it recognises the agency of other species, removing the human from a position of central importance. In Men Like Gods, however, humans master their environment, exterminating those species they deem unnecessary, to create a technocratic idyll. While these observations are undoubtedly true, Alt's is essentially a scientific historicist account of the novels that does not offer any original, ecocritical insight into Wells's work. Michael Page's subsequent chapter on 'Evolution and Apocalypse in the Golden Age' takes a similar tack, albeit with a wider range of texts (readers may like to draw their own parallels between these and Wells's The Time Machine or The Sleeper Awakes). Eric C. Otto's discussion of Paolo Bacigalupi's short fiction later in the book also seems limited in scope to rehearsing the most obvious points of ecocritical interest.

Where this strategy of expanding the ecocritic's horizons does better is in addressing texts that are not so readily badged as "environmental", or indeed "science fiction". Christopher Palmer's 'Ordinary Catastrophes: Paradoxes and Problems in Some Recent Post-Apocalypse Fictions' draws on Douglas Coupland's Girlfriend in a Coma as well as Margaret Atwood's Oryx and Crake and China Miéville's Kraken, a range of work sufficiently different to generate some fresh insights into the notion of the post-apocalyptic. Meanwhile, essays by Andrew Milner and by Elzette Steenkamp consider, respectively, George Turner's The Sea and Summer, and Jane Rosenthal's Souvenir plus Neill Blomkamp's film District 9, challenging the predominance of the Northern hemisphere in science fiction by bringing work from Australia and South Africa into the fold. Smartest of all in extending the reading list of science fiction scholars and ecocritics alike is Rob Latham's 'Biotic Invasions: Ecological Imperialism in New Wave Science Fiction'. This is comprehensive enough to work as a survey in its own right, as well as making good use of Marxian analysis to tease out the ecological implications – and possibilities – of the genre.

Latham's work, then, overlaps with the second strain of essays evident in the book, those that make engaging arguments for what science fiction, as a mode of writing, enables for environmental thinking. This approach is somewhat evident in Gib Prettyman's discussion of Ursula K. Le Guin's 'Utopian Fictions', particularly as these fictions illustrate the potential, and pitfalls, of Fredric Jameson's notion of 'World Reduction' as a novelistic strategy. Adeline Johns-Putra in her chapter on Maggie Gee's *The Ice People* then perceptively considers the ways that narrative reversals put assumptions about the value of care and the value of technocracy in tension, complicating the gender binaries with which these are associated. Melody Jue is likewise attentive to the way that science fiction can problematise straightforwardly gendered approaches to the world in her comparison of Stanislaw Lem's *Solaris* and Greg Egan's novella *Oceanic*.

Such are the possibilities in science fiction for rethinking the world that two pieces also examine its important presence in texts not just outside the genre, but also not strictly fictional. For Sabine Höhler, Garret Hardin's *Exploring New Ethics for Survival: The Voyage of the Spaceship Beagle* exemplifies this kind of thought experiment, and she analyses the concept of the vessel in its capacities as ark, spaceship and lifeboat to assess the implications of this enclosed environment for terrestrial existence. For Brent Bellamy and Imre Szeman, such speculation constitutes a new genre – 'Science Faction' – and they take Alan Weisman's *The World Without Us* as a case study to comment incisively on the problematic appeal of the abandoned planet concept in recent years.

At its best, then, *Green Planets* is as imaginative as the work it considers, analysing ecological quandaries through and beyond a genre it defines broadly and intriguingly. While the more provocative essays throw into relief the by-the-numbers quality of some others, even the latter are doing useful groundwork for future research, contributing to the projects of both ecocriticism and science fiction studies – as an anthology of this kind might be expected to do.