

Science, Engagement, Estrangement: Remarks on Kim Stanley Robinson's Californian Ecotopia*

GIULIA IANNUZZI

It is sometimes possible for science fiction literature to act as a bridge between disciplines, and offer valuable reflections on the strategies available to a structural *interdisciplinarity* as well as on how this fascinating (and often elusive) concept can work in the practice of cultural production and reflection. The need to work outside the rigid framework of disciplinary divisions seems to me to be one of the most interesting challenges for academics today, whether it be for the hard sciences to encourage a dialog with the public and participate in decision-making processes regarding research and development at an institutional if not political level, or for the humanities to define their own role in contemporary society.

Interestingly enough, the overlap between science fiction studies and Ecocriticism—two fields equally concerned with interdisciplinary issues—, is currently much more limited than might be expected. The pages that follow

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contain some reflections upon the present and potential state of this dialog, and offer some comments on Kim Stanley Robinson's *Three Californias Trilogy* and in particular, on the final novel, *Pacific Edge*, as a case in point.

As the name suggests, science fiction can draw on a repertoire of images, concepts and ideas taken from all branches of science. Biology, botany, ecology, ethology, and genetics have figured among the principal objects of science fiction invention, narration, and critical reflection since its inception. Genre narratives have often focused specifically on the interaction between man and the environment, on non-human life forms and non-anthropocentric points of view, and many works of science fiction take the form of *thought experiments*, functioning as warnings about human habits, and creating an effect of *cognitive estrangement* (Suvin) that invites readers to escape from their more habitual (and usually invisible) frames of mind.¹

Throughout the nineteenth and twentieth centuries, science fiction has helped to construct many of the rhetorical *topoi* and themes we use to discuss environmental issues. Numerous authors have played a role in developing our linguistic and imaginary repertoire about ecology, sometimes anticipating the success of works of scientific popularization (one good example is Harry Harrison's novel *Make Room! Make Room!*, which explored the consequences of uncontrolled growth in the Earth's population just two years before the publication of Paul Ehrlich's *The Population Bomb*, 1968). Environmentalism, and concern about man's exploitation of nature and natural resources, have been the central motives of many science fiction narratives, with mounting interest and awareness from the sixties onwards, when depictions of reduced ecologies are to be found in novels such as Frank Herbert's *Dune* (1965) and Ursula K. Le Guin's *The Dispossessed* (1974) (cf. Heise "Reduced Ecologies"). Alongside this theme is the role played by ecology in the depiction of the colonization of other planets, terraforming (Pak "Terraforming"), climate change and disaster narratives concerned with eco-catastrophes and ruined-Earth scenarios (Canavan and Robinson; Stableford; Nicholls, Clute, and Langford; Murphy "The Non-Alibi" 264-66). In this case as in many others, however, the research theme cannot be separated from the issue of its critical visibility: in fact, the relationship between science fiction and ecology has only just started to be a specific object of study in recent years, with essays and collections appearing from the years two thousand on, devoted to selected authors and to surveying the presence of ecology in the science fiction of previous decades, in dialog with the field of Ecocriticism, and the gradual development of the latter from the nineties on.²

1 On the definition of science fiction, and its conventions and tropes, see the seminal work by Suvin (1978), and the historical and pragmatic approaches represented by Rieder; J. Gunn, Barr, and Candelaria. For works of reference on science fiction history and sub-genres see Bould et al.; James and Mendlesohn; Latham; Roberts; Seed.

2 While the term *eco-criticism* was coined in 1978 (Rueckert), it was only in the early nineties that Ecocriticism was codified and began to develop as a specific critical field. In the late eight-

It is no coincidence that in recent years, the field of science fiction studies has seen the awakening of a new interest in the global perspective and in the study and understanding of a “global science fiction,”³ reflecting parallel trends in Ecocriticism, which has itself experienced a shift in place-attachment from a locally-focused conception to a global or, at least, a more transnational one, and which has developed significant interconnections with post-colonial studies and world literature; the field of animal studies provides a significant point of contact between the two fields of study, under the banner of the representation of the non-human, and the invitation to a non-anthropocentric or post-humanist paradigm of reality (see Buell, Heise, and Thornber 426-28, 430-33; cf. Heise “World Literature”).

What makes the works of Kim Stanley Robinson particularly stimulating as regards these problems is that, in his writing, the relationship between literary creation and scientific elements goes beyond a mere communality of themes and images: it goes without saying that the presence of scientific and technological elements as parts of the narrative invention in a novel can be interesting in itself, and can have a role, for example, in the popularization of scientific ideas, but simply translating themes from the hard sciences into literature does not fully exploit the potential of literature as a form of (and tool for) knowledge. Ongoing shifts in our model of reality are not only prepared and executed inside science departments and laboratories: they are also a consequence of complex paradigm changes, of shifts in our vision of the world, in language and metaphor, and in rhetorical strategies, where literature plays a part of its own: areas of common ground between literature and sciences can also be found at the level of critical thought and epistemology.⁴

ies, numerous special issues appeared of journals of humanities studies, and in 1992, the Association for the Study of Literature and the Environment (ASLE) was founded. The mid-late nineties saw the appearance of seminal critical works such as Buell’s *Environmental Imagination* (Buell, Heise and Thornber). Sub-genres and literary tropes identified and analyzed by Ecocriticism in relation to non-science fiction literature—such as the ideas of Eden, the wilderness, and pastoral idyll—have been used successfully in the reading of many science fiction narratives and in the genre’s general tendencies. See for example the entries of *The Encyclopedia of Science Fiction* cited in the present essay, Baratta esp. 2-3, Stratton esp. 5.

3 Of great interest are the special issues on global science fiction and the different national science fiction traditions featured during the two thousands by *Science Fiction Studies* (undoubtedly one of the most important scholarly journals of science fiction at the international level), the recent launch of a collection devoted to *World Science Fiction Studies* by the academic publisher Peter Lang (announced in May 2014), and an increased trend on the part of Clute, Langford, and Nicholls’ *The Encyclopedia of Science Fiction* toward a global perspective, with the inclusion of numerous entries on non-English speaking countries and authors.

4 On disciplinary divisions of knowledge see Kagan; on science fiction as a bridge between the “two cultures” see Westfahl and Slusser; from the vast bibliography of literature and science studies, I would like to single out a useful contribution in Italian by Ceserani. For further readings on literature and science see the on-line *Bibliography of the Society for Literature, Science, and the Arts* and the reviews section of the *The British Society for Literature and Science* website. For interdisciplinary theoretical frameworks, a useful starting-point is G. Gunn’s “Interdisciplinary Studies.”

In the case of Robinson's *Three Californias Trilogy*, Heisenberg's uncertainty principle finds a literary application: the observer—the text's implied author—is fully conscious of being part of the system observed, in the sense that he not only creates the fictional reality of the novels as refined thought experiments, but he knowingly (and meta-narratively) places himself in relation to the questions posed by the narratives (hence the *engagement* in the title of the present contribution).

Of course, while Robinson's trilogy undoubtedly makes an important contribution to the debate on North American identity, it is also relevant to the topic of the present volume. In addressing Robinson's novels, I shall be looking at the relationships they construct between different kinds of debates—literature, sciences (including ecology) and politics—and the specific reflections they stimulate as regards a collective national identity in relation to various specific man-environment relationships. The decision to focus on the *Three Californias Trilogy* (or *Orange County Trilogy*) and not on Robinson's other works is partly motivated by my own research interests and partly by the need to set a reasonable limit on the essay in terms of length and range of topics.

Robinson's *Orange County Trilogy*, made up of *The Wild Shore*, *The Gold Coast* and *Pacific Edge*, was published between 1984 and 1990. The eighties are usually remembered in science fiction history for the appearance of the cyberpunk sub-genre, but the decade witnessed other important tendencies as well, from a rebirth of hard science fiction (Stephen Baxter, Alastair Reynolds or Robert James Sawyer), to the increasing importance of an eco-centric strain, with the *CoEvolution Quarterly*,⁵ the sequels of *Ecotopia* by Ernest Callenbach, and, indeed, Robinson's *Orange County Trilogy*. Just a few years later, Robinson would be definitively acclaimed as one of the most interesting contemporary science fiction authors with the publication of his *Mars Trilogy* (1992-1996).⁶

Robinson's literary creations can be read as a contemporary offshoot of that category of science fiction best described in Suvin's seminal work, in which the aspect of thought experiment, of fantastic extrapolation and projection, is based

5 *The CoEvolution Quarterly* which developed from the *Whole Earth Catalog* ran from 1974 to 1985 and published works by many science fiction writers; Pak "Goal."

6 Robinson's most successful works in terms of critical reception are *Red*, *Green* and *Blue Mars*, which are the works usually included in science fiction companions (e.g. Seed 544-55), in studies on science fiction with specific ecological interests (e.g. Murphy "The Non-Alibi") or utopian interests (e.g. Jameson 393-416); they are among the principal objects of investigation in essays and collections specifically dedicated to Robinson's work, along with the *Science in the Capital Trilogy*—*Forty Signs of Rain* (2004), *Fifty Degrees Below* (2005), *Sixty Days and Counting* (2007) (see Yaszek and Davis; Burling). Many of Robinson's works have won important science fiction awards; to give just a few examples: the Locus Award won by *The Wild Shore*, the John W. Campbell Memorial Award won by *Pacific Edge*; *Green Mars* won the Hugo and the Locus awards, and *Blue Mars* the Nebula and the Locus awards. Among the numerous critical readings of the *Three Californias*, I would recommend Abbott; Moylan "Witness," and Csicsery-Ronay "Possible Mountains," to which I refer the reader for (differing) in-depth readings of the trilogy, impossible here.

on a clear critical engagement with the author's factual and historical context; in other words, that vein of science fiction most significantly connected to the utopian tradition, at once the worthy ancestor, sister and offspring of science fiction (Freedman; Jameson; Moylan *Demand*; Parrinder). It is no coincidence that Robinson holds a PhD in literature obtained under the supervision of Frederick Jameson (cf. Davis and Yaszek 190, 193-94; Foote 54-55).

In *The Wild Shore*, an "after-the-fall" narrative, with a well-established tradition of precedents in the genre,⁷ the United States has regressed after a nuclear bombing and the protagonist lives in a small community on the coast near San Clemente, surviving by fishing and cultivating small plots of land. He and his friends gradually come to realize that the United States is being deliberately kept in a barbaric state by the new world powers as a way of taking their revenge against the once overly powerful country. Thanks to the process of keeping a diary, the young protagonist and homodiegetic narrator develops a new awareness of both the country's situation and his own identity. The narration is enriched by a critical reflection on the relationship between man and his environment that is not merely a physical one, but one that is also crucial to the identity-building process. The novel depicts what we can properly call a *science fiction post-atomic pastoral*, offering a science fictional version of a coming-of-age story, in which the description of the experience of the wilderness draws clearly and consciously on an extended and powerful American literary tradition.

The Gold Coast, Robinson's second California, presents a car and industry-oriented dystopia directly extrapolated from the author's own life in the seventies: "during my childhood I had seen Orange County's agricultural landscape torn out and replaced by freeways and buildings. Science fiction was the first literature I had read that spoke to that feeling of 'future shock' or 'landscape PTSD.' . . . *The Gold Coast* felt like I was writing my life and times" (Csicsery-Ronay "Pacific Overture").

This dystopia or, ironically, utopia "since it satisfies most material needs and operates on the ostensibly rational human principles of self-interest, maximization of pleasure, and growth" (Csicsery-Ronay, "Possible Mountains" 168), is the closest to the author's actual experience and is certainly the most immediately plausible of the three scenarios. Once again, the plot revolves round a young protagonist, Jim, struggling to make sense of his existence. In the course of the narration he experiences what it is like to be an eco-terrorist (but the terrorists' actions will turn out to have been contrived by those very arms manufacturers whom Jim had thought were the target of the attacks) and a rebel archaeologist, who literally *digs out* the past, bringing to light the remains of a past civilization,

7 As his literary points of reference for *The Wild Shore*, Robinson has mentioned George Stewart's *Earth Abides* (1949) and Walter M. Miller's *A Canticle For Leibowitz* (1960), along with *The Adventures of Huckleberry Finn*, his direct source of inspiration for the initial scene of the grave-digging. See Csicsery-Ronay "Pacific Overture." For an overview of the theme: Pringle, Nicholls, and Langford; Nicholls, Clute, and Langford.

from under the concrete surface of parking lots and malls in order to understand the historical implications of the present situation.

A rare occurrence in contemporary fiction, *Pacific Edge* presents us with an ecotopia: as the narrator says, paraphrasing Marcuse: “one of the worst signs of our danger is we can’t imagine the route from here to utopia” (148). There is a dual narrative frame in which a second narrator, a character in his own right but also an alter-ego of the author, reflects on the difficulties inherent in the utopian literary genre.

The ecotopia described in the main plot details the everyday life of the protagonist but also the concomitant economic and legal system which plays a key role in the construction of the fictional world: Robinson’s thought experiment persuades the reader that really—as one of the character says—“legislation is a revolutionary power, boy, though it’s seldom seen as such” (56). There are advanced regulations governing economic activities, buildings, use of natural resources, and, significantly, the control of water, all of which enable the State to contain economic growth. Interestingly, the creation and adoption of neologisms in the novel—coined in analogy to existing terms as compounds or blended forms, or with new uses of English words (such as *waterscape*, *cloudgel*, *light-charged*, *thermocrete*, *thermostat* used as an intransitive verb, *iceberg* used as a verb)—is concentrated on natural resources and their practical derivatives and applications in human activities, mirroring linguistically the critical reflection on the relationship between the human community and its environment which is dealt with on one level of the narration (Slotkin).

The depiction of California’s natural environment and people’s relationship with it has its roots in American Transcendentalism, as well as in realism and in a focus on the small-scale dimensions typical of Zen Buddhism, part of a distinct Californian underground culture substratum.⁸ Orange County really is Robinson’s own Yoknapatawpha County (Foote 52), and is in fact one of the actual protagonists (if not the main one) of the trilogy; indeed, the author has been quoted as saying that he considers himself “a Californian writer,” who values the heritage of fellows such as “Snyder, Rexroth, Le Guin, and Muir” (Csicsery-Ronay “Pacific Overture,” cf. “The Boom Interview”; interestingly, Robinson was appointed Muir Environmental Fellow in 2011 by the John Muir College, University College San Diego; see “Muir Environmental Fellows”; Abbott).

Kevin, the protagonist of *Pacific Edge*, who has just been elected to the town council of El Modena, is fighting against the project to build a new development on Rattlesnake Hill, the last entirely wild hill near the town, and a clear example of the above-mentioned small-scale focus of the narration.

Kevin and some friends discuss the Rattlesnake Hill problem while on an excursion outside El Modena. In the course of the excursion, the environment

⁸ D. T. Suzuki and Gary Snyder “helped to shape the distinctively Californian ecological movement from which many currents of the global counterculture have emerged.” Csicsery-Ronay “Possible Mountains” 150; cf. Davis and Yaszek 191.

itself becomes an integral part of the characters' critical reflections as much as of Robinson's artistic recreation of it:

They listened to the wind, and watched the stars pop into existence in a rich blue sky. On such a fine night it was a shame to get into the tents, so they only shifted into their sleeping bags, and lay on the groundpads watching the sky. The snow patches scattered among the rocks shone as if lit from within. It seemed possible to feel them melt, then rush into the ground beneath them, to fall down the slope into Le Conte Canyon and seep a slow path to the sea, in invisible underground Columbias . . .

Suddenly it was clear to him that Sally had had a reason to bring them up here to have this talk; that this place itself was part of the discourse, part of what she wanted to say. The university of the wilderness. The spine of California, the hidden source of the south wealth. This hard, wild place . . . (106, 109)

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