

“A Sort of America”: Ecology and History in Kim Stanley Robinson’s *Mars* Trilogy

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ABSTRACT

American science fiction and fantasy writer Kim Stanley Robinson’s *Mars* trilogy can be read as the epic story of post-catastrophic human life. This essay investigates the narrative intersections of history and ecology in *Red Mars*, *Green Mars*, and *Blue Mars*. On the one hand, the utopian significance of the trilogy manifests itself in the textual figure of the *landscape* which, as it changes its *gestalt* over the course of the trilogy, gestures toward possibilities of ecological rehabilitation and regeneration. On the other hand, the trilogy’s narrative trajectory, i.e., the imaginary history of conquest and settlement, heavily relies on the historical master narrative of America, including some of its ideological and racial blind spots, which jeopardizes the revolutionary implications of the ecological utopia.

KEY WORDS

science fiction, utopia, ecology, history, landscape, America



1. Introduction

Kim Stanley Robinson's monumental trilogy about the human colonization of Mars has been celebrated as one of the major literary science fiction events of the 1990s. Because of their overt critique of capitalism as "a version of feudalism in which capital replaces land, and business leaders replace kings," *Red Mars* (1992), *Green Mars* (1993), and *Blue Mars* (1996)¹ have attracted particular attention from critics on the left. Reviewing the novels for *Monthly Review* magazine in 1997, British historian John Newsinger (now senior lecturer at the School of Historical and Cultural Studies at Bath Spa University College) rejoiced:

At a time when the left seems to be on the defensive and in retreat just about everywhere, it is a cause of celebration to have a best-selling, award-winning fictional trilogy that celebrates humanity's ability to take control of its destiny and to establish a socialist community, a community and society organized to satisfy human needs, where diversity flourishes and it is possible for everyone to fulfill their full potential, free from the chains of class, race, and gender.²

Newsinger agrees with Robinson that in the post-Cold War era, "[I]t is very important not to throw the socialist baby out with the Stalinist bath water!" (143).

Gesturing in a similar critical direction, but perhaps with greater

authoritative clout, Marxist critic Frederic Jameson reads the trilogy as a successful literary exercise in reasserting the cultural power of utopian thinking. Drawing on the Althusserian concept of overdetermination,³ Jameson makes a point that Robinson's science fiction trilogy, although it elaborately rehearses "a host of topics that surely qualify as hard science,"⁴ should ultimately be read metaphorically: "we need to insist on the way in which any first scientific reading of the Mars trilogy must eventually develop into a second allegorical one, in which the hard SF content stands revealed as socio-political—that is to say, as utopian" (211). As a mode of thinking that finds expression in philosophical, literary, and artistic discourses which playfully examine alternative possibilities of social, political, and cultural existence, utopia remains a necessary component of postmodern intellectual culture—in spite of the fact that, as a result of its implication since the Renaissance in a history of colonization, subjugation, and ideological aberration, it has lost much of its historical and political credibility. Focusing on its socio-political dimensions, Jameson rehabilitates utopia by defining it "as a form [that] is not the representation of radical alternatives; it is rather simply the imperative to imagine them" (231). Like the university (another modern institution currently facing severe structural criticism, at least in Germany), although utopia has not outlived its cultural legitimacy, it needs to be re-invented or re-imagined as a location "enabling that most dangerous adventure called 'experimental thinking'" (Ulrich Beck).⁵

The emergence in the 1990s of ecocriticism as a methodology concerned with "the study of the relationship between literature and the physical environment"⁶ heralded an awareness among scholars of the correlation between the ways in which a culture *imagines* and *thinks* about nature and the ways in which it *inhabits* and *interacts with* its natural environment. SF and fantasy literature is a valuable source for obtaining a better understanding of this correlation. In the following paper, I want to examine Kim Stanley Robinson's *Mars* trilogy as a literary endeavor to renew the genre of socio-political utopia from an ecological perspective. Based on literary theorist Wolfgang Iser's assumption that fiction (or the fictive) is a playful, performative

figuration and concretization of the imaginary, I will concentrate my analysis on the narrative function of *landscape* as an articulation of a postmodern ecological imaginary that links the processes of history and ecology.

My critical interest in these problems is premised on a larger theoretical interest in the role art, literature, and, by implication, the humanities can play in processes of ecological modernization. That such processes are necessary can no longer be denied. The increasingly tangible effects of global climate changes, dwindling fossil resources, the volatility of nuclear power, the growing frequency with which “natural” catastrophes such as floods, droughts, heat waves and tsunamis occur world-wide, and screaming social and racial injustices between those who benefit from exploiting natural resources and those who are affected by the often hazardous environmental side effects of such exploitation—these are some of the most obvious indicators that we are in the midst of an environmental crisis. Robinson is acutely conscious of this. This awareness, combined with the author’s Blochian hope⁷ that a deficient present does not, by necessity, lead to an apocalyptic future, lends utopic propulsion to Robinson’s work.

2. The Narrative Network of Ecology and History

Red Mars, *Green Mars* and *Blue Mars* comprise a narrative that tells the imaginary history of roughly the first two-hundred years of human life on Mars. The first human contingent arrives on Earth’s closest planetary neighbor in the year 2027 after a nine-month (!) trip from Earth. They are the First Hundred, “an impressive group of experts in the relevant sciences and professions” (RM 27) who form the avant-garde of human settlers, and who “were crazy enough to want to leave Earth forever, but sane enough to disguise this fundamental madness . . . as pure rationality, scientific curiosity” (RM 27). At the time of their arrival, the Martian landscape exists as the double-image created by mythological projection and cosmological force. Robinson opens his saga with a brief account of the red planet’s symbolic presence in the human mind, for which Mars’ momentarily bright

presence in the night sky has always presented an object of epistemological desire. This human curiosity crested in the search “for signs of past or present Martian life, anything from microbes to the doomed canal-builders, or even alien visitors” (RM 3). Two chapters later, Mars’ coming-of-age as mytho-philosophical subject is juxtaposed with its actual coming into existence as a material object. The scientific imagination has represented the planet as the product of cataclysmic cosmic forces, of rocks banging, melting, exploding and being pressurized into a planetary whole, which was later showered with myriads of meteorites, all this forming a planet whose “landscape [is] a palimpsest of newer rings obscuring older ones” (RM 95), and crisscrossed by “flood channels, stream beds, shorelines, every kind of hydrologic hieroglyphic” (RM 95) left behind after “glaciers, streams, rivers, lakes” (RM 95) have long disappeared.

The arrival of humans in this primeval landscape as imagined in Robinson’s fiction will eventually turn out to be as cataclysmic in effect and proportion as the cosmic forces that created Mars in the first place. In order to emphasize this aspect, each book in the trilogy provides a map. Readers may disagree on the degree to which these cartographic aids really help to navigate unfamiliar territories. Disparities between maps and narratives are an old and familiar problem. However, these maps fulfill an important structural function within the trilogy, for they are a visual paraphrase of the narrative’s representation of human history as a gargantuan landscaping project. From the geo-cosmic palimpsest of *Red Mars*’ disorderly surface of meteor holes to *Green Mars*’ accentuation of mountain ranges, large crater holes (e.g. Hellas Planitia), and future shore lines and, finally, to *Blue Mars*’ definitive cartography of oceans, bays, fjords, inland seas, islands, mountain ranges, plains, highlands and major cities—these (and a few more additional maps inserted into the novel) represent the course of Martian history in cartographic terms, the transition of the planet’s surface from a landscape that speaks the “visible language of nature’s mineral existence” (RM 96) in *Red Mars* to the retro-pastoral scene of *Blue Mars* whose landscape is marked by “a patchwork of fields, orchards—irrigation canals and curving streams, lined by trees”

(BM 740), “wild” Alpine mountain ranges, settlements called Odessa, Cairo, Nicosia, and Montepulciano, and islands named after Kepler, Copernicus and Galileo. Reciting the historical translation of planetary topography into cultural geography, the maps underscore the structural importance and symbolic significance of space and its various figurations in Robinson’s novels. While these maps carefully register the transformation of the Martian landscape from primeval space to a geo-cultural place, the contours of political geography, as they manifest themselves in national borderlines, are conspicuously absent. I will return to this phenomenon later. At this point I would like to discuss in some more detail the trilogy’s narrative project of uncovering the correlation between the discourses of history and ecology.

The author employs two existing concepts—terraforming and *viriditas*—and makes them the metaphoric core of his Martian eco-utopia. Terraforming is a futuristic blend of literary conjectures, scientific thought experiments, and mathematical equations calculating physical conditions such as atmospheric pressure and CO₂-content. Terraforming names the assumption that ultimately it is possible to create an extraterrestrial, planetary biosphere capable of supporting human life.⁸ Narratively turning the idea of terraforming from speculative into “[a]ppplied science” and bio-transformative “technology” (GM 144), the trilogy validates present-day science as a tool for solving the ecological problems of planetary inhabitability and sustainability. In doing so, terraforming—the imaginary technology for the creation, or cultivation of inhabitable environments—is poetically imbued with historical meaning. Whether it results in the biospheric worlds of the tented towns of Green Mars (successful versions of the 1990s Biosphere 2, the sealed-off greenhouse in the middle of the Arizona desert in which scientist practiced extraterrestrial living) or in the breathable atmosphere covering the cultural landscape of Blue Mars—terraforming is the indispensable prerequisite for the continuation of human history on Mars.

The second concept, *viriditas*, ties Robinson’s Martian narrative to the other end of the historical spectrum—and solidly roots the story back into Terran soil. Translated into English as greening power,

viriditas came into prominence during the Middle Ages, when the German nun Hildegard von Bingen made it the key concept of her medical thought. Medical historian Victoria Sweet observed that for Hildegard, *viriditas* signified “the amazing ability of plants spontaneously to put forth leaves, flowers, fruits, and seeds” as well as “the obvious, but remarkable, capacity of human beings to grow, to give birth, and to heal.” In her analysis of Hildegard’s writings, Sweet concludes that the medieval nun assumed “an absolute identity . . . between the *viriditas* of plants and of people,” and between the practice of medicine and gardening.⁹

As a double metaphor, terraforming and *viriditas* simultaneously signify the historically productive power of ecology and the ecological driving force of human history. If terraforming is the quasi-divine technology that creates the life-sustaining exterior of human culture (the landscape of history), *viriditas* is the regenerative, reproductive life-force located in the mystical interior of all organisms. At the beginning of the trilogy, the two concepts are presented as opposites. Terraforming, most prominently embodied by Sax Russell, an unsentimental physicist and technician from Colorado and only marginally, if at all interested in the Red Martian landscape, starts working on terraformation as soon as he arrives. He embarks on some of his projects—the installation of windmills on the surface and of reflective mirrors in Martian orbit to raise the planet’s atmospheric temperature—in spite of the expressed disapproval of other members of the First Hundred. Sax’s reliance on machines as terraforming tools is juxtaposed with the bio-engineering methods preferred by another of the original Mars colonists, Hiroko Ai, an expert ecosystem designer originally from Japan. Like Sax, Hiroko is a strong-willed and somewhat eccentric character. A latter-day Hildegard, she becomes the matriarchal leader of a community whose members create a self-contained, bio-engineered world, carving their domed home into one of the polar ice-caps. The focusing of Sax’s scientific work on surface and orbit, and Hiroko’s disappearance into a sub-surface (or underground) existence repeats and underscores the initial juxtaposition of terraforming as the technology of the exterior and

viriditas as the (bio-)technology of the interior. In *Green Mars*, the trilogy's middle volume, however, this contrast is deactivated.

After the failure of the First Martian Revolution—which broke out, when political relations between the Martian colony and the home planet Earth deteriorated because Terran powers did not recognize Mars as “a nation” but treated it as “a world resource” (RM 516)—Sax, like many others, was forced to go underground and found refuge in Hiroko's alternative community. There, he finally realizes that Hiroko was “sympathetic to the basic goal of terraforming, and indeed her own concept of *viriditas* [was] just another version of the same idea” (GM 143). Sax finally became “confident that [Hiroko] too desired a Martian biosphere that would support humans” (GM 144). Against the background of a failed revolution and with a Mars that is more and more subject to the insatiable Terran hunger for mineral resources, Sax also realizes that the creation of a sustainable biosphere is no longer merely a scientific challenge but has become a matter of both physical and political survival. In a conversation with Ann Clayborne, a geologist, adamant preservationist, and tooth-and-claw opponent of *any* mode of terraforming,¹⁰ Sax insists:

The transnats can operate from tent cities, and mine the surface robotically, while we hide and concentrate most our efforts on concealment and survival. If we could live everywhere on the surface, it would be a lot easier for all kinds of resistance. (GM 147)

With the last sentence, Sax not only *politicizes terraforming as an act of resistance* against those human interactions with the environment that Val Plumwood characterized as being marked by high levels of “remoteness” and “dissociation”¹¹; he also consolidates the narrative's insistence on the existential correlation between an ecologically imbued epistemology and the history of political emancipation. In the light of this performative textual strategy, the landscape described in the concluding chapter of *Green Mars* as a terrain “dotted by scattered low plants, mostly tundra moss and alpine flowers, with occasional

stands of ice cactus like spiky black fire hydrants," and as an environment inhabited by "midges and flies" (GM 610) is more than just an aesthetically pleasing sight. It becomes a utopian symbol that measures the historical level of political and social emancipation.

Not surprisingly, Frederick Buell characterized the trilogy as speculative fiction's most serious "attempt to transmute postmodernism, a movement usually antienvironmental in character, into something genuinely Green."¹² However, Buell criticizes Robinson for the ultimate failure of his Martian utopia to "provide a model for earthly ecological reconstruction" (279) on the grounds that the alternative, ecologically imbued society envisioned by the author is located on another planet. I see Buell's conclusion as too literal a reading of a text solidly anchored in a genre—science fiction—whose narrative authority rests on strategies of (spatial) defamiliarization and estrangement. The characterization of Robinson's Martian utopia as an expression of ecological escapism and as a work that ostensibly diverts the reader's attention from pressing environmental problems down here on Earth remains unsatisfactory, because by implication such a reading simplifies the relationship between the fictive—according to Wolfgang Iser the medium in which the imaginary finds "a tangible *gestalt*"¹³—and the real. Since the Earth in Robinson's trilogy is as much a fabricated reality (*eine fingierte Realität*) as Mars; and since, as such, both planets are located within the textual horizon of the fictive rather than the experiential horizon of the real, the act of reading becomes a mode of figurative terraforming, which transforms an uninhabitable, alien territory into a terrain that is adapted to the vital needs of the human species (which includes a large diversity of other species with whom humans live in a state of co-dependence).¹⁴ For in order to survive in and make sense of the narrative space of Martian history, the reader has to translate the language of the original Martian landscape into a language inspired by the eco-cultural life support systems of Earth. As Sax insists at the end of *Green Mars*: human existence on Mars "will never be out of danger until Earth is calm. Is stabilized" (GM 622). Mars and Earth are codependent imaginary systems, with Mars signifying the ecological and political status of the

Earth.

However, like Buell, I am reluctant to unreservedly celebrate Robinson's *Mars* trilogy as a valuable "model for earthly ecological reconstruction." Yet the problem is lodged elsewhere, not in the extraterrestrial setting but in the seeming absence of familiar forms of the political on the map of *Blue Mars*. In the concluding section of this essay I will argue that the trilogy, although it gestures towards Mars as a post-national space, ultimately subjects the narrative of an ecological utopia to the historical paradigm of empire and presents Mars as "a sort of America" (BM 235).

3. The Narrative Paradigm of American History

Robinson's *Mars* trilogy belongs to a genre with a well-established international market and a decidedly international audience; and it focuses on subjects—the interdependence of ecology, democratic politics, and the course of human history—that are neither American in scope, nor can they be exclusively addressed in terms of the national, at least not in any meaningful way. Robinson honors these contextual aspects by drafting the colonization of Mars as an international project: the First Hundred are a group of international scientists; immigration to Mars, which commences a couple of decades after the First Hundred's arrival, is from all parts of Earth; and the crises that cause large-scale immigration from Earth to Mars—a Malthusian population surge and natural catastrophes—are described as global problems. Moreover, after the meta-narrative opening section in which the author rehearses "the history of Mars in the human mind" (RM 2), the trilogy's plot begins with a speech in which John Boone, "The First Man on Mars" who speaks with "a friendly Midwestern accent" (RM 5), beseeches a rapt audience to understand that the project of Martian settlement "wasn't like submarining or settling the Wild West" (RM 4). The semiotic paradoxes inscribed into this description are readily apparent: not only does John Boone's name clearly echo that of Daniel Boone, the legendary 18th-century American mythologized as "an explorer of unmapped spaces,"¹⁵ John's speech is

also marked by the accent of the region that his historical namesake opened up for US settlers. Readers familiar with this aspect of American colonial history will immediately become skeptical about the narrative truth of the claim that the fiction of Martian history fundamentally differs from the master narrative of US-American history. And indeed, throughout the trilogy, Robinson strategically employs references to major paradigms, concepts, and representative figures of US-American political and cultural history as instruments for the narrative self-authorization of his imaginary historiography.

The designation of English as the Martian *lingua franca* is an act "to accommodate the Americans" (RM 37) among the First Hundred; the narratively visible majority of that group is American, or even more accurately, white American, the Russians comprising their counterparts, with three of the other major characters, originally from France, Japan, and Trinidad, as token presences in an ostensibly multicultural, multiracial group of settlers. In this context, it is important to notice the culturally conservative character of the text's racial politics: While the trilogy's white characters are predominantly scientists, engineers, political visionaries, and diplomats, thus representing the scientific and political rationality, non-white characters such Hiroko Ai (Japanese) and Desmond "Coyote" Hawkins (Trinidad) may start out as scientists but eventually gain prominence in the narrative as disembodied or semi-disembodied mythological figures who represent powerful but mystical forces. This representational division between white as the color of rationality and black as the color of the "dark continent" of the cultural unconscious reinforces the political and cultural power differential inscribed into American history.

Addressing a similar problem from a somewhat different angle, Walter Benn Michaels critically comments on the narrative reinvention of Martian settlers as Natives, observing that

. . . the colonization of Mars (unlike the colonization of the Americas, or of Australia or of Africa) really is the colonization of empty space—those who call themselves natives are just the sons and daughters of the colonists. So to characterize the struggle of the

Martians as anticolonial is in effect to imagine a colonialism whose only victims are the colonists. This is like telling the story of the American Revolution and making sure once again that the Indians get left out, or rather (in classic American fashion), redescribing the colonists *as* the Indians, turning the children of Terrans into “the indigenous people of Mars.”¹⁶

In addition to such implicit forms of neo-colonialist inscriptions, Robinson punctuates his narrative with more explicit references to the political and ideological struggles of Anglo-American history, alluding to debates about mass immigration and turn-of-the-twentieth century Nativism, the dominant perception of unsettled territory as a social and political safety valve and as cultural frontier, the ideological conflicts between wilderness preservationists and resource developers, the negotiation of conflicting interests in the American constitutional congress, and the call for a Martian Lincoln who has both the political clout and stature to maintain or re-construct the ‘nation’s’ political union.

Let me conclude by saying that as a reader who was drawn to *Red Mars*, *Green Mars* and *Blue Mars* as novels that have been received and described as a major contribution to an ecocritical literary canon, I found the trilogy filled with a host of challenging ideas and was pleasantly surprised by its gender politics, which allow ample space for powerful women characters, a trait still not often found in most science fiction novels. However, I find the narrative trajectory of the trilogy’s racial and cultural politics dissatisfying in that it reinforces rather than resists the narrative dominance of Anglo-American, as opposed to, say, African American or Mexican American history. And while the paradigmatic references to US-American history do not invalidate Robinson’s proposals for shifting the ways we think about the interrelationship between history, ecology, and democracy, the framing of utopic ecological thinking in the pre-dominantly Anglo-American terms of the master narrative of US history limits the ideological scope and the political validity of a literary work that claims to address global problems. In that regard, Robinson’s *Mars* trilogy confirms an observation Ernst Bloch made more than half a century ago:

Die Nachbarerde Mars reflektiert in den Bildern der analogischen Einbildungskraft, welche sich auf sie richtet, geradezu den Stand, auch Rang der jeweils auf der Erde herrschenden "Amerika"-Utopien (*Das Prinzip Hoffnung*, Bd. 2, 916).

For Bloch, fantasies of Martian settlement reflect the utopian dream of America. This dream has always been measured against the social, political, and imaginative realities of race and territorial expansion, an approach that strongly recommends itself for critical readings of ecological utopias.

NOTES

¹ Quotations will be from the following paperback editions: *Red Mars* (New York: Bantam Spectra, 1993), *Green Mars* (New York: Bantam Spectra, 1995), *Blue Mars* (New York: Bantam Spectra, 1997). Quotes will be marked in parentheses in the text and abbreviated RM, GM, and BM, respectively, followed by the page number. The quote in this sentence is from BM, 143.

² John Newsinger, "Red Mars," *Monthly Review* (Dec. 1997). Online: http://www.findarticles.com/p/articles/mi_m1132/is_n7_v49/ai_20348065 (May 14, 2005).

³ Originating from Freudian psychoanalysis, the concept describes the fact that any single element in a dream can be referred back to multiple factors in the dreamer's real life. Althusser applied this concept to Marxist political theory where it describes the multiplicity of historical, social, psychological, and cultural contradictions within a society leading to revolutionary rupture. See Louis Althusser, "Contradiction and Overdetermination" (1962), trans. Ben Brewster. Online: <http://www.marxists.org/reference/archive/althusser/works/formarx/althuss1.htm> (May 14, 2005).

⁴ Frederic Jameson, "'If I find one good city I will spare the man': Realism and Utopia in Kim Stanley Robinson's *Mars Trilogy*"; Patrick Parrinder, ed., *Learning from Other Worlds: Estrangement, Cognition, and the Politics of Science Fiction and Utopia* (Durham: Duke UP, 2001) 208–32. Quote 208.

⁵ Ulrich Beck, "Wider den McKinsey-Stalinismus in der

Hochschulpolitik." Qtd. in Günter Altner and Gerd Michelsen, "Hochschule im Feldversuch." *Politische Ökologie* 93 (April 2005): 9–12. "Als Antwort auf die Welt globaler Gefahren—Weltbürgerkriege, Klimakatastrophen, Aids, Terrorismus, Weltwirtschaftskrisen—müsste Humboldt 2 auch wieder ein Ort werden, an dem das höchst gefährliche Abenteuer des 'versuchenden Gedankens' ermöglicht wird" (11).

⁶Cf. Cheryl Glotfelty and Harold Fromm, eds., *The Ecocriticism Reader: Landmarks in Literary Ecology* (Athens and London: The U of Georgia P, 1996) xvii.

⁷ Robinson acknowledges his philosophical indebtedness to Ernst Bloch and his philosophy of hope by naming one of the Martian settlements "Bloch's Hoffnung" (BM 378).

⁸ For a more detailed description of the emerging science of terraformation, see Robert Markley, "Falling into Theory: Simulation, Terraformation, and Eco-Economics in Kim Stanley Robinson's Martian Trilogy," *Modern Fiction Studies* 43.3 (1997): 773–99.

⁹ Victoria Sweet, "Hildegard of Bingen and the Greening of Medieval Medicine," *Bulletin of the History of Medicine* 73.3 (1999): 381–403.

¹⁰ The next generation of uncompromising preservationists "regarded terraforming as nothing more than part of the imperial process" of Martian colonization (GM 365).

¹¹ Val Plumwood, *Environmental Culture: The Ecological Crisis of Reason* (London and New York: Routledge, 2002) 71–74.

¹² Frederick Buell, *From Apocalypse to Way of Life: Environmental Crisis in the American Century* (New York and London: Routledge, 2003) 275.

¹³ Wolfgang Iser, "Toward A Literary Anthropology," in *Prospecting: From Reader Response to Literary Anthropology* (Baltimore and London: The Johns Hopkins UP, 1989) 277.

¹⁴ In this context see also Gabriele Schwab's theoretical reflections on "reading as an experience of otherness" and as a form of cultural contact in *The Mirror and the Killer Queen: Otherness in Literary Language* (Bloomington: Indiana UP, 1996), particularly 1–46.

¹⁵ <http://www.americanwest.com/pages/boone.htm> (May 22, 2005).

¹⁶ Walter Benn Michaels, "Political Science Fiction," *New Literary History* 31.4 (2000): 649–64; 659–60.