

Treatment of Ecology in the Capital Series of Kim Stanley Robinson

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Abstract

Author Kim Stanley Robinson, a science fiction writer from America whose stories and novels give voice to ecological, cultural, and political themes. Present paper compacts with climate change, environmental ethics and ecological Communication in Capitol Trilogy of Kim Stanley Robinson. Capitol Trilogy includes Forty Signs of Rain (2004), Fifty Degrees Below (2005) and Sixty Days and Counting (2007). Article talks about the issue of global warming and social action. It also represent contemporary writers view on a challenging issue called global warming. The Capitol trilogy of Kim Stanley Robinson is purely on climate change. It represents three fundamental thoughts: first the collapse narratives, apocalyptic narratives or utopian nature, all pass their confinements and never visit the depowered eco-literature. Secondly, the biological correspondence is not found absolutely on the manner of narcissistic, emotional, moral, spiritual or didactic methodologies but, the intelligent revolt is essential for environmental criticism. Finally, Robinson's alternative history suggests that abrupt climate change can be managed through top-down global climate governance. Thus the examination of this set of three will concentrate on the states of the likelihood under which unexpected environmental change is spoken to.

KEYWORDS:eco-literature, global warming, ecology,apocalyptic

Kim Stanley Robinson was born on March 23, 1952 in American. He is an author of science fiction and authored nineteen books and many short stories to his credit, yet is best known for his Mars trilogy. His work has been converted into 24 dialects. Huge numbers of his books and stories have nature, social, economy and political topics going through them and highlights scientist as champions. Robinson won various honors, including the Hugo Award for Best Novel, the Nebula Award for Best Novel and the World Fantasy Award. Robinsons work has been marked as the best quality level of practical and very scholarly composed science fiction by The Atlantic. An article in The New York, recognized Robinson the best of living science-fiction writers.

Capitol Trilogy comprisesForty Signs of Rain (2004), Fifty Degrees Below (2005) and Sixty Days and Counting (2007). All three novels signifies climate change, environmental ethics and ecological Communication.It represents three fundamental thoughts: first the collapse narratives, apocalyptic narratives or utopian nature, all pass their confinements and never visit the depowered eco-literature. Secondly, the biological correspondence is not found absolutely on the manner of narcissistic, emotional, moral, spiritual or didactic methodologies but, the intelligent revolt is essential for

environmental criticism. Finally, Robinson's alternative history suggests that abrupt climate change can be managed through top-down global climate governance.

Global warming is defined as "the normal temperature of the Earth's atmosphere and oceans is increasing" (Masahiro 7). Two main contributive factors cause : the greenhouse effect due to the rise of CO₂ levels in the atmosphere of earth's and the circulation of Earth's currents. Both disturbs the ecology of earth. "key articulation of what literature needs to do if it's to get us to acknowledge the ecological implications of our presence on the planet," especially the exigent issues of global warming and social action (qtd. in Slovic 118).

Numerous traditional talks on global warming have prompted the discovery on the impact of greenhouse effect, for example, Jean-Baptiste Joseph Fourier, Svante Arrhenius, Tyndall, Claude S. M. Pouillet and James Hansen. What is greenhouse effect? "the increased warming of the earth's surface and lower atmosphere due to the increased levels of carbon dioxide and other atmospheric gases that, like the glass panels of a greenhouse, let heat in but prevent some of it from going back out" (Schneider 13). For certain critics, the history of an unnatural weather change is the historical backdrop of the greenhouse effect. For others, it is a made up circumstance.

As per logical writing, the fundamental ozone harming substances incorporate water vapor (H₂O), carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O), ozone (O₃) and CFCs (Ross 322; Houghton 10-11). Climatologist David Archer sees that, we have a no-environment planet, the planet will adjust "its budget by warming up or cooling down until the energy loss to space equals the energy gain from the sun."

Kim Stanley Robinson implements a new term, 'abrupt climate change,' for old term "global warming" which is creating an alarmist fear among readers. This term is used to describe the chain of global warming scenarios in *Forty Signs*, *Fifty Degrees* and *Sixty Days*. This is promoting top-down alternative mode of ecological communication. Robinson clearly states :

Alternative history is a part of science fiction, so my latest is not a departure but a venture into a particular subgenre. This subgenre has a logical relationship to regular Science Fiction unlike fantasy in that it is historical speculation beginning from some moment of the past . . . (Buhle 90).

Robinson's Science in the Capitol trilogy *Forty Signs of Rain*, *Fifty Degrees Below* and *Sixty Days* and counting works about the capitalism, collision of science and the consequences of climate change.

Charlie Quibler, an environmental policy advisor in *Forty Signs of Rain*. Anna, a science administrator at National Science Foundation is married by Charlie Quibler. As a pre-election bill Charlie Quibler convince Senator for new environmental policies. Island nation of Khemblung is sinking due to rising sea levels. Politicians continued to be impassive to the hazardous climate revolution and upcoming effects on Khemblung. Khemblung is visited by Buddhist monks and unlike politicians they gave voice to the sinking piece of land.

In *Fifty Degrees Below*, Frank, a scientist and proposal funding inspector of the National Science Foundation attended a meeting organised monks in the novel *Forty Signs of Rain*. He chooses to remain in the country's capital for one more year to support relieve unexpected atmospheric changes caused by global warming. Frank was helpless to locate a decent spot to live and so he goes wild. In the procedure, he wings up with vagrants and assembles a tree house. As the title of the book proposes, temperatures in D.C. have achieved fifty degrees beneath zero, a consequence of the absolute immersion of the warm Atlantic Gulf Stream by the dissolving polar ice top.

Senator Chase is now the elected President and expected to cope with abrupt climate change efficiently in his first sixty days in office because he follows the footsteps of Franklin D. Roosevelt's "New Deal" to accomplish his promise to the citizens who selected him. During the first sixty days in his office president Chase is ready to launch a "Global Deal" to avoid forthcoming devastations during his first sixty days in office. It shoes his eco-minded responsibility. The director of NSF Diane Chang, with her climate team of Anna, Frank, Kenzo, Edgardo and others, formulates climate policies as an endeavor to evade the hazardous consequences of climate change.

In this trilogy, NSF is a node of the Intergovernmental Panel on Climate Change . The real-life organization was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme to study the effects of anthropogenic climate change. Basically, the IPCC's 1989 task force was made up of three groups: to analyze the scientific evidence of the causes of climate change; to deal with the effects of climate change; and to explore ways to mitigate the negative effects of climate change. (Malone 23). According to the four scientific literature surveys made by the IPCC, among the human-induced greenhouse gas emissions, carbon dioxide was the most responsible for global warming and rising sea levels. Though a scientific organization, the IPCC comes under attack by skeptics of man-made greenhouse effects. As one of the sister branches:

Did you kind of bury the part about us conforming to IPCC finds?" "I don't think there's search deep enough to bury that one. I tried to put it in a context that made it look inevitable. International body that we are part of, ... support for them pretty much mandatory for us or else the whole world cooks in our juices, that sort of thing" (*Forty Signs* 43).

The NSF subscribes to the IPCC's insights about climate change: (1) the observed warming is real (*Forty Signs* 159); (2) sea-level rises are true; (3) CO₂ could cause global warming. More importantly, the NSF mirrors the IPCC's projections and directives: its evaluation of the scientific literature, risk analysis and mitigations.

Robinson use a more reasonable point of view for arguing the moral imperative: Experts from these agencies tried to explain that the flood did not have a moral meaning, ... that it was merely a practical problem in city management . . . (*Fifty Degrees* 3). Despite the fact that the NSF still left a great deal to be done, Frank indicates it functions as advance science and innovation and to discover answers for an unnatural weather change issues through its researchers remarkably Anna, Frank, Edgardo, and Kenzo.

In the trilogy, three important events take place: the flood, the cold, and the presidential election. The very tone of the trilogy is inaugurated with a scientific narrative of abrupt weather change in the novel *Forty Signs of Rain*. The Gulf Stream shutting down because of floods of fresh water coming from the melting Arctic ice cap is another extreme climate change that occurs in *In Fifty Degrees Below*. The description of thermohaline circulation denotes to deepwater subsurface currents rising from “density differences between water masses produced by variations in water temperature (thermal effect) and salinity (haline effect)” (Pinet 214). It is up to Diane Chang, to reactivate the massive conveyor-belt of benign weather that is the Gulf Stream with a salting operation to restart thermohaline circulation.

Frank Vanderwal, protagonist of the series is a scientist, journal editor and professor, who is established on his own principle: “No more lots of things. . . . Saving world so science can proceed” (3). He rebelled against global warming: “He wanted to do things. If weather was going to heat up, he wanted to cool it. If vice versa, then vice versa. . . . he wanted to sequester billions of tons of carbon, he wanted to minimize human suffering and the loss of other species” (*Fifty Degrees* 23). Being a scientist, Frank always aims for solutions and his concern as a scientist is to reduce CO₂ and bring earth back to normal.

Chase like other politicians does not describe climate change purely in economic or monetary terms. He used the alarmist term “global warming,” Chase speaks of “abrupt climate change.” He believes in social justice and sustainability: By permaculture I mean a culture that can be sustained permanently. Not unchanging, that’s impossible, we have to stay dynamic, . . . that I like to think the word permaculture implies also permutation. We will make adaptations, so change is inevitable. (516) Buddhists’ portrayal of increasing sea levels, Charlie’s thoughts on sustainability and defensive principles, carbon dioxide fear of Frank and the man-made climate change challenged Robinson’s scientific visions and ecological ideas. Moreover, as suggested by Crichton and Giddens the connection between the NSF and the IPCC are to be evaluated for being too conventional and administrative.

Robinson is not a moralistic Science Fiction writer thus he forecast future as fluid and changing. He even gives each climate event a form so that ecological communication can be possible. The rising oceans, increased carbon dioxide concentrations and derailed thermohaline circulation are thematized as forms which can be accounted and examined rationally. Robinson’s science fiction portrayal of climate change as a form of risk is Katscopic. In the hands of Robinson, society vibrates to the major climatic change this evokes ecological communication amongst the trilogy.

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