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Envisioning Environmental Calamities And Capitalist Politics In Kim Stanley Robinson's Sixty Days And Counting

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Kim Stanley Robinson's Sixty Days and Counting (2007) is the third sequel to his Science in the Capital / Green Earth trilogy. Robinson's gripping speculative narration on science and politics on one hand and the environmental destruction on the other projects a realistic vision for the future. The paper analyses the extreme environmental calamities due to the melting of glaciers and shifting ocean currents and also delves upon the climate policies as Frank Vanderval works on the challenges in mitigating climate change. Scientist Phil Chase, the newly elected U.S President goes for innovative solutions on a larger scale to challenge climate change. Phil's policies to deduct global warming against the man-made disasters of climate change. The paper focuses on the urgent initiates to be prosecuted in the sixty days of Phil's governance. Phil's new administration with a sheer climate change task force under the leadership of the scientist Diane Chang and Frank illustrates Robinson's model of a government that is conscious about drafting and implementing climate change bills. Robinson's attack on the imperialistic arrogance of America calls for social justice which according to him is essential to tackle climate change.

Keywords: climate change, mitigation, climate change policies, science, environmental calamities.

Introduction

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change. Phil's policies to deduct global warming against the man-made disasters of climate change. The paper focuses on the urgent initiates to be prosecuted in the sixty days of Phil's governance. Phil's new administration with a sheer climate change task force under the leadership of the scientist Diane Chang and Frank illustrates Robinson's model of a government that is conscious about drafting and implementing climate change bills. Robinson's attack on the imperialistic arrogance of America calls for social justice which according to him is essential to tackle climate change.

As Phil is elected president, "the world's climate was already far along on the way to irrevocable change" (690). As Phil analyses, there is already "500 parts of carbon dioxide in the atmosphere" and "another hundred would be there soon if civilization continued to burn its fossil carbon" (690). Phil assumes charge in a crucial phase that witnesses the collapse of the natural world. He evidently observes human misery in the midst of heightened climate change which according to him is "toxic" (690). Robinson, through Phil advocates that "drastic action" has to be taken to mitigate the severity of climate change (690). Being a person who have been drafting climate policies throughout his past, Phil necessitates the need to fear the consequences of climate change – "The only thing we have to fear", he would intone, "is abrupt climate change!" (690). His transition team works throughout with an urgency and the immediate crisis before Phil proves to be sea level rising and the global temperatures. Phil's hope to "remake our relationship to nature, and create a new dispensation" resonates Robinson's vision of successfully thwarting the dangers of climate change, with the help of science (691). Phil intends to create history, seizing the planet's history, and "turning it to the good" (691).

Similarly, Frank, Phil's scientific advisor at the National Science Foundation postulates a list of climate crises so as to deal with the climate problem. Frank's analysis highlights the "detachment of the West Antarctic Ice sheet" that results in the rapid rise of sea level (692). Also, Frank laments on the increase of "about nine billion tons of carbon dioxide into the atmosphere every year" which ultimately leads to many other problems (692). Further, Frank displays his fear of an uptake of "four billion tons of carbon into the oceans" that will ultimately harm and destruct the ocean life (692). Another calamity that Frank puts forth is the increase of human population by 100 million in each year, serving to accelerate the climate crisis by all means. The "cumulative impacts" of all these events ultimately leads to "feedback loops of all kinds" (692) affirms Frank. Frank's association with the oceanography group gives further insights about the West Antarctic Ice Sheet that is floating away. As the members of the group acclaims, the sea level rise has risen for about twenty centimetres and the calculation proves climate change to have reached a crucial stage:

> Back-of-the-envelope calculation: 0.2 meters times the 200 million square kilometres, was that 40,000 cubic kilometres? A lot of water. Measurements from the last few years had Antarctica losing 150 cubic kilometres a year, with 30-50 more coming off Greenland. So about two hundred years' worth had come off in one year. Now wonder they were freaking out. The difference no doubt lay in the fact that the melt before had been actual melting, whereas now what was happening was a matter of icebergs breaking off their perch and sliding down into the ocean. Obviously it made a big difference in how fast it could happen. (699)

Robinson strategizes sea level rise as a serious issue and warns us of an immediate danger of large sheets of icebergs sliding into the oceans. Though it seems interesting, Frank finds it daunting. Frank's conversations with Diane derives more clarity as they get to see a presentation by an oceanographer showing the maps and satellite photos of the floating ice sheets. Their discussion draws further insights as they unravel the troubling problem of acidification of ocean. Their quantitative analysis tracks that the ocean has become more acidic "going from 8.2 to 8.1 on the pH scale" that means thirty times more hydrogen atoms in the water (700). This leads to certain consequences like the species of phytoplankton which "have their thin calcium shells eaten away" (700). They predict that "a number of species would go extinct, and these very species constituted a big fraction of the bottom of the ocean's food chain" (700). Here Robinson scales the depth of climate crisis as the acidifying effects of the ocean poses threats to the underlying ocean species as well.

The novel gives a clear cut evidence of Phil Chase, a President turned scientific advisor to be a beacon light in the path towards sustainability. Phil writes a blog titled Cut to the Chase and his entries are his "private musings" as a citizen on the impacts of climate change (805). The blog talks about any American's relationship to the world and compares the burning of quarter of the world's carbon emission to that of obesity. He regrets the kinds of denial that the Americans pose on climate change and inspires the fellow citizens to be "the hope of the world" (806). Phil's reliance on science replicates Robinson's larger obligation to scientific rationalism in the face of climate change. Chase reliably forefronts science as the fundamental contrivance for policy-making and terrestrial restoration. Chase keeps himself engaged with advisors like Frank and Charlie Quibler, who epitomize the scientific communities. His administration does not treat science as a central organization for policy making. Chase treats scientific knowledge not as optional or controversial but as essential to survival. He works upon evidence-based governance and assimilates cutting-edge enquiry into national agendas like carbon reduction strategies. Phil's conversation between the Quiblers, especially his scientific advisor Charlie Quibler sheds light on the politics of capitalism and private ownership. It is revealed that capitalism "supposedly owns the world in perpetuity" (939). Phil's conversation proves capitalism to be truly a havoc on contemporary times:

> PC: Well, capitalism has a lot of capital. And a lot of it they keep liquid and available for investment. It runs into trillions. And they want to invest it. At the same time there's an overproduction problem. If they make more than they can sell things, they're screwed, so all capital is on the hunt for a good investment, some thing or service that isn't already overproduced. Looking to maximize profit, which is the goal that all business executives are legally bound to pursue, or they can be fired and sued by their board of directors. (940)

Phil sketches the dynamic power structure of capitalism by asserting that the accumulation of hefty liquid capital that awaits investment. This capital worth trillions of dollars, when invested to generate returns faces a tenacious problem of overproduction by manufacturing excess goods than the market requirements. This excess production leads to financial losses. To evade financial losses, business investors are always on the lookout for novel opportunities in the marketing industries to find lucrative undertakings that have not been overproduced. These unique opportunities pave way for significant gains. Thus, capitalism as Phil asserts, is

characterized by a relentless quest for revenue to focus on maximizing financial returns. Phil also argues that "uneven development" is witnessed throughout the world as "capital moving on to new zones of maximized returns" pave way to uneven "capital accumulation" in different regions of the world (940). As Phil claims, the capital that moves from place to place in search of new markets and this move lead through an uneven development – "And this is what globalization has been so far – capital moving on to new zones of maximized return. When that declines, they look around to see where they might align next, and then they take off for there" (940). In an interview with James Bradley titled "It's Science Over Capitalism: Kim Stanley Robinson and the Imperative of Hope", Robinson clarifies his thoughts on the impact between science versus capitalism:

> So there are indeed poisonous legacies of the past, inscribed into current practices, hegemonic beliefs, structures of feeling, and laws. The dead hand of the past, trying to strangle the new baby future that we, in the present, midwife. What I often feel that one can see very clearly is two major strands, braided together although often in direct conflict. I call it science versus capitalism. It's like Australian economist Dick Bryan once said to me about finance and the state: They are hand in hand, but they're arm-wrestling for control.

Charlie sardonically hints that modernization of the world will lead to global happiness, but challenges that positivity by emphasizing the ecological cost as he asserts that would require eight Earths to sustain everyone. Phil endorses that climate change and environmental degradation are the very indications of exceeding Earth's carrying capacity – "The climate change and environmental collapse are us hitting the limits. We're overshooting the carrying capacity of the planet, or the consumption level, or what have you" (941). Phil hints at the urgency of the situation by stating that the biosphere and human beings are endangered in the midst of climate crisis. Phil echoes Robinson in his critical remark of capitalism – "Meanwhile capitalism needs investment opportunities. So saving the biosphere IS the next investment opportunity!" (942). Phil targets neo-liberal economics to be a massive destruction on humankind and the biosphere and he also asserts that the corporate thirst for power and control over the governments shows the uglier side of "economic tyranny" (1043). Naomi Klein in her This Changes Everything says that the corporate wish list of free trade policies "fuel economic growth, which would trickle down to the rest of us" (19). Robinson's Sixty Days and Counting thus poses a commanding appraisal of the contemporary economic systems, particularly unchecked capitalism, and their unsustainable sway on the biosphere. Robinson explores the ecological calamities, economics, ecological limits, and the struggle to awaken collective awareness to prevent collapse.

Works Cited:

Klein, Naomi. This Changes Everything. Penguin Books, 2014.

Robinson, Kim Stanley. Green Earth. Harper Voyager, 2015.

---. "It's Science Over Capitalism: Kim Stanley Robinson and the Imperative of Hope." Conducted by James Bradley, The MIT PRESS Reader, 11 Oct. 2022, https://thereader.mitpress.mit.edu/its-science-over-capitalism-in-conversation-with- kim-stanley-robinson/. Interview.