

Severin Aarmo

Terraforming Ideology: Unbridgeable Divides and Outdated Diplomacy in Robinson`s Red Mars

Bachelor's thesis in English Literature

Supervisor: Yuri Cowan

June 2023

Severin Aarmo

Terraforming Ideology: Unbridgeable Divides and Outdated Diplomacy in Robinson`s Red Mars

Bachelor's thesis in English Literature
Supervisor: Yuri Cowan
June 2023

Norwegian University of Science and Technology
Faculty of Humanities
Department of Language and Literature



Terraforming Ideology: Unbridgeable Divides and Outdated Diplomacy in Robinson's *Red Mars*

In the novel *Red Mars*, the 2057 revision and renewal of the United Nations Office for Martian Affairs (UNOMA) Mars Treaty between the major powers of Earth is a pivotal moment of the novel's plot. It marks the result of all the First Hundred's work towards making their mark on the future of Mars, and a definitive shift from a scientific, controlled approach regarding terraforming to a more materialistic, profit-driven regime. The sudden prospect of viable Terran-Martian transport of resources, the massive resource scarcity that comes to destabilize Earth, as well as the emergence of the Transnational corporations as the de facto hegemonical Terran authority are all factors that influenced the process towards the essential privatization of Mars. Frank Chalmers, as opposed to Arkady, Hiroko and Phyllis, fails to see that the ideological foundations of the transnational corporations of Earth as opposed to the varying radical factions on Mars differ too drastically to be able to come together in a lasting compromise through the 2057 revision of the Mars Treaty.

Frank Chalmers is the chief American by formal rank among the First Hundred, and eventually becomes US Secretary for Mars. Although John Boone has a larger informal influence through his status as the first man on Mars, Chalmers is also one of the most influential of the First Hundred along with John Boone, Arkady Bogdanov and arguably Hiroko Ai. The reader learns what they need to know about the Boone-Chalmers dynamic already on page 15, the first page of the expository first chapter. Chalmers deems Boone's inspirational and uplifting speech about becoming "fundamentally different beings" to be "all lies" (Robinson 15). This simple interaction establishes the dynamic between the two, painting Boone as a man with ideas and plans for a new form of human existence, and Chalmers a rival with orthodox, conservative of what form human presence on Mars should take. Though presented as a character with few radical opinions, it is an underlying truth that Chalmers deems Boones ideals of a new society dangerous enough to kill him for, echoing the way both American and Russian governments have dealt with dissidence. It does also foreshadow the way that his narrow-sightedness leads him to be eaten by the figurative bigger fish in the Bogdanovist-Terran conflict.

The entire contents of the Mars Treaty are not clearly stated throughout the novel, although we know the important parts from how the breaches of it are represented. Apart from

the fact that the UN had plans to “establish an international regime to govern mining and other exploitation” (Robinson 111), and that bases were to be the property of the nations that built them. We also know that the initial stance of UNOMA was that human activities should have minimal impacts on the Martian environment, but it is continually amended to support more invasive terraforming measures. This comes to be apparent when a livestreamed altercation between chief Red Ann Clayborne and chief Green Saxifrage Russell is sent to earth by Phyllis, and the UNOMA committee greenlights the heat-spreading windmills (Robinson 214). In addition to illustrating the influence of the First Hundred on Terran authority at this point in the story, it also denotes the flexibility (read: lack of backbone) of UNOMA regarding the terraforming question and the treaty contents.

Already at this point, we are warned by the author as to the ease with which the Treaty will be disregarded and dismembered by most of the parties present on Mars, including most of the First Hundred. Arkady Bogdanov, the closest the novel comes to a revolutionary agitator, self-righteously argues that their “own well-being depends on ignoring it”. This comes as a response to Ann Clayborne remarking that the Treaty through Article 7 demands measures to “prevent disruption of planetary environments” (Robinson 111), which will be the core of internal conflicts among the colonists. Through this exchange, it becomes clear that most of the First Hundred are set on implementing invasive terraforming measures and violating the treaty before even setting foot on Mars. Although this is true at very different levels from Phyllis and Sax’s viewpoints all the way to Hiroko’s secretive settling in the south, it epitomizes a very conscious opinion that the treaty is not beneficial to the settlers but rather other, Terran actors. In acknowledging that the treaty does not benefit them, they are clearly each motivated by their own scientific fantasies and plans, and this in turn makes following the treaty uninteresting to them. Additionally, none could realistically reprimand them from Earth upon breaking any of the conditions of their presence on Mars, seeing as the journey is a considerable undertaking for a world society struggling with their own issues. The general disregard for the treaty amongst the First Hundred also ominously implicates that this sort of treaty when not backed with real incentives nor any real punishment for breaking it, will be disregarded by most actors, Machiavellian or not.

We might ask why, then the First Hundred signed up to be sent to Mars if they did not respect the agreements that did send them there. The technologies and items they carry on the *Ares* to Mars are fundamentally what enables such independently revolutionary sentiments. The ability to fabricate near anything through the “technology to manipulate matter right

down to the molecular level” (Robinson 113) along with the farming techniques they brought with them are what allows Arkady’s idea of a technocratic, Marxist utopia to grow, and cannot easily be undone by any Terran authority as things stand during the early days of Martian society. The First Hundred are truly “a society whose unity resides in its not being unified” (Cho 65). They are pursuing their own visions of the society they imagine forming on Mars, and in doing so are disregarding the cohesiveness that might have made such a society a possibility, as doubtlessly a united First Hundred could have made possible through their combined scientific and political capability. Although they choose to pursue only their own goals, Arkady’s faction provokes violent revolution in order to get rid of the Transnationals and Terran presence, which forces undecided actors into choosing sides. This echoes what is essentially Marxist theory, that one cannot escape capitalist society without the annihilation of private property, the abolition of classes and the foundation of a new society (Cho 66). Poignantly enough, those most prestigiously in opposition to this are outspoken Americans.

In the real world there are several treaties and legal frameworks that regulate and govern activities in vulnerable areas and new frontiers, and the three most that bear the most relevance to the Mars Treaty of *Red Mars* are the Antarctica Treaty of 1959, the Outer Space Treaty (OST) of 1967, and the Moon Agreement of 1979 (Svec 1). They differ, however, on fundamental areas; amount of signatory nations and amount of control they would exercise on certain activities carried out within their jurisdictions. Due to the focus of this paper on the fictional treaty and its properties, comparing it to its real counterparts and the processes they embody is central to this analysis. Ideologically, they show varying approaches to the central questions of sovereignty and profitability.

Throughout *Red Mars*, the Antarctica Treaty plays a minor but significant role. In real life, it was signed by the 12 nations that participated in the International Geophysical Year (Collis 293). The treaty, which defines Antarctica as a “land of peace and science” (Collis 293), bans military use and otherwise exploiting Antarctic resources for self-serving reasons. However, the signatories to the treaty have taken up very different stances regarding the question of whether Antarctica is owned or not. Some of the seven nations that claim areas of it would say that they own it, but larger nations with no claims such as the USA would say that it is not, and the Treaty itself is ambiguous as to this question. Through its ambiguity from these nations, it might also in the future be vulnerable to targeted moves made to assert sovereign territorial rights from strong international actors.

Drawing heavily upon the Antarctica Treaty, the Outer Space Treaty (OST) was similarly drafted with the purpose of promoting cooperation and scientific community within the emerging space-faring nations of Earth in 1967 (Svec 1). However, at that point in time, the economic utilisation of space resources “was not considered feasible” (Svec 1), and thus the OST does not contain reference to nor restrictions upon the exploitation of resources found in space. The way that the UN in the novel is “supposed to establish an international regime” (Robinson 111) to regulate the resource exploitation that is inevitable to follow, echoes the way that the Moon Agreement was worked out, and even more so when we consider the failure of both UNOMA and the UN to secure support for these frameworks.

The lack of restrictions on the utilization of resources in space was attempted to be amended through the Moon Agreement a mere twelve years later, the first and only source of space law that does explicitly address the issue (Svec 2). It proclaimed space resources to be the common heritage of mankind, although due to fact that it was only ever ratified by 18 states, and critically no space-faring states at that, it is rendered without real influence. We might therefore assume that legal treaties that de facto do not restrict economic activities are easier to sign and follow than those who potentially stop such economic gain. Although it is not unexpected to find that political actors on the world stage are essentially self-serving Machiavellian actors, they are willing to sign treaties and initiatives that represent good intentions as long as no real restrictions are committed to. In many ways, many of the First Hundred are representatives of this tradition through their lack of respect for the treaty they themselves represent, and their comprehensive though varying plans for a Terra Nova.

Antarctician mining in our world has, much like resources in space were previously, been deemed “economically unviable”, and thus “(..) the (Antarctic) Treaty’s unstable, compromise *terra communis* can still hold.” (Collis 297). Collis’ premise implies that the only barrier for large scale exploitation of Antarctica is the economical impossibility of it, is an important parallel in Robinsons *Red Mars*. In the Novel, which of course is set in the future, this has changed. The emerging resource scarcity that is dominating Terran politics has caused the global south to violate the neutrality of Antarctica and the treaty protecting it, to drill for oil and mineral resources (Robinson 298). Ann attributes this to the growing scarcity of said resources as well as the fact that the rich northern states are taking Mars apart without consequence (Robinson 299). This foreshadows the gradual violations of the Mars Treaty at the hands of Unoma officials and the Transnats that come to dominate UN policymaking, that eventually ends in the complete loss of moderation where terraforming and resource

extraction is concerned. This in turn emboldens the global south to utilize Antarctic resources and serves as a catalyst for further brutalization of pure environments.

When the Mars expedition is first launched, the Treaty and the First Hundred are proof of its scientific outlook. There is little sign of economic purpose, and the arguments made against plans for economic activities in non-fictional contexts are reminiscent of the ones made to demonstrate the hopelessness of exporting anything from Mars, if such goods did exist. Much like the Spanish deemed North America “nothing but a vast amount of worthless wilderness” (Zubrin 1), Mars is seen in the beginning of the novel as a large empty space with some scientific potential. The pivotal moment in this development is the harnessing of the Clarke meteor and construction of an “elevator” between it and the surface, which makes interplanetary transport feasible and economically sustainable.

Following the construction of the space elevator, moving goods and people between Mars and Earth becomes a far simpler proposition than before, introducing new areas of conflict between Martian factions and Terrans. This also increases the interest in establishing means of influence on Mars by the Transnationals, who do so in more invasive ways than before. This changes the nature of the relationship between Earth and Mars by making it far more easily available to reach, and thus is a pivotal moment in the development of human presence in space. The followers of Arkady’s ideology, the Bogdanovists, are eventually responsible for the destruction of the space elevator, as it was a symbol of Terran and capitalist authority as well as a tool for control in bringing military might and immigration with it.

The dividing line at the core of the conflicts in *Red Mars* is one of several dimensions, all of which in where the location of the centre of authority over Mars is important. At first glance, the contesting parties are either Martian or Terran, and the issue is whether Mars is a colony of Earth or ruled from the red planet. However, both sides are far more nuanced, with the Terran power dynamics changing drastically during the timeline of novel, evident through the discussion between Helmut Bronski and Chalmers in Burroughs, a town built by an “American consortium, using a French-led ED design” (Robinson 320). Through the conversations between the two, it becomes clear that the balance of power on Earth has shifted towards the number of Transnational corporations grown from merging of old, merely multinational corporations. These have through influence in the general assembly of the UN, as of the 2040s gained such leverage over UNOMA that it was no longer the de facto

authority on Mars. This changes the power dynamics of Mars in a way that parts of the First Hundred do not fully adapt to, as evident by their unreadiness when the revolution comes.

The ever-encroaching capitalist interests tell us that one of the key themes of *Red Mars* is greed, and perhaps the most important one. It is ever-present through the grasp of the massive transnational corporations that simultaneously with the story progressing on Mars, are seizing power over the governments of Earth through merging corporations and creating megacorporations. These are massive entities with economies and influence that came to dominate Terran governments and international organizations, with the sole purpose of raising profits and amassing massive wealth on the hands of the few. It is regrettably so that in the developing parts of the world, chiefly Africa and Asia, transnational corporations have a “record of human rights violations and other forms of abuses in power, including bribery and environmental degradation” (Omoteso & Hakeem 57). They argue that large international corporations today are operating under a system of voluntary goodwill, and that attempts to rein in corporate influence will result in hostile business tactics and loss of the corporate social responsibility that allegedly guides their actions (Omoteso & Hakeem 58). While the governments of these countries might be ineffective and corrupt, most of them are governing for their peoples. Under the transnationals, however, this is challenged in our world and in the novel, wherein a greedy hunt for maximised profits has come to govern most of human civilization, and when this is the case, we see ecological concerns abandoned.

When On Earth, their relentless hunt for profits has caused resource scarcity, which has in turn established the need for the exploitation of Mars, once the opportunity for this appears. Both the life-extending treatment and the mineral wealth of Mars are demanded by Earth, and they form the crux of the conflict that leads to revolution. Again, the two-fold perspective on what Mars truly is appears in the form of terraforming the new-found land for the support of life there, or the extraction of goods for the benefit of Earth. The lack of common perspective amongst the two main sides of the conflict makes a real compromise impossible, as both sides' ideological foundation is built upon the land and their stewardship of it. Markley asserts that Western society built on enlightenment values requires new frontiers, and Mars is exactly the “technologized site for an updated manifest destiny” (779). On the contrary, The Areophany is built on a contradicting spirituality based upon ideas of furthering life wherever possible and as such as incompatible with the unleashing of massive mining operations that inevitably follow transnationals.

As on Mars, there has been a separation between the nations on Earth. Those who still control enough liveable space for their population and the resources to keep their economies going and the “southern club” who do not, represented by the Indian and Chinese representatives Hanavada and Sung. Chalmers assumes that they demand liveable space on Mars as repayment for the resources that were taken from them during the colonial era, and Hanavada corrects him that “in a very real sense the colonial period never ended” (Robinson 460). Through concluding that the era of the VOC and the EIC in fact never ended, and that the new feudal overlords are inevitably mightier than those, it is clear to see the continuation of the everlasting capitalist struggle for larger profits continue on an interplanetary basis. The ecologically interdependent system that many early Martian colonists champion is obviously not able to coexist with the feudal capitalism that UNOMA is imposing upon them.

Red Mars' template for Martian colonies closely resemble the way that Anker describes the ideal ecological project, the grand space station on the moon, “complete with mountains, lakes and small-town communities” (Anker 250). These were also supposed to be constructed using materials available on the moon, much like the bases on Mars in the novel. His arguments for creating bases with human presence on the Moon are recognizable to readers of Red Mars, namely the possibility to save Earth pollution from large scale manufacturing, as well as living space for the rapidly growing world population. Gerard O'Neill, physicist and space activist, argued that this type of station would encourage a self-sufficient type of small governing unit, and a culturally diverse as well as a highly independent society (Anker 250). Robinson shares many of these ideas, and Hiroko's Areophany movement is perhaps the best example of this in fruition. The point of their project, however, is that they are operating outside of Terran and UNOMA control and therefore are not subject to the privatization and exploitation that follows. Another point to make is that human habitats on a planet with no breathable atmosphere will inherently be extremely vulnerable, which resembles the vulnerable status of Earth's untouched natural areas.

When territories are concerned, the land ethic that is being championed by the transnationals through UNOMA's authority is a new field of ethical discussion, as it is one of pure economics. The only value put upon the land that is claimed on Mars is markedly changed from a scientific one to a profit-based priority. The ruling paradigms today are more preoccupied with the place of humanity's obligations to society and each other, and less so towards the land that we depend upon for sustenance and survival. The Leopoldian land

ethic agrees with Ann Clayborne's view on Mars, and states that humans are not conquerors of the land, but rather "biotic citizens (Otto 120). Through Leopold's merging of spiritual, social and scientific dimensions in his land ethic, he manages to create a movement that moves within the same dimensions as the Areophany, although differing where stewardship of the land is concerned.

As opposed to the greed of the transnationals, there is a contrasting theme of solidarity amongst the Hiroko-led Areophany movement as well as the Arkady-inspired revolutionaries who value equality over hierarchical power structures (Robinson 113). Utopian society is a core theme for Robinson's work, and *Red Mars* regards it in a way that focuses on the possibility of such a society, and one that does come to exist after significant struggle (Burling 93). As in a feudal society, the corporatist future present in the novel can not exist in its current form and at the same time accommodate an egalitarian society as envisaged by Hiroko and Arkady, making this another opposite dichotomy that divides the sides.

Kim Stanley Robinson through his depiction of the future's mega-corporations, establishes that capitalism is, or will become a modern feudalistic system, and that true liberty for all might never be a reality, in the way that Arkady speaks of it at least. Already on the Ares when discussing the institutions for the Martian colonies, it becomes clear that both he and several others of the First Hundred are intent on making changes. Arkady argues that they as twenty-first century scientists should be free of the old world's "nineteenth-century social systems based on seventeenth-century ideologies" (Robinson 113). What he essentially agitates for by that is to create an independently anarchic society that is free of the Terran institutions that have allowed the transnational corporations to seize power over Earth and create a new society. In essence, he and his followers crave a lack of authority that the neo-feudal capitalist system of future Earth can never cede. As he is never portrayed as a fool, we might ascertain that he understands that these notions inevitably will mean that to obtain the equality he craves, sacrifices must be made.

Throughout the novel, Robinson is blunt about ceding political control to megacorporate capitalism, and not in a subtle way. It is important to note that many of the Transnats of *Red Mars* are variants of corporations that exist in our time, and that they are essentially the same entities, being mergers of corporations that exist today. The way that they influence the Martian community both before and after the restrictions are loosened is a crass critique of large scale, boundless privatization. The scientific Martian society that exists independently of the money economy of Earth also represents the very privileged western

elite's hypocrisy that they might simply leave a dying planet and start the both the ecological and political processes anew on their own *tabula rasa*. Through the very idea that they might have the opportunity to do this, and that their scientific merit has made them the technocratic peak of Terran representatives is an arrogant notion. At the same time, they are in many ways the technocratic top representatives of earth's population which makes it through Darwinist theory a natural evolution for humanity. On the other hand, it is apparent that the scientific community on Earth has abandoned any pretences of attempting to preserve or restore the climate, making their efforts to ecologically define Mars even more crucial.

When the new treaty is signed in 2057, Chalmers is still of the belief that he has managed to block the two main threats to the status quo on Mars, emigration and investment (Robinson 469). He does however get a reality check by Sax, who has understood that the treaty never had any incentives to block transnationals from coming to Mars at all, and they would simply make "new flags of convenience" (Robinson 472) to make it look like nations claim land, entirely by the book. Chalmers' death is a poignant symbol of his own life's work, his constant "realpolitik; expediency, arm-twisting and violence" (Markley 789) is swept away as a mode of influence on Mars, and he himself is a parasite being rejected by his host organism. As his old-world diplomacy has failed, it appears clear that Martian power and influence can only come from those willing to take extreme standpoints and disregard detrimental legal frameworks.

In the end, the one unbridgeable gap between the two major ideological umbrellas on Mars is the way they view the planet. The transnationals through an effectively puppeteered UNOMA view Mars as an unclaimed territory of valuable goods where destiny might manifest itself, whether the anti-aging treatment or the strategic metals present, while Bogdanovists and the Areophany among others view Mars as the crucible in which a new society and ecology on new institutions might be formed. While Phyllis, Arkady and Hiroko take vastly different approaches to the dividing line of terraforming and its purpose, they do have the foresight to take a clear stance and thus either they, or in Arkady's case, their legacies live on, which is more than we might say about Chalmers. His old-world diplomatic approach, tailored to the unipolar American old-world order was always doomed to fail on an alien world where ideologies had become alien and strange to the Terran mind.

What Neville Chamberlain was to the Post-War British with the power of hindsight, so would Frank Chalmers be remembered. A man who never understood the full danger of ideologies he would or could not attempt to fully understand.

Bibliography

- Anker, Peder. «The Ecological Colonization of Space.» *Environmental History*, vol. 10, no. 2, 2005, pp. 239-68.
- Burling, William J. “The Theoretical Foundation of Utopian Radical Democracy in Kim Stanley Robinson’s Blue Mars.” *Utopian Studies*, vol. 16, no. 1, 2005, pp. 75–96.
- Cho, K. Daniel. “Tumults of Utopia: Repetition and revolution in Kim Stanley Robinsons Mars Trilogy.” *Cultural Critique*, no. 75, 2010, pp. 65–81.
- Collis, Christy. “Territories beyond possession? Antarctica and outer space.” *The Polar Journal*, vol. 7, no. 2, 2017, pp.
- Markley, Robert. "Falling into Theory: Simulation, Terraformation, and Eco-Economics in Kim Stanley Robinson's Martian Trilogy." *MFS Modern Fiction Studies*, vol. 43, no. 3, 1997, pp. 773-799.
- Omoteso, Kamil and Yusuf Hakeem. “Accountability of transnational corporations in the developing world: The case for an enforceable international mechanism.” *Critical perspectives on international business*, vol. 13, no. 1, 2017, pp. 54-71.
- Otto, Eric. “Kim Stanley Robinson’s Mars Trilogy and the Leopoldian Land Ethic.” *Utopian Studies*, vol. 14, no. 2, 2003, pp. 118–35.
- Robinson, Kim Stanley. *Red Mars*. London, Harper Voyager, 2009.
- Svec, Martin. “Outer Space, an Area Recognised as Res Communis Omnium: Limits of National Space Mining Law.” *Space Policy*, Vol. 60, 2022, p. 101473.
- Zubrin, Robert. "The economic viability of Mars colonization." *Journal of the British Interplanetary Society*, 48.10, 1995, pp. 407-414.



 **NTNU**

Norwegian University of
Science and Technology