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Abstract

Results of anthropogenic environmental changes have become even more visible in the recent years with the ongoing climate crisis calling for sustainable alternatives to our current ways of living globally. Fiction has been in engagement with the issues of global climate crisis, however, the scales of it pose representational challenges on climate narratives and, additionally, most current literary narrativizations of the crisis embrace dystopian modes of representation. This thesis investigates the narrative strategies in *The Ministry for the Future* (2020) and how they allow Kim Stanley Robinson to mediate the complexity of the global climate crisis and its possible solutions in his anti-anti-Utopian vision.

I argue that the narrative strategies that Robinson deploys, render the complexity of the climate crisis more accessible to the readers and do so in the following ways: firstly, I propose that to respond to the representational challenges associated with the scales of the global climate crisis and the interconnected environmental and socioeconomic issues it entails, he adapts the form of *The Ministry for the Future*; secondly, I suggest that relying on re-imagining human agency in the narrative, allows him to challenge and propose alternatives to the status-quo of neoliberal capitalism, which is portrayed as the main antagonist in the face of the climate crisis. Ultimately, these narrative strategies enable Kim Stanley Robinson to both challenge the neoliberal capitalist ideology which halts a transition to sustainable ways of living, and, as part of the utopian impulse, to fictionalize scientifically informed paths of mitigating the global climate crisis.

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Preface

Amidst the news about climate change-fuelled floods in Pakistan and heat waves ranging from Andorra to United Kingdom, climate activists protesting around the world in hope to prod the governments towards more targeted political action for climate crisis mitigation, the UN head Antonio Guterres reminding the world at COP27 that we are “on the highway to climate hell with our foot still on the accelerator”, one of the mornings the fire alarm in my apartment sets off.

With the piercing sound of the alarm and no fire in sight this has, indeed, become an ironic analogy to the climate crisis we find ourselves in. The risks of the climate crisis are, perhaps, not visible in the same way to all of us at the very moment, but that does not make them and an apt response to them any less urgent. Only partly jokingly, I mentioned this incident to my friend: “Earth should have a fire alarm”, to which he responded in his usual not-joking-at-all fashion: “We *are* the fire alarm. But some of the people in the house are just trying to turn it off without stopping the fire”. Although, I dare to speculate, there are perhaps still ways out there of helping us – people - see the ongoing fire and reminding us about basic safety rules. So partly as a literary studies apprentice and mostly as a human being, I wonder in what ways literature can challenge what and how we think about the ongoing climate crisis and our role in it.

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Introduction

The plot in *The Ministry for the Future* starts *in medias res* around the year 2025 with heat wave scenes in Uttar Pradesh in India where everyone except for a twenty-two-year-old American aid-worker Frank May, dies. This hottest ever recorded wet-bulb temperature scenario, implying a lethal for humans combination of humidity and heat, coincides with an electricity shortage as such events are said to overwhelm the power grid. This near-future setting and realist backdrop creates an important tension between the actual present and speculative future from the very start. In the first chapter, distinctive from the rest of the story in its apocalyptic, yet very plausible and scientifically conceivable vision, one follows Frank May and his train of thought. Through his present-tense descriptions of the scenario, the readers can almost inhale the tragic events he is involuntarily participating in: “He suppressed a cough. It was too hot to cough; sucking back in air was like breathing in a furnace, so that one coughed again” (MftF 3). The water in the lake where Frank and other inhabitants of the city seek shelter provides no relief due to “the world both inside and outside well higher than body temperatures ought to be” (MftF 12). His body and the lake almost melt into one. Despite Frank’s efforts to help others, children and elderly die first, animals are dead. Eventually Frank becomes a sole survivor, rescuers who eventually find him describe his skin as boiled. This prompts the readers to think about how some of the effects of global climate change have been unfolding so far in real life, how hazardous they can become with time, as well as it motivates the readers - especially a reader from the Global North, perhaps - to imagine how such environmental catastrophes look like from a victim’s point of view.

When thinking about literary representations of the climate crisis-related issues, I find myself paraphrasing the sentence attributed to Fredric Jameson and Slavoj Žižek¹: is it easier to imagine the end of the world than to imagine a way to end the climate crisis? The reason is that considering fiction dealing with environmental issues, one can notice that after 1990s there has been a proliferation of novels which rather envision dystopian end-of-the-world

¹ I substitute the original «the end of capitalism» with “a way to end the climate crisis” here, since the latter is likely to imply the end of the world the way we know it now and so becomes at least partly synonymous with the end of capitalism. My decision to paraphrase it here, is based on how the aphorism explicitly appears early in *The Ministry for The Future*: “Easier to imagine the end of the world than the end of capitalism” (25) and I am generally motivated by the outlook on neoliberal capitalism presented in the novel. As this saying has been attributed to several theorists, it is worth looking at how e.g. the scholar Matt Seybold traced the origins of the quotation in his text (260).

scenarios: “the environmental SF of the last quarter century has largely employed what Gerry Canavan calls «apocalyptic ecological critique», approaching environmental issues «in almost exclusively negative terms»” (qtd. in Otto 581). Most current representations of the global climate crisis in literature have been similarly described as dystopian or apocalyptic (Heise “Realism, Modernism...” 17, Schneider-Mayerson 313, Trexler 79). One example of such writing is the dystopian novel *The Road* by Cormac McCarthy which narrates a post-apocalyptic story of a father and a son who together navigate a cruel world where the earth’s ecosystems collapsed. The depiction of the world after an environmental catastrophe in *The Road*, however, has received criticism for not adhering to any “scientifically conceivable possibility” (Kerridge 374, cf. Trexler 79), and also for reflecting the neoliberal logic of the market where emotions become a resource one calculates where they should be directed towards, and equally through focusing on the son-father narrative, the readers are not motivated to direct their emotional attention towards larger social and ecological systems (Greenwald Smith 47). Three issues emerge here when considering this example. There is a need for representations of the climate crisis which actively resist the dystopian mode and which envision how climate change could be dealt with, however not only on an individual, but also a collective and a systemic level, and last, but not least, there is a need for literature that extrapolates and actively engages with the natural sciences as a kind of bridge between them and the humanities.

However, some contemporary environmental imaginaries respond to the climate crisis with a will to envision better alternatives. The American science fiction writer Kim Stanley Robinson is a progressive author who consequently pushes against the dystopian mode of thinking. He is acknowledged to be one of the few contemporary writers who consistently and stubbornly creates visions of utopias in his narratives: his work “stands out for its steadfast commitment to utopian possibilities” (Heise “Realism, Modernism” 18). Robinson keeps challenging his audience with scientifically informed visions of how such climate-related issues may unfold. The latter – the earth’s climate - has truly become a major theme in his writing over the years, starting with *The Wild Shore* (1984) where Robinson offers an “announcement of ... an “anthropocene” caused by human-made, terraforming [sic] climate change” (Wegner “Science Fiction and Postmodernism” 517), through Mars trilogy (1992-1999) and *Antarctica* (1999) where he imagines human adaptation to extreme climates (Markley 13), the trilogy *Science in the Capital* (2004-2007) - said to have become “a primer in climatology” for many readers - where these climate issues are “brought down to earth”

(ibid), or *New York 2140* (2017) where Robinson shows “the tug between competition and cooperation in the context of global climate crisis” (Houser 203) in a flooded New York city.

Similarly, global climate crisis is a major theme in the novel examined in this thesis. In *The Ministry for The Future*, his most recently published speculative fiction work, Kim Stanley Robinson takes readers on a near-future journey in which he depicts various impacts of global climate change and sketches an anti-anti-Utopian vision of a response to this global emergency, imagining how a process of a collective effort to mitigate the crisis could look like. In his scientifically informed narrative Robinson writes an alternative, multivocal history of the future, where these who usually do not have opportunities to speak up are given a narrative voice to tell their individual and collective stories. These voices range from mine workers, through scientists and civilians engaged in geoengineering projects, all the way to an anthropomorphised carbon atom or, even, anthropomorphised history itself. Significantly, Robinson blends that with elements of non-fictional notes.

The novel captures and represents the interrelated environmental and socio-economic concerns and moods which have become especially visible in the recent years and last, but not least, envisions ways in which these climate-related issues, and our responses, could be gradually altering in the future. All the efforts in the primary storyline finally lead to, as one can read towards the end of the novel: “[t]he greatest turning point in human history, what some called the first big spark of planetary mind. The birth of a good Anthropocene” (MftF 475). In other words, a possibility for a new beginning for the planet and all of its inhabitants, also the future generations, arises after alleviating the most immediate dangers of the climate crisis. Humans - instead of acting as a self-destructive geological force - finally take the first steps towards acting on what the climate sciences have been warning them about.

This thesis investigates the narrative strategies in Robinson’s anti-anti-Utopian vision when mediating the complexity of the crisis and its possible solutions. The analyses include examining temporal and spatial perspectives in the novel and ways in which they contribute to enabling the reader to comprehend the global climate crisis and its scientifically conceivable paths of mitigation. Additionally, I will explore the representations of both human and nonhuman agency in the story to help examine how *The Ministry for the Future* challenges the ideology of neoliberalism.

The overarching research question is as follows:

- What narrative strategies does *The Ministry for the Future* deploy when mediating the complexity of the global climate crisis and its possible solutions?

Complementary questions underlying my analyses consider:

- In what ways do the temporal and spatial perspectives in *The Ministry for the Future* enable understanding the global climate crisis?
- What are significant representations of human and nonhuman agency in Robinson's narrative?
- How are scientific projections and scientific information communicated in the novel?

I argue that the narrative strategies that Kim Stanley Robinson deploys, render the complexity of the climate crisis more accessible to the readers and do so in the following ways: firstly, I propose that to respond to the representational challenges associated with the scales of the global climate crisis and the interconnected environmental and socioeconomic issues it entails, he adapts the form of *The Ministry for the Future*; secondly, I suggest that relying on re-imagining human agency in the narrative, allows him to challenge and propose alternatives to the status-quo of neoliberal capitalism, which is portrayed as the main antagonist in the face of the climate crisis.

In Chapter One, I provide the background and theoretical framework which aim at situating *The Ministry for The Future* in its literary and socio-political contexts. The chapter consists of three parts: an extended analytical description of the novel, a review of secondary literature, as well as an overview of the critical reception following the novel's publication. In Chapter Two, I look at the spatial and temporal perspectives of the climate crisis as depicted in the novel. This analysis delineates ways in which *Ministry* departs from a finite spatial, temporal, and social settings in an attempt to mediate the scales of the crisis. Lastly, in Chapter Three, I examine different forms of agency attributed to humans and nonhumans which discerns how human characters are portrayed as entangled in diverse systems. Ultimately, these narrative strategies enable Kim Stanley Robinson to both challenge the neoliberal capitalist ideology which halts a transition to sustainable ways of living, and, as part of the utopian impulse, to fictionalize scientifically informed paths of mitigating the global climate crisis.

There has been little scholarship available concerning Kim Stanley Robinson's novel *The Ministry for the Future* (2020) due to its recent publication date. Additionally, environmental critic Heather Houser notices that literary criticism has not been extensively occupied with climate fiction as opposed to, for example, how there is scholarship engaging with art on climate change (Houser 198). This dissertation, then, provides one of the first analyses of the novel as a modest contribution to the research on how fiction engages with the tangible issue of the global climate crisis.

Chapter One: Background and Theoretical Framework

This chapter, divided into three parts, aims at situating *The Ministry for the Future* in its literary and socio-political contexts and enables shedding light at my analysis of the novel. Part 1.1. is an analytical description of the book. As *The Ministry for the Future* has been described as a “systems novel” (Poole) or a “systems change novel” (Mackenthun 18), such an analytic description, together with the outlines of chapter forms and the diagram showing the relationships between human and nonhuman agents in the novel I created, will be of help when navigating the intricacies of the narrative which portrays numerous individuals entangled in different systems. The most prominent ones which emerge in the story, include the climate system, economic and political systems, but also systems of energy and digital technologies. Thereafter, I go through relevant secondary literature in part 1.2. which serves as a review of theoretical framework when approaching *The Ministry for The Future*. This review encompasses questions about the representational challenges the climate crisis poses on a traditional literary novel, essays on the relationship between science fiction and Utopia by the cultural theorist Fredric Jameson, and eco-critical and postcolonial literary approaches by Rob Nixon. Lastly, I go through the reception of the novel in part 1.3., where I focused on interviews published in literary review magazines: *Chicago Review of Books*, *Los Angeles Review of Books*, *The New York Review of Books* as well as *The New Yorker*.

1.1. Analytic Description of *The Ministry for the Future* (2020)

The speculative fiction novel written by Kim Stanley Robinson, *The Ministry for the Future* (2020), fictionalizes plausible risks of what might be the biggest anthropogenic threat humanity and the planet has ever faced: the global climate crisis. But it also narrativizes plausible ways in which the world might mitigate and even overcome the crisis. The novel opens with the heat wave scenes in India, which aid-worker Frank May is the only person to survive. After reading the first descriptions of the heat wave, the readers are quickly jolted back into a reality where the catastrophe receives no actual response from countries other than India and its people; however, only at first.

The story advances into the future and one notices how the perspectives rapidly shift from one to another throughout one hundred and six chapters, offering narratives of multiple different characters as well as less or more identifiable extradiegetic narrative voices, experiencing or commenting on the events which are now spread throughout almost all the continents across the globe. Robinson brings the issue of climate crisis as close to home as possible through setting *Ministry* not an imaginary or distant and terraformed planet, but our very planet Earth which becomes amplified by the near-future timeframe and how the world is seen through the eyes of characters affectively connected to the places they narrate their stories from. The novel's plot starts in India, returns to Zurich, where the UN fictional agency Ministry for the Future is based, regularly, and includes points of views from events happening in Glasgow, Kerala, Antarctic Ocean, Dubendorf, San Francisco, London, Paris, Los Angeles, Antarctica and Greenland, Nepal, Saint Petersburg, Alaska, Siberia, China, Hawaii, Turkey, as well as unnamed towns in USA. Already through the choice of various narrative places and going back and forth between them, the novel scales up from an individual's point of view and showcases the interconnectedness of events it describes: what happens at these seemingly separate locations can have as far as global-reaching effects. Global climate change is affecting peoples' lives different places locally and - conversely – to alleviate it, a global, collective action is needed.

Attempts of mitigating climate change in the novel last thirty years, the ending of the story coinciding with UN's goal of achieving net-zero emission by the year 2050². But even though it acknowledges that climate crisis mitigation could be a tedious, often bureaucratic process which will meet opposition and it does express worries about its most negative and often contingent consequences such as different forms of violence, the novel does not stop at only describing catastrophic, apocalyptic scenarios. Through its careful engagement with and extrapolation from sciences such as climatology and economics Robinson proposes a vision which informs the readers about solutions and paths in which a transformation possibly can be done. In that way, the story serves as an exploration of viable alternatives to the present socioeconomic system to alleviate the climate and environmental crisis and global injustice, and - as a result - secure a more sustainable, liveable future for the generations to come. In other words: capitalism and fossil fuel industry are identified in the story as the main antagonists that serve neither the environment, nor do they serve the people alive now or their descendants, as the rights of future generations are, where the novel reverberates the

² See the "Net-Zero by 2050" report issued by IEA, the International Energy Agency, May 2021.

Universal Declaration of Human Rights, “as valid as our own” (MftF 16), The solutions proposed are, then, targeting many anthropogenic alterations to the planet connected to the climate change. This includes carbon dioxide levels in the atmosphere, mass extinction of animals and loss of biodiversity, unsustainable agriculture, and other connected issues such as for example displacement caused by the crisis. Solutions to the climate crisis are seen as going hand in hand with turning towards a post-capitalist socioeconomic system and a transformation in people’s values.

Narration:	Chapter number:	Total:
Mary as <u>focalizer</u>	4, 9, 25, 27, 45, 50, 54, 56, 60, 63, 68, 84, 86, 89, 91, 94, 96, 100, 102, 104, 106	21 chapters
Frank as <u>focalizer</u>	1, 7, 13, 18, 23, 26, 47, 74, 79	9 chapters
Other <u>focalizer</u>	22, 78, 83	3 chapters
Eyewitness account	5, 10, 14, 19, 21, 29, 33, 35, 37, 39, 41, 44, 48, 52, 55, 57, 59, 62, 65, 72, 76, 80, 85, 87, 92, 93, 101, 103, 105	29 chapters
Meeting notes	15, 32*, 34, 42, 71, 81*, 98 *Transcripts of private conversations between ministry’s members	7 chapters
Riddle	2, 43, 46, 53, 66, 77, 88, 95	8 chapters
Edu. <u>note</u> ; podcast	8, 11, 12, 16, 17, 20, 24, 28, 30, 38, 40, 49, 58, 61, 64, 67, 90, 99	18 chapters
Events historicized	3, 6, 31, 36, 51, 69, 70, 73, 75, 82, 97	11 chapters

Fig. 1. Distribution of chapter forms in *The Ministry for the Future* (2020).

One of the most compelling features of *The Ministry for the Future* is its structure which incorporates poly-perspectival writing inspired by Dos Passos (Canavan “Of course they would”). Throughout the one-hundred-and-six chapters, the reader is motivated to put together fictional and nonfictional accounts presented in different forms and through different

narrative perspectives (see Fig 1). These fictional and nonfictional chapters are weaved in into another, at times retelling the same events from different points of view.

Frank May and Mary Murphy as Main Focalizers

The near-future events of mitigating climate change are mostly focalized through, or in other words seen through the perspective of, one pair of characters whose stories intersect: the first narrative focalizer is Frank May (marked “Frank as focalizer” in Fig.1), who because of the heat wave is now struggling with post-traumatic stress disorder and attempts to contribute more to stop climate crisis due to experiencing feelings of survivor’s guilt. He is a character both tragic and the very one who manages to motivate others to act on the knowledge about the crisis. The second main focalizer in the story is a former union-lawyer and diplomat Mary Murphy (marked as “Mary as focalizer” in Fig. 1). Through linking the character of Mary Murphy to politicians such as Mary Robinson, Christiana Figures or Laurence Tubiana, all standing behind the Paris agreement, it has been pointedly remarked how it is women who have been at the centre of climate diplomacy (McKibben “It’s not”). In the story, Mary Murphy is the head of a 2025-found fictional UN Subsidiary Body, commonly called the Ministry for the Future, readers meet her early in the novel as a 45-year-old Irish woman believing in the rule of law. Additionally, voices of characters which are in a closer circle of acquaintances of Frank and Mary are also included (marked as “Other focalizer” in Fig. 1), as three chapters are focalized through the character of Tatiana Voznesenskaya, head of the ministry’s legal department, through ministry’s chief of staff Badim Bahadur or at least a character who appears to resemble him, and, lastly, through two other staff members of the ministry: climate lead Adele Elia and ecologist Bob Wharton.

Eyewitness accounts

Accounts of eyewitnesses hail contemporary readers into the speculative future life of everyday citizens. As the main plot of the effort towards avoiding the worst outcomes of the climate crisis proceeds, various characters verbalize their experiences and voice their opinions on what is happening during these turbulent times as first-hand accounts narrated in past tense and, possibly, from a perspective of many years later. The impression these vignettes or mini-narratives (marked as “Eyewitness account” in Fig.1) leave the reader with, is as though they

provide accounts told during a police investigation process of witnesses to the crimes against the biosphere committed during these decades. These mini-narratives are told by climate change refugees, scientists working in Antarctica, mine-workers salaried with slave wages, farmers trying to adopt new modes of agriculture, a teacher environmental activist, a US Navy soldier, a partying linguist, and even condescending uber-rich power-brokers. Pierre-Louis Patoine in his division treated the narratives set in Antarctica and these told by climate-refugees (Patoine 147) as separate from other eyewitness accounts, which I understand is based on how the two narratives rather consist of several chapters which develop over time as opposed to individual chapters. However, I purposefully chose to treat all of these eyewitness accounts as one unit: I am motivated by how they share the narrative mode of speaking in first-person and in past tense, and my goal is to highlight the collective nature of these stories as all of them speak in first-person voice regardless of whether the narrative appears once, or whether one can follow its progression over time. Moreover, regardless of whether the stories of eyewitnesses develop over several chapters, all these stories intersect with stories of Frank or Mary either directly or indirectly through e.g. Mary learning about them from the news or from her colleagues. This feeling of collectiveness has been further highlighted by the social class of the narrators speaking in the eyewitness accounts. The majority of the eyewitness narrators belong to the professional class and working class, whereas only two chapters are narrated by those belonging to the capitalist class understood as uber-wealthy individuals portrayed as partying in an enormous mansion (MftF 77-78), or as attending a re-education camp during World Economic Forum (MftF 159-164). In total, following my analysis, there are as many as twenty-nine chapters narrated in first person singular or plural by these characters as eyewitness accounts, reliable in the way narrators are reporting the events first-hand.

Historicized events

The next section consists of eleven chapters which historicize the events of the decades from the 2020s to the 2050s, which are the decades constituting the main temporal setting of the novel (marked as “Historicized events in Fig. 1). Here, the events are presented as speculative history from an omniscient, third-person perspective written in past tense and as though it were the history of a future which has already happened. The identity of the historian-narrator of these chapters is never disclosed.

As the story progresses, the historian provides an overview of these fictional historical events. Here, the retelling of history starts with describing the COP 29, Climate Change Conference in 2025, when a Subsidiary Body of the United Nations, i.e. The Ministry for The Future, is born. Shortly later, it retells an emergency meeting of the Paris agreement where the governments acknowledge the tragedy of the great Indian heat wave, but quickly go back to business as usual (MftF 23-26), and offers descriptions of political changes in India post-heat wave, which also lead to changes in agriculture, clean electrification, and nationalization (MftF 125-127). The narrator describes the Arctic Ocean's ice cover in 2032, as opposed to its state in 1950s, and historicizes the geoengineering Project Slowdown in the context of that (MftF 147-149); describes the different kinds of violence of the 2030s as "the War for the Earth" (MftF 230); depicts the results of the implementation of the carbon coin (MftF 341-349), as well as strikes happening different places around the globe and the Year Zero, when the Internet stops working (MftF 407-411). The last of the historicized chapter describes the general mood of the late 2040s in a following way: "Right now that feels like coming back from a time of illness. Like healing, like getting healthy. The structure of feeling in our time." (MftF 502). This marks the transformation towards a more sustainable way of life on the planet Earth happening during that period. Historicized chapters become the main indicators in the story of the temporal progression of the events towards the future.

On one hand, the historicized chapters offer a retelling of major events of these decades, but on the other, they function as sobering, ironic commentaries both on these events and contemporary readers' world alike. Although mostly written as a presentation of facts, these chapters sometimes also include humorous remarks on the events. An example of that is when carbon quantitative easing is finally implemented: economists are described as frantically trying to calculate the costs and losses of saving the Earth's biosphere, and the historian calls the science of economics "a speculative fiction" (MftF 344). Additionally, these chapters include mentions on people's customs transforming during the decades, such as how in the 2040s less meat and milk was consumed, and fewer jet flights were made (MftF 230). Stylistically, the way the events are described resemble an oral style of telling. The events from historicized chapters are, importantly, also narrativized first-person in eyewitness accounts, which provides more perspectives on the events.

Educational notes

Other chapters take on more non-fictional forms which slow down the pace of the main narrative and serve as more or less direct commentaries to the fictional events in the remaining parts of the novel. These non-fictional accounts are comprised of eighteen chapters which consist of educational notes providing background information on economy, history, social sciences, psychology and other sciences, sometimes written with a slightly ironic or playful tone. For example, they offer an overview of Keynesian economics; psychological reactions and syndromes, often pathological, which are typical responses to the biosphere's collapse; on Actor Network Theory; rate of animal and plant species extinctions; or explanation on how one can understand what ideology is. There are also notes written in form of radio podcast transcriptions which are mostly structured as lively dialogues between two participants which offer comments on the issues taken up in the novel (marked as "Edu-notes and podcasts" in Fig. 1). Here, I chose to treat the chapters including the theory and the podcast-discussions as one unit, even though their form is different, they are similar in tone and take up related subjects. These non-fictional chapters – also called "non-narrative" by Pierre-Louis Patoine (146), are an addition which diverges from what a one would expect a contemporary novel would comprise of and are, moreover, in a constant discussion with the issues taken up in the remaining, fictional chapters in the novel.

Meeting notes

Seven chapters of *Ministry* offer yet another perspective which narrates official and unofficial meetings of ministry's members. Firstly, five of these chapters are written as notes (marked as "Meeting notes" in Fig 1) which describe ministry's executive group meetings centred around discussing current climate, economic and legal issues as well as the different projects the ministry engages in. They show the everyday reality of a modern workplace and even include comments on the dynamics between the different colleagues. As indicated in the first one of these chapters, the notes are meant to be rewritten later into meeting reports as requested by the chief of staff Badim Bhadur. Most of them are written by Trudi Magiorre, whose role as a minute taker is disclosed only at the end of the story.

Two chapters, however, are direct transcripts of conversations held in private: a conversation on the current economics between Mary Murphy and ministry's economist Dick Bosworth (MftF 129-133), and a phone conversation between Mary Murphy and chief of

legal department, Tatiana Voznesenskaya, which is marked as held on a secure communication line (MftF 403-405).

Riddles

Interestingly, an anthropomorphized carbon atom and a photon, the collective “we” of herd animals, as well as anthropomorphized history, the market, and a code are all narrators of the last, and most distinctive in its form range of chapters which is written as eight short riddles. These riddles function as a biding thread throughout the narrative of *The Ministry for the Future*. The reader is nudged to think about the novel’s structure since the last riddle, narrated by the planet Earth, explicitly evokes circling back to the first one, narrated by the Sun: “I spiral a god that is not a god” (MftF491). Not least, the choice of these two elements in the Solar system functions as a nudge to think on the environmental issues in the novel since the planet Earth-narrator also asks to be “found out” (ibid) and is the only narrator that does not explicitly disclose an answer to the riddle. The choice of presenting nonhuman narrators as sentient beings, equally functions as a significant addition and a contrast to the remaining chapters in the novel, which instead are all either focalized through human narrators, or narrated in first person, singular or plural, by human narrators.

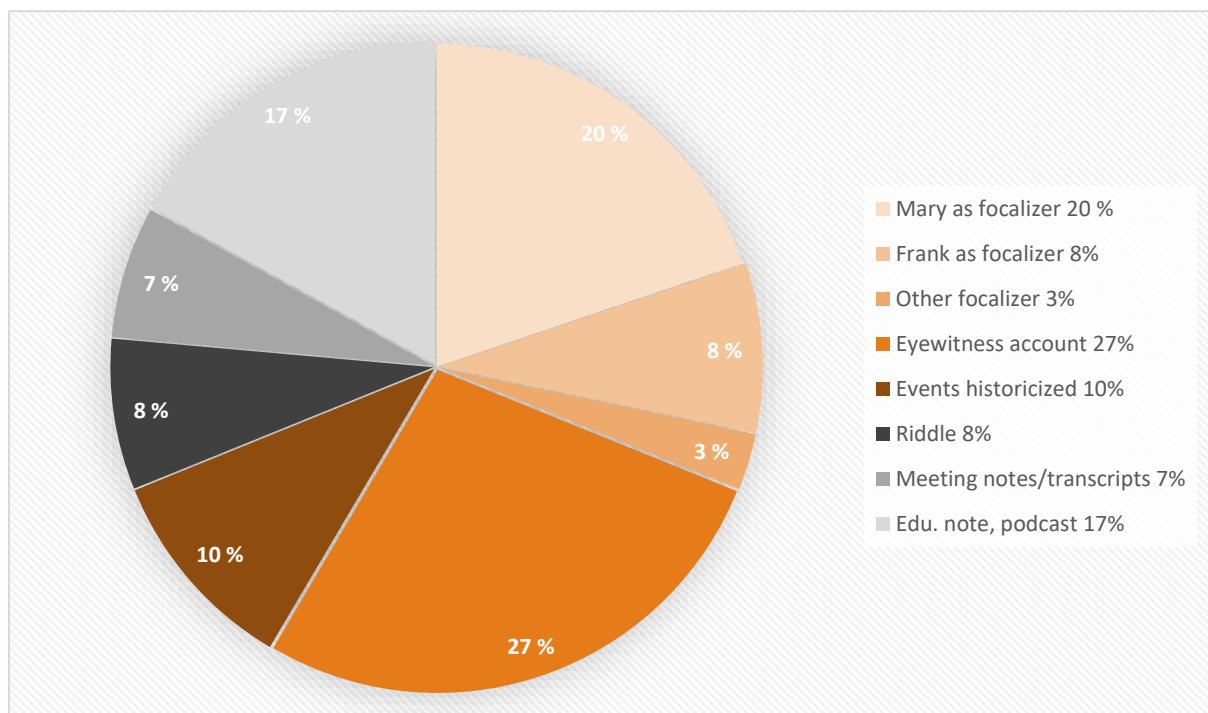


Fig. 2. Ratio of narrative forms in *The Ministry for the Future* (2020).

The innovative part of the *The Ministry for The Future* is then to what extent it contains other narrative forms than “the everyday life or heroic actions of individuals, ... their emotions, ruminations and discussions, that have occupied a large part of the modern novel” (Patoine 147). Chapters including Mary Murphy, Frank May and (occasionally) ministry’s staff as focalizers comprise about one third of the novel (see Fig 2). The historicized events presenting us with an omniscient point of view on the speculative history are constituting about ten percent of all chapters. And the part that makes the novel stand out, starts with how there is a multiplicity of narrative voices in eyewitness accounts: it constitutes as many as almost one third of all chapters. Even more interestingly, chapters written as riddles, meeting notes, educational notes and podcasts transcriptions, are all together comprising almost one third of the whole narrative. Ultimately, as Pierre-Louis Patoine remarks, this way *The Ministry for the Future* becomes “largely dominated by collective and/or anonymous voices and by non-narrative discourses of knowledge” (147), which departs in an interesting way from how a modern novel would instead usually narrate lives of more or less individual characters, but here this kind of narration comprises only one third of the total number of chapters instead.

Convergence

Despite the abundance of narrative forms as well as shifts in perspectives in *The Ministry for The Future*, the different chapters intricately link. One way this can be traced is how in a subtle way the stories of human characters tend to converge in surprising ways (see Fig. 3 for tracing relationships between different agents). These instances of different stories converging becomes an interesting narrative strategy appearing in the novel, and such a technique likewise contributes to showing how everything in the ecosystem of the planet Earth is interconnected, starting with the characters’ stories. Accordingly, several subplots emerge within the boundaries of the novel. We follow the stories of Frank May, Mary Murphy, progress of the Project Slowdown in Antarctica, as well displacement of climate refugees, where these stories weave in with one another with time. Frank’s spouse, Syrine, turns out to be the climate refugee narrating some of the eyewitness accounts in first-person. One only learns from the eyewitness accounts of her Syrine’s daughter that Frank was married to her mother. The lead of the Project Slowdown informally meets with representatives of the ministry before the project even starts. The story of ministry’s chief of staff, Badim Bahadur, appears to intersect with the group Children of Kali. The ministry’s secretary Trudi Maggiore

turns out to be more present in the narrative than the reader would think of at first glance: we only find out towards the end of the novel, when Trudi rents out an apartment for Mary Murphy, that it was her who had been writing most of the meeting notes throughout these three decades of ministry's work.

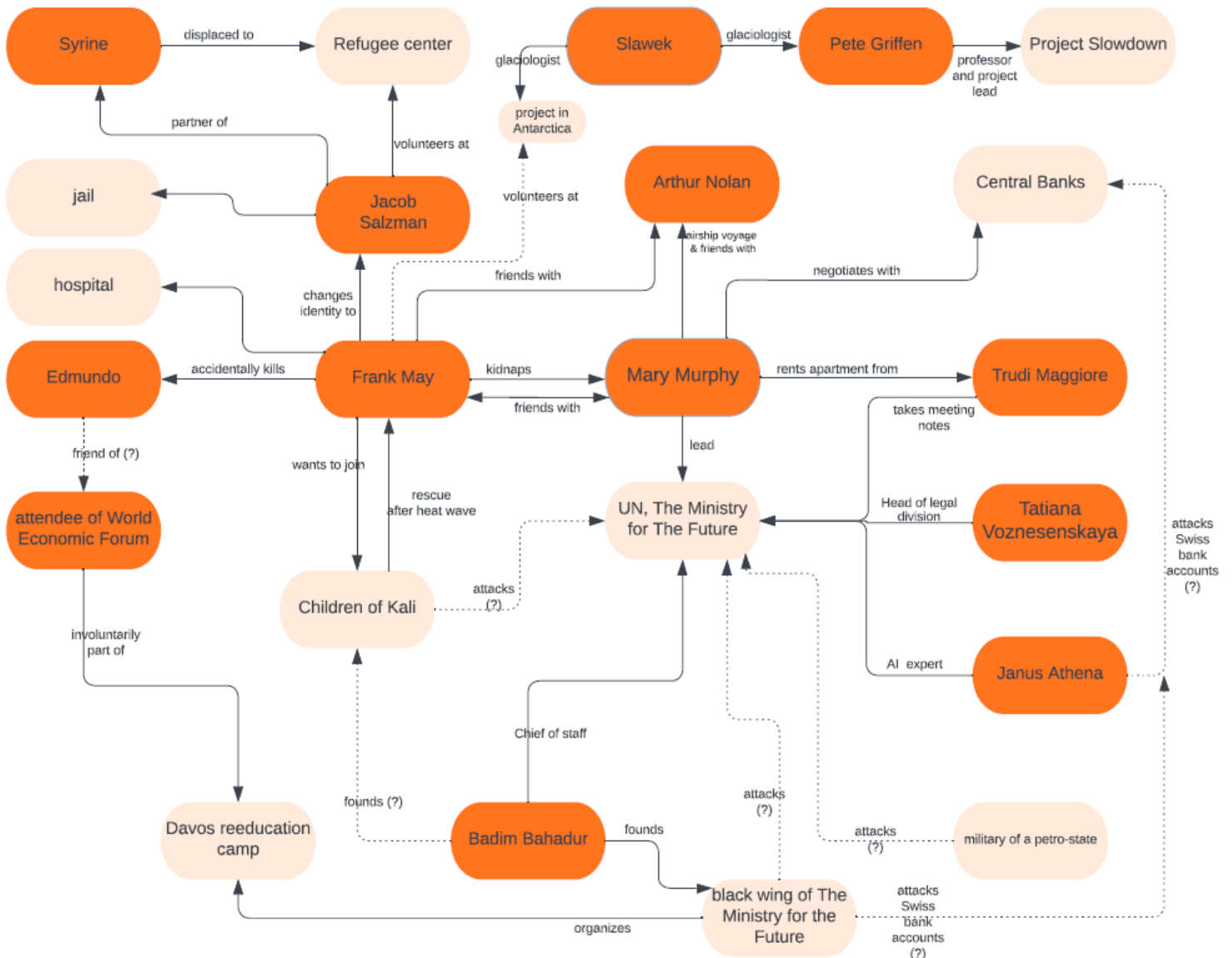


Fig. 3. Relationships between human and nonhuman agents in *The Ministry for the Future* (2020).

Importantly, a similar convergence can be seen in the stories of the main narrative focalizers. Narratives of Frank and Mary, which at the beginning are told as separate stories amplified by their different settings of Global North (Mary), and at first, Global South

(Frank), eventually converge in a strange way. This convergence also signifies the first turning point in the novel: Frank kidnaps Mary to her own apartment to tell her that the ministry is not doing enough to slow damage caused by climate change. He thinks that the rule of law, which Mary believes in, allows in turn climate change-related violence that the ministry is supposedly against, such as the heat wave resulting in deaths of more people than had died “in the entirety of the First World War, and all in a single week and in a single region of the world” (MftF 23), as many as 20 million people (MftF 227). This scene motivates the readers to question and rethink our perceptions of ‘criminal’ and ‘noncriminal’ in the face of a global climate catastrophe.

Mary Murphy’s perspective on the urgency of the issues and appropriate action shifts after meeting Frank in person and she sees it as necessary to start a black wing of the ministry, however, making it clear she would never resort to violence. After conversating with her chief of staff, Badim Bahadur, she finds out, to her surprise and alike to Badim’s surprise of her naivety, that such a wing had already existed all along (see Fig. 2). And while it is never explicitly mentioned in the novel, Badim’s work appears to also have affiliation with some of the attacks of the group Children of Kali, who allegedly target and punish the uber-rich as a response to the Indian heat wave and seem to be responsible for targeting container ships and jet planes, leaving out more sustainable modes of transportation. These contrasts of different kinds of violence like kidnapping or alleged attacks, occurring suddenly as opposed to happening over vast periods of time as climate change does, is a recurring and troubling trope in the novel prompting the readers to think of different forms of violence, more sensational as opposed to slow violence. It may function to showcase how Robinson wished to represent contingencies of history in his near-future narrative and thus making it more realist.

Mary and the ministry’s team of experts on glaciology, international law, economy, ecology, geo-engineering continue discussing and finding new solutions and assessing risks as we learn about from meeting notes. These are probably some of the most passionate work meetings ever held. The team, among others, creates an idea of issuing a carbon coin, i.e. carbon quantitative easing solution which could ensure turning towards a post-capitalist system and saving the environment. Carbon coin would be a currency issued by the main central banks, and one would then be given one carbon coin per every ton of carbon either sequestered or not burned (MftF 173). Mary Murphy keeps attending meetings with the central banks over the course of decades described in the novel to convince them to support the idea. The central banks are however reluctant:

“Because money ruled the world, these people ruled the world. They were the world’s rulers, in some very real sense. Bankers. Non-democratic, answerable to no one. The technocratic elite at its most elite [sic]: financiers. Mary thought of her group back in Zurich. It was composed of experts in the matter, people with all kinds of expertise, many of them scientists, all with extensive field experience of one sort or another. Here, she was looking at a banker, a banker, a banker, a banker, and a banker” (MftF 189).

The contrast depicted in this passage of the group consisting of only bankers on one hand, as opposed to scientists who are experts in their field on the other, points to one of the main and not so fictional conflicts driving the story in *The Ministry for the Future*: capitalism versus the health of the biosphere. Bankers’ reluctance is however defied after the second turning point in the novel: the headquarters of the ministry are assassinated at night, with no one inside. Mary is instantly put under protection, and eventually ends up hiding in Alps with security guards, there in a secret military base she meets with the former Swiss presidents to find out that the Swiss bank accounts as well as the UN are under attack. This makes Switzerland more inclined to see the work of the Ministry for the Future as crucial and support it, since so much financial capital has now been compromised, but with no culprit in sight. After that, also the central banks agree to cooperate on and back up the new currency which helps reinforce more systemic changes. Ironically, this becomes more of a reason to act on a systemic level than the heat wave which caused the death of two million people. In that way, the meeting following sabotage of Swiss bank accounts becomes a somewhat twisted narrative mirror to the opening heat wave scenes in the novel, where disappearance of financial capital, following a capitalist logic, is more successful in convincing to act on the climate crisis than a disaster resulting in loss of human and animal lives could ever do.

In addition to changes in the economic system, technological solutions presented in the novel are multiple and often bold and imaginative, but also scientifically informed as the ideas stem from what has been proposed in academic research. As attempts of thickening the ice cover, geoengineering Project Slowdown is implemented: it includes pumping up seawater from under the sea ice, even though the participants are in the beginning sceptical as to whether it will work: “It’s like sucking up the ocean in a drinking straw, I said, and spitting your mouthfuls onto shore” (MftF 181). Professor Griffen and his team of scientists, however, do proceed with the project. Interestingly, attempts alike Project Slowdown have been discussed in real life glaciologists’ meeting in 2010, and a paper on that has been published in

Nature in 2018 as well as in a climate journal in 2020 (Rothman 8). This is a hands-down example of how hard science fiction emerges as an engagement with already existing sciences and how it actively extrapolates from known sciences. As the time progresses, Project Slowdown in the novel gains more attention, funding, and enthusiasm both from its executors and The Ministry for the Future.

Technology in the novel functions often either as means of last-resort acute solutions needed in the time of transitioning, or as long-term solutions which take forms of simplified but improved technologies we use today or know from pre-industrial times. In that way, both point to a change in the value system of people: people care about making a change, but also this idea of using older technology symbolically points to reversal of the damage to the biosphere that need to be undertaken. These solutions include a project that thousands of people enthusiastically cooperate on: solar radiation management in a form of spraying sulphur dioxide from planes to temporarily reflect sunlight, which India tries out motivated by the deadly heat wave to reduce temperatures locally and globally, creating a similar cooling effect to that of volcano eruption (MftF 37-39). More and more countries turn to clean electrification and alterations in agriculture. As means of transportation, sail-ships are used which “had sails made of photo-voltaic fabrics that captured both wind and light, and the solar-generated electricity created by them transferred down the masts to motors that turned propellers” (418), so at the end of the novel one sees that older means of transportation return and are used more widely, slightly adjusted to serve the needs of a society which, as the story progresses, also changes their ways of thinking about their place on Earth. Seen this way, the novel renegotiates the role technology could play in people’s lives.

As the narrative progresses, people around the world start to participate in new ways in the process of transition, either through top-down or bottom-up initiatives, and so we are forced to connect the progression of these only seemingly disconnected stories. One can follow work of the Half Earth project throughout the novel, from descriptions of the project which assures habitat corridors for animals so that wilderness is restored, to the project’s final enactment (MftF 359-364). Even though the project implies displacement of the inhabitants, the main aspect is that people are displaced before it is too late to plan anything accordingly to what sciences have been warning us about. This is not the case for climate change refugees whose first-hand accounts follow how they are forced leave their home countries behind (MftF 51), as well as their everyday life in refugee camps over the course of three decades described in the story (MftF143-145, 205-207). As the story progresses, climate refugees are

finally granted global citizen passports and rights around 2050s (MftF 467). More and more countries, such as India (MftF 125) or Brasil (MftF 343), turn to democracy and socialist inspired movements as the time passes. The novel's multiple characters often become more solidary as the time passes. There are also acts of continuous non-violent civil disobedience such as strikes emerging in various countries for various of reasons: student strikes against student debts, or activists striking in Paris for climate solidarity. The Global South is leading in transitions, both of more democratic and more clandestine kind. In the end, a Mother Gaia religion emerges as the readers learn from an account of the first global celebration of the planet Earth which takes place towards the end of the novel around the 2050s. Altogether, these descriptions signify an imagined social and cultural shift as part of a response to the climate crisis.

Often, solutions are suggested and discussed first spontaneously and independently of how and who executes them later: for example, Frank May learns about 2000 Watt society while walking through the streets in Zurich, here, people adjust to live on 2000 Watts of energy - as that amount equals the amount of energy produced globally per individual - when it comes to the choices of food, transport and home heating (MftF 195). Towards the end of the novel we learn that Mary Murphy, along with other people in her housing cooperative which she rents from her earlier employee Trudi Maggiore, lives by these earlier foreshadowed to the reader through Frank's narrative 2000 Watt society's rules. As the seeds of the idea of living by these rules had already been planted in the reader earlier in the story and we are well familiar with it, this mirrors how also the abundance of ideas in the novel as a whole can work as means of challenging the reader's thinking. This idea, seen in the context of how during the Indian heat wave in the opening scenes the air-conditioning unit stops functioning due to an electricity shortage, prompts situating the individual within larger systems we are part of and dependent on.

There are characters who persist in their work to alter the system and this happens both from bottom-up and top-town actions. The persistence leads to how, towards the end of the novel, one can see first signs of hope for Earth. The last chapters include two distinctive perspectives which are more all-encompassing. Mary Murphy takes up an airship-voyage around the world alongside a utopian friend Arthur Nolan, looking at all the continents from the sky-level and all the implemented changes. There is also a simultaneous, around-the-globe euphoric lovefest celebration of people towards Mother Earth narrated by an enthusiastic

linguist. These two descriptions do have a slightly soap-opera-like feel to them: but how otherwise does one imagine the best possible outcome for the world?

Incorporating such global perspectives in the story directly follows the third and last turning point in the novel: an anthropogenic CO₂ drop in the atmosphere signifying the “birth of a good Anthropocene” (MftF 475). With atmospheric carbon dioxide levels at this point in the story reduced anthropogenically to 454 parts per million as opposed to 475 just four years earlier (MftF 445), this becomes a symbolic transformation moment in the story. It may highlight how Robinson’s vision is not overly optimistic, but rather realistic while remaining hopeful for changes to arise. While celebrating the festival, Mary Murphy comments at the very end that “there is no such thing as fate” (MftF 563), turning the reader’s gaze at people as having the agency to respond to the climate crisis.

1.2. Review of Secondary Literature

Literary texts engage with the theme of climate change to such an extent that the genre has gained its own name - climate fiction - and the term cli-fi has been coined in 2007 by Dan Bloom (Heise "Science Fiction" 279). However, writings of what can be called proto cli-fi go back to as early as 1960s (Schneider-Mayerson 311), and as the awareness about climate change started growing around mid-2000s, public intellectuals called for compelling narratives about the issue (ibid). One of them was the environmental writer Bill McKibben with the article "What the warming world needs now is art, sweet art" published in April 2005 in *Grist*, calling for art which will help us register the changes to the planet emotionally, and likewise envision how it could be to live on a planet where we use the climate crisis as a possibility to confront our consumer society and hyperindividualism. Some writers, though, like Kim Stanley Robinson with his *Science in Capital Trilogy* written between 2004-2007, were already "ahead of the curve" (Schneider-Mayerson 311) with writing climate fiction. His *Science in the Capitol* trilogy has been described as having served as a primer on climatology for many readers (Markley 9), and, moreover, "instrumental in defining the emergence of cli-fi" (Markley 12).

Alternatively to the name cli-fi, one can also encounter names such as 'fiction of the Anthropocene' or 'eco-fiction' (Leikam 111). This taxonomy has been, however, problematized, and it has been argued that one should not disavow climate fiction as sci-fi, noticing how the majority of fiction within the genre cli-fi often fall into the category of sci-fi (Frelik 125). Frelik draws our attention to how sci-fi as a genre had been institutionally marginalized in American Studies tradition, while it importantly works as "a mediator in the transactions between natural sciences and humanities" (129). Thinking of this sort of writing, both of sci-fi and cli-fi, as a bridge between different disciplines and sciences becomes a useful metaphor which mirrors how also facing the global climate crisis in general will require such bridges, a transition in values and finding new modes of collaboration on a global scale. However what Frelik significantly does through problematizing this genre taxonomy, is that he foregrounds the role sci-fi has as a tool for thinking: "when you finally start paying attention to the messages that climate fiction brings, you can call it whatever you want" (129). Seen this way, fiction about the climate crisis can be looked upon as a didactic tool, and this is an important point to bear in mind when approaching *The Ministry for The Future*.

The narrative in the *Ministry for the future* progresses from a negative Utopian, or dystopian, towards a eutopian narrative. After the opening and apocalyptic heat wave scenes which horrifyingly mirror what could just as well be happening soon in the readers' life, it depicts a society "as considerably worse than the society in which that reader lived" (Wegner "Utopia" 81), in a state of an almost collapse caused by the systemic inaction towards the risks of the climate change. As the *Ministry's* final chapters depict a society which is willing and capable of tackling the issues of global climate change and its related socioeconomic issues, narrative advances towards a eutopian narrative, intending the reader to view a society "considerably better than the society in which that reader lived" (Wegner "Utopia" 81). Through depicting the process of transformation as opposed offering a finished product to the readers, Robinson fills in an important narrative gap (Rothman 4) by showing how we can still redraw the plans. Ways in which *Ministry* mediates that through incorporating multiple voices and perspectives, challenges the readers to think of our own past, present and most importantly future in the age of Anthropocene.

Writing in the Anthropocene

Interestingly, several scholars argued that the temporal and spatial scales of the climate crisis pose a representational challenge on its literary depictions. The twentieth century has seen the focus of the novel narrowing to the "distinctiveness of a finite social and physical setting" (Bould 68), making a serious literary novel "incapable of addressing climate change" according to Amitav Gosh (ibid). Adam Trexler notes that while contemporary literary novel embeds conflicting interests "within local, regional, and national politics and media" (Bould 69), it became unable to address the "challenges of the Anthropocene" (ibid). Similarly, Ursula Heise notes that global climate change "poses a challenge for narrative and lyrical forms that have conventionally focused above all on individuals, families, or nations, since it requires the articulation of connections between events at vastly different scales" (qtd. in Houser, 197). Additionally, the "drama deficit of climate change" (ibid) that Rob Nixon famously called "slow violence", poses a challenge on how to narrativize it. The urgency and the extensiveness of climate change, then, requires redirecting the narratives to go beyond such individual and limited points of view, and likewise include perspectives on place and time to encompass the issue of a crisis which is global, or planetary, in scale.

However, instead of capitulating, literary scholars investigate “creative and critical frameworks for innovations” (Houser 197) when it comes to mediating the scale and complexity of the crisis. Richard Kerridge explores which literary forms are best suited to deal with climate change in “Ecocritical approaches to literary form and genre”, where he discusses criteria by which eco-critics make judgments about texts so that environmental values can reach a wider audience. He suggests that as a defensive response against knowing the traumatic truth, a *splitting* occurs as a coping mechanism so that we both know the truth and not know it, and this sort of intellectualization separates the awareness about the crisis from real emotional engagement (364). He also points out how awareness, instead of producing change, causes “doomsday fatigue” (363); and so Kerridge goes on to discussing how different forms and genres may offer different possibilities towards inspiring change and action instead: the need for literary realism, representation that goes beyond local place and individual perception, and aiming at evoking environmental care is recurring in his discussion.

As Kerridge further exemplifies, the question of representing vast temporal and spatial scales of the climate crisis has been of interest for Ursula Heise in *Sense of Place, Sense of Planet*, where she calls for forms of literature capable of “representing the global and futuristic perspectives that enable us to see climate change – spatial and temporal perspectives reaching beyond narratives of individual lives” (372) as well as for Timothy Morton who called climate change a *hyperobject* so extensive in time and place as “to be practically unlimited” (373), and so he also calls for literary forms that suggest this unboundedness and forms that remain incomplete. Modernist cut-up and collage traditions are given as examples of such literary forms, as does Google Earth-style zooming, and incorporating graphs and databases (ibid). In a way, then, the realization of the urgency of the climate crisis, also calls for a need for using narrative techniques accordingly, and perhaps even developing new literary devices.

It is interesting to consider the repertoire of techniques that science fiction offers in this regard. Ursula Heise examines the techniques developed by science fiction to mediate vast temporal scales in more detail in her article “Science fiction and the Time Scales of The Anthropocene”. Through exploring novels written before the time the term Anthropocene even existed, she identifies narrative techniques which, as she says, contemporary climate narratives may rely on, and to a certain extent already do rely on. The devices Heise labels are time travel, time leaps and serial protagonists, species narrative, time collages and time palimpsests. Here I will provide a brief summary of these strategies. Time travel in science

fiction does not only happen on the level of discourse, the way the events are conveyed, but actually happens on the level of the story: time travel is actually performed by characters themselves. Heise uses Well's *Time Machine* as an example of that, here the main character travels further and further into the future. The next strategy is time leaps where only the reader leaps through time and not the characters themselves. A version of that is combining time leaps with serial protagonists where a work of science fiction tells stories of a leading individual and then leaps in time to another decisive period and individual. Heise asserts that often these stories invite a certain scepticism regarding human agency when considered against such long temporal scales (288). Next, she considers how some science fiction works use a narrative strategy of abandoning individual characters to replace them with entire species instead. Another formal technique she looks at is modernist fragmentation which offers views from multiple characters and their accounts with other narratives in order to "give a sense of the heterogeneity of the planet" (295). The last one is time palimpsests where readers are forced to piece together narratives which appear dozen of pages apart, and need to detect similarities and contrasts over the decades and centuries "in a layered palimpsest of time" (296).

As Heise asserts, the rise of the novel implied scaling down the imagination in narrative (301). Novels describing the current climate crisis, however, may increasingly adopt the epic strategies and themes she describes, i.e. large-scale stories which are influenced, but not controlled, by humans, and stories about communities and the way they relate to the changing ecology of the planet (ibid). She also imagines that the importance of a single protagonist might decrease, and as an alternative narratives will favour describing communities and nonhuman actors (Heise 301), with the main actants shifting from "individual human characters to collective and sometimes nonhuman actors" (ibid). Bould similarly considers the strategies science fiction novels has been deploying and asserts that science fiction "relativize[s] the individual in relation to the spatial and temporal magnitudes and ecological complexities" (69), and how a science fiction novel, through being a replacement of the historical novel, as well as its affiliation with political visions and focus on social change, is enabled to address the challenges the climate crisis poses on the narratives in this regard.

The issue of scale brings one to think of the term 'Anthropocene': at this point, then, how can the "Anthropocene" be understood? Environmental critic Timothy Clark in *Ecocriticism on the Edge. The Anthropocene as a threshold concept* (2015) recounts how

the name has originally been coined by atmospheric scientists to designate the geological epoch stretching from the industrial revolution where the human activities rival the great forces of nature in their “pervasiveness and profoundness” (1), however, with some scientists designating the starting point of the Anthropocene as far as even thousands of years ago due to extensive agriculture, and emphasises how the force of the term applies mostly to The Great Acceleration post 1945 where human impacts on the earth’s biosphere have achieved “arguably dangerous intensity” (ibid). In the Anthropocene, it is humanity which is seen as a geological force. Clark early connects the term Anthropocene to the forces of expanding global capitalism. As Clark points out, the term Anthropocene has been quickly adopted in humanities to function as a shorthand term for the cultural, ethical, aesthetic, philosophical and political contexts of the environmental issues planetary in scale, such as “climate change, ocean acidification, effects of overpopulation, deforestation, soil erosion, overfishing and the general and accelerating degradation of ecosystems”, as he says (2). He links the term Anthropocene to the notion of scale effects:

“The Anthropocene is in itself an emergent ‘scale effect’. That is, at a certain, intermediate threshold, numerous human actions, insignificant in themselves (heating a house, clearing trees, flying between the continents, forest management) come together to form a new, imponderable physical event, altering the basic ecological cycles of the planet” (Clark 72).

This is exemplified by explaining how a carbon footprint of an individual person is of interest only if seen in relation to carbon footprints of the other people living on the planet and, also their impact over an uncertain timescale (ibid). That way, understanding the impact of an individual phenomenon such as heating one’s house is out of reach for a person or the household as such, and only makes sense in relation to how many other people have chosen and will choose similarly over different distances in space and time. Clark also notices how what is rational on one scale may be destructive on another: environmental campaign in one place of the world is negated by lack of such action in another (71). Thinking about such scale effects, in turn, leads to thinking about what modes of representation in literature facilitate presenting on such “geological time scale” (73), ways in which the complexity of the issue can be made comprehensible.

Importantly for the reading of *The Ministry for the Future*, in his presentation Timothy Clark also contrasts the views on new humanism of the French philosopher Michel Serres

with an almost inverse, dystopian views of Braden R. Allenby and Daniel Sarewitz. Michel Serres anticipates how the very danger of the Anthropocene could also represent “the hope for a new form of humanism” (5). The action comes not from an individual, not so much from groups such as nations or assemblies, but from the “enormous and dense tectonic plates of humanity” (Clark 4). The image of the whole Earth seen from space, makes up for a totalizing moment where the Earth becomes “a universal tomb of universal history”, where all humans become a unified agent acting in solidarity also at last realizing its dependencies on one another. However, Clark dismisses Serres’ essay as an “exercise in anthropocentric illusion” (6) and goes on to explaining what he calls an almost “inverse” vision of Braden R. Allenby and Daniel Sarewitz in *The Techno-Human Condition* (2011) instead. Allenby and Sarewitz differentiate between three levels of complexity in the relation of our species to technic. Starting from Level I, where technology is a simple tool such as an aeroplane is a means of getting from point A to B, to Level II, where planes are now parts of larger networks of social and technical control, to Level III, a higher level of complexity, where the effects of the tool have incalculable effects on the society, infrastructure, psychology, health, and so on – its complexity at this point has exceeded our cognitive capacity. He concludes the chapter admitting the limits of cultural representations in how far they can change our modes of life and saying that his project can at least help *comprehending* ecological problems, and at the same time acknowledging that such knowledge can be both illuminating and even close to paralyzing given the complexity of the issues (21). This focus on the complexity of issues such as global climate crisis and making them more comprehensible, has been a challenge that *The Ministry for the Future* deals with through different narratives strategies and the novel does not necessarily abandon the hopeful humanist views of Serres described here.

The Unforgivable-Crimescene of Slow Violence

Environmental critic Rob Nixon further problematized the term “Anthropocene” through linking ecocriticism with postcolonial studies, pointing to how thinking about the Anthropocene puts the responsibility of planet destruction on all human beings, instead of focusing on how there is a gap between how the uber-rich and the poor have affected the planet. He even suggests that the Anthropocene should instead be called an “Unforgivable-crimescene” (237), and this term allows space for rethinking how one imagines and understands the agency of different social groups when it comes to the climate crisis. In “The Anthropocene: The Promise and Pitfalls of an Epochal Ideal” Nixon is interested in a

fractured narrative of how all people are in the Anthropocene, but not all are part of it in the same way. Nixon ponders, then, how to tell the centrifugal story which “acknowledges immense inequalities in planet-altering powers” (2370), pertaining to how the rich and the poor have affected the planet in different ways and to different degrees; and at the same time the centripetal story of the force of the “dominant Anthropocene species” (ibid), that is how the responsibility for planet destruction is still laid on all human beings. Nixon’s focus on how to tell this two-fold story could be extended, I propose, into thinking not only about representing discrepancies when it comes to human agency involved in planet destruction, but also extend it towards representing and telling stories about agency of humans in their response to this self-inflicted crisis: imagining how the ongoing climate crisis could be mitigated.

Nixon again points to the importance of a connection between environmental and postcolonial literary studies in *Slow Violence and The Environmentalism of the Poor* (2011). The oxymoronic at first sight term “slow violence”, coined by Nixon, describes violence that occurs gradually, “out of sight”, and is dispersed in time and space, in fact not perceived as violence at all. One example of that is the climate crisis. He contrasts the typical “sensational” violence with such slow violence in the following way:

“Falling bodies, burning towers, exploding heads, avalanches, volcanoes, and tsunamis have a visceral, eye-catching and page-turning power that tales of slow violence, unfolding over years, decades, even centuries, cannot match. Stories of toxic buildup, massing greenhouse gases, and accelerated species loss due to ravaged habitats are all cataclysmic, but they are scientifically convoluted cataclysms in which casualties are postponed, often for generations” (Nixon “Slow Violence” 3).

These biases also have an impact on what is understood as causalities. He exemplifies that through describing how the consequences of the Vietnam war do not only encompass the time of the war, but decades after that due to the chemical weapons that were used, which makes Nixon conclude that “rhetorical conventions for bracketing violence routinely ignore ongoing, belated casualties. (Nixon “Slow Violence” 13). He argues that efforts to represent environmental slow violence have been especially challenged in the aftermath of the 9/11 in the US (ibid). Rob Nixon asks then how to narrativize such non-sensational events, like climate change, to show the effect they have on the economically vulnerable groups, “the

poor”, which encompasses for example inhabitants of Global South or indigenous communities.

Alongside the challenges of narrativizing slow violence and advocating for the economically oppressed groups of people, Nixon is interested in the role which an environmental writer-activist has when it comes to exposing these injustices:

“Writer-activists can help us apprehend threats imaginatively that remain imperceptible to the senses, either because they are geographically remote, too vast or too minute in scale, or are played out across a time span that exceeds the instance of observation or even the physiological life of the human observer. In a world permeated by insidious, yet unseen or imperceptible violence, imaginative writing can help make the unapparent appear, making it accessible and tangible by humanizing drawn-out threats inaccessible to the immediate senses.” (Nixon “Slow Violence” 16).

Nixon point out how writing can challenge these sorts of perceptual habits which downplay impacts of slow violence. The attention is turned to what perspectives tend to be concealed and suppressed by the hegemonic “sight conventions of visibility”. These perspectives include those of the poor, the women, or the colonized. Not least, Nixon notes that it is necessary to engage in the issue of who “counts as a witness” as slow violence often would be relayed by people whose authority is “culturally discounted” (16). Having Nixon’s overview of the slow violence, the poor, and the activist-writer in mind, it becomes interesting to examine how *Ministry* renders the slow violence of climate change visible, and thus also more comprehensible and accessible. At the same time, witnesses of slow violence in the novel are often immediately subjects to such violence themselves, and as fictionalized events happening in the future setting, the slow violence becomes more sensational than it is to many of the contemporary readers today.

New Sets of Norms, and New Structures of Feeling

Cultural theorist Fredric Jameson writes on the relationship between science fiction and utopia in the collection of essays *Archeologies of the Future: The Desire Called Utopia and Other Science Fictions* (2005). In “Progress versus Utopia, or can we imagine the Future?” (1982), Jameson posits that the anticipatory nature of SF as a genre is a representational one, and the sci-fi narratives make use of conventional realism where the settings and actions are possible and conceivable ones of a near or far future (286). A similar outlook at specifically

The Ministry for the Future as realist has been also expressed by McKibben in the article “It’s Not Science Fiction” (2021). As Jameson states, there comes the “canonical defence” of the SF genre: “such narratives have the social function of accustoming their readers to rapid innovation, of preparing our consciousness and our habits for the otherwise demoralizing impact of change itself” (286), or in other words, to insulate us, as he says, where Jameson compares SF to the modernist works of Baudelaire. He then proceeds to pointing out how SF is not meant to give us “images” of the future, instead, defamiliarize and restructure experiences of our own present (286). To describe this notion of defamiliarization of our present, a metaphor used by Kim Stanley Robinson himself may be helpful. He compares SF works to a pair of old-fashioned pair of 3D glasses where one lens is blue and the other red: one lens is used to look at the predictions of the future, and the other to look at our present and how it captures the feeling of living now (Robinson “Can Science Fiction Wake Us Up...” 7). SF becomes then a tool the readers can use to rethink our present through peeking at projections and visions of the future, and to accustom ourselves to upcoming transformations. Fredric Jameson further says in the essay that the SF genre has as its deepest vocation:

“[...] to demonstrate and to dramatize our incapacity to imagine the future, to body forth, through apparently full representations which prove on closer inspections to be structurally and constitutively impoverished, the imagination of otherness and radical difference, to succeed by failure, and to serve as unwitting and even unwilling vehicles for a meditation, which, setting forth for the unknown, finds itself irrevocably mired in the all-too-familiar, and thereby becomes unexpectedly transformed into a contemplation of our own absolute limits” (289).

While on one hand Jameson admits that SF can at times represent ideas which contain flaws when studied closer, and does express that SF turns out to be a way of contemplating our “own absolute limits”, he is more hopeful in in the essay “If I Find One Good City, I will Spare the Man: Realism and Utopia in Kim Stanley Robinson’s Mars Trilogy” (2000). Here, Jameson looks at how Darko Suvin’s theory conjoined the tradition of SF and utopian critical tradition with the Brechtian concept of *cognitive estrangement*. Just like for Brecht the idea of estrangement effect of art could be extended to the realm of the theatre where the audience is made aware of their passive role as receivers similar to their situation in the “manipulated illusion-world of bourgeois domination” (Csicsery-Ronay 118), Suvinian estrangement would imply that the reader’s reality is made strange through a new set of norms (ibid), and has a

cognitive purpose of gaining an understanding of the social conditions through logically consistent modelling. This highlights the role of SF as scientific in such a way so that it imitates, reinforces, and illuminates scientific cognition (ibid), distinguishing it from other genres such as for example fantasy.

Fredric Jameson exemplifies that by pointing out how the solutions proposed in Mars trilogy (1992), while sometimes contradictory, are meant to stage a debate with ideological and political prejudices of its readers, and further, how contemporary utopias prompt us to think of ‘real’ science and politics, and not only their ‘representations’. In that way, as he says, such stories equally dramatize our ideological objections and resistances to Utopia as well as satisfy our impulses towards it (ibid). Here Jameson designates trilogy as polyphonic as opposed to “monological” utopias of the tradition Utopia in Mars, including in that way a struggle between a range of different utopian alternatives which it “deliberately fails to conclude” (410). The way it can be understood is that a polyphonic nature of a contemporary utopia may be the very place where the reader can find opportunities for inspiration to criticize the status-quo of the dominant ideologies and from where it can inspire change; even though the solutions may be contradictory in nature, or even impoverished as Jameson states in the previous essay, it prompts certain kind of thinking and re-thinking modes in their readers.

Theorist Raymond Williams, who is said to have prefigured the contemporary interest in affect studies, proposes that the social and material infrastructure of reality should be complemented with an affective infrastructure of “the structures of feeling”. This idea has been central for William’s contribution to the materialist cultural studies. Kim Staley Robinson refers to the notion of “structures of feeling” explicitly in *The Ministry for The Future*, linking our feelings to periodization: “our feelings are not just biological, but also social and cultural and therefore historical” (MftF 124), he correspondingly commented on the present structures of feeling in our society in several of the interviews (Ezra Klein Show 1:01:06, Robinson “Imagining the end”, Rothman 12). This can foreground how Robinson is explicitly interested in capturing a certain process of transformation in his narrative.

The notion of “structures of feeling” has first appeared in Raymond Williams entry in 1977 in *Marxism and Literature* (Sharma and Tygstrup 2), and then developed further in (add where). Williams is interested in the lived lives which are underpinning the cultural record which we can access from the archives. In the essay, Williams describes it as “a particular

quality of social experience and relationship, historically distinct from other particular qualities, which gives the sense of a generation or a period” (Williams 23), which implies that such an affective structure is changing in different periods of time and setting more focus on the everyday experiences of ordinary lives. In that sense, it becomes important what it feels like to be in particular situations, what our inclinations for doing one thing and not the other, are, what fuels our enthusiasm, and how the “little things” pertaining to feeling, bodily sensations and atmosphere inflect our ideas and interests (Sharma and Tygstrup 1); and, finally, what one arrives at here, is participants’ perspective on culture. The transformation process in *Ministry* also involves characters describing such changes in their values, as distinct from other periods in time: it mediates when these new patterns emerge as opposed to when they are already established.

1.3. Reception

This subsection offers an outline of interviews and reviews conducted and written for literary magazines subsequent to the publication of *The Ministry for The Future* in October 2020, ordered chronologically by the date of their publication. Gerry Canavan, literary critic associated largely with science fiction criticism, in his review “Of Course They Would: On Kim Stanley Robinson’s *The Ministry for the Future*” published 27th of October 2020 in *Los Angeles Review of Books*, focuses on how there are many paths to “enlightenment”, understood as the mitigation of the climate crisis, proposed in the novel and focuses largely on the more troubling paths which it suggests. He starts off by pointing to how writing near-future narratives is more challenging than describing worlds which are existing centuries ahead of time and highlights how, ironically, we seem to have become convinced that large world-historical changes cannot happen in the short term. As he brilliantly points out, we do so even though there have been many world-historical changes which have happened the last five years alone, naming examples such as coronavirus pandemic, the legalization of gay marriage in many countries, the #MeToo and #BlackLivesMatter movements to name a few.

Gerry Canavan calls *Ministry* the grimmest book of Robinson since the publication of his novel *Aurora* in 2015, likely the grimmest he has written at all, and also the most ambitious in the way it describes how it would be to imagine living through a revolution ourselves, as he says. Interestingly he points to how *Ministry* lacks the “temporal and spatial distancing” which novels set on other planets or distanced in time offer instead. Canavan mentions the polyperspectivity of *Ministry* which he identifies as an inspiration from John Dos Passos³ where traditional narrative is combined with other forms such as meeting minutes or new reports. In the review, Canavan notices how in *Ministry*, “[w]hat passes for hope is thus a very particular, very narrow trail somewhere between reform, revolution and revenge”, to succeed, the fictional Ministry in the novel needs a black ops division, and so Canavan suspects that this crossover of “optimism of progressive political discourse with the brutality of apocalyptic SF” will be controversial. He concludes his review with stating: “if you’re reading this, you are the Ministry for the Future. Get back to work”, which circles back to how the novel directly addresses the readers and calls for action. Canavan focuses then in his review on the plethora of paths outlined in the novel towards overcoming the climate crisis,

³ See also the interview conducted by Ursula Heise with Kim Stanley Robinson (2016), where Robinson described Dos Passos’ style as “symphonic in structure” (21) and as having become an influence when writing the novel “2312”, and then asserts to have “translated it into the future and into space”.

on the lack of typical temporal and spatial distancing we might expect and how it proposes a viable path towards “world-historical change” in the, relatively, short term which seems to be a difficult mode of thinking for contemporary readers despite the recent years only showing otherwise.

The interview “A crucial collapse in *The Ministry for the Future*” conducted by the environmental writer and historian Amy Brady was published the same day, 27th of October 2020, in *Chicago Review of Books*. Here one can read on why Kim Stanley Robinson keeps focusing on the subject of climate change in his writing, about the structure of *The Ministry for the Future*, the vital role of change in the global economic system in overcoming the climate crisis and the dual nature of work of the fictional body of the UN in the novel. Amy Brady in the introduction presents Kim Stanley Robinson quoting *New Yorker* where he was called “the greater political novelist”. She classifies his work as hard science-fiction due to the level of detail in descriptions of social and technological advances. Kim Stanley Robinson asserts that Earth is a “major character in all our novels” whether the novelists realize it or not, and highlights how science-fiction always has taken the present moment as the starting point for speculations, thus he says climate change is part of any future he could try to imagine in one way or another. Kim Stanley Robinson explains the background for opening the novel with the great Indian heat wave with the wet-bulb temperatures as the main background, and noticing how such events have already been happening for example in Chicago in 1995. He points to how the combination of weak electrical grids and dense population makes such situations even more dangerous.

Further, when addressing Amy Brady’s questions about the depiction of the UN as both a catalyst for global change as well as involved with clandestine activity, he explains how even though he prefers that a new post-capitalist economy will be created through the means of the discursive and legal battles, he did not want to exclude the possibility of the occurrence of more physical, material battles which are plausible to happen in the future. In their conversation, they highlight the focus on not only scientific changes, but perhaps even more so on the economic changes, as he comments:

“[...] we are doomed – unless we quickly invent and install a new political economy in which we pay ourselves to do the work to build a decarbonizing infrastructure, along with many other needed tasks that are not profitable in the current dispensation” (“A crucial collapse...”).

That way Robinson is explicit in describing ways in which his novel is an expression for how a systemic change is needed to create a better future. In this future, we live in balance with the biosphere's processes and the economic system supports that. In his novel central banks cooperate on a carbon quantitative easing solution, so the change happens from *within* the system we are stuck in at the moment, the neoliberal capitalism. In addition to discussing the systemic changes necessary, they also look at the novel's form: Robinson describes how in his novel "form follows function" as it offers different modes, such as 18th century IT narratives, riddles out of Old English, meeting notes in addition to eyewitness accounts and the narratives of Frank, Mary and a handful of secondary characters.

Environmental writer Bill McKibben in his review "It's Not Science Fiction" published 17th of December 2020 for *The New York Review of Books* concludes with admitting how he finds Robinson's vision possible in the real world when taking into consideration the rise of climate activist movements, the Sunrise Movement's demand for Green New Deal, and development of cheap renewable energy. However, on the other hand, he reveals how he fears that Robison underestimates how the climate crisis could just as well drive us towards emergence of more far-right-wing movements instead: "the odds that when things get really bad, we will react really badly", as he says. McKibben expresses hope, however, that the novel will be widely read as the main goal of the book is to "fire the imagination" and remind us that questions of politics and economics, not only love, are the great questions of our lives. McKibben calls attention to how the climate crisis in the novel forces the people to deal with the inequality and unjust history, likening it to what Naomi Klein advocates for in her book *This Changes Everything*. In the introduction to the review, he describes Robinson as an optimist, yet still, Robinson's novel to be "as bleak as it is possible", which is echoed in how he regards *The Ministry for the Future* as anti-dystopian as opposed to utopian, and also describes it as realist, and this could serve as an interesting comment on the severity of the situation we find ourselves in globally. In fact, McKibben portrays Robinson as writing "more realistic fiction than most contemporary novelists", and later additionally gives credit to Robinson when highlighting how his writing is often three or four years ahead of the news.

One of the focal points in the review is McKibben noticing how Kim Stanley Robinson "very much want us to focus on this world". He describes the setting and time *The Ministry for the Future*: the novel starts around the year 2026 which is similar to that of the Mars trilogy, however, *Ministry* acutely attempts to turn the readers' attention to the planet

Earth which we inhabit now. As McKibben explains, since after the Mars trilogy has been published, it has become clear that the planet is inhabitable due to its soil containing toxic perchlorates, so perhaps changing the setting to planet Earth explicitly becomes an even more apt choice seen in this context, as he similarly adds how Robinson's 2015 novel *Aurora* demonstrates how space colonization would be impossible. In that way, Robinson clearly incorporates into his writing the fact that we need the planet we inhabit now and evokes through his writing the need to care about it.

Los Angeles Review of Books interview conducted 8th December 2020 by critic Everett Hamner who specializes in American science-fiction literature and film as well as Science and Culture studies, centres around the questions of political transformation and economic policies, characters and their relationships, gender stereotypes, and literary form and structure. Here, he discusses the issue of 'ecoterrorism' as raised in the novel, which Kim Stanley Robinson problematizes by looking at who would usually use that word and what that implies, and instead - as the word can be understood as an accusation - proposes looking at alternatives such as "physical resistance" or "revolution". Robinson explains how he is committed to nonviolence and does not advocate for political violence, instead, how his works are rather meant to provoke the readers' thinking and thus provoke "moral considerations". In the interview, they also dedicate some space to discussion on the significance of the relationship of Mary and Frank as well as the intertextual development of the character Frank across his novels.

Moreover, when discussing the idea of carbon quantitative easing as presented in the novel, they go on to talking a look at Keynesianism as a step towards post-capitalism, strong use of taxes, and a nationalized bank system, all of which also have their place in *Ministry's* narrative as well as the non-fictional chapters. Robinson additionally comments on the current situation of the relation between the current economic system and the climate crisis in through following words:

"The current political economy can't go on without crashing the biosphere and causing a mass extinction event. That's becoming clearer every day in ways many people can see with their own eyes. So a change is simply inevitable, one way or another. The question is, what kind of change? Can we make things better?" ("Odd Couples")

His comments point to how *The Ministry for The Future* envisions such a system's change and how we could possibly "make things better", as he says. But this also points to how his writing requires extensive interdisciplinary research, here working with the climate sciences, natural sciences and economics are the most foregrounded. Robinson also links that to how the story we tell about the role major banks play matters, as refreshing and reframing such a 'discursive battle' will facilitate estrangements, where "things get seen newly", and thus hopefully facilitate change. Lastly, Hamner and Robinson move on to discussing the structure and formal elements of the novel as well as its approach to deep time, also in comparison to his other novels. They as well look at how the idea of what constitutes "literary fiction" has collapsed with postmodernist literature and how Anthropocene has redirected our awareness of thinking of the planet as "our extended body", which Robinson then asserts is a major character in all our stories.

The interview for *The New Yorker* titled "Can Science Fiction Wake Us Up to Our Climate Reality" is the earliest one included in this selection, and was conducted by the historian Joshua Rothman in January 2022. The introduction to the interview sets up the focus on ecological themes in Robinson's writing by describing a backpacking trip that Kim Stanley Robinson went on the previous summer. There, he discovered that six of the seven glaciers melted away, a development which was new and not marked on any map yet. This makes Robinson to comment that it felt "... like a goodbye. Like going to a hospice visit" (Rothman 3).

Rothman describes that he is "a longtime reader" of Robinson's fiction, but *Ministry* gave him a "sense of the space" in the way it shows our prospects to be both "imaginable and variable: we can still redraw the plans" (Rothman 4). Robinson explains in the interview how the heat wave scenario with wet-bulb temperatures meaning a "deadly coincidence of heat and humidity" which opens *Ministry*, has been occurring in places such as Australia, India, Mexico, Pakistan, Saudi Arabia and other places and is predicted by scientists to become regular events in the tropical parts of the world. In this context, Rothman proposes that the Ministry for the Future stands for the obligation people have to act on the knowledge we possess about the climate crisis:

"A bureau full of experts, balked and opposed but not giving up—this is the metaphor that the novel offers for our own time. We are the Ministry for the Future. Our job,

too, is to act on pre-existing knowledge: many of the solutions to the crisis are also prefab” (8).

The view of looking at the current generation of contemporary readers as the Ministry for the Future, is an interpretation Rothman shares with Canavan (“Of Course They Would”), who concluded his review with “... The terms are clear. If you’re reading this, you *are* The Ministry for the Future. Get back to work” (ibid).

Then, Rothman offers an overview of what Robinson does as part of research for his novels: part of the preparation is attending scientific conferences. This is for example how a in 2010, a researcher gave Robinson an idea of how melting of Antarctica’s glaciers can be slowed down by pumping up meltwater from beneath them, and the same idea had been analysed further in 2018 in the journal *Nature*. In addition to scientific conceivability, an important part of the novel is also finance, as Rothman notices, and remarks on the carbon quantitative easing solution described in *Ministry*. Rothman calls novel’s concreteness “compelling” as it puts “a relief on the strangeness of our outlook” (9).

Rothman likens the style of Robinson to modernist naturalists who focused on everyday life, however, translating them into describing a future and a transformation: Robinson “brings these traditions to bear on future problems, combining them with an unusual narrative style designed to dramatize civilizational transformation” (12). Such transformations in everyday life have been of interest for the cultural theorist Raymond Williams, which Rothman calls “an invisible scaffold on which our emotions hang” (ibid) which is unique to each period. Then the article ponders on whether fiction can reshape the readers so that they can respond to reality more aptly. Robinson’s writing has been called as much an activism as it is art, and as Rothman remarks, the *Ministry* is an attempt of doing something that a news report cannot: “[i]t wants to offer us the experience of crossing the pass before we cross it—to give us a feeling for the routes we might take” (16).

Concludingly, and as part of looking at the reception, it is relevant to consider the ethos of Kim Stanley Robinson arising from his distinct affiliations with the Science Fiction genre throughout his life. Robinson holds a doctoral degree in English literature, and a revised version of his doctoral dissertation on the New Wave Science Fiction writer Philip K. Dick had been published in 1984 (Wegner “Science Fiction and Postmodernism” 516). Robinson’s formal training and background as a scholar adds an additional perspective when approaching

his writing. One of the supervisors of the dissertation was cultural theorist Frederic Jameson, whose work Robinson oftentimes refers to in the interviews. Robinson has, moreover, received grants to conduct research in Antarctica organized by the US National Science Foundation's Antarctic Artists and Writers' Program in 1995 (Robinson "Remarks" 4, Trexler 81), and Antarctica as a setting has a significant role also in *Ministry*. The research grants together with how Robinson was a featured speaker during the COP26, Climate Change Conference in Glasgow (Robinson "Can Science Fiction Wake Us" 4), highlight the way his writing perceives and tackles these urgent and real-life issues of the climate crisis from a scientifically informed perspective which has been recognized in different milieus in addition to literary studies. His Mars trilogy, moreover, is said to have "established Robinson as one of the most important contemporary science fiction writers" (Wegner "Science fiction" 64). Considering what contributes to Robinson's ethos, may be borne in mind when approaching the reception of *Ministry*, and when approaching the novel itself.

Chapter Two: From Corporeal to Planetary

The temporal and spatial scales of the global climate crisis have challenged ways in which we tell stories about it⁴. As the problem of climate change has become more urgent, it also calls for rethinking and maybe even inventing new narrative strategies. The problem which arises is two-fold: firstly, the way a modern novel has been developing as a literary genre in the twentieth century (Bould 68), implies that it concentrates around a finite local, temporal as well as social setting. For that reason, literary critics have called for the need for exploring narrative techniques to help overcome that challenge. But secondly, this problem additionally highlights how the extensiveness of the climate crisis regarding its time, space, and complexity makes it problematic for an ordinary reader to comprehend it without becoming overwhelmed. Becoming overwhelmed happens perhaps equally so to climate-denialists and those who adhere to the climate sciences. In other words, as the climate issues become even more urgent, one also calls for rethinking methods of literary representation to help make accessible a problem which is as complex and vast as climate crisis is without paralysing the reader. In this chapter, the focus will be at looking closer at narrative techniques used to represent global climate change as reaching beyond local place, limited timescales, as well as beyond individual perception in *The Ministry for the Future*. While I order and organize the subsections here by various narrative settings in the novel, I will be exploring the temporal perspectives simultaneously as the spatial and temporal dimensions cannot be easily separated from one another.

As a tool to mediate global climate change, Robinson uses multiple perspectives assigned to narrators telling stories from their points of views in one hundred and six distinctive chapters where the narratives have varied settings. Whilst partly these narrators are not bound to any particular place, a large majority of them are bound to specific geographical places: in total, sixty-three out of one hundred and six chapters are narrated by or focalized through such characters. Some of them are more specific such as Mary and Frank are, some are more anonymous, and often they offer collective stories. The settings correspond to real-

⁴ Scholars who consider the global climate crisis as posing a representational challenge are, for example, Rob Nixon in *Slow Violence and The Environmentalism of The Poor* (2011), Amitav Gosh in *The Great Derangement: Climate Change and The Unthinkable* (2016), Adam Trexler in *Anthropocene Fictions: The Novel in a Time of Climate Change* (2015), Timothy Morton in *The Ecological Thought* (2010) and Ursula Heise in *Sense of Place and Sense of Planet* (2008).

life places: continents, countries, cities and towns, and additionally the characters are connected to them through their background in an affective way. Such attachments to the place also help with altering the story of the climate crisis.

The narrative technique of moving rapidly from one point of view to another that additionally includes quick shifts in narrative settings, subsequently reminds of a Google Earth-style zooming in and out method: the reader is rather quickly relocated from one setting, a particular city, such as for example Los Angeles in USA, to another place, for example Zurich in Switzerland. These shifts are highlighted even more by how some of these plotlines are chopped up into shorter narratives and scattered as individual chapters throughout the novel, so that one is forced to dive in and out of them, and additionally amplified by how these stories are intertwined with non-fictional educational notes and chapters where events are historicized by omniscient, third-person narrators. Eventually, the narrative settings are spread across almost all continents. The novel opens with a heat wave in India, returns to Zurich on regular basis, including points of views from events happening in Glasgow, Antarctica, Kerala, San Francisco, London, Paris, Los Angeles, Antarctica and Greenland, Nepal, Saint Petersburg, Alaska, Siberia, China, Hawaii, Turkey, as well as unnamed towns in USA. The readers not only can follow the developments of consequences of climate change as it affects the different places on the globe, but also the ways in which the fictional characters more or less successfully deal with them.

The linear temporal progression of the narrative into the future has been disturbed in the novel in subtle ways. On one hand, already the near-future setting of the novel renders the climate crisis as urgent. The progression of main events in the narrative follows a time span of thirty years, the fictional events beginning with the Indian heat wave striking around the year 2025 and the story ending around the 2050s with more global perspectives, which for contemporary readers is the immediate future. As the novel was written in 2019 (*The Ezra Klein Show*) and published in October the year after, Kim Stanley Robinson's vision of dealing with the climate crisis is anchored in the way the crisis is scientifically understood by the contemporary readers. Ending the story in the 2050s also coincides with the goals of achieving net-zero emissions by the year 2050, which highlights how the narrative imagines a process of a transformation in line with Paris Agreement goal of keeping the greenhouse gas emissions to no more than 1.5 degrees Celsius compared to pre-industrial times.

On the other hand, though, this thirty- year time scale which easily could constitute part of an individual character's life span, has been intertwined with other narratives. That choice disturbs this linear progression in three ways: eyewitness accounts are told as though from the future happening after the story had already ended; the historicized events present the story are told as though the events already had happened and are known as such by the general public; and thirdly, the riddles give a narrative voice and anthropomorphize often non-sentient entities such as for example the Sun, a carbon atom or a photon which existence exceeds the human temporal scale and instead happens on a much larger temporal scale which is geological. Moreover, chapters which contain theory, educational notes, often exceed the temporal scale of the main plot by referring to events and phenomena from other time periods. These notes on the temporal perspectives can be borne in mind when reading my analyses of the passages below in order to set them in a larger perspective of how the novel as a whole is structured.

2.1. The Financial Epicentre of Climate Change, Switzerland

Most of the story in *The Ministry* takes place in Switzerland, Zurich, from where the quotidian work-life of the lead of the fictional Ministry for The Future, Mary Murphy, is contrasted against the events emerging as consequences of the climate crisis other places in the world. As Adam Trexler pointed out, urban settings in climate fiction allow drawing on popular symbols, such as for example “London flooded” (77) in their descriptions to engage wider readerships. Choosing Switzerland as a setting can encourage certain associations and stereotypes in their readers, Switzerland is after all one of the wealthiest countries in the world with the highest mean wealth per adult according to Global Wealth Databook⁵, it also is the place where offices of many intergovernmental organizations, such as World Health Organization (WHO) or United Nations (UN) are located, and lastly a country which more than often shelters tax-refugees⁶. Due to an urban setting, additionally, these stories prompt tracing “social, economic, and interpersonal impacts of anthropogenic warming” (Trexler 77), understood this way, an urban setting allows showing complex interconnections between people and the social and political systems around them.

Zurich becomes then such urban epicentre of the events in *The Ministry for The Future*: it is here the headquarters of the ministry are located, from here Mary Murphy learns about the deadly Indian heat wave and eventually her and Frank’s stories converge, here the global issues are discussed by Mary and her team. Early in the novel, the placement of the Ministry for the Future offices is described in relation to the Swiss Federal Institute of Technology, that is “within easy walking distance of the ETH, with its geotechnical experience, and not far above offices of the big Swiss banks” (MftF17). This is not coincidental. Such setting foreshadows how both technical and scientific expertise will create a backbone for the later transitions, and at the same time, how central banks will be major actors who agree to cooperate on a new currency and appropriate taxes enabling a change in the world’s economic system towards a post-capitalist one, so technological and economic changes equally will play a crucial role in the attempts of mitigating global climate change in the novel.

⁵ See *Global Wealth Report 2022*.

⁶ See *Le Monde*, changes in wealth taxes in Norway in Nov. 2022 have led to Norwegian billionaires fleeing to Switzerland.

Moreover, Zurich is one of the few places in the novel where its inhabitants do not directly experience climate change manifestations in forms of environmental extreme events such as heat waves, extensive and unpredictable rainfalls and floods, or droughts ending in lack of water, which serve as the centre around which stories from other places in the novel revolve around. If anything, Mary Murphy reads about these environmental risk scenarios from the news or her team. This nudges the reader to think about the discrepancies in the living standards and climate realities within the global South and the Global North here amplified by the choice of a city placed in one of the richest countries in the world.

Despite the place being effaced of such catastrophic environmental scenarios, however, the Switzerland-located and seemingly safe uber-rich in the novel receive more and less civilized reminders of the urgency of the climate crisis. At a party in Brissago, at the Swiss side of Lake Maggiore, where one can deduct the participants are extremely wealthy since both a celebrity chef cooking with a welder's torch and a band with brass section are present there to amuse them, a random person appears at the public park between the property and the lake. He is simply standing there and staring at the party's participants. He is, in addition, holding a piece of driftwood. The party's participants find this offensive, and the narrator, one the participants, interprets the perpetrator's offensive stare in such a way that he describes him as "some kind of Bible guy" (MftF 77) laying his morality on them. Referring to the perpetrator in a condescending tone as a "Bible guy" in this manner, may suggest that the narrator is well-aware the way of living of uber-rich is not approved by ordinary people in the context of a climate catastrophe, and at the same time, suggests he simply does not care about others' opinion. At the same time, referring to him as a "Bible guy" can also function as a foreshadowing and may be suggestive of how the perpetrator could be Frank May, after all, Biblical imagery echoes the prophetic tone of the first chapter where the Indian heat wave is described, in earlier chapters Frank often describes how unlikely it was for him to be a sole survivor of the Indian heat wave (MftF 28, 95) which somehow makes one think of him as a sort of prophet who survived to be able to spread the word, finally, he explicitly says he likewise wished to help people and do good as well as punish them (MftF 65) after what had happened in the heat wave in India.

The perpetrator accuses the partying rich of destroying the world: "The guy said to Edmund something like, You fuckers are burning up the world with your stupid games" (MftF 77), here clearly making allusions to the global warming; for him, it is obvious the world as we know it will come to an end while the uber-wealthy are having fun and, instead of

directing their attention towards saving the biosphere, which they ironically also are dependent on themselves, they focus on financial gain and holding parties. The responsibility for the climate crisis this way is laid mainly on the rich, and Frank's disgust corresponds to the numbers available in real life: between 1990 and 2015, the richest 10% accounted for over half of the carbon emissions, while only the richest 1% were responsible for 15% emissions (Oxfam International). This reaction inspires Edmund, one of the party's participants, to reply in a sort of archaic English: "Dost thou think because thou art virtuous, there shall be no more cake and ale" (ibid), and here Edmund asking whether one should not "eat cake" or drink ale is an ironic remark in the context of how climate change in the long run will affect the food systems security, too, due to occurrence of unpredictable extreme events. The perpetrator tosses the piece of driftwood at him, and so Edmund is killed. As the readers learn two chapters later, the perpetrator is indeed Frank May, and the event is accidental. However, even though Frank May is after all just standing in a public park close to the place where the party is happening, his existence in itself is enough to trigger and annoy the partying rich who quickly attempt to involve the security and even the police to remove him. Ironically, there is no police station or a court to turn to regarding the reckless killing of the biosphere.

Switzerland is not completely effaced of other manifestations of the climate crisis, which are likewise not as immediate, and these include events such as violence in forms of bombing the ministry's offices, riots, and displacement of people to refugee camps in Switzerland, all being either reactions or consequences occurring due to climate crisis. The headquarters of the Ministry for the Future are bombed there (MftF 296) after the implementation of a new currency. The displacement of people to refugee camps located in Zurich lasts as many years as until the end 2040s, and is described from first-person perspectives beginning with fleeing the countries affected by conflicts, to the everyday life in refugee camp in Zurich, until the refugees are granted global citizenship passports.

Trexler mentions that use of urban space as a setting has become more prominent as opposed to earlier nature writing; advocates of environmental justice, as he says, "[have] drawn attention to the importance of urban spaces as sites of degradation or more sustainable living" (Trexler 76). Zurich does become an example of an urban which with time becomes a site of sustainable living. This is explained gradually to the readers. The idea which exemplifies that, is at first explained in educational notes in chapter sixteen. A 2000 Watt society, which started in 1998 in Switzerland, calculated how much energy a household should consume dividing the total amount of energy consumed by the number of humans

alive. That would mean about 2000 watts of power, and people who tried living this way simply, “found it was fine” (MftF 58) and even felt more “stylish” and “meaningful”. This is theory. Such a shift to happen in Zurich is then, again, foreshadowed by how Frank May. In 2030s, he learns about the 2000 Watt society in the back room of a restaurant called Mamma Mia in Zurich (MftF 195), where readers learn about the rules of such a 2000 watt society in more detail: the amount of energy that would be used on food, shelter and travel respectively. Frank May, who at this point in the novel is living very simply having no car, taking no plane flights, and eating vegetarian, compares himself to living as citizens of Global South do: “he used an almost Bangladeshi amount of energy per year” (MftF 197). As provided earlier in the same chapter to support Frank’s ruminations with facts, inhabitants of the USA use 12000 Watts per person, whereas an average Indian citizen uses around 1000 Watts per person. This depicts the inequalities in energy use clearly.

Eventually towards the end of the novel in chapter one-hundred-and-four, Mary Murphy becomes part of 2000 Watt society together with all the other residents in her housing cooperative. This happens around the end of 2040s. In the housing cooperative, “calculations were made for everything they did” (MftF 544): communal vegetarian meals, use of public transport and travelling where the carbon burn was getting lower and lower, and the residents owned together and shared an electric car. They used less than 2000 watts and still, all of them travelled in Europe despite that. This transformation towards more sustainable living reflects the general trend of change in values and thinking throughout the novel, a new “structure of feeling”. Moreover, exemplifying such an idea in the narrative might just be one of the objectives of Utopian narratives as Fredric Jameson posited in his essays. 2000 Watt society appears repeatedly in the novel in order to “insulate us” for the upcoming change of our ways of living, and perhaps more so for the readers from the Global North. This could be because people’s values will change in an scenario where energy use is distributed more evenly between the different countries’ inhabitants.

On the other hand, even though as a place Zurich does not directly become a site of environmental degradation, there are other forms of degradation of values one could speak of in its case. It is here climate refugees are displaced to, where they not only have been deprived of home and sense of security, but also experience hatred in Zurich: Swiss men, for example, attack one of the refugee tents (MftF 199). The degradation is not a natural disaster caused by the climate issues, but rather manifests metaphorically as a degradation of values in form of prejudice, hate and violence towards people who did not contribute to the degradation of the

biosphere themselves. Importantly, one learns this mostly through the eyes of Frank, like in the example above, or the displaced characters themselves as first-person accounts, and not Mary Murphy who is rather immune to experiencing these events first-hand throughout the novel. Since such events have been juxtaposed with the descriptions of Mary Murphy's quotidian life, where she regularly goes swimming, commutes to work by tram, and enjoys drinks at the bars of Zurich with her co-workers where they informally discuss the rising climate issues, this foregrounds her role as a representative of an institution as an actant.

It is also in the story taking place in Zurich a sort of revised time-travel narrative device makes an appearance together with Frank May. Frank kidnaps Mary to her own apartment to explain to her the severity of the issues as though he were a prophet figure from the future: he has seen the future in the heat wave where he even says he was indeed dead, but for some reason his body lived on after his death (MftF 95, 101). He confronts Mary with how unsuccessful the work of the ministry has been so far:

“You're trying, but it isn't enough. You and your organization are failing in your appointed task, and so millions will die. You're letting them down. Every day you let them down. You set them up for death. (...) You have to stop thinking with your old bourgeois values. That time has passed. The stakes are too high for you to hide behind them anymore. They're killing the world. We're in a mass extinction event” (MftF 97).

Frank here shifts from placing the responsibility for the course of events and lack of appropriate laws on the institutions using the second person pronoun “you” when addressing the ministry's lead, Mary, and the consequences of merely ‘trying’ to address the catastrophe. He then swiftly moves to using “they” to point to the major actors in planet destruction, in this case corporations which value financial profit more than the health of the biosphere. He finally uses the collective “we”: *we*, humanity, are all in a mass extinction event. The choice of words here showcases how severe the situation is: choosing the term “climate change” as opposed to “mass extinction event” would sound mild in comparison, as though it were a natural - and not anthropogenic, man-made - course of events. Kim Stanley Robinson also commented on how the name “climate change” is a way of narrating the situation: “We use the term now as a synecdoche to stand for the totality of our damage to the biosphere, which is much bigger than mere climate change, more like a potential mass extinction event” (Canavan and Robinson 243), a synecdoche meaning that the term ‘climate change’ only

describes the situation partially, like the expression “wheels” instead of “a car” does: climate change constitutes only a part of a larger picture of interconnected problems which ultimately can lead to mass extinction. Robinson elaborates on that saying that the name suggests “climate change” can be fixed, but there will be no such fix for a mass extinction event (ibid). Frank’s choice of words can be seen in the context of chapter twelve, where the readers learn about the current rates of extinctions from educational notes on natural sciences and ecology:

“The current rate of extinctions compared to the geological norm is now several thousandfold faster, making this the sixth great mass extinction event in Earth’s history. And thus the start of the Anthropocene in its clearest demarcation, which is to say, we are in a biosphere catastrophe that will be obvious in the fossil record for as long as Earth lasts. (...) Ocean acidification and deoxygenation are other examples of things done by humans that we can’t undo, and the relation between this ocean acidification/deoxygenation and the extinction event may soon become profound, in that the former may stupendously accelerate the latter. ... The pre-existing plenitude of speciation will be restored in less than twenty million years” (MftF 43-44).

Here an objective, scientific voice presents the facts on the sixth mass extinction to the readers and presents a time frame of restoration for the catastrophe which compared with the length of a human life is close to an infinity. It also explains some of the cause-and-effect loops of the ecological crisis caused by global warming such as ocean’s health – ocean acidification and deoxygenation - and their relation to the rate of extinctions which will affect ocean’s ability to absorb carbon dioxide in return. In chapter twelve, a list of extinct species encompasses almost half of the page and includes, among others, “seven hundred species of birds, four hundred species of reptiles, (...) and four thousand species of plants” (ibid). Frank May verbalizing his concerns provoked by his near-death experiences from the great Indian heat wave, transferred into the context of Zurich when meeting Mary, only make the facts more accessible to the readers. The rate of extinctions of animals and other lives will be affecting their ecosystems, so the consequences will be catastrophic for everyone and everything that is part of the ecosystem of the planet Earth.

Equally, Frank decides to simply say it as it is: a mass, global extinction where the collective “we” will correspondingly encompass the “you” he is addressing, i.e. Mary and the institutions, the “them”, i.e. corporations and the uber-rich who emit most of the gases to the atmosphere, but what is more, all human, animal and plant lives on the planet. One could also,

however, read in the context of how the ministry has been appointed to protect the future generations, understand the “you” as addressing the readers and the obligation humans have to act on the knowledge we possess about the climate crisis. Frank also envisions how it is now the highest time for the structure of feelings of that period, and perhaps also the reader’s culture, to change: the time of hiding behind “old bourgeois values” has now passed, which shows how the encounter of him and Mary is also a symbolic turning point in the novel to define the upcoming shifts in people’s values in the novel, a new “structures of feeling”.

2.2. Sites of Rising Solidarity

Effects of climate change, in contrast to Zurich's relative stability when it comes that, become more tangible in other narratives in the novel. This is particularly observable in narratives with settings in, here listed according to in what order they appear in the novel: a town in Uttar Pradesh in India, an unnamed town in the USA, Paris, Los Angeles and a town in Montana in the USA. In the stories described there such immediate effects of climate change, both in form of environmental extreme events and socioeconomic problems, prompt more solidary behaviour in their inhabitants. The Global North and South distinction has also been challenged by these descriptions: whereas India becomes motivated to implement changes after the great heat wave, the rest of the descriptions of risk scenarios take place in towns and cities belonging to the Global North instead.

Residents of an unnamed town experience lack of water after twelve years of drought in chapter forty one. The setting is not identified as a particular place in any more detail than simply a city that has one million inhabitants (MftF 168). However, the time of the emergency is acutely specific and narrowed down precisely to the 11th of September 2034, the day and month likely alluding to the 9/11 attacks in America which nudges the reader to think of the effects of climate change as, proportionally, more acute and immediate. Similarly, environmental critic Rob Nixon famously contrasted environmental violence spread throughout large periods of time with more abrupt violence such as 9/11 ("Slow Violence" 13). Here, he also hints on how eco-critical thinking could be executed to include both local, in this case, American, and global perspectives. Nixon describes how critics associated with environmentalism are often focused on the American region and preoccupied with the ethics of place; while postcolonial critics are more preoccupied with displacement. Nixon proposes that postcolonialism can help diversify our thinking to render ecocriticism more accommodating what he calls a "transnational ethics of place (243). In *Ministry*, the narrative setting of "any town" with one million inhabitants which serves as a backdrop for such an emergency, prompts a similar perspective: environmental disasters occurring as effects of anthropogenic climate change can, seen this way, occur anywhere in the world, which would render responding with indifference to them as causing a more universal ethical dilemma, simply put: are some places and their inhabitants "worth" protecting from these risks more than other places and people are? Additionally, the narrative of an "unnamed town" which makes the event more universal, foreshadows how in later chapters it will be mostly American states that experience severe weather events: later in the story extreme heat waves struck

Arizona, New Mexico, west Texas, east Texas, Mississippi, Alabama, Georgia, Florida (MftF 348), which locates these descriptions in contrast to ways in which some comfortably and mistakenly envision how countries of Global North are immune to such climate change-related extreme environmental events.

Here, the place described consistently as “our” city, after a continuous drought is additionally struck by an earthquake which ultimately causes that the city runs out of water as the wells and reservoirs consequently go dry. Referring to the place as “ours” and the fact how most of the chapter is narrated in first person plural “we” foregrounds how Robinson imagines that solidarity between people grows in times of crises. The inhabitants are ordered to queue up in public places to receive their water allotments, and while waiting at one of these places with a friend Charlotte, the narrator emerges for the first and only time as a first person “I” in this vignette:

“(...) Charlotte’s usual cynical sardonic attitude now almost jaunty, almost amused - she gestured at the line in front of us and said, Remember what Margaret Thatcher said? There is no such thing as society! We laughed out loud. For a while we couldn’t stop laughing. Fuck Margaret Thatcher, I said when I could catch my breath. (...) Because when the taps run dry, society becomes very real” (MftF 169).

This exchange between the two characters mirrors the general theme in *Ministry* which is the trope of finding alternatives to the capitalist economic system. Here the narrator accompanied by a friend laughs off the logic of neoliberalism through quoting Margaret Thatcher in a sort of strange, absurd relief: they laughed until it was finally possible to catch breath, even though they could not know how hazardous the drought could potentially become. While, as Greenwald Smith notes, neoliberalism casts the individuals as responsible for themselves (3) amplifying the tendencies of capitalism where social institutions become personalized and privatized, the opposite becomes obvious at this point in the novel: such logic simply does not add up anymore as in the situation where the taps run dry the inhabitants become acutely dependent on one another and the society finally “becomes very real”. In a way, this is one of the moments in the story where ordinary people start dismantling the neoliberal capitalist order from within as they come to a realization, when facing an extreme environmental event first-person, how dependent they are on one another, and on well-functioning systems that support them. Here they do so through relying on each other and acting collectively.

Such collective mode of thinking is also seen in Los Angeles where an unforeseen rain fall causes a flood in the 2030s. The story told in first person in chapter fifty nine by a narrator born and raised in LA who describes herself ironically as a “young-aspiring-actress-currently-waitressing” (Mft275), makes her ultimately change her career choices. Part of the reason for the flood to become so bad, is the infrastructure of the town which is surrounded by mountains, and importantly how LA is built with no plan other than to contribute to the developers' accelerated accumulation of financial capital after the WWII through uncontrolled expansion of the suburban areas. LA inhabitants are surprised by the flood early in the morning, and the narrator describes her struggle to get to her kayak in order to start evacuating:

“I looked out my front door and saw cars floating down the street on a brown wave about three feet high that covered everything. I could see the water was already coming into my landlord’s house, and rushing hard towards 210. (...) In fact I couldn’t see anyone anywhere except for a family on top of their SUV, getting taken for a sideways ride and looking desperate. I got down my outside stairs and slogged through brown water to the garage side door. Inside I found the power had gone out, of course, so it was a struggle to get the big garage door open” (MftF 276).

The use of verbs focusing on immediate and first-person visual perception, “I looked out”, “I could see” and “I couldn’t see”, which repeat several times in this passage, accentuates the reliability of the narration. The verbs also render the event feel both not only very real, but also shocking, as the narrator is still passive at this point and only perceives the situation: she *can* see the water, the “brown wave” covering everything and the damage done, but *cannot* see many people left in the area and this contrast suggests that the force of man-made disasters can, if not taken seriously and prevented in time, ironically outweigh people’s capability to survive them even though the cause is anthropogenic. The family clinging onto their SUV shows how social stratification and consuming goods such as comfortable cars is not in any way a vaccination towards the risk of climate change, neither is the electrical door of the garage which becomes useless when the electricity shortage happens. The garage door becomes somehow symbolic of how capitalist consumption does not provide the security needed in times of crises, offering us rather an illusion of safety and comfort.

Quite the contrary, a simple kayak becomes an appropriate aid to evacuate and later help others come to safety. The narrator says the event was “like Noah’s flood” (MftF 277),

likening the environmental event to a biblical apocalyptic scenario. But there was no organized help coming except for the inhabitants helping one another, contrary to people's solitary reactions in the previously described towns struck by such disasters. The narrator eventually acknowledges how some professions are of less use for the society, the flood was not reminding of how such an event would unfold in a movie, instead she says: "Here I was helping people, all of us wet and scared, and my right bicep just screaming, and I kept thinking This is real, this feels good, why are you trying to be a fucking actress?" (MftF 278). The narrator's realization is a pointed remark on how certain jobs are of more use for the society, something that was observable in real life during the recent coronavirus pandemic and seem to quickly become forgotten. Later, when Mary Murphy learns about this event from the news, it becomes described as "the world's dream factory was being destroyed before their eyes" (MftF 285). Jurgen, ministry's insurance expert, soberingly estimates that restoration of the city would cost thirty million dollars – it is unsure whether his comment is an ironic meta-commentary on capitalism, or whether Jurgen stays true to his values in this calculation. But people helping one another in this fictionalized event of flood in Los Angeles show how solidarity can rise in times of crises, somehow despite and against Jurgen's calculations.

The last example of events which eventually spark solitary behaviour is the great Indian heat wave of the first chapter, located in an "ordinary town" (MftF 2) in Uttar Pradesh in India. The heat wave is the reason why India takes the matter in their own hands: they firstly, lower temperatures globally with a solar radiation management solution (MftF 37-39), and turn to democracy, as well as clean means of electrification and organic regenerative agriculture (MftF 125-127), making India lead in transitions. The heat wave forces the inhabitant's of the town to seek shelter in the nearby lake, the temperature and humidity combination was unbearable for the elderly and infants who die before that, and in the end, even the seeking refuge in the water turns out to be deadly. Everyone, except for Frank May, faces their death that night.

In these opening scenes, the spatial dimension of the climate crisis becomes narrowed down to the ecosystem of a single human body: that of Frank May who experiences the deadly catastrophe. Patoine writes how in the opening chapter the narrative combines descriptions of sensorimotor imagery: from movement, vision, respiration, even to memory (151). We read from Frank's point of view: "The heat coming from it was palpable, a slap to the face. Solar radiation heating the skin of his face, making him blink. Stinging eyes flowing,

he couldn't see much" (MftF 1), which combines description of his impaired vision and how it affects his tactual sense. Later we can read effects the web-bulb temperatures have on his respiratory system: "The air, already bad, would soon be a blanket of exhaust. Like breathing from the exhaust pipe of an old bus. Frank coughed at the thought of it ..." (MftF 2). After deciding with the other town residents to move towards the lake to cool themselves in the evening, he says he is feeling "jittery and light-headed and weak. The sauna feeling hammered him and it was hard to carry a sack of food and canned and bottled drinks back to the clinic" (MftF 9). Through these descriptions, these experiences feel very tangible to the readers.

This imagery and ways in which the scenes are described from Frank's perspective, facilitate "the embodied sharing of his bodily state" (Patoine 151). But in addition to creating a sense of almost participating in the events in the readers, they make it clear how the environmental risks of the climate crisis affect a human body, which is a scaling-down from the other perspectives described in the remaining chapters. Frank's bodily experiences is moreover something that does not stop after surviving the heat wave. Months after, "he was having panic attacks whenever he got hot, and then the panic attacks would make him hotter still" (MftF 27) and, later, he describes the attacks down to the level of biochemicals in his body: "his body and mind would be plunged instantly into another terrible tornado of biochemicals, pounding through his arteries like crystal meth at its paranoid worst" (MftF 45). Descriptions of these bodily reactions which follow Frank even years after the event, exemplify how a crisis global in scale causes local risk scenarios which, again, in this case destabilize the balance within the body – an ecosystem of its own - of their victim.

2.3. Un-Melting the Antarctica

While Antarctica is a place of significance in cli-fi in general, it is of special importance in Robinson's writing specifically: Robinson has received grants to conduct research there in the past (Robinson "Remarks..." 4, Trexler 81), organized by the US National Science Foundation's Antarctic Artists and Writers' Program in 1995, which gives another dimension to his vision of Antarctica since he has had experienced the place empirically. The setting of Antarctica in literature serves as an important symbol of climate change with the retreating glaciers and, furthermore, the temperature rises are expected to be happening faster at the poles (Trexler 81). This theme is used in *The Ministry for the Future*, but interestingly, it is reversed.

The plot unfolding in Antarctica mostly comprises the progress of the scientific Project Slowdown towards slowing down the process of glaciers' melting. Such geoengineering solutions in the novel, interestingly, are anchored in real life research. Descriptions of similar solutions has been published in *Nature* in 2018 and in a climate journal in 2020 (Rothman 8). The story of Antarctica has been presented in a form where the reader needs to piece together narratives that are scattered around in the novel to see their continuity across time, changing from foreshadowing of the project, through diary entries of one narrator, towards more collective narrative accounts. Firstly, the project is foreshadowed when Frank May signs up to join an expedition of his Scottish friend in Dry Valleys in Antarctica as a result of experiencing guilt after surviving the Indian heat wave, and hopes to contribute more. While the cold temperatures were supposed to be a source of relief, "the cold weather led to thoughts of temperature itself" (MftF 69), and eventually Frank ends up experiencing a panic attack when observing people jumping out of sauna and shrieking due to the instantaneous temperature shift.

Even though Frank is forced to abandon the project once it is made clear how he left out his past traumatic events from the application form, the readers learn more about a scientific project which will be conducted in Antarctica only four chapters later: two of the ministry's representatives meet with glaciologists Slawek (who appears to be Frank's earlier mentioned Scottish friend) and Pete Griffen after a meeting of Scientific Committee for Antarctic Research. Here, Slawek explains how it would be possible to slow down the process of glaciers' melting by pumping up the melted ice onto the polar plateau (MftF 80), an old idea originally studied by the Potsdam Institute. They discuss the cost of it through comparing

it with current priorities on financial profit with the cost of energy needed to support a project that could save the world's coastal cities, coral reefs, fisheries, and save ten percent of human population from being displaced: "Energy is the least of it. Since one percent of all electricity created is burned to make bitcoins, seven percent for saving sea level could be seen as a deal" (ibid). One of the ministry's representatives, ecologist Bob Wharton, admits it would be expensive. However, when compared to the "quadrillion dollars" or "infinity" which Jurgen, whose specialization is insurance, earlier calculated (MftF 55) it would cost to save the civilization, it is quickly and somewhat ironically concluded by Slawek such a project would still cost less. These contrasts of priorities of taking action against continuing business-as-usual again make the current economic system look illogical.

Professor Pete Griffen and his team set up a camp on the Thwaites Glacier about a hundred kilometres inland from the coast of Antarctica (MftF 119). These are the first attempts of the slowing down of the glaciers' melting process, narrated in first person by Griffen as his diary entries (see "Eyewitness accounts in Fig 2.). The participants are reluctant as to whether the plan will work, calling the project "another fantasy solution" (122), however, professor Griffen responds: "I sure hope not. (...) I like the beach" (ibid). This quickly and with a grain of dark humour connects the melting of glaciers affectively to how not only the worlds' coastlines with their typical beach activities such as swimming, sunbathing and surfing might change from the way we know them today, but also signals how coastal cities around the world are predicted to be endangered by the melting of the ice cover, which ultimately pointedly locates the Antarctic setting within a larger perspective. With a gesture of one simple sentence Robinson swiftly nudges even the most climate-sceptical reader to show how human agency connected to one scientific project in Antarctica may have an impact on the entire planet.

Project Slowdown develops further and gains more funding, first by a Russian billionaire from Silicon Valley (MftF 179). Even though the attempts are still unsuccessful at first, the participants keep returning to work with the project each Antarctic season, and the fifth time they arrive there a realization comes: they should have relied in their glaciologists' expertise and instead of pumping sea water onto Antarctica like the billionaires suggested, they should have followed the plan of pumping up water from under the glaciers which came up first from Slawek. While it still is a significantly problematic project with the amount of water being roughly sixty cubic kilometres, professor Griffen remarks that this is "not outside the zone of what we already pump every year" (MftF 263). This allusion to oil industry is a

sobering comparison: while humanity is willing to pump up oil in order to accelerate financial growth, a project in Antarctica which will save humanity is doomed to be a fantasy solution which only a handful of scientists persist on cooperating. The project after a decade of operating and several deaths, including that of professor Griffen, finally works out: “So, at the end of the season, we were flown into the middle of the Recovery Glacier, where we had drilled a double line of wells five years before. One of the lines was reporting that all its pumps had stopped.” (MftF 472). A collective first-person plural narrator – instead of the first person singular narrator of diary entries earlier - arrived back at the Recovery Glacier at the end of the season, which already somehow suggests an “end” to an era and a change. The line reporting that the pumps had stopped shows how there was no more water left to pump, the project indeed worked out. As this chapter is additionally followed up by a story focalized through Mary Murphy where “the birth of a good Anthropocene” (MftF 473) is mentioned, it becomes one of several factors contributing to the Anthropocene becoming “good” after years of persistence, working towards the same goal, and not losing hope.

Choosing Antarctica as a setting also foregrounds what Robinson referred to as deep time in interview with Ezra Klein for *The New York Times*. As he says, immense human-made buildings which represent human time and human cycle, create an impression which falls short compared to the one is left with while, for example, hiking in the mountains, which make us think of deep time instead (31:30). A similar feeling of immensity is highlighted through the Antarctic setting as opposed the earlier described urban settings in the novel, for example in how the village of yurts where scientists live is contrasted with the vast expanse of ice (MftF 180), or in how professor Pete Griffen dies in Antarctica and disappears into the vastness (MftF 267). Lives of individual human characters are relativized against a larger temporal background of Antarctica’s own time-scale which is millions of years.

But deep time or geological time has also been represented in other ways. It is for example hinted on with the short humorous story of a typical life of a carbon atom, narrated by an anthropomorphised carbon atom itself with an opening directly addressing the reader: “You think your birth was hard – my mum exploded!” (MftF 327). The narrated story takes space of only two and a half pages, but narrates from the prehuman past until the present to the story 2030s, as opposed to for example the narration of Mary negotiating with central banks, where one meeting can take up as many as eight pages (MftF 287-296), or her hiking to get to safety in the Alps (MftF 305-313). This again serves as a contrast of human and geological time where the carbon atom’s narration describing a period stretching across

millennia only takes a few minutes to read as opposed to the long stories describing only hours of human events.

Starting off the story billions of years ago in the prehuman past, the carbon atom describes its childhood and adolescence leaping in time from the beginning of the Solar system, through the Jurassic era and the mining of coal in the seventeenth century, until the present time in the novel, around 2030s. The described life span is rich in different events such as for example marriage with two oxygen atoms or getting lucky in 1634 when its seam gets mined and burnt (MftF 328) as opposed needing to wait until the Earth would be burnt up by the Sun to get a release from the “veritable jail” of being a seam of coal. Narrated in a rather euphoric manner, the tone is similar to a chapter narrated by a linguist participating in a celebration of Mother Earth towards the end of the novel, which somehow brings the human and nonhuman narrators in the novel closer.

2.4. A Pale Blue Dot?

The global aspect has been especially highlighted through choices made towards the end of the novel when it comes to the narrative place. There, two chapters are in contrast with the rest of the novel, as they include more all-encompassing perspectives with focus on the whole globe. Firstly, after Mary Murphy retires, and along other travellers takes up an airship voyage across the globe with the captain and utopian Arthur Nolan, they travel across the Arctic, Europe, Africa and Antarctica observing effects of all the work towards mitigating climate change which the reader learned about throughout the book, such as the Half-Earth Project which had been focused on wilderness and animal preservation, Project Slowdown which aimed at mitigating rising sea levels and melting of glaciers. They travel in an airship, a carbon-neutral means of transportation which emphasises how the goal of reducing the atmospheric CO₂ level has just recently been achieved and symbolizes the global collectiveness of this anthropogenic change through them looking at all the continents from a sky-level:

“Earth was big. At this height, at this speed, that immensity was becoming clearer and clearer. Of course scale was also variable. Pale blue dot, mote of dust in the sunlight, true enough; but from this vantage it was beyond enormous. You could walk your whole life and never cover more than a small fraction of it. Now they lofted like an eagle over it” (MftF 525).

This passage originates from a chapter focalized through Mary Murphy, and the setting is indeed distinctive when it comes to the place and movement here: the characters are observing the planet Earth from above, the means of transportation is carbon neutral to highlight how the human species are now living more in harmony with nature and achieved the net-zero emissions, and the pace of the travel is slower than a plane or a train trip which, at last, allows to see the immensity of the planet Earth. Mary and her utopian companion Arthur Nolan observe the Earth from a proximity which strangely both allows to see the Earth from afar in more of its totality, but concurrently allows them to feel close to it. This contrasts with well-known visions of an Earth as a “pale blue dot” or “mote of dust” mentioned in the passage which instead render the planet Earth as insignificant in relation to the universe’s immensity and vastness. Here, the Earth is not insignificant, it is “beyond enormous”, so enormous you could only cover a small fraction of it when walking. This description, when considered in conjunction with the “birth of the good Anthropocene” marked by the long-

awaited decrease in carbon dioxide levels, shows how Earth can be seen as something to admire, even majestic.

Now the airship-travellers are additionally granted a new point of view, not only do they see the Earth from above and still remain in proximity to Earth, but they also are “lofted like an eagle” over Earth. This again foregrounds how instead of being a self-destructive geological force and acting in (financial) self-interest, human species in the novel are on their way to live more in harmony with the natural world as they are now observing the Earth from a perspective of a nonhuman animal, an eagle. They also finally see the Earth, and here depicting them as a tourist trip setting off *from* Earth to be able to finally *see* the Earth is an interesting narrative choice. Such a “tourist trip” back to a restored Earth in a “good Anthropocene” is an interesting twist to a SF technique which Jameson described in his essay as an “obligatory tourist trip to Earth” (“If I find one” 410). That paradoxically estranges the setting even more. It becomes symbolic through the use of an airship as a vehicle from pre-industrial times, but also strangely nostalgic through this reverse in the modes of travelling in the larger context of the “good Anthropocene” in the way it projects an image of the planet Earth that is something we have not seen yet, which could be exemplary to attain to and might feel unattainable for at least some of the contemporary readers.

Thinking of temporality in relation to the structure of the novel as a whole and the progression from the Indian heat wave to the more celebratory scenes, also leads to interesting observations. Just as the narrative strategies shift, so do descriptions of solutions to the climate crisis, as they involve a certain level of reversing or going back in time. The narrative in *The Ministry for The Future* depicts a progression from a negative Utopian to eutopia, which then retraces tendencies in 20th century literature: Wegner identified a similar progression in California trilogy, where “Robinson retraces the historical development of SF: first, the nuclear post-apocalypse –, then the dystopia (in the Golden Coast), formed through the fusion of the literary utopia and naturalism, and finally contemporary utopia” (“Science Fiction and Postmodernism” 516). This progression from a negative Utopian and plausible heat wave scenario towards solutions to the current climate crisis, will require adjustments to the ways of living globally in order to, among other, reverse the atmospheric CO₂ levels. These changes involve implementing and going back to certain technological solutions known precisely from e.g., pre-industrial times and adjusting technology available in 21st century to enrich these solutions, such as using airships instead of planes, or sail ships with sails improved with AI technology. When Robinson maintained that modern utopias need to be

redefined as “a road of history” instead of their representations “as isolated, static islands in history or in physical space” and (qtd. in Carol 545), this appears to be true also in the case of *The Ministry for The Future*: the story here involves reversing time or restarting history both on the level of the plot, where the transformation involves going back to pre-industrial atmospheric CO₂ levels, but also on the level of the novel’s genre, where the story has a progression away from the dystopian mode which is favoured in many contemporary narratives imagining future scenarios.

Chapter Three: Towards a Better Anthropocene - Human Agency Re-imagined

“We cannot afford for [the] world to end!” (MftF 54)

Uttered by Jurgen, insurance and re-insurance specialist working for the fictional Ministry for the Future, the words above are to be found in the meeting notes from the first of the weekly executive staff meetings of the ministry taking place in the early 2020s. His words create an interesting backdrop to discuss ways in which the story foregrounds and reimagines human agency when facing the climate crisis. During the same meeting, climate lead Adele Elia lists some of the environmental risks which the climate crisis brings upon civilization. The glacial basins hold ice which is sliding faster and faster, and in a matter of a few decades they will be depositing thousands of cubic kilometres of ice into the sea. The sea level rise happening as an effect of that, will cause a doom for “all coastal cities, beaches, marshes, coral reefs, many fisheries” (MftF 55). This, as Adele estimates, will cause displacement of ten percent of the world population and disrupt twenty percent of food supply. She sums up her litany with a short statement: “Civilization kaputt” (ibid). Ministry’s insurance and reinsurance specialist, Jurgen Atzgen, reacts to this by throwing up his hands and exclaiming that the cost of this cannot be calculated. When Mary Murphy, ministry’s head, finally orders him to calculate it nevertheless, together with economist Dick Bosworth they finally end up calling the financial costs of the crisis an “infinity”. This scene sets up a backdrop for the main interconnected pair of issues: the health of the biosphere which humans are inextricably part of as now urgently facing the anthropogenic climate change, against their antagonist, the human-made economic system of neoliberal capitalism.

Here Jurgen explains how the entire economic system is on the brink of collapse because of the global warming: money is “no longer working as money” (ibid) since re-insurance companies - which would usually insure insurance companies - refuse to cover environmental catastrophes, in this situation governments are not able to help either as they are already in debt to finance which includes re-insurance companies, and this will simply mean the end of insurance and consequently the end of money working as money. His remark showcases how our thinking is entrenched in neoliberalist ideology and the absurdity of the situation: the economic system the way we know it now, is not only not resilient in case of a global catastrophe, but Jurgen’s comment also suggests how neoliberalism may in fact be one of the very reasons for the catastrophe to happen. Continuing the way we do is impossible

without the biosphere collapsing, and reacting too late is something the world “cannot afford” either within the neoliberal system, since, as calculated shortly later during the same meeting, it would cost us an “infinity” (MftF 55). Ironically, then, even when thinking about the current economic system through its own lens, the logic of neoliberal capitalism just does not add up. People become victims of a human-made system which came to grow so complex that it goes out of control and in need of replacement with a more suited alternative. Therefore, when the character Jurgen says that we “cannot afford” for the world to end, several issues come to mind. Firstly, the neoliberal ideology becomes an agent in this case in the way neoliberalism permeates people’s thinking. His utterance becomes an ironic remark on how it is about time to think about the system critically and find apt alternatives.

The collective “we” appears to be more problematic. At first glance, the “we” Jurgen is referring to could be the ministry or the insurance companies, the uber-wealthy, or the countries of the Global North. However, considering that the sixth mass extinction event will affect everyone on the planet, also the plural pronoun Jurgen uses could just be including all of the people, also the future generations that the ministry advocates for. An interesting question to ask is then, since “we” cannot afford for the world to end, what agency does the novel suggest that “we” have, instead, when facing the catastrophe? However, as Heise describes, questions of human agency have been complicated by theories such as Bruno Latour’s Actor Network Theory in social studies. Here “human identity and agency emerge in the context of systems, communities, and “actants” that include nonhuman species all the way from microbes ... to animals, and in some theories also objects, physical processes, and social structures” (Heise “Introduction” 4). This is already visible in the scenes described above: the ministry’s meeting involves experts collaborating together with other experts, as opposed to working alone; their work is also happening on the institutional level, here of a ministry belonging to United Nations; and already these short meeting scenes prompt considering their work within larger ecological, economic and political systems by the way they describe the urgency of the climate crisis.

In this chapter, I divided my analysis of significant representations of human and non-human agency in the following way: firstly, I will explore the question of human agency by scaling down to the individual level, and so I will be looking at the individual conflicts and peripeteia of Frank May and his displacement which mostly represents the internal and psychological battles when facing the global climate crisis. His story problematizes the question of how much agency an individual has in such circumstances. Secondly, I will be

looking closer at the political enactment represented mainly through the lead female Mary Murphy working within, although fictional, but still institutional level of the United Nations to force a larger systemic, collective, economic change. Then, I dedicate a subsection to the socio-political battle enacted by the representatives of the global South on a collective level which implies ministry's chief of staff, Badim Bahadur, and his affiliation of his work with the movement Children of Kali and what it might stand for.

3.1. Individual Agency

The question of individual agency in the face of a global climate crisis has been problematized by the character of Frank May as his actions often, quite literally, meet a dead-end. This has been amplified through how his character functions as a narrative pair together with the character of Mary Murphy from the day of her kidnapping. In the first chapter Frank May is already preassigned a role of a character who resists the dominant ideology of oppression of the Global South: in the opening scenes the reader meets him as a 22-year-old aid-worker in a medical centre in India. There, even when the heat wave worsens, he refuses to join the other aid-workers who leave the town in order to get help and instead chooses to stay in the town.

This from the start suggests his willingness to act on the global inequalities that constitute a part of the climate crisis. But this voluntary work does not secure any form of moral redemption. The day the heat wave hits, three young local men hold him down and put a gun to his head to claim the generator and the A/C unit, which as they explain, they need more than he does (MftF 9). They explicitly remind Frank about the prevalent role the Global North has had in perpetuating such inequalities worsening the climate crisis which will be affecting the Global South countries the most, as another of the three men says to Frank when leaving: “You did this” (ibid). Read in the context of how the events in the novel progress afterwards, this scene through enforcing a violent and decisive allegory foreshadows how the Global South will refuse to participate in the oppression by the Global North. Later, it is Global South represented by India which leads in transitions implementing clean electrification, new modes of agriculture, and creating democratic political structures.

In the great Indian heat wave in the opening scenes, Frank is portrayed as displaced and even somehow falling outside of the global systems, when watching the sky from the water-level of the lake he seeks shelter in:

“Only the very brightest stars were visible, blurs swimming overhead. A moonless night. Satellites passing overhead, east to west, west to east, even once north to south. People were watching, they knew what was happening. They knew but they didn’t act” (MftF 12).

Despite having the knowledge, and the technological systems reminding about the catastrophe in real time – a catastrophe which turns to have killed twenty million people - the world’s

response is still inaction. The psychological struggles of Frank May afterwards showcase the conflicting agency of individuals living in the Global North who contribute to the climate crisis to a greater degree. Frank becomes even more well-aware of these inequalities as, in addition to the heat wave having affected his physical health, he experiences persistent feelings of guilt after becoming its only survivor. He subsequently develops a post-traumatic stress disorder, and struggles comprehending why others in the heat wave did not survive. Discussing various possibilities to what was the cause of his survival when talking with a friend, Frank finally says it must have been chance (MftF28), rejecting the idea that his lifestyle might have made him stronger physically to withstand the wet-bulb temperatures. When attending one of the cognitive therapy sessions for the PTSD he had developed, the psychologist asks him: “At that time, did you think of yourself as one of them?” (MftF 68), as Frank retells the story of what had happened in the heat wave, however, not really including himself in the story as though he had not been there, or perhaps as though he were not alike the people who had died there. This therapy method meant to help Frank gain distance to the traumatic memory, reinforces thinking about the hierarchy that arises between the richer and the poorer people in the face of the climate crisis. We are indeed not all in the Anthropocene the same way.

Frank May's story is also shedding light at the limits an individual in general has when facing the crisis. As the narrative progresses Frank May attempts to contribute more through signing up for a project in Antarctica, attempting to join the Children of Kali movement, volunteering at a climate refugee centre as a language teacher, testifying to the police when having witnessed climate refugees being attacked by the Swiss men, or even confronting the uber-rich face-to-face. These actions, nonetheless, are futile until eventually directly confronting the UN's lead Mary Murphy through kidnapping her to her own apartment – only to talk to her. That way, the character of Frank May functions as a narrative pair together with Mary Murphy. This carries implications for how the novel foregrounds the role of collective action and solidarity in the face of a global crisis over the individualism valued in capitalism. The story after their meeting continues to rely on portraying these two characters together, which can function to foreground solidarity even more. However, out of these two characters, there is one main actant on the climate crisis. Mary Murphy is the agency's lead, the narrative's lead according to Robinson (“Odd Couples”) and the lead in how she becomes the one reinforcing economic changes. This, in turn, puts emphasis on systemic changes as vital in transitions.

Frank's intentions and willingness to, after all, "do good" in the complicated situation of the climate crisis where his attempts may sometimes seem twisted, becomes highlighted and problematized by the connotations carried by his name. To start with, his first name "Frank" brings associations of honesty and speaking the truth, and Kim Stanley Robinson in the interview with Everett Hamner for the *Los Angeles Review of Books* (2020) comments on how the usual reversal of "Frank being a liar" in his novels, had never stopped being funny for him: "Being able to clomp around in one's novels like Brahms in a boisterous mood, that's one of the ways it can stay fun" (2020). However, *Ministry's* protagonist Frank May is a disruption from this intertextual tradition. Frank indeed tries to be as honest as possible when confronting others in the story, speaking motivated by his first-hand experiences from the heat wave day. Then, the surname "May" carries connotations of spring and with that, perhaps, enforces a trope of hope for the future. My choice of putting emphasis on the significance of Frank's name is strengthened through how he in the story, motivated by realizing he has committed manslaughter, Frank obtains a fake identity of Jake Salzman and his passport: identity change happens here not only to hide from the authorities, but also when faced with a realization he does not live up to his own ideals anymore when, even though accidentally, he stopped acting in the rule of law and that name change mirrors his internal struggles. His name matters, becoming thus a part of a other and larger discursive battles in the novel. But Frank's subsequent to the heat wave - and often questionable - choices, prompt thinking of and problematize ethics of not only his own actions. They similarly problematize actions, and maybe lack thereof, which others are complicit of - such as actions of institutions, leaders, politicians, or the rich when faced with the global climate crisis. Thus, the larger questions Frank May's choices reinforce considering, is thinking through what behaviours and choices are perceived as legal and who decides that in a capitalist system which ironically justifies violence as long as it implies financial profit.

As Frank's name corresponds to the names of characters appearing in other novels of Robinson, this transmigration of a character named Frank, or at least the character's name, happening across Kim Stanley Robinson's novels can be looked upon as an interesting, and likely familiar from other types of postmodern literature, intertextual narrative move. One example of such a character could be Frank January from an alternative history in "The Lucky Strike" written by Robinson where he has to choose whether he should drop the atomic bomb on Hiroshima or not (Markley 10) and does so too late. While he gets executed, this delayed action sparks a "global disarmament movement" (Markley 21). In *Ministry*, similarly, the

kidnapping of Mary Murphy by Frank May on one hand does get him imprisoned, but on the other sparks authorization of more decisive actions to mitigate the global climate crisis in form of carbon quantitative easing as well as also questionable actions of starting a black wing of the ministry which appears to have a role in mitigating the crisis. In another of Robinson's novels, *Science in the Capital* trilogy, yet another character of Frank is trying to recover from a brain injury (Markley 122), which is similar to how Frank May in *Ministry* eventually dies of a condition affecting the same organ, brain cancer. This transmigration of a character and/or character's name and traits could, for example, foreground how through Robinson's preoccupation with the theme of global warming over time the stories he writes become updated as the public's general knowledge on the crisis also grows. This could imply that the character of Frank evolves with time and "migrates" across the different novels of Robinson, to suggest how his fiction with its imagined solutions adapt to the reality of the readers and the climate crisis.

In addition to convincing Mary to act on the climate crisis, it is Frank's death which may ironically be the second of the more fruitful of his actions. As his tumour and death coincide with the "birth of the good Anthropocene" (MftF 475) in the story, reading these events in relation to one another leads to think that Frank's nationality symbolizes the empires of the Global North, and how their "death", or end, is necessary in order for other parts of the world and the whole biosphere to thrive. There is another hint in the novel suggesting this end to other sorts of colonization. Mary, when mourning Frank's death, for the first time in the novel opens up about her husband's Martin death when describing how these two events seem alike to her. Since Mary is Catholic Irish and described her husband as Protestant like many descendants of British colonists were, her seeing Martin's death as reminding her of Frank's could also suggest how it was symbolic of rejecting a supremacy, in this case British. This trope of a new beginning is reinforced how right after Frank's death, Mary sets out to the streets of Zurich where celebration of Sechseläuten started, a welcome-spring Swiss ritual where the ritual of burning of Böögg signifies the end of winter.

3.2. Institutional and Collective Agency

The institutional agency to mitigate the climate crisis in the novel has been, predictably, exemplified largely through the work of the titular Ministry for the Future. Through the course of several decades, the ministry's members discuss the current developments and possible solutions, and these struggles are presented in the novel as either transcriptions of ministry's team meetings or through chapters focalized through Mary Murphy. The ministry is found in 2024 (MftF 98) and gets tasked with a responsibility of multigenerational work: they are "to advocate for the world's future generations of citizens, whose rights, as defined in the Universal Declaration of human rights, are as valid as our own" (MftF 16), and furthermore "charged with defending all living creatures present and future who cannot speak for themselves, by promoting their legal standing and physical protection" (ibid). These attempts of finding a legal standing on behalf of future lives has been exemplified mostly through the work of the head of ministry's legal division, Tatiana Voznesenskaya.

Not surprisingly, perhaps, these attempts are often met by her frustration. When reporting to Mary on the situation, she remarks how there is no court the ministry can address to bring such lawsuits on climate justice: neither is The International Criminal Court nor The World Court tasked with that, as several big countries had withdrawn from the first one and, as for the latter one. only states - not agencies like the UN's ministry - can bring cases before it. Likewise, neither are the national courts nor the World Trade Organization places to turn to as such action would not prevail in the former case, or would be extremely slow in the latter and thus eventually be useless (MftF 250). As there is no place in the legal system to approach, this makes Tatiana's work futile, and meanwhile as she comments "fossil fuel companies keep pouring vast sums into buying elections politicians, media, and public opinion" (ibid) making the effects of climate change even worse: when Tatiana is commenting on the situation, the atmospheric levels are already at "463 parts per million" (ibid). The descriptions of the struggles of the head of ministry's legal division when facing this catch-22 of climate legal justice system, expose the shortcomings of the contemporary legal system. What here is presented as crimes against the biosphere, are made possible and become legalized in such an arrangement. In the meantime, millions of people are dying, not only in the fictional world of the novel, but also outside of the realms of fiction.

Ministry's work on behalf of the future generations has been presented as a struggle between ethics and the current economics, neoliberalism. On one hand, as I exemplified in

Chapter Two, it is Frank May's arguments when confronting ministry's lead Mary Murphy which raise questions of ethics in the face of a sixth mass extinction. As Frank puts it during their conversation, "They are killing the world" (MftF 97), and elucidates that by "they" he means those thinking with old, outdated values when later telling Mary that there are people who "spend their entire lives working hard to perpetuate a system that will end in mass death" (MftF 99). This tension between ethics and economics has been further elaborated on in chapter thirty two, which is a transcript of a conversation between Mary Murphy and ministry's economist specializing in taxes and political economy, Dick Bosworth, here the readers can learn about so called "discount rates on the future" that the current economics relies on. It is an assumption that "future people will be richer and more powerful than we are" (MftF 131), which shows how the current system simply discriminates the future generations: as Dick explains in the conversation with Mary, if someone hypothetically suggests a policy which would save lives of a billion of people in two hundred years from now and that would cost ten million dollars, with such a discount rate that amount of money would be worth five million dollars in the future, which exemplifies how we put a number on an ethical decision as how it quickly becomes devalued using the discount rate logic.

This kind of discount rate thinking has met critique, as we can read from the same chapter and has been described as "ethically indefensible", "a polite expression for rapacity", and that we should act "as though the discount rates were zero" (Mft 131). Literary scholar Matt Seybold tracks how this critique of discount rates has been associated with Keynes and his economics (258), and Keynesianism is something Robinson explicitly hopes could be the first step towards a post-capitalist system:

"Can you morph, by stages, from the political economy that we're in now, which is neoliberal capitalism, to what you might call anti-austerity, to a return to Keynesianism, and then beyond that to social democracy, and then beyond that to democratic socialism, and then beyond that to a post-capitalist system that might be a completely new invention that we don't have a name for?" (Robinson "Imagining the End...")

The movement away from neoliberal capitalism, through going back to Keynesianism, though socialism, and towards a post-capitalist system, constitutes a large part of what the fictional ministry works towards throughout the decades described in the novel, and the majority of the discursive battle towards that change are executed by Mary Murphy in the novel. Mary Murphy is then an example of a reformer working from within the system, but in order to

work against its values and in that way, ultimately, to turn capitalism against itself. But opposing global capitalism is only one of the two dominant systems Mary Murphy actively works both within and against. She is also opposing the patriarchal order: as Seybold describes, the contemporary economist is “three times more likely to identify as male” and six times more likely so “if he has tenure” (245). When addressing the climate crisis, patriarchy also becomes a problem as women often become excluded from action: for example through having less access to education or other forms of discrimination such as underrepresentation in certain professions, not less female economists.

Mary’s agency in the story is mostly understood as a discursive battle when meeting representatives of other institutions in order to put an end to a system that oppresses not only the people, but also the biosphere’s health as such. Through the course of the decades portrayed, Mary meets, thus, both executives of fossil fuel companies and leaders of central banks in attempts to reinforce a new solution worked out by her team: carbon quantitative easing. The ministry’s AI team, mostly represented by the nonbinary character Janus Athena, works out the idea of a new currency called carbon coin, and this project is inspired by the solutions originating from an actual study⁷ published in 2019 which is referred to as Chen paper (MftF 171) in the novel.

Carbon coin is, then, a new currency, which ideally would be supported by at least some of the central banks. This new money would be given to people in two instances: either one coin for every ton of carbon not burned, or sequestered in a way that would be certified, and one would also be able to trade these for any other currency (MftF 174). Combined with taxes, that way, one would get paid for sequestering and conversely, taxed for burning carbon. This would be the first steps towards using the tools available in the neoliberalism to make the system work more in harmony with the biosphere’s health: we simply are forced to somehow pay ourselves to do the work necessary to avoid a mass extinction event. That way, changing how the concept of money is understood and still making it serve a purpose, however still within the boundaries of the current economic system, becomes the first step towards a transformation which is mostly fought for by Mary.

⁷ The paper referred to in the novel is accessible as a study by Delton B. Chen, Joel van der Beek, and Jonathan Cloud titled “Hypothesis for a Risk Cost of Carbon: Revising the Externalities and Ethics of Climate Change” and was published in *Understanding Risks and Uncertainties in Energy and Ethics of Climate Policy* by New York, Springer in 2019. It has been referred to by Seybold (253). Again, this showcases the novel’s active engagement with academic research.

The recurring meetings of Mary with central banks show bank's resistance to change. The patriarchal and capitalist values had been embodied by Mary's antagonist during these central banks' meetings. It is, ironically, the character Jane Yablosnki, the Fed chair of the US Federal Reserve, a public bank funded by private banks. They are both women who are the same age, and Yablonski could be colloquially described as a typical contemporary "girl boss" figure i.e. a woman who in reality only reinforces the patriarchal order in the way she sticks to favouring old systems. Yablosnki is the only female representative except for Mary during the first of central banks meetings' alongside all male representatives from China, the European Union, the Bank of England, and the Bundesbank in Germany. During this meeting, she is the one who explicitly rejects the idea of the carbon coin. She is not impressed by the idea of the carbon coin and believes in the US dollar, even when Mary confronts her saying "if we don't take the immense amount of capital that flows around the world looking for the highest rate of return and redirect it into decarbonizing work, civilization would crash" (MftF 188). But as Yablonski asserts, "grimly amused" with how in the case of the crash of civilization the dollar indeed would be weak, avoiding such a crash is not still the task of the central banks according to her. This exemplifies how Yablonski's values are entrenched in (old) capitalist values and how she rejects the scientific information available on the climate crisis.

As the time passes, during 2030s in the novel Mary continues having meetings with the Bank of England, the European Central Bank, the People's Bank of China, and the Bundesbank, Germany's central bank, as well as the central bank of Russia, which are still likewise reluctant to support the idea of a carbon coin. These meetings' descriptions are intertwined with non-fictional notes on each bank's history and how they emerged, presented in a form of Mary preparing for these meetings to the reader: "she read up on the history of the Bank of England and saw it was important in the financial history of the world" (MftF 211). Importantly, as part of these theoretical notes, the neo-colonial order is described, too. A description of structural adjustment programs which became instruments for the post-war American economic empire, includes a "definition" of a neoliberal efficiency ironically described as: "the speed and frictionlessness with which money moved from the poor to the rich" (MftF 214). These notes both work as an educational and didactic tool in the way the facts presented here are precise and interwoven with the plot. However, the sometimes ironic tone and remarks in addition, render these notes into a critique of a system which gets exposed as being outdated when facing the global climate crisis; biased towards minorities as

shown in the way Mary is approached during the meetings; based on exploitation of the weak(er), and, ultimately, it presents the neoliberal order as a system that needs to be replaced in order to solve the biosphere's problems.

In addition to the meetings with central banks, Mary is actively trying to influence the leaders of fossil fuel companies. Early in the novel, the readers get a description of the executives of the fossil fuel companies which functions as a backdrop for her meetings with fossil fuel executives. Following an educational note on how humans are now burning 40 gigatons of fossil carbon per year (MftF 27) and how it is calculated we can only burn 500 more gigatons more in total before the average global temperature is pushed over 2 degrees Celsius higher than in pre-industrial times, also the executives of these companies are described shortly after presenting these facts. Here, they are depicted as making future decision about the use of fossil fuels in a following way:

“They will be good people. Patriotic politicians, concerned for the fate of their beloved nation's citizens; conscientious hard-working corporate executives, fulfilling their obligations to their board and their shareholders. Men, for the most part; family men for the most part: well-educated, well-meaning. Pillars of the community. Givers to charity. (...) White men, who will want the best for their children” (MftF 30).

Firstly, seen through the logic of the current economic system and what is valued within it, the executives are simply not doing anything else than the right thing when deciding to still burn carbon. “Hard-working”, “conscientious”, fulfilling their obligations to their board and shareholders, they make sure that the system is maintained the way we know it. Within the neoliberalism, these characteristics are in the end valued a lot. It is almost as though this passage were not ironic until one reads how the executives will want “the best for their children”, when seen in the context of how more use of fossil fuels will have dangerous effects on most of Earth's bioregions, including food production for the people as described in the beginning of this educational note. “White men” is a shorthand which functions here to describe how it is mostly the richest people, often in the Global North, who are temporarily profiting from such as system. Here, this shorthand becomes a way to describe the current situation in which the different minority groups such as women or inhabitants of the Global South are excluded from profiting from such as system financially, but at the same time it will also be these groups which will be taking the larger share of the negative consequences which are unfolding as a result of relying on the fossil fuel industry and the resistance towards creating new ways of more sustainable living for everyone on the planet. This passage is

placed in a chapter immediately following descriptions of Frank's survival guilt and preceding a chapter on Mary's meetings with colleagues about creating a legal standing for the climate justice, which again serves in demonstrating contrasts between action and inaction when facing the crisis.

This passage also creates a backdrop for how the patriarchal order also needs to go as it is outdated. One of the areas this dismantling of patriarchy happens, is the meeting of Mary and the fossil fuel industry executives to discuss the idea of carbon coin which takes place later in the story. The idea is still that the new carbon coin will function as a kind of "carrot" in addition to the "stick" of progressive taxation. Additionally, Mary finds it important that the oil industry has the technology available which could be used either for pumping water or capturing carbon into emptied oil wells. Seeing the possibility of a vital post-oil business, the executives are interested, which here casts capitalism as an agent fuelling the thinking of executives: again, the crash of civilization is not enough of a reason, but a prospect of making money is, so in that way capitalist logic is here beginning to be turned upon itself as supporting the idea of carbon coin would have a positive impact on the Earth's ecosystems. As the executives during the meeting are all men, Mary finds herself making linguistic choices they will hopefully find appealing: she tells them that they either can "go short on civilization" with nobody to pay them for it, whereas the smart move is to "go long" in order to "win big", her colleague calls these arguments a "Hail Mary pass" (MftF 240). Just in the same way capitalist logic is turned upon itself, so is the patriarchal "toxic masculinity" turned upon itself in the way Mary, inspired by the economic theory to convince the executives, carefully chooses her words and arguments. The neoliberalist ideology of profit above all, here modified in the form of a carbon coin to help protect the biosphere's health, predictably hails on the fossil fuel industry executives.

Finally, the central banks agree on issuing the carbon coin. In a meeting in Zurich in the Kongresshall with a storm serving as a background, Yablonski still asks whether the causes of the situation they were facing were so clear. Mary's team in a response holds a group presentation which goes around the table in a cause/effect mode describing the levels of carbon dioxide and methane in the atmosphere, the current rate of extinction, inevitable famine, displacement and war: in total, "[i]rreversible and unfixable catastrophe" (MftF 293). Finally, Mary concludes that although full employment was the main objective for the banks, "... it wasn't such a victory if the remnant of humanity that survived the crash ended up working as scavengers and peasant farmers. That wasn't the kind of full employment that the

world had in mind when central banks were created” (ibid). These scenes are important in the way they foreground science as an agent: it is the scientists and experts who get to present the rising issues and communicate it as a group, and the dynamic of the presentation shifting from person to person shows how different aspects of the climate crisis connect and it helps making a complex issue more comprehensible. It appears, also, when looking at the character of Yablonski who asks whether “the causes were that clear”, that inaction on the climate issues stems not (only) from neoliberal-induced greediness, but, perhaps, other reasons too. It is unlikely that at this point Yablonski lacks knowledge about the crisis, so her responses might just be exemplary of the process of a coping mechanism called ‘splitting’, the way ecocritic Kerridge uses the psychoanalytical term in his essay (364), as a way of protecting ourselves from knowing the traumatic truth and not knowing it simultaneously. At the same time, these scenes foreground the need for cooperation and collective action in the way Mary Murphy cleverly has the ministry’s team at hand to support the arguments she has been presenting over the years when meeting the banks, and it is this meeting which finally convinces the banks the most. Ultimately, here it is science which wins over what its antagonist, capitalism, and at the same time, collective thinking and action symbolically win over self-concerned individualism in a truly interdisciplinary meeting involving economists, scientists and a diplomat who finally find common language.

But there is more to this scene than focus on scientific findings and emphasis on collective action. As ministry’s team had also been working out a new kind of Internet ecology which gains a name YourLock, internet owned by its users (MftF 242), YourLock turns out to have several purposes on the way towards a systemic change imagined in the novel. As one function of the YourLock accounts, people would gain access to what head of Artificial Intelligence department, Janus Athena, calls a people’s bank, “an open network of people who make a distributed issuance of credit, issuing carbon coins to each other” (ibid). Mary uses this project to blackmail the banks: they are either to support the new currency or YourLock users will put that idea to use themselves. This new people’s Internet becomes especially relevant when 16 July during 2030s big parts of the (old) Internet stop working (MftF 407), which is referred to as The Crisis or Year Zero. The idea of creating a version of the internet that is owned by its users who are fully in charge of their data, might just be the perfect socialist invention. However, the idea of a back-up internet pushes the readers to think of a need of having a pre-existing plan B in times of crises to avoid chaos.

Therefore, the way the ministry uses technology in the novel, can function as putting into question the way technological advancements have been used in the modern world, such as e.g. the threat of nuclear weapons during Cold War, or privacy issues connected to the invention of the Internet. The events in the novel showcase technology as a source of positive impact and a sometimes even a necessary contribution in mitigation of the climate crisis. Robinson comments on use of technology in the interview with Ezra Klein; he asserts there is no going back to some supposedly pre-technological state, we are technological creatures, as he remarks (49:00), and the work of the fictional ministry is means of exploring technology use in such a “direction of harmony” as part of the utopian impulse in the novel. One of them is the mentioned YourLock project of the internet owned by its users which the ministry works out, as well as their role in negotiating the carbon quantitative easing, but so is the geoengineering executed as the Project Slowdown in Antarctica which the ministry eventually supports fully (MftF 365).

Ironically, attempts to change the system are not effective until after the Swiss bank accounts are under attack (MftF314-315). It is the latter that secures support from the Swiss presidents towards ministry’s work, which is ironic when compared to how the Indian heat wave that have killed twenty million people, barely prompted a speech by that year’s president of the Paris Agreement about how the incident should spark more action: “We share the same air and water, and so this disaster has happened to all of us” (MftF 24). But after the heat wave, no other action than India themselves was attempted. This likely mimics the situation a contemporary reader is well-familiar with from the realms of outside of fiction, where the The Intergovernmental Panel on Climate Change (IPCC) reports of 2021-2023 that action of every country is needed, urgently. In *Ministry*, neither does the Davos re-education camp in which World Economic Forum participants are held hostage to get schooled through power point presentations on global inequalities, cause larger results either. As a perfect example of neoliberal logic, it is the disappearance of financial capital in Switzerland which gets looked upon as a serious emergency and Mary uses that opportunity to suggest Switzerland also joins the idea of carbon coin as that was the most secure way to proceed at that point. Former Swiss presidents during that meeting with Mary, who authorize such support from Switzerland in implementing the carbon coin and supporting the ministry’s work interestingly mostly women (MftF 314). That way, ultimately the logic of neoliberal capitalism is turned upon itself: the most viable option becomes to support the new carbon coin currency, which can be a step towards a transition to post-capitalism:

“But this time, growth might be reconfiguring itself as the growth of some kind of safety. Call it involution, or sophistication; improvement: degrowth; growth of some kind of goodness. A sane response to danger – now understood as a very high-return investment strategy! Who knew? (MftF 345).

Here, a historian narrator describes the first responses and effects of the carbon coin implementation. Capitalist growth starts reconfiguring itself as something else: a new system, in which biosphere’s health is at last understood as the “only one available to humanity” (MftF 344).

During the last of the meetings with the central banks that Mary attends, the Chinese finance minister Madame Chan takes over the financial issues. The role of female agency becomes clearer and cleaner here: it has been women who were executing the changes on the institutional level: Tatiana, Mary, former Swiss presidents, and now Madame Chan. During the last meeting, Madame Chan speaks of “income floors and ceilings, of land taxes and habitat corridors. Of the world as a commons, one ecosphere, one planet, a living thing they were all part of” (MftF 510). Madame Chan’s remark on “one planet” also points to the planet seen as female: Mother Gaia, highlighting women’s role in the transitions to living in harmony with nature. Outside of the institutional change, there are several other examples of women facilitating the transition to a system away from neoliberalism. During environmental strikes in Paris, it was “the women of the city, they were the real organizers, ... not the people at the microphones” (MftF 248); in the eyewitness account of farmers trying new modes of regenerative agriculture, it also the woman who sees that transition as vital (MftF 400) despite her husband’s focus on the financial losses because of it. The women portrayed as having a vital role in a transition away from capitalism is assigning agency to a social group which have been historically oppressed.

3.3. Badim Bahadur and His Clandestine Children of Kali

Badim Bahadur, in addition to being ministry's chief of staff and the main addressee of the majority of the meeting notes included in the novel, is also highly likely to be responsible for starting a black wing of the Ministry for the Future (see Fig 3). The first time the black division of the ministry is ever mentioned, is after Mary had been kidnapped by Frank. In a conversation with Badim, Mary asserts "I think we need to set up a secret division of the ministry, working in secret to forward the cause" (MftF 109), and he responds by explaining the rules of how such a division would be working. Mary becomes baffled by how he speaks about it as though he had rather extensive experience with such things, and Badim simply responds by saying "Now" (MftF 110), which points to him having a double identity. Badim also mentions that "what really scares people is financial" and elaborates that if they lose access to their money, "they are definitely scared" (MftF 114). This conversation can point to some of the incidents which the black division might have been compliant with inducing, which are described other places in the novel, such as changing Swiss bank account numbers ("Attacks Swiss bank accounts" in Fig. 3.) so that it became unidentifiable who owned what.

As the conversation continues, the readers also learn more about Badim's background, which will be crucial at identifying him as likely to have affiliation with another group described in the novel, similarly controversial, i.e. Children of Kali. Badim was born in Nepal, and in a later conversation with Mary he expands on the experiences he has had in his childhood years spent there before moving to Switzerland: "No toilets, no antibiotics, people died of diarrhoea all the time. In general people were sick, they were worn out, they died young. I wanted to change that" (MftF 253). Their conversation – similarly to the previous one - incorporates pieces of absurd, as though taken out of a Samuel Beckett play, humour: "'The pursuit of happiness is the happiness.' 'Then we should be happy!' 'Yes', she said unhappily" (MftF 254). In the same conversation Badim also declares that the black wing was not complicit of any violent action, and instead insists on the need of inventing a new religion – "the oldest one" (MftF 255) – similarly to what Tatiana said earlier in the novel. This induces a somehow detective reading mode in the readers when approaching the novel. As it is never explicitly said who is compliant of doing what, readings of these plotlines, opened to interpretation, may just be confirming - or defying - the beliefs and stereotypes held by the readers.

The information on Badim's background helps at revealing this affiliation with the group Children of Kali only twenty-two chapters later in the novel. Here, a narrator telling the story in first person, travels to Lucknow and reminisces his Nepali mother and childhood, which quickly may point to the person telling this being Badim. There, he visits people working in the fields as part of India's Regenerative Agriculture programme which helps reducing the carbon dioxide emissions. Additionally, while visiting India, the narrator meets the agents behind a more clandestine work to combat climate change, namely the group Children of Kali which turns out to have woman as a lead. As the members find him to be "like a firangi" – a "foreigner" (MftF 389), he finally admits that he was indeed "Kali" himself.

This Children of Kali movement has been described earlier in the novel as a more radical fraction of the new, democratic political structures which emerged in India after the heat wave which become democratic. The Children of Kali had a message to the world: "change the world, change now, or suffer the wrath of Kali" (MftF 25). Moreover, a whole chapter has been dedicated to their sort of manifesto (MftF 135-137) where Children of Kali depict themselves as vigilantes who make sure to punish the criminals who contribute to worsening the climate crisis the most. While in the interviews and book reviews of *Ministry* these alleged actions of Children of Kali have often been referred to as "ecoterrorism" (Canavan, Hamner, Vion-Dury), it is not clear in the novel which actions happened as an effect of their work (see Fig 3.). Private jet planes and business travellers' flights are targeted, mostly during the 2030s in the novel as retold by a historian-narrator, but "quite a few terrorist groups took credit for the action in the immediate aftermath" (MftF 228) as the narrator states: these actions are then contingent, it quickly becomes unclear who does what and for what reason.

Fictionalizing such scenarios may have several narrative functions in the novel. The choice of imagining such developments can be understood as novel's preoccupation with how slow violence of the climate crisis, if not mitigated, could motivate other kinds of violence in the future, and in that way, it becomes a sort of cautionary tale. Additionally, as a piece of speculative, i.e. imagined, future history, it is also preoccupied with depicting how contingent and unpredictable some of the events could be, so it makes the novel more realist. It is, in the end, not unlikely, that a crisis such as this one could cause a range of various responses in different people.

Through imagining such, however controversial, plotlines, fiction here becomes a safe space where it is possible to question the current status-quo. Depiction of such immediate instances of violence problematizes the kind of violence modern economic colonization poses on the countries of Global South. Holding these countries in debt towards the richer countries happens only in addition to the risk of the climate change which their inhabitants will be more vulnerable to, while again themselves being less complicit of contributing to the causes of the climate change. The characters in the novel allude several times to the hypocrisies of the current system. Badim comments on the period post-British-colonization in one of the first conversations with Mary saying that one pays “for being the victim, not the criminal” (MftF 32), Chandra on a trip in India which is to present new modes of agriculture comments on the Children of Kali group saying “Murder rate never really a concern when poor people are being killed by terrorists hired by rich people” (MftF 141). In the narrative, these inequalities become remodelled so that the oppressed regain their agency in these imaginary scenarios precisely to help shedding light on the current inequalities. These instances are to challenge the status-quo and make it evident how the hegemony of the Global North is controversial and violent, too.

Furthermore, one could also wonder whether these fictional instances of such attacks on the transport methods relying on carbon, are a narrative method which helps rendering the slow violence of the global warming more visible to the contemporary readers of the novel. Is relying on a system which implies flying in private jet-planes, taking unnecessary business flights, and relying on transport methods involving container ships considered “safe” to a greater degree for the contemporary reader than it is in the fictionalized instances described in the novel? Seen in the context of the ongoing sixth mass extinction event, these transportation means are not only unsustainable, but also unsafe in the outside of the realm of fiction today. We are in fact perpetuating the catastrophe by not being willing to find alternatives. In turn, it becomes clearer how these means of transportation attached to our ways of living are, ironically, as lethal in the contemporary world of the reader, as they are in the fictional future described in the novel. In a way, we – the contemporary readers – are also complicit of making the crisis worse for us and the future generations when living this way today. The story makes the problem of climate change more visible and tangible through turning such slow violence of the climate crisis into a more sensational, and noticeable, violence. The difference is that in the former example, it is easier to pretend as though the violence was non-existent.

Moreover, there are other sides to the movement of Children of Kali which also emerge in the novel, which complicate that image further. Firstly, the movement describes themselves as having witnessed the damage of the Indian heat wave immediately after it had struck, and thus also become the very people who are likely to have helped Frank May out of it. Children of Kali seem, moreover, to be the ones responsible for the solar radiation management action taking place early in the novel during the 2020s, when spraying sulphur dioxide into the air from planes in order to lower the temperatures which is imitating a “Pinatubo volcanic eruption of 1991 which lowered global temperatures by about a degree of a Fahrenheit” (MftF 18). And importantly, these two events become connected as the first-person narrator also describes themselves as having seen the worst outcomes of climate change, saying that hell is a place in India they have already seen (MftF 39). Sulphur dioxide experiment indeed helps in lowering the temperatures globally and becomes the first geoengineering project in the novel which assigns India’s role as leading in transitions, and Children of Kali are likely to be taking part in that project. As they explain in first-person later in the story: “Everyone in our cell had helped to clean up after the heat wave. You don’t forget a thing like that. I myself didn’t speak for years” (MftF 135), confirming that the people in the group have been traumatized by the event. Presenting them as having been traumatized after cleaning up after the Indian heat wave and as having helped in lowering the temperatures globally is another way in which their image becomes problematized and sheds light, again, at the discrepancies in who will be getting affected by the climate crisis the most outside of the fictional world, and how much – or how little - agency in fact these groups have when facing the crisis.

As can be assumed from an eyewitness accounts of fishermen working in the Antarctic Ocean (MftF 71-72)) and of miners in Namibia (MftF 323-325), the group Children of Kali are involved in rescuing people working in inhuman conditions. In both instances presented in these accounts, the working conditions are equal with slavery, exemplifying how the current system is based on exploitation of people and nature for financial profit. The fishermen are completing their work unpaid, moreover, they describe their working life reality by saying how they would be left to starve unless they are compliant in doing their work. Suicides, euphemized at first in a sentence “accidents were not uncommon” (MftF 71), were therefore a part of such a reality. This shows that the suicides were probably being covered up post-mortem by the owners of the finishing industry. The narrator responds to one of these suicides by saying: “We knew why he did it. It was probably the best option, but it took courage”

(MftF 71), which further unfolds the hopelessness of their situation. In the case of Namibia miners, the workers are not even aware of what precisely they were working on as it was not disclosed to them and call the resources "... colored rocks. Gold? Uranium? Rare earth, some call it" (MftF 323). They were on the other hand well-aware they had no way to get away as they were placed in a desert (*ibid*), whereas it was officially held they could leave as they wanted to. Neither they were fed, similarly to the fishermen from the previous eyewitness account, and so they decided to go on strike.

In both instances, the narrators, workers employed in slave conditions, are freed by what most likely is the terrorist group Children of Kali. A transport ship comes to the rescue of the fishermen; however, the rescuers make the decision to leave the captains on the fishing ship after learning how they treated the workers and destroy their ship which they also make sure to film. This would force the captains to try to save themselves using rescue boats. The fisherman-narrator reckons who the rescuers might be, which turns into a slightly humorous reflection: "So that meant these people were probably not police. That was not a good thing, but it's not as if we could choose who saved us" (MftF 72). The miners are saved by drones which attack the guards, which points to how the Children of Kali defined their means of working in the manifesto described earlier. Eventually the workers are made into work-owners of the mine. These fictionalized responses disclose the inequalities of the capitalist system and make these inequalities and exploitation of people and resources painfully clear. It functions, then, as an estrangement of the reality of the readers, especially through fictionalizing as extreme methods to shift power relationships as happens in the two instances of slave workers described in the two eyewitness accounts.

Ultimately, the narrative effect of the fictional means by which Children of Kali approach the economic and social inequalities, render the slow violence of the current system - which is based on exploitation of people and nature - more immediate and visible. It becomes a way to imagine a world effaced of these inequalities, and on the level of the narrative, a mirror set against the unethical actions that neoliberalism entails. At the same time, attacks of Children of Kali may be just that: stories. Mary Murphy expresses at the end that these events were rumours she only had read on the internet; and that these "secret plots" were mere stories people loved to believe (MftF 546). What is explicitly advocated for, is a systemic and legal change as a solution to the inequalities which agency of Children of Kali sets in focus. The narrator in chapter eighty-two describes how in times of crisis, there needs to be a pre-made, known plan:

“... there had to be a plan B. What was it? Big parts of it have been there all along; it’s called socialism. ... The necessities are food, water, shelter, clothing, electricity, health care, and education. All these are human rights, all are public goods, all are never to be subjected to appropriation, exploitation, and profit. It’s as simple as that” (MftF 409).

The importance of a legal, systemic change that the titular Ministry for the Future advocates for through the discursive battles, becomes amplified through the stories of Children of Kali which expose the slow violence of inequalities of neoliberal capitalism to their readers.

Conclusion

This thesis has sought to look at the narrative strategies which Kim Stanley Robinson deploys in *The Ministry for the Future* when mediating the complexity of the global climate crisis and its possible solutions. I argued that Robinson makes the climate crisis comprehensible and accessible through the narrative strategies he uses. Firstly, I proposed that he adapts the form of *The Ministry for the Future* to respond to the representational challenges associated with the scales of the global climate crisis and the interconnected environmental and socioeconomic issues the crisis entails. Secondly, I suggested that he re-imagines human agency in his narrative to consequently challenge and propose alternatives to the status-quo of the neoliberal capitalism, which is portrayed as the main antagonist in the face of the climate crisis.

In Chapter One, the extended analytical description of *The Ministry for the Future* provides a closer analysis of the polyperspectivity in *Ministry's* narrative. There are eight distinctive narrative perspectives to distinguish between: chapters focalized through the ministry's lead Mary Murphy and the heat wave survivor Frank May; meeting notes, educational notes and podcast transcripts, historicized events, and eyewitness accounts. Out of these only one third, however, involve explicitly narrativizing lives of individual characters. Instead, it is collective and nonhuman voices, as well as non-fictional accounts, that dominate the narrative. Together with including such multiple perspectives, the ways in which different storylines converge in *Ministry* with time may suggest another kind of interconnectedness: the novel narrativizes and mirrors with its form, how everything connects also in "a single ecosystem which is the planet" (MftF 502), as the narrator asserts in the last of the educational notes of the novel.

The selection of examples in Chapter Two demonstrates ways in which *The Ministry for The Future* goes beyond a finite spatial, temporal, and social setting to mediate the issues of climate change and its imagined response. The setting lacks spatial and temporal distancing, as it describes events happening during a near future happening on the planet Earth which creates an important tension between the actual present and future. This narrative choice already renders the issue of global climate change urgent. Often mediating a global setting is reinforced through use of contrasts between the quickly shifting perspectives: the reader is being relocated from one narrative setting to another along with every chapter.

However, these relocations also show connections between the local and the global events in the way environmental risk scenarios unfold different places in the world, and as a reverse of that, for example, melting of glaciers is being mitigated through Project Slowdown. This shows how actions local in scale can be extended to globally reaching consequences. Such local vs global dichotomy has been then further challenged through depictions of a drought in “our city” with no name, which eventually may function to showcase how different settings are interconnected: climate change will in the end manifest in the lives (places) of everyone, globally. Displacement of characters functions in a parallel way. Frank May, an American aid-worker survives a deadly Indian heat wave, and later confronts the uber-rich as well as the head of the ministry, Mary Murphy, in Switzerland. Similarly, climate change refugees are displaced to refugee camps in Switzerland. It appears that both Frank and climate refugees become displaced in space and time: he experiences survivor’s guilt after what he refers to as dying in the heat wave, and climate refugees are immobilized throughout the thirty years of the narrative and made passive with no choice to change the course of events. This displacement of characters blurs the comfortable distinction between the Global South and North.

Examples in Chapter Two depict, then, how *The Ministry for The Future* can be looked upon as a somehow planetary narrative. The novel scales up from the descriptions of Frank’s bodily experiences in the Indian heat wave, to include narrative perspectives of characters from all over the globe, and such a global outlook has been further amplified by voices of nonhuman narrators. Urban settings with stories told by human narrators are juxtaposed with contrasting to them settings, such as Antarctica, and with stories told by nonhuman narrators, such as an anthropomorphised carbon atom. Antarctica, a non-state, additionally makes one think of vast space and deep time as opposed to the other settings incorporating lives of permanent residents. The riddles give narrative voices to nonhuman actors: a carbon atom which describes its story of origin with the temporal scale stretching across millennia, also contributes to going beyond a finite setting. Finally, the temporal horizon of the *Ministry* ultimately stretches into a future that is beyond the future it primarily describes, with an almost infinity as a purview, when the readers are reminded how the effects of climate change-related extinctions will “be obvious in the fossil record for as long as Earth lasts” (MftF 43). The novel ends in two distinctive global perspectives: an airship-voyage of Mary observing the globe, and a love-fest celebration to Mother Gaia around the world, which allow to ultimately scale up from the different individual locales described so far, to the scale

of an explicitly global setting. These contrasts help relativize individual's life span in relation to the spatial and temporal settings reaching beyond a human life, and this movement away from individual to planetary is simultaneously a narrative progression from a dystopian mode depicting a deadly heat wave, to eutopian, where people live in more sustainable ways than in the beginning of the story.

Human characters are, however, not only placed in relation to the global setting through the climate-change related environmental risk scenarios they are experiencing, but also in the ways in which they oppose a global system of neoliberal capitalism as described in Chapter Two. Residents of different towns work towards dismantling the capitalist order bottom-up by proving how it lacks logic in the face of extreme environmental risk events, and act in solidarity with one another. Moreover, the first-person narrators and other included characters are attached to the places they are narrating from affectively: either through having spent their upbringing and life there or connected to these places through passion for their work. Such narrative choice of foregrounding place-attachments can create recognition in the readers, additionally, a narrative of opposing the capitalist order resists the dystopian mode of thinking where one is expected to believe that capitalism is the only functioning system available out there.

Chapter Three examined representations of human and nonhuman agency in *Ministry*. Human agents are representatives of groups who have been historically oppressed such as women, the poor, and victims of the post-colonial order. Through assigning agency to these groups in an imagined response, this depiction further challenges the status-quo of the current system of capitalism which relies on exploitation in order to secure financial profit. Firstly, the current power relations between Global North and South have been challenged, again, in how India and the movement Children of Kali originating in India have been assigned agency in this imagined scenario. These narrative choices function in order to critique the current neo-colonialism which countries of the Global South are subjected to, and such a choice achieves its pinnacle when Badim Bahadur becomes the lead of the Ministry for The Future towards the end of 2040s. In addition, the role of women as agents has been highlighted in Mary Murphy's persistence in the discursive battles when meeting central banks and oil industry executives. Additionally, Tatiana, the head of ministry's legal division, and Madame Chan, the finance minister, are also important agents towards a systemic change. Including women in the story as enacting a legal and systemic transformation, resonates with how it is vital to include all women in mitigation of the climate crisis through equal access to education

and equal rights. That notion becomes highlighted when Mary becomes a professor after retiring. These scenarios where the oppressed groups are portrayed as having significant agency also have a defamiliarizing effect, not least amplified by how the group that the ministry primarily advocates for, is the future, unborn generations.

Chapter Three displays how human agency is associated with depicted characters as being embedded in systems: they act collectively, often on an institutional level, and narrativized in such a way that it forces understanding their agency as emerging within larger political, economic and social contexts. When describing the characters as relying on technological systems, the novel renegotiates the role technology could play in people's lives. It fictionalizes implementation of ideas such as Project Slowdown which halts the melting process of glaciers using technology known from the oil industry; new internet ecology of YourLock owned by its users; going back to older and emission-free means of transportation such as sail ships improved with AI technology; or implementation of the economic solution of carbon quantitative easing and the carbon coin, which make it profitable to simply not burn fossil fuels. These innovations defamiliarize solutions one relies on in neoliberalism, which instead centre around financial profit, exploitation, growth, and self-interest.

The Ministry for the Future narrativizes a near-future in order to insulate the readers for the changes to come: it makes the complexity of the global climate crisis more accessible, and illustrates the risks that the climate crisis entails, but it does so through consistently showing how they can be overcome. A systemic change towards post-capitalism is a vital part of that project in which new social and economic values emerge. That way, Robinson's narrative becomes a reminder of what I think the following passage expresses well:

“We must face the future with hope and humbleness, but not with the firm belief that endless growth capitalism and reductionism will save us. History has reminded us repeatedly that no systems last forever, and that it is wise to make the difficult decisions now, before one is forced to do so. Or to rewrite Shakespeare's famous lines from Hamlet: *To transform, or to become transformed, that is the question.*” (Aall and Eriksen, my trans.).

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