



Fictioning the Futures of Climate Change¹

Bodhisattva Chattopadhyay

Fictionality, at a basic level, is a heuristic invitation. It achieves its effects using a combination of worldbuilding and speculative potential, the former the design and the latter the openings afforded by the conditions of the design. Within climate change fiction (aka climate fiction, cli-fi, Anthropocene fiction, eco-fiction, and similar modes of fictionality), environmental change and ecological disaster are the design in which such heuristics may be employed, which means that the trials and tribulations of the beings faced by ecological changes in these works act as the trajectories of possible futures, through which we may renegotiate the possibilities, the potentials, the demands, the horrors, and the pleasures of our various presents. The conditions of the world described are the conditions of the world as it could be, even if it does not confuse potential with the definite.

Thus, while it may be easier to imagine the end of the world rather than the end of capitalism, the fictionality of climate change fiction (hereafter, climate fiction) does not lend itself by default to apocalypticism, but to the shadow of warning and hope of the otherwise. The flexibility of reverse psychology, which is a cognate of what Tom Moylan and others have argued can be termed “critical dystopia”, has become the *raison d’être* of such worldbuilding, that is, apocalyptic worldbuilding is necessary precisely because it does not show the future, but affords a way of thinking otherwise. Hence climate change fiction is deemed similar to a haunting, but the haunting is more like the ghosts haunting Ebenezer Scrooge, ripe with tragicomedy and less the deterministic haunting of a Marxist spectre.² What climate fiction does is inhabit a possible future in order to inhibit possible futures, a joke laden with

¹ A version of this essay was first published in Swedish translation in *total*, 4/5, 2021.

² While both Jaques Derrida (*Spectres of Marx*, 1993) and Mark Fisher (*Ghosts of My Life*, 2014), have their specific takes on haunting, my own description here is akin to what Glen Albrecht terms *solastalgia*, which evokes less a sense of the past futures as nostalgia but a sense of the futures to arrive as disquiet, or the future as being already ruptured making the present unbearable. Cf. Albrecht Glen, et al.

the weight of a proverbial canary in a coal mine. Speculative potential lies in exploring the fictional future to transform the world in the present.

Two different yet distinct forms of climate fiction apocalypticism thus become visible in such worldbuilding. The first takes the apocalypse as a matter of course, but challenges its inevitability. The second rejects the apocalypse as an accelerationist wet-dream and undermines its damage (Shaviro). This brief prefatory sets out some basic arguments regarding the two and then explores how the worldbuilding and speculative potential become intertwined in the origin and effects of these works.

Hyperobject-ivity

A significant focus of environmental humanities more broadly, and within studies of climate fiction or studies of the environment in fiction more narrowly, has been Timothy Morton's concept of the hyperobject. Hyperobjects are the twenty-first century, Anthropocene-centric rendering of the idea of the sublime (which is unsurprising given Morton's background in romanticism and the Romantic obsession with the sublime in nature). Hyperobjects such as global warming are, by definition, too big to be grasped, too massively distributed in time and space to be localized or temporally delimited, even as their existence can be glimpsed in the Anthropocene era, for instance, in terms of their impact on the local, or as data. As a concept, the "hyperobject" is an easy sell for climate fiction and related criticism, even if its definitions and metaphysical characteristics are open to criticisms of vagueness. Hence, a lot of climate fiction, in seeking to capture the globality of disaster, spreads it out geographically; the novels invoke in the same breath Asia and Americas, global South and North, and everything in between and beyond. In one of the most significant climate fiction narratives to come out of the Nordics in recent years, Maja Lunde's *Climate Quartet* (of which three parts have been released so far)³ takes us to near and far futures spread across continents and cultures in a sweeping overview of possible human futures across the world. The more hopeful (but no less urgent) vision of *The Ministry for the Future* (2020), the latest novel by Kim Stanley Robinson, arguably the most important climate fiction writer of the last four decades, foregrounds international collaboration in addressing a world overrun with the disastrous effects of climate change. Much climate fiction is also directly critical of capitalism, especially consumer capitalism, which becomes twinned with geopolitics to highlight what are often seen as part of the general causes and effects of climate change, such as widespread resource transference from the global south to the global north, genetic colonialism, biodiversity loss, shifts to hyper urbanism, and unequal distribution of resources. The transnational moves of solidarity become the means of addressing the hyperobject, even if highly localized histories become the lens through which to see the larger world.

Yet the grand narratives within climate fictions of this kind are not only about Earth, but also post-Earth and beyond-Earth futures on other planets. If geoengineering is the narrative of Earthly futures, its correlate, terraforming,

³ Bienes *Historie* (2015; *The History of Bees*), Blå (2017; *The End of the Ocean*), and Perzewalskis *Hest* (2019; *Przewalski's Horse*).

the transformation of other planets into Earth or Earth-like habitat, has had a history just as long and important (Pak). Theoretically, the ecological bent of terraforming excavates two primary forms of climate change fictionality, those related to the ethics of transforming an alien world to foster human habitat and those pertaining to cost-benefits of geoengineering as a process. The first, especially, is in line with environmental philosophies that de-centre the human, not only to challenge the anthropocentrism of the concept of the Anthropocene, but also to recognize the uniquely detrimental effects of anthropogenic activity on other species that has precipitated the ongoing sixth extinction. Climate fiction of this kind tends to focus on concepts such as hybrid species, post-human species, and parallel evolution.

Futurisms in the Heat-Wave

Perhaps the most exciting wave of new climate fiction is, however, not emerging from the core of what has traditionally been called science fiction, but from what may be termed Cofuturisms. These are stealing the centre of gravity from science fictional imaginaries of the future that are associated with a more singular Anglo-American view of the world and turning towards alternative modes of representing the future that nonetheless retain science-fictional characteristics. These futurisms, for instance, Afro / African, Indigenous, Latinx, Desi, Sino, Gulf and Arab, Xeno, and their other, as yet un-futurism labelled counterparts in the non-Anglophone world, represent futures from very specific, localized imaginaries of climate change futures that nonetheless intersect with the global themes of climate change. Their strength comes from their careful dissociation with the grand narratives of Anglo-American science fiction (which were already somewhat limited in terms of their representation of much of the globe) towards micro-narratives that foreground community experiences of climate change. In many cases, petro- and necro-capitalism become the underlying reality, the explicit aesthetic forms of which are these futurisms. For instance, the explosion of Arabfuturism is often seen to follow the Syrian conflict and the refugee crisis (Tabur), which was in turn precipitated by regional instability due to a prolonged drought (Kelley et al.).

These cofuturisms, which may be termed “futures from the margins”, describe deeply personalized narratives of devastation that impact communities that are either more vulnerable from a systemic perspective or that are lesser-known. Afrofuturisms for instance, foreground the experience of Black communities in the United States (Sunstrum), while African futurisms / Africanfuturisms pushes the narratives towards the African continent, which is already seeing some of the worst effects of climate change. Indigenous futurisms, likewise, seek to foster solidarity between indigenous communities worldwide (Dillon). Writers whose works are often classed in these new futurisms, such as Harold R Johnson (*Corvus*, 2015), Nnedi Okorafor (*Lagoon*, 2014), Cherie Dimaline (*The Marrow Thieves*, 2017), and Tochi Onyebuchi (*War Girls*, 2020), often deal with similar catastrophes as those discussed above, but instead of some form of global – or globalitarian – statements on climate change, prefer to explore or deal with localized effects of disasters that are global. For many of these communities to which these writers belong, the catastrophe has already happened – that is, climate affected violence has

already forced its way through colonial expansionism and its attendant genocide, pandemics, pollution and environmental devastation (“Rethinking the Apocalypse”). The future then comes into shape not through the simplicity of a dystopia or a utopia, but through a continual struggle to remake the everyday in order to spark the possibility of a better future.

Hence, many of these futurisms are also not just oriented towards fiction, but actual community practice that seeks to support and aid struggling communities, protect and preserve their rights (including land rights), and orient visions of the future towards recuperative and restorative practices (Streeby). While the works of climate fiction themselves may not necessarily be allied towards activism, the politics and practices of these futurisms are definitely oriented towards ideas of decolonial and anticolonial activism on the one hand and restorative pleasure activism on the other (Brown). For this reason, it is inadequate to limit any analysis of these futurisms purely to the written word. They form a complex of ideas that are part political activity (for instance, aligning artistic output and manifestos to political ends), part institutional activity (for example, transforming the publishing industry to be open to coloured or non-binary creatives), and part artistic activity (in terms of fiction and art in all different media, including video games and interactive media, film and television, and more traditional visual or sonic arts). It is unsurprising then that some genres have a particular purchase in these futurisms, for instance, solarpunk, which has its dominant roots in South America, the Latinx communities in the USA, and the African continent with numerous adherents in the rest of the Global South and North. Being a distinctly community-oriented philosophy, solarpunk, which involves imagining a post-fossil fuel world, often takes its inspiration from indigenous ideas and shares many methodologies, including its anticolonial and anti-capitalist stance.

Fiction and Climate Change Futures

Climate fiction is everywhere. While fictions featuring environmental themes have been familiar to science fiction and realist literature, recent climate fiction is a buzzword as much as a bibliography. Nearly 800 out of the 860 books on the online ecofiction database maintained at *dragonfly.eco* are post-2000 works. Some of the best bibliographic studies of the phenomenon hail from these last two decades,⁴ as do some of the best critical works on the phenomenon, which also rely on philosophy developed within the time frame. And this does not even take into account studies of climate fiction in other media and arts. The causes for this explosion in climate fiction are more easily mapped than the effects of such literature. Notwithstanding Amitav Ghosh’s somewhat disingenuous dismissal of climate fictions written in the speculative mode, the fact of the matter is that climate fiction aligned to science fiction is the most active and vibrant mode of futurist speculation related to climate change in any artistic media at present. Hence, the question becomes even more

⁴ Cf. Jim Dwyer’s *Where the Wild Books Are* (2010) and Adam Trexler’s *Anthropocene Fictions* (2015)

pressing: what are the effects of these new climate fictions and what are they trying to do?

Perhaps the most direct effect is the one on the surface: inform possible scientific truths about the impending climate apocalypse, but tell it slant. If hyperobjects cannot be theorized, then their outlines may be mapped by possible lived effects of how they are being experienced. Hence, parts of Robinson's *Ministry* often read like boring bureaucratic reports or lazy journalism: possibly immense in its implications, yet banal or routine in its practice. Feeling it perhaps is even more banal due to the shifting nature of its temporality, sometimes highly accelerated as in periods of droughts or wildfires, sometimes muted in times of apparent normalcy. Survival becomes a matter of surviving the everyday, rather than affecting a global change. These climate fictions seek to deal with the root causes of the impending disaster, but as critical dystopias that may yet be effective in evoking an emotional response to a catastrophe that is already visible but not readily perceptible everywhere – and certainly not equally. From history, they draw lessons of resistance for survival, which is why many of these fictions and futurisms turn to the past (Estes), and for the future, they offer the lesson of resistance for hope. By putting reality in a sandbox, that is, using fiction as a testing environment where reality may be parsed and selectively stripped of constituents to focus on specific aspects of our life rather than others, these climate fictions can activate the triggers that most directly speak to their communities and thus be most successful in effecting positive change.

Biography: Bodhisattva Chattopadhyay is an associate professor at the Department of Cultural Studies and Oriental Languages, University of Oslo. His work concentrates on contemporary future fictions and science fiction from a science and technology perspective and spans multiple media, including texts, graphic novels, films and tv, video games, and visual arts. He is the Principal Investigator of the European Research Council project "CoFutures" and of the Norwegian Research Council project "Science Fictionality" and he runs the Holodeck (the Games Research Lab), which is the University of Oslo's first lab dedicated to research on video games. Chattopadhyay is also a former editor-in-chief of *Fafnir*.

Work Cited

Albrecht, Glen, et al. "Solastalgia: The Distress Caused by Environmental Change." *Australasian Psychiatry*, vol. 15, suppl. 1, 2007, pp. 95–98, doi.org/10.1080/10398560701701288.

"Book Database." *Dragonfly.eco*, www.dragonfly.eco/title-author-publication-date-search/. Accessed 26 June 2021.

Brown, Adrienne Maree. *Emergent Strategy*. AK Press, 2017.

- Dillon, Grace L. Introduction. "Imagining Indigenous Futurisms." *Walking the Clouds: An Anthology of Indigenous Science Fiction*, edited by Dillon, U of Arizona P, 2012, pp. 1–14.
- Estes, Nick. *Our History is the Future: Standing Rock Versus the Dakota Access Pipeline, and the Long Tradition of Indigenous Resistance*. Verso, 2019.
- Ghosh, Amitav. *The Great Derangement: Climate Change and the Unthinkable*. The U of Chicago P, 2016.
- Kelley, Colin P., et al. "Climate Change in the Fertile Crescent and Implications of the Recent Syrian Drought." *Proceedings of the National Academy of Sciences*, vol. 112, no. 11, 2015, pp. 3241–46, doi.org/10.1073/pnas.1421533112.
- Morton, Timothy. *Hyperobjects: Philosophy and Ecology after the End of the World*. U of Minnesota P, 2013.
- Moylan, Tom. *Scraps of the Untainted Sky*. Westview Press, 2000.
- Pak, Chris. *Terraforming: Ecopolitical Transformations and Environmentalism in Science Fiction*. Liverpool UP, 2016.
- "Rethinking the Apocalypse: An Indigenous Anti-Futurist Manifesto." *Indigenous Action*, 2020, <https://indigenouaction.org/wp-content/uploads/rethinking-the-apocalypse-PRINT.pdf>. Accessed 26 June 2021.
- Shaviri, Steven. *No Speed Limit: Three Essays on Accelerationism*. U of Minnesota P, 2015.
- Streeby, Shelley. *Imagining the Future of Climate Change: World-Making Through Science Fiction and Activism*. U of California P, 2017.
- Sunstrum, Pamela Phatsimo. "Afro-mythology and African Futurism: The Politics of Imagining and Methodologies for Contemporary Creative Research Practices." *African SF*, special issue of *Paradoxa*, edited by Mark Bould, no. 25, 2013, pp. 113–30.
- Tabur, Merve. *Ends of Language in the Anthropocene: Narrating Environmental Destruction in Turkish, Arabic, and Arab Anglophone Speculative Fiction*. 2021. Pennsylvania State University, PhD dissertation.