

# Climate Justice Approaches In “Sand” And “On Darwin Tides”

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## **Abstract:**

*Fiction has always addressed climate change, but since the last century, writers have emphasized the theme through several genres, including climate fiction, which encompasses works focused on climate change and its impacts on the planet. Among the multiple aspects these narratives address, climate justice plays a crucial role. Studies show that developing countries, mainly located in the Global South, are the ones that suffer the most the devastating effects of floods, extreme weather, heat waves, and species extinction caused by anthropogenic climate change. Such impacts bring to the debate the issue of climate justice since it underscores its inequality. Climate fiction plays a significant role in presenting possible scenarios caused by climate change, implicitly or explicitly pointing out who and what is impacted by its adverse effects. Perspectives on climate justice are analyzed in the short stories “Sand” by Conor Corderoy and “On Darwin Tides” by Shauna O’Meara. These short stories portray how the characters deal with climate effects and how physical spaces, natural or urban, are affected. Their narratives emphasize issues related to climate justice, including the difficulties people face in surviving in deeply transformed realities and the discrepancy in the perception of the impacts of the climate crisis according to economic and social conditions. These stories stress the need to reflect on how the most vulnerable populations and ecosystems are affected and how climate justice can prevail to change this unfair scenario.*

**Keywords:** *Ecocriticism; Anthropocene; Climate change; Climate fiction; Climate justice.*

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## **I. Introduction**

According to Cheryll Glotfelty and Harold Fromm in their seminal *The Ecocriticism Reader* (1996), Ecocriticism emerged around the end of the 1970s, firstly based on isolated research by scholars investigating the relationship between literature and ecology. In the following decade, collaborative work was established, and the creation of the Association for the Study of Literature and the Environment (ASLE) and the journal *Interdisciplinary Studies between Literature and the Environment* (ISLE) in the 1990s settled the field as a critical school<sup>1</sup>. Within the framework of ecocritical studies, literary narratives that deal, explicitly or not, with themes related to the environment and ecology are investigated to — among other goals— verify how they establish interconnections between nature and culture. In this study, those narratives are examined to convey how climate change, climate fiction, and climate justice may influence our understanding of the environment as we navigate the climate crisis.

Climate change and its consequences, regardless of their causes, have been explored in speculative fiction since the last decades of the 19th century<sup>2</sup>, mainly in science fiction, focusing on apocalyptic futures caused by climate change. Adam Trexler refers to a “considerable archive of climate fiction”<sup>3</sup> from the 1950s onwards, with works that became classics such as *Sands of Mars* (1951) by Arthur C. Clark and *Dune* (1965) by Frank Herbert. Publications on this theme increased significantly at the end of the 1980s and 1990s and, from the 21st century onwards, “climate fiction steadily expanded”<sup>3</sup>.

Journalist Daniel Bloom is known for having coined the term climate fiction (cli-fi) in 2007, advocating the emergence of a new literary genre, although this fact is debated. Pawel Frelík, for example, doesn’t agree that climate fiction suddenly emerged in the early 2000s. For him, “climate fiction is science fiction”<sup>4</sup>, and the latter already addressed “the interactions between human progress and nature”<sup>4</sup> decades ago. The resistance to associating narratives that explore climate change with science fiction is due, according to Frelík, to the marginalization of the genre by academia, categorized as “low literature” due to its origins in pulp fiction<sup>4</sup>. For the academy, the popularity and commercial success of science fiction would be evidence of its lack of artistic depth since the genre would be more interested in pleasing the tastes of its audience than in addressing literary issues considered more relevant (such as those discussed by Modernism, for example). Even

so, for Frelik, cli-fi is an integral part of the textual framework of science fiction, and “its relevance to our lives and the future of the planet has been growing explosively in the last several decades”<sup>4</sup>, no matter how it is denominated.

Regardless of being called climate fiction, eco-fiction, or Anthropocene fiction<sup>4</sup>, contemporary climate fiction encompasses narratives that explore the consequences of anthropogenic climate change<sup>5</sup>, portraying scenarios that show the planet (and everything on it) impacted by the climate crisis, whether in the distant future, the near future or the present. How these impacts occur and who suffers their effects are crucial aspects of the climate crisis discussion, as Schneider-Mayerson observes:

*Over the past decade, scholars and activists in the Global South and allies in the North have argued compellingly that climate change is an ethical tragedy that produces not only an unjust distribution of vulnerabilities and impacts between generations (intergenerational injustice) but also between different groups in the present and future (distributive injustice), often reflecting and reinscribing historical cartographies of exploitation and colonialism<sup>6</sup>.*

As the crisis intensified, the debate about who is responsible for strengthening it and who is most affected by its consequences became inevitable. Although Schneider-Mayerson argues that there is a gap in most contemporary climate fiction in issues related to climate justice, more recent publications have taken a more incisive approach to this issue<sup>6</sup>.

Broadly speaking, climate justice addresses how climate change affects vulnerable communities and ecosystems around the planet and the struggles to engender fair and equitable solutions to solve or mitigate those consequences, such as access to resources, water and food security, migration, the rights of Indigenous peoples, and reforestation. As climate fiction portrays possible scenarios conditioned by climate change, we assume that, explicitly or not, these narratives point out who and what is impacted by the crisis and its adverse outcomes, enabling discussion about how climate justice is established and how fair its manifestations can be.

The anthologies *Winds of Change: Short Stories about Our Climate* (2015) and *Everything Change: An Anthology of Climate Fiction* (2016) bring together short stories focused on portraying the realities experienced by characters living in times when the climate crisis deconstructs the “normalcy” of life. In this context, they address issues related to climate justice. The collections’ forewords emphasize these narratives’ joint commitment to approach the multifaceted aspects of the climate crisis. In the first volume of *Everything Change*, Kim Stanley Robinson, an established author of science and climate fiction, points out that the short stories are “about things that will be happening soon, as people try to adapt to a changing climate and its impacts on our biosphere”<sup>7</sup>. Likewise, Michael Rothenberg, in *Winds of Change*, states that “poets, writers, and artists of every discipline have begun a powerful and unceasing global analysis of what the world is, and what it will be like, for our children, as everything we thought we knew about our planet Earth has been compromised and set adrift”<sup>8</sup> (2015, loc.55). Thus, the collections attest to the ongoing production and dissemination of fictional narratives in the context of the Anthropocene, the era in which imbalances in the climate due to anthropogenic causes culminate in profound and often traumatic changes and repercussions, both in the human and non-human spheres. The analysis of the short stories “Sand” by Conor Corderoy and “On Darwin Tides” by Shauna O’Meara aims to demonstrate how their forms of representation and considerations on the impacts of the climate crisis outline reflections on the relevance of climate justice in the face of the inequalities that affect populations and ecosystems, especially the most vulnerable.

## II. Analysis And Discussion

### Facing Climate (In)justice and the Imponderable in “Sand”

In “Sand,” published in *Winds of Change*, the reader finds three situations related to climate change involving children and their families. In the first, Babacar, the son of a Senegalese family, witnesses his parents’ despair as they deal with the factory closure where Ibrahim works due to a brutal drought in the region. When his wife Awa asks him how they will survive this situation, Babacar watches his father reply: “Awa, Awa, what can I do? I am nobody. The order comes from Munich. Our Senegal plant is closed. They have gone. What can I do?”<sup>9</sup> Ibrahim’s speech defines his position on the issue: he is “nobody.” Invisible to his employers, he is discarded when the conditions for generating profit are altered by climate change. Ibrahim and his family are undoubtedly the hardest hit without a job and the conditions to survive. Forced to leave the village where they live due to the harsh conditions imposed by the relentless drought, they become climate refugees, and the family’s survival is uncertain. At the end of the story, it is tragic.

The second situation involves the family of another company employee, Peter, a C.E.O. He is not from Africa and does not live in Senegal, so we can infer that he comes from the northern hemisphere, probably the United States or Europe. With the factory’s closure in Senegal, he tells his wife they must move to Canada, where a new factory will open. The couple’s son, like Babacar, watches his parents argue over his wife Moira’s refusal to move to Canada. She doesn’t like the place and doesn’t want to give up the lifestyle she’s used to.

Impatiently, Peter tries to explain why the move is necessary, but Moira becomes increasingly hysterical and inflexible in front of her son’s frightened eyes.

Comparing the situation of the two families, it can be seen that, while in Ibrahim’s family, the discussion becomes dramatic because it involves survival, in Peter’s family, the argument is limited to a marital disagreement. The family in the northern hemisphere has a comfortable life and doesn’t even think about the terrible impacts of the drought ravaging Senegal and threatening to decimate Babacar’s family. With these scenarios, the story emphasizes the discrepancy in the distribution of the consequences of climate change on the social and economic geography of the planet, as noted by Elizabeth Cripps: “climate harm is about lack of privilege. It hurts those already disadvantaged worst of all. In sweeping terms, that means the global south”. The populations living in the developed countries of the global north, on the other hand, are the least likely to experience the climate crisis as forcefully as Babacar, Awa, and Ibrahim since “this group is well placed to adapt to the negative side effects of the development trajectory they have helped generate and have largely benefited from”<sup>10</sup>, as exemplified by Peter’s family.

The third scenario presented in “Sand” is set in Greenland, in the city of Qasigiannuit. A young boy, Akysya, watches his father in his sleep after a night of drinking. In these moments, the man becomes abusive and beats his son, but for Akysya, the despair of seeing him in this situation represents “a deeper pain than his bruises” (Sand, loc. 1925). Akysya finds solace in the company of Dr. Petersen, a scientist who monitors the ice cap of the northern hemisphere. Akysya leaves her father sleeping and goes to Dr. Petersen’s house. There, she hears a dialog between the scientist and another man, an executive, whose speech is representative of the denialism of the climate crisis. The character is not named, and we can infer that he symbolizes the forces of big business that systematically exploit the planet’s resources for profit. The scientist tries to explain to him the dangers of the destruction of marine plankton and the melting of the polar ice caps, but the man is dismissive of all arguments. The narration of the moment when the executive leaves Dr. Petersen’s house is symbolic, functioning as a record of how global capitalism positions itself about the discussion on climate change, as well as a foreshadowing of the end of the story:

*The man shrugged and moved past them. At the door he stopped and turned. Akysya could now see the ice cliffs reflected in his lenses. The man shook his head. “Positive feedback, the tipping point: scaremongering. We got there a century ago, Dr. Petersen. There has been no way back since the industrial revolution began. This is a living planet. Catastrophic change is part of how it works. It adapts.”* (Sand, loc. 2003).

Minutes after leaving the site in his Land Rover, sounding like an ironic comment on the executive’s speech, the imponderable happens: the wall of icebergs located two and a half kilometers from the city collapses into the sea, emitting a noise that, to Akysya’s ears, sounded “indescribable. As though the earth and the sky were tearing in half.” (Sand, local 2003). The polar ice cap disintegrates, and the cataclysm generates a gigantic wave that advances over Qasigiannuit, tracing Akysya’s fate and following its path into the North Atlantic. Its devastating effects will be felt by Peter’s family, specifically by the boy, who, from his apartment window, follows the strange effects on the city’s sky and sea until a sixty-meter wave appears “to sweep away in a few minutes what man had built over half a millennium” (Sand, loc. 2030).

The apocalyptic scenarios in the story are contrasting: the hardships of the African drought, which takes Awa’s life and leaves Ibrahim and Babacar adrift, and the advance of the waters due to the melting of the polar glaciers over the northern hemisphere. These scenarios point to the paradoxes of climate change and its frightening, adverse, and unequal effects on the planet, as can also be seen in “Darwin Tides.”

### **Struggling to Survive the Climate Crisis in “On Darwin Tides”**

“On Darwin Tides,” from the first volume of the *Everything Change* anthology, is a first-person narrative by the protagonist Maslina, a girl from the Sama Malay ethnic group. Her story shows how climate change strongly affects Malaysia, specifically the province of Lahad Datu, located on the Dent Peninsula in South Asia. The year is 2048, and Maslina finds herself in the Lahad Datu night market, clandestinely selling handmade rugs to tourists. The heat is scorching, and she comments that she “would give anything for a plastic stall sheet to shield [herself] against the late-afternoon sun,”<sup>22</sup> highlighting the extreme heat waves that punish the peninsula. While talking and negotiating with customers, Maslina depicts different scenarios caused by climate change in the region.

Each of her observations highlights an environmental problem. Tourists kayak in the algae-infested waters of the bay, which results in a foul smell and excess toxins in the water. At the market, “painful to look at against the sun-blached sky, coconut trees drape desiccated fronds towards the asphalt” (ODT, p. 157). Commenting on the handicrafts made from pieces of coral, Maslina informs that certain parts of the reefs have already been bleached, and their coral is dead. A tourist admiring the rugs comments that on Saturday, she will dive in the reefs and have the chance to see something before the corals disappear. These tourists, called “last minute” by the locals, are visitors from developed countries who take advantage of the “last chance” to know the region’s natural wonders before the environmental collapse occurs. Despite their questionable motivation,

they are unconditionally accepted because they provide a source of income for people amid the economic and social chaos caused by the impacts of the climate crisis. The better social and economic conditions of these people allow them to get to know the regions of the Global South where these effects are seen daily, as Maslina points out:

*It is April in the second half of the worst El Niño on record. In December, two category-five typhoons raged across the South China Sea, decimating Kedah, Perlis, Kelantan, and Pahang and, with them, most of Peninsula Malaysia’s rice harvest, agriculture, and palm oil. Uprooted Malaysians and flood refugees from the Philippines, Bangladesh, China, Laos, and Vietnam streamed into my world: drought-stricken Eastern Sabah. There is not enough water, not enough food, and not enough jobs. Without Last Chance tourists like this woman, we’d be having food riots and street battles like Indonesia.* (ODT, p. 158).

The scenario described is one of environmental, economic, and social destruction. It emphasizes Elizabeth Cripps’ view that those “least responsible for climate damage are losing everything, and they are losing it as a consequence of colonialism, slavery, oppression and systematic disregard for human rights.”<sup>9</sup> Maslina’s and her brother Tadi’s living conditions corroborate Cripps’ observation since environmental impacts have deeply worsened their lives. According to Maslina, there were large protests in 2045 due to hunger in the region caused by the climate crisis. During one of these protests, they lost their parents and were left stranded. Unsure whether their parents had been arrested or killed, they had to build survival strategies. Without documentation, they are considered illegal and institutionally invisible. As such, they are chased by the state apparatus in charge of this control, called ESSFOR, a controlling and surveillance police. They lack housing, access to drinking water and adequate food, schools, jobs, and dignity.

The story’s title alludes to the British scientist Charles Darwin, who elaborated on the issue of species’ adaptation for survival in his theory of evolution. Maslina and Tadi, as climate refugees, struggle to adapt to those harsh conditions daily. The end of the story offers some way out of their dire straits through an American NGO, which helps Maslina sell her rugs and get enough money to obtain the documentation that will allow her and Tadi to leave the demeaning clandestinity and become visible to institutional systems. Even so, we can question these forms of aid, which were casual in Maslina’s case: the NGO’s purpose is to look after the fate of the region’s orangutans, not the people. It is true that both humans and non-humans are impacted by climate change, and all should be equally considered, but this is not the case, as the story demonstrates. The mitigation, adaptation, and compensation mechanisms that guide the principles of climate justice<sup>9</sup> should operate synchronously to distribute climate justice on a large scale, and, once again, this is not what O’Meara’s narrative emphasizes<sup>3</sup>. Without those mechanisms, the climate refugee boats will undoubtedly continue to try to dock in Lahad Datu and other places of the world. Discriminated and undocumented ethnic groups will continue to try to survive (and die) in degrading conditions. Ecosystems, animals, plants, and marine life will follow their path to extinction, showing that stories like Maslina’s may continue to be told.

### **III. Conclusion**

The conflicts established in the short stories evoke environmental and ecological issues related to the idea of a planet affected by misguided human actions and procedures concerning the use and exploitation of the biosphere, emphasizing how global warming changes spaces, non-human realities, human lives, and the lives of other species in the face of extreme climatic events such as severe droughts, heat waves, floods, rising sea levels, melting polar ice caps and species extinction. Such actions result in substantial repercussions at local and global levels and impact people according to their geographical, social, and economic conditions, determining how those people realize and experience the consequences.

By portraying these complex issues through imagined worlds, contemporary climate fiction instigates reflections that can contribute to the political, scientific, social, and economic debate that permeates the concerns and anxieties that climate change raises. Through their narrative strategies, the short stories highlight how climate change affects the spaces and how the characters deal with them while experiencing the consequences and the imbalance of its impacts, allowing the reader to ponder how a notion of climate justice (or injustice) is constituted.

In this sense, the stories corroborate Tahseen Jafry’s observation that “it is our responsibility to address the root causes of climate inequality and prioritise those who are the most vulnerable.”<sup>11</sup> Similarly, Schneider-Mayerson ponders that as “we move into an era in which socioenvironmental concerns will be defined by adaptation, triage, and migration in addition to mitigation, it will be critical to keep justice firmly in mind.”<sup>16</sup> Therefore, by incorporating the narrative framework of justice and equity<sup>12</sup>, climate fiction makes it possible to expose, debate, and enhance the claims defended by climate justice.

As well as offering the readers representations of the gloomy scenarios that climate change brings about, “Sand” and “On Darwin Tides” show that it is imperative to point out and discuss who the agents responsible for exacerbating the climate crisis are, for example, at the institutional, governmental, and productive levels. Above all, it is necessary to point out to whom— human and non-human— the burden of

their injustices will fall so that we can reflect and act on their propagating mechanisms. Glotfelty observes that “[a]n ecologically focused criticism is a worthy enterprise primarily because it directs our attention to matters about which we need to be thinking. Consciousness raising is its most important task.”<sup>1</sup> In this framework, contemporary climate fiction and its criticism have increasingly become a realm for engendering and reverberating such reflections.

### Endnotes

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<sup>1</sup> Corderoy, Connor. (2015). Sand. In Mary Woodbury (Ed). *Winds of change: Short stories about our climate*. Moon Willow Press. Local 1879- 2036. Kindle, loc. 1879. Further references are to this edition. The short story’s title will be included in the parenthetical reference in the body of the text, followed by the location of the text in the Kindle edition.

<sup>2</sup> O’Meara, Shauna. (2016). On Darwin tides. In Joey Eschrich, Manjana Milkoreit, Martinez, Meredith Martinez (Eds.) *Everything change: An anthology of climate fiction* (pp. 156-177). Arizona State University, p. 156. Further references are to this edition. The short story’s title will be abbreviated ODT and included in the parenthetical reference in the body of the text, followed by the page number.

<sup>3</sup> According to Cripps, mitigation in the context of climate change means reducing greenhouse gas emission levels, as set out in the Paris Agreement (2015), for example. Adaptation implies instituting public policies to protect ecosystems and life forms from the impacts of the climate crisis, and compensation refers to reparations for the losses and damage caused and suffered.

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