

Learning from our vulnerabilities: insights from Octavia E. Butler's parable of the sower and West Sumatra's 2024 flood disasters

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Abstract. This article discusses the correlation between flood disasters in West Sumatra in March and May 2024 and the science fiction novel *Parable in the Sower* by Octavia E. Butler. The novel explores how social and environmental degradation amidst the extreme weather and climate change in the fictional setting of America in 2024–2027 mirrors West Sumatra's lack of preparedness to face similar situations in reality. The novel warns people of the consequences of environmental issues by addressing our vulnerabilities and resistance to change. Through the concept of "Earthseed", the story reminds society to work toward positive changes through resilient infrastructure, disaster preparedness, and empathy when facing natural disasters.

1 Introduction

West Sumatra was hit by large-scale natural disasters related to floods and landslides twice in 2024. Intense monsoon rainfalls in March and May 2024 triggered flash floods, notably volcanic mudflows surrounding Mount Marapi and landslides in several areas. One significant disaster mainly resulted in the traffic closure in Lembah Anai due to a road collapse lasting over two months. Those disasters reveal our vulnerabilities in several factors, such as environmental issues, fragile infrastructure, and preparedness to mitigate or prevent natural disasters.

1.1 West Sumatra flood and landslide disasters on March and May 2024.

The natural disasters that struck West Sumatra were related explicitly to flash floods and landslides in March and May 2024. The first disaster happened between 7 March and 13 March 2024, when heavy rainfall triggered flash floods and landslides, resulting in 26 casualties, extensive damage, and an estimated economic loss of Rp170.4 billion [1]. Meanwhile, the second disaster occurred from 11 May to 12 May 2024 due to intense heavy rainfall resulting in flash floods and volcanic mudflows, with 67 casualties, particularly in Agam and Tanah Datar regencies [2]. The second disaster also caused traffic closure from Padang to Bukittinggi due to the collapse of roads near Lembah Anai.

The disasters in March and May 2024 resulted in several effects. Damages to bridges, roads, houses, rice fields, schools, power outages, and blackouts affected more than 4000 people in several areas. The vital traffic

road from Padang to Bukittinggi and vice versa was closed due to a road collapse around Lembah Anai, diverting the traffic to Malalak or Stinjau Lawik. This diversion added more time and congestion on those alternative routes because of the economic significance between Padang and Bukittinggi. Moreover, The Indonesian National Board for Disaster Management declared West Sumatra a state of emergency for 14 days due to the floods in May 2024.

1.2 Parable of the sower by Octavia E. Butler

Parable of the Sower (1993) is a novel by Octavia Estelle Butler which revolves around environmental issues in America, starting from 2024, when the main character, Lauren Olamina, turns 15 years old, continuing through 2027 when she is 18. The novel explores the fragility of places near Los Angeles facing climate change and social collapse. The main character, Lauren Olamina, narrates her struggle through her journal as she envisions "Earthseed" as her religious view to survive.

Lauren Olamina is a 15-year-old black woman residing in the Los Angeles region amid social disintegration in 2024. She lives in a neighbourhood, which is a precarious haven enclosed by walls. Outside those barriers, individuals in need fight for their lives. At the same time, criminals who are addicted to fireworks prowl the area, starting fires. Lauren possesses two unique qualities: an unusual perspective and hyperempathy, or the ability to experience the emotions of others. She created the Earthseed philosophy based on the notion that "God is Change." Following three tragic events—her father goes missing, her brother Keith dies, and the neighbourhood collapses due to fireworks—Lauren flees with Harry and Zahra [3, 4]. The novel's story ends in

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2027 when Lauren is 18 and continues her journey far to the north.

The entire storyline continues in the sequel *Parable of the Talents* (1998). It remained unfinished when Butler passed away in 2006, leaving the planned sequels *Parable of the Trickster*, *Parable of the Teacher*, *Parable of the Chaos*, and *Parable of the Clay* never written [5].

The narrative of *Parable of the Sower* paints the struggle of survival while searching for the meaning of life as the novel's dominant theme. Lauren's journey envisioning her religious view signifies her hypocrisy of people's pain and pleasure as she experiences tragedies and her effort to survive the harsh environment and social collapse. The novel's theme explores the vulnerability of our life and enforcing the idea of inevitable change, reflected in Lauren's Earthseed belief to encourage adaptability.

As the *Parable of the Sower* falls into the speculative fiction genre, the novel distances itself from everyday reality. It presents fantastical, imaginative, and, in this case, futuristic speculation of America from 2024 to 2027. The novel foreshadows climate change challenges, especially with extreme weather events and social collapse, such as poverty and unlawful and rampant violence. Iossifidis (2020) argues that reading speculative fiction, notably *Parable of the Sower*, contributes significantly to "learning in community" as the main character, Lauren, encompasses hyperempathy, signifying the importance of her vision of the world that needs to change [6]. Meanwhile, Guerrero stated that speculative fiction can analyse the world following a disaster and assist in identifying potential outcomes that project and respond to actual feelings of uncertainty and social unrest [7]. While speculative for 1993's standard, the novel still serves as a reminder and a warning of our vulnerability in mitigating and preventing natural disasters and social collapse in our actual 2024 today.

1.3 Literature and its function

Human problems, from personal ones to catastrophic natural disasters, have been staple subjects of literature. All stories, no matter how light, revolve around conflicts and tensions, making it almost impossible for writers to work outside "the tight confines of problem structure." [8]. In an emerging perspective of literary Darwinism, which scholars like Jonathan Gottschall and Joseph Carroll champion, literature is seen as a tool to simulate human problems. It allows us to observe how problems unfold or play out from a safe distance as readers. It enables us to see the cause and effects of the problems and the scenarios they are dealt with. In short, literature is the training ground for our minds to understand and approach conflicts.

Angus Fletcher, a literary scholar with a background in science, suggests that literature should be seen as a type of technological innovation. In his pragmatist view, literature and narrative have functions akin to technology: to solve human problems [9]. This perspective shows that literature can address human concerns and worries and offer solutions.

With this adaptationist and functional view of literature, one can see that different genres of literature address various issues and offer different solutions to them. One should not look further than science fiction for major human concerns and conflicts relating to the present and the future. Throughout history, we have seen plenty of examples of this. Mary Shelley's *Frankenstein* (1818) explores how unchecked scientific ambitions can result in disasters, encouraging us to take a humane approach in our scientific endeavours. George Orwell's *1984* (1949) looks at how totalitarianism seeks to annihilate human freedom and abuse technology for total control, making it clear that the solution for us readers is the rejection of dictatorship. *The Hunger Games* series (2008-2010) investigates how people are always caught in crossfires between the ruling status quo and oppositional elements, forcing us to think of ways for a non-violent change.

There have also been great works from this genre that draw our attention to environmental issues and how our species deal with them. *Dune* by Frank Herbert (1965) highlights the resistance against exploiting natural resources and promoting ecological balance. Cormac McCarthy's *The Road* (2006) dives deep into the social effects of food scarcity resulting from a mysterious natural disaster in which human beings must choose between cannibalism or cooperation for survival.

Works of black American female writers, such as N.K. Jemisin and the late Octavia Butler are particularly relevant to the discussions of how humanity should react to natural disasters. Jemisin's *The Fifth Season* (2015) imagines a world in which intense seismic activities plague the world. While the hero, Essun, undertakes a personal journey in search of her lost daughter, we, the readers, are invited to open our eyes and change our ways of dealing with nature. Rather than controlling nature, we must adapt to and respect it.

Butler's *Parable of the Sower* (1993), a precursor and a direct influence for the novel mentioned above, perhaps deserves more considerable praise. The novel's dystopian world is affected by climate change, and the populations must face severe droughts and extreme weather. This matter is exacerbated by two factors: the government in the novel is corrupt and ineffective in handling environmental crises. At the same time, influential corporations are controlled by greed and drive for profits. It is this combination of these problems that the hero, Lauren Olamina, and her community must face. In her journey, she develops a philosophical teaching called "Earthseed", which promotes the understanding that humans must adapt to change and strive to create positive changes through collective efforts. This lesson from a fictional work may be a real solution to our real problems, especially about our attitude, government and corporations included, to environmental challenges.

1.4 Ecocriticism

Emerging in the 1990s, Ecocriticism responded to environmental concerns about human relationships with nature. Literature and other cultural products can be explored from the perspective of nature and

environmental issues reflected in texts to promote awareness. With closer ties to biology, ecology and environmental studies, enriching literary interpretation is significant in promoting an interdisciplinary perspective of the interaction between character development, plot, or even themes with nature and environment. Exploring natural disasters amplified by some issues in nature, social policies, and mitigation/prevention, the ecocritical lens helps to understand the nature-human connection, primarily when the literary work serves as a warning and foreshadows the near future [10].

One of the most common ways to see the relationship between literature and nature is from how nature is presented in literary works. Some works would present nature as a powerful, untouched space wherein humans' lives might be threatened. This approach sees humans as separate from, if not opposed to, nature [11]. They are simply two different entities which probably need to compete with each other. Coleridge's poem "The Rime of the Ancient Mariner" might be one of the most outstanding poems featuring the fear and terror that nature can cause to humans. "The ice was here, the ice was there, / The ice was all around: / It cracked and growled, and roared and howled, / Like noises in a swound!" (1798:9:59-62). The stanza might frighten the readers, showing how nature can be hostile and deadly to humans simply because humans' lives (alone) are considered the most important. However, more literary works recently promoted biocentric awareness. Nature is no longer regarded as fearful, frightening and untouched. Humans are part of nature, like animals, plants and other living creatures. Therefore, all living beings' lives are as meaningful as humans. As Desjardins puts it, "[all] living beings, simply by being alive, have moral standing and deserve moral consideration" [12].

Deeper into the spirit of Ecocentrism (putting the ecosystem at the centre of ethical considerations and considering sustainable and healthy ecology as the essential thing in life), Arne Naess and George Sessions developed the eight principles of deep ecology social movement. Some, if not all, of these principles are now frequently promoted by many authors in their literary works to promote environmental awareness. These articles analyse the two issues from the perspective of the first, third, and fourth principles of deep ecology social movement [13, 14]. Principle number one mentions that: "The well-being and flourishing of human and nonhuman life on Earth have value in themselves. These values are independent of the usefulness of the nonhuman world for human purposes." The second one argues, "Humans have no right to reduce this richness and diversity except to satisfy vital needs." Meanwhile, the fourth believes that: "Present human interference with the nonhuman world is excessive, and the situation is rapidly worsening" [12]. These three principles would presumably prove that nature has come to a devastating mode due to humans' greediness and recklessness.

2 Results and discussion

Parable of the Sower is a constant reminder that environmental disasters pose a severe threat either when published in 1993 or as we see it today [3]. Global warming, climate change, famines, and scarcity of necessities are problems that not only exist in a fictional storyline but also serve as a warning that the threats are real and not something we can ignore. West Sumatra's flood disasters that occurred in 2024 become correlated to every warning the novel delivered. Although specific to flash floods, landslides, and road collapses, these disasters encourage people living in West Sumatra to adapt and be resilient to avoid similar disasters happening in the future. People can no longer be the victims; instead, they can start to be partners in shaping the environment, making it better, and not leading into the next catastrophe.

2.1 Environmental issues

One pressing concern in West Sumatra's flood disasters is the failure to put things in order due to illegal buildings surrounding the Anai watershed. Walhi Sumbar (2024) accused the government of failure to manage this area, as this failure is characterised by the proliferation of utilisation/cultivation activities that do not align with their intended use [13]. One of them is using borders to construct hotels and cafe buildings. The National Land Agency (BPN) noted approximately 107 built objects along the Lembah Anai area. According to the BPN, the built objects include stalls/cafes/restaurants, hotels, mosques, pools and others, such as spring baths, PT HSH Rest Area and Xakapa Cafe and Resto [14].

The government's failure to manage the area resembles the failure of the government in the *Parable of the Sower*, which was plagued with rampant greed and ignorance to preserve the environment. While West Sumatra is not as dystopian as 2024's chaotic America in the novel, the government's (federal, state, local) existence as tax collectors while ignoring starvation, disease, and mob rule signifies the distrust between the society and government [3]. While a series of floods struck West Sumatra, the novel's recurring theme revolves around water scarcity. Both opposite disasters related to waters are connected by one thing in common: greediness. The lawlessness in the novel creates people who are greedy and dangerous; the authorities are only there to collect the fees and are not interested in solving the social problems of the neighbourhood or the environment [3]. The government showed the same ignorance by letting the buildings surround the Anai watershed until the flash flood happened, which created several problems. One particular problem is the collapsed road in Jalan Raya Padang-Bukittinggi in Anai, which disrupted traffic, highlighting another issue of fragile infrastructure in West Sumatra.

The concern for environmental issues here aligns with the second and fourth principles of the deep ecology social movement. Excessive human interference with the Anai watershed and the failure to manage the area became the centre of the disaster of landslides, flash floods, and road collapses. Humans cannot interfere with or reduce the area intended to stabilise the watershed around Anai.

2.2 Fragile infrastructures

Parable of the Sower (2023) highlights infrastructure decay as roads, bridges, and utilities deteriorate in the surrounding Los Angeles area and the entire United States. With societal breakdowns that have occurred in the entire country because of global warming or climate change, the situation is worsening with corporate greed, racism, and spreading disease everywhere. The government does not care to build more roads as there is not enough money to build the road condition is depicted to have more dirt than asphalts, with several collapsed houses and scraps of people's belongings [3]. This situation signifies a lack of maintenance to keep the facilities applicable to society, adding problems to the security of people as mob rule is running rampant near the neighbourhood of Lauren.

The damaging infrastructure, such as a collapsed road approximately 200 meters in the Lembah Anai area due to flash floods that occurred on 11-12 May 2024, created significant problems ranging from mobilities, economy, and logistics. People who live in Lembah Anai are isolated, limiting access to work, education, and health. At the same time, all kinds of vehicles could not pass the area entirely, disrupting the distribution of products and logistics [15]. The area is closed for more than two months until it is opened on 21 Juli 2024, affecting the connectivity of Padang and Bukittinggi and creating more problems in the delivery of food, medicine and necessities as they were hampered, resulting in shortages and rising prices [16].

Infrastructure improvements and constant maintenance are the recurring concerns in both the novel and West Sumatra's flood disasters, as the fragility of those utilities affects social activities. Both governments should prioritise improving and maintaining roads, bridges, and other vital utilities because their neglect creates unstable conditions and uncertainties socially and psychologically. Mobility is the core of socioeconomic growth, and both governments should understand that mitigation of infrastructure-related disasters takes the utmost priority to stabilise situations, notably during disasters. It will also highlight how prepared governments are for natural disasters during these latest climates.

The fragile infrastructure is in line with the second principle of deep ecology social movement as the infrastructure decay affects the life of the society there. The deterioration of roads and bridges signifies the disturbance of the well-being and flourishing of human and nonhuman life on Earth.

2.3 Disaster preparedness

Parable of the Sower (2023) and West Sumatra's flood disasters in 2024 reveal how imminent natural disasters could occur anytime and anywhere, requiring resilience, hardship, and preparedness.

People need to stay resilient as the places are ravaged by environmental damage and social collapse, as seen in the novel. Lauren senses threats loom at a large scale, and she must endure and witness violence caused by people suffering from water scarcity, fragile infrastructure, and diseases that spread rampantly. She develops Earthseed to emphasise other people's emotions intensely, as the idea revolves around inevitable changes for humanity's task by acknowledging hardship, risk, and concerns to be resilient [3]. She believes people must adapt, collaborate, and shape the inevitable changes instead of succumbing to the despair of impending doom, as God can change, and people also can change [3, 4].

While the novel *Parable of the Sower* is rooted in the religious context of Christianity, West Sumatra's people, with a Muslim majority, should acknowledge the determination to prepare for imminent or predictable disasters. People should realise that the threats are real, and risk planning is the effort to avoid becoming the victims of natural disasters related to flash floods and landslides.

The local term 'galodo' literally means rocky terrains. However, the term can loosely refer to flash floods and landslides [17]. With such revelation, these natural disasters are something people are already familiar with, and they must find a way to overcome them. Government and people in West Sumatra can learn from the novel that disaster preparedness requires community awareness and collective action to prevent dire circumstances from happening in the future. As the hardships require resilience, government and people should approach the future with hope amidst the challenges they must overcome. As Lauren expresses in her belief in Earthseed, the action considers the consequences of getting along with God [3]. The government and society cannot ignore preparedness, as prevention is always better than mitigation. The road, a symbol of connectivity, now ironically leads to disconnection, highlighting the need for certainty, willingness to change, and addressing vulnerability.

Disaster preparedness aligns with the first principle of the deep ecology social movement, as the well-being and flourishing of human and nonhuman life on Earth must be balanced.

2.4 Embracing changes in the face of disasters

Preparedness is indeed a key message in Octavia Butler's masterpiece. However, the biggest takeaway of this novel lies in this philosophy or religion that the main character tries to promote: Earthseed. The philosophy provides Lauren's community with a principle of survival in a post-apocalyptic world.

However, through careful reading, one can see that it gives us a dynamic view of reality that our species can adapt to survive in this ever-changing world.

At the heart of this philosophy of Earthseed is change: “All that you touch You Change. All that you Change Changes you. The only lasting truth Is Change. God is Change” [3, 4]. Change, with a capital C, equates God and is manifested in nature. This belief has two significant implications concerning humans’ relationship with nature.

The first one is that nature is in a constant state of flux, and this means that we have no choice but to adapt to and constantly devise new strategies to do so. In the real world, this wisdom can and should be practised by both the government and the public. There is no point in hanging to the notion that nature is stable—an erroneous view proven wrong with our current knowledge of climate change, moving earth plates, etc. Several years or decades of safety and stability are not always followed by decades free from danger. It is time that we take heed of the warnings from the most informed of us about impending dangers posed by nature and our ignorance. The government should do everything possible to take anticipative measures and not assume everything will be as it is.

The second one is a complex relationship between humans and nature. On the one hand, people are shaped by nature: our species has evolved in response to environmental challenges, and we produce technology in response to nature’s challenges. This requires change on our part. On the other hand, we can affect our surroundings by shaping, moulding, or even harnessing what nature offers to benefit human communities. This worldview implies that interference may be necessary and that we can make positive changes. It also means that we need to develop awareness of the effects of our actions since what we do may affect nature negatively. The understanding that interferences can be beneficial or detrimental is crucial for our survival of nature. Our actions have effects, meaning we are not entirely helpless in the face of future disasters and are responsible for our actions’ effects.

What is required to embrace this view of life fully? In the novel, it is clear that the key is to leave our old ways behind to see the limits of established rules, challenge specific fixed ways of thinking, and shatter the illusion of fixedness or stability. This is symbolically illustrated by the protagonist’s refusal to follow the ways and teachings of her father, Reverend Olamina, who is described as someone who clings to the past. Despite his good intentions, the character insists on staying in the gated community, ignoring the lurking danger. This proves disastrous as a gang of murderous people attacks the community. His daughter Lauren, the protagonist, contrasts this static and conservative view of life. Instead of just staying, she journeys north, leading her group to a new life. In contrast to living in a gated and isolated community, she opens the possibility of a more inclusive and ever-growing community. In place of her father’s religious view, she creates a new system of belief that helps her adapt to uncertain situations where natural disasters and man-made threats could happen anytime.

3 Conclusion

Olivia E. Butler remains hopeful that people must act, adapt, and shape changes in environmental crises instead of suffering in despair [18]. The urgency to acknowledge the impending environmental threat must also be communicated to the people of West Sumatra, as novels can serve as a medium for learning from our vulnerabilities and raising awareness about natural disasters’ realities and potential consequences. We cannot ignore the impact of human interference with nature and the disasters it causes, as flash floods, landslides, and road collapses affect us economically, socially, and culturally. They can also alert us to the importance of mitigation and prevention. Taking examples from international novelists, Indonesian writers should bring readers’ attention to these crucial matters before it is too late.

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