Australian Journal of Environmental Education (2025), **41**, 449–461
doi:10.1017/aee.2025.10061

CAMBRIDGE UNIVERSITY PRESS

ARTICLE

Cli-Fi as Climate Change Education: A Posthumanist Ecofeminist Approach to Thinking with Australian Cli-Fi Narratives

Chantelle Bayes[1] and Hasti Abbasi[2]

[1]Southern Cross University, Gold Coast, QLD, Australia and [2]Deakin University, Geelong, VIC, Australia
Corresponding author: Chantelle Bayes; Email: chantelle.bayes@scu.edu.au

(Received 03 March 2025; revised 11 July 2025; accepted 12 July 2025)

Abstract
As climate change accelerates, its most devastating impacts fall on those already marginalised, deepening existing inequalities. This underscores the need for climate change education to attend not only to the scientific but also to social, cultural and ethical dimensions. Like science fiction, climate fiction (cli-fi) has often reinforced colonial, patriarchal and anthropocentric worldviews. However, some contemporary cli-fi narratives challenge these paradigms by offering alternative visions that centre climate justice and the voices of those most affected by climate change. In this paper, we examine two contemporary Australian cli-fi narratives — Merlinda Bobis's *Locust Girl* and Alexis Wright's *The Swan Book* — and their potential role in climate education. Integrating these cli-fi into a cross-disciplinary higher education curriculum can enrich climate change education by encouraging critical, ethical and imaginative engagement and prepare students to navigate and respond to the crisis in transformative ways. Not only do these texts critique climate inequalities but they imagine alternative ways of being, positioning characters in relational entanglements with climate, cultures and place. We conduct an ecocritical analysis, applying a critical posthumanist and ecofeminist lens, to examine how these narratives disrupt anthropocentric and patriarchal logics and advocate for relational, justice-centred approaches to climate issues. Climate change concepts that emerged from this analysis act as a guide for educators.

Keywords: cli-fi; Australian fiction; environmental education; higher education; climate change

Introduction

As climate change continues to impact the globe, people living with disadvantages will be the most vulnerable to the effects of climate change. This makes it essential for climate change education to attend not only to the scientific but also to the social, cultural and ethical dimensions of climate change. Like science fiction, climate fiction (cli-fi) has often reinforced colonial, patriarchal and anthropocentric worldviews (Ralph, 2022; Milner, 2020). For example, cli-fi has traditionally been associated with themes of territorial expansion and the conquest of nature, depicting climate catastrophe as a challenge to be solved through technological advancements and individualist survivalism. However, some contemporary cli-fi narratives are challenging these tropes by offering alternative visions that centre climate justice, relational more-than-human ways of living and that give voice to those most affected by climate change. In this paper, we explore the potential of cli-fi as a pedagogical tool by examining two contemporary Australian cli-fi narratives — Merlinda Bobis's *Locust Girl* (2015) and Alexis Wright's *The Swan Book* (2013). Although research on cli-fi is often focused on Northern hemisphere texts and in particular, cli-fi from North America, we

© The Author(s), 2025. Published by Cambridge University Press on behalf of Australian Association for Environmental Education. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

https://doi.org/10.1017/aee.2025.10061 Published online by Cambridge University Press

offer examples of often overlooked texts from the Southern hemisphere. Further, these texts highlight Indigenous and Global South voices with Merlinda Bobis having roots in the Philippines and Alexis Wright being a Waanyi woman. Beyond their literary value, these cli-fi texts offer powerful tools for climate change education in higher education settings. More than just depicting climate crisis, these novels critique structural inequalities, resist anthropocentrism and imagine alternative ways of being in the world. Both texts follow young women in precarious circumstances who are oppressed by the dominant political power of their worlds while being subject to the impacts of a changing climate. For educators, this presents an opportunity to engage students critically and creatively with climate change as an eco-socio-cultural phenomenon.

These narratives provide rich provocations for reading, writing and teaching cli-fi in meaningful and transformative ways. For example, cli-fi can foster creativity, empathy and critical thinking allowing students to explore climate issues through storytelling, ethical reflection and speculative imagination. Educators can engage students in activities such as writing their own cli-fi stories or discussing the ethical and social issues raised by these texts. Furthermore, through a pedagogy informed by posthumanist and ecofeminist perspectives, educators can encourage students to critically examine the relationship between animals (including humans), climate and the environment, as well as the intersectional inequalities exacerbated by climate change. If integrated into a cross-disciplinary climate education framework, cli-fi can offer students new ways of understanding and responding to climate change — not just as a scientific or policy issue but as a deeply cultural, ethical and relational challenge.

The novels *Locust Girl* by Merlinda Bobis and *The Swan Book* by Alexis Wright were selected for this paper due to their engagement with the settler-colonial and ecological conditions specific to the Australian context. Both texts foreground marginalised voices — diasporic and Indigenous, respectively — while offering a rich ground for posthumanist and ecofeminist critiques of climate injustice. Therefore, their capacity to challenge dominant anthropocentric and patriarchal narratives that often define mainstream climate discourse makes them rich examples for climate education. Although grounded in the Australian context, these texts will also resonate in other areas where colonial structures, climate migration and climate justice concerns are felt. We provide just one example in this paper of how an ecocritical analysis might be carried out for cli-fi in climate change education, though many of the questions we ask about these texts will be relevant for discussion of other texts and in other contexts. In fact, how climate change manifests textually in particular places offers students resources to study the eco-socio-cultural complexity of the phenomenon.

We begin this paper with a discussion of climate education in higher education and the role that cli-fi can play before providing an ecocritical analysis of *The Swan Book* and *Locust Girl* as a way to inform climate change pedagogies. Ecocriticism is a form of literary and cultural analysis that examines the relationships between texts, cultures, places, people and the more-than-human. In this study we use critical posthumanist and ecofeminist theory to drive our analysis and unpack some of the ways that these texts engage with climate justice concerns. Our ecocritical analysis was approached using a postqualitative method that involved a generative rather than linear or rigid process. Our reading of the texts was guided by attention to the complex entanglements of humans, cultural structures and the more-than-human including the ways that gender intersected with the environmental concerns in the narratives. Initial readings prompted a series of questions, which we explored through ongoing reflection, discussion and revisiting of the texts. This iterative process allowed key concepts to emerge, which we elaborate on in the following sections of the paper.

Climate change education

Climate change education is an interdisciplinary subfield of environmental education that plays a crucial role in fostering students' understandings of human-environmental relationships. However, contemporary climate change education demands a radical shift from traditional,

https://doi.org/10.1017/aee.2025.10061 Published online by Cambridge University Press

science-dominated paradigms. Given the urgency of addressing climate in the Anthropocene — a geological epoch defined by humanity's irreversible impact on Earth's ecological systems — a holistic approach that integrates scientific, cultural and ethical dimensions would better help students to understand and address climate change. Scholars such as Selby and Kagawa (2010) argue that traditional educational frameworks often reduce climate change to a technical problem, neglecting its roots in social and ethical inequities. These authors specifically criticise science education for its role in shaping perceptions of climate change "as an issue calling for a scientific or technical fix rather than as a pathology of an ethically numb, inequitable and denatured human condition" (Selby & Kagawa, 2010, p. 42). This limited framing has proven insufficient, as increased scientific knowledge alone shows little correlation with behavioural changes in environmental attitudes (Dijkstra & Goedhart, 2012). Therefore, higher education must adopt more inclusive approaches that integrate cross-disciplinary perspectives.

In addition, the current institutional framing of climate change education often elevates western scientific knowledge and positions it as a superior and isolated source of understanding, overshadowing other forms of knowledge and praxis (Somerville & Green, 2012). This dominance of scientism, which attempts to separate science from cultural, social and political influences, paradoxically diminishes its richness, as Morton (2016) notes: this approach involves "shutting one's ears to what is most interesting about science," that it has the potential to inspire speculation and social change (p. 29). Scholars such as Karen Barad (2007), challenge this traditional view of science by highlighting the interconnected nature of scientific practices, which are generated through "a dynamic set of open-ended practices iteratively refined and reconfigured" (p. 167). Barad's (2007) concept of ethico-onto-epistemologies further demonstrates the ways that knowledges (including western scientific knowledge) are always already entangled with the material, ethical and cultural. These principles of inter-relation, ethics and co-constructed knowledge are the basis of a posthumanist approach and informs our critique. Shaviro (2015) expands on this by arguing that "empirical science and rational discourse are largely continuous with other ways of feeling, understanding, and engaging with the world ... [including] art, myth, religion and narrative" (p. 13). These perspectives suggest that climate change education is enriched by embracing a broader, more inclusive approach that integrates science with other forms of knowledge and expression. However, there is still a notable gap in pedagogical strategies to integrate trans-disciplinary knowledges to enhance climate literacy and action-oriented learning (Molthan-Hill & Blaj-Ward, 2022). This is partly due to challenges in higher education structures such as limited curriculum integration between disciplines, funding constraints and institutional inertia that impact continued innovation and collaboration across faculties.

Central to a cross-disciplinary educational approach is the development of students' ethical imagination through frameworks such as posthumanism and ecofeminism. These perspectives challenge anthropocentric and patriarchal hierarchies, to highlight the interconnectedness between climate, cultural structures and ecologies. Braidotti (2013) describes posthumanism as encompassing a set of "ontological tools" including speculative methods, creative designs, experimental practices and technologies that enable us to "re-think the basic unit of reference for the human" and reexamine our interactions with both humans and non-humans at a planetary level (p. 5). In environmental education, posthumanists have sought to question the mechanisms of the Anthropocene. For example, Fettes and Blenkinsop (2023), argue that eco-social-cultural change requires society to stretch its imagination in order to see a new way of living beyond the Capitalocene — a version of the Anthropocene that takes extractive capitalism as the key driver of environmental harms. They also suggest that education focused on resilience, as traditional climate change curriculums often do, can miss an opportunity for transformative change since resilience "operates as a code word for 'adaptation' to the oppressive conditions of the Capitalocene" (Fettes & Blenkinsop, 2023, p. 116). Therefore, they argue that educators must use tools such as art and literature to tell stories of "deep transformation," reinterpret narratives to "reveal new possibilities," create counter narratives of change and "weave stories that bring

https://doi.org/10.1017/aee.2025.10061 Published online by Cambridge University Press

together place and community" (p. 112). In addition, Volkmann and Fraunhofer (2023) argue that in teaching climate change, there is a need to look to the more-than-human as co-teachers:

> We have not yet reached a truly posthumanist educational practice. We are still only talking about the more-than-human world, applying our human problem-solving skills to ecological problems, instead of conceptualising the role of humans as part of an ecology or taking more-than-human beings seriously as co-equal partners (p. 92).

In this context, climate fiction emerges as a powerful tool within university curricula, offering an approach to teaching climate change where the more-than-human can also figure as an actor and co-teacher. *The Swan Book* and *Locust Girl* resonate with posthumanist concerns by rejecting anthropocentric paradigms, highlighting more-than-human agents as teachers and emphasising the entangled relationships between cultures, climates, humans and the more-than-human as we will show.

In addition, ecofeminism allows for an analysis of the gendered aspects of climate injustice. Women are already disproportionately affected by social and environmental crises (UN, 2024). Further, the United Nations (2024) reports that women and girls will experience more impacts from climate change than men and boys since they have less access to resources, finance and technologies and are more likely to face higher mental and physical health impacts as a result. One of the key progenitors of ecofeminism, Val Plumwood (1986) argued that the oppression of women and the destruction of the environment were perpetrated by the same logics and that the figuring of nature as female and the figuring of women as closer to nature has worked to mutually reinforce this domination. Ralph (2022) shows that much of mainstream cli-fi has taken what she calls "masculinist" approaches where male protagonists attribute climate change to techno-scientific failures and respond with stories of conquest, individualist survival and competition over scarce resources. As an example, we might consider stories such as Cormac McCarthy's *The Road (2006),* set in a post-apocalyptic world where women and environments are reduced to commodities. Such narratives often align with neoliberal and technocratic ideologies, which frame climate solutions as dependent on individual heroism or technological innovation rather than systemic change. In contrast, an ecofeminist ethic recognises how patriarchal logics are deeply entangled with capitalist and colonialist structures, perpetuating myths that contribute to environmental crisis. Ralph (2022) argues that ecofeminist cli-fi might advance narratives that centre cooperative action, coexistence and conservation practices. *The Swan Book* and *Locust Girl* resonate with ecofeminist concerns by depicting the experiences of women as agents, navigating the complexities of social and political oppression while living through climate crisis.

Climate fiction education

Although not yet widespread, climate fiction is being explored in more diverse disciplines in higher education from geography to sustainable development as a way to engage students in the complexities of climate change as well as give students a living knowledge of the mechanisms and impacts. By incorporating cli-fi into the curriculum, educators can leverage its ability to combine emotional resonance with intellectual inquiry. Cli-fi narratives can also bring to life the human and environmental consequences of climate change, making abstract concepts tangible and relatable (Richardson, 2022). Through immersive storytelling, students are encouraged to empathise with diverse characters and perspectives, engaging with ethical questions about climate change justice (Chen, 2024). *The Swan Book* and *Locust Girl* introduce into the curriculum important questions that other cli-fi may not attend to around the role of colonial, patriarchal and anthropocentric structures in marginalising and harming others. Encouraging ecocritical engagement with cli-fi in higher education curricula supports a shift toward participatory and

https://doi.org/10.1017/aee.2025.10061 Published online by Cambridge University Press

transformative learning experiences, which can prepare students to navigate the multifaceted challenges of climate change. Through cli-fi, educators bridge academic knowledge with the lived realities of climate change ensuring that climate change education reflects the diverse social and cultural realities of the crisis (Reimers, 2021). This ethical grounding not only enriches students' understanding of climate change but also cultivates imaginative and innovative thinking for eco-social-cultural justice.

This potential of cli-fi to shape individual understanding and engagement with climate change makes it a crucial pedagogical tool, capable of encouraging both ecological literacy and ethical responsibility. In this context, as Snaza and Weaver (2015) assert, speculative frameworks are essential for imagining an educational approach that "[does] not insist on human superiority and dominance and that [does] not disavow the human's ecological entanglements" (p. 3). Johns-Putra (2016) highlights the importance of climate fiction within literary studies, recognising its ability to bridge scientific discourse and personal narratives. Meanwhile, scholars of environmental communication and psychology have highlighted the capacity of creative mediums, including literature, to influence beliefs, attitudes and behaviours related to climate change (Boykoff, 2019). Many of these creative forms are crafted with the activist intent of increasing awareness and driving both behavioural and political change (Schneider-Mayerson, 2017). So, in addition to asking students to think about how to prepare for a difficult future, we might also use cli-fi as a means of reimaging our current ways of living to lessen climate impacts, to think through climate justice aims or otherwise to imagine ways of being and doing differently.

Casper Bruun Jensen (2020) asks two questions framed within the context of climate change — a phenomenon whose specific outcomes remain uncertain, though its broader trajectory is clear: "What kind of world will we inhabit?" and "How should educational institutions adapt?" This uncertainty creates a space for imagining potential futures, highlighting the growing significance of cli-fi as a tool for education: "Cli-fi . . . confronts us with the difficult collective question of how to modify our thought collectives and thought styles" (Jensen, 2020, p.151) but also offers us a way to explore how we might change the way we live and learn to support the kind of future we would like to see. By integrating cli-fi narratives such as *The Swan Book* and *Locust Girl* into curricula, educators can empower students not only to comprehend climate injustices but also to envision and advocate for transformative change.

Literature, in particular, offers opportunities to make the abstract and distant realities of climate change more immediate and emotionally resonant for readers. As Corbett and Clark (2017) argue, the arts can make "the so-called invisibility of climate change" tangible, fostering critical reflections on societal and cultural norms (p.1). Schneider-Mayerson (2018) explores the empirical impacts of cli-fi on readers, highlighting how these narratives influence attitudes, emotions and behaviours concerning climate change. One of cli-fi's significant strengths is its ability to bridge the temporal and spatial gaps often associated with climate change (Goodbody & Johns-Putra, 2018). Importantly, cli-fi resonates most with younger, liberal audiences who are already concerned about environmental issues (Schneider-Mayerson, 2018). While it may reinforce existing beliefs rather than convert sceptics, cli-fi has the potential to deepen concern and inspire new perspectives among its target readership. Numerous scholars specialising in environmental literature have explored the potential influence of climate fiction on individual readers (Gaard, 2014; Mehnert, 2016). By weaving scientific and social dimensions into compelling stories, cli-fi enables readers to confront the moral and ethical complexities of climate change. It transcends traditional modes of environmental communication by situating these issues within relatable experiences and scales. As Fettes and Blenkinsop (2023) argue, "unless we can find new, different, more inclusive, and thus flexible and imaginative stories that allow for different, more relational, less anthropocentric, possibilities to be produced, we are oddly stuck if the goal is eco-social-cultural change" (p. 78). As the genre continues to expand, it offers valuable insights and strategies for addressing one of the most pressing global challenges of our time.

https://doi.org/10.1017/aee.2025.10061 Published online by Cambridge University Press

Cli-fi in Australia

Climate fiction ranges from the realistic to the speculative and often leverages narratives of the future to confront ecological crises, illustrating what might happen if current circumstances are taken to further extremes or in the case of solar punk (a sub-genre of cli-fi), futures where regenerative and reparative measures have been taken. As Andrew Milner (2020) details, climate has always been a prominent aspect of Australian fiction in a country where Anglo-Australians have encountered conditions unfavourable to traditional European ways of living. Floods feature prominently, which is not surprising given the frequency and devastation of floods across Australia (the most recent being in Northern Queensland as we write this paper). Other popular themes include intense heat, drought, rising sea levels, desertification and the loss of ice in Antarctica. Then there is Peter Carey who imagines the widespread dismantling of large corporations driving climate change in *Amnesia* (2014) and narratives such as James Bradley's *Clade* (2017) that tell generational stories of change (Milner, 2020).

There were a handful of early works written prior to the widely reported coining of the term cli-fi in 2007 by Dan Bloom (Milner, 2020) such as Graeme Turner's *The Sea and Summer* (1987) and James Bradley's *The Deep Field* (1999) that sought to explore the experience of climate change, but by the late 2000s as the impacts of climate change became more visible and public concern heightened, the number of cli-fi works in Australia expanded rapidly (Milner, 2020; Schneider-Mayerson, 2017). In Australia's political climate where fossil fuels dominate, "Australian fiction writers have increasingly focused on the climate emergency; drawing attention to how the political and environmental processes underway may play out and exploring the emotions attached to the situation, such as anxiety, grief — and in small ways hope" (Castles, 2024, p.1). This makes it a particularly potent context in which to examine climate justice. Additionally, Australian cli-fi (and more broadly sci-fi) have built on typical myths and tropes about the Australian landscape, the most prominent of these are the desert as a frontier (Singeot, 2021) and the swamp as a place of monsters and madness (Giblett, 2009). The desert (and swamp) have long been an inclusion in sci-fi as "ecosystems that members of different civilisations have to tame in order to colonise new spaces" (Singeot, 2021, p. 2). A good example of a narrative that examines and subverts such problematic tropes can be found in Clare Coleman's cli-fi *Terra Nullius* (2017). Cli-fi narratives can help readers to navigate these complex socio-political conditions and social imaginaries of the environment, as well as the environmental crises created by these conditions. *The Swan Book* and *Locust Girl* both explore Australia's colonial legacy, imagining how current social and environmental injustices might be amplified in a climate-changed world. The following ecocritical analysis of these texts provides some grounding for educators to include these narratives into climate curricula.

Merlinda Bobis's locust girl: a love song (2015)

In *Locust Girl,* Filipino-Australian author Merlinda Bobis, responds to climate change inequalities by setting her characters in a future world where environmental degradation and social injustice converge to disproportionately harm marginalised communities. This book reflects rhetoric long projected in Australian political discourse and reflected in global conversations about refugees and migrants such as offshore detention camps, borders that are heavily controlled through violence, and what Behrouz Boochani (2018) has called a kyriarchal system of control where people are forced to wait in endless queues in hot or difficult conditions to receive a share of limited resources (an experience he ties into broader systems of control in Australia, such as hours-long waits on phonelines and physical lines at social security centres and the ever increasing times for visa application outcomes). *Locust Girl* centres the experiences of a young girl, whose journey traverses arid, resource-scarce landscapes shaped by ecological collapse and social hierarchies. Through a posthumanist lens, the novel underscores the entangled relationships between locusts, waters,

https://doi.org/10.1017/aee.2025.10061 Published online by Cambridge University Press

urban political structures and exploited desertscapes, revealing the inseparability of ecological and social systems. The protagonist, Amadea, experiences a changing intimate relationship with locusts which begins with her eating locusts — the only subsistence available in her desert camp. When the camp is bombed, she is buried underground in a hibernation like a locust; Her body is subsequently nibbled by locusts before one lodges in her forehead; So she is eater, eaten, sister and symbiont of locusts. The symbolism is heightened by the fact that locusts are the gregarious (migratory) phase of grasshoppers that emerge when populations outgrow food supply and are often maligned as swarms that engulf and devour whole fields of food crops intended for humans. Amadea's story muddles this relationship, repositioning humans and locusts particularly in a world where humans have stripped whole ecosystems leaving only desert. This is evident when Amadea encounters a woman in a cave:

> The memory of those once upon a times from her own time, her mother's, her grandmother's and all the women who had wept out their stories about the drying up of water and the earth, of trees and daily fare, even of colours. Because all these blessings were wasted or taken far away. Because of stupid wars. Because of great fires that fell from the sky or sprouted from the earth and dried up their insides, their wombs then their hearts. That dried up even the love among lovers (Bobis, 2015, p. 59).

Bobis highlights how this environmental destruction is inseparable from colonial violence, war and displacement, positioning climate catastrophe as also a deeply human and political crisis. Additionally, from an ecofeminist perspective, *Locust Girl* critiques the patriarchal and exploitative attitudes underlying ecological destruction. Women and other marginalised characters are positioned as agents of resistance and renewal. This is amplified by the oppressive political leaders' attempts to silence such people. In this context, the narrative imagines alternative ways of being that reject hierarchical systems in favour of interconnected and relational modes of existence. By centring marginalised perspectives, Bobis's narrative not only critiques existing inequalities but also proposes a vision of ecological and social justice rooted in empathy and interdependence.

Alexis Wright's the swan book (2013)

In *The Swan Book,* Waanyi author Alexis Wright imagines a near-future Australia re-shaped by climate change, where Indigenous characters grapple with the compounded effects of colonialism and environmental crisis. Wright weaves a richly symbolic narrative that highlights the enduring resilience and wisdom of Indigenous knowledge systems. Through a posthumanist lens, the novel emphasises the relational dynamics between humans, more-than-humans (waters and swans), metaphysical beings (ancestors and ghosts) and the land, portraying these relationships as central to survival and identity. There is a sense that anthropocentric climate change began long before the current events of the narrative, perhaps when the first Europeans came to the continent: "The swamp people . . . rocked to their foundations from three centuries of dealing with injustices already, will probably feel the same in two centuries more — who's speculating on the likely projections of this tragedy?" (p. 50). From an ecofeminist standpoint, the story critiques the patriarchal and colonial forces that exploit both land and marginalised communities. No more so than in the experiences of protagonist Oblivia Ethylene, survivor of childhood sexual assault, who is then forced into marriage. *The Swan Book* challenges anthropocentric and colonial frameworks, advocating for an ethic of care that transcends human-centred concerns. This is evident when the novel describes the fate of the swans, mirroring the displacement of the marginalised:

> Then the winds grow warmer and disappear in the atmosphere laden with dust. Without a breeze, the land becomes so still and lonely in the silence, you know that the spirits have left

https://doi.org/10.1017/aee.2025.10061 Published online by Cambridge University Press

> the skies. It does not rain any more. The land dries. Every living thing leaves in the seemingly never-ending journeys that migrating creatures take (Wright, 2013, p. 327).

Just as the land and the swans suffer displacement and erasure, so too does Oblivia Ethylene, whose loss of autonomy parallels the histories of Indigenous women under colonial and patriarchal rule. The narrative foregrounds the voices of Indigenous women, portraying their lived experiences and ancestral knowledge as vital to imagining sustainable futures. Wright's depiction of relational ontologies — where humans, other animals and the environment are deeply interconnected — proposes a new way of being that values reciprocity and respect for all life forms and the more-than-human world.

Enacting ecocriticism in the classroom

The Swan Book and *Locust Girl* provide rich narrative worlds for exploring key aspects of climate change including climate justice, belonging, transformation, hope and the Anthropocene. At the centre of both narratives are questions about social and environmental justice including the complexities of contemporary society that makes the marginalised complicit in the harms of climate change at the same time as they are victims of those harms. In integrating these narratives into curricula, we discuss several aspects of the texts that might guide educators to develop relevant discussion prompts, lectures points or assessment topics. Some pedagogical strategies for including these texts into a curriculum include discussions to drive understanding and apply analysis, sense-making activities, creative writing activities and close reading. Our analysis was guided by questions such as: How do these works challenge anthropocentric and patriarchal frameworks? In what ways do more-than-human agents — locusts, swans and water — function as active participants in the narrative, unsettling binaries and proposing relational ontologies? And how might such narratives open pedagogical pathways that foster relational, justice-oriented approaches to climate education? These questions underpin our ecocritical reading and inform the broader educational relevance of cli-fi in reimagining climate futures. In our readings and discussion, the following concepts emerged.

Eco-social-cultural transformation (resilience and adaptation)

Resilience and adaptation are concepts that have long been associated with solutions to climate change impacts. However, we take a cue from Fettes and Blenkinsop (2023) who argue that these concepts can limit opportunities for justice. Therefore, educators might discuss the ways these complexities play out in narratives. For example, the protagonists of both *The Swan Book* and *Locust Girl* are young women thrust into complex social, political and climatic situations and must find ways to survive. While at first both go through a process of attempting to adapt to the oppressive situations they find themselves in, at the end of each narrative we see both protagonists embracing transformation and the reader is left with the hope of change — which in both cases means liberation from these oppressive social and political conditions. Oblivia Ethylene, in *The Swan Book,* is forced to leave her home in the Swamp and become the promised wife of Warren Finch, the first Indigenous Prime Minister. The swans follow her, likely as a result of Warren's orders to destroy the swamp of "his own people," and Oblivia Ethylene continues her relationship with the swans in the city (Wright, 2013, p. 149). However, at the end of the narrative, we see Oblivia Ethylene (as well as many other city dwellers) leave the city — Oblivia Ethylene in search of the place where she imagines the swamp had been and the city dwellers who want to find another way to live.

In *Locust Girl* the transformation is more overt. Over the course of the narrative, she moves from the position of "waster" in the deserts and crosses the border into the Five Kingdoms to become a "carer." However, she finds the life in the city just as exploitative. At this point in the

https://doi.org/10.1017/aee.2025.10061 Published online by Cambridge University Press

narrative, the locust has merged with her body and sings about the injustices — something which is outlawed — leading her to front court and explain herself. Here she erupts into flames and emerges as a locust. Zong (2020) argues that the songs "become here a redemptive act of love and sacrifice" since they embody a multiplicity of stories and memories of the people Amadea has encountered (p. 118). This act of returning the stories and memories might also be seen as "a reclamation of global Indigenous narratives in the face of colonial myths that seek to erase them" (Bayes, 2023, p. 205). However, Bobis works to create "a politics of care against a politics of fear" by restoring relational care in the Five Kingdoms where injustice is created through myths of who is worthy of resources and fears of those resources being reclaimed by those beyond the border (Herrero, 2017, p. 953).

Community and belonging/identity

Students might be asked to consider how questions of community, collective action and belonging or identity impact climate change contexts. In both narratives the protagonist begins in isolation. In *Locust Girl,* Amadea is living in a refugee style encampment in a desertscape beyond the bounded walls of a city (the Five Kingdoms). In *The Swan Book,* Oblivia Ethylene grows up as a mute child living on a boat along with a collective of swans and is cared for by the only European climate refugee left, an outsider to the swamp community. These complex relationships raise important questions for considering current and embedded hierarchies that mean not everyone has the same resources or abilities to manage climate crises. As an Indigenous man, Warren Finch is meant to usher in a new way of governing but he enacts the same kinds of colonial violence as previous governments. When Warren takes Oblivia Ethylene to live in the city, she is trapped in his apartment and forced to perform as a wife and later a widower on a travelling memorial tour for Warren. In these circumstances, it is the swans that give her a sense of belonging and when she escapes Warren it is the swans she follows. We are told this is Oblivia Ethylene's "quest to regain sovereignty over [her] own brain" (p. 4) as she follows the swans back to her swamp.

For Amadea in *Locust Girl,* the positioning of the wasters of the desert and the carers of the city is both stark and layered as Amadea finds herself transitioning from one to the other and back again. The epithet that describes the values of the five kingdoms "*Symmetry. Equality. Justice*" (original emphasis) sets up a fantasy that overlooks the very real injustices enacted on those living in the desert including stolen waters, histories and lives (p. 76). These injustices are further obscured through laws against singing which work to control the narratives passed between peoples and the distribution of seeds in the rations that erase memories (Bayes, 2023). The fact that Amadea is bound up in body with a locust is symbolic of relationality — grasshoppers become locusts when stressed by population density leading to a search of food paralleling her own journey through the desert to the city (Bayes, 2023). However, it is the locust that steers Amadea away from danger, helps her navigate social and environmental challenges and gives people back their stories and their memories through song.

Hope

Another key aspect of climate change education is the psychological impact of the climate crisis, particularly the rise of climate anxiety and Glenn Albrecht's notion of solastalgia — the distress caused by environmental change and loss (Albrecht, 2005). *Locust Girl* and *The Swan Book* counter narratives of despair with stories of hope and agency during climate crisis. Many early cli-fi narratives have leaned into apocalyptic tropes, depicting sudden global disasters such as the Earth rapidly freezing into a new glacial age or, conversely, becoming entirely desertified. For example, *The Swarm* (2004) dramatises the rapid destabilisation of global climates, reinforcing fears of ecological collapse. While dystopian narratives such as this serve as warnings of what might happen if humanity fails to act, Thaler (2019) suggests that they can also induce despair and

https://doi.org/10.1017/aee.2025.10061 Published online by Cambridge University Press

helplessness, even discouraging action when people feel they are unable to affect change or prevent such catastrophe. However, Thaler (2019) argues that "critical dystopias" that leave room for hope can assuage feelings of despair. Similarly, Daysh et al. (2024) found that while dystopian thinking produces mixed responses that show both fear-driven action on climate change and disengagement, utopian thinking was far more effective in mobilising collective climate action. By incorporating *Locust Girl* and *The Swan Book* into curricula, climate educators can move beyond fear-based and anxiety-inducing messaging and instead foster a sense of agency, imagination and collective responsibility in addressing climate change.

Both *The Swan Book* and *Locust Girl* appear at first to be dystopias. In *The Swan Book* people are inundated with flood waters, have largely lost access to electricity and fossil fuels, and there is a sense of everyone being unsettled and in danger. In *Locust Girl,* the country has largely become a desert, absent of water apart from in the city (the Five Kingdoms) where the last of scarce resources are concentrated. Meanwhile, those in the desert are forced to eat sand and locusts, and people live at risk of fire-bombing from the Five Kingdoms. However, each narrative ends with a glimmer of hope for other ways of being in a climate-changed world. In *The Swan Book*, Oblivia Ethylene escapes Warren to regain her autonomy and return to her Country. In *Locust Girl*, Amedea's truth-telling and complete transformation into a locust alludes to a future that is less extractive and more loving. In both, there is a sense of having a more relational engagement with places, peoples and environments as well as the agency to enact change. The sprouting of the desert at the end of *Locust Girl* serves as a powerful metaphor for renewal, resistance and the possibility of transformation in the face of environmental devastation. Rather than reinforcing the despair often associated with cli-fi dystopias, both *The Swan Book* and *Locust Girl* offer narratives where survival is not just about endurance but about reimagining ways of living that are reciprocal, and cultivated through care and collective justice. This hopeful dimension is crucial in climate change education, as it encourages students to think beyond apocalyptic inevitability and towards the potential for systemic change. By engaging with these texts, students can explore how literature provides not only warnings about climate futures but also blueprints for alternative possibilities — narratives that challenge dominant structures of power and propose new relationships between humans, more-than-humans and the environment. In doing so, cli-fi becomes not just a tool for understanding climate change but a means of inspiring action, innovation and ethical responsibility in the face of the ongoing crisis.

The Anthropocene

The Swan Book and *Locust Girl* demonstrate what could happen when, taken to an extreme, social and political structures enable an extractive relationship with the environment. Employing a posthumanist framework in the classroom, educators might ask students to consider the texts in ways that question the human as the dominant (or only agentic) species — to consider the agency of swans, waters or locusts in the texts — or to analyse the ways in which climates and animals (including humans) are entangled in particular relationships and the impacts of those relationships (whether constructive, destructive, apathetic, challenging, mutually beneficial or something else and for whom). In addition, students might be asked to consider the way political logics including temporal and spatial structures are enacted within each narrative and what impact these have. For example, in *The Swan Book,* Prime Minister Warren Finch orders the destruction of the swamp (Oblivia Ethylene's home and Warren's ancestral home) leading to the displacement of the community and Oblivia Ethylene suffers not only the grief of her forced removal from the swamp but the grief of never being able to return to her home (particularly the ship she lived on with the swans). Her second name is of course an allusion to the carbon-based economy that has led to the climate crisis. In *Locust Girl* students might consider the ways political myth making obscures the reality of exploitation and enables the hoarding of resources to benefit a few at the expense of many. These logics set up a story that pits the people of the city (said to be carers)

https://doi.org/10.1017/aee.2025.10061 Published online by Cambridge University Press

against the people of the deserts beyond (said to be wasters). Without critical engagement with such logics, oppression of particular groups is able to continue. Although from the desert, the residents of the city at first seem to be beneficiaries, it becomes clear when Amadea enters the city that these people are also exploited and in fact are often wasters who have made it across the border and then become complicit in the oppression of other desert dwellers. Students can be engaged in examining the complexities of contemporary extractivist practices which make us all complicit in climate change and environmental destruction.

Educators might also raise questions about the more-than-human agents of these narratives. Water plays an important role in interrupting ways of thinking and doing (see Bayes, 2023 for an in-depth discussion of how waters operate in the narratives). In *The Swan Book,* waters are an ever-present force in the city where they overflow and flood residents while the wealthy implement ways to avoid the impacts and even block the sound of the ocean. Meanwhile, the poor are stuck on the streets listening to the ground for rising waters and perpetually wet from the rain. In *Locust Girl* waters are scarce. The city steals water from what is now the desert and yet has created a myth of the city as responsible and efficient (given as the reason for water abundance) while those beyond the city are said to have wasted their resources. Other animals also play an important role in both texts. In *Locust Girl,* the locust is afforded agency and appears to be immune to the harms that are done to Amadea's body, memory and subjectivity. In *The Swan Book,* swans tell a story of adaptation to new conditions, illustrating how other animals navigate and respond to ecological change. Their presence throughout the narrative serves as both a symbol of resilience and a critique of human-centred approaches to survival, reinforcing the idea that justice is not solely a human endeavour but a deeply interconnected more-than-human process.

Conclusions

By integrating cli-fi into climate change education, universities can foster not only scientific literacy but also ethical and emotional engagement, empowering students to become active participants in shaping regenerative and just futures. Narratives such as *The Swan Book* and *Locust Girl* provide more than just literary insight — they challenge dominant structures of colonialism, patriarchy and anthropocentrism, offering alternative ways of thinking and acting in response to climate crises. It is essential that climate change education extends beyond science-based learning to include justice-oriented perspectives that recognise the unequal impacts of environmental damage. By including texts such as Merlinda Bobis's *Locust Girl* (2015) and Alexis Wright's *The Swan Book* (2013), educators can introduce students to narratives that resist and subvert logics that uphold climate injustices. Additionally, introducing students to ecocritical techniques with the use of a critical posthumanist and ecofeminist lens, further equips them to recognise the ideological forces that shape climate injustice. As cli-fi continues to evolve, further research is needed to explore how different cli-fi approaches and subgenres shape student learning. By embracing cli-fi as a cross-disciplinary educational resource, universities can equip students with the critical, imaginative, and ethical tools necessary to confront the complexities of the climate crisis and work toward transformative change.

Acknowledgements. We acknowledge the Countries where this research was written — Naarm and Yugambeh — and the traditional custodians of these places. We acknowledge the support of the Sustainability, Environment and Arts in Education (SEAE) research centre for encouraging arts-based approaches to climate change education. We also acknowledge Deakin Learning Futures for supporting academics with teaching development.

Ethical standards. Nothing to note.

Financial support. This research received no specific grant from any funding agency, commercial or not-for-profit sectors.

https://doi.org/10.1017/aee.2025.10061 Published online by Cambridge University Press

References

Albrecht, G. (2005). 'Solastalgia'. A new concept in health and identity. *Philosophy, Activism, Nature*, *3*, 41–55.

Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Duke University Press.

Bayes, C. (2023). *Reimagining Urban Nature: Literary Imaginaries for Posthuman Cities*. Liverpool University Press.

Bobis, M. (2015). *Locust Girl: A Love Song*. Spinifex Press.

Boochani, B. (2018). *No friend but the mountains: Writing from manus prison (O. Tofighian, Trans.)*. Pan Macmillan.

Boykoff, M. (2019). *Creative (climate) communications: Productive pathways for science, policy and society*. Cambridge University Press.

Bradley, J. (2017). Clade. Hamish Hamilton.

Braidotti, R. (2013). *The posthuman*. Polity Press.

Carey, P. (2014). Amnesia. Penguin.

Castles, B. (2024). When the world gets worse: Form and feeling in Australian climate fiction. *TEXT*, *28*(2), 1–17.

Chen, X. (2024). Reading the unsustainable present, writing a more sustainable future: Exploring climate fiction as a pedagogical tool in education for sustainable development, Unpublished Masters thesis. Uppsala University.

Coleman, C. (2017). Terra Nullius. Hachette.

Corbett, J.B., & Clark, B. (2017). The arts and humanities in climate change engagement. In J. Uscinski, K. Douglas & S. Lewandowsky (Eds.), *Oxford research encyclopedia of climate science*. Oxford University Press. https://doi.org/10.1093/acrefore/9780190228620.013.392

Daysh, S., Thomas, E.F., Lizzio-Wilson, M., Bird, L., & Wenzel, M. (2024). The future will be green, or not at all": How positive (utopian) and negative (dystopian) thoughts about the future shape collective climate action. *Global Environmental Psychology*, *2*, 1–28.

Death, C. (2022). Climate fiction, climate theory: Decolonising imaginations of global futures. *Millennium*, *50*(2), 430–455.

Dijkstra, E.M., & Goedhart, M.J. (2012). Development and validation of the ACSI: Measuring students' science attitudes, pro-environmental behaviour, climate change attitudes and knowledge. *Environmental Education Research*, *18*(6), 733–749.

Fettes, M. & Blenkinsop, S. (2023). Education as the Practice of Eco-Social-Cultural Change. Palgrave Macmillan.

Gaard, G. (2014). What's the story? Competing narratives of climate change and climate justice. *Forum for World Literature Studies*, *6*(2), 272–291.

Giblett, R. (2009). *Landscapes of culture and nature*. Palgrave Macmillan.

Goodbody, A., & Johns-Putra, A. (2018). *Cli fi: A companion*. Peter Lang.

Herrero, D. (2017). Post-Apocalyptic Literature in the Age of Unrelenting Borders and Refugee Crises: Merlinda Bobis and Australian Fiction. International Journal of *Postcolonial Studies*, *19*(7), 948-961.

Jensen, C.B. (2020). Cli-fi, education, and speculative futures. *Comparative Education Review*, *64*(1), 150–152.

Johns-Putra, A. (2016). Climate change in literature and literary studies: From cli-fi, climate change theater and ecopoetry to ecocriticism and climate change criticism. *Wiley Interdisciplinary Reviews: Climate Change*, *7*(2), 266–282.

McCarthy, C. (2006). *The road*. Picador.

Mehnert, A. (2016). *Climate change fictions: Representation of global warming in American literature*. Springer.

Milner, A. (2020). Australian climate fiction, *Oxford research encyclopedia of literature*. Oxford University Press. https://doi.org/10.1093/acrefore/9780190201098.013.1155

Molthan-Hill, P., & Blaj-Ward, L. (2022). Assessing climate solutions and taking climate leadership: How can universities prepare their students for challenging times? *Teaching in Higher Education*, *27*(7), 943–952.

Morton, T. (2016). *Dark ecology: For a logic of future coexistence*. Columbia University Press.

Plumwood, V. (1986). Ecofeminism: An overview and discussion of positions and arguments. *Australasian Journal of Philosophy*, *64*(sup1), 120–138.

Ralph, I. (2022). Climate fiction and ecofeminism. In D.A. Vakoch (Eds.), *The Routledge handbook of ecofeminism and literature* (pp. 469–478). Routledge.

Reimers, F.M. (2021). The role of universities building an ecosystem of climate change education. In *Education and climate change: The role of universities* (pp. 1–44). Springer.

Richardson, K. (2022). The hottest new literary genre? How cli-fi can support the teaching of climate change. *Teaching Geography*, *47*(3), 123–126.

Schätzing, F. (2004). *The swarm: A novel of the deep*. Hodder.

Schneider-Mayerson, M. (2017). Climate change fiction. In R.G. Smith (Eds.), *American literature in transition: 2000–2010* (pp. 309–321). Cambridge University Press.

Schneider-Mayerson, M. (2018). The influence of climate fiction: An empirical survey of readers. *Environmental Humanities*, *10*(2), 473–500.

Selby, D., & Kagawa, F. (2010). Runaway climate change as challenge to the closing circle of education for sustainable development. *Journal of Education for Sustainable Development*, *4*(1), 37–50.

Shaviro, S. (2015). *Discognition*. Repeater Books.

https://doi.org/10.1017/aee.2025.10061 Published online by Cambridge University Press

Singeot, L. (2021). The swamp and desert tropes in post-apocalyptic Australian indigenous fiction: *The swan book*, 2013 by Alexis Wright and *Terra Nullius*, 2018 by Claire Coleman. *Commonwealth Essays and Studies*, *43*(2). 10.4000/ces.7448.

Snaza, N., & Weaver, J. (2015). Introduction: Education and the posthumanist turn. In N. Snaza & J. Weaver (Eds.), *Posthumanism and educational research* (pp. 1–16). Routledge.

Somerville, M., & Green, M. (2012). Place and sustainability literacy in schools and teacher education. In *Joint AARE & APERA international conference, Sydney 2012*. Australian Association for Research in Education (NJ1). http://files.eric.ed.gov/fulltext/ED544521.pdf.

Thaler, M. (2019). Bleak dreams, not nightmares: Critical dystopias and the necessity of melancholic hope. *Constellations*, *26*(4), 607–22. https://doi.org/10.1111/1467-8675.12401.

Turner, G. (1987). The Sea and Summer. Faber and Faber.

United Nations (2024). *Progress on the sustainable development goals: The Gender Snapshot 2024*. UN-Women & the United Nations Department of Economic and Social Affairs.

Volkmann, L., & Fraunhofer, H. (2023). Environmental literacy, sustainable education and posthumanist pedagogy: Teaching the climate crisis in a global, transatlantic online setting. *International Journal of Development Education and Global Learning*, *15*(2), 87–102. https://doi.org/10.14324/IJDEGL.15.2.02.

Wright, A. (2013). The Swan Book. Giramondo.

Zong, E. Y. (2020). Post-Apocalyptic Specters and Critical Planetarity in Merlinda Bobis' Locust Girl. *Ariel: A review of international English literature*, *51*(4), 99–123.

Author Biographies

Chantelle Bayes is a writer, researcher and educator with a background in the environmental humanities and creative writing as research. She is currently a postdoctoral research fellow at Southern Cross University on an ARC project exploring climate change education with Country.

Hasti Abbasi is a Senior Lecturer in Learning Futures at Deakin University and holds a Ph.D in Literary Studies. She is a Senior Fellow of the Higher Education Academy with expertise in pedagogy, digital learning, and curriculum design. She supports academics in their professional development, enhances teaching practices, and fosters a culture of continuous improvement and recognition in education.

Cite this article: Bayes, C., & Abbasi, H. (2025). Cli-Fi as Climate Change Education: A Posthumanist Ecofeminist Approach to Thinking with Australian Cli-Fi Narratives. *Australian Journal of Environmental Education* **41**, 449–461. https://doi.org/10.1017/aee.2025.10061

https://doi.org/10.1017/aee.2025.10061 Published online by Cambridge University Press