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Writing Hopeful Climate Fiction for Middle Grade Readers

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Abstract

Many children suffer from climate anxiety. How can children's fiction help them? Through the lens of three Middle Grade novels – *The Last Bear* by Hannah Gold; *A Cloud Called Bhura* by Bijal Vachharajani and *Where the World Turns Wild* by Nicola Penfold – this essay examines the nature of climate anxiety, asks why addressing it for Middle Grade readers is particularly important, and looks at ways in which authors can write hopeful and helpful climate change stories.

Research shows that many children feel adults do not talk to them enough about climate change, which can lead to feelings of helplessness. This is where story-telling can come in. I suggest that fiction writers can draw inspiration from Greta Thunberg, who has empowered children by speaking of their fears and offering them a shining example of how a child can make a difference.

Offering hope is vital, both to children's mental well-being and indeed for the future of the planet. Hope is about imagining a desired future and taking action to bring it about. In hopeful climate fiction children can explore the world's troubles in a safe way, and take inspiration from the actions and feelings of the protagonists. I discuss the responsibilities of authors of climate-fiction in this context.

Keywords: Creative writing for young people, Climate, Anxiety, Hope, Responsibility

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If you're anxious, you're imagining stuff all the time. You need to fill that imaginative space with positive, fun, nourishing stuff and books can give you that. Through fiction, you can escape into a world that isn't your life, but can help you to deal with it.

Matt Haig, quoted in Ferguson (2018)

Introduction

Throughout my career, making TV nature documentaries, I have experimented with ways of covering environmental issues, especially climate change. I've battled against the creative limitations of presenting unhopeful facts hopefully, and a viewer's natural instinct to switch off bad news. Arguably, the most important audience for this work is children, but unfortunately many do not watch documentaries. Nevertheless, they do want us to talk to them about climate change.

A 12-year-old shared this view with Caroline Hickman (2020, p.419), Social and Policy Sciences Lecturer at Bath University:

[...] adults have got to tell children the truth about the climate crisis [...] but don't tell them all the bad things all at once, talk about a bad thing, then a good thing, then a bad thing, then a good thing.

Can fiction tell children a palatable truth about the climate crisis? It certainly has a long history of talking to children about important issues. As Professor Esther Jones (2020) of Clark University, USA argues, 'What better way to deal with the uncertainty of this time than with forms of fiction that make us comfortable with being uncomfortable, that depict young people as active agents, survivors and shapers of their own destinies?'

Research has shown the remarkable power of fiction to impact children's mental health and social abilities through empathy. Corcoran and Oatley (2019, p.336) have found:

[...] the more fiction a person reads and has read, in day-to-day-life, the better that person's empathy and understanding of others [...]. Reading [fiction] can enable a person to change some aspects of themselves, to change their personality, to expand their minds in a way that makes them more socially adaptable and so able to successfully navigate the challenges of our social world in cooperative ways.

Oatley (2016, p.618) observes that the impacts of reading fiction are, 'partly due to engagement in stories, which includes making inferences and becoming socially involved, and partly to the contents of fiction, which include complex characters and circumstances that we might not encounter in daily life.'

Fiction then, can be a powerful tool in helping children navigate the mental and practical challenges of climate change.

I have been writing a Middle Grade (MG) climate change manuscript for several years. I often ask myself how best to craft it to engage children and to leave them feeling inspired or proactive, or at least hopeful. The challenge, as Lauren James (2021) tells us, so pithily, is that climate change is 'discomforting at best and soul destroying/terrifying at worst'.

In this essay I try to see inside the heads of children, in order to understand their feelings around climate change. I analyse the work of scientists and the thoughts of authors, and I look at 'Hope Theory', a field of psychological study, to see what it has to offer myself and other writers.

I have chosen to look at three texts, all MG novels, each with a different approach to climate change, examining the authors' craft and asking whether they have achieved their aims. These novels are: *The Last Bear* by Hannah Gold (2021); *A Cloud Called Bhura* by Bijal Vachharajani (2019a) and *Where the World Turns Wild* by Nicola Penfold (2020a).

But before beginning this investigation, I will look at the role of climate fiction in children's publishing today.

Children's Publishing

Climate change is a big player in popular culture. Hughes and Wheeler (2013, p.1) say, 'it has eclipsed nuclear terror as the prime mover of the apocalyptic and dystopian imagination.' To prove their point, the 2004 movie *The Day After Tomorrow* – which tells a 'real world' story of catastrophic climate change – was a commercial success, taking \$552 worldwide (Wikipedia a). More recently, in 2022 James Cameron's movie, *Avatar: The Way of Water* – an environmental story set in a parallel world – passed \$2bn in takings at the box office (BoxOfficeMojo, 2023).

Climate change is a growing player in children's publishing too. Data from Nielsen Book Research (Ferguson, 2019) shows that children's books published on climate change and the eco-crisis more than doubled between August 2018 and August 2019, as did sales (Barkham, 2020). In the USA, sales of books with environmental themes rose by 69% between 2019 and 2021 (Plautz, 2022). The data does not distinguish between fiction and non-fiction.

The timeline of this boom closely follows Greta Thunberg's environmental activism, which began in August 2018, when she spent every Friday outside Sweden's Parliament buildings, calling for stronger action on climate change. She spoke from a child's point of view. Children listened and wanted to know more; a change dubbed

'The Greta effect' (Ferguson, 2019). But it seems children may often have trouble getting adults to talk to them about climate change.

Hickman (2021a, p.5) found that 48% of children and young people feel 'ignored or dismissed when they talk about climate change'. Jeremy Wortzel, of Pennsylvania State University, speaks of how he discovered, in a parent and child therapy session, that climate change can be taboo: 'A parent will lean over and say, "We're not talking about death or divorce" because those are topics we tend to shield young people from. But this time it was climate change' (quoted in Wetmore, 2022).

If climate fiction takes a role in talking to children, which age range might benefit most? My research suggests middle childhood.

Why Middle Grade?

Professor Maria Ojala, of Örebro University, Sweden, says (2022) that during late middle childhood, around ages 11-12, children develop a capacity for abstract thinking and begin to extrapolate from their own experiences to the wider world, showing a new interest in societal and global issues. Is there a bigger issue today than the climate crisis? Climate psychology educator, Leslie Davenport, summarises how this development impacts responses to climate change: 'Kids younger than 6 tend to develop an innate sense of stewardship for nature. Round age 10, "despair" creeps in and conversations need to evolve' (quoted in Plautz, 2022).

If MG fiction is to help evolve these conversations, then the first step (as with most story-telling) is to engage the reader by means of the protagonists. Greta offers a hint to writers. She engages children because she talks about their fears and worries. In the same way, it seems wise for an author to write protagonists who think and worry like MG readers, who are going through the same changes in how they understand the world, and feeling the same 'despair'.

Hannah Gold, in *The Last Bear*, has her child protagonist, April, move to an arctic island with her father, where he conducts climate research. April becomes aware that this landscape is changing. Here is Gold, pinning down Ojala and Davenport's insights through April's thoughts: 'These changes would soon be affecting the whole planet and who knows what would happen then [...] this was something that made her desperately worried' (p.11).

Bijal Vachharajani, in A *Cloud Called Bhura*, has child protagonist, Amni, extrapolating from the toxic cloud that has appeared over her city of Mumbai. She tells her friend Mithil, 'Don't you see, it's everywhere, in some form. It's not just a cloud. It's taking over our entire world' (p.172).

You can almost hear the child readers of these books thinking, 'Snap!' Or, perhaps, in the voice of Anna from the movie *Frozen*, 'Jinx!'

The power of representing children's thoughts in fiction is confirmed by a remarkable observation, although counterintuitive on the face of it, made by Hickman (2021b). She recounts how adults and children react to the results of a study revealing high levels of anxiety among young people, due to climate change. Adults often tell her

the results are 'depressing', whereas children will say, 'this gives me hope.' Asked why, they tell her, 'because it reflects how I feel'.

To write with a child's feelings, it will help to understand the nature of their 'despair', which is also called climate-anxiety.

Climate-Anxiety

The American Psychological Association defines climate-anxiety as, 'a chronic fear of environmental doom' (Kennedy-Williams, 2019). Is it that simple? Hickman (2020, p.412) suggests it goes deeper: 'Children have told me repeatedly that what is being done to the planet feels personal, as if it were being done to them.'

These children are not taking the anthropocentric view of many adults, that humanity somehow exists separate to nature. They clearly feel a deep, emotional connection to the world around them, hence a feeling of personal injury when they learn of damage done to it. This is supported by Climate Psychologist, Patrick Kennedy-Williams (2019): 'People report a sense of grief for the planet, and anger, and also a sense of disempowerment.'

'Grief for the planet' is a broad phrase. For an example, I turn again to Hickman. She writes (2020) of conversations in which children became frustrated. They'd say, 'You just don't get it. You grew up in a world where you expected Polar Bears to be there forever, I'm growing up knowing that they will be extinct soon. It's different for us' (p.420). Children are frustrated, and grieving for the impoverished world they will inherit. Here, surely, is a valuable insight for writers. When creating fictional characters, an awareness of children's emotional connection to nature will allow writers to employ fiction's power of empathy to draw the reader close to the characters and their stories.

How do the writers of the primary texts go about this? In A Cloud Called Bhura, Vachharajani shows her children beginning to see that their world is changing. They haven't reached grief yet, but it seems inevitable. Amni says, 'The bandicoots have disappeared into the gutters, pigeons are quiet all the time. They are not even pooping that much. Kites have been calling to each other, desperate for some sun. The fish have swum further away' (p.65).

In Where the World Turns Wild, we meet Penfold's characters further along this emotional road. Two siblings, Juniper and Bear, live in a city from which nature has been eliminated. Teenage Juniper writes an essay, which beautifully addresses her 'grief for the planet':

I wrote about what the world had been like once - the magnificence of it, the beauty. When we were little, our brains got used to trees and flowers and animals, and even though we can't really remember much of all that, this city is a cage for us. (p.13)

Both writers, by employing a child's feelings of connection with nature, and feelings of impoverishment at the damage, are telling the readers, 'this is a story about you'. It is fictional empathy in action.

As well as grief, Kennedy-Williams uses the word 'disempowerment'. Where does this feeling come from? Amy Chadwick (2010), in her PhD thesis, suggests that it is not simply a product of the enormity of climate change facts, but also the way they are often deliberately framed to trigger negative emotions in the receiver, including fear, guilt and anger, in order to kick the public into more environmentally-friendly behaviour.

Is this helpful? Jeremy Wortzel (quoted in Plautz, 2022) is not convinced; he says, 'The traditional trope of scaring people into agency, that we're in trouble and you've got to act now, doesn't work for everybody.' His point is, if you believe you have no power to make a difference, then you will just feel worse. This is amplified by children's worries that governments are neither listening to them nor doing enough to combat climate change. Children experience this as a betrayal of them and of future generations (Hickman, 2020).

Fiction's power to engage readers empathetically with the feelings of fictional characters, is well summarised by Tamir et al (2016, p.215): 'Readers of fiction can transcend the here-and-now to experience worlds, people and mental states that differ vastly from their local reality'.

Vachharajani uses empathy to reflect feelings of disempowerment. In A Cloud Called Bhura, Tammy says, 'They tell us we are the future. I don't want this future, full of grime and pollution, of shortages and scarcity, of grabbing and buying more and more, of hate and disrespect. A climate crisis' (p.236). Mithil says, 'All the adults do is moan and groan on Facebook and Twitter. Or they upload photos on Instagram. How is that going to help?' (p.91).

Where the World Turns Wild presents a different kind of scenario. In the dystopian city, all traces of the wild are sprayed into oblivion. The children are powerless. Expressing their feelings for nature could land them in the Institute, and Juniper knows what that means. It is, 'A facility for people who are too angry or too sad. The Institute is meant to help people get better, so they can manage life in this place. But that's a lie. No one ever comes out' (p.33).

The Last Polar Bear deals less with feelings of disempowerment and more with the value of being proactive. April befriends a polar bear and, by her actions, saves it. A reader who empathises with a proactive fictional character may find themselves empowered, as the next section investigates. It is an important tool for children and adults, in the face of climate change.

An author, having helped the reader engage with fictional protagonists, is now in a position to 'evolve the conversation' towards something more positive. But how?

I was fascinated to read some advice that Hickman (2021b) offers children. It contains something very helpful to climate fiction writers. She says, 'If you're struggling with eco-anxiety and worrying that governments aren't doing enough, that's because

you care what's happening to the planet. You should feel proud for feeling eco-anxiety'. She is telling them, *Don't be overwhelmed by your feelings*. They are your power. She goes on to note, 'I want to transform that feeling into something positive'.

'Transformation' is exactly what Vachharajani does in A Cloud Called Bhura. Her protagonists use the energy of their frustration to drive themselves forwards. They discover that all is not lost, that they can do something, and so they start to take action. Vachharajani has 'evolved the conversation', offering her characters, and her readers, hope.

Hope will surely be a welcome feeling for any anxious child. But what is it really? And what does hope do to us?

Hope

Psychologist, C. R. Snyder, father of a field of study called Hope Theory, wrote (1991, quoted in Rand and Cheavens, 2009, p.323-333), 'Hopeful thought may be an antidote to fear and frustration, which we believe to be at the heart of many ongoing [psychological] ills in the world.'

In this discussion, we can substitute climate-anxiety for 'fear and anxiety'.

Hopeful thinking is built on the belief that there are things you can do to achieve your goals and that you can find the motivation to do them. A state of hopeful thinking leads, perhaps unsurprisingly, to positive emotions (Rand and Cheavens, 2009).

Take Greta Thunberg. She has a global following. This is partly due to her willingness to speak truth to power, from a child's point of view. But arguably more important, at least for its immediate impact on children, is her core message (quoted in Lush, 2019): 'Homo sapiens have not failed yet [...] there is time to turn things around.' In other words, there is hope; you can still make a difference. This ties in with Kennedy-Williams's light-bulb moment (quoted in Taylor and Murray, 2021): 'We realised the cure to climate anxiety is the same as the cure for climate change – action. It is about getting out and doing something that helps'. This is hope as the antidote to disempowerment.

Professor Rick Miller of Arizona University has studied 'hope' since the early 1990's. He founded an organisation called 'Kids at Hope', to spread a culture in the USA of teaching hopeful thinking to children in schools, communities, the juvenile justice system, and so on. His philosophy is that kids who are hopeful can imagine the future they want and act to bring it about. Kids who have no hope will disengage. It is adults, he says, who must teach kids about hope (Carlos and Miller, 2007). But then came Greta; a child teaching children about hope.

Miller's philosophy might inspire climate fiction authors, like myself. Through our characters, we can show children a way to think hopefully in the face of climate change, which may impact a child's life long after finishing the book, both emotionally and in terms of their own future actions. A study (Tamir et al, 2015) has shown that reading fiction can physically alter the brain, which will have an impact on future behaviour. Sahakain (2023), writing of this study, notes, 'children who read for pleasure

had larger cortical surface areas in several brain regions that are significantly related to cognition and mental health (including the frontal areas)'. Tamir et al (2015, p. 215) offers an extraordinary statement on the power of reading to change behaviour:

The consequences of reading extend far beyond the subjective experience of any one individual. Researchers from fields as diverse as evolutionary psychology, literary studies and anthropology have independently credited literacy as a possible explanation for such societal shifts as the decline in human violence over the past few centuries, the development of desire-based over rules-based social interactions, and the advent of modern subjectivity.

Author Linda Strachan (2020) notes the value to MG readers of incorporating hope in the resolution of stories about difficult subjects: 'Everything must be resolved, mainly by the young characters, in one way or another by the end of the book, leaving the child reader with a sense of security, not fearfulness'.

Here it would be useful to reflect on the resolution of the three texts under consideration, with the question of hopefulness in mind.

Vachharajani, in A Cloud Called Bhura, was inspired by children in the USA and India, who sued their governments for inaction on climate change. She has her protagonists sue the government of Mumbai for doing nothing about the toxic cloud. What begins as a mission for four friends grows into a city-wide movement. Tammy says, 'They say we're a generation who want more, yes we do. More of a better future. And we have the right to demand this' (p.236). Vachharajani's images of child protestors, hand-in-hand, demanding their government acts, are inspiring.

In Where the World Turns Wild, Penrose gives her children hope that the wild has recovered beyond the city walls. Juniper thinks, 'I don't look at the buffer [a sterile ring around the city]. I only look beyond. Right to the horizon where I swear I see the beginning of green' (p.22). Added to this shred of hope is the children's belief that if they can escape, they can survive out there, because the wild contains everything humanity needs (a belief that proves correct).

In *The Last Bear*, April risks her life to help a polar bear trapped on an island due to melting ice sheets. Gold's message that taking action can have a positive impact (both for the world, and for the action-taker) is an important and hopeful one.

Next, I want to consider why these texts, dealing as they do with a subject as difficult as climate change, are so readable. Or, to put it another way, what are they really about?

Storytelling

Climate fiction may be *about* climate change, but if that is *all* it's about, would anybody read it? All stories, as Will Storr explains so brilliantly in *The Science of Storytelling* (Storr, 2019), are really about people with flaws and needs. The flawed characters draw us in, empathetically, and their struggles to fix themselves keep us reading. A study by

Bal and Veltkamp (2013) suggests that the greater the emotional connection the reader makes with the characters, the more empathy they will feel. The rest is context. More or less. Including climate change.

In *The Last Bear* we learn that April's father is distant, as he struggles with the death of her mother. April may spend a lot of the book trying to save a polar bear, but what she *needs* is a closer relationship with her father. This, rather than the fate of the bear, feels like the real resolution to the story.

The protagonists of Where the World Turns Wild hate their sterile city. They want to escape to the wild beyond. But what they really want is to escape in order to find their parents, who are living somewhere 'out there'. Family is again the resolution.

A Cloud Called Bhura covers climate change issues: from venal politicians to corrupt scientists; public health and social inequality, as well as flooding, crop failure and ecosystem damage. This doesn't sound like an enticing MG read. But Vachharajani pulls it off by using her protagonists' relationships with family and friends as the engine of her story. For example, Amni fears her parents will move to the clean air of the countryside, forcing her to leave her friends behind. Tammy worries about her grandfather, who is suffering from the toxic chemicals in the cloud. When the four friends join forces to sue the government, their actions may have an impact on climate change, but what really matters is that they did it together.

These stories are all so readable because the authors have written about human relationships in a world of climate change.

Responsibility

There is debate in the publishing world around what constitutes helpful, or unhelpful, climate fiction. This has focused on dystopian stories, set in futures where the damage is done and societies have re-shaped, often in alarming ways. Some feel that such stories risk deepening a child's climate-anxiety.

Author David Thorpe, speaking at the Hay Festival in 2015 (quoted in Knapton, 2015) said, 'Over the last 10 years [children] have been reading nothing but dystopian fiction. If we make them think the future is terrible, what are we doing to them?'

Lauren James, says (2023, p.165), 'I feel strongly that we should not be telling a generation that their future is broken'.

Leslie Davenport comments (quoted in Plautz, 2022), 'A story that is purely apocalyptic isn't helpful, but one where emotions are acknowledged and kids can find ways to navigate their feelings and get involved, that can break through'.

Philip Pullman though, argues that dystopia may highlight important values (2017, p.16):

Some writers feel they shouldn't take too bleak a view of the world, that [...] they should always leave the reader with a glimmer of hope. I think that has something to be said for it, but we should remember that tragedy is uplifting too, if it shows the human spirit at its finest.

Leavenworth and Manni (2019) recorded young peoples' reactions to climate fiction, focussing on a dystopian, YA trilogy written by Julia Bertagna, that begins with the novel *Exodus*. They write, 'Contemporary, speculative cli-fi may certainly give rise to potentially troubling emotions [...]' (p.731). However, they spotted that, at several points in the trilogy, the reader is invited to imagine the 'fragile moment' of history at which the consequences of climate change could have been avoided. This moment is 'now'. Bertagna is cleverly offering her readers the possibility, the hope, that the future she depicts can still be avoided, as if channelling Greta Thunberg's comment that there is still 'time to turn things around'. This surely qualifies as hopeful dystopian fiction.

The only dystopian text under consideration here is *Where the World Turns Wild*. Here, nature has recovered beyond the city walls. Penfold's central message, that nature *can* recover, given space and time, is a powerful and hopeful truth.

Maybe it's those authors who craft their stories to offer both 'a glimmer of hope' and show Pullman's 'human spirit at its finest', who can give their readers the most hope and inspiration; the very same qualities that have drawn children to the courageous Greta.

I would like to end with a different aspect of a writer's responsibilities, to do with how authors depict nature in climate fiction. This is important because it could influence a child's attitudes towards the natural world.

Penfold, in Where the World Turns Wild, emphasises the value of nature to our physical and mental well-being. In a wonderful early section, we learn that badly-behaved children are given a cage of stick insects to look after – a small concession by this society to the value of 'the wild'. This sliver of contact with nature offers children their last chance of reform before they are sent to the Institute.

Penfold goes on to portray the wild world beyond the city with deep respect. In her hands it is not something to be sanitised and controlled. It is complex, independent, even dangerous; valuable for its own sake, quite aside from what it could do for humanity. She does this so well that she even brings a sense of wonder to many people's least favourite animal – spiders: 'These ornate, perfect hangings. Geometry strung between branches. There's a spider still spinning. This incredible, graceful thing with long legs. Her web spirals out from the centre and she walks it like a circus performer. Like an acrobat' (p.148).

Penfold is espousing 'deep ecology'; an environmental philosophy which 'promotes the inherent value of all living beings regardless of their utility to humans' (Wikipedia b). It is built on the scientific principles of modern ecology, that individuals in nature are intricately connected, and that non-vital human interference with, or destruction of, the natural world poses a threat therefore not only to humans but to all organisms (ibid). Penfold is not simply telling a story in her novel, she is working on the huge theme of humanity's place in nature.

In *The Last Bear*, Gold sets up April's temporary island home as an ecosystem as complex and dangerous as Penfold's wild forest. Gold has a boy called Tor display a

wise respect for it, telling April, 'It is wild, and all wild things are dangerous [...] polar bears are not pets. They'll eat a girl like you alive' (p.22).

So far, so real-world. Later, Gold has April exploring by herself, approaching a starving polar bear, touching it, feeding it processed food and taking lone action to save it. This feels more like fantasy, where such things can happen, yet it remains framed as the real world, where such actions are more likely to lead to disaster. The story speaks strongly of the importance of taking action, but whether April's actions offer a helpful portrayal of how to interact with real nature is, perhaps, an open question.

Conclusions

Climate-anxiety is an issue for children around the world. In researching this essay I have looked for guidance from both scholars and other writers of hopeful MG climate fiction. I have been able to understand: a child's perspective on climate change; their worries about not being heard; their disempowerment and their grief at what is being lost, and, connecting all this together, fiction's power of empathy to engage a reader and alter how they think and feel. An MG climate fiction author, like myself, has many tools to engage readers and to offer hope and inspiration.

It has been brought home to me that what children want is a rattling good story. A writer can wrap up the difficult topic of climate change in engaging stories of family and friends, offering warmth, humour and resolution, deploying fiction's empathy to draw the reader in. This is well summarised by Marr and Oatley (2008, p.173):

Narrative fiction creates a deep and immersive simulative experience of social interactions for readers. This facilitates the communication and understanding of social information and makes it more compelling, achieving a form of learning through experience. [It] can facilitate the understanding of others who are different from ourselves and can augment our capacity for empathy and social inference.

Nicola Penfold said (2020b), of writing Where the World Turns Wild:

I was hearing a lot about how our lives today are less connected to nature than our parents' and grandparents' generations were. I wanted to explore what it means to have nature in our lives. At its heart, *Where the World Turns Wild* is hopeful and a rally cry for the natural world.

Penfold's story is one of the best MG 'rally cries' for nature that I have read, perhaps on a par with Eva Ibbotson's *Journey to the River Sea* (2001).

In writing *The Last Polar Bear*, Hannah Gold was concerned that most climate change stories for children were set in a future:

[...] where the natural world had already died [...] I felt a huge responsibility to hit a more positive tone. I was keen to tell a story full of heart, warmth and love, that inspired and empowered children to stand up and fight back. I hope my book encourages every child to know, that no matter how small, you can still make a difference. (quoted in Skinner, 2021)

The story is positive, her protagonist empowered. There is warmth and emotion. There is an argument that the real world relevance of the story could be weakened by the more fantastical elements of April's relationship with the bear. However, the take-away message of the story overcomes that. Here, April enunciates Gold's excellent principle, 'Imagine if every single person on the planet did just one thing [to fight climate change],' (p.268). This vital message offers readers an outlet for difficult emotions around climate anxiety by telling them, your actions matter.

Bijal Vachharajani said, of A Cloud Called Bhura, (2019b):

I imagined a scenario where a visible brown cloud hovers on top of my home town, Mumbai, and how all of us would react to it. Inspired by the many children I have met in the course of my work, I knew I wanted the solution to come from them.

Vachharajani has achieved her aims. She covers a wide range of the social and political aspects of climate change. She puts her children centre stage and lets them grow. The story is funny and uplifting, offering an important message of hope and empowerment. This is good climate fiction.

Works Cited

Bal, P. And Veltkamp, M. (2013) 'How does fiction reading influence empathy? An experimental investigation on the role of emotional transportation'. *Plos One* 30 January. Available at:

https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0055341 (Accessed 25 March 2024)

Barkham, P. (2020) 'Tears at bedtime: are children's books on environment causing climate anxiety?'. *Guardian* 27 Feb 2020. Available at:

https://www.theguardian.com/books/2020/feb/27/tears-at-bedtime-greta-thunberg-effect-behind-boom-in-childrens-climate-crisis-books (Accessed: 25 November 2022)

BoxOfficeMojo, (2023) Avatar: The Way of Water (2022) Available at: https://www.boxofficemojo.com/title/tt1630029/ (Accessed: 8 January 2024)

Chadwick, A. (2010) 'Persuasive hope theory and hope appeals in messages about climate change mitigation and seasonal influenza prevention'. *PhD thesis*: Pennsylvania State University, College of the liberal arts. August 2010. Available at: https://etda.libraries.psu.edu/files/final_submissions/88 (Accessed: 24 November 2022)

- Carlos, J. and Miller, R. (2007) *Kids at Hope: Every child can succeed*, no exceptions. Champaign: Sagamore.
- Corcoran, R. and Oatley, K. (2019). Reading and Psychology I. Reading Minds: Fiction and Its Relation to the Mental Worlds of Self and Others. In: Billington, J. (eds) Reading and Mental Health. Palgrave Macmillan, Cham.
- Ferguson, D. (2018) 'Can picture books meet the crisis in children's mental health?' *Guardian* 18 Oct. Available at:
 - https://www.theguardian.com/books/2018/oct/18/can-picture-books-meet-the-crisis-in-childrens-mental-health (Accessed: 25 November 2022)
- Ferguson, D. (2019) 'Greta effect' leads to boom in children's environmental books'. *Guardian* 11 August. Available at:
 - https://www.theguardian.com/environment/2019/aug/11/greta-thunberg-leads-to-boom-in-books-aimed-at-empowering-children-to-save-planet (Accessed: 25 November 2022)
- Gold, H. (2021) The Last Bear. Kindle edition. London: Harper Collins.
- Hickman, C. (2020) 'We need to (find a way to) talk about ... Eco-anxiety'. *Journal of work Practice* 34 (4) 411-424
- Hickman, C. et al (2021a) 'Young people's voices on climate anxiety, government betrayal and moral injury: A global phenomenon'. SSRN Electronic Journal 7 Sept. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3918955 (Accessed: 25 November 2022)
- Hickman, C. (2021b) Interview on: BBC Radio Somerset, *University Speaking*, ep. 33, 11 November. Available at: https://www.bbc.co.uk/sounds/play/p0bngh96 (Accessed: 2 Jan 2023)
- Hughes, R. and Wheeler, P. (2013) 'Introduction. Eco-dystopias: Nature and the dystopian imagination'. *Critical Survey* 25 (2): 1–6
- Ibbotson, E. (2001) Journey to the River Sea. London: Macmillan
- James, L. (2021) 'Can a climate fiction novel be uplifting?'. Climate Fiction Writers League Sept 17. Available at:
 - https://climate-fiction.org/2021/09/07/positivity-in-the-apocalypse-can-a-climate-fiction-novel-be-uplifting-by-lauren-james/ (Accessed: 6 Dec 2022)
- James, L. (2023) 'Writing hopeful climate fiction'. In Halls, S. (ed.) *Children's Writers and Artists Yearbook*. London: Bloomsbury, pp. 165-167
- Jones, E. (2020) 'How reading science fiction can build resilience in kids'. *Greater Good Magazine* May 15. Available at:
 - https://greatergood.berkeley.edu/article/item/how_reading_science_fiction_can_build_resilience_in_kids (Accessed: 1 Dec 2022)
- Kennedy-Williams, P. (2019) Interview on BBC Radio 4, You and Yours, 9 Sept. Available at:
 - https://www.psychologyoxford.com/blog/2019/8/8/eco-anxiety-discussed-on-bbc-radio-4-you-and-yours (Accessed: 2 Jan 2023)
- Knapton, S (2015) 'Climate activists target children with range of 'cli-fi' novels: Climate change fiction for youngsters is 'taking off in a big way according to activists'. The Telegraph online 22 May. Available at:
 - https://www.telegraph.co.uk/culture/hay-festival/11624736/Climate-activists-targeting-children-with-range-of-cli-fi-novels.html (Accessed: 26 December 2022)

- Leavenworth, M. and Manni, A. (2019) 'Climate fiction and young learners' thoughts a dialogue between literature and education'. *Environmental Education Research*, 27, pp. 727-742.
- Lush, A. (2019) 'From Greta Thunberg to Sally Morgan: 10 books to help kids come to grips with climate crisis'. *Guardian* 9 July. Available at:

 https://www.theguardian.com/books/2019/jul/09/from-greta-thunberg-to-sally-morgan-10-books-to-help-kids-come-to-grips-with-climate-crisis (Accessed: 25 Nov 2022)
- Marr, R., Oatley, K. (2008) 'The Function of Fiction is the Abstraction and Simulation of Social Experience'. *Perspectives on Psychological Science*, 3 (3), 173-192.
- Ojala, M (2022) 'How do children, adolescents and young adults relate to climate change? Implications for developmental psychology'. *European Journal of Developmental Psychology* Aug 2022. Available at: https://www.tandfonline.com/doi/full/10.1080/17405629.2022.2108396 (Accessed: 5 Dec 2022)
- Oatley, K. (2016) Fiction: Simulation of Social Worlds. *Trends Cogn Sci.* 20 (8); 618-628. Penfold, N. (2020a) Where the World Turns Wild. London: Stripes.
- Penfold, N. (2020b) Interview on: *The Reading Realm*, January 27. Available at: https://thereadingrealm.co.uk/2020/01/27/meet-the-author-an-interview-with-nicola-penfold/ (Accessed: 2 January 2023)
- Plautz, J. (2022) 'Kids are freaked out about climate doom. Can bedtime stories help?'. Mother Jones, May + June. Available at: https://www.motherjones.com/environment/2022/04/kids-are-freaked-out-about-climate-doom-can-bedtime-stories-help/ (Accessed: 1 Dec 2022)
- Pullman, P. (2017) Dæmon Voices. Oxford: David Fickling Books
- Rand, K. and Cheavens, J. (2009) Hope Theory, in Snyder, C. and Lopez, S. (eds.) in *The Oxford Handbook of Positive Psychology*. Oxford, OUP pp. 323-333
- Sahakain, B., Langley, C., Feng, J., Sun, Y-J. (2023) 'Reading for pleasure helps kids' brain development'. *Sci Am.* Sept 24, 2023. Available at: https://www.scientificamerican.com/article/reading-for-pleasure-helps-kids-brain-
- <u>development/</u> (Accessed: 25 March 2024)
 Skinner, S. (2021) 'Hannah Gold on her favourite climate change novels for children'. *Waterstones* February 2021. Available at:
 https://www.waterstones.com/blog/hannah-gold-on-her-favourite-climate-change-novels-for-children-08c3748b (Accessed: 6 December 2022)
- Storr, W. (2019) The Science of Storytelling. London: Collins.
- Strachan, L. (2020) 'Writing Middle Grade', Writers & Artists 12 October. Available at: https://www.writersandartists.co.uk/advice/writing-middle-grade (Accessed: 2 January 2023)
- Tamir, D., Bricker, A., Dodell-Feder, D., Mitchell, J. (2016) 'Reading fiction and reading minds: the role of simulation in the default network. *Soc Cogn Affect Neurosci*. Feb; 11(2): 215–224.
- Taylor, M. and Murray, J. (2021) 'Overwhelming and terrifying: the rise of climate anxiety'. *Guardian* 10 Feb. Available at: https://www.theguardian.com/environment/2020/feb/10/overwhelming-and-terrif
- Vachharajani, B. (2019a) A Cloud Called Bhura. New Delhi: Speaking Tiger.

ying-impact-of-climate-crisis-on-mental-health (Accessed 29 Nov 2022)

Vachharajani, B. (2019b) Interview in *Soup* 14 November. Available at: https://thesoup.website/interviews/2019/11/14/writers-on-reading-part-ten-bijal-vaccharajani (Accessed: 2 January 2023)

Wetmore, K. (2022) 'Calming the 'climate talk'. *Penn Medicine News* November. Available at:

https://www.pennmedicine.org/news/publications-and-special-projects/penn-medicine-magazine/fall-winter-2022/calming-the-climate-talk(Accessed: 5 Jan 2023)

Wikipedia a: The Day After Tomorrow. Available at:

https://en.wikipedia.org/wiki/The Day After Tomorrow#:~:text=The film was a commercial, at its time of release. (Accessed: 25 March 2024)

Wikipedia b: *Deep Ecology*. Available at: https://en.wikipedia.org/wiki/Deep_ecology (Accessed 25 March 2024)

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Rupert Barrington has spent thirty-five years as an award-winning writer and producer of wildlife documentaries, mostly for the BBC. His programmes have covered subjects across the animal and plant kingdoms, and from all over the world. His target audiences cover all ages, from young children to adults. He has worked closely with Sir David Attenborough on many programmes, crafting stories to stimulate a viewers' interest, to offer entertainment and to provide information about the climate and biodiversity crises. His most recent production was the BBC's *The Green Planet*. He is currently studying for Bath Spa University's MA in Writing for Young People.