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## Food, Fears and Anxieties in Climate Change Fiction

### Abstract:

Climate change fiction (cli-fi) is a relatively new and burgeoning genre. As creative writers, this paper's co-authors find many questions regarding how to address our current climate crisis in ways that protest stereotypical representations and over-simplified political systems. In order to develop climate change fiction that engages with the climate as something more than a backdrop for the action or as an adversary for the protagonists, as authors of cli-fi, we need to interrogate the roles of recognisable details, such as food, in our fiction. In this paper, we use Margaret Atwood's *MaddAddam* trilogy as a case study of how cli-fi novels can interrogate climate change by making use of food as a symbolic and narrative device within the work. From that foundation, we argue that reading and research crystallises imaginative prowess and galvanises new ways of writing in the genre of cli-fi.

### Biographical notes:

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## Introduction

Within the context of the current global climate crisis, climate fiction (or cli-fi) and the authors writing cli-fi become potential agents of change. The climate crisis raises questions for creative writers: how do we write texts inclusive of current scientific and imagined climate outcomes? How do we detail all the aesthetic, emotional, political and eco-poetical minutiae? And how can we action and use climate change theory to deepen our writing practice and outcomes? To address these questions, this article examines Margaret Atwood's *MaddAddam* trilogy to see how it can trigger and inform creative work. As creative writers employing food as a focus and writing cli-fi respectively, the intertwined nature of cli-fi and food as presented in Atwood's trilogy is of special interest to the authors of this article. By looking at Atwood's climate fiction that addresses specifics such as those related to food within the climate-changed setting, alongside the current fears and anxieties about the future of our planet, we can see a way forward to generate a fictional setting that is more than just a conflict, a situation that becomes real for the reader and therefore something that can be discussed within the fiction and as an issue that can be addressed in the real world.

Margaret Atwood has spent her writing career examining human fears and anxieties and often speculating about the futures that humanity as a collective could create. In the 2003 novel *Oryx and Crake*, Atwood constructs a future set at the precipice of climate change disaster being realised with mass extinctions of plant and animal species; an increase in storm activity; a decrease in potable water, crops, and food resources; and mass migration and the problematic ethics of genetic modification to feed the ever-increasing population. This novel is narrated by Jimmy (also known as Snowman). Jimmy has been an unwitting accomplice to Crake, a mad scientist figure, who designed a virus to wipe out all human life. Jimmy is left alone, abandoned in an almost human-free world to watch over the Crakers, a post-human hybrid created by Crake.

Atwood's sequel novel, *The Year of the Flood* (2009), retells the events of *Oryx and Crake* from two women's points of view: Toby and Ren, both members of God's Gardeners which opposes Crake's view of hopelessness and cynicism. These two narrators instead emphasise the importance of domesticity, being responsible for growing food and providing for your community and yourself, interspecies connection and respect, and responsibility for the environment. This trilogy ends with the novel *MaddAddam* (2013), which further draws on interspecies cooperation and breeding and even suggests that the future of intelligent life on earth could be post-human.

As creative writers interrogating how to write effective cli-fi, we see Atwood's trilogy as offering opportunities to reflect upon a series of fiction texts that offer different character perspectives and an immersion into the writing craft that is robust in ideas, strategies, and provocative speculation. Despite numerous articles on the trilogy, there are only a few commentators, such as Adele Tiengo (2016), who focus on its climate change ethics. Others tend to look more broadly and frame their discussion in terms of 'loss', 'apocalypse' or 'environmentalism' (Ciobanu 2014; Brooks Bouson 2015; Harland 2016; Northover 2016). This reluctance of critics to engage with the climate change aspects of these novels corresponds with environmental humanities scholar Timothy Clark's argument that 'literary criticism rarely directly addresses the topic [of climate change] in interpreting literature and culture. It is mostly at issue only obliquely or implicitly. This must be set to change' (2011: 22). As creative writers,

we need to acknowledge the role of literary theory to our creative practice. As Dominique Hecq argues, 'theory can come to the rescue of creative writing', noting that 'theory may enhance the creative process' (2015: 168). We need theory on writing climate change as much as we need more climate change fiction.

Climate change author and literary theorist Adam Trexler has argued that cli-fi tends to limit climate change scenarios to setting or backdrop (2015: 121). Many cli-fi novels depict governmental collapse and anarchy, so this becomes the focus of the fiction. This results in the many causes of climate change and the anticipated consequences being ignored or downplayed in these texts. Novels that the authors of the current article would list as acquiescing to Trexler's criticism in this regard include but are not limited to T.C. Boyle's *A Friend of the Earth* (2000), Susan M. Gaines *Carbon Dreams* (2001), Kim Stanley Robinson's *Forty Signs of Rain* (2004), Paolo Bacigalupi's *The Windup girl* (2009), Michael's Glass's *The Ultimatum* (2009) Marcel Theroux's *Far North*, (2010), Ian McEwen's *Solar*, (2010), Jim Laughter's *Polar City Red* (2012), Alexis Wright's *The Swan Book* (2013) and Nathaniel Rich's *Odds Against Tomorrow: A Novel* (2013). These novels are generally based in the future where the ideological conflicts occur in social, political or corporate spheres. Such texts 'fail to represent the politics of climate change, while covertly willing a new political climate' (Trexler 2015: 121).

Academic and practitioner wariness of climate change is especially prevalent in the creative arts (Clark 2011) and is an area specifically highlighted by this paper. We argue that Atwood's novels engage with this criticism and show a way forward for other cli-fi writers. There is a documented tension and polarisation between literary criticism and creative writing. As Dominique Hecq argues, 'writers are first and foremost readers and hence can learn from their reading processes' (2015: 9). We focus on Atwood's novels using both literary criticism and creative writing theories to explore ways in which writers can learn from Atwood's poetics and therefore engage with climate change in new ways – for example, by making use of food.

The *MaddAddam* trilogy repeatedly represents the politics of climate change, particularly with a focus on food production and consumption, the dangers of and impacts on the livestock and agriculture industries, deep sea dredging, and the acidification of the oceans. To examine the eco-poetics and politics within the trilogy, we will use specific elements of food theory, including food as structure, food driving the narrative, hunger, speciesism, individual ethics and identity, belonging and family, culture and group belonging, cannibalism and food symbolism. This paper will contribute to the growing field of climate change literary criticism and to the discussion of creative writing practice in this genre by using the twinned lens of climate change and food theory in order to show the entangled politics and eco-poetics within the *MaddAddam* trilogy. By using ideas about the role of food in fiction from essayist and food writer Adam Gopnik, we will address the ways that food is used by Atwood. According to Gopnik (2011), food has distinct uses within fiction. We have redefined his idea to refer to two broad narrative devices: one that helps to structure the narrative by showing about time, and the other that shows the reader about character. By referencing food as intrinsically linked to climate change, Atwood's work addresses the criticisms of Trexler and, in reverse-engineering these novels in this way, we are addressing the concerns expressed by Clark.

Atwood has publicly spoken about her personal stance on climate change, and has said of *Oryx and Crake*:

I put nothing into this book that we don't have or are not on the way to having. It's like *The Handmaid's Tale* in that I didn't invent. I just extrapolated. (quoted in Halliwell 2006: 256)

For this reason, this article will examine how the *MaddAddam* trilogy employs a climate change poetic, looking specifically at the ways in which climate change is written into the fabric of the fiction using food. By looking at Atwood's use of specific relatable details, we intend to offer her methods up as those which result in cli-fi that fills the gaps pointed out by Trexler and Clark in order to create literature that engages with the reality of the current global climate crisis.

### **Food as structure in cli-fi**

Atwood makes extensive use of references to food, its production, preparation, and consumption in the cli-fi *MaddAddam* trilogy. As creative writers focused on food and climate fiction respectively, the coming together of these two elements particularly interests us. Some of Atwood's structural uses are located in food's traditional roles within fiction and some relate more specifically to cli-fi. In Gopnik's discussion of the ways food is used in a structural context related to time, he argues that one of its roles in fiction is to show time passing and the thought processes of characters:

We need these devices in books, because we do not, in life, think our thoughts over time. Since our real mental life is made in tiny flashes in the midst of our routines, we have to stretch it out, taffy-like, in literature to cover a span of time worthy of it. (Gopnik 2011: 224)

In addition to this use of food, we add the idea of food being used to structure the narrative – as a beginning, as something that drives the narrative, and as a culminating scenario at the end. These are all uses to which specific details within cli-fi, such as food, can be put in order to create engaging literature around, about and within the current global climate crisis. Practitioners can actively plan and structure their works-in-progress to include, if not food, then other specific relatable details in this way.

The opening section in *Oryx and Crake* is titled 'Mango', and it is a mango that the protagonist, Jimmy, first eats. He chooses the mango over two manufactured products: a can of 'Sveltana No-Meat Cocktail Sausages' and a 'chocolate flavoured energy bar scrounged from a trailer park, limp and sticky inside its foil' (Atwood 2003: 4). Jimmy can be seen as similar to the limp and sticky chocolate bar; he wonders if he is the last human alive and has a flaccid attitude towards living and survival. When he eats his first meal of the day, there is no pleasure in the act: 'He sits down on the ground and begins to eat the mango' (Atwood 2003: 5).

By positioning food and eating as the opening sequence of the novel, Atwood highlights to the reader and 'proto-writer' alike (Hecq, 2015: 68) the importance of food and its production and consumption in a post-apocalyptic climate-changed world, a theme maintained throughout the trilogy. There is no reason provided for Jimmy's choice of the mango over the manufactured no-meat cocktail sausages, but the reason given for not eating the chocolate bar is that, 'He can't bring himself to eat it yet, it might be the last one he'll ever find' (Atwood 2003: 4). This positioning of food, and the consumption of food, sets up the themes of hunger, survival, and choices about food, which embody the climate change politics of the narrative. The juxtaposition between 'natural' food and 'manufactured' food also begins here. This use of food at the beginning is a structural function of food within fiction whereby the imagery of food is the starting point of the narrative.

There is a subtlety to Atwood's food politics which relate to the climate change politics of the narrative. Food, as impacted by climate change, provides the conflict that moves the narrative forwards. The impacts of climate change throughout the trilogy and these consequences drive the narrative. Climate change is not only experienced by all characters, but it is also used within the character's memories. *The Year of The Flood* discusses the consequences of climate change and Toby recalls her grandfather's farm:

her grandfather's Florida grapefruit orchard that had dried up like a giant raisin when the rains had stopped coming, the same year Lake Okeechobee had shrunk into a reeking mud puddle, and the Everglades had burned for three weeks straight. (Atwood 2009: 71-72)

The changed climate is shown to diminish people's ability to produce food in the same ways as done in the past, and this impacts on ideas of food security and ability to feed the population, even those who are affluent. The novels depict this situation as the logical progression from current food production trends. Jonathan Bate contends that 'man's presumption of his own apartness from nature is the prime cause of the environmental degradation of the earth' (2000: 36), and such setting apart of humans from the natural environment is investigated in close focus within *Oryx and Crake*. The *MaddAddam* trilogy explores the resultant over-population, mainly through the theories of Crake. He is critical of the human species, saying 'the less we eat, the more we fuck' (Atwood 2003: 139), and compares human behaviour to that of other animals who won't mate in lean seasons or who cut down on the number of young produced. Crake explains the situation to Jimmy, which acts as foreshadowing of his decision to wipe out humanity and replace humans with Crakers:

As a species we're in deep trouble, worse than anyone's saying ... Demand for resources has exceeded supply for decades in marginal geopolitical areas, hence the famines and droughts; but very soon, demand is going to exceed supply for everyone. (Atwood 2003: 347)

Atwood's novels predominantly use third person narration with close focalisation through particular characters, but she uses other characters, such as Crake, to comment the climate crisis and its impacts. Crake comments on the current food production and consumption crisis. This warning is echoed in *The Year of the Flood*, when Ren says, 'We're using up the Earth. It's almost gone' (Atwood 2009: 285). These ideas of hunger and food scarcity relate to overpopulation and food security, depicted in Atwood's pre-flood setting, which have long been theorised upon but which still need addressing in creative writing practice and literary criticism given the current climate cataclysm. Thomas Malthus's 1798 *Essay on the Principle of Population* argues that the growth of humanity should be guided by the ecological ability to sustain it but that the only thing that will stop the growing population will be the resultant 'misery and vice' which results in inevitable conflict (quoted in Gerrard 2004: 94). Malthus's ideas, much discussed at the time and subsequently (Cannan 1924, Boserup 1965, Schumacher 1973), play out in the speculative future of the *MaddAddam* trilogy.

Who and what is considered food along with interspecies ethics are other areas raised in the trilogy. In *Oryx and Crake*, the use of animals as food is complicated by genetic engineering as human brain tissue is implanted into the pigeons, which muddies the understanding of who can be eaten. The idea of distinguishing between species in this way is the basis of using some animals for food and not others, and these rules are culturally and ethically coded in a group and individual sense respectively.

Emily Askham defines speciesism as 'a practice by which we judge non-human animals and treat them in certain ways for no other reason than that they are of a different species' (2012: 29). Speciesism related to food production within Atwood's novels is depicted as eating for survival. In *The Year of the Flood*, Adam One says,

'The truth is ... most people don't care about other Species, not when times get hard. All they care about is their next meal, naturally enough: we have to eat or die...'  
(Atwood 2009: 287)

This is echoed by Jen Webb in her article about the politics of food choices:

In times of starvation or deprivation the gentlest of people have been observed to salivate over the prospect of eating a rat, or to sift weevils out of flour and then cheerfully – gratefully – prepare a coarse biscuit from the results. (Webb 2010: 4)

A further depiction is evident in Toby's decision to eat what Zeb refers to as 'land shrimp' despite her Vegievows, and she fries up a meal of maggots when her desperate times call for desperate measures. Later, too, Toby is interested to note how quickly some of the other Gardeners have relinquished their Vegievows when Rebecca serves up 'pig in three forms: bacon, ham, and chops' (Atwood 2009:34). Atwood's ability to link her characters to reality in the way they respond to food and hunger is instructive for other creative writers working in this genre because it acts as a model of how details such as these can be used by the creative writer to develop cli-fi that does more than set the environment up as an antagonist or backdrop for the human drama to play out against.

In terms of the structural use of food within Atwood's novels, this can be read as food, or a lack of food and hunger, that drives the narrative. Jimmy reflects on hunger first in discussing the intense heat during the middle of the day that he refers to as 'nooners':

The best thing about the noon hours is that at least he doesn't get hungry; even the thought of food makes him queasy, like chocolate cake in a steam bath. (Atwood 2003: 44)

Later in the novel, he muses over the advantage of hunger itself: 'There's something to be said for hunger: at least it lets you know you're still alive' (Atwood 2003: 109). Jimmy is aware that he is slowly wasting away and that the food available to him is insufficient.

Hunger puts pressure on the characters within Atwood's novels, driving them to act in particular ways. Their need for sustenance drives the narrative but the choices they make around food tell us about who they are – a strategy that can be employed by all creative practitioners, not only those who write cli-fi. It is a literary extension of Jean Anthelme Brillat-Savarin's adage: tell me what kind of food you eat and I will tell you what kind of man you are (1854). Examples of this driving force of food from other genres widens to include food as a conflict within the narrative, such as in Joanne Harris's *Chocolat* (2010) and Aimee Bender's *The Particular Sadness of Lemon Cake* (2011).

### **Food and character in cli-fi**

Food can be used in literature to develop and position characters. It allows the reader an insight into the character's morals, values and personality, but it also speaks to their background, in that food production and consumption is an indicator of culture, class and religion. In food theory, there is a connection between the preparation of

food and a person's empowerment. As pointed out by food theorist and third wave feminist Emily Matchar, 'Food choices have become important political acts, with deep moral and environmental consequences' (2013: 97).

The Gardeners, a survivalist group who feature heavily in *The Year of the Flood*, have developed a community based upon shared food choices, ethics and taboos as well as celebrations and festivals. Unlike naturally occurring cultural communities, the Gardeners would be considered an intentional community with a constructed food ethic and community guidelines. In her first few weeks with the Gardeners, Toby is 'inept' (Atwood 2009: 55). She cuts herself and bleeds into salads and she uproots artichokes, thinking they are weeds. She must develop the self-reliance and autonomy that the group shares when it comes to food production and preparation that frees the community from reliance on consumer food goods that are manufactured in the unsustainable manner typical of Atwood's pre-flood world. Toby finds that the Gardeners share an idyllic and sustainable space:

The Garden wasn't at all what Toby had expected ... Each petal and leaf was fully alive, shining with awareness of her. Even the air of the Garden was different. It was as if a large, benevolent hand had reached down and picked her up, and was holding her safe. (Atwood 2009: 52)

According to Matchar, the new 'food culture' puts its faith in 'food as a solution for a variety of social ills, from childhood obesity to global warming to broken families to corporate greed' (2013: 96). The animal and food ethics of Jimmy in his childhood are challenged when Crake takes him on a tour around Watson Crick College (Atwood 2003: 237). Crake takes Jimmy to 'NeoAgriculturals' and shows him 'ChickieNobs', which are 'a large bulblike object that seemed to be covered with stippled whitish-yellow skin' and are the genetically modified version of a chicken (Atwood 2003: 237-238). The tour guide explains that the head is in the middle: 'There's a mouth opening at the top, they dump the nutrients in there. No eyes or beak or anything they don't need those' (Atwood 2003: 238). The animal has no brain functions except 'digestion, assimilation and growth' (Atwood 2003: 238). Jimmy internally protests this level of genetic modification, however. His ethical distaste is overwhelmed by convenience and he decides 'the stuff wasn't that bad if you could forget everything you knew about the provenance' (Atwood 2003: 284). Jimmy continues eating in an almost deliberately unethical way throughout the novel, which can be seen as a choice of convenience over ethics and the human ability to turn a blind eye when making an ethical choice becomes too difficult or too inconvenient.

This is, however, a change from his concerns as a child, when he struggled with ideas about 'who should be allowed to eat what' (Atwood 2003: 27) when confronted by his father's work colleagues who would tease him about the cafeteria serving pigoon pie, pigoon pancakes, or pigoon popcorn. OrganInc Farms created pigoons to grow human organs, including livers, kidney and hearts. They were 'bigger and fatter than ordinary pigs' (Atwood 2003: 29). Jimmy is clear about how he feels about eating pigoons:

Jimmy didn't want to eat a pigoon because he thought of pigoons as creatures much like himself. Neither he nor they had a lot of say in what was going on. (Atwood 2003:27)

This speaks to a personal set of ethics that Jimmy has trouble maintaining when he becomes more jaded and cynical about life, the planet, and what constitutes food. This contrasts sharply to the development of a food ethic in Toby. Jimmy is disempowered

by the relinquishment of his childhood ethics and he finds he has fewer food choices available to him and less autonomy. In contrast, Toby, with the help of the Gardeners, develops a more sustainable and thoughtful way of consuming food and finds she has more choices and is empowered by them. Atwood uses food in this way to show the development or decline of the characters. Their choices around food show the reader who they really are. As creative writers we can use choices such as these to similarly develop characters who have particular sets of food ethics, making them real but also allowing us to put them under pressure in this regard, particularly in cli-fi where the changed conditions make difficulties with food security a very real obstacle for the characters to negotiate and overcome.

Our first experiences of food occur within our family and cultural groups. This is significant because foods from our childhood can therefore call up our early memories of our family when our identity is less individualised and is more that of the group. In this way, food is often symbolic of various familial roles and dynamics – mothering, sibling rivalry, the ways in which the group gathers to eat, or not, can all be significant, and they can all be consciously represented in fiction through food. Because of the ubiquitous nature of food and eating, these symbolisms may also come through subconsciously in an author's representations of food and eating. Bell and Valentine acknowledge that 'food has long ceased to be merely about sustenance and nutrition. It is packed with social, cultural and symbolic meanings' (1997: 3). These uses of food within fiction can be expanded out to include religious food choices as an extension of family and community. Food establishes images of family in the *MaddAddam* trilogy – Jimmy's mother doesn't prepare food because her focus is elsewhere, while other mothers are similarly absent from 'the kitchen'. There is a connection between food preparation and care, specifically the care related to parenting. In Jimmy's childhood, the only food item that is made for him is a peanut and jelly sandwich. His lunch would often not be made for him, instead 'he would have to make it himself' (Atwood 2003:35). This suggests a greater autonomy but what it really indicates is the dysfunction of his family. Atwood's use of food and food preparation is complex. As creative practitioners, it is worth noting the number of themes that food can relate to and the various meanings it can encompass. By being aware of how these details function, particularly in cli-fi, we can work towards literature that engages more deeply with the catastrophic nature of the climate crisis.

Food provision within the family (or lack thereof), as depicted in the *MaddAddam* trilogy, is indicative of familial dysfunction, which is symbolic of the depicted social dysfunction. This suggests that the loss of traditional understandings and knowledge about food and food preparation are either causative or symptomatic of the wider environmental and social dysfunction. The images of the destruction wrought by current (and predicted near-future) agricultural practices within the *MaddAddam* novels are linked to concepts of family, safety and wellbeing as symbolised by food within fiction. In the case of *Oryx and Crake*, there is the negative depiction of the lack of wellbeing as it relates to food in the lives of the main characters: their families are dysfunctional, do not provide emotional or physical nourishment for them, and their homes are not places of care. In stark contrast, *The Year of the Flood* details a community built around food, food knowledge, and food choices. Bell and Valentine discuss the nature and role of food in community-building:

In the literature on migration and food ways, food habits are seen as a fundamental way of shoring up a sense of (usually ethnic) community identity (e.g. Brown and

Mussell 1984), while material on local, place-bounded communities (or neighbourhoods) considers food as social glue... (1997: 15)

It is this 'shoring up' and 'social glue' that is missing within the communities represented in *Oryx and Crake* but that is being re-established in *The Year of the Flood*.

Food can be used within fiction in the same way that it is used within real life in order to create a sense of belonging. This also links to ideas about inclusion and exclusion. Being offered an understanding of the food eaten by a particular group of people is an entrée into that group itself. As creative writers, we should consider that way that the inclusion in a ritual of eating is an act of generosity from one character or set of characters to another, as this can help us to create believable interactions and nuance in character relationships (Shuman 2015; Köstlin 2015). This is evident in the interactions between Jimmy and the Crakers. The Crakers are designed as vegetarian with no need or desire to kill other species. However, Jimmy has lied and told them that Crake, who has been deified by the Crakers, decreed that they bring Jimmy a fish: 'one a week' (Atwood 2003: 116). There is a ritual around this weekly task; the women point at the fish and the men kill it: 'That way the unpleasantness is shared among them and no single person is guilty of shedding the fish's blood' (Atwood 2003: 116). Jimmy's character pre- and post-flood is the same, placing survival and convenience before any ethical regard. Readers see the generosity of the Crakers and their inclusion of Jimmy despite their inability to be truly hospitable due to the fact that Jimmy cannot eat what they use for sustenance.

God's Gardeners show the juxtaposition between Crake's extinction philosophy – that it is best to wipe the planet clean and start again – and a position where humans are caretakers, with an emphasis placed on gardening and living from what you and your community produce. Adam One discusses the group's use of rooftop spaces for gardens:

By covering such barren rooftops with greenery we are doing our small part ... and feeding ourselves with unpolluted foods into the bargain. Some would term our efforts futile, but if all were to follow our example, what a change would be wrought on our beloved Planet! (Atwood 2009: 13)

Atwood regularly uses Adam One's addresses to the group, in *The Year of the Flood* and *MaddAddam*, to make direct comment upon the state of the planet. God's Gardeners also serve to depict the communal and celebratory nature of food production, preparation and consumption as well as the way that this autonomy is empowering to those who belong within the community.

Within the Gardener Community, the group is more important than the nuclear family: 'everyone, including children, had to contribute to the life of the community' (Atwood 2009: 83). They grow the produce, prepare meals, bottle preserves, and create medicine as a tribe, with each member having responsibility for the welfare of the whole. Their approach to recycling also echoes this holistic approach to living as they teach:

Nothing should be carelessly thrown away, not even wine from sinful places. There was no such thing as garbage, trash, or dirt, only matter that hadn't been put to a proper use. (Atwood 2009:83)

Readers are first introduced to the world of exaggerated genetic modification and gene-splicing without limits or control via one of Jimmy's memories of his childhood

in his father's workplace, OrganInc Farms. OrganInc Farms created the pigeons to grow spare human organs and claimed that,

none of the defunct pigeons ended up as bacon and sausages: no one would want to eat an animal whose cells might be identical with at least some of their own. (Atwood 2003: 27)

The pigeons function in the narrative to symbolically to highlight food ethics that relate to concepts of self and other. Compare this to Zeb's survival cannibalism after a 'thopter crash in inhospitable frozen mountainous country and his blasé attitude when he is telling this story to Toby: "I took some of Chuck. Hacked it off with the pocketknife, kind of sawed it." ... Then he did some cooking. Then he ate' (Atwood 2013: 70). These references to cannibalism feed into the cli-fi ideas about our current (and predicted) use of the planet – the fact that we are consuming its resources in a similarly obscene way.

Within depictions of God's Gardeners there is the sort of understanding shared by a group who is already of one mind about what and how to eat. Depictions of sharing also appear between the Crakers and Jimmy when they bring him a fish, and in their offer of their caecotroph pellets when he approaches their camp looking hungry:

they'd offered him food – a couple of handfuls of choice leaves and roots and grass, and several caecotrophs they'd kept specially for him – and he'd had to explain carefully that their food was not his food. (Atwood 2003: 187)

The need to 'explain carefully' is inherent in an understanding that food, foodways practices, and the offering of food are imbued with cultural importance and are not to be shunned lightly.

Culture or group identity is an aspect of food widely recognised – cultural cuisines are commonly understood as being specific, determinant, and treasured cultural markers (Bell & Valentine 1997). We define who we are and who we identify with by what we eat and how we eat it. Layered upon these cultural considerations of food are specific food ethics which impact upon an individual's identity and sense of belonging or standing apart from their wider cultural or social group. These are features of food that can be used by creative writers within cli-fi to add nuance to characters. From the perspective of practitioners and our detailed examination of Atwood's *MaddAddam* trilogy, we argue that the creative writer's use of details such as food is strategic and deliberate; it does not happen by accident or osmosis. As writers, we can plan for these details or build them into the story to make for a more engaged cli-fi narrative.

## **Conclusion**

Atwood's *MaddAddam* trilogy is a textual space that allows for the investigation of climate change politics and poetics through the lens of food theory to create new understandings and advance climate change literary theory. Clark argues that the lack of climate change literary criticism has 'more to do with the novelty and scope of the problem than with personal failing, a measure of how starkly climate change eludes inherited ways of thinking' (2011: 10-11). Food theory is well placed to interrogate climate change, as it is used in a political manner within fiction. Food exposes the links between time, place, climate and characters such that climate change becomes more than a mere backdrop for the events of the novel. Adele Wessell notes that, 'Many things are edible, but what counts as food is narrated into being' (2010: 2). This link between food and story is at the basis of our argument that the images of food production and consumption establish, develop and drive the climate change

politics within Atwood's *MaddAddam* Trilogy and that these are techniques that can be drawn on by creative writers in order to do the same. This entanglement uses specific elements of food theory to contribute to the growing field of climate change literary criticism and to our understanding of what we can achieve as creative writers in the cli-fi genre.

Effective climate change fiction should aim to inspire change and create awareness in readers. In our view, authors should attempt to expose the environment devastation just as climate change literary criticism attempts to draw out and amplify the ecopoetics inherent in the fiction. There is often a philosophical underpinning to cli-fi novels asking us who we are in response to the climate-changed setting. Jimmy considers his identity by imagining explaining the meaning of 'toast' to the Crakers. He finds, within this imagined attempt, an embodiment of their lack of shared social understandings. His society that invented toast and then took such a basic food for granted operated outside of nature which means he needs to continue going back further and further to explain his explanation. His imagined conversation with the Crakers about toast shows that the Crakers, who do not see nature as apart from themselves, have a much more innate knowledge of food and one that indicates our current food production and consumption as being inherently flawed. Jimmy's imagined conversation highlights the ridiculousness of the toast-making process:

*Toast cannot be explained by any rational means.*

*Toast is me.*

*I am toast.* (Atwood 2003: 113)

Given that, as Joseph Meeker points out, humans are the only literary creatures on the planet, the creative writing we produce would ideally interrogate in these ideas in relation to cli-fi in order to,

determine what role, if any it plays in the welfare and survival of mankind and what insight it offers into human relationships with other species and with the world around us. (quoted in Love 2003: 25)

Atwood has created a climate-changed fictional future that is not only terrifyingly believable but that also embeds climate change poetics and politics, and the real ramifications of our current practices, within the fabric of the texts themselves – her novels deal with human and planetary welfare, survival, and relationships. As practitioners, we need to offer up both warnings and solutions within our fictions that contain within them the climate as something more than an adversary for the protagonists to battle against or a backdrop for their survival narrative. The productive use of food theory to understand and advance climate change literary criticism and creative writing practice encourages other multidisciplinary approaches in order to both create effective cli-fi texts and to develop literary criticism in this arena.

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