

What and How Will We Eat in Future? Food Culture, Food System, and Food Memory in Cli-fi Novels for Young Adults

Corina Löwe and Sabine Planka

When reading fiction about the future, food may not be the first thing that comes to mind, especially when thinking about dystopian worlds that deal with new technologies that facilitate a change in urban living conditions. While looking back into the past it becomes clear that food has played and still plays an important role in literary texts, as Renate Brosch notes in relation to English texts: “During the nineteenth century the inclusion of food in literary texts became more pervasive: it infiltrated all genres” (229). Our study explores whether this applies to fiction that looks forward into the future. In this article we focus on three Cli-fi novels for young readers and analyze the role and function of food.

The term Cli-fi novel, introduced in 2007 by Dan Bloom, is an emerging but not yet well-defined literary genre (Leikam and Leyda) with its origins in popular culture, film and media. With its main focus on anthropogenic climate change and its devastating effects on nature and society, this kind of fiction systematically investigates what daily life might look like after a climate emergency. The genre has been recognized as “a powerful medium to explore hopes and fears about climate change and imagine potential solutions” (Malpas).

The settings of Cli-fi narratives vary from scenarios in the present, as in Saci Lloyd’s *The Carbon Diaries 2015* (2008), to near-future stories, such as Mats Söderlund’s Swedish novel *Hotet* (2018) (in English *Threat*), to novels depicting a far-off future, like Emmi Itäranta’s *Memory of Water* (2014). The texts we aim to discuss here are placed in a far-off future and highlight the intersection of “both lived experience and otherworldly, a projection of a credible future” (Einsiedel, Chiang and Whiteley 28). Climate change appears in the novels

as part of a dystopian, post-apocalyptic, sci-fi setting with hegemonic social structures, marked by economic imbalance, a collapse of nature and society, and a faith in technical innovation (Loock; Einsiedel, Chiang and Whiteley; Johns-Putra; Schneider-Mayersson). Food and eating are important aspects of the narrative and serve as special indicators for climate change (Muñoz-González; Höglund and Salmose). According to Diane Wain and Penelope Jones, the representation of food can fulfil several functions in narratives, “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” (Wain and Jones 3).

Highlighting representations of food and discussing changes in the food system and food culture, provides a fresh way of analyzing the novels through a cultural lens. This is also a way of understanding environmental issues on a more specific level. When Timothy Morton talks about overwhelming spatio-temporal phenomena such as “climate change” or “global warming” in general, he refers to them as “hyperobjects” because, on the one hand, they are difficult to grasp and think about. On the other hand, they begin to infiltrate our thinking, so that hardly anyone can say ‘nice weather today’ without having the ulterior motive of global warming (Morton 1, 99). His assumptions can be applied to the consumption of foods, for example, avocados, cucumbers or meat, where water scarcity or other extensive use of resources should also be taken into account. Awareness of the production and consumption of food as a driver for environmental problems is growing, and against the background of socio-political debates on environmental protection, sustainability and related topics, it is not surprising that children’s and youth literature has also been increasingly addressing these issues since the mid/late 2000s, often in form of future scenarios in the speculative fiction genre.

While scientific-theoretical considerations on these works of children’s and young adult literature usually analyze works from English-speaking countries, including translations, for this paper we have chosen to examine works from Germany and France, which demonstrate that climate and environmental issues are also addressed in non-Anglophone language areas in order to sensitize readers to the fragility of the environment, including the production and preparation of food. Accordingly, we have chosen literary works that imagine different ways how future life on Earth could be affected by global warming, and which therefore address the production and availability of, as well as the handling of and concern for, food in the plot. As a result, climate change also has an impact on social rituals associated with food. These combinations result in different concepts of food memory, which aim to preserve memories of food.

David Moitet’s novel *New Earth Project: Tödliche Hoffnung* (2020) depicts a society affected by climate change and divided into two social strata. In the novel, some residents strive to regain lost knowledge about food production in order to help those who are

starving due to climate change and are dependent on food donations. Daniel Höra's novel *Das Ende der Welt* (2011) also plays with the concept of lost knowledge. However, his novel is much more dystopian, set in a distant future where today's knowledge has been forgotten. At the same time, the novel shows that life as a whole has undergone a change in meaning, which also has an impact on nutrition: eating is no longer a pleasure, at least for the majority of humanity, but only serves to maintain vitality. This contrasts with the third selected novel: Ursula Poznanski's novel *Cryptos* (2020) offers the protagonists pleasurable moments of eating, which are, however, subject to the dualism of artificial and natural. Poznanski creates a story whose dualism depicts a reality in which the majority of people have to be fed artificial food due to climate changes. This reality is juxtaposed with a virtual, artificial world in which people spend most of their day and therefore consume food that is modeled on natural food in terms appearance and consistency. Poznanski thus plays with the artificial and the natural by including food into the game both as a means of pleasure and as a means of sustaining life.

Food System, Food Culture and Eating Narratives for Young Readers

Writing and reading about food and eating has a long tradition (Gilbert and Porter). As a topic in children's literature, it is complex; food is very often not foregrounded in the novels, but rather, it adds another layer to the description of the protagonists' life, for example when families sit around the kitchen table and discuss daily problems while having breakfast, lunch, or dinner. Other stories present a variety of food and highlight eating situations, such as Roald Dahl's *Charlie and the Chocolate Factory* (1964), where both food system and culture are extensively discussed. With the term *food system* we mean "all activities, infrastructure, social institutions, and cultural beliefs within a social group across stages of the production, processing, transport, and consumption of food" (Zhen 19). Connected to the food system is the *food culture*, defined as "what we eat, as well as how and why and under what circumstances" (Edge 8); or, as Counihan puts it, food culture is about "the beliefs and behavior surrounding the production, distribution, and consumption of food" (Counihan 2).

Food and eating are closely related to the term cooking. Cooking is a cultural process and, therefore, mainly part of the food culture, but it also belongs to the food system when taking into consideration the accessibility of food. The anthropologist Claude Lévi-Strauss has developed the "culinary triangle," an influential model, to qualify the level of culture expressed by cooking in a society. Lévi-Strauss' triangle contains three states of food: raw, cooked and rotten. Its basic idea is that more developed cultures prepare more food by cooking and use more kitchen appliances and more complex methods for food preparation. "Humans were the agents of the transformation from the raw to the cooked, from the natural to the artificial," argues Bosch (218). Interestingly, she assumes

that “raw” means “uncultivated” while “cooked” is associated with “belonging to a higher culture.”

Today, however, an increasing variety of popular diets includes raw food, which is associated with the idea of healthy living.¹ Conversely, another contemporary trend involves an increase of cooked, processed convenience food, which has entered homes and kitchens from the 1950s onwards. Despite well-equipped kitchens in modern homes and a sufficient variety of food in supermarkets, the arrival of convenience food has resulted in a loss of culinary skills. The result is that people lose contact with nature and with unmediated, natural food (Caraher).

This short discussion demonstrates the difficulty in drawing a line between food system and food culture. The food system cannot exist without the food culture and vice versa. The food system, with the production, delivery, and access to food, influences the food culture that develops eating habits and food traditions. The food culture likewise affects the food system because the food and ingredients for which people ask will require production and delivery.

When it comes to its literary function in novels for young readers, food “offer[s] the researcher a snapshot of prevailing culture. Reading fictional food events provides us with knowledge about the social and family relationships, manners and morals of a given period” (Daniel 1). Research has linked food in children’s literature to culture and history, but also to relevant social topics like “politics, poverty, morality, lifestyle, health, social interaction, identity” (Webb 103), and has highlighted the ritual function of food as part of *rite de passage* or discussed it as a surrogate for sexuality (Bergstrand et al.; Nikolajeva 11ff). Other studies emphasize food as a symbol for sensuality and emotion, and the extensive discussion of table manners in many books alludes to the educational function of children’s and YA literature (Jäkel; Daniel). Special food products like honey or oranges have been interpreted as a link between home-loving and tradition, which can place a story in a certain time and culture (Keeling and Pollard; Everett). Additional topics in which researchers are often interested include eating disorders, and the children and young adults who seek to express their individuality through food and eating habits (Blackford; see also Carrington and Harding). Daniel sums this up by arguing that literary food images are a “particularly good vehicle for carrying culture’s socializing messages [...]” (Daniel 4).

In light of this, our analysis of the three novels will be guided by the following questions: how does human society react and adapt to the transformation of current food systems? What kind of new food and food systems have emerged in worlds transformed by climate change? How does this affect food memory?

The Dualism of Artificial and Natural in Ursula Poznanski's *Cryptos*

The story world in Ursula Poznanski's novel *Cryptos* is complex and divided into a real world in which global warming makes life almost impossible, and many virtual worlds that vary widely in the lifestyles and offer, therefore, an alternative to reality. The population in the real world is grouped according to their social status. The first group consists of a small minority of rich people that own IT-companies. They employ IT-specialists, creating and building the virtual worlds, that can be identified as the second group. Jana, the main protagonist, is one such world designer. The bottom of the population pyramid consists of the majority of people, and form the third group, spending their lives in living depositories, apartment buildings with thousands of tiny cells, each of them equipped with an incubator that enables its inhabitant to enter a virtual world. Sometimes, people are forced to leave virtual reality in order to work in the real world. In return they earn climate-points to buy, for example, access passes for new virtual worlds.

The complex field of tension between nature and technology is already established in the first chapter, with an idyllic description of a Irish landscape in a computer-animated world with sheep, mushroom pickers and lots of greenery, contrasted by the reality of life for the game programmers, who can choose between lemon flavored iced tea or synthetic chocolate as a drink, which is described as “inedible” (Poznanski 7).² Thus, food serves as a structural element of the narrative, describing the daily routines of the inhabitants and as a means of demonstrating power relations, as the dualistic division of the social strata in the real world shows, where class and social status define available food options. The rich elite has access to a full supply of food and is protected from the rest of the population. In contrast, intravenous, artificial nutrition keeps the majority alive in incubators during their time in virtuality, whilst world designers because of their higher rank have access to real food, offered in cafeterias. Climate points limit the monthly consumption: “I load a small portion of beet puree on my plate. Points: zero. Appetite: Zero” (Poznanski 39). The reaction of Jana gives the reader the feeling that food mainly fulfills a physiological function in the real world. Obviously, the sensory qualities and social aspects of eating and drinking are no longer of great importance, a fact underlined by the intravenous food, which is more of a nutrient solution than a tasteful meal. Real food experiences are no longer an option for the majority of inhabitants. They cannot experience food through tact or taste – the senses are no longer involved. Food is reduced to something fed intravenously. What could be interpreted as care is actually perverted into an element of control, with the aim of keeping people alive in their incubators during their visits in the virtual worlds.

In contrast to the real world, where class and social status function as access to food, in the virtual worlds boundaries are blurred, and good food is accessible to nearly everybody. In general, the computer-animated worlds meet all interests. They imitate places and ages

– people can spend time in seventeenth-century London, in places for dinosaur fans, or take vacations on dreamy islands – as well as live in futuristic places, created in order to try out new forms of social togetherness. These virtual worlds perform the same function as the “bread and circus” combination in ancient Rome. They cover up the shortcomings of the real world, where fewer and fewer people can be fed due to global warming and mismanagement. The virtual worlds become a true culinary Garden of Eden. In the Austen world (Poznanski 108), inspired by Jane Austen-narratives, for example, people eat ham and sandwiches and drink cider at a garden party and do not have to worry about the lack of food.

The rich selection of delicious dishes, like meat, fish, cheese, bread, porridge, chocolate, beer or sushi in these different virtual worlds awakens nostalgic memories of the good old days before climate change. As Jana reflects, it was crucial after the climate emergency and the transformation of society to recreate the “good old times” through virtual reality, because people expected to “live in a familiar environment” (Poznanski 9), even though in current times there is no one left who can remember the past (Poznanski 9). Many virtual worlds imitate different historical epochs and the food takes on at least a superficial cultural and historical - and at the same time democratic - meaning. Since all residents have access to these worlds, food provides a common ground, a global canon. In addition, however, the food depicted in the novel mainly reflects Western eating habits, and enables the Western reader to identify more easily with the story.

While food culture – or should we say food *cultures* due to the variety of worlds – as well as the food system in the virtual worlds remain constant, both are at risk in real life. Drinking water is scarce, desalination systems are inadequate, fields can no longer be used (Poznanski 369), feeding the world population is in general problematic. By contrast, people nourish nostalgic dreams about food in the different virtual worlds: “Lisa and Emil put on a barbecue with pieces of meat and fish. The smell arouses an appetite in me, that I haven’t felt in months. Steak. Potatoes and grilled vegetables. I take a huge portion [...] This is a feast. I am vaguely aware that this behavior – eating meat! – would greatly reduce my chances in the real world” (Poznanski 66). Jana’s struggle with self-control is not limited to avoiding unhealthy foods or counting calories: climatic conditions and regulations such as climate points have a strong influence on her eating behavior. In addition, she is aware that wasting food is not an option and is, in fact, prohibited.

Poznanski, therefore, develops a double food system in her novel: one that exists in the real world and one in the virtual world. For Jana, eating in the real world is always accompanied by regulations and restrictions, such as climate points, as seen above. The dishes are tasteless and monotonous, whereas food intake in the virtual world is described as something that stimulates the senses. It is not just the abundance of different foods that keeps people in the virtual world, but also the taste experiences and the chance to eat

their fill. In addition, social interactions, which in the virtual world are not subject to class constraints, play an important role. Eating porridge in 1622 London or being guest at a Jane Austen tea party may be a way to preserve collective memories about worlds history, but as Jana's brother remarks: "we have freedom of design. [...] it is not a history lesson, it is living space" (Poznanski 129). People in the virtual worlds are aware that everything that happens – eating included – only happens in their imagination, regulated and controlled by game designers. Celebrating a barbecue is a virtual social activity as the food itself is. Therefore, food culture in the virtual worlds has a double function: it is connected to memory and reproduces a shared experience.

The novel ends somewhat optimistically. After an uprising, arranged by Jana and her friends, the new rulers try to recultivate the earth and make the world a place worth living in again. Jana and her boyfriend celebrate this with an "exquisite meal" in a fancy restaurant (Poznanski 443) in the virtual world, which again illustrates the cultural importance of food, but also how long the road is towards a sustainable food system in the real world.

Scarcity as a Driving Force in Daniel Höra's *Das Ende der Welt*

While the protagonists in *Cryptos* still have a lively memory of food and food traditions, the protagonists in Daniel Höra's novel have lived for generations in a damaged world, and their connection to food culture is lost. The repartition of society into poor and rich people and the difference between rural and urban lifestyle underpin the novel and decide resident's access to food. Food as a topic is not foregrounded in the narrative, which indicates the general food shortage. No one in this society can afford to be picky. The most important function of food is to satisfy physiological needs, with the result that people eat simply everything – moles are, for example, a special delicacy. Usually, people eat spoiled food or muesli bars with an indefinable taste (Höra 131). In Berlin, where the main part of the story takes place, the apocalyptic living conditions, with constant rain and poor weather, lead to social decline and people would almost kill each other for food. Hunger forces people to humiliate themselves, as illustrated in the scene where a half-naked man approaches a group of soldiers. "The man held out his hand pleadingly and bowed incessantly. Prüm kicked him in the side so that he fell over howling and peed in fright" (Höra 30). The city of Berlin has become an unpleasant place to live. Its former glory has faded.

After a riot, the two young main protagonists Leela and Kjell flee to the countryside, where people in a village invite them for dinner. The dichotomy between city life and the village is evident. A closeness to nature in the form of food production and consumption as well as a closeness to culture in the form of social eating rituals is ascribed to village life. Arguing against Lévi-Strauss' triangle, in this novel, it is not the use of cooking or kitchen

tools that defines a higher cultural value but closeness to nature which enables people to maintain civilized habits, such as eating together the food they have grown. These skills indicate that the inhabitants still have agricultural knowledge apparently passed down for generations. Even Kjell discovers he has a sense for nature. He can for example detect edible tree fungi. Leela, who is from a wealthy city family disrespectfully comments that he is a “nature child” (*Naturbursche*) (Höra 131). However, being a nature child also means surviving. The return to nature becomes the new culture. In Lévi-Strauss’s culinary triangle, the use of cooking tools is linked to culture, while the non-use of tools is linked to nature. One interpretation of this paradigm is that culture has greater value than nature. However, what Höra’s novel proposes, and can also be observed in our world, is a general trend that can be described as ‘back to nature’ – back to the roots. Among the wealthier portion of the world population today, “back to nature” symbolizes an awareness of food and health and above all an awareness of ecological responsibility, which translates into the increasing success of plant-forward, vegetarian, and vegan diets. In Leela’s and Kjell’s world, the return to nature is born out of necessity. The novel’s representation of the future is overall pessimistic, and it does not imagine a solution to the food shortage; it rather pleads for a responsible relationship with nature, whereby food is sourced by learning agricultural skills again.

David Moitet’s *New Earth Project: Tödliche Hoffnung*.

David Moitet presents the world of 2125. Rich people in New York live in town centers protected from pollution by big fresh-air bubbles, while the poor live in the flooded water zones. Living in the latter means sharing little space, rarely having access to knowledge and education, and fighting for food. Isis, the protagonist, comes from a poor family and lives in Manhattan, which in 2125, due to the global warming and rising sea level, is “a swimming slum” (17) plagued by pollution (16). Isis is selected to visit a mixed school, where rich and some poor kids are educated together. In school she meets Orion, son of the founder of the New Earth Project that is about to send one billion people per week in the companies’ spaceships in search of a better life elsewhere. What the lucky winners do not know is that they are facing their death, because Orion’s father is responsible for organizing a massive genocide in order to reduce population on Earth.

In the poor water zones, where Isis lives with her family, the food supply is scarce. People drink seaweed tea (Moitet 18) and their survival depends on food distributions in form of energy bars or dried insects (Moitet 24). In markets, salesmen offer seaweed, old fish and chicken for those who can afford it (see Moitet 69). Attending school gives Isis the chance of social advancement, but it also gives her a warm meal a day (see Moitet 51). Even if “poverty is a creeping poison” (Moitet 76) and hunger a constant companion, in contrast to Höra’s novel, the living conditions are good enough to guarantee that cultural

and social values of eating still exist. The family gathers for a meal, Isis's mother cooks the vegetable Isis has delivered, and she reminds her daughter that eating regularly is important (Moitet 49). The novel highlights the value of family connectedness through food as part of the upbringing of Isis and her brother. Despite the fact that continued food distribution is never guaranteed, the novel leaves the impression that family meals provide quality time for parents and children, and are a place to develop a relationship with food, in line with scientific studies that state that eating at home to a great extent forms the eating habits of young children, prevents health issues, and fosters intelligence and empathy (Fruh et al.; Skafida; Vidgen 159).

What makes the novel especially interesting is the depiction of the food system. Isis is smart and understands that a lack of job opportunities and dependence on social welfare neither helps people in her neighborhood nor solves the food problem. In an old library – unused and destroyed as in most dystopian novels (see Planka) – she finds books on plant cultivation and learns more about it. This trait of her character aligns with what Goddek and colleagues have said about young people, that even if they “are statistically not interested in being the farmers of the future, they do want to be future farmers if technology is involved and [if] they can adapt these technologies to live closer to urban environments and have a better quality of life than in the rural past. Kids of all ages are fascinated by technology, and it is no wonder as technology solves many problems” (Goddek et al. V).

This aspect emerges when Isis and her best friend Flynn find out how to cultivate vegetables and provide their families with fresh food, after trying several different methods, like aquaponics and recultivation of plants in low nutrition soil (84-86). Here, books as part of human cultural memory are the key to success – and to food. While the generation of Isis' parents has accepted and adapted to the poor and unhealthy living conditions, the young generation fights it.

In contrast to Poznanski's novel with a virtual world that pretends to serve real food and by doing so still brings back memories of food from a bygone era, Moitet's novel demonstrates how memories come true by using special techniques to cultivate plants. *New Earth Project* is the only example in our selection of texts where ongoing scientific experiments, connected to the food system, have been included in the story. The story ends optimistically. The overthrow of the ruling class centered on Orion's father, who tried to solve the environmental crisis with inhuman methods, succeeds. A cross-generational change process begins, to which Isis contributes through her knowledge of recultivation.

Food Memories

What the authors of these three cli-fi novels highlight is the interconnectedness of climate change, the political and moral solutions of politicians and stakeholders, and their effect

on society and on individual living situations. In all three novels, food memories or their loss play an important role in defining people and their actions. It is possible to analyze this in relation to individual protagonists as well as to the collective memory of the society in question. John S. Allen notes that “[f]ood has meaning, it evokes memories, and it shapes identities” (2). He continues:

[f]oods are cultural objects, invested implicitly and explicitly with meaning and significance beyond their nutritive value. We also expand our food universe with cultivation and preparation techniques, some of which may date back millions of years and others that are far more recent. How we eat and how we think reflect the unique natural history of the human species.
(3)

Through the selection, combination and configuration of the narrative, literary texts condense memories and thus contribute to the formation of a collective memory (see Erll 144-145). Cli-fi novels are special because they anticipate memories and thus direct the reader’s gaze towards their own present. What it is necessary to carry into the future is a question the novels try to answer.

In Moitet’s novel the food system and culture are an important aspect. Isis, the main protagonist, acts much as Allen has described above: she is able to cultivate food and by doing so she not only expands the food options of her family; with her knowledge on plant cultivation, she also saves lives. Following her discussions with Flynn and Orion, and through her actions, the reader learns more about sustainable food production. Food is the link between the present and the past, connecting new agricultural methods of the reader’s contemporary time to preserved and almost forgotten knowledge in Isis’ own present. Education is the cultural capital passed on through books and social interaction.

In contrast to Moitet’s novel, a double connotation of memory is part of virtuality in Poznansky’s novel. In the virtual worlds people indulge in food memories; it is only there that a variety of food exists. This leaves a bitter aftertaste. When we ask (with Allen) how we might define people’s identities, we come to the conclusion that the protagonists in *Cryptos* still mentally live in the “good old times”. They pretend to live a “normal” life in virtual reality, where they maintain and cultivate knowledge about food, and where they practice social rituals such as table conversations.

In Höra’s novel knowledge about food is either not conveyed, or is only very rudimentary. In the world presented here, the protagonists know nothing about the cultural food traditions of their ancestors. Life and society have changed drastically and can no longer be compared with a reality familiar to the readers of the novel. It is important to mention that not only the original knowledge about food is lost, but also knowledge about

the social aspects that are strongly related to food. Sharing food, eating and enjoying it together with other people in a social event are unthinkable. Food simply exists to satisfy physiological needs, as is partly the case in Poznanski's depiction of the real world. Food in the real world shares the same function in both novels. No cultural rites guide the intake of food in the real world.

Comparing the three novels, food memories in real world-scenarios live on in such institutions as food markets (Moitet) or in the designing process of the virtual worlds (Poznanski). Another feature embedded in the texts is the mentioning of special dishes or food, for example iced tea with lemon flavour (Poznanski 7) or orange juice (Moitet 181), food that the protagonists like and with which they associate positive memories and nostalgic feelings. In Höra it is eatable trees fungi that form the frame of references for Kjell and connect him to his ancestors. John S. Allen observes that

[f]or humans, whose culture and consciousness provide the collective power to isolate and promote certain aspects of the struggle for life over others, food (along with sex and status) has become one of the touchstones of social life. Food memories are important not just because they concern sustenance but also because they have extensive connections to other memories of people, places, and things. (Allen 2012, 152)

We can conclude that these kinds of memories are partly lost in novels whose future settings no longer serve as a social environment for its inhabitants.

Conclusion

According to Alexa Weik von Mossner, “writers [...should] scrutinize whether their dystopian scenarios actually allow for an at least partially hopeful ending”. She admits that this is difficult to achieve in “eco-dystopian novels dealing with climate change, [...] because, as is well known, the effects of climate change will only be visible when it is way too late for mitigation” (Weik von Mossner 799). The authors of the analysed Cli-fi novels try different ways to highlight the long-term effects of climate change. In all three novels there is a close connection between the degree of destruction of living conditions and food memories.

In *Cryptos* and *New Earth Project*, people still have vivid memories of earlier times and miss familiar and beloved dishes. In Moitet's *New Earth Project*, nostalgia is also linked to the food system, when the protagonists do research on “old” agricultural methods like aquaponics, which then benefit the population. However, the notion of nostalgia is absent in Höra's *Das Ende der Welt* where people fight to survive – there is no space left for comforting food memories or other cultural expressions. The more the environment is

destroyed by climate change, the more people lose touch with what we consider normal eating habits, providing a pessimistic forecast on what adaptation process society might undergo.

In terms of what new systems and modes of eating the novels propose, the books mention inventions such as artificial food in form of liquid nutrients. Delivered intravenously, this food also represents a new way of eating. A clear sign of climate change is the lack of food variety. In addition, processed foods such as orange juice or cereal bars are similar to what readers might know from their own menus. Virtual food is a new category; whether it contributes to a healthy diet is another question. In general, we conclude that in all these books a plant-based diet is the norm, and what remains of nature becomes the new culture.

What we only have touched upon in our analysis are the social and power implications connected to the food system and culture. When Roland Barthes notes that food “is not only a collection of products that can be used for statistical or nutritional studies but is also, and at the same time, a system of communication, a body of images, a protocol of usages, situations, and behaviour” (Barthes 24) we can only agree. Eating habits are closely related to class issues. Used as a narrative strategy, tension is created in all books when discussing how the decadent behavior of the rich contributes to global warming. The poor cultivate some knowledge about the use of natural resources, and protagonists like Isis try to teach others how to produce food on a local basis. Both in *Cryptos* and *New Earth Project* people have lost connection to the real world, due to their wish to live in virtual or extraterrestrial worlds.

The ‘partially hopeful ending’ to which Weik von Mossner refers to is an attempt to direct our gaze back to the earth and, with small steps, to recultivate the soil and grow food. The treatment of food in these novels provides a glimpse into the near future.

Works Cited

- Allen, John. *The Omnivorous Mind: Our Evolving Relationship with Food*. Harvard University Press 2012.
- Barthes, Roland. “Toward a Psychosociology of Contemporary Food Consumption.” *Food and Culture. A Reader*, edited by Carole Counihan and Penny Van Esterik, Routledge, 2013, pp. 23-30.
- Bergstrand, Ulla et al. *Läckergommarnas kungärike: Om matens roll i barnlitteraturen* (Centrum för barnkulturforskning, 31). Centrum för barnkulturforskning, 1999.
- Brosch, Renate. “Visual Victual: Iconographies of Food and Dining in Nineteenth-Century

- England.” *Eating Culture. The Poetics and Politics of Food*, edited by Tobias Döring, Markus Heide and Susanne Mühleisen, Winter, 2003, pp. 209-235.
- Caraher, Martin. “Food Literacy beyond the Individual: The Nexus between Personal Skills and Victim Blaming.” *Food Literacy: Key Concepts for Health and Education*, edited by Helen Vidgen, Routledge, 2016, pp. 118-133.
- Carrington, Bridget and Jennifer Harding, editors. *Feast or Famine? Food and Children’s Literature: Food and Children’s Literature*. Cambridge Scholars Publishing, 2014.
- Counihan, Carole. *The Anthropology of Food and Body: Gender, Meaning, and Power*. Routledge 1999.
- Dahl, Roald. *Charlie and the Chocolate Factory*. Puffin, 2014 [1964]
- Daniel, Carolyn. *Voracious Children: Who Eats Whom in Children’s Literature*. Routledge, 2006.
- Edge, J. T. “Foodways.” *The New Encyclopedia of Southern Culture* edited by J.T. Edge, University of North Carolina Press, 2007.
- Einsiedel, Edna , Chiang, Angie and Andrea Whiteley. ”Climate Change Imaginaries? Examining Expectation Narratives in Cli-Fi Novels”. *Bulletin of Science, Technology and Society* 36 (1), 2016, pp. 28-37.
- Erl, Astrid. *Kollektives Gedächtnis und Erinnerungskulturen*. Metzler, 2005.
- Everett, James. “Oranges of Paradies: The Orange as Symbol of Escape and Loss in Children’s Literature.” *Critical Approaches to Food in Children’s Literature*, edited by Kara K. Keeling and Scott T. Pollard, Routledge, 2009, pp. 193-206.
- Fruh, Sharon et al. “The Surprising Benefits of the Family Meal.” *The Journal for Nurse Practitioners*, vol. 7, no. 1, 2011, pp. 18-22. DOI: 10.1016/j.nurpra.2010.04.017
- Gilbert, Sandra M. and Roger J. Porter. *Eating Words: A Norton Anthology of Food writing*. Norton, 2016.
- Goddek, Simon et al. *Aquaponics Food Production Systems: Combined Aquaculture and Hydroponic Production Technologies for the Future*. Springer Open, 2019.
- Höra, Daniel. *Das Ende der Welt*. Bloomsbury, 2011.
- Höglund, Johan and Niklas Salmose. “Climate Diaspora and Future Food Cultures in *Snowpiercer* (2013) and *The Road* (2009).” *Food, Culture & Society*, vol. 1, no. 16, 2024. doi:10.1080/15528014.2024.2342627
- Itäranta, Emmie. *Memory of Water*. Harper Voyager, 2014..
- Jäkel, Sonja. *Inszenierungen des Essens in der Kinder- und Jugendliteratur. Aufklärung – Romantik – Biedermeier*. Peter Lang, 2015.
- Johns-Putra, Adeline. “Climate Change in Literature and Literary Studies: From Cli-fi, Climate Change Theater and Ecopoetry to Ecocriticism and Climate Change Criticism”. *Wiley interdisciplinary reviews (WIREs): Climate Change*, vol. 7, no. 2, 2016, pp. 266-282. DOI: 10.1002/wcc.385 (accessed on January 09, 2024).
- Keeling, Kara K. and Scott T. Pollard. *Table Lands: Food in Children’s Literature*. University Press. of Mississippi, 2020.
- Leikam, Susanne and Julia Leyda. “Cli-Fi in American Studies: A Research Bibliography”. *American*

- Studies Journal*, no. 62, 2017, <http://www.asjournal.org/62-2017/cli-fi-american-studies-research-bibliography/> (accessed on January 09, 2014).
- Leikam, Susanne and Julia Leyda. "Cli-Fi and American Studies: An Introduction". *Amerikastudien / American Studies*, vol. 62, no. 1, 2017, pp. 109-114.
- Lévi-Strauss, Claude. "The Culinary Triangle." *Food and Culture: A Reader*, edited by Carole Counihan and Penny Van Esterik, Routledge, 2013, pp. 40-47.
- Loock, Kathleen. "Cli-fi and the Dystopian Tradition". *The Dystopian Impulse of Contemporary Cli-Fi: Lessons and Questions from a Joint Workshop of the IASS and the JFKI (FU Berlin)*, edited by Julia Leyda et al, 2016 https://www.rifs-potsdam.de/sites/default/files/files/wp_nov_2016_the_dystopian_impulse_of_contemporary_cli-fi.pdf (accessed on January 09, 2024).
- Lloyd, Saci. *The Carbon Diaries* 2015. Hodder, 2008.
- Malpas, Imogen. "Climate Fiction is a Vital Tool for Producing Better Planetary Futures." *The Lancet Planetary Health*, vol. 5, no. 1, 2021, e12-e13.
- Moitet, David. *New Earth Project. Tödliche Hoffnung*. Edel, 2020. Original French: *New Earth Project.*, 2017.
- Morton, Timothy. *Hyperobjects: Philosophy and Ecology after the End of the World*. University of Minnesota Press, 2013.
- Muñoz-González, Esther. "The Anthropocene, Cli-Fi and Food: Margaret Atwood's *MaddAddam*." *Atlantis*, vol. 43, no. 1, 2021, pp. 39-54. <https://www.jstor.org/stable/27088735>
- Nikolajeva, Maria. *From Mythic to Linear: Time in Children's Literature*. Scarecrow, 2000.
- Planka, Sabine. "... und von hier oben sieht es so aus, als wären die Trümmer der alten Bibliothek mit riesigen schwarzen Spinnen bedeckt." Die Bibliothek in dystopischen Jugendromanen des 21. Jahrhunderts ["... and from above it seemed as if the ruins of the ancient library were covered by giant black spiders" – The library in dystopian novels for young adults in the 21st century.]. *Bibliotheksdienst*, vol. 53, no. 1, 2019, pp. 12-36.
- Poznanski, Ursula. *Cryptos*. Loewe, 2020.
- Schneider-Mayerson, Matthew. "Climate Change Fiction." *American Literature in Transition 2000-2010*, edited by Greenwald Smith Rachel, Cambridge University Press 2017, pp. 309-321.
- Skafida, Valeria. "The Family Meal Panacea: Exploring how Different Aspects of Family Meal Occurrence, Meal Habits and Meal Enjoyment Relate to Young Children's Diets!" *Sociology of Health & Illness*, vol. 35, no. 6, 2013, pp. 906-923, doi: 10.1111/1467-9566.12007.
- Söderlund, Mats. *Hotet*. Rabén & Sjögren, 2018.
- Vidgen, Helen. "The Development of Food Literacy." *Food Literacy: Key Concepts for Health and Education*, edited by Helen Vidgen, Routledge, 2016, pp. 151-164.
- Wain, Debra and Penelope Jones. "Food, Fears and Anxieties in Climate Change Fiction." *TEXT* 22, vol. 51, 2018, pp. 1-13. <https://doi.org/10.52086/001c.25582>
- Webb, Jean. "Changing Approaches to Food in the Construction of Childhood in Western Culture". *(Re)imagining the World: Children's Literature's Response to Changing Times*, edited by Yan Wu et al.,

Springer Berlin, 2013, 93-104.

Weik von Mossner, Alexa. "Hope in Dark Times: Climate Change and the World Risk Society in Saci Lloyd's *The Carbon Diaries* 2015 and 2017." *Contemporary Dystopian Fiction for Young Adults*, edited by Carrie Hintz et al., Routledge, 2013, pp. 69-84.

Zhen, Willa. *Food Studies: A Hands-On-Guide*. Bloomsbury, 2019.

Notes

¹ We cannot answer the related question: could raw food be the new symbol for a higher culture, in contrast to what Lévi-Strauss and Brosch have suggested?

² Translations, unless otherwise stated, are our own.