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Reflections of Hope and Anxiety in Audience Responses to Three Environmental Films

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Abstract

This article discusses the results of a reception study of three environmental films with a focus on emotional reactions and the films' influence on the respondents' environmental awareness. The short experimental film *Valtakunnat/Realms* (Finland, 2018) envisions post-human life, and the potential destruction that the planet is being driven towards. *To Teach a Bird to Fly* (Finland, 2020), a short documentary fiction film about a woman raising critically endangered birds, imagines a future where the effects of climate change have been reversed. The documentary film *The Biggest Little Farm* (USA, 2018) follows a couple who buy a barren farm with the aim of restoring its biodiversity. Through thematic analysis two interconnected responses – hope and anxiety – were identified. The article discusses the connection between viewers' emotional responses, the films' different styles, their utopian and dystopian elements, and the impact of the films on viewers' environmental awareness. The article concludes that both gloomy and hopeful films can help viewers reflect on their own relationship to nature and consider their role in preventing an environmental catastrophe.

Keywords: reception study, empirical ecocriticism, environmental film, *Realms*, *To Teach a Bird to Fly*, *The Biggest Little Farm*

Introduction

We are living in a time of unprecedented ecological crisis in which climate change, loss of biodiversity and the sixth mass extinction, which is driven by human activity, are all connected and intertwined. The importance of art's role in addressing the complex environmental situation has come to the fore of artistic discourse, and both artists and researchers are exploring the ways that art can bring ecological issues closer to people on an intellectual, emotional and affective level. Many filmmakers and artists have responded to the situation by engaging with environmental topics in different ways. However, in recent years there have not been many studies into how audiences experience these works of art. This article presents the results of a small-scale reception study of three environmental films. The study was organized at the University of Jyväskylä as a part of the interdisciplinary research project *Art, Ecology and Diverse Human–Nature Relationships – Towards a Shared Future*¹, which explores human-nature relationships using methods involving artworks and artistic practices. The aim of the project is to produce knowledge that helps gain a deeper understanding of human-nature relationships and to awaken people to the reality of the environmental crisis.

The reception study took place online during autumn 2020 and was open to everyone over the age of 18 who agreed to participate in the study. The aim was to find out what thoughts and feelings the films evoked, and how they might have helped the viewers reflect on their own relationship with nature. We chose three films that deal with human-nature relationships in an age of environmental crisis using different artistic methods. *Realms* (2018, Finland) is an experimental short fiction film by Patrik Söderlund, *To Teach a Bird to Fly* (2020, Finland) is a short documentary-fiction film by Minna Rainio & Mark Roberts, and *The Biggest Little Farm* (2018, United States) is a full-length documentary film by John Chester.

Although all three films deal with the environmental crisis, only *The Biggest Little Farm* can be characterized as an environmental documentary (see for example Musser 2014), and even then, it does not quite fall into the category of argumentative environmental documentaries with its feel-good approach. *Realms* and *To Teach a Bird to Fly* are art films and have been shown mainly in galleries and film festivals. We did not include 'rhetorical documentaries' (Bordwell and Thompson 1993) that aim to influence and persuade² audiences by promoting a specific cause. Although many environmental films have used the rhetorical form (Weik von Mossner 2014, 45), we intentionally selected films with subtle ecocritical messages that leave space for the viewer's contemplation and interpretation. In this article, we are particularly interested in how the different styles and approaches of the three films affected audience reactions.

¹ The project's website: <https://taideko.org/>

² As Michael Renov (1993, 28–30) points out, persuasion is a tendency intrinsic to all forms of documentary, but some traditions are more openly persuasive.

However, all three films can be characterised as environmental films, because they aim to call attention to human responsibility for the environment and non-human nature. Ecocinema is a term used by film studies scholars to describe films that aim to raise awareness about the state of the environment and encourage a shift in viewers' behaviour and attitude (Willoquet-Maricondi 2010; Smaill 2014, 103). Some researchers argue that experimental films are particularly well-suited to raising ecological awareness by challenging the viewer's spectatorship (Willoquet-Maricondi 2010, MacDonald 2004). Others claim that any film – documentary or fiction – can be effective in explicitly or implicitly dealing with ecological issues. Films can be analysed through an ecocritical framework by asking how they show the role of humans as part of the ecosystem (Brereton 2016, 31; Kääpä 2014; O'Brien 2018). Viewpoints also vary on whether ecocinema films should have a concrete impact on audiences. For Paula Willoquet-Maricondi (2010, 45) concrete impact is a requirement: "Ecocinema overtly strives to inspire personal and political action on the part of viewers, stimulating our thinking so as to bring about concrete changes in the choices we make, daily and in the long run, as individuals and as societies, locally and globally." It has been pointed out that ecocinema, or eco-documentary, is a loose subgenre that encompasses films made from very different starting points and styles (Hughes 2014, 8–9; Musser 2014). In this article, we use the neutral and widespread term environmental film.

Many researchers have pointed out that in addition to textual analysis and theories, empirical reception studies are needed (Ivakhiv 2008, 24; Willoquet-Maricondi 2010, 45; Brereton & Hong 2013; Kääpä 2013, 108). Schneider-Mayerson, Weik von Mossner and Małecki write that ecocritical research has long assumed that environmental texts, such as fiction and films, increase environmental awareness in readers and viewers. Such assumptions, however, are based mainly on intuition, and even wishful thinking. Traditional ecocriticism has concentrated on a close reading of various texts and films, whereas empirical ecocriticism brings an empirically grounded and multidisciplinary point of view to the study of environmental texts. Empirical ecocriticism combines societal and empirical methods with textual, narrative and aesthetic analysis and asks how the assumptions of ecocritical research relate to the knowledge of how actual viewers receive the stories (Schneider-Mayerson, Weik von Mossner & Małecki 2020, 1-3, 8). The questions asked by empirical ecocriticism arise from the field of ecocriticism: how environmental narratives influence attitudes, behaviour, culture and practices (Schneider-Mayerson, Weik von Mossner & Małecki 2020, 8).³

Reception study: the implementation and the questionnaire

Participants for the research project *Art, Ecology and Diverse Human–Nature Relationships* were recruited during late summer 2020. The research was conducted in Finnish. Therefore,

³ The study by John Corner, Kay Richardson and Natalie Fenton (1990) about the reactions of different kinds of British audiences to various television programs and videos that deal with nuclear power in the 1980s is an early, perhaps even the first, example of a reception study related to environmental themes.

a good knowledge of Finnish language was required of the participants. When signing up for the research, people were asked to choose which parts of the research project they wanted to participate in.⁴ They could sign up for all three films or for just one film. Before being allowed to watch the films and answer the research questions, respondents were required to fill in another questionnaire about their relationship to nature. In this questionnaire we also collected some basic information about the respondents. This included age, gender and occupation/education. In addition, we asked about their motivation for taking part in the research project. The respondents ranged from students born in the 1990s to pensioners born in the 1940s. A great majority of the respondents were highly educated. Judging from the answers, most of them felt they had a close connection with nature and were concerned about the environmental crisis. Many of them were interested in the topic because of their work or hobbies. Some even mentioned that they were interested in the research methods.

Our original plan was to organize a separate screening of each film and facilitate a discussion among the participants and the researchers afterwards. Due to the COVID-19 pandemic, we could not screen the films publicly, so participants watched the films online instead.⁵ The films were available on Yle Areena, the streaming service of Finland's national public service media company. A single questionnaire was provided for each film, featuring 15 open questions. The questionnaires were open for six weeks. The first questions (1–9) focused on the film whereas the remaining questions (10–15) asked how the films connected with the viewer's relationship to nature:

1. Was there something that you especially remember from the film?
2. What kind of feelings did the film evoke?
3. What did you like about the film?
4. Was there something that you disliked about the film?
5. What was the central message of the film?
6. Did the film raise any physical sensations or sensory reactions? Could you describe them?
7. Could you differentiate some cinematic methods (i.e., sounds, rhythm, angles, colours) that may have contributed to your feelings and reactions?

⁴ The invitation for the research was distributed on the project's website, on the mailing lists of the University of Jyväskylä, in various social media groups, on the notice boards of public buildings such as the university, libraries and shops, as well as on notice boards located outdoors. The different parts of the research included the three films, an eco-acoustic workshop, and a workshop that combined artistic and ecological practices. In addition, we had a separate invitation to take part in a reception study of a work of sound art.

⁵ The original plan was that in addition to the discussion the participants should also answer the questionnaire. In retrospect, we are satisfied with how things turned out. Public discussion might have influenced the participants' opinions, or they might have decided not to answer the questionnaire after having already discussed the films with other viewers. In terms of viewing conditions, the original plan would have guaranteed an identical viewing situation for everyone.

8. Did the film tell something you didn't know before?
9. How did the film describe the relationship between humans and nature?
10. Did the film make you think differently about your relationship to nature or humans' relation to other species?
11. Do you think your relationship to nature or other species can deepen with the help of this film, or can the film help create a relationship to nature? How?
12. Did the film make you feel responsibility or complicity?
13. What kind of thoughts did the film raise about the future?
14. Did the film help you encounter or deal with feelings about nature? Did it console you or increase your worries?
15. How did you feel about answering the questions and writing about the film? Was it difficult or easy?

We received altogether 62 responses from 28 different participants. The films received the following number of responses: *Realms* twenty-two, *To Teach a Bird to Fly* twenty-three, *The Biggest Little Farm* seventeen. 13 participants watched all three films.

Approximately four months after the viewings, we interviewed four participants who had watched all three films. The interviews took place on Zoom. Because it was not possible to organize screenings and discussions with the participants as initially planned, we decided to conduct interviews to replace some of that interaction. We asked six questions to find out what they remembered about the films, if the films had left any lingering impact on their thinking or actions, and what they thought about the role of art and films as a way of addressing human-nature relationships.⁶ In the interviews we discussed these issues on a more general level and did not return to the details of each individual film. In this article the interviews are used only in the conclusion when reflecting on the method of the questionnaire in our research.

Emotional reactions in focus

We used the method of thematic analysis to analyse the responses to the questionnaire (Brown and Clarke 2006). After reading the material through several times, we were able to

⁶ The interview questions:

1. Is there any specific moment or image in the films that you remember or that stayed with you?
2. Is there something that you have been thinking about the films after seeing them?
3. Did the films affect you or your relationship with nature in some way (thoughts, attitudes, actions)?
4. Do you think watching these films and answering the questions was a useful way to reflect on your own relationship with nature?
5. What kinds of places, spaces or practices would you need to reflect on your relationship with nature?
6. Do you think art, for example films, create meaningful places to encounter and deal with feelings relating to nature and the environment?

identify central and interlinked themes and issues. As we constructed the themes, we also drew upon earlier reception studies and research into environmental films. In our analysis we thus created a dialogue between the empirical material and earlier research. The interlinked themes and issues we identified are 1) the emotional affectivity of the films, 2) connections between the emotional and bodily responses and film style, 3) dystopias and utopias/ecotopias, and 4) the influence of the films on the respondents' relationship to nature and environmental awareness.

All films, including environmental films, have effects on cognitive, emotional, and affective levels. We took all these levels into account when creating the questionnaire. We asked what kind of emotions and sensory experiences the films aroused, and what kind of new knowledge they provided the viewers. We also asked the respondents to analyse, if possible, which aspects of the films caused them to experience emotional or bodily reactions. We asked participants directly about emotions in two questions (2 and 14), and emotional reactions were also raised in other questions (particularly questions 5 and 6).

Alexa Weik von Mossner argues that artists and activists who deal with ecological questions favour film as a medium. Because of the sensory and emotional experiences that cinematic technology offers, people can experience a connection to environments they cannot have "sensory access to" (Weik von Mossner 2016, 337). The affective effects of films remain with viewers for a long time, and the affectivity may materialize into concrete action later (Hiltunen et al. 2020, 154–155, 172–173). Reception studies suggest that experiential rather than analytic processes are more crucial when it comes to influencing climate attitudes. Here, the various kinds of "simulations" offered by film may be effective (Weik von Mossner 2016, 340).

In the answers given to the questionnaire, emotions and affects were emphasized more than issues related to information and knowledge, although some respondents also mentioned information as an important aspect of environmental films. When asked whether the film conveyed new information the responses were heterogeneous, and a variety of disparate things were mentioned. Therefore, the emphasis in this article is on emotional reactions.

We analyse the responses film by film, starting with *Realms* and concluding with *The Biggest Little Farm*. With each film we look first, based purely on the empirical material, at the emotional and affective reactions to the films, then we analyse how the emotional and affective responses relate to specific film styles. We found that feelings of hope and hopelessness or despair were often brought up in the responses. Based on these findings we focus next on the themes of dystopia and utopia/ecotopia, and the related feelings of hope and despair. These themes have also been explored in previous studies of ecocinema as we will explain below (Ivakhiv 2011; Kääpä 2014; Matts & Tynan 2012). In the last section, we bring the films together and pay attention to their influence on the respondents' attitudes and behaviour. Previous reception studies have studied the influence and impact of environmental films, and we therefore compare our results with these earlier studies (see

for example Beattie, Sale & McGuire 2011; Howell 2011, 2014; Lowe et al. 2006; Nolan 2010; Schneider-Mayerson 2017) and the viewpoints of ecocritical film theory.

One significant difference between our study and previous empirical reception studies is that most of the earlier research focused on the impacts of environmental films from the viewpoint of environmental communications. They concentrated, for example, on whether seeing a film affected viewers' attitudes, such as prompting them to make more environmentally conscious choices after seeing the film (Howell 2011, 185; Nolan 2011). This point of view is evident in the choice of mainstream films such as *An Inconvenient Truth* (2006) and *The Day After Tomorrow* (2004) (see for example Beattie et al. 2011). The impact of environmental films was also followed up over longer timespans (Nolan 2010; Howell 2011, 2013).

In the context of the research project *Art, Ecology and Diverse Human–Nature Relationships – Towards a Shared Future*, this reception study was one of several methods used to explore the role of art in reflecting on one's relationship to nature and raising environmental awareness. Furthermore, we wanted to explore how different cinematic styles and approaches affected viewers' experiences. For this reason, we chose three very different films. In previous reception studies of environmental cinema, the aesthetic aspects of films have not been the main priority. However, when asking what makes a film effective, it is important to pay attention to film style. By style we mean the systematic use of film techniques such as camera angles and movements, as well as colour grading and soundscape, through which a distinctive style is created (Bordwell & Thompson 1997). This could also be referred to as film poetics.

In this study, we asked the viewers to specify those expressive visual strategies that caused them to react or experience emotion in a certain way. The answers to other questions too, particularly questions 3 (What did you like about the film?) and 4 (Was there something that you disliked about the film?), often included references to film style. Some respondents commented that they could not remember such details and others left this answer blank, which suggests that the question was difficult. However, most respondents pointed out that their reactions were caused by aspects of film style.

Dystopic Realms



Realms (Valtakunnat, 2018). Image: Patrik Söderlund.

The short film Realms is a voyage through time, evolution and the kingdoms of life towards the natural destruction wrought upon the planet by the human species. (...) Realms is a film about this constant metamorphosis, a succession of states, epochs, species, kingdoms and realms, a journey through past and future strata, organic and inorganic phases and spheres of our planet. (Söderlund 2018.)

This is a description of Patrik Söderlund's experimental short film *Realms*. Söderlund and Visa Suonpää work together as artist duo IC-98, and many of their works, which include moving image installations and site-specific projects also deal with ecological themes. *Realms* was shown in their solo exhibition in the Helsinki Kunsthalle in 2018 which explored the theme of a post-human world.

Over 20 minutes, the film covers a timescale which is almost unfathomable from a human perspective. The journey begins hundreds of millions of years ago in the depths of an ocean and continues on through geological epochs to ultimately show the disappearance of humans and almost all life from Earth. At the end of the film, we see some form of new life sprout again in a mycelium. The film shows human existence to be just a fleeting phase in the history of the Earth, but it also suggests human actions are accelerating the destruction.

The first few seconds of the film are shot from the perspective of fish, and through the murky water we see a blurry shadow of a human waving a trident. When the image refocuses again, it shows a shoreline covered in plastic waste, dead fish, and the remains of a boat. The next scene takes us to a house in the middle of a forest. The house has been overrun by wildlife and animals. The corpse of a person – who appears to have been dead

for a long time – lies in bed and birds have built a nest in the stomach cavity. The house is surrounded by traces of human beings, such as various dilapidated objects and carvings on a tree. Deeper in the forest we encounter forces of life and death. From the forest the film moves on to depict a seashore covered in ash, and dust floating in the wind. Mycelium grows on the burnt tree trunks. In the end the camera gazes towards the stars of the Milky Way and the electronic soundtrack grows louder.

The film does not have a narrator, nor a central human perspective. It does not contain any speech and the narrative contains large temporal and spatial ellipses. Vivid sounds such as buzzing flies, a screeching black woodpecker, and humming winds fill the soundtrack. The film has no informational content, and it does not present an explicit ecological message. What it shows is not a representation of reality, but an imaginary vision constructed in part digitally. The film could be described as a contemplative environmental film, as it leaves ample space for the viewer's thoughts, feelings, and interpretations, and does not fill the narrative with commentary or dialogue (Hughes 2014, 14). Although the image of the mycelium at the end might be interpreted as a sign of a new life, the film still appears to be dystopic for humans.

The emotions the viewers described were sometimes reactions to the film's content, and sometimes to the film's style. The emotions were not reactions to character activity, since there are no characters that the viewer could identify with in the film. *Realms* aroused negative feelings a little more often than the other two films, and these emotions were evoked by the film's style, which is darker than in the other films. Disgust, anxiety, aversion, melancholy, fear, shuddering, excitement, boredom and tiredness were among the emotions and feelings reported for *Realms*. The film's gloomy and ominous atmosphere aroused anxiety and melancholy, its slowness, especially the long takes, boredom, irritation, and tiredness. One respondent described her experience:

It's boring when the camera moves so slowly through the same landscape. It's irritating that you can't make out what is in the faded image, which gradually grows darker. (14)⁷

The same respondent gave the following answer to the question whether the relationship to nature and other species can be established or deepened on the basis of this film:

Perhaps it can, if today's two-seconds-per-image person is able to watch such a slow film, one may start to think that a dead bird and a dead person are equal. And then the camera points towards space... (14)

In several answers positive and negative emotions were mixed so that the experience was initially negative, but ultimately positive. Negative emotions were thus not always

⁷ When we analyzed the responses, we gave each respondent a number. The numbers placed after the citations thus refer to individual respondents. Translations of the citations are ours.

considered a bad thing: *Feelings of mild anxiety, fear and insecurity. Joy, mixed with wonder.* (36)

Many answers revealed that gloominess, disgust and beauty were all part of the same experience. The respondent who wrote that the film had aroused “*shivers of disgust*” also wrote, “*Wonderfully gloomy!*” Another noted: “*It aroused shivers. At the same time reverence and melancholy.*” It was details such as the images of the dead fish on the beach, bugs crawling in the abandoned house, and the dead human being that aroused contradictory feelings:

It felt creepy when there was a bird's nest in the stomach of the human being. In a way it was also beautiful. (35)

The visual style of *Realms* was commented upon more often than that of the other films, which is not surprising, since it is the most experimental of the three. Two respondents dismissed it as an art film: “*for me this film was a light/gauzy piece of art, nothing more*” (25). Some of the viewers did not recognize the ecological point of the film, but such viewers were a minority. One respondent admitted that she did not understand what the film’s “*disconnected images*” were supposed to say. Another viewer pondered whether the film portrayed the aftermath of an atomic bomb explosion. Two respondents said that they did not understand what the film was supposed to be about.

The style of *Realms* implies that it does not intend to convince the viewer about environmental issues in the same way that straightforward environmental documentaries such as *Gasland* (2010, United States) or *The Cove* (2009, United States) might. Chris Tong (2013) argues that aesthetics contributes in an important way to the meaning of films, and this also applies to a film’s ecological message. Judging by the responses, *Realms* created a particular atmosphere or feeling of estrangement, which is fitting given that it explores the idea of a post-human world. The film encourages the viewer to infer meanings and unravel its ecological message. One respondent liked the film’s unconventionality:

I liked that the film did not contain any speech or other “communication”, actually not even human characters, but the narrative style in general was unconventional. This is significant in the sense that I find it difficult to take seriously films that are too conventional, because in such films genre conventions seem to take the place of narration. (43)

The same respondent gave the following interpretation when answering the question “Did the film make you think differently about your relationship to nature or about humanity’s relationship to other species?”:

Not really. Rather the film offered one, very beautiful, presentation about the human being as a part of nature and its cycle of life and death (43)

Most respondents felt that the film's message centered around the continuation of nature after humans, and that human beings are merely a minuscule part of the universe. An equal number similarly thought that *Realms* represented humanity's destructive force and attempt to dominate nature, but also the ultimate failure of this effort. Based on the responses, the human-nature relationship appears distorted in the film.

Realms transports viewers through geological epochs and imagines a dystopian future. Dystopias and various catastrophe narratives have long been common cinematic approaches to representing the ecological crisis and the future (Hughes & Wheeler 2013, 2). The temporal and spatial dimensions of climate change and environmental crisis can be difficult to grasp; the future of our planet is beyond the limits of our imagination. The invisibility of climate change poses a specific challenge to its representations in the fields of visual arts or film. Rising temperatures, ocean acidification or loss of biodiversity can't easily be seen, visualized or narrated (Weik von Mossner 138; Doyle 2013, 28; Rainio 2019). From the human point of view, *Realms* can be read as a post-dystopia, as it does not present humanity experiencing its own demise, but instead imagines a time after humans.

Such dystopian visions might be fuelled by the idea that we need extreme and shocking visions of the future to make people pay attention and push them into action (Kaplan 2016, xix). Dystopian frameworks have been a common approach in environmental films, but they have also been criticized. Ursula Heise observed that a rhetoric of "gloom and doom" alienates and discourages and does not encourage individuals to act (Heise 2008, 142). Alexa Weik von Mossner (2017, 162–163) states: "Cueing negative emotions such as fear, anger, sadness, mourning and regret is an often-tried and yet risky strategy for environmental narratives, because an overload of negative emotions might either lead to debilitating pessimism or to various forms of denial". If the aim is to get people to act, then dystopias are not necessarily the best strategy.

Most of the respondents experienced *Realms* as dark, pessimistic and hopeless, and the film seemed to increase worry and anxiety. Some responses raised perspectives of confrontation and division between humans and nature, often with a warlike rhetoric. Many wrote how nature "*wins*", "*takes over*" and "*survives*", even without people. Humanity has a "*destructive*" influence and people will "*lose*" to nature. Conversely, many respondents interpreted the film to convey how humans are a part of nature, at one with nature and not above it: "*the role of humans was not brought up in any way. The role of the humans was just to be part of nature, nothing more*". (11) Another reply points out how the film shows "*humans to be part of nature and, at least as individuals, not that significant*". (41)

For many viewers the film's dystopian approach evoked thoughts of human insignificance and smallness in relation to the universe at large and its temporality. As one of the respondents wrote, "*What happens on Earth has no significance in the scale of cosmos*". (23) Many of the reactions were fatalistic, and the film seemed to give permission for

passivity and indifference, as we are only “*grains of sand in the universe*” (42) that continues its existence after humans. One answer points out that “*the oppressiveness of the film brought up thoughts about the destruction we will inevitably face.*” (11) The film caused “*anxiety because it was oppressive, [with an] atmosphere of defeat and finality.*” (11) However, for some viewers the film also evoked feelings of calmness and the smallness of one’s own existence.

Based on the responses, *Realms* seemed to convey the slow violence (see Nixon 2011), the gradualism and invisibility of the ecological and climate crisis and the temporal scale of planetary change exceptionally well. It communicated the notion that even if humans irrevocably alter ecosystems and destroy their own kind, they won’t destroy all life on Earth (cf. Weik von Mossner 2016, 149). The message many viewers seemed to take in from the film was the continuity of life and nature after humans. Some of the respondents found this viewpoint comforting, because “*the world has hope after humanity*” (41). One viewer believed “*that there will be life on this planet even if humans would destroy themselves from Earth. I find it comforting.*” (42) It was the film’s aesthetic, its style and mood, that evoked emotions and feelings in the viewers. Although the film comments on reality it is also detached from it. No facts related to environmental crisis were presented. In many ways the emotions it generated were very strong and they were also felt as bodily reactions.

Pietari Kääpä has written about the abundance of apocalyptic scenarios in film and sees them as signs of a heightened awareness of the fragility of human life on Earth (Kääpä 2014, 217). Such films can raise feelings of ecological melancholy (Matts & Tynan 2012). One film that is often brought up in discussions about end-of-the-world visions is Lars von Trier’s *Melancholia*. In the film, a planet called Melancholia is approaching Earth and, in the last scene, collides with the planet. *Melancholia* does not show the consequences of the collision, because it would not be possible from the human perspective. Both Kääpä (2014, 230–232) and Adrian Ivakhiv (2011) point out that the ending of *Melancholia* questions the human-centric worldview. In this sense *Realms* is similar to *Melancholia*, as both films raise questions about the role of humanity in the larger planetary ecosphere through ecophilosophical self-questioning (Kääpä 2014, 232. See also Matts & Tynan 2012).

Another consideration is where this kind of questioning leads. Kääpä (2014, 231–232) reflects on *Melancholia* and asks whether it evokes a nihilistic and indifferent attitude to our environment or encourages us to seize the moment to enjoy our fleeting and brief time on this Earth. We can ponder, like Brereton, what these end-of-the-world scenarios mean in today’s societies and economies, where the possibility of destruction is always imminent (but no longer a Doomsday of spiritual reckoning). According to Brereton, such representations at least help us pay attention to climate catastrophe and “afford fruitful reflection”, even though they do not, and are not intended to offer clear guidelines for future action (Brereton 2016, 204).

***To Teach a Bird to Fly* and a hopeful future**

To Teach a Bird to Fly is a short documentary-fiction film that explores bird extinction and climate change through a fictionalised story from the future. The film's directors, Minna Rainio and Mark Roberts, work as an artist duo who have dealt with social, political and environmental themes in their films and moving-image installations. *To Teach a Bird to Fly* has been shown in international film festivals, museums and galleries.



To Teach a Bird to Fly (2020). Image: Minna Rainio & Mark Roberts.

The film's narrative encompasses two layers of time. The audio narration takes place in the future, whereas the film's visual narrative is mostly located in the present. The film's narrator relates events from the past – today's world – when her grandmother worked as a foster parent to a critically endangered bird, the Northern Bald Ibis. The visual narrative of the film follows the Waldrapp project in Germany, where a young woman (the narrator's future grandmother) helps breed and hand-raise the birds. She spends all her time with the birds as their foster parent and eventually teaches them to migrate by following a light aircraft across the Alps to their wintering grounds in Tuscany, Italy. The Waldrapp project is a real conservation project that aims to rewild the endangered Northern Bald Ibis population back to Europe.

The visuality of the film focuses on the birds and their relationship with the foster mother. The film begins with long, slow motion shots and close-ups of the birds. The birds look strange, even slightly alien with their bald, unfeathered heads and wispy black ruffs on their neck. Soon, we see a young woman looking after, caressing and feeding young chicks. Scenes with the birds are interspersed with images of their interactions with the foster mother. Gradually, as the film progresses, the strange looking birds become more familiar and even friendly as the viewer gets to know them. During the second half of the film, when

the birds begin their flight to the wintering grounds in Italy, the film's point of view shifts to aerial shots and the birds' point of view.

The scripted voice-over narration is partly a fictional imagining of the future and partly based on interviews with the foster parents at the Waldrapp project. The narration is projected some 80 years into the future as stories passed down from one generation to another. The narrator recalls stories her grandmother told about the surprising bond she experienced with the birds, but also delivers subtle references to the possible future effects of climate change and wonders what it must have been like to be alive today.

By "looking back at the present" the story connects the endangered bird species to the wider context of climate change, species extinction, and the future of our planet. The film turns the predominant dystopic climate change and extinction narratives upside down, replacing them with a very differently imagined future – while simultaneously highlighting the importance of environmental choices made today.

To Teach a Bird to Fly typically raised positive and negative feelings at the same time. Hope and fear, hope and grief – both appear simultaneously in many answers. The success of the project presented in the film evoked hope but also grief about the fact that not all animals on the brink of extinction can be saved. In addition, the respondents experienced feelings of guilt and insufficiency:

Partly anxiety, about the situation that the film described, which I think is true at the moment, and partly anxiety and fear about how I act in this moment: can I or am I able to do the right thing? Do I have the vision, information or knowledge to act so that I won't make things worse? The film also partly aroused hope, so when the film tells about this moment in time and about the possible future, the vision of this future was optimistic in the sense that the course of events that now seems bad can still be changed. From here we come again to the feelings of anxiety and fear caused by one's own existence and actions! (11)

On the one hand an atmosphere that aroused anxiety and guilt, on the other hand a more trustful feeling. (13)

The emotions were described in several answers as contradictory, which is not surprising, because in the narrative worry and hope are both present. There were also answers in which the emotional reaction is clearly positive. Hope and hopefulness are the positive emotions mentioned the most often:

A feeling of hope and of connection between the human being and nature. (27)
For me the central message was that there is always hope. Even though the film is an imaginary peek into the future, I feel that it will give strength and resolve to the activists of today. The film is very hopeful: the starting point is the acknowledgement of the crisis but it also presents an example of concrete action to prevent it. The

significant message is that something can be done and that after all this we can get through this crisis in one way or another. (47)

We still have hope and a possibility to maintain the biodiversity of nature as long we all believe in it and do what we can for it. (27)

The film raised also hope. If and when the film depicts the present time and a possible future, the depiction of the future was positive in a sense that the bad situation and direction we are in at the moment could still be changed. (11)

Alexa Weik von Mossner has studied utopian narratives in fiction and films and suggests that the most important emotions relating to utopia are hope and desire (Weik von Mossner 2017, 165-166). She refers to Ernst Bloch's concepts of *abstract utopia* as a form of escapism, and *concrete utopia* as a process of societal imagination and prediction that can potentially lead to change. Only concrete utopias can relate to hope because we can only hope for something that is perceived as possible (Ibid., 188). Weik von Mossner points out that *critical utopia*⁸, on the other hand, takes into consideration the fact that the state of the world is never completed or static. The aim of critical utopia is to awaken desire for a better world and to provide motivation for the continuous work and effort that the process of change requires (Weik von Mossner 2017, 165).

Sheryl Medicott writes that instead of dystopias we need utopianism, which can be a radical and effective way to deal with the climate crisis. Medicott proposes Ruth Levitas' concept of an *ontological utopia*, which is not a description of an ideal or flawless world, but a way to imagine better ways of being. In other words, ontological utopia is a process and not an objective (Medicott 2019, 174). If regarded from the perspective of the above theories, *To Teach a Bird to Fly* could be seen to participate in this process of societal dreaming by imagining a world where the relationship between humans, other species and the environment has gradually changed. It opens a perspective into a different future but does not offer a concrete model for a better world, or advice for how people should act.

The narrative of *To Teach a Bird to Fly* is also not straightforward. It is temporally multi-layered. In addition, documentary material is combined with a fictional story, which makes possible the creation of an optimistic future scenario. A couple of respondents commented on the film's narrative strategy of treating the present time as history. They saw it as imaginative, thought-provoking, and as creating hope, but some had mixed feelings:

The temporal level of the narrative: the narrator was in the future and in a way narrated the documentary shot by her grandmother. Unfortunately, something about it did not work. (23)

⁸ Weik von Mossner refers to Tom Moylan's concept of critical utopia. Moylan, Tom. 1987. *Demand the Impossible: Science Fiction and the Utopian Imagination*. London: Routledge.

The narrative about the difficulty of conveying a message across generations was a bit forced. Although it was justifiable I did not like the way the message was carried out. The threats about extinction are reality already and it irritates me when they are presented as happening in the future. (36)

In this film, the fictional elements only annoyed me. In a way I understand the perspective of the filmmakers, but I believe in the force of experience, and as such, I do not need an interpretation stemming from the future. (4)

The beauty of the film was also mentioned as a cause for positive emotions, while some described the soundtrack as unpleasant and said the narrative voice caused negative feelings. The combination of fictional and documentary material made some viewers unsure what was real in the film:

I was also thinking whether something like this could actually happen and whether the procedure [the training of the birds] is reality. (21)

I am thinking whether this is true (is this going to happen/is it already happening). (11)

Some answers regarding *Realms* and *To Teach a Bird to Fly* reveal that film style and aesthetics can be experienced as a disruption to the successful delivery of a message and prevent a full understanding of the films' content. At the same time, some opinions expressed the opposite, such as this concerning *To Teach a Bird to Fly*:

[I liked] The unhurried pace of the narrative, which gave space and time for the viewer's own thoughts. Things were not underlined or explained or unnecessarily/spelled out. (16)

The filming style also evoked strong bodily sensations in many viewers. The aerial flying scenes were felt as lightness and dizziness, and the symbiosis between the birds and humans brought on cold shivers. One viewer describes sensations of “*stomach cramping, shortness of breath and warm bodily feeling*” (36). Another respondent calmed down while watching the film: “*I think my heart rate slowed down. I felt a such peace of mind that I haven't felt for days*” (2).

The different layers of time made the viewers think about the temporality of the environmental crisis and its effects on present and future generations. “*In a way it encouraged us to act so that we would offer a better world for the next generations, one that still has nature and animals.*” (6) On the other hand, the respondents brought up the previous generations and their responsibility for the present day and the future. One viewer described the central message of the film as “*seeing the political and personal choices as*

multi-generational, the need to look at things through a longer timeline. And, of course, also the actions of individuals that can have a significant effect, the significance of those actions can only be seen after decades.” (4)

Many viewers also reflected on the relationship between humans and other species. The close relationship between the foster mother and the birds *“brought faith in the possibility of the co-existence of humans and the rest of the nature” (7)* and it offered *“an example of a responsible and respectful connection to animals.” (43)*

To depict a species closely brings it also experientially closer and often the portrayal of the connection between humans and nature can create more knowledge and awareness. (16)

The film depicted the relationship between the birds and humans beautifully, as well as the individuality of the birds and people’s choice to lessen “destruction.” (11)

To Teach a Bird to Fly is an example of a utopian approach in an environmental film. It opens up a perspective into a future where the process of climate change has been reversed, people have learned from their mistakes, and there is an understanding, empathy and respect between humans and other species. The film’s parallel temporal narratives opened a space for viewers’ contemplation. Especially the hopeful approach evoked the strongest feelings, hope and sorrow, in the viewers. Also, the way the film depicted the close relationship and emotional bond between humans and the birds was felt strongly.

The Biggest Little Farm as an ecotopia



The Biggest Little Farm (2018). A screenshot from the film.

The full-length documentary *The Biggest Little Farm (2018)* follows a couple, John and Molly Chester, in California. They decide to set up an organic farm which would be different from

the big factory farms in the area. The decision is set in motion by the couple's dog, Todd, who doesn't adjust to an urban life in an apartment but barks all day long while the couple is at work. The Chesters buy a farm in an area that is barren due to previous monoculture farming. As John is a filmmaker and photographer and Molly works in a restaurant business and as a food blogger, they don't have the knowledge and skills to start a farming project. They get help from an expert in biodynamic farming, Alan York, who teaches them to transform the farm into a functioning ecosystem where all the species have their own vital role and purpose. The key to this is biodiversity and understanding how everything is connected. This connectedness and the circle of life is visualized with animated scenes. The film follows the couple and the farm-building process for about eight years. The narrative presents a continuous flow of challenges and problems to solve. Infertile and unproductive land must be revitalized to produce crops, and the process to make the farm productive through ecological methods is a challenge presenting many surprises along the way.

The film differs from the two other films through its commercial production value and broad distribution channels. There is also an associated educational campaign with learning materials, and the film is available for community screenings in schools, libraries, community centers, workplaces and farms. *The Biggest Little Farm* website encourages the audience to get involved with conservation and it lists ways people can make concrete change in their ecosystems. In this sense the film has elements of a strategic impact documentary (Nash & Corner 2016). As the film's website states: "*The Biggest Little Farm* provides us all a vital blueprint for better living and a healthier planet. We hope their epic journey inspires you to look for ways to reintegrate your own life with the forces of nature that surround us all."

The Biggest Little Farm emphasises subjective experiences. It has characteristics of performative documentary (Nichols 2010, 199–209), because John Chester who directed, scripted and shot (DOP) the film is also one of the film's protagonists. The film follows life on the farm closely and intimately. It was filmed mostly outdoors, and it includes a lot of beautiful nature imagery. The film conveys a great deal of information about organic farming and biodiversity. The animated sections illustrate Alan York's descriptions of biodiversity as a basis for the farm. The couple have a child during the film's timespan, but the narrative of the film is mostly focused on the farm rather than the couple's personal life. The farm animals, such as Emma the pig and Greasy the rooster have significant roles in the film, and their fates contribute to many of the film's emotional moments.

The spectrum of emotions evoked by *The Biggest Little Farm* was the widest of the three films. This can be seen as a reflection of the film's story, which encompasses a time period of about eight years and involves all kinds of twists and dramatic events. Unlike the other two films it is character-driven, and this may explain why the viewers seemed to be more emotionally engaged with it than with the other films. Judging by some of the answers the viewers were immersed in the story and they empathised with the animals and

protagonists as they faced ever new challenges. The film was experienced as inspiring and offering hope for the future.

Joy and sorrow, irritation and frustration, hope and excitement; Warm, hopeful, sorrowful, happy, many different kinds. (27)

Fear, anger, sorrow, happiness, wonder, disappointment and disgust. (36)

First, I would like to say that I cried almost through the whole film for various reasons. The visual beauty and narration touched me the most. While watching the film I experienced a whole array of feelings; happiness, excitement, disappointment, sorrow, compassion, hopefulness, despair, universal humanity, the smallness of humanity and the greatness of nature. I felt empathy especially towards the stories of the animal characters. (10)

Emotions were felt also as bodily reactions:

A feeling of happiness in my chest, a slight feeling of “bursting” in the moments of success, eyes getting moist when the mentor died. When the fire was approaching I felt the excitement taking my breath away. The killing of the coyote also aroused a surprisingly strong feeling in the body. As was told in the film, it was a moment when harmony with the environment was momentarily given up. (11)

What would be a Finnish word to describe “kicks”? Pins and needles. One cannot sit still. (30)

Two respondents drew attention to the conventional cinematic form of the film and its capacity to arouse certain kinds of emotions: *[It aroused] “Cinematic” happiness and sorrow, as these kinds of films tend to do. (43)*

We believe that viewers generally know what to expect from documentary films compared to experimental films, because documentaries are traditionally considered to record reality (see for example Renov 1993, 22). This can be seen in the responses to the more conventional *The Biggest Little Farm*, which uses the experiences of its protagonists as the point of departure, and which garnered the most positive opinions and irritated fewer respondents than the other two films. Perhaps it represented the respondents’ idea of what an environmental film should be. Only two respondents expressed negative views about the film, arguing that the events had been dramatized for further effect, and that the film’s format was too conventional and American.

The Biggest Little Farm was also perceived as a very hopeful film, and many viewers felt that it encouraged action, at least on a general level. After seeing the film some of the

respondents wrote that “*change is possible if we try to do it together*” (39), and “*everything is possible if you just act*” (11). One viewer wrote:

the film raised hope that people could one day live in harmony with nature and would understand better the significance of different organisms and species as part of the whole.’ (26)

The Biggest Little Farm portrays an example of an achieved, concrete ecotopia as it follows an urban couple’s journey in creating a biodiverse permaculture farm. At the same time, it offers an example of one possible route towards a balanced interaction with nature and a more just and sustainable world, while offering hope that it is possible and achievable (cf. Weik von Mossner 2017, 188). Ecotopias have been described as utopias of radical environmentalism which are also connected to the idea of ecological citizenship (Pepper 2005, 17). Ecotopias can imagine and show us the way towards a more sustainable way of living (Weik von Mossner 2017, 189). They can also widen the political imagination relating to environmental issues, create hope for a better future, and lead to change (Ibid., 166). Even though the film shows a successful precedent for farming that respects natural biodiversity, many viewers felt that it was a one-off case which, despite its success and optimism, didn’t seem like a viable possibility on a larger scale in the future. One respondent wrote that

[the film] raised hope and concern; some kind of balance between humans and nature seemed more possible after seeing the film, on the other hand it could be that the planet reaches its end before we get into such a big project.” (43)

Many responses combined the hope that “this is possible” with worry and concern that “this is anyway unrealistic and won’t happen”.

Similar conflict was visible in many of the responses to *To Teach a Bird to Fly*. Even though the film was hopeful, its positive imagination of the future raised simultaneously hope and worry. The film’s hopefulness seemed to reveal the difficulty and the complexity of the situation we are in and brought up concern about people’s inability to work together for a better future. In the words of one viewer, the film:

“raised hope, as it was supposed to do, that some kind of collective awakening will take place and we can change our values and actions. At the same time, it evoked sorrow, that’s why it left me with conflicted feelings.” (39)

Another respondent felt “*glimpses of hope, but also fear and despair that: what if we are too late?*” (27)

Thus, thinly veiled uncertainty and sorrow were found behind the feeling of hope in the responses to both films. Lesley Head has argued that hope and optimism, which are

often seen as connected, should be detached from each other. Instead, she wants to conceptualize hope as a process, a state of becoming, which can open up spaces for change. Hope is not just an emotion, but more importantly, an action. The idea of hope as a process is associated with uncertainty and the possibility of failure, as well as sorrow and melancholy (Head 2016, 74). Rebecca Solnit has also emphasised that hope does not equal optimism, and it does not contain the belief that everything will be fine. Hope entails coping with uncertainty because we can never know what the future will be like. But at the same time, it is this uncertainty that opens the space for hope (Solnit 2016, 4–7).

The effect of the films on relationships with nature and environmental awareness

As we noted above, in the 2010s researchers started to note that it would be important to conduct reception studies to evaluate the impact of environmental films. In the context of reception studies of environmental films, “impact” is usually understood as a clearly defined effect of seeing a film. An extreme example of calculated impact would be “strategic impact documentary”, a documentary that can be understood as a form of strategic communication striving towards a clear social impact (Nash and Corner 2016). Our aim was broader than studying the clearly pre-defined effects of the films on viewers’ attitudes and behaviour. We were interested in the immediate emotional and affective reactions as well as how the films could inspire the viewers to reflect on their relationship to nature and the ongoing multifaceted environmental crisis.

The three films presented in the reception study are very different. *The Biggest Little Farm* has an explicit environmental topic: the importance of diversity for a well-functioning ecosystem. Everything in the film’s narrative contributes to this topic. One of the respondents commented that *The Biggest Little Farm* gives the best explanation of diversity that he has ever encountered, and that after having seen this film it is difficult to argue against the importance of diversity. *To Teach a Bird to Fly* deals with climate change and mass extinction by combining documentary with fiction. The film can be seen to encourage action, because in the imagined world it describes people have been able to stop climate change and the conservation work has been successful. However, the film deals with big issues in a manner not typical of documentaries, and its content cannot be summarized as simply as that of *The Biggest Little Farm*. *Realms* is more ambiguous than the other two films because it does not contain verbal narration, and the place and time of the events shown is intentionally nonspecific. In other words, while the starting point of each of the three films is very different, each film comments on the environmental crisis in its own way and style. This needs to be considered when interpreting them as environmental narratives.

In the following section, we discuss whether the three films inspired and activated the viewers or whether they increased feelings of indifference and apathy. The questions that were most closely connected to these points were “Did the film make you think

differently about your relationship to nature or to other species?”, “Can (this) film help establish or deepen one’s relationship to nature or other species. If so, how?” and “Did this film evoke feelings of responsibility or complicity?”

As mentioned above, several respondents commented that *Realms* was gloomy and distressing. In their opinion the film increased anxiety rather than giving hope. Most of the respondents thought that *Realms* did not affect their relationship to nature. One answer revealed that the respondent did not even want such a gloomy film to have any effect on them: “*The film was so very gloomy that I am not sure if I even wanted it to have any impact on myself.*” (30) One respondent wrote that a film like this might even alienate one from nature. The film was also interpreted as saying that the evolution it shows is inevitable and that people are powerless in the face of it. The scale of the film’s events was experienced as so huge that it brought about feelings of powerlessness and indifference.

The film made me feel somehow tired. Too big things on too large a scale. (16)
In my opinion I already take nature into account pretty well in my life. The film instead made me feel powerless and dispossessed in the sense that in the end I can only affect my own deeds. (6)

These answers seem to support what Heise and Weik von Mossner have said about the discouraging and passivating effects of dystopian frameworks (Heise 2008; Weik von Mossner 2017). The respondents write about the feeling of surrender, the inevitability of destruction, and even feelings of calm and peacefulness. Some answers seemed to suggest that nothing can be done, and we should focus on enjoying the present moment and its meaningfulness. In other words, the film did not seem to inspire the viewers to do something to prevent the dystopian future imagined in the film from becoming true.

In an empirical study about the effects of climate fiction, Matthew Schneider-Meyerson discovered that the affective reactions of the respondents were mainly negative and demobilizing. He refers to research that illustrates how representing climate change as an imminent catastrophe makes people want to avoid the topic (Schneider-Meyerson 2018, 490). Vivid artistic descriptions of the catastrophic consequences of climate change can thus be counterproductive in the goal to raise awareness about environmental problems. According to Schneider-Meyerson, negative emotions such as hate can serve as fuel for political action, whereas emotions such as guilt, shame, helplessness and sadness are less likely to activate. For this reason, psychologists recommend that communication about the environment employ positive frameworks (Ibid.).

On the basis of research carried out so far, it is not possible to draw unequivocal conclusions about the effects of negative emotions on environmental awareness and activity responses. For example, Beattie, Sale and McGuire (2011) reported results opposite to those discussed above in their empirical study of the emotional impact of the documentary film *An Inconvenient Truth*. They found that although certain scenes of the film decreased happiness and increased restlessness, the viewers were still motivated to take environmental action.

Scenes depicting catastrophes did not make the viewers feel that there was nothing they could do about climate change (Beattie et al. 2011). Rachel A. Howell (2014, 88) noted that the catastrophe framework of the film *The Age of Stupid* did not leave most of the research subjects feeling disempowered or “inclined to maladaptive defensive responses”. However, Howell points out that this result may be a consequence of the fact that the participants were interested in environmental issues, and thus did not represent an average audience.

Similarly, some of the respondents thought that *Realms* could “raise and deepen environmental awareness” (16), “by increasing awareness and making one react to the prevalent state of destruction” (36). The film made a couple of the respondents hope for concrete action before it is too late:

We must do everything we can to prevent the destruction of the environment now. (21)

We must reconsider the relationship between humanity and the environment now, for the sake of the future. For the sake of our children and their children. (42)

A couple of the respondents said that the film made them think about the insignificant role of humanity in the universe. *Realms* awakened them to consider such things from a different perspective.

We could argue that the effect of *Realms* lies in its capacity to “retrain perception”, which according to Scott MacDonald (2004, 109) is typical of experimental films. In other words, the film challenges the viewer on the cognitive level to perceive and think differently. Kääpä (2014, 6–7) refers to such retraining of perception as “cognitive invigoration”. The way the film emphasized the insignificant role of humanity was experienced by several viewers as eye-opening, and they saw the film deliver a comforting message about the cycle of life. For some viewers the absence of a human point of view in the film was a positive thing because it emphasized that human beings are not the center of the universe. However, some found it hard to relate to the film because it did *not* include a living and active human character: “I believe it is easier to discuss a film when it includes dialogue and human characters that one can reflect on.” It seems likely that through human characters and the examples they provide, it is easier for viewers to become aware of their own potential to make a difference.

In several answers, respondents expressed the hope that *To Teach a Bird to Fly* would affect people and encourage them to act. They mention a change of attitudes, but mostly on a very general level and hypothetically:

This film might support the development of pro-environmental attitudes. (23)

It may well awaken people to think about the importance of conservation work and to think about solutions so that we would not get to the situation where we must raise species. (46)

Admittedly it made me consider which nature organizations I could support and in which ways in the future. (6)

Earlier research suggests that if we want films to have impact then it is important to show the impact of other people. Howell states that it would be a good strategy for films to propose solutions and to tell stories of ordinary people who decide to take environmental action (Howell 2011, 186; 2014, 90). The respondents of Brereton and Hong's study hoped that ecocinema films would focus more on the experiences of individuals, offering examples and solutions to problems. They stressed the necessity of including a personal point of view and scenes from everyday life in documentary films (Brereton & Hong 2013, 183–184). *The Biggest Little Farm* focuses precisely on such things as it tells about the challenges that the protagonists face in their work on the farm. Such character-driven stories have been identified as "critical to inspiring social change because it builds an emotional connection between the viewer and the film that can serve as a basis for engagement" (Nash and Corner 2016, 235).

When asked whether the films made them think differently about their relationship to nature and other species, most of the respondents gave a negative answer. There was no difference between the three films. Rather, they thought that the films had deepened or strengthened their current thinking. A few suggested that the films had raised some new thoughts:

Through the thoughts that the film [To Teach a Bird to Fly] raises, an individual may better realize their own ability to affect the state of the Earth through their own actions, and that way feel connected and part of nature. The film may also raise feelings of responsibility towards nature. (47)

Most of the respondents were interested in environmental questions and were well aware of the problems to begin with, which probably meant that these films did not have a big impact on their relationship with nature, or on their thoughts about the relationship between humans and non-human species.

Not really. My relationship to nature and connection to the network of life has existed since my childhood. (16, To Teach a Bird to Fly)

No really, but I am very well informed about these issues and discussions. (48, Realms)

No, it confirmed my thinking. (39, The Biggest Little Farm)

Some respondents noted that *The Biggest Little Farm* could deepen our relationship with nature by increasing an understanding about natural diversity. The film also provided new information to many. However, much like the other two films, it did not really succeed in making the respondents change their thinking. One respondent's answers revealed a tentative change in thinking: "I have never accepted humanity's dominant role, but I have never considered taking part in some eco hippie thing. I mostly take care of my own lot." (26) However, to the later question, whether the film made them feel responsible or complicit they answered: "In some ways, yes, perhaps I could do a bit more than just take care of my own lot." (26) Interestingly, when asked directly whether the films had an effect on their relationship to nature or other species, most respondents answered simply "no" or "not really". However, when we looked closely at the answers to the other questions, they revealed that the films had actually affected the viewers in many ways.

Concluding thoughts

Our study differs from previous reception studies in that it explores mainly the immediate emotional and affective reactions to films instead of any concrete influence on thoughts and behaviour. Despite the rather small number of responses, we were able to find some interesting results that contribute to the growing field of empirical ecocriticism. Thanks to our comprehensive questionnaire we received a considerable amount of information about our respondents' thoughts and experiences. Our results also support the conclusions of earlier reception studies, which point out that catastrophic depictions of climate fiction arouse mainly negative, disempowering emotional reactions (Schneider-Meyerson 2018). At the same time, we found support for oppositional results showing how images that arouse strong negative feelings can motivate viewers to become environmentally active (Beattie et al. 2011). Our results also seem to concur with some earlier theoretical viewpoints, such as Alexa Weik von Mossner's (2017, 9; 2014) observation that emotionally strong depictions of the human-nature relationship in environmental narratives can have remarkable real-world consequences and that this applies to both documentaries and fiction films.

Judging by the answers to our questionnaire, we need all kinds of environmental films: gloomy films that evoke end-of-the-world scenarios, and hopeful films that cast a brighter light upon the future. Both kinds of films can help viewers reflect on their own relationship to nature and consider their role in preventing an environmental catastrophe. In fact, there is no clear difference between the films in the sense that even the more hopeful films take as their starting point the vulnerable state of nature and the potentially catastrophic future.

One respondent described the effect of *Realms* and *The Biggest Little Farm* in this way:

(...) the films were so different, it's funny how differently they affected me (...) it just left me anxious, feeling that I don't want to have anything to do with this. And then

on the other hand (...) this scene I referred to, which was so life affirming and beautiful, and so wonderful, exhilarating, uplifting, that I felt like yes, this is what I want to be advancing (...) I'm sure for someone else the things that made me anxious and wouldn't make me move anywhere else but under the covers, for someone else that would be the spur. (25)

Helen Hughes (2014, 15) has written how in many contemplative environmental films “the relationship with the environment is caught between the past and the future in a present that seems unsustainable.” She refers to the philosopher and literary critic Timothy Morton who “sees the creation of this kind of ‘ambient’ present as a means to mourn what we already recognize as irrevocably changed (Morton, 2007)” (ibid.). This mourning of the ‘ambient’ present was also apparent in the responses to the films in our research.

As noted earlier, we chose films that leave room for the viewer’s own thoughts and interpretations. In our opinion, it is unrealistic to expect art to offer direct solutions for complicated environmental problems.⁹ It is possible that the effects of the films – for example, a feeling of increased responsibility, or a change in relationship with non-human animals – will become apparent only later. In addition, such effects are often indirect and remain unrecognised. But strong emotional or physical reactions *are* direct effects, and their significance should not be overlooked or underestimated. Such effects – and the individual images that might cause them – can remain in memory for a long time. “Affect and feelings (...) play a crucial role in subsequent thought”, as Anthony Leiserowitz (2006, 47) points out. Those working with strategic impact documentaries have also noted that emotions are an important “catalyst for action” (Nash and Corner 2016, 235).

Although the instrumental value of films was not uppermost in our minds when starting this reception study, we do not want to underestimate their impact. We believe it is important to continue to study the measurable impact of films, but we argue that it is also important to take into consideration the aesthetic and narrative aspects of films, which have not been given as much attention in reception studies of environmental films. Most filmmakers and artists would want their art to have a lasting impact on the audience. Films, like art generally, have an important role in communicating and engaging with environmental issues, and it is valuable to get information about how real audiences experience and interpret such works. However, rather than emphasizing immediate and measurable effects, we think it is more important that art and culture enable and provide spaces for critical thinking. Reflecting on one’s own relationship with nature through films can be a good starting point for considering other, wider environmental issues.

All four respondents that we interviewed later in the research valued art as a means or forum for discussing their relationship with nature and environmental emotions. In fact, they found it hard to come up with a better method for dealing with such issues (11, 30).

⁹ Although one of the larger aims of the research project is to awaken people to see the current state of the Earth, we did not want to give individual artworks an instrumental role. Some of the respondents also took part in artistic workshops and another survey concerning a piece of sound art. In other words, they had an occasion to reflect on their nature relationship through several works of art and different kinds of artistic processes.

One interviewee (25) compared the role of science and art, arguing that art has the ability to communicate something that science necessarily cannot. Art can achieve this by appealing to emotions and experiences, and it has greater freedom of expression, which this respondent considered very important. Another interviewee (27) observed that art can reach levels of experience that cannot be expressed using words alone. In this respondent's opinion, nature can be experienced through art and art can reawaken a dormant connection with nature. The interviewee added that by showing nature's beauty, art can prevent the exploitation of nature.

Reception studies involve various challenges. First, the responses always represent the opinions of a limited number of people. In our case, the participants did not represent an average citizen. They were highly educated and well-informed about environmental issues, which clearly led to a certain bias in the results. Second, to collect information about viewer experiences of films using a written questionnaire is not easy. Answering questions in writing can feel laborious and time consuming, and it may be difficult for some people to put thoughts into words. Some of the participants pointed out in their questionnaire answers that it would be easier to talk than write. Writing requires more effort and thought, as one of the interviewees mentioned. However, another interviewee experienced writing rewarding. Some participants perhaps lacked the skills to analyse film experiences and cinematic expression, which may have led to some blanks in the questionnaire.

When the participants started answering the questionnaires, they had already answered a previous questionnaire about their relationship with nature, which also included a lot of questions. A couple of respondents pointed out that some of the questions seemed to overlap, and one respondent added that they would not want to spend too much time answering the questions. For us, coming up with relevant questions was one of the most challenging aspects of this research. In retrospect, we feel that some of the questions were indeed overlapping, confusing and ambiguous. This applies particularly to questions 9, 11 and 12.

Participants viewed the films on their own screens, laptops or television, which affected the viewing experience and the responses. One respondent wrote about the uncomfortable viewing position by the kitchen table. Another answer described how it was helpful to watch films peacefully and thoughtfully at home and to be able to pause certain scenes and watch them several times. The possibility to stop the film and repeat scenes makes the viewing experience unusual compared to watching the film in a cinema or gallery. Some participants may have viewed the film several times and answered the questions straight away, others might have completed the questionnaire much later, and some might have watched the films together with a family member or a friend and discussed it before answering the questions. All these issues may influence how the participants responded to the films. Despite all these difficulties, the participants generally answered almost all questions. Only a couple of viewers expressed frustration.

The interviewees also pointed out that group discussions at screenings and other people's opinions might have changed their interpretation of the films. In the end, it is

possible that the arrangement to watch the films remotely at home instead of in a screening event was beneficial for our research too. As one of the interviewees put it:

Also the fact that if there is a discussion after the viewing of the film, some people take more time to put their thoughts together than others. And my guess is that you get more out of it this way. (30)

This reception study focused on how the films affected the viewers' personal relationship to nature. The responses to the questionnaire revealed their concern about the future of our planet. Both dystopias and ecotopias, in documentary, fiction and docufictional form, can encourage viewers to think about their own relationship to nature as well as their role in preventing environmental catastrophe. As we noted above, most of the respondents can be described as nature lovers or environmentalists and they do not represent the general population. In the future, it would be interesting to see how results might differ if the respondents represented a wider spectrum of society.

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References

Beattie, Geoffrey, Laura Sale, and Laura McGuire. 2011. "An Inconvenient Truth? Can a film really affect psychological mood and our explicit attitudes towards climate change?" *Semiotica* 187, no. 1: 105–125. <https://doi.org/10.1515/semi.2011.066>.

Bordwell, David and Kristin Thompson. 1997 [1979]. *Film Art: An Introduction*. 5th ed. New York: McGraw-Hill.

Brereton, Pat. 2016. *Environmental Ethics and Film*. London: Routledge.

Brereton, Pat and Chao-Ping Hong. 2013. "Audience Responses to Environmental Fiction and Non-fiction Films". *Interactions: Studies in Communication & Culture* 4, no. 2: 171–199. https://doi.org/10.1386/iscc.4.2.171_1.

Brown, Virginia and Victoria Clarke. 2022. *Thematic Analysis: A Practical Guide*. London: SAGE.

Corner, John, Richardson, Kay & Fenton, Natalie (1998) *Nuclear reactions: form and response in public issue television*. London: John Libbey.

Doyle, Julie. 2013. *Mediating Climate Change*. Farnham: Ashgate.

Head, Leslie. 2016. *Hope and Grief in the Anthropocene: Re-conceptualising human–nature relations*. New York: Routledge.

Heise, Ursula. 2008. *Sense of Place and Sense of Planet. The Environmental Imagination of the Global*. Oxford University Press.

Hiltunen, Kaisa, Tuija Saesma and Nina Sääskilähti. 2020. "Rajojen poetiikkaa ja politiikkaa: taiteellinen aktivismi reaktiona 'pakolaiskriisiin'." [Border Poetics and Politics: Artistic Activism as a Reaction to the 'Refugee Crisis.']. *Media & Viestintä* 43, no. 2: 150–175. <https://doi.org/10.23983/mv.95674>.

Howell, Rachel A. 2011. "Lights, Camera ... Action? Altered Attitudes and Behaviour in Response to the Climate Change Film *The Age of Stupid*." *Global Environmental Change* 21, no. 1: 177–187. <https://doi.org/10.1016/j.gloenvcha.2010.09.004>.

Howell, Rachel A. 2014. "Investigating the Long-term Effects of Climate Change Communications on Individuals' Attitudes and Behavior." *Environment and Behavior* 46, no. 1: 70–101. <https://doi.org/10.1177/0013916512452428>.

Hughes, Helen. 2014. *Green Documentary: Environmental Documentary in the Twenty-First Century*. Intellect Books.

Hughes, Rowland and Pat Wheeler. 2013. "Introduction. Eco-dystopias: Nature and the Dystopian Imagination." *Critical Survey* 25, no. 2: 1–6. <http://www.jstor.org/stable/42751030>.

Ivakhiv, Adrian. 2008. "Green film criticism and its futures". *Interdisciplinary Studies in Literature and Environment*, 15: 2, 1–28. <https://doi.org/10.1093/isle/15.2.1>

Ivakhiv, Adrian. 2011. "The Anthrobiogeomorphic Machine: Stalking the Zone of Cinema." *Film-Philosophy* 15, no. 1: 118–139. <https://doi.org/10.3366/film.2011.0007>.

Kaplan, Ann E. 2016. *Climate Trauma: Foreseeing the Future in Dystopian Film and Fiction*. New Brunswick: Rutgers University Press.

Kääpä, Pietari. 2013. "Understanding the Audiences of Ecocinema". *Interactions: Studies in Communication & Culture* 4:2, 107–111.

Kääpä, Pietari. 2014. "Ecology and contemporary Nordic cinemas: from nation-building to ecocosmopolitanism". London: Bloomsbury. Leiserowitz, Anthony. 2006. "Climate Change Risk Perception and Policy Preferences: The Role of Affect, Imagery, and Values." *Climatic Change* 77: 45–72. <https://doi.org/10.1007/s10584-006-9059-9>

Lowe, Thomas; Katrina Brown, Suraje Dessai, Doria Miguel De Franca, Kat Haynes, and Katharine Vincent. 2006. "Does Tomorrow Ever Come? Disaster Narrative and Public Perceptions of Climate Change." *Public Understanding of Science* 15, no. 4: 435–457. <https://doi.org/10.1177%2F0963662506063796>

Matts, Tim and Aidan Tynan. 2012. "The Melancholy of Distinction: Lars von Trier's "Melancholia" as an Environmental Film." *M/C Journal* 15:3. <https://doi.org/10.5204/mcj.491>.

Medlicott, Sheryl. 2019. "A Provocation to Practice Utopianism in the Face of Climate Crisis." *Studies in Arts and Humanities* 5, no. 1: 173–176. <https://doi.org/10.18193/sah.v5i1.163>.

Musser, Charles. 2014. "Trauma, Truth and the Environmental Documentary." In *Eco-Trauma Cinema*, edited by Anil Narine, 46–71. New York: Routledge.

Nash, Kate and John Corner. 2016. "Strategic Impact Documentary: Contexts of Production and Social Intervention." *European Journal of Communication* 31, no. 3: 227–242.

Nichols, Bill (2010) *Introduction to Documentary*. 2nd edition. Bloomington: Indiana University Press.

Nixon, Rob. 2011. *Slow Violence and the Environmentalism of the Poor*. Harvard University Press.

Nolan, Jessica. 2010. "'An Inconvenient Truth' Increases Knowledge, Concern, and Willingness to Reduce Greenhouse Gases." *Environment and Behavior* 42, no. 5: 643–658. <https://doi.org/10.1177%2F0013916509357696>.

O'Brien Adam. 2018. *Film and the Natural Environment*. London: Wallflower.

Pepper, David. 2005. "Utopianism and Environmentalism." *Environmental Politics* 14, no. 1: 3–22. <https://doi.org/10.1080/0964401042000310150>.

Rainio, Minna 2019. "How to Look at Climate Change? Art, Complicity and the Invisible Climate." In *Routes of Participation in Art*, edited by Kaisa Hiltunen and Nina Säskilähti, 229-251. Turku: Eetos.

- Renov, Michael. 1993. "Toward a Poetics of Documentary." In *Theorizing Documentary*, edited by Michael Renov, 12–36. New York: Routledge.
- Schneider-Mayerson, Matthew. 2018. "The Influence of Climate Fiction. An Empirical Survey of Readers." *Environmental Humanities* 10, no. 2: 473–500.
- Schneider-Mayerson, Matthew, Alexa Weik von Mossner, and W.P. Małecki. 2020. "Empirical Ecocriticism: Environmental Texts and Empirical Methods." *Interdisciplinary Studies in Literature and Environment* 27, no. 2: 327–336.
<https://doi-org.eres.qnl.qa/10.1093/isle/isaa022>.
- Small, Belinda. 2014. "Emotion, Argumentation, and Documentary Traditions." In *Moving Environments: Affect, Emotion, Ecology and Film*, edited by Alexa Weik Von Mossner, 103–120. Waterloo: Wilfrid Laurier University Press.
- Solnit, Rebecca. 2016. *Hope in the Dark. Untold Histories, Wild Possibilities*. 3rd ed. Chicago: Haymarket Books.
- Söderlund, Patrik. 2018. "IC-98. Moving Images and Other Projects 2016–2021." Vantaa: Grano. <https://socialtoolbox.com/>
- Tong, Chris. 2013. "Ecocinema for All: Reassembling the Audience." *Interactions: Studies in Communication & Culture* 4, no. 2, 113–128.
- Weik von Mossner, Alexa. 2014. "Emotions of Consequence? Viewing Eco-documentaries from a Cognitive Perspective." In *Moving Environments: Affect, Emotion, Ecology, and Film*, edited by Alexa Weik von Mossner, 41–60. Waterloo: Wilfrid Laurier University Press.
- Weik von Mossner, Alexa. 2016. "Environmental Narrative, Embodiment, and Emotion." In *Handbook of Ecocriticism and Cultural Ecology*, edited by Hubert Zapf, 534-550. Berlin: De Gruyter.
- Weik von Mossner, Alexa. 2017. *Affective Ecologies: Empathy, Emotion, and Environmental Narrative*. Columbus: The Ohio State University Press.
- Willoquet-Maricondi, Paula. 2010. *Framing the World: Explorations in Ecocriticism and Film*. Charlottesville: University of Virginia Press.