

This is a self-archived version of an original article. This version may differ from the original in pagination and typographic details.

Author(s): Hiltunen, Kaisa; Björklund, Heidi; Nurmesjärvi, Aino; Purhonen, Jenna; Rainio, Minna; Säaskilahti, Nina; Vallius, Antti

Title: Tale(s) of a Forest : Re-Creation of a Primeval Forest in Three Environmental Narratives

Year: 2020

Version: Published version

Copyright: © 2020 the Authors

Rights: CC BY 4.0

Rights url: <https://creativecommons.org/licenses/by/4.0/>

Please cite the original version:

Hiltunen, K., Björklund, H., Nurmesjärvi, A., Purhonen, J., Rainio, M., Säaskilahti, N., & Vallius, A. (2020). Tale(s) of a Forest : Re-Creation of a Primeval Forest in Three Environmental Narratives. *Arts*, 9(4), Article 125. <https://doi.org/10.3390/arts9040125>

Article

Tale(s) of a Forest—Re-Creation of a Primeval Forest in Three Environmental Narratives

Kaisa Hiltunen ^{1,2,*}, Heidi Björklund ^{1,2}, Aino Nurmesjärvi ^{1,2}, Jenna Purhonen ^{1,2,3},
Minna Rainio ^{1,2}, Nina Säaskilahti ^{1,2} and Antti Vallius ^{1,2}

¹ Department of Music, Art and Culture Studies, University of Jyväskylä, 40014 Jyväskylän yliopisto, Finland; heidi.m.bjorklund@jyu.fi (H.B.); aino.e.nurmesjarvi@jyu.fi (A.N.); jenna.purhonen@jyu.fi (J.P.); minna.k.rainio@jyu.fi (M.R.); nina.saaskilahti@jyu.fi (N.S.); antti.s.vallius@jyu.fi (A.V.)

² School of Resource Wisdom, University of Jyväskylä, 40014 Jyväskylän yliopisto, Finland

³ Department of Biological and Environmental Science, University of Jyväskylä, 40014 Jyväskylän yliopisto, Finland

* Correspondence: kaisa.e.hiltunen@jyu.fi

Received: 29 October 2020; Accepted: 26 November 2020; Published: 1 December 2020



Abstract: We analyze three environmentally conscious works that are concerned with the state of Finnish forests: the documentary film *Metsän tarina/Tale of a Forest* (2012), the book with the same name (2013) and the series of short documentaries *Tarinoita metsästä/Tales from the Forest* (2013). By combining methods from arts research and ecology, we ask how the narratives adapt material from nature photography. The film and book present mythic stories and old Finnish beliefs about forests. They also contain references to cultural memory. Additionally, the biodiversity on display reflects a conventional practice to exhibit large or charismatic species. However, the ecological message remains only implicit, expressed through aesthetic choices rather than information about natural processes. Overall, we suggest that adaptation in these narratives can be understood as an artistic process of recycling and referencing and as a way to reconnect with cultural memory and nature. As such, it can enhance relationships with nature and awareness of conservation needs. However, we ask whether the past-oriented strategy is a politically effective way to activate a connection with nature in modern Finland, where discussions about environmental problems are closely connected to heated debates about forestry.

Keywords: Tale of a Forest; adaptation; biodiversity; documentary; ecocriticism; environmental narrative; forest; nature photography; nostalgia; species

1. Introduction

It is a common claim that Finnish people have a special relationship with the forest. According to recent research, 83% of Finns consider forests important or very important (Kantar TNS 2018; Halla et al. 2018). This is not surprising because Finns spend a lot of their free time in forests that are accessible through ‘everyman’s rights’.¹ This relationship with the forest was even included in the UNESCO Finnish National Inventory of Intangible Living Heritage in 2017.

The forest is an integral part of the Finnish national culture and identity that lives in numerous cultural products, stories, and myths. For example, in the national epic myth Kalevala, the founding of the entire nation is pinned to the depths of wild forests. Simultaneously through the ages, forests have

¹ In Finland the everyman’s rights prevail on almost all governmental and privately owned land. The rights include, for example, freedom to roam and camp in forests, pick up berries and mushrooms, and fish with a line and rod.

also provided a variety of raw materials, food and shelter, and have enabled livelihoods in agriculture and forestry. This diverse utilization of forests has led to intensive management of a resource that makes up 75% of Finland's land area, with only 12% of the productive forest land under protection. For decades, this has meant alteration of natural forest dynamics with fire suppression, monoculture cultivation, selective thinning and final harvesting with clear-cutting. These practices have led to habitat destruction and threats to many species (Kouki et al. 2001; Kuuluvainen 2009; Hyvärinen et al. 2019). Changes to practice have been slow, as forest harvesting methods other than clear-cutting were only allowed for the first time in 2014 when the Finnish Forest Act was amended. Furthermore, the protected forests do not distribute evenly within the country. For instance, only 5% of the forest is protected in southern Finland where the most productive forests are situated (Vaahtera et al. 2018).

Recently, the assertion that Finns have a close relationship with the forest has been challenged. This relationship can be criticised for being a romanticizing, contradictory and even exclusive myth. Rather, the intensified industrial use of forests during the 20th century is a cause of deep, ongoing disputes and conflicts (Siiskonen 2007). Therefore, it could be argued that the forest relationship has not been harmonious, but is instead based on exploitation (Jokiranta et al. 2019a).

Our knowledge of the forest is not only created by experiencing real physical forest environments, but also through cultural representations. Nature documentaries, for example, play a significant role in creating the visual and narrative conventions of how we see and understand the natural world (Willoquet-Maricondi 2010, pp. 7–8; Bousé 2000, p. 192). In recent years, an increasing number of cultural products that deal with Finns' relationship to the forest have been produced, such as non-fiction books, films and exhibitions.

The documentary film *Metsän tarina* (*Tale of a Forest*, Finland, 2012)² is one of the first examples of the current wave of such cultural products. *Tale of a Forest* is the result of a collaboration between nature photographers and filmmakers and is one of the most popular documentary films ever produced in Finland. In 2013, it was adapted into a "coffee table book" with the same title. Both versions tell a mythic story of the Finnish forest and its origins. The filmmakers were worried about the disappearance of old forests in Finland. By showing a beautiful, harmonious forest that has hardly been touched by humans, they wanted people to see the value of Finnish nature and help them restore their relationship to it (Tiessalo 2012; Rosenqvist 2012).

One of the film's two narrators is a boy who learned old Finnish beliefs about the forest and its animal and fairy inhabitants from his father. In both the film and the book, the ecological message is only implicit in a narrative that references old myths and folklore. Moreover, in 2013, a collection of 20 short documentaries, *Tarinoita metsästä* (*Tales from the Forest*), was produced using the same material. In these short documentaries, the mythical, past-oriented approach was replaced by an informational tone.

In this article, we approach these three environmental narratives and the idea of adaptation from a multidisciplinary perspective. Specifically, we combine the perceptions and methods of art and ecology researchers. We apply the idea of adaptation to the works in at least two senses. First, we compare the three versions and ask how they adapt the material in terms of aesthetic and narrative strategies to persuade the audience of the need to connect with nature. We specifically analyze how the works portray nature and forest ecology and how they relate to other cultural products. Second, we introduce a conception of adaptation that emerges from, and that is informed by, biological and artistic understandings of adaptation. Consequently, we suggest that these works can be understood as a way for people to negotiate their relationship with nature and as a way to connect the next generations to Finnish narratives about nature. However, from an ecocritical perspective (Willoquet-Maricondi 2010, p. 2; Marland 2013; Christman Lavin and Kaplan 2017; Lehtimäki 2019), the film's turn-to-the-past, as a strategy to arouse people's interest in nature today, can be questioned.

² See the film's trailer: <https://www.youtube.com/watch?v=GLER4UUexiQ>.

2. Concepts and Method

The book and the short documentaries are adaptations of the film, but our main interest is not to analyze how they differ from “the original”. Instead, we compare the three works in their function as environmentally conscious narratives. When making comparisons, we pay attention to the change of medium and its effects. In addition, we discuss how the film and book utilize elements of older Finnish cultural products and cultural memory. Here we understand adaptation in a broader sense of intertextuality and dialogical relationships between texts; this means that connections between artworks are not always created intentionally (Cutchins 2017). In this view, historical contextualization and aesthetic analysis highlight certain traditions as relevant points of reference. However, we do not stop here.

Our theorizing of adaptation is inspired by our multidisciplinary approach. We see something comparable to adaptation, both artistic and biological, in the way people relate to nature and how they construct narratives about that relationship. We think that adaptation already takes place when the authors adapt ecological knowledge to communicate their ideas and intentions. Thereby, an imaginary forest is constructed through different layers of interpretation and adaptation. In other words, the imagined forest is based on ecological reality, but through adaptation it becomes a composition of scientific facts, beliefs and myths about the forest.

We examine not only the cultural dimensions of the analyzed works, but also how they present forest nature and the current state of forests in Finland. Specifically, we compare the representation and similarity of biological content in the film and the book by identifying all recognizable species in the shots, narration, text and sound (Supplementary Materials). Artwork can purposely concentrate on attractive threatened species and thereby be a powerful tool to raise audience awareness towards conservation (Silk et al. 2017). To study such a potential bias towards threatened species in the film and book, we checked the extinction risk for each species using the Finnish Red List valid at the publication year of the film (Rassi et al. 2010). This classification of the extinction risk follows the categories and criteria of *The International Union for Conservation of Nature's Red List of Threatened Species* (IUCN 2020). The film and book include species in the following Finnish Red List categories: Not Evaluated, Least Concern, Near Threatened, Vulnerable, Endangered and Critically Endangered (Supplementary Materials). We also counted the appearances of species in film shots and book pages and noted whether the organism was the major or minor object. This was done to evaluate which species were of interest (primary targets) for shooting. We then compared the numbers and qualities of species in the film and the book. We further classified the species into larger taxonomic groups to study whether the film and book have some fundamental differences in their level of ecological knowledge (see Supplementary Materials). Furthermore, we compared the proportions of species in these groups in the works with respective proportions using all Finnish species (FinBIF 2020). This comparison aids in discovering potential shooting preferences towards certain taxonomic groups.

Because the majority of Finnish forests are managed, most Finnish people have never set foot in an old forest in its natural state (Jokiranta et al. 2019a). In a way, we have lost the knowledge of what a real natural forest looks like. This phenomenon has been described as “shifting baseline syndrome” or “environmental generational amnesia”. It takes place when each new generation perceives the environmental conditions in which they grew up as “normal” (Kroschel 2019). We discuss how environmental generational amnesia motivates the creators of the scrutinized works and potentially has an effect on the reception of these works as environmental narratives.

3. The Same Material—Many Adaptations

The nature photographers³ filmed the material over four years, after which they offered it to the production company and the actual filmmaking began (Rosenqvist 2012; Tiessalo 2012). The influence of the long tradition of nature photography can be seen in the realistic style and the conventional ways of portraying nature in all the works. They all include examples of the five subgenres of nature photography: animal, landscape, plant, close-up and human–nature relationship (Hautala et al. 1981).

Although the film, the book and the short documentaries use more or less the same material (in different amounts), each work takes a slightly different perspective. This perspective is partly determined by the medium, but it is also a question of narrative and stylistic choices. Yet despite different strategies, all seek to convince the audience of the need to protect nature.

What started as the work of nature photographers has evolved in various directions over the years. The popularity of the film encouraged the making of the book and the series of short documentaries, which were published the following year (Pirilä 2013). It can be argued that, in addition to environmental concern, the sheer economic success of the documentary film *Tale of a Forest* explains making the related products. The same material was later used as part of another film, *Luontosinfonia* (Nature Symphony 2019). Also, the success of *Tale of a Forest* encouraged the making of two more nature films, *Järven tarina* (Tale of a Lake 2015) and *Tunturin tarina* (Tale of the Sleeping Giant 2020), which will conclude the trilogy. This multitude of versions can be fruitfully analyzed in the framework of adaptation studies.

3.1. Three Stories about the Boreal Forest

The film, the book and the short documentaries portray biodiversity and harmony within a primeval boreal forest that has not been destroyed by humans. The forest is shown to be home to both small and big animals, fungi and various plants. The portrayal mostly consists of forest interiors, ponds and streams, woodland-fringed watercourses, big trees and peculiar rock formations (Figures 1 and 2). The depicted forests are rated as very valuable habitats and are protected by The Finnish Forest Act or Nature Conservation Act. In addition, a multitude of deadwood, characteristic of primeval forest, appears in the works. The change of seasons forms a loose dramatic arc in the film and book, but the depiction of the species and forest remains rather fragmentary.



Figure 1. Boreal spruce forest. Screenshot from *Tale of a Forest* DVD.

In contrast to the visual narrative that focuses on animals and plants, the voice-over in the film and the text of the book introduce an anthropocentric viewpoint that recalls old folk beliefs. An adult and child, father and son, alternate as narrators, but no human beings are shown. The man's narrative

³ The nature photographers are Hannu Siitonen, Mikko Pöllänen and Teemu Liakka.

focuses on the myths and beliefs about the forest and its meaning for people. He describes the habits of the portrayed species and explains how traditional folk beliefs relate to natural phenomena, thus adding layers of cultural meanings to the visual representation. The boy's narration focuses on the teachings of his father and his own experiences and imaginations, such as "I imagined I was in the old forest during the Carboniferous period. (...) What kind of animals would have run there? (...) A slithering slow worm?" The voices lend the film an educational tone and the young boy's bright voice, unusual for a nature documentary, gives the impression that the film is directed at families. The film has been shown at comprehensive schools, and teaching materials about it have been produced. The book looks more like a picture book for the general audience. In the text, the child's perspective is even stronger than in the film. Both narratives end with the boy's utterance: "That was my first trip to the forest".



Figure 2. A stream in the forest. Screenshot from *Tale of a Forest* DVD.

Both the film and the book are genre-hybrids that combine familiar elements from several genres, such as family films, literature and documentaries. They do not contain a coherent storyline but rather use a big old tree as a central narrative and visual element to represent the tree of life that supports the universe. In the beginning, middle and end, the narrative returns to the tree. Close to the end, the film's adult narrator (and the book's narrative) points out that the fate of humans was believed to be connected to the fate of the tree of life. People were afraid that if the tree fell, they too would be destroyed (Figure 3). The tree of life appears in mythologies across the world as well as in modern stories such as the film *Avatar* (2009, USA), in which the destruction of the home tree is a disaster for the imaginary Na'vi people.



Figure 3. The tree of life. Screenshot from *Tale of a Forest* DVD.

The tree of life exemplifies how the works remind the viewer of today's reality of old forests disappearing because of humans. The works advise people to be more respectful towards nature and to learn from our ancestors, who treated forests and their inhabitants reverentially. How the film and book promote this environmental awareness is subtle. It comes through in the voice-over and narrative that speaks, for example, about how trees were allowed to reach their full length and how "animals had taught us all the necessary skills back in the day". It also comes through in aspects of the film's style, such as the music used.

Tale of a Forest as a film and book represents pristine nature as timeless, without referring directly to politics and without calling attention to its own constructed nature. Because of the dominant role of the voice-over, the film's point of view is strongly anthropocentric even though no traces of human action are seen in the images. Because of these traits, *Tale of a Forest* closely resembles "blue chip" wildlife films. According to Derek Bousé, such films come closer to art than documentary, because they avoid issues and are not set in any specific time (Bousé 2000, pp. 14–16, 20). *Tale of a Forest* is a "dramatic re-creation" (Brereton 2016, p. 192) of the endless, pristine forests that barely exist today.

The book is not concerned with documenting the forest either. It represents the forest according to established codes and ideals of nature photography, and tells a nostalgic tale of a boy's adventures. However, the book seeks to be informative to an extent. At the end of the book, the reader can find a summarised list of many of the portrayed species and some information about shooting locations.

The series of 20 short documentaries, *Tales from the Forest*, is more informational in tone and stylistically closer to a traditional nature documentary than the feature film. Each of the less-than-five-minute-long films focuses on one animal or group from *Tale of a Forest*. In some of the short documentaries, the voice-over explains how climate change and human action affect Finnish nature, but again the consequences of human action are not shown. Even so, the films include advice on how to protect nature. The short documentaries were made in co-operation with The Finnish Association for Nature Conservation, and material for teachers was produced as part of the project.

The adaptation of the same material has resulted in three different environmental narratives. In the short documentaries, the emphasis is on information, while the film seeks to emotionally affect the spectator through music, aestheticized visuals and fascinating myths. In the book, visual and textual narratives combine subjective experience with nature photography to engage the audience with the beauty of nature.

3.2. Visual and Aural Narratives about the Forest

The core of the story is the same in the film and the book, but the narrative points of view differ. In the book, the narration is on a more personal level. The story includes autobiographical memories of the father and focuses on his subjective experience with the human–nature relationship. The text describes how people interact with elements of nature in their everyday lives. For example, the first-person narrator observes changes in nature through the lens of various activities such as berry-picking and skiing. By contrast, the film does not describe these kinds of personal activities. Therefore, the book offers a slightly more coherent story of a trip to the forest compared to the fragmentary and suggestive story in the film.

In the film, there are two narrators, the father and the son, and thus two loosely constructed parallel narratives. The focus is on the old beliefs and myths told by the father, but the attention alternates between the belief systems from the past and animal lives in the present. A narrator who simultaneously experiences nature and reflects on the human–nature relationship (cf. Lehtimäki 2019) is lacking. The boy's voice appears only now and then and his lines have a sense of randomness. The film's narration uses temporal references in an unspecified way, as compared to the book's use of specific experiential memories. As an example, the narrator in the film does not specify historically where or when people held the mentioned beliefs. Through this stylistic means, the film depicts a timeless quality to untouched nature.

In the film, different elements of visual and aural narration and style are used to create meaning and a multisensory experience. The fact that the material was not originally meant for a film can be seen in the way the narrative moves quickly from one animal to the next. As is typical of nature photography, the camera picks one animal at a time. Additional materials, such as tracking shots, were shot later to augment the film's cinematic quality. In the beginning, fade-in, fade-out, acceleration and slow-motion are used to create a sense of mystery. The film begins almost like a fairy tale. The camera also artistically focuses on details, such as interesting textures or anthropomorphic features. The narrative pauses several times to focus on beautiful views like a fiery setting sun reflected through snowfall (Figure 4) or a vast mosaic of forest and lake revealed by a high angle. Thus, the film's vision of nature is aestheticized and detached (c.f. Lehtimäki 2013). Although close-ups are used frequently, their main purpose seems to be to celebrate the beauty of nature rather than to disclose information.



Figure 4. Snowfall coloured red by the setting sun. Screenshot from *Tale of a Forest* DVD.

The adaptation of the same material has structured the narration of all the works. The book borrows its narrative style and structure from the film. For instance, the way close-ups and long shots alternate on its pages resemble the camerawork of the film. Similarly, artistic images can be found on the book's pages. In both the film and book, the viewer is positioned as a detached voyeur who pays attention to one species for a short time. In the short documentaries, the material used is mostly the same as in the longer film, but bird sounds may differ, images are more tightly framed and the wide shots are missing. Sharper editing has replaced shots of longer duration and camera movements such as zooms and pans.

In the film's visual narrative, animals and plants are the protagonists and humans are missing. But the human presence is dominant in the audio narrative (orchestrated music and voice-over). In general, the aural depiction of the forest has a less significant role in the sound design. Human voice and music are in the foreground while sounds of nature remain in the background. Soundscapes are less diverse than expected based on the forest habitats (i.e., more forest bird species would usually sing simultaneously). In only two longer sections there are sounds of nature with no voice-over or music. Vococentrism, the tendency to emphasize the importance of human voice over other sounds (Chion 1994; McCorkle 2020), characterizes the film.

Non-diegetic orchestral music is used to accentuate dramatic moments and to create moods. Orchestral music, mystical low sound effects, or echoed bird sounds are used in a romanticizing style to produce the film's mythological tone. The orchestration is dominated by string and wind instruments, creating a melancholic atmosphere, particularly towards the end. These moments raise feelings of compassion and concern for the inhabitants of the forest. It can be argued that the music is used as a sensitive aesthetic tool to turn attention to the possible risk of extinction. The music is strongly emotional in contrast to the musical style of the short documentaries. In addition to the explanatory

voice-over, each of the short documentaries has a different musical score that pointedly creates a specific mood related to the subject. Again, music and voice-over dominate the sounds of nature.

3.3. *Tale of the Species*

Despite their titles, *Tale of a Forest* and *Tales from the Forest* focus on the inhabitants of the forest rather than the forest itself (c.f. Koskinen 2020). Generally, a forest is defined by its trees (FAO 2012), but the two dominant tree species in southern Finland, the Scots pine (*Pinus sylvestris*) and Norway spruce (*Picea abies*) play only minor roles in *Tale of a Forest*.⁴ In all of the works, the complex and diverse forest ecosystem is mainly an appealing backdrop for the animals. This follows a widely recognized phenomenon: the tendency of nature documentaries to show visually attractive species (Koskinen 2020, pp. 29–30) and “spectacular moments of animal activity” (Mills 2017, p. 85).

However, *Tale of a Forest* differs from typical nature documentaries in that its primary interest is not to impart knowledge about the processes of nature or animal behavior. The information conveyed in the film and the book consists of myths, beliefs and rather general observations. For instance, the narrator in the film describes animals in this manner: “The black woodpecker (*Dryocopus martius*) was a jinxed bird. A messenger of death. People feared its cry as it caused rain and thunder if nothing worse.” Similar stories are told about most of the animals and some trees.

The focus on folk beliefs in the film and book contrasts with the short documentaries that disclose biological details of the species, such as breeding and eating habits. More complex biological processes are only shortly referred to in the works. For example, a forest fire that begins ecological succession is shown only in the book. As examples of more complex species interactions, the pygmy owl (*Glaucidium passerinum*) tries to be less visible by retracting slim in the film when supposedly an avian predator passes, while the Siberian flying squirrel’s (*Pteromys volans*) attraction to nest sites of the northern goshawk (*Accipiter gentilis*) emerges from both the visual and audio narrative (Byholm et al. 2012). Extinction threat is handled in the short documentaries, but only one paragraph in the book alludes to the possibility of extinctions. In the film, the extinction threat was not mentioned at all.

The film and the book altogether include 270 species (218 in the film and 155 in the book). Most of the species are not threatened, indicating that the works did not especially seek rarities. The small coverage of threatened species implies a general, timeless representation of the forest. Therefore, the works do not represent the true forests of the past, in which currently endangered species were once common.

Both the film and the book include species that do not appear in the other, although they share 103 species. Interestingly, the species group composition is very similar in the film and the book. Birds are the dominant species group in both works (30% of the species), followed by plants (25%) and arthropods (16%, mainly insects), while mammals (9%) and fungi (4%) are among the minority groups. This implies a congruent representation of the forest nature in both works. However, the distributions of the species groups in the film and book differ substantially from reality. In Finnish nature, arthropods (65% of species) and fungi (19%) dominate, while birds (1%), plants (8%) and mammals (0.2%) are only small groups (FinBIF 2020). Clearly, the film and the book excessively present large or middle-sized organisms such as birds, plants or mammals, and disregard small ones such as arthropods and fungi. This is partly in line with the finding that large mammals are often considered the most charismatic animals (Albert et al. 2018).

The pictorial expression of the works has many features that are typical of nature photography and its most popular subgenre, animal photography. For example, 130 of the book’s 215 images represent animals (but also include 47 landscapes and 20 plant or fungus photos). When mammals, amphibians or reptiles are shown in the film’s shots or the book’s pictures, they are chiefly the main objects in the respective images, whereas plants, lichens and mosses are usually in minor roles.

⁴ Scots pine and Norway spruce are the major objects only in 7% and 12% of the film shots where they appear, respectively.

Interestingly, *Tale of a Forest* also depicts non-traditionally attractive or species considered anthropomorphic. For example, most of the arthropod species depicted in the works are insects, which as a group, are usually associated with a negative visual charisma (Lorimer 2015, pp. 48–9). Although arthropods are underrepresented in the film and book as compared with their species diversity in the Finnish species, they are often the major object of their respective images.

Birds are the major objects in over 90% of pictures, including birds in the book, but only 40% of shots included birds in the film. This is because birds often vocalize in the background without a connection to their visual appearance. However, vertebrates are preferred objects in the images even though they are a small proportion of Finnish biodiversity. The most depicted species in the film and of the animal species in the book is the Siberian jay (*Perisoreus infaustus*). The most depicted plant species in the book is the old pine tree, the mystical tree of life. Other plant depictions are mainly neutral. Images of fungi, insects and mosses on old trees give an impression of the biodiversity in an old forest ecosystem.

Visual elements that refer to the relationship between humans and nature are missing from the films. In the book, the subject is dealt with a little. There is one image of a human sitting by a campfire, two images of campfires, two of ancient rock paintings and one image of a ringed white-backed woodpecker (*Dendrocopos leucotos*). In the film and short documentaries, results of human actions are seen only suggestively, e.g., when logging areas are reflected in bird eyes or water droplets (Figure 5). This avoidance of humans and their traces in nature is a common convention in nature photography. In the case of the ringed white-backed woodpecker, the photographers may not have had a choice because almost all breeding individuals are monitored, as the species is endangered (Rassi et al. 2010). As such, this picture, perhaps unintentionally, brings modern times to the tales.



Figure 5. Siberian jay with a reflection of a clear-cut area in its eye. Screenshot from *Tale of a Forest* DVD.

The way animals are depicted in all three works mainly follows the conventional forms of nature photography, which can be divided into neutral species depictions, portraiture and depictions of animal activities. The latter two also allow an artistic approach that relies on accurate timing and exposure control (Willamo 1988, p. 11). The majority of images in the film and book emphasise animal activities. For example, the Siberian jay is pictured atop of a branch just when the bird has spread its feathers diagonally to the counter-light. These kinds of “decisive moments”, when all the elements are perfectly balanced, are typically highlighted in nature photography (Cartier-Bresson 1952). Some of the images can also be defined as simple species depictions that clearly show detailed characteristics. In the case of some timid or rare animals, such as the elk (*Alces alces*) and lynx (*Lynx lynx*), the representations are more neutral.

The set of species in the film and book is not representative of the typical species pool in boreal coniferous forests. Rather, it reflects the choices of the authors or the availability of material. For instance, songs of some common forest birds are under-represented in the film. In contrast, others appear in

believable frequencies, such as how the dunnock (*Prunella modularis*) sings only once. In contrast, the European robin (*Erithacus rubecula*) appears in more than 20 shots, even though both species are typical in spruce forests. Often the species in the film are not introduced, leaving viewers uninformed about the biodiversity on display. For example, 28 bird species are only presented in the film's soundscape, including many widespread forest birds and the most common bird species in Finland, the willow warbler (*Phylloscopus trochilus*; Valkama et al. 2011). Similarly, most of the insects, plants and fungi shown in the film are not named. In the book, species in the text often remain on a general level (insect, owl, tree), while species displayed in pictures are listed at the end. Overall, the general presentation of biodiversity suits the mythical tone of the film and book. Nevertheless, the phenology and ecology of species are mostly presented correctly, reflecting the expertise on nature from the authors. Inaccuracies occur in only a few cases, such as when birds continue singing in autumn when territorial songs would have ceased. These examples of selecting and presenting species suggest they are based more on aesthetic than scientific criteria.

4. The Past-Oriented Approach

As we have already noted, the film and the book both gesture in many ways to the past. They draw examples from old belief systems and cultural memory to raise environmental awareness. The set of depicted species is also conventional, as it prioritizes animals over plants or fungi. Although not explicit, the works also contain several visual and textual references to previous canonical works inspired by Finnish nature.

Tale of a Forest carries on the idealization of the mystical past and the late 19th-century romantic embodiment of pristine forests, the influence of which can still be seen in nature photography. For example, some scenes and images refer to iconic works of Finnish national romantic art, such as *Palokärki* (The Black Woodpecker 1893) (Figure 6) painted by Akseli Gallen-Kallela (1865–1931). One of the most prominent artists in Finnish art history, Gallen-Kallela created, among other things, the visualization for the national epic *Kalevala*. This kind of intertextuality can be seen in the many representations of the black woodpecker in the film and book, but in particular in some of the Siberian jay images (Figure 7). These reproduce Gallen-Kallela's composition of a bird sitting on deadwood above a forest landscape that continues into the distance.

The reuse of Finnish cultural and folkloric elements in the narratives bears resemblance to the recent revitalization of indigenous knowledge and an environmentalist retreat to premodern times, in the sense that *Tale of a Forest* looks back in time and avoids reference to the contemporary state of forests (see Wapner 2010; Lorimer 2015). The film and the book represent the forest as it used to be, emphasizing a timeless Finnish forest at its best and most impressive.

This orientation towards the past can be characterized as a form of environmental nostalgia, which is almost inevitably present in environmental films that deal with actual or potential losses. Jason Sperb argues that, through documentation, environmentally concerned films attempt to preserve threatened landscapes, species, and "anxieties over their possible extinction". According to him, nostalgic longing is most clearly present in films that "minimize the impact of humans and technology on nature, or even deny the processes of cinematic and televisual mediation which brings audiences so close to nature in the first place" (Sperb 2016, p. 209). The makers of *Tale of a Forest* said they wanted to create a film and an experience that makes the viewer want to go for a trip to the forest (Toijonen 2013; Tuominen 2012). Because people have gone to the forest throughout centuries, we may ask why the presence of humans is so carefully erased from these portrayals. The film does not quite manage to create the feeling of being in the forest. The aestheticized approach may even create the opposite effect.

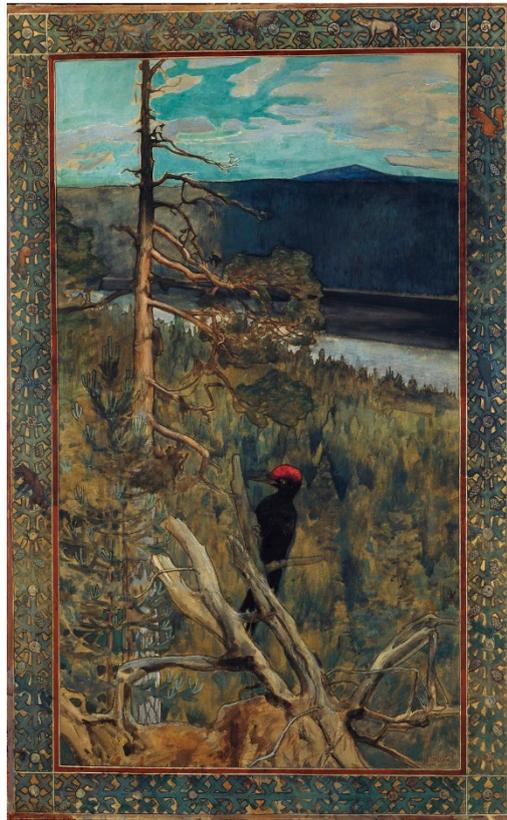


Figure 6. Akseli Gallen-Kallela, *Palokärki (The Black Woodpecker)*, 1893, gouache, 145 cm × 90 cm. Finnish National Gallery/Ateneum. Photo: Finnish National Gallery/Pirje Mykkänen. Used with permission.



Figure 7. A Siberian jay shot that can be seen to refer to Akseli Gallen-Kallela's painting *Palokärki (The Black Woodpecker)*. Screenshot from *Tale of a Forest* DVD.

Nostalgic longing is connected to economic considerations. Jones et al. (2019, p. 422) point out that nature documentaries tend to show the best parts of nature because filmmakers think that they may lose their audience by focusing on human-induced threats. In *Tale of a Forest*, for example, clear-cut areas are not shown, although they are common in the Finnish forest landscape. In their analysis of the Netflix documentary *Our Planet*, Jones et al. (2019, p. 422) commented that its “spectacular images revealing the grandeur of nature (. . .) may inspire and mobilize concern for the remaining biodiversity found on Earth”. They also noted that it is important to maintain hope. At the same time,

the erasure of people from images of nature is potentially misleading and a way of keeping people and nature apart on the discursive level. (Ibid.)

This tendency to look to the past and to cherish nostalgia needs to be considered when analyzing how the works succeed in raising environmental awareness, especially among the younger generations. Is the past-oriented narrative a politically effective way to activate nature connectedness in the present environmental crisis? Are the mythic creatures and old tales too unfamiliar for people who live amongst the imagery of climate crises and extinctions? An alternative way would be to pass on information about how important the old forests are as carbon stores and sources of forest biodiversity (Goldstein et al. 2020; Pukkala 2020; Hyvärinen et al. 2019). Also, it is important to bear in mind that amongst the Finns there are differing, contradictory, or even opposing values attached to forests. Finnish people with different cultural backgrounds and histories, such as immigrants and refugees, can experience the forest as an unfamiliar environment (Paaskoski et al. 2018, p. 5). The patrilineal father to son narrative can also be seen as a part of the works' nostalgic outlook and it might feel alienating and old-fashioned, at least for today's audiences.

In some ways, the works could be read as a memorial to the disappearing primeval forest. In that sense, they fight against the environmental generational amnesia by showing what we have lost or are about to lose. As Kroschel (2019) has written, shifting baseline syndrome or environmental generational amnesia takes place when "(...) each new generation perceives the environmental conditions in which they grew up as 'normal'. It also describes how people's standards for acceptable environmental conditions are steadily declining. (...) We cannot appreciate what has been lost if we never knew it was there." This applies to the Finnish forest relationship too. As people do not have the knowledge and experience of old forests, it is harder to demand their conservation. This lowers expectations for the protection and management of forests and increases tolerance for the loss of forest biodiversity (cf. Kroschel 2019; Soga and Gaston 2018). We argue that the subtle ecological strategy of the *Tale of a Forest* works only if the audience is already aware of the disappearance of old forests and its consequences for the biodiversity and climate. For an environmentally aware viewer, the film and the book might enhance awareness through its nostalgic and past-oriented approach.

5. After *Tale of a Forest*: Conclusions

The film, the book and the short documentaries were published between 2012 and 2013. After that, the discussion around the state of forests has become more intense in Finland. There have been many books, films, articles and campaigns about forests and their connection with climate change and the biodiversity crisis.⁵ One of them is the award-winning book *The Forest After Us* (Jokiranta et al. 2019a.)

The Forest After Us challenges myths and reveals the reality of the state of the Finnish forests. Outside of protected areas, the forests are not what we might imagine. The majority of them are young and fragmented with clear-cut areas. The authors point out that most Finnish people have never actually been to an old forest in its natural state (Jokiranta et al. 2019a). In fact, the authors have received recurrent feedback from readers that the book helped them realize the difference between a primeval and a managed forest for the first time (Jokiranta et al. 2019b).

The *Forest Finland* campaign (2020) on the other hand, is a joint communication project by the Finnish forest sector,⁶ responded to the growing critique of forest management with an attempt to highlight its sustainability. The campaign's website states that the aim is "to awaken and raise peoples' interest in forests, encourage discussion about the forests' role in everything we have in Finland, as well as update our perception of modern forestry".⁷ However, the campaign has been heavily

⁵ Kuivalainen, Anu, *Into the Forest* (Sielunmetsä 2017), Kauppinen: *Monimuotoisuus* (2019), Rapinoja, Anni: *Luonnollisesti* (2019), exhibition in Oulu Art Museum, Hyvärinen et al.: *The 2019 Red List of Finnish species* (2019).

⁶ Funded by the Finnish Forest Foundation, the Finnish Forest Industries Federation, State forest agency, the Central Union of Agricultural Producers and Forest Owners MTK and the Ministry of Agriculture and Forestry.

⁷ <https://metsiensuomi.fi/in-english/>.

criticized for distributing disinformation, such as the false claim that over half of European protected forests are in Finland and the general assertion that the forest industry is sustainable (Aamulehti 2020; Kajander 2020).⁸

These ongoing discussions have influenced our reading of *Tale of the Forest*. The film is different from most recent works that have sought to raise awareness of environmental problems. For example, in Anu Kuivalainen's documentary film, *Sielunmetsä* (Into the Forest 2017), the protagonists discuss intensive forest management in a fairly straightforward manner.⁹ Instead, *Tale of a Forest* presents an image of an untouched Finnish forest, and the filmmakers hoped that beautiful and nostalgic views of disappearing forests could help people reconnect with nature. But from an ecocritical perspective, such a strategy may seem escapist and out-dated.¹⁰ *Tale of a Forest* has achieved great attention, and it keeps coming up in media discussions about the state of the forests.¹¹ For example, several news articles have recently discussed how the famous "Siberian jay-forests from the *Tale of a Forest*" are under threat (Sormunen 2017). Despite the fact that the film has raised awareness of these forests, numerous filming locations have been clear-cut or changed (Kauppinen 2019, pp. 120–27).

In this article, we have discussed an understanding of adaptation beyond an artistic process of recycling, borrowing and developing elements from other works of art. We point out that artists such as filmmakers adapt biological and ecological knowledge when creating narratives about the forest. Furthermore, in addition to the actual process of adaptation, we have discussed how the works are connected to a greater number of cultural products. Thus, it is also possible to speak of intertextuality, although only a few other works are referenced directly. On a more general level, we can speak of recognisability. That is, each viewer or reader recognizes different connections based on their own previous knowledge and experiences (Dicecco 2017, p. 614). We have confined our observations to how the three works are connected to Finnish artworks, folklore and representations of forest nature, but are aware that there are other relevant points of reference too.

As we noted in the beginning, representations of nature contribute considerably to our understanding of the environment. Therefore, we believe it is useful to include a multidisciplinary approach into research about the human-forest relationship. In order to gain a deeper understanding of the significance of forests, it is vital to continue to combine biological and cultural perspectives in novel ways.

Making films and books about people's relationship with nature is a reaction to changes taking place in nature. It can be seen as an attempt to cope with or adapt to current circumstances.¹² In the situation where old forests are disappearing, the makers of *Tale of a Forest* have aimed to conserve them by recreating them in their artworks. We think that through environmental narratives, the audience, especially younger generations, can be made aware of the diverse nature relationship experienced by earlier generations of Finns. As the forests are degrading, the narratives and myths about the forests are also in danger of fading. In this situation, films like *Tale of a Forest* can be used to remind people of the importance of forests and suggest ways to reconnect with them. The popularity of these works shows that they have succeeded in participating in the debates about the Finnish human-forest

⁸ During the writing of this article, the Finnish parliament received a popular initiative "Clear-cuts to the history" signed by more than 60,000 Finns. The main directive in the initiative is for government owned forests to be managed with methods other than clear-cutting in the future (for example with continuous cover forestry).

⁹ Other recent examples of documentary films include: *Talvivaaran miehet* (Men of Talvivaara 2015), *Nälkämaan Sampo* (The Land of Mine 2016) and *Luonto sisälläni* (2016).

¹⁰ *Tale of a Forest* is not the only contemporary artwork that deliberately turns attention away from environmental problems. For instance, when nature photographer Heikki Willamo's latest book *Metsä minussa* ("The Forest in Me" 2020, translation by authors) was published, he commented that he prefers to show what we are about to lose: primeval forests.

¹¹ The film has also been used to gain wider publicity and importance on petitions (https://www.adressit.com/suojellaan_metsan_tarinan_syntymetsa_tulevaisuudelle).

¹² In a similar vein, the British ecocritic Ted Hughes who was interested in the bio-evolutionary foundations of culture, approaches myths as 'dynamic shifting in response to environmental conditions' (Solnick 2017, p. 72). Myths are linked to cognitive and communicative capacities and they have an adaptive force. Hughes suggests that if a founding myth becomes useless, it is a sign of maladaptation to environment (ibid.).

relationship. On the other hand, *Tale of a Forest* could lull viewers into a false sense of security by celebrating the Finnish forests instead of telling the truth about their real state. As a result, the film and the book might reinforce the myth of the Finns' close forest relationship rather than challenge it.

Supplementary Materials: The following are available online at <http://www.mdpi.com/2076-0752/9/4/125/s1>. Supplementary File S1: A detailed description of the used methods in gathering and analyzing the biological data from the book and film. Column specification of the table Supplementary File S2. Supplementary File S2: Occurrence information of the detected species/taxa appearing in the book and film.

Author Contributions: Conceptualization, K.H., H.B., A.N., J.P., M.R., N.S. and A.V.; Formal analysis, K.H., H.B. and J.P.; Funding acquisition, K.H.; Investigation, K.H., H.B., A.N., J.P., M.R., N.S. and A.V.; Methodology, K.H., H.B., A.N., J.P., M.R., N.S. and A.V.; Project administration, K.H.; Visualization, K.H., H.B. and A.V.; Writing—original draft, K.H., H.B., A.N., J.P., M.R., N.S. and A.V. All authors have read and agreed to the published version of the manuscript.

Funding: The article is part of the research project *Art, ecology and diverse human–nature relationships* and it was funded by the Kone Foundation, grant number 201904167.

Acknowledgments: We thank Olli-Pekka Turunen, Sampsa Lommi, Aurora Prättälä, Anne Koivunen, Ina Tirri, Jarkko Santaharju, Seppo Niiranen, Aleksi Nirhano, Anna Olden, Mari Jäntti, Atte Komonen, Jenni Toikkanen, Matti Koivula, Jaakko Mattila and Lauri Kaila for their aid in species identification.

Conflicts of Interest: The authors declare no conflict of interest.

References

Primary Sources

- Metsän tarina/Tale of a Forest*. 2012. Documentary film. 72 mins. Directed by Ville Suhonen and Kim Saarniluoto. Finland: Matila Röhr Productions.
- Suhonen, Ville, Hannu Siitonen, and Mikko Pöllänen. 2013. *Metsän tarina*. Helsinki: Maahenki.
- Tarinoita metsästä/Tales from the Forest*. 2013. A series of documentary films. 85 mins. Directed by Kim Saarniluoto. Finland: Matila Röhr Productions.

Bibliography

- Aamulehti. 2020. Kansanliike Kritisoi Metsäkampanjaa—Näin Metsien Suomi Vastaa. *Mielipiteet*, June 6. Available online: <https://www.aamulehti.fi/a/12e52709-e9a2-4386-af8e-2d5253b46731> (accessed on 19 October 2020).
- Albert, Céline, Gloria M. Luque, and Franck Courchamp. 2018. The Twenty Most Charismatic Species. *PLoS ONE* 13: e0199149. [CrossRef]
- Bousé, Derek. 2000. *Wildlife Films*. Philadelphia: University of Pennsylvania Press.
- Brereton, Pat. 2016. *Environmental Ethics and Film*. London: Routledge.
- Byholm, Patrik, Daniel Burgas, Tarmo Virtanen, and Jari Valkama. 2012. Competitive Exclusion Within the Predator Community Influences the Distribution of a Threatened Prey Species. *Ecology* 93: 1802–8. [CrossRef] [PubMed]
- Cartier-Bresson, Henri. 1952. *The Decisive Moment*. New York: Simon & Schuster.
- Chion, Michel. 1994. *Audio-Vision: Sound on Screen*. Translated by Claudia Gorbman. New York: Columbia University Press.
- Christman Lavin, Sophie, and E. Ann Kaplan. 2017. *The Climate of Ecocinema. The Oxford Research Encyclopedia of Communication*. Oxford: Oxford University Press. [CrossRef]
- Cutchins, Dennis. 2017. Bakhtin, Intertextuality, and Adaptation. In *The Oxford Handbook of Adaptation Studies*. Edited by Thomas Leitch. New York: Oxford University Press, pp. 71–86.
- Dicecco, Nico. 2017. The Aura of Againness: Performing Adaptation. In *The Oxford Handbook of Adaptation Studies*. Edited by Thomas Leitch. New York: Oxford University Press, pp. 607–22.
- FAO. 2012. FRA 2015 Terms and Definitions. Forest Resources Assessment Working Paper 180. Rome: Food and Agriculture Organization of the United Nations. Available online: <http://www.fao.org/3/ap862e/ap862e00.pdf> (accessed on 19 October 2020).

- FinBIF. 2020. *The FinBIF Checklist of Finnish Species 2019*. Helsinki: Finnish Biodiversity Information Facility, Finnish Museum of Natural History, University of Helsinki, Available online: <http://urn.fi/URN:ISSN:2490-0907> (accessed on 19 October 2020).
- Goldstein, Allie, Will R. Turner, Seth A. Spawn, Kristina J. Anderson-Teixeira, Susan Cook-Patton, Joseph Fargione, Holly K. Gibbs, Bronson Griscom, Jennifer H. Hewson, Jennifer F. Howard, and et al. 2020. Protecting irrecoverable carbon in Earth's ecosystems. *Nature Climate Change* 10: 287–95. [CrossRef]
- Halla, Tuulikki, Reetta Karhunkorva, Sirpa Kärkkäinen, Jaana Laine, and Anna Rautio. 2018. Suomalaisten metsäsuhteiden tila [On Finns' Emotional Responses to the Forest]. In *Vuosilusto 12: Suomalainen Metsäsuhde*. Edited by Leena Paaskoski and Heikki Roiko-Jokela. Punkaharju: Lusto—Finnish Forest Museum and The Finnish Forest History Society, pp. 112–21. Available online: <https://issuu.com/vuosilusto/docs/vuosilusto12> (accessed on 19 October 2020).
- Hautala, Hannu, Jorma Luhta, Arno Rautavaara, Veikko Rinne, Kari Soveri, and Teuvo Suominen. 1981. *Luonnonvalokuvauksen Käsikirja*. Espoo: Weilin + Göös.
- Hyvärinen, Esko, Aino Juslén, Eija Kempainen, Annika Uddström, and Ulla-Maija Liukko, eds. 2019. *The 2019 Red List of Finnish Species*. Helsinki: Ministry of the Environment and Finnish Environment Institute. Available online: <http://hdl.handle.net/10138/299501> (accessed on 19 October 2020).
- IUCN. 2020. The IUCN Red List of Threatened Species. Available online: www.iucnredlist.org (accessed on 16 November 2020).
- Jokiranta, Anssi, Pekka Juntti, Anna Ruohonen, and Jenni Räinen. 2019a. *Metsä Meidän Jälkeemme*. Helsinki: Like.
- Jokiranta, Anssi, Pekka Juntti, Anna Ruohonen, and Jenni Räinen. 2019b. Miltä näyttää metsä meidän jälkeemme? *Koneen Säätiö*, September 26. Available online: <https://koneensaatio.fi/milta-nayttaa-metsa-meidan-jalkeemme/> (accessed on 19 October 2020).
- Jones, Julia P. G., Laura Thomas-Walters, Niki A. Rust, and Diogo Verissimo. 2019. Nature Documentaries and Saving Nature: Reflections on the New Netflix Series Our Planet. *People and Nature* 1: 420–25. [CrossRef]
- Kajander, Lauri. 2020. Metsien Suomi-kampanja levittää virheellistä tietoa metsien suojelusta. *Metsäblogi*, June 24. Available online: <https://metsablogi.wordpress.com/2020/06/24/metsien-suomi-kampanja-levittaa-virheellista-tietoa-metsien-suojelusta/> (accessed on 19 October 2020).
- Kantar TNS. 2018. Suomalaisten Metsäsuhteiden Tila-Selvitys. Kestävästi Metsäsuhteessa-Hanke. Ministry of Agriculture and Forestry of Finland, Finnish Forest Association, and Lusto—Finnish Forest Museum. Available online: <https://smy.fi/wp-content/uploads/2018/03/Suomalaisten-mets%C3%A4suhteiden-tila-selvitys.pdf> (accessed on 19 October 2020).
- Kauppinen, Juha. 2019. *Monimuotoisuus: Kertomuksia katoamisista*. Helsinki: Kustannusosakeyhtiö Siltala.
- Koskinen, Kristiina. 2020. Antroposkenen ekosysteemi: Pohjoinen metsä villin luonnon näyttämönä [Forest Ecosystem as a Stage: Constructing Wilderness with Northernness]. *Lähikuva* 33: 25–41. [CrossRef]
- Kouki, Jari, Satu Löfman, Petri Martikainen, Seppo Rouvinen, and Anneli Uotila. 2001. Forest Fragmentation in Fennoscandia: Linking Habitat Requirements of Wood-associated Threatened Species to Landscape and Habitat Changes. *Scandinavian Journal of Forest Research* 16: 27–37. [CrossRef]
- Kroschel, Whitney. 2019. Shifting Baseline Syndrome. *Envirobites*. Available online: <https://envirobites.org/2019/08/22/shifting-baseline-syndrome/> (accessed on 19 October 2020).
- Kuuluvainen, Timo. 2009. Forest Management and Biodiversity Conservation Based on Natural Ecosystem Dynamics in Northern Europe: The Complexity Challenge. *Ambio* 38: 309–15. [CrossRef] [PubMed]
- Lehtimäki, Markku. 2013. Kuvia ja kertomuksia metsästä. Luontoelokuva digitaalisen todellisuuden aikakaudella. *Niin & Näin* 2: 31–35. Available online: <https://netn.fi/artikkeli/kuvia-ja-kertomuksia-metsasta-luontoelokuva-digitaalisen-todellisuuden-aikakaudella> (accessed on 22 October 2020).
- Lehtimäki, Markku. 2019. Narrative Communication in Environmental Fiction. Cognitive and Rhetorical Approaches. In *Routledge Handbook of Ecocriticism and Environmental Communication*. Edited by Scott Slovic, Swarnalatha Rangarajan and Vidya Sarveswaran. London and New York: Routledge, pp. 84–97.
- Lorimer, Jamie. 2015. *Wildlife in the Anthropocene: Conservation after Nature*. Minneapolis and London: University of Minnesota Press.
- Marland, Pippa. 2013. Ecocriticism. *Literature Compass* 10: 846–68. [CrossRef]
- McCorkle, Brooke. 2020. Listening to Soundscapes in Kurosawa's *Dersu Uzala* (1975). In *Voicing the Cinema: Film Music and the Integrated Soundtrack*. Edited by James Buhler and Hannah Lewis. Champaign: University of Illinois Press, pp. 190–206.

- Mills, Brett. 2017. *Animals on Television: The Cultural Making of the Non-Human*. London: Palgrave Macmillan.
- Paaskoski, Leena, Heikki Roiko-Jokela, and Marko Rikala. 2018. Suomalaisia metsäsuhteita. In *Vuosilusto 12: Suomalainen Metsäsuhde*. Edited by Leena Paaskoski and Heikki Roiko-Jokela. Punkaharju: Lusto—Finnish Forest Museum and The Finnish Forest History Society, pp. 5–9. Available online: <https://issuu.com/vuosilusto/docs/vuosilusto12> (accessed on 19 October 2020).
- Pirilä, Marjo. 2013. Metsän tarinasta kirja. *Yle News*, June 24. Available online: <https://yle.fi/uutiset/3-6698837> (accessed on 19 October 2020).
- Pukkala, Timo. 2020. Calculating the additional carbon sequestration of Finnish forestry. *Journal of Sustainable Forestry*. [CrossRef]
- Rassi, Pertti, Esko Hyvärinen, Aino Juslén, and Ilpo Mannerkoski, eds. 2010. *The 2010 Red List of Finnish Species*. Helsinki: Ministry of the Environment and Finnish Environment Institute, Available online: <http://hdl.handle.net/10138/299499> (accessed on 19 October 2020).
- Rosenqvist, Juha. 2012. Ville Suhonen ja Metsän Tarina. Juha Rosenqvist Interviews Ville Suhonen. Film-o-Holic. Available online: <http://www.film-o-holic.com/haastattelut/ville-suhonen-metsan-tarina/> (accessed on 19 October 2020).
- Siiskonen, Harri. 2007. The Conflict between Traditional and Scientific Forest Management in 20th Century Finland. *Forest Ecology and Management* 249: 125–33. [CrossRef]
- Silk, Matthew, Sarah L. Crowley, Anna J. Woodhead, and Ana Nuno. 2017. Considering Connections between Hollywood and Biodiversity Conservation. *Conservation Biology* 32: 597–606. [CrossRef] [PubMed]
- Soga, Masashi, and Kevin J. Gaston. 2018. Shifting Baseline Syndrome: Causes, Consequences, and Implications. *Frontiers in Ecology and the Environment* 16: 222–30. [CrossRef]
- Solnick, Sam. 2017. *Poetry and the Anthropocene: Ecology, biology and technology in contemporary British and Irish Poetry*. London and New York: Routledge.
- Sormunen, Elli. 2017. Luontojärjestöt: Metsän tarina-elokuvan miljöö on raikattu—Metsäjätin avohakkuut tuhosivat kuukkelimetsän. *Yle News*, November 21. Available online: <https://yle.fi/uutiset/3-9941407> (accessed on 19 October 2020).
- Sperb, Jason. 2016. From Nihilism to Nostalgia: Blackfish (2013) and the Contradictions of the Nature Documentary. *Journal of Popular Film and Television* 44: 206–19. [CrossRef]
- Tiessalo, Paula. 2012. Metsän tarina kypsyi neljä vuotta. *Yle News*, December 10. Available online: <https://yle.fi/uutiset/3-6409305> (accessed on 19 October 2020).
- Toijonen, Ville. 2013. Metsän tarina on Suomen katsotuin dokumentti. *Yle News*, April 15. Available online: <https://yle.fi/uutiset/3-6579653> (accessed on 22 October 2020).
- Tuominen, Päivi. 2012. Metsän tarina pääsi valkokankaalle. *Yle News*, December 27. Available online: <https://yle.fi/uutiset/3-6423627> (accessed on 22 October 2020).
- Vaahtera, Eeva, Martti Aarne, Antti Ihalainen, Elina Mäki-Simola, Aarre Peltola, Jukka Torvelainen, Esa Uotila, and Esa Ylitalo, eds. 2018. *Finnish Forest Statistics*. Helsinki: Natural Resources Institute Finland (Luke), Available online: <http://urn.fi/URN:NBN:fi-fe201902043966> (accessed on 19 October 2020).
- Valkama, Jari, Ville Vepsäläinen, and Aleksi Lehikoinen. 2011. The Third Finnish Breeding Bird Atlas. Finnish Museum of Natural History and Ministry of Environment. Available online: <http://atlas3.lintuatlas.fi/english> (accessed on 19 October 2020).
- Wapner, Paul. 2010. *Living through the End of Nature: The Future of American Environmentalism*. Cambridge: MIT Press.
- Willamo, Heikki. 1988. *Eläinvalokuvaus*. Forssa: Forssan kustannus.
- Willoquet-Maricondi, Paula. 2010. *Framing the World: Explorations in Ecocriticism and Film*. Charlottesville: University of Virginia Press.

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



© 2020 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).