Storytalk and complex constructions of nonhuman agency

An interview-based investigation

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Recent work in environmental philosophy has uncoupled the notion of agency from the human domain, arguing that the efficacy of nonhuman entities and processes can also be construed as a form of "agency." In this paper, we study discursive constructions of nonhuman agency as they appear in a set of interviews revolving around fictional narratives. The participants were asked to read microfiction engaging with the nonhuman perspectives of entities such as a melting glacier or an endangered tree species. The analysis of the interviews centers on "complex" attributions of nonhuman agency – that is, attributions that involve a combination of agencies attributed to the nonhuman. We show that these complex attributions emerge more frequently in discussing the story (what we call the "storytalk") than elsewhere in the interviews. We also explore the way in which such complex constructions of nonhuman agency challenge widespread assumptions about the natural world.

Keywords: empirical ecocriticism, nonhuman agency, microfiction, interview study, nonhuman-centric narratives, environmental narratives

Introduction

The field of ecocriticism, or environmentally oriented literary scholarship, sees literature as a means of enriching and deepening readers' understanding of ecological phenomena (see, e.g., Garrard, 2004). Over the last two decades, the center of gravity of ecocritical discussions has shifted from genres, such as nature writing, that foreground pristine natural landscapes, to literature that stages human-nonhuman interconnectedness. In particular, recent ecocriticism has addressed climate change, arguing that poetry and fiction are uniquely suited to convey the scale and ramifications of a crisis that, while historically grounded in industrial

activities in the Western world, threatens to destabilize human-nonhuman relations around the globe (Farrier, 2019; Trexler, 2015).

Some strands of ecocritical thinking have posited a direct relation between literary experience and environmental attitudes. In the field of "econarratology," Erin James (2015), for instance, builds on work in cognitive approaches to literature to argue that immersion in narrative leads to the expansion of what she terms, following Lawrence Buell (1995), readers' "environmental imagination": namely, the way in which audiences understand and value the nonhuman world. As James puts it, narrative's "immersive power ... has the ability to transport readers to new environmental experiences and potentially influence the way those readers view the world" (2015, p. 33).

There have been a few attempts to turn this intuition into an empirical research program, notably in the area of "empirical ecocriticism" (Schneider-Mayerson, 2018; Schneider-Mayerson et al., 2020b). Researchers in this field have adopted empirical methods to study the claim that engaging with narrative literature raises awareness of or changes our attitudes towards a variety of environmental issues, including climate change and animal welfare (Małecki et al., 2016; Małecki et al., 2018; Schneider-Mayerson et al., 2020a). Extending this body of scholarship, this article embraces qualitative methods to study the ways in which the reading and discussion of literary narrative prompts a (re)negotiation of nonhuman agency. In doing so, our work places an emphasis on the intersubjective nature of narrative experiences. One of the leading advocates of empirical ecocriticism recognizes that environmental "awareness and anxiety do not exist in isolation but are situated within webs of social relationships and popular opinions about appropriate responses to environmental concerns" (Schneider-Mayerson, 2018, p. 493). Put otherwise, the impact of literary texts is fundamentally shaped by their social context, through practices such as collective discussion in schools or reading groups.

In this study, we look at how people discuss environmentally oriented microfiction in the dynamic communicative context of an interview. Our goal is to examine how readers' imagination of human-nonhuman relations is informed not only by reading a story, but by discussing the reading experience with an interviewer. More specifically, using the methodological framework of discourse analysis (e.g., Potter, 2004), we analyze how the participants negotiate the agency of the nonhumans in the discussion of three different stories. We used short (one-page long) stories commissioned for this study (see the Appendix). All of them employ a nonhuman perspective or narrative voice to unsettle what Monika Fludernik (1996, p.13) has called the "anthropomorphic bias" of storytelling – that is, narrative's inherent tendency to privilege and foreground individual human char-

acters.¹ By engaging with the perspective of a tree, an iceberg, and humankind in general, these short narratives illustrate the power of literature to raise pointed questions on the boundary of human and nonhuman agency.

We chose very short texts on pragmatic grounds. These could be read during the interviews and thus, did not require any advance reading on the part of the participants. We wanted to use stories commissioned especially for the purposes of this study to ensure that none of the participants would have any previous experience of the texts and because this allowed us to use texts specifically written to explore the perspective of a nonhuman or abstract entity. We acknowledge, however, that length may have a significant impact on how stories are received. For example, the complex agency constructions we observe below might be amplified by engagement with longer narrative forms such as a novel or feature film.²

The texts use metaphor and a number of other stylistic devices to complicate readers' understanding of the nonhuman world: icebergs are said to be "wild and ferocious," a tree is "dreaming," people want to "become one with the wind, snow, and stone," etc.³ Confronted with these defamiliarizing narratives, the participants resorted to a number of different constructions of both human-nonhuman relations in general and nonhuman agency in particular. Our goal in this paper is to map out these conceptualizations as they arose in what we call "storytalk" – the discussion (mediated by the interviewer) of the participants' reading experiences. Storytalk refers to those parts of the interview in which the participants explicitly commented on the stories as opposed to those sections in which (for instance) climate change in general was discussed.⁴ More broadly speaking, we understand storytalk as any form of discussion generated by shared engagement with a story and hence as an expression of the inherently intersubjective and social nature of narrative experiences.

Within the storytalk of our interviews, we identify what we call "complex nonhuman agency constructions," which are inspired by the narrative and subsequent discussion and which – we claim – hold particular promise vis-à-vis the expansion of readers' environmental imagination. It is this kind of complex thinking that should be cultivated in fields such as climate change education and

^{1.} Over the last ten years, literary scholars in the field of narratology have started to discuss the form and affordances of nonhuman-oriented narrative from the perspective of both unnatural (Alber, 2016) and cognitive theories of narrative (Bernaerts et al., 2014; Herman, 2018).

^{2.} For more on the ecological significance of narrative experiences, see Weik von Mossner (2017).

^{3.} See also Caracciolo (2021, Chapter 5) on metaphorical language and the imagination of the nonhuman.

^{4.} The other sections of the interviews are the focus of Toivonen (2022).

science communication, and narrative, as we argue in this article and elsewhere (Caracciolo, 2021), is a helpful tool for fostering appreciation of complexity in human-nonhuman relations.

The assumption behind this study is that claims on the influence of environmentally engaged literature ought to be preceded by careful qualitative work on the readerly negotiation of the nonhuman as it emerges in an interpersonal context (in our case, an interview). What are the main conceptualizations of human and nonhuman agency available to readers, and how do they intersect with their more general understanding of human-nonhuman relations? Only after answering these questions can we identify the *most promising* conceptualizations with a view to deepening and complexifying readers' understanding of the nonhuman. In line with the "nonhuman" turn in the humanities (Grusin, 2015), we use the term "nonhuman" to refer to a wide range of realities that include ecosystemic and geological processes as well as individual environmental elements (a mountain) or living beings (plants and animals). Before expanding on the methodology and the results, it will be useful to introduce the idea of (non)human agency and explain why it occupies a strategic position in the debate on the climate crisis.

A conventional understanding of agency sees it as an individual human's capacity to act - that is, to intentionally bring about change in the world through verbal utterances or the physical manipulation of the environment. The idea of agency also implies the agent's separation from others, their awareness of their own actions, and ability to reflect upon those actions (Harré, 1993; Marchand, 2018; Pope, 1998; Yamamoto, 2006). Even the more language-oriented, narrative conceptualizations of agency tend to define it rather narrowly as a sense of control embedded within dynamics of empowerment vs. constraint (Arduser, 2014), or as individual characteristics such as independence, personal achievement, power, and victory, as opposed to concepts of community, dialogue, caring, and togetherness (Wilinsky & McCabe, 2021). Also within literary scholarship, the notion of agency has for long gone hand in hand with notions of human exceptionalism, reflecting its intricate ties with a limited (anthropocentric) understanding of subjectivity and power (Marchand, 2018). Such prototypically Western notions of agency present human beings as possessing the "highest" or most complete form of agency and exclude depictions of (human) agency as emerging from or intertwined with nonhumans (Plumwood, 2009).

Recently, these traditional definitions of agency have been challenged by so-called New Materialist approaches, which promote a reframing of agency as emerging in complex human-nonhuman networks and in intra-actions that do not assume pre-existing individual agents (Barad, 2003; Braidotti, 2019; Haraway, 2016). Accordingly, bold claims have been advanced in the field of material ecocriticism about the potential of environmental fiction to challenge anthropocen-

tric notions of agency (Iovino & Oppermann, 2014). However, few studies have empirically investigated how people discursively express nonhuman agency after having encountered narratives that question the centrality of individual human agency.

In analyzing readers' responses to three such narratives, we have chosen to view agency as a discursively constructed notion. In a good deal of scholarship that renegotiates the human-centric notion of agency, there has been a lack of attention to the language with which agency is constructed. In defining agency as constructed in verbal interaction, we are not subscribing to the extreme forms of social constructionism that (for instance) Iovino and Oppermann (2012) criticize; exploring agency as a discursive concept does not mean that it would be understood only as such. By contrast, with the methodology of discourse analysis, we aim to focus on how we (human animals) discursively construct (non)human agency in the particular conversational context of our interviews.

Reappraising the concept of agency has important ramifications for the understanding of human-nonhuman relations in general. Research has demonstrated the variety and cultural specificity of constructions of nature; however, especially in modern Western thinking and media discourse, certain constructions keep re-emerging, three of them being of interest for our study: nature as a vulnerable victim of human actions; as a potentially threatening force that humans should not interfere with; or as the harmonious provider of sublime experiences (Coscieme et al., 2020; Evans, 2012; Hansen, 2006; Olausson & Uggla, 2019; Wall, 1999; Williams, 1993). All these views are in dialogue with a "master narrative" of nature as separate from and inferior to the human realm, a non-agentic set of resources to be acquired and exploited by human agents (e.g., Haraway, 2016; Plumwood, 2009). Our interviews suggest that discussing narratives has the potential to invite more complex constructions of nonhuman agency that challenge such conventional understandings of nature.

There is, however, an important caveat: we are not arguing that reading fiction can have *immediate* effects on readers' environmental imagination. In fact, the interviews show that, while readers are quick to pick up on the complexities of nonhuman agency in the storytalk, their thinking on human-nonhuman relations in general (i.e., when they are not discussing the stories directly) may not display the same level of complexity. From our perspective, that result does not invalidate the larger point that reading fiction can enrich our understanding of the nonhuman: it only suggests, as we are doing in this article, that whatever influence literary fiction can have on the cultural understanding of the nonhuman depends on long-term exposure to certain stories. Thus, the ability to leverage literary stories to construct nonhuman agency in a more complex manner is only a *step* towards embracing this complexity outside of the storytalk: whether that happens or not

depends on an individual's reading habits as well as external (cultural and institutional) pressures. Work in empirical literary studies is often based on the assumption that reading a single literary text will have repercussions (at least in the short term) on readers' psychology. Yet, that is a grossly oversimplified model of literary influence. As Suzanne Keen puts it, reading "alone (without accompanying discussion, writing, or teacherly direction) may not produce the same results as the enhanced reading that involves the subsequent discussion" (2007, p.91). Indeed, the alternative conceptualizations of human-nonhuman relations highlighted by our interviews are a promising focus for future interventions aimed at fostering pro-environmental behavior in fields ranging from literary education to science communication. These interventions would be geared towards cultivating complexity in the general public's environmental imagination, for instance through guided discussion of stories that – like the three stimulus narratives we focus on in this study – use literary strategies (including metaphor, atmosphere, etc.) to destabilize conventional ways of looking at nature. Not only schools and universities, but public libraries and the local offices of environmental organizations would be ideal settings to host such story-focused debates.

Method

Empirical studies on the social dimension of narrative experience have frequently studied book clubs and reading groups using ethnographic methods, surveys, and the discourse analysis of group discussion transcripts (Long, 2003; Swann & Allington, 2009; Todd, 2008). In this study, however, we opted for one-on-one interviews because this allows us to gain deeper insights into individual readers' responses to narratives. In addition, in a book club setting it is not possible to distinguish which constructions emerge as directly related to the narrative experience and which develop from complex discursive processes, whereas within a one-on-one interview such structured approach is easier to accomplish. As the interviewees were participating at a time of their own choosing and from their own homes, the conversations created a rather natural setting as opposed to (for example) experimental laboratory conditions.

Twenty-one semi-structured interviews were conducted by the first author on Zoom videocalls. The interviews were conducted mostly in English, in some cases also in Finnish in case this language was preferred by the interviewee. The participants were all volunteers that represented ten different nationalities, their age range being 21–74. Twelve of the interviewees self-identified as women and nine as men. The participants were recruited via various routes including posting on social media (Facebook, Reddit, LinkedIn), both to groups related to envi-

ronmental topics (environmentalist groups, climate change denialist groups) and to groups that do not focus on environmental questions specifically. Participants were also recruited by emailing environmental and climate science organizations as well as by using the first author's extended contact network. There were no specific inclusion or exclusion criteria except that all participants had to be at least 18 years old. The goal was to find participants representing diverse backgrounds and, more specifically, to make sure participants highly interested in literature and/or environmental topics would not be overrepresented; we deliberately included participants who claimed they do not read much and/or are not particularly interested in environmental topics. Since this study is exploratory and qualitative, representativeness of "general population" was not the main criterion in forming the group of participants; instead, we sought to include a wide array of perspectives and ways of perceiving the nonhuman environment. All participants signed an informed consent form prior to the interviews and, if they so requested, received their anonymized interview transcript by email for commentary.

Prior to the participation in the study, the interviewees were told that they would take part in a semi-structured interview related to literature and environmental thinking, and that they would be asked to read a short story in English and to discuss it with the interviewer. The interview protocol (see the Appendix) consisted of questions related to the participant's thoughts about environment, nonhuman animals, and climate change. The respondents were first asked two questions aiming to introduce them to environmental issues, then received a text file with a nonhuman-oriented narrative. These stories were paragraph-long fictions composed for this study by literary scholar and writer Riikka Ala-Hakula. They are titled "The Giving Tree" (a nod at Shel Silverstein's famous children's book of the same title), "Seekers and Fools," and "Icebergs." All of these short texts foreground a nonhuman or more-than-human perspective. After reading the stimulus material at their own pace, the participants were asked about their narrative experience and various aspects of their thinking with regards to humannonhuman relations and the nonhuman environment. All interview questions were formulated in order not to encourage any specific kind of conceptualizations over others. Following the principles of qualitative research, the interviewer is seen to be fundamentally embedded in the co-constructed meaning-making of the interview situation; the validity of the research does not arise from attempts to erase the researcher's influence on the data collection and analysis but in acknowledging it.

The interviews were anonymized and transcribed verbatim into English by the first author, and the transcriptions were analyzed drawing from discourse analytical methodology. First, one of the authors (Toivonen) carefully read and reread the entire transcripts, paying attention to all expressions related to humans or nonhumans that had an active verb and that could be understood as involving agential notions. The goal was to identify a variety of ascriptions of abilities, actions, ways of existing, occurring, and influencing the world in the both the human and the nonhuman domain. Based on this initial reading, a classification of human-nonhuman relationship constructs started to emerge. This classification was further defined by iterative readings of the material and discussions with the second author. Next, readings focused on nonhuman agency ascriptions, that is, different ways of presenting the being-ableness of the nonhuman environment. Finally, the focus shifted to how the participants discussed their narrative experience and the nonhuman agency constructions performed in the storytalk – that is, in those sections of the interview where the stories were explicitly discussed. The final classifications of human-nonhuman relationships and nonhuman agency constructions were agreed upon based on transcription extracts by both authors. In the following sections, all participants are referred to using pseudonyms. The letter H in the interview extracts refers to the interviewer's first name

Results

Table 1 presents thirteen different ways of constructing nonhuman agency in the interviews, both when the participants were discussing the story as well as outside of the storytalk (that is, when talking about environmental topics in general). Individual interviewees could not be classified on the basis of how they constructed nonhuman agency, because they produced different types of nonhuman agency in different combinations. The middle column gives a short definition of each type of agency, while the last column indicates how many times this particular agency construction appeared in the storytalk of the interviews.

The distinction between the first and the last construction in Table 1 calls for clarification. *Not transparent* shows nature or animals as not fully available to human understanding. These constructions display the nonhuman as in some way resisting human understanding. The simple attribution of agency classified as Not transparent does not mean that the nonhuman is given any specific kind of "psychological" agency exceeding the limits of the human mind; it merely means that the nonhuman is viewed as something that the human cannot fully know or comprehend. By contrast, the *Distanced* category presents the nonhuman as something that is not beyond human understanding, but is constructed as separate from humans to the point of not existing in relation to humans at all; the nonhuman is not recognized and taken into account as an agent of any kind by humans.

Table 1. Discursive constructions of nonhuman agency

Nonhuman agency construction	The nonhuman is presented as	Frequency in the storytalk
1. Not transparent	not being transparent and fully knowable to humans; it does not belong to humans and escapes their definitions; it raises a challenge to the human imagination and perspective-taking	5
2. Sublime force	powerful, ancient, sacred, mysterious	16
3. Systems and interconnectivity	constructions of nature as an interconnected system; also elaborations of how humans are intertwined with the totality	6
4. Great life actor	sustaining and expressing life, for instance by producing oxygen	2
5. Competitor and threat	challenging humans with natural events and disasters	7
6. Cognizant and sentient	having cognitive or emotional capacities; also depicted as interactive partner	18
7. Emotional attachment	something loved, admired, and/or influencing the human senses	10
8. Species- specific actor	conducting simple species-specific actions without implications of intentionality or interaction with humans; the iceberg floats, the tree blooms, etc.	6
9. Enabler and giver	providing humans with comfort or (pleasurable) experiences	20
10. Object or victim	being observed, named, or defined by humans; also, being destroyed by humans	30
11. Livingness	alive, a living entity	6
12. Beingness	being, existing	5
13. Distanced, separated	fundamentally different and apart from humans	20

The categories of "Livingness" and "Beingness" also warrant further discussion. Within the storytalk, some interviewees presented an element of the nonhuman environment as a living being even if this clashed with their usual understanding of these entities as *not* alive. See, for instance, this passage from the interview with "Valery":

H: Do you think that this text captured something about the relationship between humans and our environment?

V: I completely get the idea of the text in the sense that it's about trying to bring up emotions I can attach that ain't... Making this iceberg alive gives you a perspective on why you shouldn't just let it die or just do something else about it.

Some interviewees constructed nonhuman agency as *Beingness*. These constructions displayed nature as raw being: nature "just is" or "exists". In our analysis, this counts as agency, albeit a weak form of it. This kind of construction emerged from the interviews as the simplest kind of recognition that the nonhuman world exists and needs to be at least acknowledged by humans. It thus differs from the "lowest" category, Distanced, in which nonhuman is not even granted the agency of existence. Constructing nonhuman agency as simple "beingness" did not imply that the nonhuman served as a passive background to human actions; often, it denoted a specific form of agency related to, for example, notions of deep time. Deep time refers to the vast timescale of geological processes compared to human-perspective time perceptions (McPhee, 1981); the concept has also been approached from a human experiential perspective, underlining it as something present in our phenomenological worlds and differentially perceived by different people (Irvine, 2014; Trend, 2011).

Discursively speaking, all of the forms of nonhuman agency listed in Table 1 can be presented as both positive (existing) or negative (not existing). That is, the speakers could depict the environment specifically as a systemic, machine-like actor or deny that it is such an agent; they could argue that the nonhuman has cognitive skills or resist the idea that they may have such cognitive agency.

These thirteen different ways of constructing nonhuman agency were embedded within six larger configurations of human-nonhuman relationships that our analysis revealed (see Table 2). More specifically, because these relationship configurations emerge from constructions where human participants attribute agency to the nonhuman from the human's perspective and thus represent how humans see the nonhuman as related to them, they have been named "Nonhuman agencies in relation to the human". These relationship categories differ in terms of whether it is the human or the nonhuman that is depicted as the more powerful agent or whether the relationship is displayed as beyond such power battles (either as an interaction between two equal agents or as the nonhuman being far beyond human understanding). Different participants used different combinations of the nonhuman agencies listed in Table 1 when describing specific human-nonhuman relationships.

While all of these ways of constructing human-nonhuman relationships occurred in various combinations throughout the interviews, some depictions were clearly more common than others. The environment was often presented as being mindlessly consumed or destroyed by humans (a variant of Human

Table 2. Nonhuman agencies in relation to the human

Nonhuman agencies in relation to the human	Description	Frequency of complex nonhuman agency constructions per each relation type in storytalk
Beyond the human	The nonhuman is presented as something not completely known and understandable for the human. The human is presented as not willing or able to comprehend nature.	2
Wholeness	The nonhuman is constructed as something larger than humans while also including humans. The nonhuman environment has the ultimate agency, as it is the Actor, the greatest Builder, or Mother Nature, or alternatively, the nonhuman is the realm of natural laws and biological systems where humans are just a part of a complex totality.	3
Overpowering nature	In these constructions, the nonhuman is given more agency than humans and humans are constructed as smaller, weaker, or less knowledgeable.	1
Two agents	These constructions display both human and the nonhuman as having some kind of agency and as having a connection or interaction where neither is clearly in control.	6
Human rule	In these constructions, humans have more or stronger agency than nature, which is depicted as being used or victimized by humans.	10
Disconnection, separation	These constructions invoke a binary division between humans and nature or humans and animals. The human and the nonhuman are presented as fundamentally different or separate.	4

rule); as the sublime provider of emotional and spiritual experiences (Wholeness, Overpowering nature, Two agents, or Human rule, depending on the specific allocations of agency between human and the nonhuman); or as a powerful, threatening force of droughts, viruses, floods, and other phenomena that humans need to overcome or master (Overpowering nature). As mentioned in the introduction, such depictions of the nonhuman environment have been identified in previous research as relatively conventional ways of depict the environment.

While analyzing the participants' comments on nonhuman agency, it became clear that some of their constructions were more sophisticated than others. These "complex nonhuman agency constructions" consist of at least two of the thirteen different nonhuman agencies listed in Table 1, in varying combinations. Thus, they present the nonhuman as having more than one kind of agency at the same time. Complex agency constructions appeared within all of the conceptualizations of human-nonhuman relationships. The frequency of complex nonhuman agency constructions per each type of human-nonhuman relationship within storytalk is given in the rightmost column of Table 2.

Complex nonhuman agency constructions were more common within discussions of the narrative than outside of the storytalk. In the storytalk, there were altogether 26 complex constructions of nonhuman agency. Outside of the storytalk, there were only 14. Most participants (16 out of 21) offered at least one complex nonhuman agency construction when discussing the story. The participants who expressed a more positive opinion of the narrative and discussed it in detail produced at least one such construction within their storytalk. The complex nonhuman agency constructions were less frequent among participants whose narrative experience was more detached and/or who were critical of the story. These complex constructions appeared often in instances where the reader was explicating their interaction with the story, that is, where they talked about their reading experience and how that expanded their previous thinking or clashed with it.

We now turn to examples of complex nonhuman agency constructions representing all six categories of nonhuman agencies in relation to the human. These complex constructions emerged from the discussions revolving around all three different stories used as material in the interviews. The interview extracts show how the participant negotiates the stimulus narrative in relation to their thinking, explicates their reading process, and simultaneously comes to construct nonhuman agency in a complex way. The underlined parts are to illustrate where the interviewee is giving a specific nonhuman agency construction, and all nonhuman agency constructions are marked with a number corresponding to Table 1. The presented extracts have been slightly edited to enhance readability.

Beyond the human ("The Giving Tree")

The narrator of "The Giving Tree" is a human character walking to a park in Kyiv, Ukraine. From the midpoint of the text, the narrator starts talking about an old, endangered horse chestnut, which gradually becomes the focalizing character. Initially framed as little more than a glorified sunshade, the tree is revealed to be dreaming of a life in a more open environment. The story ends with the

question whether the reader, addressed directly in the second person, could have believed this about the horse chestnut.

In her interview, "Annie" conceptualizes the story as showing a discrepancy between the perspectives of the narrator and the tree; the tree might seem to be doing well on the outside in all its greenness, but still have a "limited life":

- H: Do you feel that this text captured something about the relationship there is between the human and his/her living environment?
- A: Yes, for sure something. These kind of... central and somehow quite everyday life forms of experience... of the relationship. What the human in the city environment is seeking for from the tree (9), also. But well, it's going a lot to the other direction. Or in the other direction there starts coming this that the tree is somehow being limited, the life of the tree (10)
- H: Yeah.
- A: And perhaps there is also this like disproportionality between these two, so that the human does not necessarily come to think about the perspective of the tree (13) So the perspective (6) of the tree on the fact that it might have a limited life (10) even if it seems somehow to be doing very well and seems to be green and vast (8,1) So there can be... the tree might have completely different dreams (1). And that is perhaps a thing that expands outside this text quite well.
- H: Yeah.
- A: So that the perspective of the nonhuman is usually never noticed anywhere.

In this extract, Annie first constructs humans as seeking something from the tree, a reference to the text displaying humans as looking for shade under it (9, Enabler). She then constructs the tree as being "somehow" limited; thus, the tree is not dramatically damaged by the human but is more of an object of human actions (10, Object or victim). The tree is displayed as being limited by the human in two different ways: it is forced to live in an "unnatural" habitat and the human is not taking into account its perspective. Humans are not positioned as intentionally dismissing the tree's perspective out of cruelty; they merely do not "come to think about" it (13, Distanced). This conceptualization of the human as lacking in awareness or understanding is the most common way of talking about human agency in the interview corpus. Thus, humans are not presented as deliberately acting in a harmful way in relation to nature; they just do not really acknowledge or understand the true nature of their actions. Also, typical of human-nonhuman relationships constructed as Beyond the human, nature is not necessarily presented as being beyond human comprehension by definition; it might also be the case that the human just "does not necessarily come to think about" the perspective of nature.

The tree not only has a limited life in the city environment, but it also has a perspective on its predicament (6, Cognizant). In addition to having a reflective viewpoint, the tree also has one kind of an existence "outside," perceivable for the humans, and a secret inner life not taken into account by them. Annie mentions the tree *seems* to be doing very well and *seems* to be "green and vast." She is granting the tree a form of agency here classified as 8, species-specific actor, which conceptualizes the nonhuman as doing simple, non-anthropomorphic and species-specific actions (tree is green, icebergs are floating). In addition, she is simultaneously presenting her human viewpoint as conditional and the tree's perspective as not fully available to the human characters of the narrative or to her as a human reader (1, Not transparent). The tree only seems to be doing well but in fact, this might not be the case.

Lastly, Annie ponders how the tree, despite its healthy appearance, "might have completely different dreams" (1, Not transparent). The conditional "might" again shows that this perspective of the tree is not taken for granted but remains a possibility. Thus, Annie as a reader does not position herself as knowing for sure what the tree is dreaming about, but grants the narrated tree an existence that is beyond her human definitions, making this extract a good example of the construction we have labeled Beyond the human.

Wholeness ("Seekers and Fools")

"Seekers and Fools" has a narrator describing how a group of people are pursuing the peak of Mt. Fuji in search of sacred experiences while they sense the overpowering presence of nature. The viewpoint represents humanity at large, not an individual human character. Hermits are said to be living in caves on the mountain. The last paragraphs underline that people do not notice the influence their collective hike has on the natural environment.

The reading of "Diana" includes an interesting problematization of the idea that human beings can be "one" with the nature, a trope that many interviewees use when describing their personal experiences of natural environments.

- H: Did this text capture something about the relationship between the human and the environment?
- D: It captured a negative perception of the environment. That's how I felt about that text.
- H: Whose negative perception?
- D: Of the climbers, and almost, I would say, even the hermits, because the hermits... became one with nature (3), therefore, they did not think about nature (13), they just were, so there was no longer that... How can I put it? That

admiration and love for nature (7), they were just almost as if apathic to nature (13) because they had absorbed it all (13), so it was as if they maybe transcended the concept of admiration of nature (13).

In this reading, Diana first constructs nature from the hermit's point of view as representing the agency of interconnectivity (3): nature is one with humans and humans are one with it. Then, she problematizes this depiction by suggesting that the hermits had stopped thinking about nature and were indifferent to it (13, Distanced) and having lost their love and admiration for it (7, Emotional attachment). Oneness is not a harmonious state of togetherness with nature, but just a sign of having "transcended" the notion of admiring nature and ending up in a state of separation (13).

Even if Diana's focus is on humans and how they relate to nature, in depicting the human's position vis-à-vis nature she also comes to a complex conceptualization of nonhuman agency. Nature is something fundamentally interconnected with humans, something loved and admired, and lastly, something separate from humans. Diana's suggestion that the hermits have "absorbed" the environment within themselves can be read as meaning they have become numb to nonhuman agency through the lack of separation between themselves and the environment. She explains, with several constructions of Distanced agency (13), underlined:

I didn't feel very good about the hermits because they were just at that point that they don't care. They might not even notice what's going on anymore because they have been in that mountain hole for so long that they're just numb to everything that is happening. They can no longer see that okay, the nature is giving you a sign and it's talking to you through the environment changing.

Interestingly, while elsewhere in the interview corpus the interviewees discuss oneness with nature in terms of the human losing their "boundaries" and merging into nature, Diana's reading implies the opposite: The hermits seem to have taken nature inside themselves and therefore, have lost the ability to value it and hear its message. Separation from the environment thus becomes constructed as something that is needed in order for humans to be able to properly relate to it, not as a negatively connoted state of separation and difference that should be superseded.

As mentioned above, several participants constructed human-nonhuman relationships as being about feeling wholeness, entanglement of unseparated agents, usually when discussing their personal experiences in nature. In his influential study of nature writing, Scott Slovic has discussed this stance as a "facile sense of harmony, even identity, with one's surroundings" (1992, p.4). Some of the rare occasions in the whole interview corpus where such a relationship with nature is problematized occurred in relation to the narratives, specifically "Seekers

and Fools." Diana presented oneness as a space of numbness where the human ability to adore nature has disappeared, whereas for "Felicia", oneness implied that the human climbers have no free will of their own. "Joanne" read the same story as showing that humans had projected themselves onto nature and unity was merely an illusion, not the true state of affairs (see further discussion on her example). Thus, the narrative seems to offer a chance to reflect on the construction of human-nonhuman relationships as unity and ask critically what this means and whether such a state of wholeness is as positive as it is often assumed to be.

Overpowering nature ("Icebergs")

"Icebergs" centers on a human narrator who describes these mighty inhabitants of the North Pole by taking their perspective as they feel themselves melting into the sea. The last paragraph focuses on polar glaciers, similarly endowing them with a will of their own, and ends with the question whether "we" could prevent the glaciers from dying.

In her reading, "Hannah" views the story's iceberg both as a powerful entity and as the embodiment of an approaching threat:

HT: What kind of an experience was reading this text?

HB: What kind of an experience. It's like a... so when I read it... it begins like it's the strength, the power of the iceberg (2) but then also like some dark stories, something dark I feel of the icebergs when the icebergs are melting (5). So it's like the experience is more like "Oh yeah!" than something... There are scary things coming, when those icebergs are melting (5).

Hannah struggles slightly in expressing herself in English in this part. We have nevertheless chosen to use this extract, because this is the only example of a complex nonhuman agency construction representing such human-nonhuman relationships where the nonhuman is (if implicitly) threatening or overpowering humans. First, Hannah characterizes the iceberg as strong and powerful (2, Sublime force), then she connects the icebergs with a dark feeling implying that their melting represents a larger threat (5, Competitor and threat). In her reading, the icebergs thus become the messengers of climate change. The exclamation "Oh yeah!" in the middle of this construction hints at a particular way of humans relating to the icebergs. Later in her interview Hannah refines this further, underlining how she experiences the humans in the story as half-heartedly acknowledging they should do something about the melting of the icebergs. Furthermore, she explains that the power of the icebergs is about them being the "keepers" who maintain the world in balance, a rather mystical construct showing how much sublime agency she reads into the icebergs of the story.

Two agents ("Seekers and Fools")

In her reading of the story, "Emma" constructs Mt. Fuji as both the source of unpredictable weather conditions and the object of the human collective's influence. Humans are granted agency as the ones who impact the mountain by their collective climbing.

- H: Well, what do you think, what kind of an actor that mountain was in that text? In other words, what was it displayed as able to do, that mountain?
- E: Well, of course it is like... A mountain for a person is always like a little bit... Because it is big and a little bit unpredictable, so probably a little bit a little bit like... strong or somehow like... there can be any kinds of weather conditions for those climbers (5), but then again, it was a little bit, in the end it came to my mind that this mountain is also a passive object that the people like influence. Or the actions of the humans, not just one person alone but everyone (10).

First, Emma positions the mountain as massive, strong, and unpredictable (5, Competitor and threat). She also refers to the characters' experiences of the weather in the story. Emma keeps hedging her expressions (e.g., "a little bit," "probably"), perhaps to avoid forming too strong conclusions as to what is going on in the story before she has had the time to refine her reading. Next, she recognizes that the mountain is also suffering the impact of people's repeated visits (10, Object and victim). She underlines that it is not one person alone but everyone together that has an impact on the mountain landscape. In a similar fashion, some other readers used this story to reflect on how unaware people are of their collective impact on nature.

In Emma's complex agency construction, nature was displayed as simultaneously the opponent and the victim of human actions. In the other complex agency constructions representing the relationship category "Two agents," the participants displayed the stories' environmental elements as both humans' opponent and their supporter (for example because the nonhuman environment gives them spiritual relief or something to reflect upon). Yet another type of complex agency construction within the "Two agents" category showed the story's tree as dreaming of other possibilities while also enabling people to have shade or experience beauty. The stories did not invite any more detailed descriptions of the entanglement of human and nonhuman agencies, but merely accounts where both the human and the nonhuman were allocated some power to act.

Human rule ("Icebergs")

In her reading, "Daria" is first drawing from a common view of nature as a sublime, magical force possessing powers and wisdom beyond those of humans, but she is also complexifying this depiction by combining it with the construction of the iceberg as a victim of human violence. This notion is followed by another complex nonhuman agency construction where the iceberg, endowed with cognitive capacities, is also a passive object of the approaching threat of climate change. These two complex constructions of nonhuman agency both display a relationship where humans are ruling over the nonhuman environment.

- H: How was it to imagine this iceberg in mental images?
- D: Well, I got this image of an incredibly strong force, like some elf of the glacier (2) and then the fact that it is like a billion years probably, like a very old stratum of the earth and everything that has been crystallized into it, like this remarkable wisdom and force (2), and then the fact that if it like... Because then the thought is that it is melting so fast, so that feels like violence that has never existed before, that is not meant to be experienced (10). A little bit like a human is not meant to experience domestic violence so- ((chuckles)) or murders and manslaughters so it is a little bit of a similar thing.
- H: Yeah. What kind of an actor, agent was the iceberg described in the text? So what was it able to do?
- D: Well, it... In that text it of course was able to talk and tell about itself and its feelings and its influences and of its history (6). So that in this way it was an agent but then in relation to this coming threat, so well, it didn't look like an agent (10).

In Daria's reading, the iceberg is a strong and old force possessing wisdom, a typical construction of the nonhuman as a sublime power (2). This agency does not save the iceberg from being a victim who strongly lacks agency in relation to the humans (10, Object or victim). To a further question on the iceberg's abilities, Daria responds by explaining that it was able to talk and relate its experiences (6, Cognizant), which is an interesting reading considering it is not really the iceberg narrating the story, but rather a human narrator observing the iceberg. Both the construction of the environment as the victim of human actions and as a sublime spiritual force are rather common within the storytalk as well as elsewhere in the interviews. However, outside of the storytalk, they are not evoked together and woven into a complex nonhuman agency construction, as in Daria's account.

In her reading, Daria positions the violence encountered by the iceberg as unnatural or problematic. The violence it experiences is something that has never existed before and that the iceberg is not *supposed* to experience, just as human

beings are not *meant to* experience domestic violence. This reading evokes the provocative question whether there is some kind of destruction of icebergs that is more "natural" or usual, or whether it is simply the speed of the iceberg's melting indicating that a line has been crossed in terms of how much destruction the nonhuman can be expected to take. It is worth noting that Daria is not saying the iceberg is experiencing the violence; rather, she is, in passive form, describing the violence as something that is not supposed to be experienced. Moreover, in her reading, she implicitly aligns human and nonhuman agents as connected by how neither of them is supposed to experience violence.

When the human-nonhuman relationships were constructed as Human rule, the environment was typically positioned as either a victim or an object or as a servant enabling people to have pleasant experiences. Interaction with the narratives seemed to open possibilities to depict this kind of a master-victim relationship with more nuances and including complex nonhuman agency constructions. Many interviewees took note of the cognitive skills assigned to the nonhuman in the narratives, and like Daria, used them in depicting the nonhuman as having in some sense a stronger or deeper agency than the human who was physically harming it.

Disconnection ("Seekers and Fools")

"Joanne" problematized the idea that humans and nature are united in spiritual oneness and presented the humans as actually putting themselves above nature:

- H: Well do you think this text managed to capture something about the relationship between the human and the nature?
- J: Well, yeah. Okay. This kind of a thought also came... Like I said, originally the first sentences made me like aha, here in front of me is some Japanese folk story. And of course Eastern philosophy often explores this relationship between the human and the environment, and the boundaries. Are there boundaries or are we all together, do we have everything in common or are we separate. My first thought was like, aha, here we are dealing with this combining of the boundaries and it is reflected or described in some sense, this kind of us being together. I am part of nature and the nature is part of us (3). But then these last sentences, they created this image or actually a state that perhaps we aren't really. The human is somehow separate and different and has put themselves above nature (13).

Joanne's example shows how she first approaches the narrative as a Japanese folk story dealing with the question of vanishing boundaries between humans and nature (3, Systems and interconnectivity). Such oneness is described as "us being

together" and then as the "I" being part of nature, while nature is part of "us," implying that humans as a collective belong to this representation of unity. Joanne describes the story's last sentences as creating a "state," not only a visual image, where there is disconnection between humans and nature because humans have put themselves on a pedestal (13, Distanced). As noted above, the story "Seekers and Fools" appeared to invite many such constructions of complex nonhuman agency where the idealized oneness between humans and other beings was questioned or problematized.

Like in Joanne's example, across the whole interview corpus disconnection in human-nature relationships was almost always described as a matter of humans separating themselves from nature due to their pride and lack of awareness. In only one example the participant described the disconnection of the story's iceberg as emerging from the fact that it is bounded by laws of nature and does not actually have free will – even if it thinks so.

Discussion

The six examples above demonstrate that narrative experience (including the storytalk) can enrich and challenge the traditional constructions of the nonhuman circulating in our culture, especially by inviting the combination of different discursive agencies-what we have here named complex agency constructions. It is, of course, possible that without the questions posed by the interviewer and the subsequent re-reading of the story during the interview the participants' constructions of nonhuman agency would have been thinner. The engaged presence of the researcher in the interview situation has certainly influenced the emerging meaning-making (see, e.g., Elliot & Bonsall, 2018). In our view, that is not a flaw in our research design but an illustration of the powers of the guided discussion of literary narrative: the interview context mirrors, to some extent at least, the intersubjective nature of narrative experience and storytalk in general, where often one of the participants (moderator, teacher, etc.) does play an important role in steering the conversation. Our analysis of the interviews, supported by the examples above, has shown that discussing nonhuman-oriented narrative can challenge both anthropocentric accounts of agency and conventional notions of nature. In particular, two dimensions of the interviews bring out the way in which the reading and discussing the stories defamiliarized the participants' understanding of nonhuman entities: the complexification of ascriptions of nonhuman agency and the explicit reflection on the limits of human understanding.

Complexifying nonhuman agency

Firstly, the stories invited the problematization of a conventional way of presenting nature, namely, as giving sublime experiences, especially those of oneness with the natural world. "Seekers and Fools" encouraged the readers to question whether this sense of unity with nature reflects the truth of human relationships with the environment and whether such oneness is an entirely positive state. In these accounts, the state of interconnectedness was explored as a human construction rather than as an idealized way of being with the nonhuman per se.

Further, the narratives triggered more nuanced depictions of nature as limited or damaged by humans than happened elsewhere in the interviews. Outside of the storytalk, the participants tended to depict the environment as simply a mute victim of human destruction; it was not displayed as having any perspective on this violence, nor was the point of view of nonhuman entities (excluding animals) as in some way *experiencing* this destruction evoked. By contrast, the narratives helped the participants craft a more three-dimensional and complex picture of the nonhuman world as an object or victim of human destruction. Often, the cognitive skills attributed to the nonhuman in the narratives triggered the interviewees to use them in complex nonhuman agency constructions where the nonhuman was a victim or object but also something more than just that, as it was described as (for example) having wisdom or forces despite being victimized, or even as having a tentative perspective on its own predicament.

Acknowledging the limits of human knowledge

The narratives invited constructions of the nonhuman as eluding human understanding and potentially having "needs" or "dreams" of its own. This is significant because while outside of direct storytalk the interviewees did occasionally mention that the environment, animals, or phenomena such as climate change are beyond human understanding, the nonhuman perspective was mostly left rather blank and without further elaboration. Climate change, in particular, was usually constructed as a phenomenon completely and directly knowable for the speaker. The reading and discussion of narratives invited participants to elaborate on the nonhuman "otherness" so as to lend an independent and separate perspective to the nonhuman. Cognitive skills attributed to the nonhuman in the narratives were in some instances picked up by the participants and elaborated into complex agency constructions to display that not all of the nonhuman is directly visible and comprehensible for the human observer.

However, the gesture of granting the nonhuman world cognitive skills was not perceived as unproblematic. Some interviewees accepted the fact that the narratives they encountered ("The Giving Tree" and "Icebergs") granted the environment cognitive skills; these participants played with the notion of (for instance) a dreaming tree, often humorously. For other participants, this ascription of cognitive skills to the environment provoked resistance as an excessively anthropomorphic device; some saw it as a clumsy literary strategy associated with the writer's attempt to make a point. This seems to be an opposite effect compared to that described by Varis (2019), who argues that readers cannot help but attribute their human mental states to nonhuman literary characters, and the job of narratives is to undermine readers' tendencies for overstated humanization.

It is also worth discussing the conceptual issues raised by the stories' use of a *human* narrator who mediates the inner world of a nonhuman entity. Alert readers such as "Cat" question the narrator's seemingly privileged access to the nonhuman: "One thing I do wonder is how does this first-person narrator understand that this horse chestnut is not in its right place?" "Yannick", in his reading of "The Giving Tree," took the narrator's approach as an example of human presumptuousness, of the author thinking that they can know what a tree is thinking.

- Y: I felt the presumptuousness of the author in thinking that's what the tree is thinking.
- H: You're saying you felt it?
- Y: Yeah, I felt... This person thinks that she can or he can think what the tree is thinking.

Yannick does not respond to the interviewer's invitation to specify the feeling aspect in the perceived presumptuousness of the author, but discusses how humans in general relate to nature in presumptuous ways. He explains that he does not see the tree in the story he read and cannot take its perspective; he can only perceive the narrator "telling to the tree what it should think."

Explicit thinking on the limited nature of human understanding within storytalk was usually connected with criticism of the use of a human narrator. The stories in general invited the participants to display humans as not understanding the consequences of their actions for the nonhuman. In addition, as demonstrated before, the attribution of cognitive skills to the nonhuman in the stories sometimes triggered constructions of the nonhuman as beyond the reach of human mind. This points to the importance of narratives that both underline the limitedness of human ways of knowing and allow the reader to imagine the nonhuman as having an existence not completely transparent and directly knowable for humans.

Conclusion

This study has examined a number of promising ways in which narrative can invite people to reappraise nonhuman agency. We have presented a discursive approach to human-nonhuman interactions from the perspective of agency. The result is a classification of human-nonhuman relationship constructions and a variety of discursive agencies that are, in different combinations, attributed to the nonhuman within these wider relationship descriptions. We suggest that sensitivity to the nuances of language use can enable us to become more aware of the limits of our human representations while acknowledging that any attempt to view nonhumans as agents is a more or less linguistically mediated human construction – not a transparent representation of the actuality of nonhuman agency. This does not imply that our engagement with nonhuman agency is merely a matter of language; however, it is with language that we construct – and deconstruct – our understanding of human-nonhuman interactions.

Our theorizing of discursive (non)human agency suggests this approach as a tool to show narrative's potential in stretching the boundaries of the imagination of the nonhuman. The detailed analysis of how participants discussed nonhuman agency after reading the stories illustrates that the participants were not merely listing different forms of nonhuman agency mentioned in the stories. The variety and complexity of agency conceptualizations in the storytalk underline how participants drew from their own memories and experiences while noting, reflecting on, and questioning different capacities attributed to the nonhuman in the stories. Thus, the complex agency constructions represent a negotiation between the reader and their idiosyncratic ways of accessing and using resources such as memories from their travels or encounters with animals, imagery seen in pictures and news clips, or representations of nature encountered in books and movies.

Even if we have demonstrated the promising aspects of narratives in shaking human-centric and simplistic notions of agency, there is reason to temper the optimism of this conclusion. Interaction with narratives did not trigger any unique conceptualizations of human-nonhuman relationships or nonhuman agency. Put otherwise, all of these ways of conceptualizing human-nonhuman relationships and ascribing agency to the nonhuman could be found in *both* the storytalk and in the participants' answers to questions that did not relate to the stories directly. Thus, the complexity of fictional narrative did not seem to systematically seep into the participants' thinking about the nonhuman in general. Our findings suggest caution in expecting narratives to have causal impact on how people reason about the agency of nonhumans; further research is needed to understand whether nonhuman-centric narratives could have an impact on people's everyday beliefs and actions concerning the nonhuman. Our results can be

taken to imply that engaging with fictional representations of nonhuman agency may well have limited short-term effects on the imagination of the nonhuman, or – possibly – that there is a temporal delay between the identification of complex nonhuman agency and its "uptake" in readers' worldview (see Appel & Richter, 2007). Narrative may still be capable of inviting more complex nonhuman agency constructions *in the long run*, as a result of repeated exposure to (and discussion of) stories such as those we used in this study.

The ability to think flexibly across the human-nonhuman divide is particularly valuable given the many simultaneous challenges raised by today's climate crisis, which doesn't admit of easy "solutions" but rather calls for a recognition of the ethical needs of *both* human communities and the nonhuman life that is being eradicated by human activities. Instead of serving as a simple delivery mechanism for an environmental "message," narrative is a powerful tool for fostering critical and sophisticated thinking on humanity's responsibilities vis-à-vis the nonhuman world. Crucially, as we have suggested here, that kind of complexity is not the result of reading narrative per se, but of explicit reflection on narrative experience in guided (and repeated) discussion.

In further research, it would be productive to identify connections between certain narrative strategies and specific types of nonhuman agency attributions – something we did not observe in this study. Furthermore, it would be worthwhile to examine responses to narratives that more explicitly stage conflicts or interactions between the nonhuman and human communities or elaborate on the notion of nature's "mind" in order to elicit reflection on the limitations of human knowledge and understanding. If, as this study highlighted, human agency is often constructed as incomplete awareness of the consequences of our actions, perhaps one of narrative's main tasks is precisely to explore this fundamental limitation.

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Appendix 1. Three Stories by Riikka Ala-Hakula

The giving tree

I walk around a vegetable market in the Kievan heat, make my way to a bakery and from there on to an ice cream parlour in the shade of hundreds of horse chestnuts. As I scour for delicacies, a verdant roof of treetops of trees more than ten meters wide arches over me. It is the most beautiful time of the year, when the white, columnar flowers of horse chestnut embellish the city and their honey scent spreads everywhere.

I head to a park with even more of these wonderful trees than there are by the street. One tree in particular is especially popular, since it's the oldest and provides the best shade from the sun. As people enjoy a lick of their ice cream in the shadow of the old tree, they hardly fathom that the legendary flora arching over them is an endangered species growing predominantly both domestically and cared for by people.

The old horse chestnut, on the other hand, can only live in the park as a beautiful, decorative tree and as a parkgoers' sunshade. It is an involuntary prisoner of its species-specific traits and can only thrive in a suitable environment. In actuality, all the while living in the park, the tree is waiting for a chance to go wild once more and spread according to its own will.

The tree is dreaming of a life in which its seeds could live among grass stalks in the untouched, open nature. It dreams of an environment, in which the human species does not restrict the living space of flora and fauna with such a massive impact. Could you have believed this about the horse chestnut of the park?

Seekers and fools

A plethora of paths surround Mt. Fuji, laying bare how time and time again people went on a pilgrimage in search of sacred experiences. People pursue the snow-white mountain peak.

They wander towards it feeling like small, poor creatures torn to pieces by hardships regarding money, work, and relationships. The weight of everyday worries falls off of their shoulders as they progress step by step further down the path. With each step, they find their way closer to independence and freedom.

People wander higher and higher up the smooth and hard stone paths. The higher they get, the more often snow falls down from the sky. Snow permeates through the thin fabric of the hiking cloak and touches the neck and the chest with a cold embrace. Simultaneously, the erratic behaviour of other people feels bothersome and the challenges posed by work exhaust them. Nature in particular seems overpowering and unpredictable since it rules over people's lives and prevents emancipation.

People wander towards the top of the mountain. They absorb the inner freedom of hermits living in the caves of Mt. Fuji. To them, nature feels lifeless and everlasting and they want the serenity of the mountain top within them. They want to become one with the wind, snow, and stone. They do not want to be torn by their own desires and sentiment. They want to be eternal and sacred like Fuji.

People do not look around them. They do not notice the other wayfarers beside them. They do not notice the marks left by other people, the channels honed onto the mountain surface. Due to their individuality, they cannot comprise their activity on the hike as a species. People do not note that they are no longer one with the wind, snow, and stone. Instead, they have become a force of nature altering wind, snow, and stone.

Icebergs

Icebergs are the freest beings in the world. No external restraint binds their movement or composition. They move solely by the force of the winds of the world. They flow onwards in the glacial night of the arctic and carry the souls of countless sea animals and the sailors of sunken fleets within them.

Icebergs resemble cathedrals, although no proponent of any religion of the human race has built or altered them. They are born solely of their own volition and the mystique of the eternal winter created by nature. Wild and ferocious, icebergs break free from the ancient polar glaciers of the Earth that maintain the climate and habitat familiar to us.

The icebergs of the North Pole do as they will! They drift across the sea without expecting the adoration of anyone. Oh how tall they are! How they twinkle in the radars of ships! How unpredictable they are for humans!

There is nothing more saddening than a dying iceberg. It can feel its shiny and radiant highness melting degree by degree into the shivery sea. The iceberg exerts itself as sunlight hits it, but no other option remains but to release dangerous gas into the air and reveal history's great mysteries to humans by means of fossils.

No, there is something even more saddening! The saddest thing of all is the death of ancient polar glaciers. They do not want to alter their ancient form, which frees the gods of destruction and chaos from within. From the perspective of human lifetime, the melting of polar glaciers causes a chaotic silence and darkness lasting millennia, even millions of years. Could we switch on the ship radar and prevent this change from happening?

Appendix 2. The Interview Protocol

- 1. How would you describe your political views?
- 2. How would you describe your views on environmental issues?
- 3. What does "climate change" mean to you?

Reading the text simultaneously with the interviewer

- 4. What kind of an experience was reading this text?
- 5. Can you tell me a little bit about how you read the text: Were you reading it in a detached/ objective manner or did you get inside the text, taking the perspective of the narrator?
- 6. How was it to imagine [the environment/nature/nonhuman agent] in the text?
- 7. What kind of an actor was [the environment/nature/nonhuman agent] in the text you just read? What was [the environment/nature/nonhuman agent] able to do?
- 8. What kind of an actor were the humans in the text you just read? What were the humans able to do?
- 9. Did this text capture something about the relationship between the human and the non-human environment?

The part of the interview not directly related to the narratives:

- 10. How would you describe your own relationship with animals (other than humans)?
- 11. How would you describe your own relationship with the environment/nature?
- Describe a meaningful encounter you have had with a nonhuman animal or with the environment/nature.
- 13. What kind of an actor is the environment/nature?
- 14. How would you describe the climate change as an actor? What is it able to do?
- 15. What is the role of humans in climate change?
- 16. Would you like to tell me how you see your possibilities to act in relation to the climate change.
- 17. Do you think reading this specific text could have an effect on what you think or do in relation to climate change?
 - → If not, would you change something in the text to increase its influence?
- 18. Do you think that fiction in general can have an effect on how people think and act in relation to climate change?

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