Introduction

The commercial success of Norwegian author Maja Lunde has reached international proportions following the publications of the first three instalments in her planned 'Climate Quartet' of environmental novels. The series, which dramatises issues of species extinction and climate change, so far consists of the titles *Bienes Historie* (*The History of Bees*, 2015), Blå (The End of the Ocean, 2017), and Przewalskis hest (The Last Wild Horses, 2019). With millions of copies sold worldwide and translations into over thirty languages (Furuseth 2021, 86), Lunde may well be, as her website proclaims, 'the most successful Norwegian author of her generation.' The reception of Lunde's novels at home has also been marked by vast sales figures, as well as favourable reviews. This engagement is perhaps not so surprising considering that the recent literary trend of environmental writing has been particularly pronounced in Norway (Hennig 2021, 107), and that Norwegian cultural identity is rooted in ideals of proximity to nature.³ Yet, the widespread environmental consciousness of Norwegian society is undercut by the tensions inherent in the country's role as a leading petrostate whose welfare has been financed by the oil and gas industries and whose government insists on fossil fuel extraction as part of the solution to a renewable energy transition. The Norwegian loyalty to the petroleum industry was part of the reason why the Climate Action Network awarded Norway the sarcastic 'Fossil of the Day' prize at the COP26 Climate Change Conference for 'doing the most to achieve the least' (Climate Action Network 2021).

For its wide audience of readers, Norwegian and international alike, Lunde's work offers engaging narratives that crystallise climate change scenarios and complex planetary

¹ The novels have been translated into English under these titles. All translations from Norwegian sources are my own, except citations from *Bienes historie*, which are taken from Diane Oatley's translation of the novel. ² An obvious rival for the position of most successful contemporary Norwegian author would be Karl Ove

Knausgård, famous for his autofictional *My Struggle* series.

³ One of the earliest organisations of writers publicly committed to climate change activism was founded in Norway in 2013 under the name of *Forfatternes klimaaksjon* (Norwegian Writers' Climate Campaign).

processes that exceed the human scale and perception. A wide spectrum of ecological concerns animates the different stories in the 'Climate Quartet'. Bienes historie envisions a world devastated by the agricultural consequences of the honeybee's extinction. It also traces an early twenty-first-century American beekeeper's struggle with the effects of colony collapse disorder, and the invention of a modern beehive by an English scientist in the nineteenth century. Its sequel, Blå, transitions from the direct focus on species extinction to instead exploring the motif of water, contrasting contemporary Norway, where water is perceived as being so abundant that businesses exploit glaciers for ice cube exportation, with a future southern Europe where droughts have precipitated mass migrations of climate refugees. In *Przewalskis hest*, Lunde returns to the theme of species endangerment by telling the conservation story of the takhi, also known as the Mongolian wild horse. As a cohesive series, the books span more than 1,000 pages and three centuries, featuring a large cast of individual first-person narrators. Uniting the storylines is a common focus on often troubled parent-child relationships. The literary forms and structures remain the same throughout the narratives, with interwoven storylines and alternations between timelines and continents that, while adhering to realist conventions, highlight multiple intergenerational connections between both humans and nonhumans. In this way, Lunde's project, as Nicole Pohl (2019) observes, conflates 'past, present and future in interlinked narratives that show the effect of species extinction' while also demonstrating how those effects manifest on both a global level and on the level of the individual (73). Through these timeframes and interconnections, the 'Climate Quartet' might be said to encapsulate the temporality of the Anthropocene itself.

As this article will show, Lunde's novels speak to the Anthropocene in profound and complex ways, especially in how they negotiate between worldviews that embrace human stewardship of the environment and value-systems that denounce human mastery in times of anthropogenic ecological transformations. While for many, the discourse around the

Anthropocene revolves around the horror and lamentability of humanity's unprecedented potential for destruction of the biosphere, for others, the Anthropocene is being framed as an event to be celebrated rather than feared (Hamilton 2016, 233). Instead of regarding the Anthropocene as an incentive to reduce our climatic and stratigraphic footprint, we should consider it, according to Erle Ellis (2011), as a period 'ripe with human-directed opportunity' (124). Since humans have already catalysed this level of change, so the argument goes, we should embrace our position as the most dominant species on the planet and seek active stewardship of the nonhuman world. From this eco-modernist perspective, the way forwards consists of more technological developments, geoengineering, ecosystem monitoring, and interventionist approaches to biodiversity preservation. Criticism directed at the ecomodernists, meanwhile, warns that the confidence in human interference is a 'dangerous fantasy' (Clark 2015, 4). According to Eileen Crist (2013), 'managerial mindset[s]' and reliance on techno-salvation potentially foster a 'human species-supremacist planetary politics' that minimises the discursive space for imagining other ways of inhabiting the planet (130). Myra J. Hird (2017) similarly cautions against the 'selected visualization' provided by 'an Enlightenment script' of human mastery over other species (256). A great deal is at stake, in other words, in how we envision the role of humans in relation to other species. As Ursula K. Heise (2016) has shown, public engagement with issues of species extinction depends on precisely such 'broader structures of imagination' (5).

As one of the contemporary fictional dramatisations of biodiversity loss, Lunde's work conveys an uneasy awareness of the extent to which human activities have altered the environment. In many ways, the novels seek to interrogate whether dominance and environmental destruction are integral to human nature, and, if this is the case, what it means for the planetary future. This question becomes particularly apparent through the novels' treatment of species conservation. As I will demonstrate, at the core of the narratives'

ecological awareness is an ethos where humans are ultimately both destroyers as well as saviours of the nonhuman world, and where the fates of other species are entirely contingent on human interference – a vision that celebrates the potential of human mastery and knowledge to resolve environmental crises. Lunde's novels would therefore at first glance seem to resonate with eco-modernist impulses, and also present interesting parallels to the Norwegian government's belief in technological solutions and environmental interference, in the form of fossil fuel extraction as a climate change mitigation strategy. By examining the two major examples of species conservation in the series, the honeybee in *Bienes historie* and the takhi in *Przewalskis hest*, I show how conservation necessarily becomes a form of 'species saving' bound up with human mastery, exerted through biopolitical mechanisms, and motivated by a thinking founded on nature/culture dualisms. Since, as mentioned above, the second novel of the series, *Blâ*, thematises issues related to water scarcity and hydro resources rather than nonhuman animals, my focus will lie on the first and third instalments of the 'Climate Quartet' and on how the novels articulate visions of both species conservation, human mastery, and nonhuman resistance to that attempted mastery.

Closer inspection of the two novels namely reveals that while they highlight and at times celebrate human managerial behaviour towards other species, the narratives also challenge fantasies about environmental stewardship and subvert the Anthropocene mastery narrative. Lunde achieves this particularly by employing the trope of animal bio-resistance – the ways in which animals resist and disrupt the human drive for control by not breeding, falling ill, and physically harming humans. The dramatic weather events that play out in the storylines set in the future also serve to emphasise human vulnerability and fracture visions of species mastery. Finally, my discussion will conclude by demonstrating how Lunde's novels also contribute to debates about the role of literary form against the backdrop of the present moment's dire environmental predicament. For while narrative storytelling in itself might be

said to be fuelled by the desire for human control when faced with unprecedented uncertainty, Lunde's storytelling showcases the abilities of the novel to foreground the agentic capacities of nonhuman forces and to communicate the insignificance of individual humans in the magnitude and complexity of planetary forces. Moreover, the apocalyptic narrative elements that Lunde includes in her visions of the future are arguably symptomatic of a contemporary sense of uncertainty about the future that erodes any claims to the view that humans are 'as gods'.⁴

New conservation and the biopolitics of saving species

The eco-modernist commitment to human environmental stewardship takes on a particularly visible form in discourses about species conservation. While conservation has always been a nuanced and difficult pursuit, imbued with the human values that underpin it (Sarkar 2005; Heise 2016), recent technological advances and imminent climate breakdown have made contemporary conservation debates urgent and complex. Contemporary conservation includes diverse activities ranging from 'assisted colonization' to 'ecosystem engineering, Pleistocene rewilding, de-extinction, frozen zoos, gene-drives, and conservation cloning' (Sandler 2017, 72). Many of these approaches intertwine with the eco-modernist view of interventionist practices as solutions to environmental problems; particularly the so-called 'new conservation' that has gained traction in recent years by advancing claims that pristine wilderness does not exist and that since humans are already 'running the Earth', we should manage it 'consciously and effectively' as if it were a garden (Marris 2011, 9). Embracing the Anthropocene, new conservation advocates conservation not for biodiversity's sake, but for the 'very practical and more self-centred reasons concerning what nature and healthy

⁴ Stewart Brand's famous statement from the first issue of his counterculture magazine and product directory, the *Whole Earth Catalog*, in which he expressed that 'we are as gods and might as well get good at it' is wholly suggestive of the eco-modernist stance.

ecosystems provide to humanity' (Kareiva and Marvier 2012, 965). Moreover, the new conservationists do not see a conflict between capitalism, economic growth, and environmental degradation, but in fact argue for an intensification of the capitalist system (967).

In a species extinction discourse dominated by a rhetoric of loss and decline (Heise 2016, 12), Lunde's retelling of the takhi's hopeful conservation story in *Przewalskis hest* is a welcome change. Through its account of the successful takhi rewilding project, the novel showcases many of new conservation's claims about the rightful intervention by humans into the fates of other species. Lunde's work therefore suggests that new conservation ideals have already become internalised in the literary imagination to a greater degree than that which new conservation opponents such as Michael Soulé might feel comfortable with.⁵ Like the other two books in the series, Przewalskis hest consists of narratives from three different homodiegetic narrators in different centuries. In 1882, Mikhail, who is the assistant director of the Saint Petersburg zoological garden, receives the animal remains of an unknown horse species discovered by Colonel Przewalski on the Mongolian steppes. Suspecting that the species is the mythical 'last true wild horse' represented in prehistoric cave art paintings (43), Mikhail sets out on an expedition to Mongolia with the aim of capturing wild takhi specimens for the zoo. He enlists the help of Wilhelm Wolff, a famous hunter of exotic animals. In a parallel storyline taking place in the 1990s, the German veterinarian Karin is organising 'the largest nature conservation project of all time' (46) by transporting a group of takhi from a European nature reserve to their original Mongolian habitat. In between these two storylines, the novel offers glimpses of a bleak future as it turns to Norway in 2064 and introduces Eva, a middle-aged woman raising her teenage daughter on a tumbledown farm and nature park.

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⁵ Soulé expresses his criticism of new conservation particularly strongly in an editorial in *Conservation Biology*, where he states that this approach to conservation, with its economic growth agenda, should not be labelled conservation and would likely accelerate global ecological collapse (2013, 895).

Society as the reader knows it has disintegrated following an event known as 'The Collapse'. As storms and landslides occur around them, Eva and her daughter struggle to remain on the farm, where there are also two takhi horses left as a remnant of the nature park, among 'the few wild horses that existed in the world' (7). Aware of the previous efforts that have brought the takhi back from the brink of extinction, Eva is desperate to preserve the species.

Karin's and Mikhail's storylines present many parallels to historical proceedings surrounding the endangerment and conservation of the takhi.⁶ After the species became extinct in the wild during the twentieth century, the takhi population in Mongolia rebounded following reintroductions by Western countries (Bouman and Bouman 1994, 15; King et al., 2015). The central tension in the takhi's history, however, is that humans precipitated their endangerment in the first place. The novel accentuates this tension by juxtaposing Karin's and Mikhail's storylines. What ultimately emerges in each of the narratives is a picture of total human mastery of the takhi species. Mikhail, who is captivated by the takhi's wildness, paradoxically destroys that wildness upon the horses' capture, while Karin's dream of a rewilded takhi population can only be achieved by increasing human interference. In a striking episode, the opening of Karin's narrative sees Karin and her grown son, Mathias, on board a crammed cargo flight with the first group of horses they are transporting from France to Mongolia. The 17-hour flight is a struggle for the horses, far removed from their natural habitat. Karin plans to collect more groups of horses for the same trip, intent on making them adapt to the wild and reproduce until the population is fully sustainable. The plans are already made for the horses' propagation: as she explains, 'I need three new foals next spring' (129). This need to control the horses' reproduction plays out in the other storylines too. After returning from the expedition to Mongolia, Mikhail has secured two horses for his zoo and

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⁶ In the nineteenth century, the takhi species was subject to a thoroughly imperialistic project when sightings by European explorers initiated several expeditions that captured foals for European and American zoos. A trace of this colonial legacy remains in the fact that the horse is commonly referred to as 'Przewalski's horse' instead of by its Mongolian name *takhi*.

hopes they will reproduce. The opening scene of Eva's narrative shows Eva trying to prevent her domesticated horse from mating with her takhi horses so that the species line will be kept pure; even upon ecological collapse, the takhi's existence is troubled by human control.

The scale of human mastery involved in the fate of the takhi species becomes particularly clear when one considers the resonances with the operations of biopower, where animals become biopolitical subjects under human dominance. Although Michel Foucault himself never engaged with the animal question, several critics have argued for the indispensability of Foucault's work on biopower for critical explorations of species conservation (Youatt 2015; Chrulew 2011). Biopower, as Foucault understands it, arises out of the shift from sovereign power to the modern nation-state where power is 'applied at the level of life itself' (Foucault 1978, 143). Through 'the administration of bodies and the calculated management of life' (140), practices such as vaccinations and control over reproductive health manifest as 'the imperative to promote life' at the population level (Youatt 2015, 55). A similar type of logic underpins species conservation. As Matthew Chrulew (2011) states, with the threat of extinction comes 'an increasingly intensive anatomo-politics of the animal body' that legitimises practices such as 'separation and recombination of social groups, imposed breeding and the removal of offspring' (148). Since what matters is the survival of the population and not the individual, there is an 'entanglement of harm and care' in these biopolitical conservation practices (Srinivasan 2014, 502), where conservationists 'come to genuinely recognise acts of violence, neglect, and letting die as constitutive of care for a population' (Biermann and Anderson 2017, 6). In this way, dominance and biopower are always implicated in conservation practices that seek to protect species, regardless of whether humans perceive of themselves as stewards, carers, or saviours of a species.

Many of the interactions that the novel stages between humans and takhi illuminate how biopower operates under the guise of care and conservation. In order for Mikhail and Wolff to transport the takhi to Europe, they must separate foals from their mothers, and half of their captured horses die during the eight-month trip. The death of their first captured foal greatly upsets Mikhail until Wolff reminds him that 'we must think of him as an object for our research' (354). The two horses that end up in the Saint Petersburg zoo are kept under strict scrutiny, and Mikhail is determined to ensure they will produce healthy offspring that can add to the zoo's takhi exhibition. He states, 'At the same time I did everything I could so that the horses would survive, so that their bloodline would continue. The first years they were in pain ... the stallion would not copulate, the mare did not become pregnant' (527). Eventually he succeeds, and the mare gives birth to a foal. While Mikhail's narrative can be read as exposing the violence involved in colonial hunting and the collecting of live animals, a similar form of animal conquest is arguably also happening in the other narratives through the biopower of conservation practices.

Karin's case is particularly interesting. In what may appear to be the opposite of Mikhail's project, and therefore an anti-colonial one, she carries out the takhi rewilding with the help of the native Mongolians, who also wish to see the species returned to the Mongolian steppes. It is nevertheless Western scientists such as Karin who make the important decisions regarding the takhi population, and the natives are kept largely in the background of the narrative. Moreover, Karin's efforts are seemingly guided by a selfless commitment to the takhi. She believes that a species found only in captivity is, in principle, extinct: 'I have always thought that a species that no longer exists in wild nature does not really exist', she explains (53). This belief results in an imperative to ensure the population's survival in the wild at all costs, something that becomes a mantra repeated throughout Karin's narrative. As the novel makes clear, the horses have grown so used to human support that they struggle to

adapt to the transition to the wild: winter storms threaten the population, several individuals are wounded, and some die. Like Mikhail and Wolff, Karin is prepared to sacrifice individuals to save the population: 'If I lose some next winter, the loss will not be as visible, as clear' (425). When the horses gradually begin to adapt, Karin still monitors them closely, constantly facilitating, intervening, and pursuing them to ensure that they are healthy. As Sissel Furuseth (2021) puts it in one of the few scholarly articles that have addressed Lunde's novels, one of the key the questions raised by *Przewalskis hest*, given the narrative's investment in expressing the horses' plight, is whether the horses would not be better off without any form of human care at all (96). Thus, *Przewalskis hest* reveals that although saving species might be thought of as a noble pursuit, the intense focus on *saving* and ensuring survival comes at the cost of the suffering and death of individuals. Framing Lunde's novel, then, is a dialectic of care, stewardship, and mastery that implicates humans as exercising a totalising form of biopower.

It should be acknowledged that the novel displays a certain self-awareness around this dialectics of care and control and overtly exposes some of its workings, particularly through dialogues between mothers and their children. During a conversation between Karin and Mathias, the son uses the phrase 'your horses' to describe the takhi to his mother, which she objects to, claiming that 'they aren't mine' and that the reason for her presence in Mongolia is that the horses must learn to be 'their own masters' (58). Mathias reminds Karin that she also used to insist during his childhood that he learn to become his own master, something Karin now remembers with self-reproach, as Mathias's adult life has been spent in drug rehabilitation facilities and on the streets of Berlin. The scene is one of many instances where Lunde's novels evoke linkages between caring for one's children and caring for the environment. According to Furuseth (2021), in *Przewalskis hest*, this pairing takes the form of failed parenting as a result of caring too much about other species (95). Both Karin's son

and Eva's daughter express disapproval at how their mothers care for animals as if they were their own children, often at the expense of caring less for their biological children. As Furuseth argues, the novel mediates a sense of the uncanny in its portrayal of mothers whose maternal instincts seem to have gone astray (94). What this aspect of the novel indicates, Furuseth suggests, is a critique of biodiversity discourse in itself (95). Lunde would seem to imply that human well-being must come first, and that the drive to save species should not consume our obligation to care for other humans and our children. *Bienes historie*, in its dramatisation of environmental stewardship in the form of beekeeping and *bee-saving*, can further illuminate these complex issues, as I shall now explore.

Care, knowledge and honeybee conservation

Like *Przewalskis hest*, *Bienes historie*, although less invested in the practicalities of conservation projects, can be described as a story of species conservation. But the narrative is also attuned to the fundamental entanglement between humans and bees, exemplifying Richie Nimmo's statement that while '[h]umans have shaped and reshaped honeybees, especially in the modern era, through selective breeding, intercontinental transportation, and changing beekeeping practices', bees have also 'shaped human societies perhaps more profoundly, having played highly significant roles in human food production and material culture' (2015, 1). The far-reaching implications of this entanglement become apparent in the novel's vision of the honeybee's extinction, which has already occurred in the 2098 storyline, following 'The Collapse'. Tao, the 2098 narrator, is one of thousands of manual workers who pollinate fruit trees across China. During their first day off in months, Tao and her husband take their three-year-old son Wei-Wen on an outing to a nearby forest, where Wei-Wen falls ill under mysterious circumstances. The child is rushed to a Beijing hospital without the parents receiving any information of his whereabouts, and Tao sets off for Beijing to find him.

Parallel to Tao's plight, the American beekeeper George, in the 2007 storyline, suffers terrible losses of bee populations due to colony collapse disorder. The novel's ending reveals that George's beehive blueprints are the ones William, the nineteenth century scientist, develops in the 1852 storyline. The same blueprints find their way to the 2098 storyline through a book written by Tom, George's son, and which Tao reads.

A central concern of *Bienes historie* is the despair felt by beekeepers experiencing colony collapse disorder without any power to mitigate it. While George struggles to fathom how 'the mysterious colony collapses' (75) could afflict his careful organic beekeeping methods, the novel offers insights into external factors such as 'the ever more unpredictable weather' (91), 'the watered-down cheap stuff [honey] from China' (91), and other farmers who embrace pesticide usage and industrial-scale beekeeping. The novel again evokes a form of biopower at work in this portrayal of an exploitative agricultural system, which enacts 'the disciplinary subordination of life to capital accumulation via the systematic application of mechanistic rationality to vital processes' (Nimmo 2015, 12). This is a system where humans are in control, and where technological innovations reinforce that control. Perhaps part of the reason why colony collapse disorder has been perceived with such horror is that its mysterious nature escapes precisely human control. But although the novel's portrayal of contemporary large-scale beekeeping may be read as a critique of bee exploitation, the storyline set in the future does not break away from a vision of human mastery.

When Tao eventually finds her son dead in a Beijing hospital, she receives the news, confirming her own suspicion, that Wei-Wen has died because of an allergic reaction to a bee sting. Since bees are presumed to be extinct, what follows is a government scramble to preserve the bee population in the area where Wei-Wen was stung, and this is where conservation comes into play. The government's reaction is to seal off the area and summon the military. Tao observes a scene characterised by industrial sterility, where guards in

biohazard suits keep watch over the bees and build tents around them: 'The bees were contained, like in a cocoon, not a single one was supposed to slip out, not until there were many more of them and there was certain knowledge about how to control them' (325). The country's leader, Li Xiara, is firmly decided on an approach based on containment and coercion. She has a clear plan in mind for the bees: 'to cultivate them like useful plants, in controlled surroundings, make every effort to ensure that they would once again reproduce, at such a rapid pace that everything would soon be as before' (314).

But Tao, who has read Tom's book, knows intuitively that this approach is wrong. Tom's book explains George's methods and his experiences with colony collapse disorder, as well as the blueprints for William's beehive. Its philosophy is to leave the bees alone and not to exploit them for honey or pollination. When Tao convinces Li Xiara to read the book, the leader changes her mind about her conservation approach, and the novel's closing chapter describes a very different scene to the industrial sterility of the previous methods: the military has left the area, William's beehive has been built, flowers have been planted, and the surrounding environment is permitted to grow without human interference. Honey will no longer be exploited for human use. Instead of exploitation, there is care: as Tao explains, 'bees cannot be tamed. They can only be tended, receive our care' (334). However, as Przewalskis hest similarly implies, the line between care and control is often a thin one, where the caring subject is in a position of superiority and control in relation to the more passive receiver of care. The novel's emphasis on care as the ideal approach to species conservation resonates with the parent-child motif. When Li Xiara eventually reads Tom's book, the reason she expresses for doing so is that she herself has children, implying that she sympathises with Tao's loss of her son and that she understands the form of care that Tao sees as necessary for conserving the honeybees: caring for other species in the same way as one cares for one's children. Bienes historie therefore conveys a more straight-forward

message about parental care as a necessary component of environmental ethics than the one seen in *Przewalskis hest*, where, as described above, the practice of caring for nonhuman animals as one's own children is problematised.

Bienes historie's vision of human stewardship and mastery as preventive measures against ecological collapse becomes particularly manifest if we consider the importance that the novel affords to knowledge and education. In the same way that Tao and Li Xiara read Tom's book to discover the 'proper' method of protecting the honeybees, the novel's ending suggests that humans can learn to be good stewards of the environment if we educate ourselves. Tom's book argues that to acquire knowledge is what enables humans to transcend an intrinsic human capacity for environmental destruction and thereby to set ourselves apart from the natural world: 'In order to live in nature, with nature, we must detach ourselves from the nature in ourselves ... Education means to defy ourselves, to defy nature, our instincts...' (291). As Tao also states: 'Without knowledge we are nothing. Without knowledge we are animals' (24). This message is at the core of Lunde's novel and is echoed in the other two works of the 'Climate Quartet'. In *Przewalski's hest*, for example, Eva defends her intention to preserve the takhi, even when she and her family face starvation, with the logic that if they sacrifice the horses, then the humans will be 'just animals' (371). In his ecofeminist reading of Bienes historie, Reinhard Hennig (2019) takes up precisely Lunde's investment in foregrounding knowledge acquisition as a way of escaping the human tendency for environmental exploitation. As he rightly argues, the novel presents 'an unshakable faith that education can lead to sensible action, for the good of both humans and the environment', where knowledge plays 'the central role in overcoming the Anthropocene's ecological crisis' $(286).^{7}$

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⁷ As Hennig's article further explores, the novel's faith in knowledge and environmental care seems to afford a privileged position to the feminine and the maternal, and at times the novel runs the risk of projecting a biologically essentialist view of women as environmental carers (2019, 283).

The view that that '[w]ithout knowledge we are animals' signals a mode of thought underpinned by what Val Plumwood has theorised as a nature/culture dualism that permeates modern Western culture and that gives rise to both anthropocentrism and gender hierarchies. In advocating the supremacy of human knowledge, Lunde's novel would seem to project what Plumwood describes as the 'identification of humanity with active mind and reason and of non-humans with passive, tradeable bodies' (2002, 4). The novel's trust in knowledge and education as means of overcoming the climate and extinction crises again speaks to ecomodernist notions about increasing human stewardship. Even if the honeybees in *Bienes* historie are left largely on their own to recover from the brink of extinction, the novel clearly endorses the view that humans can 'rise above' nature to save it. Thus, the consistent message of the 'Climate Quartet' can be interpreted as the insistence on knowledge and stewardship as ways to avert planetary ecological collapse. It is therefore not surprising that Furuseth describes Lunde's novels as overtly didactic (2021, 86). However, what is striking about Lunde's novels is that on closer inspection, elements of the narratives also undermine visions of environmental stewardship and mastery. As I demonstrate next, rather than advocating human control and reinforcing nature/culture dualisms, Lunde's novels go a long way in acknowledging human vulnerability and ecological embeddedness. The series may therefore not be as didactic as Furuseth claims. Indeed, on levels of both content and form, Lunde's work reveals a great deal about human vulnerability in the face of ecological disaster.

Bio-resistance and human vulnerability

If, as Hird (2017) suggests, the Enlightenment faith in humans as rational and superior beings is what has given rise to the environmental violence of the Anthropocene, what may be needed instead are visions that underscore 'the realization of our own vulnerability as nature

within a volatile and agentic environment' (Hird 2017, 265). Such visions, Hird elaborates, might expose the unpredicted consequences of human actions and the limitations of science, knowledge, and technology. In Lunde's work, a number of narrative elements contribute to producing visions akin to those described by Hird. Firstly, a connecting thread of the narratives set in the future is that climate change has progressed to the point where extreme climatic events occur regularly. Przewalskis hest offers a dramatic scene where Eva's neighbour is buried alive when heavy rainfall triggers a landslide. The unpredictable weather that comes with climate change is, as Timothy Clark (2015) describes, one of the major ironies of the Anthropocene, because although defined as the era where humanity becomes a decisive force, it also 'manifests itself to us primarily through the domain of "natural" becoming, as it were, dangerously out of bounds, in extreme or unprecedented weather events, ecosystems becoming simplified or trashed, die-back or collapse' (6). As Ylva Frøjd's (2021) analysis of *Bienes historie* has shown, human vulnerability, both in the shape of human bodies and human social forms, is an important framing trope of Lunde's project. The extreme weather events, for instance, confront human characters with their own and society's vulnerability and powerlessness in the face of climate systems out of control. According to Frøjd, vulnerability serves to highlight human-nonhuman entanglements and channels the narrative's ecocentric impulses (226). Although Friød does not state so explicitly, the emphasis on human vulnerability clearly challenges the anthropocentric worldviews held by the characters and thereby exposes some of the limitations of human mastery and stewardship.

Lunde's novels also go to great lengths to show that the species humans attempt to save partly *resist* being saved. This tendency exemplifies how within the workings of biopower, there is always bio-resistance (Nimmo 2015, 13). Bio-resistance consists of unforeseeable, difficult, and uncertain interruptions into biopower – a 'recalcitrance of bios

examples such as penicillin-resistant bacteria, Rafi Youatt (2015) highlights biological mutations, uncontrollable reproduction, and animal migrations as configurations of nonhuman resistance to biopower. He argues that animals often present unpredictable forms of bio-resistance to human management and serve as active participants in the power being exerted over them. Lunde's novels provide several examples of such bio-resistance. The takhi defy the carefully laid plans humans have for them: they die, fall ill, refuse to breed, and Eva's domesticated horse interrupts her preservation efforts by trying to mate with her takhi horse, even physically injuring Eva in the attempt. The bee sting that causes Wei-Wen's death might also be read as a form of bio-resistance. On a broader scale, the bees' collective agency also presents bio-resistance in the disastrous consequences of their disappearance for human society. Alongside the novels' faith in human stewardship, then, what also emerges are visions of animals' power to resist human domination.

Finally, it is helpful to consider the form of Lunde's novels in more detail to better understand their negotiation between visions of environmental stewardship and visions that subvert human mastery. Lunde joins the ranks of writers who make use of the realist novel to narrate environmental concerns. Arguably, narrative itself, and perhaps easily readable narratives in particular, constitute a human desire for knowledge and control, and an urge to create perceivability out of the uncertain. As Marco Caracciolo (2020) puts it, 'as the etymological link with "knowledge" suggests, narrative as a practice is historically and conceptually complicit with the *reduction* of uncertainty' (128, emphasis in original). Indeed, as Adam Trexler's (2015) study of Anthropocene fiction has shown, the novel has a particular capacity to highlight a 'complex network of ideas' in a multivocal and multilayered way (5). For Amitav Ghosh (2016), the novel as symptom of the desire for human certainty and control ties in with the genre's fundamental anthropocentrism, produced by its

'individualizing imaginary' (292), which partly explains why the novel, according to him, struggles to meet the representative challenges of climate change. Horn and Bergthaller (2020), meanwhile, argue for the necessity of *staying with* unrepresentability – that which is 'too complex to be fully accounted for' and which may require a withdrawal from 'perceptibility and representability' (102). This is something that Anthropocene narratives characterised by formal complexity and experimentality can achieve, they assert (109). But as Hennig (2021) importantly points out, although Lunde's novels hardly meet Horn and Bergthaller's criteria of formal innovation, one might assume that the books have engaged audiences to a greater extent than more formally complex narratives and that their appeal to a wide audience has inspired changes in environmental attitudes and behaviours (127).

Although Lunde's work might represent the attempt to create control and representability out of Anthropocene uncertainties, thus echoing impulses of human mastery, I would argue that Lunde's choice of form also contributes to highlighting human vulnerability. The storylines set in the future suggest a strange mix of hope and dystopia, with post-apocalyptic resonances brought about by descriptions of 'The Collapse'. Lunde is not the only writer who utilises the apocalyptic to describe ecological collapse; in fact, the myriad of current examples of post-apocalyptic portrayals in literature, film, and video games attests to the popularity of this approach. The question of why these narratives are so popular right now has led several critics to argue that apocalyptic fiction can be read as a fundamental expressions of uncertainty, and eco-uncertainty in particular (Seymour 2018; Dewey 1990; Kermode 2000). Nicole Seymour (2018) proposes that the 'doom and gloom' rhetoric of much environmental fiction is an anticipatory structure that represents the human desire for 'certainty and neat narratives about the future' (3). Joseph Dewey (1990) similarly argues that apocalyptic narratives are produced by a culture suspended 'in graceless poses of helplessness, uncertainty, and fear' and one that is 'genuinely puzzled and deeply disturbed to

understand itself and its own time' (10). In other words, we might read current examples of apocalypticism as symptomatic of a prevailing sense of uncertainty about the unforeseeable effects of climate change. Thus, when Lunde, as well as numerous other contemporary writers, turn to the apocalyptic mode to imagine the future, they evidence the pervasiveness of this uncertainty. In this way, the form of the 'Climate Quartet' itself works to underline the texts' expressions of human vulnerability and ecological embeddedness, attesting to the fact that human mastery can never be totalising and that we are far away from being gods of the planet.

To conclude, then, the tensions summarised in this article demonstrate that Lunde's work at first glance conveys an ethos of human stewardship and mastery, but that it also dramatises human vulnerability and presents a vision of humans as always embedded in ecological unpredictability, uncertainty, and vulnerability. In both Bienes historie and Przewalskis hest, the portrayal of species saving is constructed around the idea that rationality and knowledge can serve as emancipatory tools to prevent ecosystem collapse and extinction. But as this article has shown, closer inspection of the two novels reveals that the species that 'need saving' by humans offer unpredictable bio-resistance and that knowledge and rationality ultimately cannot prevent climate change. The anxieties we feel in the present moment are strongly implied by Lunde's use of the apocalyptic mode. Finally, my analysis has indicated the important role that literary fiction can play in examining and dismantling seductive ideas such as the new conservation movement which promises techno-fixes and capital-centric solutions to environmental degradation. By exposing these complex issues and concerns, fiction such as the 'Climate Quartet' mirrors the complexity of the Anthropocene itself – the challenges of which require that we think carefully about our orientation towards other species and environmental problems without assuming that easy solutions and more

anthropocentrism will offer salvation. As we await the final instalment in Lunde's series, the first three novels can inspire a great deal of reflection around these challenges.

References

- Biermann, C., and R. M. Anderson. 2017. "Conservation, biopolitics, and the governance of life and death." *Geography Compass* 11 (10): 1-13. doi:10.1111/gec3.12329.
- Bouman, I., and J. Bouman. 1994. "The History of Przewalski's Horse." In *Przewalski's Horse: The History and Biology of an Endangered Species*, edited by L. Boyd and K. A. Houpt, 5-38. Albany: SUNY Press.
- Caracciolo, M. 2020. "Strange birds and uncertain futures in Anthropocene fiction." *Green Letters* 24 (2): 125-39. doi:10.1080/14688417.2020.1771608.
- Chrulew, M. 2011. "Managing Love and Death at the Zoo: The Biopolitics of Endangered Species Preservation." *Australian Humanities Review* 50: 137-57.
- Clark, T. 2015. *Ecocriticism on the Edge: The Anthropocene as a Threshold Concept*.

 London and New York: Bloomsbury Academic.
- Climate Action Network. 2021. "COP26." https://climatenetwork.org/cop26/
- Crist, E. 2013. "On the Poverty of Our Nomenclature." *Environmental Humanities* 3 (1): 129-47.
- Dewey, J. 1990. In a Dark Time: The Apocalyptic Temper in the American Novel of the Nuclear Age. West Lafayette, Indiana: Purdue University Press.
- Ellis, E. 2011. "The Planet of No Return: Human Resilience on an Artificial Earth." In *Love Your Monsters: Postenvironmentalism and the Anthropocene*, edited by M. Shellenberger and T. Nordhaus, 106-38. Oakland: The Breakthrough Institute. Kindle edition.
- Foucault, M. 1978. *The History of Sexuality. Vol. 1: An Introduction*. Translated by R. Hurley. New York: Pantheon Books.

- Frøjd, Y. 2021. "Sårbarhet i Maja Lundes *Bienes historie*." In *Litteratur og sårbarhet*, edited by A. M. Dancus, S. Hærnes Linhart and A. Bøstein Myhr, 211-29. Oslo: Universitetsforlaget.
- Furuseth, S. 2021. "Bærekraftdilemmaer i Maja Lundes klimaromaner." In *Fortellinger om bærekraftig utvikling: perspektiver for norskfaget*, edited by M. Axelsson and B. Bredesen Opset, 86-102. Oslo: Universitetsforlaget.
- Ghosh, A. 2016. *The Great Derangement: Climate Change and the Unthinkable*. London: Penguin. Kindle edition.
- Hamilton, C. 2016. "The Theodicy of the 'Good Anthropocene." *Environmental Humanities* 7 (1): 233-38.
- Heise, U. K. 2016. *Imagining Extinction: The Cultural Meanings of Endangered Species*.

 Chicago and London: The University of Chicago Press.
- Hennig, R. 2021. "Anthropocene Aesthetics: Norwegian Literature in a New Geological Epoch." *Changing Concepts of Nature in Contemporary Scandinavian Literature and Photography*, special issue of *NORDEUROPAforum*: 105-30.
- Hennig, R. 2019. "Å trosse naturen i seg selv. Kjønn og kjønnsroller i Maja Lundes roman Bienes Historie (2015)." In *Norsk litterær årbok 2019*, edited by N. Simonhjell and B. Jager, 272-90. Oslo: Samlaget.
- Hird, M. J. 2017. "Proliferation, Extinction and an Anthropocene Aesthetic." In *Posthumous Life: Theorizing Beyond the Posthuman*, edited by J. Weinstein and C. Colebrook, 251-69. New York: Columbia University Press.
- Horn, E, and H. Bergthaller. 2020. *The Anthropocene: Key Issues for the Humanities*. Abingdon and New York: Routledge.
- Kareiva, P., and M. Marvier. 2012. "What Is Conservation Science?" *BioScience* 62 (11): 962-69. doi:10.1525/bio.2012.62.11.5.

- Kermode, F. 2000. *The Sense of an Ending: Studies in the Theory of Fiction*. New York: Oxford University Press.
- King, S. R.B., L. Boyd, W. Zimmermann, and B. E. Kendall. 2015. "Equus Ferus, Przewalski's Horse." The IUCN Red List of Threatened Species.

 doi:10.2305/IUCN.UK.2015-2.RLTS.T41763A45172856.en.
- Lunde, M. 2015. *Bienes historie* (*The History of Bees*). Translated by D. Oatley. London: Scribner.
- Lunde, M. 2019. Przewalskis hest. Oslo: Aschehoug.
- Marris, E. 2011. *Rambunctious Garden: Saving Nature in a Post-Wild World*. New York: Bloomsbury. Kindle edition.
- Nimmo, R. 2015. "The Bio-Politics of Bees: Industrial Farming and Colony Collapse

 Disorder." *Humanimalia: A Journal of Human/Animal Interface Studies* 6 (2): 1-20.
- Plumwood, V. 2002. *Environmental Culture: The Ecological Crisis of Reason*. London and New York: Routledge.
- Pohl, N. 2019. "The Sense of an Ending: Utopia in the Anthropocene." *Књижевна историја* 51 (167): 65-82.
- Sandler, R. 2017. "Techno-conservation in the Anthropocene: what does it mean to save a species?" In *The Routledge Companion to the Environmental Humanities*, edited by U. K. Heise, J. Christensen and M. Niemann, 72-81. London and New York: Routledge.
- Sarkar, S. 2005. *Biodiversity and Environmental Philosophy: An Introduction*. Cambridge and New York: Cambridge University Press.
- Seymour, N. 2018. *Bad Environmentalism: Irony and Irreverence in the Ecological Age*.

 Minneapolis and London: University of Minnesota Press.
- Soulé, M. 2013. "The 'New Conservation'." Conservation Biology 27 (5): 895-97.

Srinivasan, K. 2014. "Caring for the Collective: Biopower and Agential Subjectification in Wildlife Conservation." *Environment and Planning D: Society and Space* 32 (3): 501-17. doi:10.1068/d13101p.

Trexler, A. 2015. *Anthropocene Fictions: The Novel in a Time of Climate Change*.

Charlottesville: University of Virginia Press.

Youatt, R. 2015. Counting Species: Biodiversity in Global Environmental Politics.

Minneapolis and London: University of Minnesota Press.