



# World-Building as Grand-Scale Speculation: Planetary, Cosmic and Conceptual Thought Experiments in Emmi Itäranta's *The Moonday Letters*

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*Abstract:* Speculative fiction is commonly associated with highly involved artistic world-building. Indeed, speculation itself as an artistic practice often involves creation of detailed, grand-scale imaginary scenarios that come across as worlds the reader is invited to interpret as coherent systems. By analysing such grand-scale speculation in Emmi Itäranta's *The Moonday Letters* (2020/2022), I demonstrate how such focus on modelling an imaginary world makes the novel a vehicle for various kinds of grand-scale thought experiments ranging from exploration of global ethics and meditations on cosmic order to conceptual reflection on speculative world-building itself as a manner of engaging with reality. This analysis offers a view to world-building in speculative fiction as a means for going beyond the everyday scale of human life, viewing the imaginary world as a heuristic model for interpreting our own reality.

*Keywords:* speculation, world-building, modelling, scale, Anthropocene

## 1. Introduction

In scholarly accounts of speculative fiction as a (super)genre (e.g., Oziewicz), the defining feature its various (sub)genres are most commonly considered to share is their drive to imagine alternatives for our “consensus reality” (see Hume; Chu). Speculation itself as an artistic and cognitive practice, from this vantage, is all about leaving the known and familiar behind and heading toward

unknown or uncertain territory (also Roine 10; Varis 254; Karkulehto et al. 5). Often, this imaginative exploration of the unknown in SFF takes the shape of constructing a whole alternative vision of a reality that is systemically different from our everyday one: an imaginary world, or a speculative scenario on a grand scale. In this article, I discuss the potential of such *speculative world-modelling* to enable storytelling beyond the usual human-scale perspective on worlds that narrative representation is usually thought to entail (e.g., Fludernik 13; Clark 178; Caracciolo 18). Using Emmi Itäranta’s latest cli-fi novel, *The Moonday Letters* (2022),<sup>1</sup> as a case study, I also examine this grand-scale speculation as a means for narrative fiction to confront challenges that define the so-called Anthropocene epoch.

While world-building in and of itself is commonly considered “part of the very definition of fictionality” (McHale, “Speculative Fiction” 327) and a basic effect of narrative discourse in general (see, e.g., James 186–190 for discussion), a focus on particularly elaborate world-building is rightly considered a genre-distinguishing hallmark of both fantasy and science fiction. The idea goes back to classic theories of these genres such as J.R.R. Tolkien’s idea of “sub-creation” of “secondary worlds” as the storyteller’s art (131–132) and Darko Suvin’s theory of science fiction as “literature of cognitive estrangement”, which defines the genre in terms of its ability to relocate the reader’s cognition into an “imaginative framework” that allows them to view the real world from a new perspective (15). Both the pleasure and the purpose of speculative fiction have, following these influential accounts, been commonly understood as a matter of getting immersed into alternative worlds (e.g., Wolf) and reviewing our own reality critically from that new vantage point (e.g., Rayment). Literary speculation itself, by this line of thinking, can be defined as an artistic and readerly practice of interrogating our world via imaginative engagement with an alternative, experimental one.

While this kind of dialogue between an imaginary world and our reality can be taken for a basic principle of interpreting any fiction, it seems clear to me that speculative fiction involves a heightened focus on the role of world-building itself in that interpretive process. It is, as Brian McHale has put it, “an ontological genre par excellence” (*Postmodernist Fiction* 59) in the sense that it puts its efforts at “scale-modelling” alternative realities into spotlight (“Science Fiction” 23) and invites the reader to examine the imaginary world itself as a *system* – to ask, “what is this world and how does it work?”<sup>2</sup> The world in SFF, in other words, comes across as *the focal point* of interpretation (see McHale, “Science Fiction”; Ryan 25–26). In fantasy scholarship, it has also been a recurring refrain to consider the world the “protagonist” of an epic-scale story (Attebery, “Epic” 1) or something “analogous” to that (Clute and Grant), or at least “a character in and of itself” (Mendlesohn 34). The story that captures the reader’s interest, by this line of thinking, is above all else the story of the world and its fates. Therefore, the speculative thought experiments enabled or prompted by such ontologically oriented storytelling are also liable to revolve around the world and its constitution: they are concerned with global-scale

<sup>1</sup> Published in Finnish as *Kuunpäivän kirjeet* in 2020.

<sup>2</sup> McHale originally included only SF in this discussion of ontologically oriented fiction, broadening his approach to cover speculative fiction in general later (“Speculative Fiction”).

phenomena, world-historical developments, or even the cosmic ordering of the universe and the nature of reality itself.

My analysis of *The Moonday Letters* will demonstrate that exploring world-modelling in speculative fiction can shed light to the genre's potential to engage with real-world, grand-scale phenomena such as climate change and global inequality. Lying outside the immediate life-world amenable to human perception, such phenomena famously resist narrative representation (see James for an overview) – but they can, I find, be *approached as a matter of speculation* via modelling of imaginary worlds. Itäranta's novel illustrates this potential of SFF for such grand-scale speculation in at least three ways. Firstly, its vision of a possible future where humankind has started colonising the Solar System constitutes a model of an alternative reality that provides an estranging vantage point to review global-scale inequalities, class struggles, and oppressive structures. Secondly, the novel's model of a cosmic order, with numerous planes of existence traversed by its shamanistic healer-protagonist, involves a speculative exploration of the very fabric of reality and the capabilities and failures of human beings to make sense of it. Thirdly, the overarching story of planet Earth – and especially how it is saved in the end – amounts to a metafictional, conceptual examination of imaginative world-building itself as a means for productive rethinking of our world.

What I intend to demonstrate with this analysis, then, is that the grand-scale speculation involved in SFF world-building is not just a matter of representing long temporal spans, vast planetary spaces, or the cosmic ordering of the universe – although these do certainly play a significant role in it. On a more fundamental level, such speculation works to *estrangle and redefine "world" itself as an ontological concept and a cognitive metaphor*. Instead of coming across as a mere setting for human-scale stories, the world in this sort of grand-scale thought experiment is conceived of as both an entity with its own story and an artistic device for modelling global or cosmic-scale phenomena and developments. Speculating on a grand scale, in other words, amounts to questioning, rethinking, and experimenting with "worldness" itself – asking, "what do we mean by worlds and what can be done with them?" (cf. McHale, *Postmodernist Fiction* 10) Next, I take a closer look at world-modelling and this conceptual rethinking in practice.

## 2. Theorising the World: Speculative World-Modelling

The potential of fiction, and especially SFF, to confront grand-scale phenomena – such as climate change, global inequality, or actions of humanity on the species-level – has recently been much discussed in the conversation about the place and purpose of narrative fiction in the so-called Anthropocene epoch (e.g., Clark; Heise; Raipola; Karkulehto et al.; Attebery, "Anthropocene"). Some accounts are fairly optimistic about that potential, others less so. Ursula K. Heise, for instance, finds that "telling stories of entire species, on a planetary scale of space and on a geological scale of time" has always been a genre-distinguishing ability of SF (282), and that its various narrative strategies for "scaling up the imagination" lead the way for other genres of fiction as they seek ways to confront the Anthropocene (300–301). On the other hand, Timothy Clark has expressed scepticism over the very notion that any cultural

representations can truly allow for perception of our world beyond the narrow limits of “the familiar ‘life-world’ that gives us our immediate sense of orientation and of significant context in our lives” (39; cf. Chu 85). Juha Raipola has similarly pointed out that the narrative form itself, when imposed on the “unnarratable matter” of “more-than-human world”, reduces that world into a fundamentally anthropocentric pattern (266–267). Marco Caracciolo, in his take on “cosmic narratives”, splits the difference by focusing on the feeling of “wonder and awe at the sheer scale of the cosmos” (171) elicited by literary engagements with the universe, rather than the possibility of representing that scale. Indeed, it can be the very *failure* of imagination when trying to grasp a world together at a cosmic level that affords the reader an opportunity to reflect on “the parochiality of our own species” (ibid., 203) – a prerequisite, as he sees it, for “tempering” the inevitably anthropocentric orientation of human thinking.

From this discussion on literary confrontation of the Anthropocene, and limitations and failures thereof, emerges a suggestion of a tension between an ethical imperative to reimagine the world in its grand, “more-than-human” scale (e.g., Karkulehto et al.) and the impossibility of truly capturing such a world in writing. *The Moonday Letters* itself also showcases and reflects on this tension. The novel effectively establishes itself as part of the conversation about the Anthropocene from the very beginning by evoking one of the most iconic symbols of the epoch (see Clark 30–31): an image of the whole Earth seen from space.

In silence Earth seems to climb higher, a flawless, rounded drop of water that contains everything: each day, past and future. From this distance, not a single scar is visible on it. It seems to me that if I reached out my hand, I could stroke its surface, stroke it back to sleep. (Itäranta 9)

Despite its play with scale, this particular evocation of the planetary perspective on Earth is likely to be deeply familiar for the reader, rather than estranging. It effortlessly recalls two famous images of the planet: the 1968 Apollo 8 picture “Earthrise” and the 1990 Voyager 1 photograph of a “pale blue dot” on which, in Carl Sagan’s memorable words, “everyone you ever heard of, every human being who ever lived, lived out their lives” (6). As Clark has noted about the significance of these famous representations of the planet, “to contemplate the sight of the whole Earth is to think the disjunction between individual perception and global reality” (36). By evoking the symbolism, *The Moonday Letters* effectively announces its intention to examine that disjunction. In the following analyses, I will demonstrate how the novel’s world-modelling involves a stark look at humans’ limited ability to understand or take care of the world – and how the novel confronts its own limited ability, as narrative fiction, to achieve these same goals as well.

Considering world-building as a practice of building grand-scale speculative thought experiments – or theories about worlds – can provide a useful analytical perspective to ways in which novels like *The Moonday Letters* negotiate the limitations of human perception and narrative form in their attempts to grasp a bigger-picture view of the planet and the universe. As I noted earlier, the key function of the sort of intricate world-building typical to SF is to focus attention on the world *as* a model in a dual sense: as a grand-

scale vision of an alternative reality and as a means for addressing grand-scale phenomena in our own reality (cf. McHale, “Science Fiction” 23). Erin James, for one, has suggested that the “sense of worldmaking” fundamental to narrative can, in fact, help us grapple conceptually with the human “rewriting” of the real world involved in the idea of the Anthropocene (187–188). In other words, the sense of worldness in fiction models a grand-scale perspective similar to that needed to come to terms with the real planet Earth as a global entity – as well as human agency in relation to it. With its explicit conceptual engagement with the Anthropocene, *The Moonday Letters* makes its own world-modelling efforts particularly conspicuous as a matter of such renegotiation of human and “more-than-human” versions of reality.

The modelling of an alternative world, then, does not just offer an estranging departure from known reality or even, as McHale has it, empower us “to think of the [real] world as *otherwise than it currently is*” (23, emphasis original). It also constitutes a means for refocusing our perspective on our present reality *as it is*, expanding our capacity to imagine what might be real or possible at this very moment (also Roine 13). The unknown territory that speculative experimentation gropes toward is not something inexistent, either possible or impossible, but rather the grand-scale reality that lies beyond everyday human perception. Since such scales of reality are, as noted in the above-cited discussion on Anthropocene fictions, incomprehensible as such (e.g., Clark 29–30) – and certainly impossible to represent accurately in a form as fundamentally human-scale as narrative fiction (see Fludernik 13; Clark 178; Raipola 263) – SFF world-building orients itself towards the next best thing. It creates experimental models about what that reality *might be like* or how it *could be fruitfully understood* that readily come across as such models, rather than representations of an already-known reality.

Speculation, after all, is an activity that hinges on both a drive to know something and an inability to know it for certain. As a means for interpreting our world, a speculative thought experiment trades the confident yet rigid certainty about how this world works that realist forms of fictional representation adhere to (cf. Oziewicz) for a more questioning and playful outlook. It is conspicuous in both its fictional artifice (cf. Elgin 7) and its ultimate open-endedness. In this outlook, literary speculation is an interpretive activity that is openly oriented towards *provisional and tentative knowledge*. The imaginary worlds built in speculative fiction can, then, be understood as models in a similar sense as the concept is used in scientific discourse: they are *heuristic tools*, or knowingly imperfect yet potentially useful representations (see Frigg and Hunter xvii–xix for an overview; cf. Grishakova et al. 118). Philosopher of science Roman Frigg, for one, has suggested an analogy between such modelling practices in science and fiction: neither relates to the real world per se, but to some simplified, idealised, or otherwise curated and designed version of it, and “competent readers” on either field are expected, however tacitly, to be fully aware of this (257). Catherine Z. Elgin, in her turn, elaborates that instead of depicting our reality as it is,

[m]odels, like other fictions, can simplify, omitting confounding factors that would impede epistemic access to the properties of interest. They can abstract, paring away unnecessary and potentially confusing details. They can distort or exaggerate, highlighting significant aspects of the features they focus on. They can augment, introducing additional elements that focus attention on properties of interest. They can insulate, screening off effects that would otherwise dominate. (8)

In terms of speculative world-building, this means simply that the grand-scale reality the reader can be invited to engage with or experience via fiction is not the universe itself in all its overwhelming scale and complexity (cf. Caracciolo 171), but a visibly designed and hypothetical model of how that universe could be fruitfully understood (cf. Elgin 2). Built to be relatively easy to grasp, such a model of a world therefore offers itself up to be evaluated not in terms of its tenuous credibility or plausibility – never mind its accuracy – as much as its potential explanatory power (as well as, of course, its aesthetic appeal as an artistic object).<sup>3</sup>

Speculative modelling of worlds is in this sense, to put it succinctly, an art of grand-scale *theory-building*. As a heuristic activity, it is oriented towards consolidating some valuable or at least interesting understanding of our own reality, its constitution and possibilities – but in the face of the impossible task of representing the world itself on a grand scale, it approaches that goal via hypothetical models of that world explicitly framed as such. It can therefore provide “epistemic access”, to borrow Elgin’s expression, to phenomena that elude everyday human-scale perception, knowledge, and even comprehension. The world presented in *The Moonday Letters* functions in my following readings as such a heuristic tool: a model that, regardless of its resemblance to any possible reality or lack thereof, is nevertheless geared towards building grand-scale theories about the universe and humanity as part of it.

### **3. A Planetary Experiment: Global Inequality Writ Large**

On the most tangible level of its world-modelling, *The Moonday Letters* presents a vision of an ostensibly possible future where scientific advancement has facilitated relatively fast interplanetary travel, colonisation of the Solar System, and some limited terraforming of other planets, especially Mars. The resulting colonies are prosperous, although it is pointed out that their “wealth and wellbeing are based on systematic long-term exploitation of Earth’s natural resources” (Itäranta 47). Earth itself has been left to degenerate into a poverty-stricken wasteland plagued by environmental disasters. In the grand-scale thought experiments suggested by this model of a world, the ravaged planet plays a dual role. Firstly, it serves as a future-projection for examining great changes brought about by unmitigated climate change. Secondly, it works as an allegorical stand-in for our own world’s global south and exploited working classes in a fairly obvious analogy the novel builds about real-world global politics. Both the vision of a possible future and the analogy of real-world

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<sup>3</sup> Of course, a lot of the above can be – and has been (e.g., Grishakova et al.) – rightly stated about any fictional scenario (cf. Chu 7; McHale 25). The specificity of SFF, in this matter, may in fact lie more in the scales of its speculations than its speculativeness in itself.

politics are, then, readily approachable as models for making sense of planetary-scale phenomena in our present reality: climate change on the one hand and global inequality on the other.

The scenario of a future Earth, with its submerged continents, trash-clogged seas, and impoverished citizens, is designed to model consequences of global warming in a world-historical perspective: what the planet might look like 150 years into the future? The timespan between our present and the novel's present is left as an ellipsis – a common narrative strategy of science fiction for affording readerly engagements with *longue duree*, according to Heise (284–285). As world-historical timescales in SFF go, this one is relatively short, yet it does serve to prompt the reader to fill the gap with their informed speculation. What happened to this world? What has humankind been up to in the intervening decades and centuries? In other words, the omitted span serves to focus readerly attention on grand-scale questions about the world itself, its past and its fate – and because such omission also involves lack of narration that would involve any singular human perspective, the story itself is framed as one about the world as a whole and the collective deeds of humankind as a species within it.

A simple answer to those questions about the world could be found via viewing the scenario as just extrapolation from current circumstances (cf. Landon 25), conceiving of it as a model of a plausible future if climate change continues unhindered on its currently expected trajectory. The presence of commercial interplanetary space travel (for the wealthy) in this world, however, introduces a complicating “what if” factor to the scenario. It raises the possibility that in this world's history, global warming was allowed to run rampant precisely because the affluent classes of the world society, who would have had the most power to mitigate it, instead got to have the proverbial “planet B” after all. Indeed, the plight of Earth is shown not only to be of little concern to the wealthy inhabitants of the colonies, but also to directly benefit them in many ways. It provides them a highly commodified tourist destination as well as a convenient source of cheap immigrant labour to toil in their farms, kitschy holiday resorts, and space ports (Itäranta 85). This “what if” side of the modelled world therefore redirects focus from climate change per se towards the global-scale inequality and exploitation that, the model suggests, is intrinsically tied to it. The model thus augments (cf. Elgin 8) the link between global inequality and global warming, focusing attention on the stark contrast between the lives of the wealthy ruling classes who benefit from the overexploitation of the planet's natural resources and the global poor who bear the consequences.

This thought experiment on planetary-scale injustices ties the future scenario together with another salient theory of the world modelled by *The Moonday Letters*: the analogy of the exploitation of the global south by the global north, blown up to the scale of the Solar System. In this model, Earth is also set up as a stand-in for the former via frequent references to Martians' callous attitudes to its plight, their reluctance to provide humanitarian aid (46–47), and xenophobia towards the Earth-born (100). The relationship between Mars and Earth is depicted in a manner that regularly evokes daily headlines on global politics. For example, there is a mention of “[y]et another vessel left on the orbit by human smugglers ..., this one no larger than a capsule and bursting at the seams with people running from Earth's famine. No survivors”

(94). This readily brings to mind the news about the so-called “refugee crisis” of 2015, and desperate people drowning while trying to cross the Mediterranean to Europe in packed inflatable boats. Estranged via its expansion to the scale of the Solar System, the scenario is stripped from any connotations of racism or religious prejudice that may accompany our habitual thinking around this humanitarian disaster. The scaling up of global inequality results, then, in an estranging “othering” of all the Earth-born as a homogenous group.

In this play with scales, the common humanity of the desperate refugees is highlighted and their ostensible differences are downplayed. With the habitual divisions and categorisations pared away, any justifications Martians offer for closing their ports from those refugees – “Shouldn’t Mars put its own population first?” (47) – ring conspicuously hollow in their familiar echoes of real-world populist nationalism. In this grand-scale speculation on global inequality, the disregard one faction of humankind holds for the other comes across not only cruel but downright absurd, based as it is on the failure to recognise the obvious common humanity shared by people of Earth and Mars. This world modelled by *The Moonday Letters*, in short, not only pares planetary-scale issues like global inequality and anthropogenic environmental destruction down to their fundamentals, but also makes an urgent case for human unity in the face of planetary-scale challenges. This case is further emphasised by the “pale blue dot” symbolism I noted earlier, which evokes Sagan’s famous notion of Earth as humanity’s only home “in the great enveloping cosmic dark” (7). Next, I take a closer look at how Itäranta’s novel builds a model of this cosmic dark and the place of humanity within it.

#### 4. A Cosmic Experiment: the Unknowable Universe

The word “cosmos”, as Caracciolo points out in his account on cosmic narratives, refers to a principle by which the universe can be understood as a coherent system (19): an ordering pattern of the universe as a whole. Narratives, understood as fundamental human sense-making devices, can provide such patterns, imperfect as they are (cf. Raipola 267); and providing heuristic tools for comprehending the universe is what both myths and scientific models of the cosmos are commonly considered to do. Kathryn Hume has suggested (121) that the “mythic outlooks” of fantastic narratives “let one view the universe in terms that relate it to a human scale of values”, imposing sense into something unknowable and making it legible (cf. Chu 3). In contrast, Caracciolo sees the point of engaging with cosmic-scale narratives in the poignant consciousness they can invoke of the limitations of human-scale reality – a rebuttal of “human exceptionalism” (200). In its own modelling of the cosmos, *The Moonday Letters* can be seen to test out both of these outlooks. On the one hand, the novel casts mythic imagery and narratives as means by which human beings navigate the incomprehensible vastness of the universe; on the other hand, there is an emphatic suggestion that those narratives fall far short of actually capturing any true understanding of that universe.

In the protagonist Lumi’s narration, there are recurring explicit reflections on the precariousness of human existence within a vast, uncaring universe: “we all know that just outside the fragile sphere of light the dark lays its heavy fingers onto the thick glass. It was here before us and will remain long



after we are gone, hungry, untamed, uninterested in anything but itself” (Itäranta 22–23). For the Earth-born Lumi, even the well-established settlements at relatively close reaches of the Solar System, like the Moon, Mars, and Jupiter’s moon Europa, bring about acute awareness of this fragility. Staring into this incomprehensible cosmic dark gives the protagonist both a thrill – “this was how far I had made it” (19) – and a profound sense of homesickness for the “pallid blue dot” (18) she can, like Voyager 1, just discern in the distance. In the model of a cosmos built by the novel, then, the dark presence of the vast unknowable universe is set to envelope the narrow limits of all that is instinctively familiar and naturally amenable for human perception, represented in Lumi’s narration by the planet Earth:

People who were born and grew up on Mars long for Earth. For the horizon, the open sea, the sky and the sun. Science believes it is because evolution has not caught up with the changes. As a species, we evolved in Earth conditions and for them, not for underground artificial light. (193)

The narration, then, constructs a model of the universe as a whole where Lumi’s personal perspective as she attempts to navigate it and the vast cosmic darkness lying always just outside that perspective are constantly contrasted with each other. With more universal statements like the one quoted above, Lumi’s way of perceiving the world is also generalised on the level of humankind as a species. This, in my reading, suggests a possible grand-scale thought experiment about the relations and disjunctions between human perception of the universe and the reality of that universe in all its incomprehensible vastness (cf. Clark 36) – a contrasting of a human-created cosmic order and the unknowability of the universe itself.

This interplay between human perception and the universe is explored in the novel via Lumi’s efforts to impose workable order to the universe that, despite those efforts, remains mostly dark and unknowable. The disjunction is most thoroughly emphasised in her shamanistic travels to other planes of existence. Through these travels, Lumi has gained an understanding of the cosmic order of this world that is explicitly contrasted with that of her scientist spouse Sol: “Your world is built from science, from what can be proven and measured. My world looks toward that which can be sensed but not shown to others” (139). In this opposition of two “worlds”, the limits of Sol’s version of the cosmos are emphasised, its positivist scientism cast as both naïve and hubristic. In contrast to their<sup>4</sup> conception of the world, where everything that cannot be known for certain gets rejected, the cosmos as Lumi experiences it consists mostly of unknowable matter. It is stated that the spirit realms she traverses “will take the shape the mind gives them” (122) – the only thing she can perceive of that universe is her own attempt to make it legible.

What that attempt mostly consists of is shown to be a matter of constructing narrative patterns in reference to various world mythologies. For example, what Lumi calls a path to other worlds takes a shape that is familiar from several Eurasian mythologies: a world tree (141). A spirit guiding her through the phantasmagorical landscapes of this shamanistic world appears as a “soul-animal” (122), reminiscent of various Indigenous religions, and on one

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<sup>4</sup> Sol is nonbinary and uses they/them pronouns.

trip to an unknown world, she borrows the spool of thread from the Greek Minotaur legend to find her way back (266). Familiar mythic imagery and narratives are thus cast as means for Lumi to impose workable cosmic order to a universe that, in reality, lies entirely outside of her comprehension. Her attempts to bend the spirit realm to her will are also eventually cast as abusive; after badly hurting her soul-animal, she eventually realises that herself (335). In the cosmic order suggested by the novel's world-modelling on the whole, this non-human world is not for the human minds to command by organizing it into anthropocentric patterns.

The grand-scale speculation about a cosmic order in Itäranta's novel, therefore, sets the realm of human existence against the unknowable, fundamentally non-human universe as a matter of humility and wonder, rather than of the former extending its control over the latter (cf. Caracciolo 171). The model of a cosmos it builds highlights the narrow limits of the world that can be related to human scale of perception and values, and also proposes certain serenity before those limits; the protagonist, at least, eventually finds some peace in the acceptance that "[i]t meant nothing to the universe where you walked, or I" (Itäranta 303). Rather than suggesting nihilism or apathy, this emphasis on the indifference of the universe is ultimately framed as another Sagan-esque evocation of "our responsibility to deal more kindly with one another, and to preserve and cherish the pale blue dot, the only home we've ever known" (Sagan 7; cf. Caracciolo 203) – or the only corner of the universe that readily lends itself to human sense-making efforts, with its horizons, seas, and skies. The novel's grander narrative, implicitly overarching the story of Lumi searching for her missing spouse, is indeed one about saving Earth. To conclude this article, I will briefly discuss how this storyline of *The Moonday Letters* can be read as conceptual experimentation with the potential of SFF world-building itself to serve as a means for utopian thinking.

## 5. A Conceptual Experiment: World-Modelling as Utopian Thinking

In terms of confronting the Anthropocene, speculative fiction is often lauded by scholars and authors alike as a potential vehicle for imagining possibilities for a better future (e.g., Roine 8) or fostering a less anthropocentric world view (e.g., Caracciolo 203; Attebery, *Anthropocene* 24). As Clark notes (18), it is a habitual line of thinking in ecocritical thought to "trace environmental degradation to mistaken knowledge, a false world view" that can ostensibly be altered via engagements with ecocritical writings – fictional, speculative, or otherwise. This "faith that environmental destruction can be remedied by cultural means" (ibid., 19), which Clark regards with some scepticism, is evidently also embraced by Itäranta's novel – or at least its narrator, who justifies her own epistolary writings with a belief that "[s]tories brighten the reality and bring out something unforeseen, they make a little less broken that which bears a fracture upon it" (61). With its overt partaking in the conversation about the Anthropocene, *The Moonday Letters* also positions itself as a participant in a utopian project of imagining the world a little less broken.

Utopia is most usefully understood here, following sociologist Ruth Levitas (xi), as a method rather than a goal: it lies in *the act of imagining*

possibilities for a better future, rather than that imaginary future itself (also Jameson 416; cf. Suvin 60–61). To that end, it is immaterial whether that future is plausible or closely tied to present reality; or, as Lumi puts it, “Sometimes imagination is more important than the truth. Not because it covers the truth, but because it expands it and makes its potential bigger” (78). In its utopian modelling of a future, *The Moonday Letters* explores this importance of imagination by building a scenario of saving Earth that is explicitly framed as implausible, and yet offered up as a vehicle for fostering environmental awareness – and, most crucially, hope. With its story, only slowly emerging from the background of Lumi’s oblivious narration, about a group of activists and scientists dreaming about “a politically, economically and ecologically free planet, purified of its past” (348), the novel casts such dreaming as a fundamental means for humanity to achieve more harmonious coexistence with the rest of the universe.

It is repeatedly pointed out in the course of the story that “[t]here is no magical quick way to fix Earth” (179) and that scientists “are not capable of miracles” (184). Lumi directly evokes the world-historical scale of the challenge with her assertion, “What matters is that we are willing to do slow and tedious and frustrating work in order to improve things bit by bit. Even when we know we’ll never see the results” (180). The “idea of solving ecological problems with one stroke of a magic wand” is thus explicitly framed as a pipe dream a reasonable person could only wish to believe in “for just a while, until the reality hits again” (184). Yet for all this sensible realism, a miracle is exactly what Sol and their group of activists end up performing at the climax of the novel. They introduce to Earth’s oceans a genetically modified fungus which forms a symbiotic relationship with certain seagrasses, stimulating their growth. These seagrasses form a huge carbon sink that is projected to cool the planet’s climate and allow its ecosystems to heal in a relatively short time, and since the fungus would devastate food crops in the colonies, it also forces Earth into a decades-long quarantine, ending its exploitation.

This modelling of a utopia thus blatantly exaggerates the potential of human action to impact the planet’s biosphere and climate. As humans “started a new geological epoch”, the activists in the novel reason, they can also finish it and create a new one, “the Biocene” (347). Something that is conventionally seen as a matter of long-term collective action by humankind is here simplified into a single act by a few individuals – and the sudden collapse of the scale is quite jarring, heavily underscoring the sheer implausibility of the whole scenario. The utopian solution is thus conceptually positioned in this thought experiment into stark tension with its sceptical framing as a “magical quick way to fix Earth.” This contradiction within the utopian scenario can easily come across as a simple, frustrating failure of imagining a true possibility for positive change: the utopia turns, in a cynical reading, into a deconstruction of itself.

However, I find this very failure can also serve its own purpose: it highlights the heuristic quality of the modelled world itself, focusing attention on its limitations as a means for projecting an accurate or actionable vision of the future. This, in turn, enables a conceptual thought experiment about the very purpose and potential of speculative world-modelling for confronting the Anthropocene. The apparent failure of the utopian scenario as a credible thought experiment foregrounds the novel’s practice of grand-scale speculation as an artistic attempt to imagine a hopeful future for the planet – an attempt

which, while failing on the credibility front, still manages to make a case for the importance of that hope. In a subtly self-reflective way, *The Moonday Letters* thus focuses attention on its world itself as a model for imagining such a future: a narrative device and a heuristic tool which, while incapable of producing true actionable knowledge, can still perhaps evoke some vision for aspiring towards a better world. Even in the face of the inevitable failure of its attempt to project such a world, the novel conceptually makes a case for the potential of speculative storytelling itself to engage with the Anthropocene in a provisional yet productive manner.

In fact, the various grand-scale thought experiments I have found premises for in *The Moonday Letters* – be they about global-scale politics, cosmic ordering of the universe, or world-modelling itself as an artistic practice – all share this same sense of a failure of knowledge, or of coming across the limits of imagination. More importantly, however, they also share a striving for understanding despite that failure. In its scenario about climate change and global inequality, the novel comes to emphasise the importance of trying to overcome habitual failures of empathy and recognition involved in human-scale attempts to engage with global challenges – and sets itself up as an almost didactic, if imperfect, means for doing that. In its cosmic experiment, it turns the unknowability of the universe into a case for cherishing the small corner of that universe which does lend itself to human-scale sense-making. Finally, the conceptual thought experiment *The Moonday Letters* builds about speculative world-modelling itself uses the failure of the novel's own utopia to examine the potential such modelling still has to imagine a better future – or at least evoke hope for one.

Itäranta's novel, in conclusion, strives to confront global-scale phenomena, represent a cosmic order, and imagine a post-Anthropocene future – and ends up reflecting on its own limitations as a heuristic tool for accomplishing those things at every turn. As such, it constitutes a fruitful case study for examining how SFF can negotiate the tension, integral to the Anthropocene discussion, between the ethical imperative to confront the grand-scale, more-than-human world and the impossibility of putting such a world in narrative. The models for making sense of our world I have found in *The Moonday Letters* are all, in the end, conspicuous as imperfect heuristic tools, yet still offered up as attempts to gain some understanding of the world, the universe, or human nature on the whole. Producing and entertaining provisional and imperfect knowledge about ultimately unknowable things is, after all, what speculative thinking and writing is all about. Reading *The Moonday Letters* in terms of the grand-scale thought experiments involved in its world-building sheds some light into where the value of such knowledge can lie: its potential for fostering not only critical awareness of the limitations of human-scale thinking, but also wonder, humility, serenity, and hope.

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also previously published peer-reviewed articles on literary speculation as a means for confronting the current post-truth discourse (2019) and for reaching beyond postmodernist suspicion of master narratives (2021).

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