



Fafnir

NORDIC JOURNAL OF SCIENCE FICTION AND FANTASY RESEARCH

Volume 11, issue 1–2, 2024

fafnir.journal.fi



The Finnish Society for Science Fiction and Fantasy Research
Suomen science fiction- ja fantasiatutkimuksen seura ry

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Editorial 1–2/2024

*Elizabeth Oakes, Merve Tabur, Elise Kraatila,
& Jari Käkälä*

Welcome to *Fafnir – Nordic Journal of Science Fiction and Fantasy Research*'s 2024 issue 1–2 as we glide into the new year with a fascinating collection of the latest research in speculative fiction for our readers!

Warm thanks to Susan Mandala – expert in stylistics, author of *Language in Science Fiction and Fantasy: The Question of Style*, and founder of Writing Works Consulting, a writing and language consultancy dedicated to helping people achieve more effective writing and critical thinking – for her prefatory, “Science Fiction, The Future, and Now: Some Mid-Life Reflections from a Life-Long Fan.” In it, she follows the threads of speculative fiction woven through her life and reflects on how a genre of imagination nevertheless deeply entwines with the reality we inhabit. While SFF fans may find much in this essay deeply relatable, Mandala also prompts us to ponder how our engagement with emergent, science-fictional technologies shapes our societies and our own psyches.

Taking off from the interconnectedness of science fiction and reality, we fly on to the issue's brace of peer reviewed articles, starting with Juha-Pekka Alarauhio's “Ant Similes in J.R.R. Tolkien's *The Lord of the Rings* – an Analysis of Literary Technologies.” Alarauhio introduces a novel perspective on Tolkien's beloved work by foregrounding the author's innovative usage of epic simile, creating new insight into his repurposing of traditional storytelling devices. Suvi Korpi also takes a language-focused, empirical approach to a classic speculative work in “SF Estrangement in Literary Translation: Translation of Neologies in the Finnish Version of *Dune*,” where she demonstrates the importance of translation strategies to preserving the estrangement that invented words may induce in translated works of science fiction. Then, Faeze Rezaii examines the important issue of environmental agency and trauma in “Ice and Ecotrauma in Isaac Asimov's “*The Martian Way*,” where she analyzes Asimov's depiction of space mining in the novella. Mobilizing the concept of “ecotrauma,” which she defines as the entangled

suffering of the environment and humans, Rezaii argues for the ethical mattering of inorganic matter, such as water.

The issue loops back to Tolkien with Jyrki Korpua's essay on speculative worldbuilding, "From Middle-earth to Duckburg. Worlds of Fantastic Mythmaking and Mythbreaking. On J.R.R. Tolkien's Sub-Creation and Carl Barks' Organic World Building." As not only a chairperson of the board of The Finnish Society for Science Fiction and Fantasy Research (*Fafnir's* governing organization), but also Finland's leading Tolkien scholar, Korpua presented this essay as his Guest of Honour speech, a keynote that capped Finncon 2024's academic track in Jyväskylä this July. If you were not able to catch this culmination of two days of stimulating SFF scholarship live, you will definitely want to read it here. In his essay, Korpua draws surprising and thought-provoking connections between the storytelling practices of Tolkien and Barks, two authors especially beloved by Finnish audiences. SF scholars also gathered this summer in Tartu, Estonia, for the SFRA 2024: Transitions conference. *Fafnir's* former Editor-in-Chief, Essi Varis, relays the highlights in her mixed-media "Conference Report on SFRA 2024: Transitions in Tartu, Estonia on May 7–11." Varis weaves the observations she has gathered from the opening speech, keynotes, panels, and a multimedia performance into a tapestry of insights on imagination, linking past speculations to future transitions.

Evgenia Amey and Garrett "Wereyoi" Moore also explore creativity and imagination in environmental worldbuilding in video games and novels. Their "Interview with Nicolas Lietzau: Approaches to Storytelling, Worldbuilding, and Fantasy Geographies in *Enderal* Mod and the *Twelfth World* Novels" dives into the imaginative process from the perspective of a multimedia creator. Rounding out the issue's extra content, Esko Suoranta's lectio praecursoria, "Technonaturalist Speculative Fiction and Literary Affordance," examines how a technonaturalist mode of speculative fiction affords insight into the inherently complex and abstract realities of contemporary capitalism, using poetic features shaped by the material and social structures of capitalism and its technologies.

Finally, our ever-active Reviews Editor, Jari Käkälä brings us no fewer than 10 book reviews. Karl Bell reviews *Space(s) of the Fantastic – A 21st Century Manifesto*, edited by David Punter and C. Bruna Mancini, which demonstrates a variety of ways that literary geography can be applied to the interpretation of fantastic literature. Jeremy Brett reviews Ida Yoshinaga, Sean Guynes, and Gerry Canavan's edited volume, *Uneven Futures: Strategies for Community Survival from Speculative Fiction*, which highlights the imaginative power of speculative fiction to reshape the ways in which we consider the world around us. Ananya Buragohain and Lakshminath Kagyung review *The Evolution of African Fantasy and Science Fiction*, edited by Francesca T. Barbini, a collection of five essays that trace the route of African science fiction's emergence, identify the forces shaping its development, survey readers' expectations, and examine the portrayal of African characters in popular entertainment. Sabina Fazli reviews Mike Ashley's *The Rise of the Cyberzines: The Story of the Science-Fiction Magazines from 1991 to 2020*, an encyclopedic history of science fiction periodicals. Carol Franko reviews John Rosegrant's *Tolkien, Enchantment, and Loss: Steps on the Developmental Journey*, which points to a coupling of enchantment and loss that shapes Tolkien's art. Aino-Kaisa Koistinen reviews Pablo Gómez-Muñoz's *Science*

Fiction Cinema in the Twenty-First Century: Transnational Futures, Cosmopolitan Concerns, which offers a timely analysis of the possibilities and limitations of science fiction cinema to interrogate transnational concerns through the lens of transnationalism and cosmopolitanism. C. Palmer-Patel reviews *Gendered Defenders: Marvel's Heroines in Transmedia Spaces*, edited by Bryan J. Carr and Meta G. Carstarphen, a volume packed full of facts and contextual information about the publication histories, character arcs, and media battles of many of Marvel's famous female heroes. Michael Pitts reviews Stephen C. Tobin's *Vision, Technology, and Subjectivity in Mexican Cyberpunk Literature*, which illuminates the centrality and significance of the screen in 1990s–2010s Mexican cyberpunk and post-cyberpunk fiction. Noah Slowik reviews Ross Clare's *Ancient Greece and Rome in Modern Science Fiction: Amazing Antiquity*, which identifies works of science fiction that implement stories and figures from antiquity and examines what such use says about the legacy of classical thought in popular culture. Rounding out the issue, Essi Varis reviews Merja Polvinen's *Self-Reflective Fiction and 4E Cognition*, in which Polvinen demonstrates through speculative fiction examples how literary narratives constitute particular "cognitive environments" for fostering layered effects of fictionality and self-reflection, and how interacting with them can potentially give rise to entirely new ways of thinking.

Here's to a new year of fiery imagination, winged dreams, and hopeful speculations! We hope this issue provides a stimulating start to your 2025 reading. Happy New Year from the lair of Fafnir!

Elizabeth Oakes, Merve Tabur, and Elise Kraatila, Editors-in-Chief
Jari Käkälä, Reviews Editor
Fafnir – Nordic Journal of Science Fiction and Fantasy Research



Science Fiction, The Future, and Now: Some Mid-Life Reflections from a Life- Long Fan

Susan Mandala

It all started with *Star Wars, Episode IV: A New Hope*. That was the first one, back in 1977. I was nine. I don't remember the theatre, or who I went with, or if I had popcorn. But the film – that has stayed with me ever since. I walked in a child, just going to see a movie. I walked out transformed, newly aware of the power of narrative. Stories were not just for fun: they *meant* something. Mythic understanding dawned in my soul that day as the unending battle between good and evil played out before me. Intuitively, I knew that “a long time ago, in a galaxy far, far away” is always here and now. The first stirrings of what it might mean to live wisely, or at least to try, began that day.

All this I owe to *Star Wars*. In the eighties when I was coming of age, “serious” fiction was still the canonical fare – Dickens, Jane Austen, Hardy, Faulkner, and so on. This did me no harm, and certainly a great deal of good. But always, when I had the choice, I returned to science fiction and fantasy, and somewhere in the early 2000s, I never left. Thankfully, these genres have now (mostly) taken their rightful place as valued literatures, and readers familiar with my work will know my arguments about the power of language in these texts. What I want to do in this piece is reflect more widely on how the formative science fiction of my youth relates to the world we find ourselves in today. I shall consider my reflections in three categories: predictions that have not come to pass, predictions that have, and predictions where we seem to be teetering on the edge.

Some predictions in our science fiction remain fiction and seem whimsical. We do not, for instance, whizz around on *hoverboards* (*Back to the Future II*), *landspeeders* (*Star Wars*) have not replaced cars, and we do not have individual flying craft to access our stratospherically high apartment blocks or floating schools (*The Jetsons*). Other unfulfilled predictions seem to

serve more serious narrative purposes. While it might be tempting to put *Star Trek's transporter* with the whimsical examples, I think it has more to say to us. I have great affection for Reg Barclay, the character in *Star Trek: The Next Generation (TNG)* who travelled by shuttle as often as he could because he feared the transporter. If I were in the same future as Reg, I too would be in the shuttle – it seems to me very rational to fear a form of travel where you are turned into energy, shot through space in some sort of “beam,” and then turned back into matter at the other end.¹ What could go wrong? Multiple *Star Trek* episodes ponder this very question, and yet Reg's fear of the transporter was deemed a phobia in his character arc. I think his story explores at least two significant issues that remain with us. One is the question of how we decide what is and is not a diagnosable mental illness. Reg is presented as a brilliant but neurotic and somewhat troublesome character who does not fit comfortably with the rest of the ennobled *TNG* crew. He is the one that needs treatment, the one who is “broken” and needs to be “fixed” to be brought in line with what is “normal.” And yet, he often turns out to be right. The second issue enters deeper territory still. Are we matter or energy? I will leave that one for individuals to ponder as they will.

Other predictions that started as science fiction are now reality – the mobile phone, voice-activated computers, satellite navigation. Such predictions frequently appear on lists of things science fiction got right, but I find them interesting for another reason. When textually introduced, these yet-to-come innovations can be rhetorically presented as already come to pass, part of the unremarkable norm (Stockwell 34). This makes sense in terms of fictional world-building but it cuts out the journey to that norm, which is often messy. Tad Williams shows us some of this in his futuristic quartet *Otherland*. Here, virtual reality is the norm, but there are allusions to a hopelessly naïve past (our near present) when people accidentally starved to death in their then-new virtual worlds, forgetting that the food their minds thought they were eating didn't nourish their physical bodies.

Clearly, technological innovations do not reach all of society evenly at once. Early adopters rush forward to embrace the new, others grudgingly come on board only after it can no longer be avoided, some just never buy in at all. All of these people co-exist for a time, in workplaces, families, friendship groups, neighbourhoods, and cities, their relationships to each other and the world recalibrated and mediated by the new thing. Having lived through several transitions from science fiction idea to real thing, I find I am one of the grudging resisters. While many welcome the convenience of internet banking as a seamless part of their everyday lives, I find myself traveling further and further to the dwindling number of physical branches, where even the bank staff seem to wonder why I don't want internet banking. I switched from a landline to a mobile only when I had to – after discovering that people with mobiles were beating me to properties I wanted when I was buying my first flat. I do a great deal of walking, and to this day, I prefer printed A-to-Z maps. Not that long ago, I was amazed to meet someone who had never seen one. How long before A-to-Z maps are no longer sold and exist only as museum items or curios? The

¹ I am indebted here to the website <https://memory-alpha.fandom.com/wiki/Transporter>. I had wrongly assumed that transporter technology broke us down into our molecules and then reassembled them upon arrival at our destination. Also a bad way to travel.

physical printed map, centuries old, might disappear in my lifetime. What will go with it? Our ability to navigate? Another one of our increasingly tenuous connections to the physical landscape? As we move into a future where our science fictional ideas may overtake us, I think it wise to give thought to what we might be losing as we bring to life what was once only imagined.

And that brings me to the most interesting category of predictions – those we seem to be just on the cusp of adopting. Extended space travel is one example. While this is still in its infancy and may or may not happen, it is taken more seriously now than when I was growing up. But amongst the many conversations that are had about it, there is one thing I seldom hear discussed. As M. Night Shyamalan warned us in *The Village*, escaping to a new environment does you no good if you take the same old sins (greed, violence, fear) with you. We cannot run from ourselves.

And neither, it seems, can we run from robots and AI. Of all the imagined worlds in the science fiction of my youth, it was dystopic futures run by intelligent machines that seemed to obsess us the most. The *Terminator* films and *The Matrix* still loom large in my imagination, and *The Matrix* especially has become a common reference point in our public discourse as we grapple with the algorithms to which we are increasingly subjected. Computer automation, of the kind that makes cash machines possible, is one thing. Computer automated telephone menus are quite another – talking to a machine when I want to talk to a person has always seemed to me an uncomfortable concession. But ChatGPT and similar AI chatbots? Now I am alarmed. I accept that AI is here now, to stay, and that it can be useful in many ways. But some of those uses are, in my view, concerning, particularly when it comes to writing.

Writing is hard. It takes time. And we are all busy. So an AI that can help with this and save time may at first look like a good thing. I want, however, to sound a note of caution as both a writer and someone who believes we are empowered by our own writing. If you get an AI to give you some ideas for something you need to write – a post, your web text, a proposal – and then edit those ideas, you are running surface operations on ideas that an AI served up to you. Generating our own ideas and choosing from a pre-selected list strike me as two very different things. And if you say “Oh, but I only get the AI to help with structuring my ideas,” then you are not grappling with that structure yourself. Why does this matter? In my view, it matters because *writing is thinking*. If we are not doing our own writing, we are not doing our own thinking. The structure of your work is not an optional extra, but an articulation of *your* argument – *your* assessment of how the ideas *you* have come up with logically fit together. If you get an AI to do that, you are not making that logical assessment. Every time we grapple with our own ideas and use our own minds to think through and solve problems, we are thinking. Whether this is restructuring our argument, or doing more research to enrich it, or innovating in some way, we get better at it. We learn more and more and become more skilled, more creative, and more effective. Every time we ask an AI to do these things for us, it seems to me that we deny ourselves these opportunities to grow and learn. Where might that end? Several classic *Trek* episodes have asked that same question (“Return of the Archons,” “The Apple”). In these episodes, the *Enterprise* crew land on a planet and discover the inhabitants are, unbeknownst to them, being controlled in all aspects of their lives by an AI.

Captain Kirk and Co. inevitably discover this and destroy the AI to save the people from its tyranny.

People will engage with AI in their own way and make their own choices about how to use it and embed it in their day-to-day lives – I am not here to tell anyone what to do. But as we make these choices, I ask only that we do so carefully and consider what we might over time be putting at risk – our capacity to think and learn independently. Is using AI to outsource our thinking a convenience too far? We should at least ask the question.

By way of conclusion, allow me to quote the “rules” Douglas Adams, widely known for *The Hitchhiker’s Guide to the Galaxy*, devised to explain our relationship with technology (reprinted in *The Salmon of Doubt* from an original article in *The Sunday Times*).²

1. Anything that is in the world when you are born is normal and ordinary and is just a natural part of the way the world works.
2. Anything that’s invented between when you’re fifteen and thirty-five is new and exciting and revolutionary and you can probably get a career in it.
3. Anything invented after you’re thirty-five is against the natural order of things.

Now in mid-life, maybe I fall into the final category of those prone to complaining when things change. Or maybe we need to pay more attention to our science fiction.

Biography: Dr Susan Mandala is the founder of Writing Works Consulting, a writing and language consultancy dedicated to helping people in a diverse range of professions achieve their highest level of achievement and professional fulfilment through more effective writing and critical thinking. A specialist in stylistics, the study of choice in language, Susan concentrates on the way language works in writing. She has a PhD from the University of Cambridge and was for many years an academic at the University of Sunderland. She has published two books (*Language in Science Fiction and Fantasy: The Question of Style* and *Twentieth Century Drama as Ordinary Talk: Speaking Between the Lines*) and numerous scholarly essays and journal articles. Now an independent author and freelance writing and language consultant, Susan designs and delivers bespoke workshops on diverse aspects of language and decision-making in writing.

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Stockwell, Peter. *The Poetics of Science Fiction*. Longman, 2000.

² Here, I quote the “rules” and the publication details from Becher, Jonathan. “Douglas Adams’ Technology Rules.” 2014, <https://www.forbes.com/sites/sap/2014/07/07/douglas-adams-technology-rules/>. Accessed 14 November 2024.



Ant Similes in J.R.R. Tolkien's *The Lord of the Rings* – an Analysis of Literary Technologies

Juha-Pekka Alarauhio

Abstract: This article investigates the use of similes in J.R.R. Tolkien's writing as literary-technological design that partakes in traditional means for narrative meaning-making repurposed for his fantasy in *The Lord of the Rings*. I argue that by focusing intensely on these features in Tolkien's textual design, it is possible to support ongoing scholarship on the literary influences and sources of Tolkien's legendarium with a less directly comparative method. This approach can illuminate, on one hand, Tolkien's strategies in deploying traditional literary technologies, and on the other hand, the purposive redesign of these technologies for the specific storytelling needs of his fantasy writing. My analysis focuses on a series of similes in *The Lord of the Rings* that compare orcs to ants, showing that the similes are applied with a consistent overall strategy that highlights an important thematic strand in Tolkien's legendarium. Through this analysis, I demonstrate how the adaptive use of similes exemplifies the idea of purposive design. On a more interpretive level, I explore the functional envelope of the simile as a narrative technology, and its implications for meaning-making within Tolkien's storyworld and beyond.

Keywords: epic simile, classical tradition, literary technologies, *The Lord of the Rings*

1. Introduction

Taken the rhetorical prominence of extended similes in epic poetry and later applications in prose, finding the device in J.R.R. Tolkien's *The Lord of the*

Rings (1954–55; *LotR*) should not be altogether surprising. Nevertheless, such encounters have not received closer attention yet, possibly because the verbal composition in Tolkien's work is only occasionally connected to structures of classical epic poetry (for exceptions, see Fimi *A Homeric Simile*; Jensen; Korpua; Stevens; Walker). Even when the connection is drawn, detailed analyses rarely follow. Furthermore, on a more general level, the attitude towards research into Tolkien's literary models has been understandably prudent. As scholars (Drout and Wynne; Williams; Fisher; Shippey *The Road to Middle Earth*) have routinely stated, the study of the sources and influences for Tolkien's fiction has been a road shadowed, on one hand, by Tolkien's own vivid denunciations and, on the other hand, by overly strong assertions based on analogies leading to interpretive dead ends. Additionally, the very idea of literary influence involves the problematics of authorial intention – whether a textual model has been *intentionally* imitated or not and what the author *intended* to achieve by their imitations. The study of Tolkien's adaptation of classical epic composition patterns thus starts at a junction where a “stylistic gap” (Reid 518; also Walker) still lingers in the scholarship. This gap is further stretched by a scarcity of practical analyses of classical composition in Tolkien's work, as well as source study approaches that are often oriented towards the Northern European languages and literatures (Livingston 77–78), in spite of the author's upbringing in the Classics (Letters 172).

However, instead of pursuing direct, verifiable paths of transmission from classical epic to *LotR*, I propose a switch of perspective from the study of literary influences to a process of adaptation of *literary technologies*, such as epic similes, through *purposive design*. This view prioritizes the assembly of specific means of literary communication deployed in the text. Simultaneously, it acknowledges, for analytical purposes, the application of comparable means in other texts. With this focus on the medium, I also wish to contribute to what Michael Livesey has recently described as a “descent to word” in Tolkien scholarship (3), calling for “micro-level tools and mechanisms that tell us how the composition took shape, at word- or sentence-level – as much as why, and to what end” (5). In this article I apply such a tool, not only for microscopic observation but also a more sustained and communicatively pragmatic exploration of the ways words bring fantasy worlds into being in the reader's experience.

My response to Livesey's proposition is a slight reorientation in the study of Tolkien's sources. I argue that, by exploring Tolkien's use of language and narrative means as technologies designed to produce a range of effects, it is possible to study the author's meaning-making strategies without claiming direct imitation of or dependencies on specific model texts. The notion of *purposive design*, as formulated by Jarkko Toikkanen, helps clarify the goals of this inquiry. Placing poetic compositions in the domain of technologies because they result from applied knowledge of “the formal and generic elements of poetry,” Toikkanen suggests that

To design a verbal poem, the poet employs words with knowledge of producing effects by this technology. Their act of designing is purposive in the sense of writing a poem, and it requires employing the resources of the medium of poetry for its execution. This medial condition persists objectively, although it differs from one instance to the next what those resources are, how an individual agentively employs them, and which effects and meanings they may wish to produce. (64)

Viewing the simile in this way, it can be said that its verbal components and organizing principles are purposively designed to facilitate certain kinds of readerly interactions, experiences, and interpretations. In other words, the use of a technology shows that the author is familiar with it and knows how to apply it in their own work¹.

The notions of purposive design and the technological structure of a literary text can be further clarified by discussing the relations between a design, its component parts, and the user function it provides. According to Brian Arthur, “all technologies are combinations” constructed “from components or assemblies or subsystems at hand” (23). Because the purposive design of a written simile constitutes a technological solution that uses the resources of the written verbal medium, these assemblies manifest in the linguistic hierarchy on the pragmatic, semantic, syntactic, morphological, and graphological levels. Yet, as I will demonstrate below, this linguistic paradigm alone is not enough to fully account for the technological solution of similes, which I consider to be literary technologies – that is, expansions on the basic technologies of verbal language.

2. Similes as literary technologies

In *LotR*, similes number in the hundreds, their functions as diverse as their forms and contexts². In many cases, they are used formulaically, recurring in similar contexts so often that, in his pioneering study, Colin Manlove (165–6) deemed them excessively repetitive. To address this observation, I will examine a series of ant similes in *LotR* with an analytical eye on recurrence, yet without the assumption that they are functionally identical. Therefore, I will prepare the investigation by introducing a notion of similes as literary technologies. I build this view on Daniel Dor's theory of language as technology in order to highlight the ways in which this technology, by its design, fulfils a purpose. Since my aim is to specify the effects of the technology, I apply Dor's concept of the *functional envelope*, which refers to what the technology “can do with high levels of efficiency, where its efficiency declines, where it collapses, and what it cannot do to begin with” (2). The functional envelope of a simile is defined by its

¹ When discussing traditional models for composition, I refer to technologies that authors have adopted from their predecessors and adapted for meaning-making in their own works. In this technological sense, the notion of the tradition of the classical epic is thus limited to identifiable recurrence of specific technologies. For example, it is possible to trace a tradition of classical epic similes in which the Homeric poems and works by Vergil, Lucan, Ovid, Torquato Tasso, Edmund Spenser, John Milton, Herman Melville, Tolkien, and many others partake. By comparison, there is no classical epic tradition of, for instance, stream-of-consciousness writing extending back to the Homeric poems from James Joyce's *Ulysses*.

² This is well demonstrated in Emma Hawkins' exploration of dogs in Tolkien's similes.

linguistic (lexical, syntactic) and textual (narrative, descriptive, intertextual) means as actualized in its context of use. In the analysis, I will consider the simile a structural design, a platform that affords the assembly of diverse components drawn from the technologies of language and literature.

My formulation of the technological constant in verbal similes is that it is a linguistic protocol serving the basic function of bringing two or more verbal segments to comparison through an explicit juxtaposition. These segments are scalable components and may include references to existents, ideas, or processes expressed through linguistic units ranging from single words to complex sentences. Simplest forms of similes thus juxtapose ideas by single words, whereas more extended similes can do the same on the scale of short narratives. Since this arrangement is an objective condition for subjectively actualized readerly experience, it can be regarded as the *functional core* of a simile. By this design, the simile triggers its effects: it introduces a degree of experiential dissonance, or the sense that an ongoing reading experience is intruded upon by imagery, details, or entire scenes and ideas that appear, to a varying degree, absent from the surrounding narrative or its setting.

The effect of experiential dissonance that similes elicit can be further described with the help of Lars Elleström's concept of the virtual sphere as "a mental sphere, created by communicative semiosis" ("Coherence and Truthfulness" 430). The virtual sphere, in other words, is an imaginative construct that results from interpretive engagement with a media product such as a written text. Virtual spheres may include represented time, space, and "materialities and sensory perceptions" (Elleström "Beyond Media Borders" xii). They thus contain whatever the reader of a novel, for example, can imaginatively perceive as existing in a particular spatiotemporal setting. This imaginative experience of "worldness" amounts to what Marie-Laure Ryan defines as "storyworld," in that such worlds are "... totalities that encompass space, time, and individuated existents that undergo transformations as the result of events" (62). That the storyworld becomes present to the reader in this way – as something that exists on its own terms – is, of course, necessary for the experience of a fantasy world.

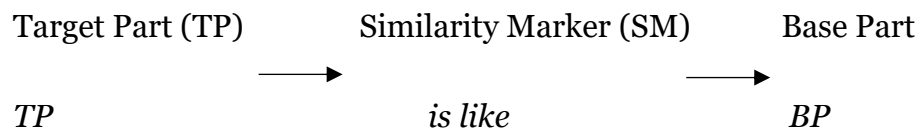
Using similes as literary technology highlights how the experiential connections between the lived experience in the actual world and any storyworld constitute a complex interactional relationship. This is because a simile, and an extended simile in particular, introduces a semantic domain from outside the ongoing narrative that feeds the reader's experience with information from outside the storyworld. The simile thus offers the reader's perception a separate virtual sphere for comparison. It causes an interruption to the narration, as the reader is invited to take in what the parallel virtual sphere holds and how it relates to the action in the main narrative. The resulting juxtaposition between the two virtual spheres always presents a demand for interpretive action for the sake of communicative coherence. The reader must discover some relevant semiotic or experiential connections between the two spheres to be able to gauge the import of the simile within the ongoing experience of the storyworld, all the while maintaining a sense of integrity for the storyworld despite the import from the actual world. I argue that the set of communicative resources that the simile presents to the reader – the logical, figurative, aesthetic, experiential or affective import – not only facilitate such

an outcome from the reader's engagement with the simile but also modify that outcome in important ways.

The technological perspective accounts for the means that facilitate the readerly outcomes of similes. I analyze these similes as formed with two main components. Firstly, the *simile protocol*, which is a formalized syntax or a "grammatical nexus" (Whaler "Grammatical Nexus" 327–328) determines the sequential and referential coordination of the parts of the simile and its context. The second component is the semantic content that is placed in the grammatically appointed slots in the simile. To give a consistent coding of the components in different simile types, I apply Ben-Porat's structural description of the classical epic simile as an expansion of what is termed the *nuclear simile*.

In all similes, the outward signs that inform the reader of an intended comparison are explicit and selected from a set of suitable similarity markers or grammatical signals such as those used by John Milton in *Paradise Lost* (1667): "as," "as if," "as when," "so," "such," or "such as." These similarity markers (SM) signal a pattern of comparison by connecting the target part (TP), which is the primary phrase set up for comparison, to the base part (BP), which is the phrase introduced for the comparison (Ben-Porat 738–740). Together, these three component types form the simile protocol by providing the "structural slots" (Ben Porat 740) for the semantic content.

The prototypical parts of the simile protocol – Ben-Porat's nuclear simile (739) – can be formalized as a sequence as follows:



As Ben-Porat has shown, this protocol can be reordered and expanded for each simile, but despite this flexibility, the basic role of each component must remain recognizable. When this is the case, the simile protocol guides the reader to interpret in the comparative mode. The simile's lexical content, then, provides not only the semantic domains for the target part and the base part, but the resource of intertextuality that facilitates linking the simile to any other semantic domains within and without the storyworld. This analysis of the basic components of all similes suggests that further technological elaboration expands the potential effects and therefore uses of the simile. To put it simply, I will differentiate here between three main types of similes: 1) a very basic type that consist of the components of the nuclear simile, 2) a more complex simile that extends one or more of the basic components, and 3) the most complex simile type of the fully realized epic simile that follows the patterns that emerge in classical epic poetry. Next, I will show how the simile protocol provides a simple yet flexible and scalable framework for assembling similes with highly variable functions and effects.

3. A review of ant similes in *LoTR*

Overall, *LoTR* employs a variety of structures of comparison. The majority of these are simple, such as those that employ the similarity marker “like.” However, as can be seen in Table 1., the ant similes are of the more complex type, and present comparisons between actions and events rather than single attributes. This is achieved via various kinds of extensions in the simile structure.

Simile		Structural Type	Discourse Mode	Focalizer	Protocol Components
1	I came to Buckland and found it in uproar, as busy as a hive of ants that has been stirred with a stick. (I, 276) ³	extended	direct speech representation	Gandalf	implied TP, TP + SM + expanded BP
2	But everywhere he looked he saw the signs of war. The Misty Mountains were crawling <u>like</u> anthills: orcs were issuing out of a thousand holes. (I, 416)	parabole	narration	Frodo	expanded TP + SM + BP + antapodosis
3	'We loosed every arrow that we had, and filled the Dike with Orcs. But it will not halt them long. Already they are scaling the bank at many points, thick as marching ants.' (II, 137)	extended	direct speech representation	a warrior of Rohan	expanded TP + SM + BP
4	Beneath the hills on either side the rock was bored into a hundred caves and maggot-holes: there a host of orcs lurked, ready at a signal to issue forth <u>like</u> black ants going to war. (II, 244)	extended	narration	impersonal narrator	TP + SM + expanded BP
5	Busy as ants hurrying orcs were digging, digging lines of deep trenches in a huge ring ... (III, 95)	parabole	narration	impersonal narrator	TP + SM + BP + antapodosis

Table 1. Ant similes in *LoTR*

³ The numbering in this article refers to a three-volume edition of *Lord of the Rings* by Roman numerals followed by the page number in the specified volume: I “The Fellowship of the Ring,” II “The Two Towers,” III “The Return of the King.”

According to the protocol criteria, it can be said that the similes in Table 1 are moderately complex, adding some expansions to the nuclear simile in the target part or the base part, or by *antapodosis*, “a phrase which follows the parable and connects it with the action” (Nünlist 284) (“were issuing,” “were digging”). These similes expand beyond a single attribute comparison, yet much like Vergil’s epic ant simile in *The Aeneid*⁴, underline two main ideas: massed movement and unified action. The notable exception to this is Simile 1, which refers to temporary disarray caused by a disturbance in the ant hive, yet this limited spectrum of associations is apt since the simile describes the behavior of hobbits, who are also compared to bees (III, 302). After this single comparison involving hobbits, ants are consistently and exclusively evoked in similes depicting orcs.

Specific attributes connecting orcs to ants include subterranean habitation, vast numbers, and fervent activity. Not distinguishing between individuals, the similes show the orcs as a faceless, relentless threat. In each simile, the narrative perspective places the orcs at a distance, introducing a miniaturizing effect that further motivates the comparison to small insects. In some cases, the spatial distance is due to focalization; in Simile 2, the experiencer is Frodo who, by the power of the ring and the Seat of Seeing on Amon Hen, has attained the divine perspective of a mountaintop observer and is thus able to witness events from afar. In Similes 1 and 3, direct speech representation designates a focalizer, a speaker narrating their own perceptions. It is worth noting that since the sources of the two similes are characters in the storyworld, the distancing effect in them does not occur between the reader and the storyworld, but establishes ant similes as native to the storyworld parlance. The later instances, Similes 4 and 5, on the other hand, are delivered by an impersonal narrator depicting the scenes. While employing a similarly distanced view on the orcs and repeating their now established association with ants, the similes thus keep reinforcing the analogy between ants and orcs. To sum up, while each simile provides their individual effects, they have a collective function as well: through the repeated association, the image of the ant swarm becomes emblematic for masses of orcs. This process sets the stage for the effects of the fully realized epic simile.

4. Analyzing a fully realized epic simile

Being a structure for even more extended and complex comparisons than those in the similes discussed so far, the fully realized epic simile introduces a notable digression that alerts the reader to shift into the kind of interpretive action described earlier. By this design, the simile’s functional envelope is amended with a wide range of possible expansions. For example, instead of indicating a

⁴ You could see [Trojans] swarming all over the city:
like ants, when they pillage a huge heap of grain,
mindful of the winter, and store it in their home:
a long black stream hauls plunder through a narrow
pathway in the grass. Some roll giant grains,
pushing with their shoulders; others mind the line
and chastise stragglers. The pathway teems with work.
Vergil (4.401–406)

single attribute present in two different domains, the epic simile can present an elaborate description of sensory experience or a sequence of actions, or a combination of the two. In addition, the effect span of an epic simile becomes more far-reaching, since the form enables more elaborate types of intertextual referencing.

In *LoTR*, there is only one simile structure that fully realizes the classical epic simile protocol. The narrative context of the simile is the culmination of the battle at the gates of Morannon:

The Captains bowed their heads; and when they looked up again, behold! their enemies were flying and the power of Mordor was scattering like dust in the wind. As when death smites the swollen brooding thing that inhabits their crawling hill and holds them all in sway, ants will wander witless and purposeless and then feebly die, so the creatures of Sauron, orc or troll or beast spell-enslaved, ran hither and thither mindless; and some slew themselves, or cast themselves in pits, or fled wailing back to hide in holes and dark lightless places far from hope. (III, 227)

The simile realizes all the components of the epic simile in Ben-Porat's (744) typology: it employs the split connective "as when"/ "so" as similarity markers and expands beyond the individual noun or noun group in both the target part and the base part. Yet, since Vergil already often disposed of the second similarity marker (Beck), this structure stands out as markedly Homeric – one clearly separated from the surrounding narrative. Furthermore, the simile also delivers an implied target part, which even includes a simple simile, "like dust in the wind". This target part functions by implication since, in the fully realized classical simile, the simile protocol places the base part before the target part, ensuring that whatever the target part refers to should already be known from the narrative that precedes it.

While the simile protocol provides signposts for readerly engagement, a linguistic protocol informs the structures that make up the similes' content; an intricately designed syntactic parallelism provides further cues for identifying semiotic correspondences. The first clause in the BP sets up the comparison and does not correspond with any part of the TP, but rather with the implied TP, which is the initial reference point to the simile. The most significant syntactic parallelism, however, emerges between the syntactic roles in the latter part of the BP and the first clauses of the TP, as can be seen in Figure 1.

STAGE 1: SYNTACTIC PARALLELISM					
BP	SUBJECT	PREDICATOR	ADJUNCT	ADJUNCT	CONJ.
	ants	will wander	witless	and purposeless	and
TP	SUBJECT (+apposition)	PREDICATOR	ADJUNCT	ADJUNCT	CONJ.
	the creatures of Sauron, orc or troll or beast spell- enslaved,	ran	hither and thither	mindless	and

Figure 1.

Initially, the elements in the BP and the TP correspond semantically as well as syntactically: the grammatical subject “ants” is parallel to that of “the creatures of Sauron,” whereas the BP predicators “will wander” and “die” are semantically parallel to TP predicators “ran,” “slew,” and “cast.”

However, there are also signs of an expanding TP: as illustrated in Figure 2, the syntactic parallelism begins to unravel towards the end of the TP. While the first sentence elements are arranged in close syntactic parallels, they are loosened after the first conjunction.

STAGE 2: WEAKENING SYNTACTIC PARALLELISM					
BP	ADJUNCT	*SUBJECT	ADJUNCT	PREDICATOR	-
	then	*ants (implied)	feebly	die	-
TP	-	SUBJECT	-	PREDICATOR	OBJECT
	-	some	-	slew	themselves

Figure 2.

In Stage 2, the syntax is similar only in the broadest sense, yet even here, the semantic parallels suggest an analogy. The implication in the BP is that the ants will perish, being unable to function individually, whereas the TP begins to differentiate between various outcomes caused by a comparable lack of purpose in the creatures of Sauron. At this point, the TP continues to accumulate constituents that have no counterparts in the BP. The parallelism completely unravels as the TP introduces a third and a fourth predicator, as well as a long string of adjuncts towards the end of the sentence, none of which have equivalents in the BP.

STAGE 3: SYNTACTIC DIVERGENCE	
BP	-
TP	or fled wailing back to hide in holes and dark lightless places far from hope.

Figure 3.

In Stage 3, there are no points of connection to the BP, which signals the limits of the analysis of the simile protocol. Here, the reader is led away from interpretation for correspondence and returns fully to the context of the storyworld. To sum up the purposive design of the simile as a literary technology, it could be said that the simile protocol arranges the selected input from the symbolic landscape into parallel patterns, which the reader is invited to experience within two different semantic domains. Simultaneously, and quite inevitably, the simile guides the reader to engage in further interpretation of what the juxtaposition of these experienced images entails for their understanding of the main narrative. Yet a complication emerges when the TP

expands to a point in which close comparisons to the BP must end – there, questions arise about the extent to which “the abundance of superfluous or even disturbing objects and attributes in the relational comparison hinders the clear mapping of objects and relations from the BD onto the TD” (Ben-Porat 742). Furthermore, I argue that this feature of the simile design has special significance regarding the experience of an autonomous fantasy storyworld. Describing what takes place at this crucial moment requires a closer investigation of the interactions between the simile protocol and the symbolic landscape.

While the protocol of the epic simile provides an essential structuring principle, the corresponding parallelism between items in the symbolic landscape is crucial for readerly meaning-making. In other words, while the protocol of the simile leads the reader to focus on comparing the two domains, the grammatical and semantic parallelisms help the reader in forming interpretations of what the potential similarities could mean. What is particularly interesting in Tolkien’s application of extended similes in *LotR* is how the fantasy storyworld implies an increased distance between the domains of experience from which meanings emerge: one rooted within the experienced fantasy storyworld, the other outside it. As a technology for eliciting experience, the extended simile can be regarded as designed to exploit the simultaneous experience of these separate domains. This, of course, may pose a challenge to the notion of the autonomous storyworld.

5. Synthesis: similes and the storyworld

One factor in the simile design that seems to mitigate its effect of distancing from the storyworld is that the juxtaposition reveals some crucial differences between the objects of comparison. Admittedly, the initial semantic parallels are clear: Sauron is related to an ant queen (“the swollen brooding thing”), his creatures to ants. The semantic overlap can be understood as a monarch holding absolute power over their subjects. In both domains, the unravelling of the bond between the master and the servants results in the disorientation and destruction of the latter. However, in semantic terms, an expansion appears along with the syntactic divergences, in the action after the first predicator: while the ants “feebly die” like automatons, the servants of Sauron become suicidal or flee to places “far from hope,” expressing sentience and awareness of their fate. The syntactically divergent section in the target part thus adds further semantic content that no longer corresponds syntactically with the base part, although it seems clear that the two “or” connectors merely elaborate on the given description, suggesting various “feeble” ends to Sauron’s servants that could still be considered comparable to the ants’ demise. Here, we witness a shift in focus that leads away from the comparison and back to the storyworld. The symbolic landscape can be further explored to highlight the simile’s connections to the narrative, or the storyworld as a large-scale frame of reference.

I have already suggested that the base domain, the ant-likeness of Sauron’s creatures, is repeated to the extent that the two semantic domains are already connected by multiple similarities before the fully extended simile. Based on this, the ant similes can be considered subassemblies in a purposive

design that employs repetition to the effect of identifying orcs with ants. While the similes and their contexts vary slightly, each case emphasizing some aspect of the orcs' behavior or appearance, the repeating act of associating ants and orcs instructs the reader to employ relevant aspects of their experience of ants to construct in their imagination the experience of what orcs are like. When the classical epic simile arrives, its effects build on existing experiences within the relevant domains, evoking the earlier images of the single-minded, war-like swarms.

That final simile, however, is used at a moment when the creatures' determination is abruptly lost, and the epic simile thus collects the semantic momentum of the brief similes only to reverse the implication of an unstoppable swarm. Simultaneously, it also introduces a set of spatiotemporal effects to create a change in narrative perspective and pace at a climactic point in the story. In terms of narrative space, the animal simile is, according to Helen Lovatt (43), a traditional way of presenting the perspective of a divine audience; this seems to be the case with Tolkien's simile as well. The perspective becomes omniscient gradually. First, there is the miniaturization of Sauron and his creatures achieved via the image of the ants, but when the simile ends, the perspective continues to expand, and not only in space. In Homeric Greek, tense in similes conventionally switches to the present (Bakker) as a further digressive modulation of narrative time. In Tolkien's ant simile, however, the tense is also partially in the future, which adds an appeal to the reader's experience of how ants generally behave, and their ideas of logical consequences of what will happen afterwards.

Bakker argues that in Greek, the use of the present tense produces a closeness and "immediacy" (Bakker 21); by contrast, Tolkien's use of the English future tense evokes a sense of prognosis and underlines the inevitability of what results from the ant queen's death. The most obvious temporal effect is the narrative pause that the rhetorical diversion creates, but what results from it is not a leisurely description. In fact, the language of the simile is far less descriptive when compared to Tolkien's Lórien similes (I, 393)⁵. These similes create spatiotemporal effects through subjective focalization and retardation of narrative pace for the very purpose of description. In other words, as narration is favored over description, there is less an impression of a lingering gaze than an expanding vista. The subjective sensory experience is exchanged for a less detailed and more distanced, interpretive account of events as the simile swiftly telescopes into a vision of large-scale events in a future that is rapidly narrated with broad strokes.

The placement of the simile in the narrative further underlines its function as a "transition shot", as Martin describes it (147): the simile occurs at the end of an episodic boundary that marks the end of the War of the Ring. This is a Homeric application of the kind of simile that is often used in the *Iliad* for "moving the listener out to a panoramic perspective, before taking them back in to a different part of the action" (Lovatt 39), in this case the last stand of the

⁵ Two extended similes appear in the scene of departure from Lórien, the first depicting the location: "For so it seemed to them: Lórien was slipping backward, like a bright ship masted with enchanted trees, sailing on to forgotten shores, while they sat helpless upon the margin of the grey and leafless world" (I, 393). The second simile describes Galadriel: "She shone like a window of glass upon a far hill in the westering sun, or as a remote lake seen from a mountain: a crystal fallen in the lap of the land" (I, 393).

“Men of Rhûn and of Harad” (III, 227). The strong sense of reframing makes a cinematic description fitting, as the depicted scene moves from the narrated here-and-now to an altogether different spatiotemporal perspective in which consequences of the narrated events can be reported. In this sense, the simile functions like an epilogue in miniature – at least as far as the fate of Sauron’s servants are concerned. This impression is further underlined by the traditional, impersonal narration of the classical epic simile.

Yet, while the ant similes in *LotR* form a consistent relationship with the narrative, their connection to the storyworld is not, perhaps, as simple as it seems. In epic poetry, as Bakker has suggested, “similes are set apart from narrative as a different register, as a way of speaking in which the performer adopts a different tone and stance and communicates more directly with the audience” and carry a “different experiential load” with “semantic and communicative consequences” (23). While similes can be effective in illustrating the unfamiliar through images of the familiar, problems may arise when the frame of reference is not a familiar world, but one of fantasy. What is at stake here, once more, is the diegetic integrity of the storyworld: if the narrator sets itself apart from the narrative to present images for comparison, the reader is likely to take note if the images do not belong in the same world.

However, the recurrence of the ant simile grounds it back into the storyworld on both stylistic and symbolic levels. The repeated use of the simile, with slight variations, can be seen as a strategy for achieving what Dor describes as “symbolic control” (44) over the depiction of orcs and their relationship with Sauron. Once the reader becomes accustomed to identifying orcs with ants, these connected attributes not only embed themselves into the storyworld but also enable further associations with each new variation. The sustained use of ant imagery and the detached narrative perspective thus shift the story from its immediate context to a more thematic exploration. This practice of ascribing moral qualities through animal similes, as discussed by Whaler in “Animal Simile in *Paradise Lost*,” aligns with classical and medieval symbolic traditions. While medieval symbolism preserves the classical depiction of the ant as a model of thrift, tenacity, and diligence, it also incorporates Christian moral virtues (Ermacora 340)⁶. In Tolkien’s similes, however, these attributes are repurposed for the context of his storyworld, imbuing the orcs with radically different associations.

While Shippey (“Orcs, Wraiths, Wights”) has demonstrated how the moral state of individual orcs can be discerned through dialogue, action, and description, Tolkien’s use of the ant simile also constructs a collective image of the orcs. The ents, who catalogue life in Middle-earth, refer to orcs as “flint-hearted” and highlight their immense endurance in marching, running, and climbing (*The Nature of Middle-earth*, 176). Yet, the collectivizing imagery of ants emphasizes the orcs’ mindless servitude – a corrupted form of labor that connects specific narrative events to broader ideas about evil in Tolkien’s world. In an unsent letter from 1954, Tolkien describes orcs as “more like puppets

⁶ Tolkien’s use of the ant as a potent symbol may have been further charged by the cultural fascination with ants and insects in general in the late nineteenth and early twentieth centuries. As Natacha Vas-Deyres and Patrick Bergeron (160–163) have shown, the society of insects became a popular motif in science fiction writing. Against this literary backdrop, where the ant society was reimagined as a threatening empire, Tolkien’s view of the ant gains markedly dystopian significance.

filled (only at a distance) with their maker's mind and will, or ant-like, operating under the direction of a queen-centre" (*Letters of J.R.R. Tolkien*, Letter 153), exemplifying the behavior of masses controlled by tyranny. A later essay reiterates this idea, asserting that it was not an essential quality of the orcs but their "servitude to a central will" that reduced them to an ant-like existence ("Morgoth's Ring," 419). This framework underscores the glimpses of individual orc agency as reminders of their victimization. In a contrasting choice, Tolkien employs a bee simile for hobbits: "Hobbits can work like bees when the mood and the need comes on them" (III, 302). This comparison implies that hobbits' industriousness is rooted in their agency and does not define their entire existence. The bee, as a symbol of labor, stands in opposition to the ant, suggesting a form of value accumulation that is free from aggression and exploitation.

Yet simultaneously, and despite the design effort of domesticating the classical epic simile for Middle-earth, the device nevertheless keeps the door ajar to the actual world and becomes a vantage point between two worlds, inviting interpretations of the ant similes as applicable to phenomena in our everyday reality. This effect is further intensified by the change in the narrative voice that brings about the "semantic and communicative consequences" Bakker (23) suggested. In this case, the reader is encouraged to engage in a kind of double reading that results in what Cecire describes as "Fantasy's ability to cast "proof" of enchantment back onto reality" (79). The purposive design of the ant similes as a connected series exemplifies this, as it enables a process of meaning attachment where classical and medieval animal symbolism is appropriated and imbued with meanings that resonate not only with Tolkien's fantasy world, but also the reader's world.

The two-way implications Tolkien's use of the ant similes can be further assessed in connection to ongoing discussions about language, power, ideology, and race in Tolkien's works, particularly in connection to the representation of orcs (e. g. Stuart; Mills). At the very least, analysis of the technologies of narrative can provide further evidence on the degree (both qualitatively and quantitatively) of the author's purposive rhetorical investment in their representations. The collective representation of orcs via similes may encourage the reader to prioritize the symbolic value of this representation. This may contribute to a failure – of the kind Fimi has pointed out in a response to a collective reading of orcs – in differentiating

between an author's urge to communicate with his contemporaries via his own (very successful) imaginative creations, and the inner logic of his invented secondary world, in which the Orcs aren't (only, in some cases) symbols, but actual characters with agency that drive elements of plot and dialogue. ("Tolkien, Race, and Racism" 4)

As I have shown in the analyses, Tolkien's sustained use of ant similes does appear to characterize the kind of communicative urge Fimi discusses. The rhetorical persuasiveness attained through the ant similes, however, also runs the risk of leading the reader to bypass the glimpses of orc individuality that Tolkien nevertheless offers, in exchange of actual-world relevance that becomes available from a more abstracted interpretation. This serves to illustrate how

the autonomy of the storyworld may become compromised in the reader's experience.

It is, however, also a salient example of the difference between purposive design and authorial intention. While the author's intentions remain a subject for guesswork, the effects of the purposive design of the similes can be observed as it guides the reader to experience the analogies (if not fusion) between the storyworld and the actual world. It is, however, at the reader's discretion to decide what this amounts to in their own interpretation. Seeing Tolkien's writing as technology – for the purpose of imaginatively experiencing the stories and storyworlds – thus places a counterbalance on the user's end: in taking up the technology for their use, the reader also agentively engages in the process of meaning-making and bears the responsibility for maintaining awareness of its effects on themselves. Thus, the reader may also note that, even with its collectivizing images, the epic simile ultimately diverges from the comparison with ants, returning the creatures of Sauron a degree of subjectivity and awareness of their own plight as they “hide in holes and dark lightless places far from hope” (III, 227).

6. Conclusion

From the perspective of purposive technological design, I have demonstrated here how similes function as flexible platforms for a range of functionalities, some of which Tolkien develops into a meaning-making strategy in his application of the ant similes. In their variable yet sustained use, the ant similes illustrate the technological adaptability of the simile for cumulative impact: the first instances are comparisons with some elaboration on the details, but the final simile is extended into a fully realized epic simile that hinges on the meanings established in preceding similes. This design can also be seen as an extension of the functional envelope of similes as they are used to gain symbolic control over the collective representation of imagined existents in an imagined world. Such control is attained by instructing the reader to imagine the creatures in a particular way that further resonates with multiple levels of interpretation and symbolism.

By the ant similes, and via the narrative perspective and voice of the final simile in particular, Tolkien communicates ideas about evil in a universalizing manner that does not seem to appear to the same degree anywhere else in the *Lord of the Rings*. The impact of this short narrative moment is amplified by the preceding ant similes that persuade the reader to perceive orcs as a collective. At the point of the story's culmination, the fully extended simile purposively shifts the narrative into an epic scale, further charged by the accumulated vision of evil and the universalizing logic provided by the similes' design. Thus, the epic simile contributes to how the downfall of that collective evil is rationalized and justified in a grand, proleptic vision presented to the reader looking on as if from a great distance. In redesigning and expanding the functional envelope of the classical epic simile, Tolkien creates a powerful rhetorical device. The effects of this device, however, are bound to raise questions about the way his narrative relates to his storyworld as well as the actual world. There, the meaning-making can be seen as a two-way street: the

story is constructed in the imagination of the reader on the foundation of their lived experience, which then becomes enriched by the experience of fantasy.

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SF Estrangement in Literary Translation: Translation of Neologies in the Finnish Version of *Dune*

Suvi Korpi

Abstract: This study analyzes the translation of neologies in the literary translation of the science fiction (SF) novel *Dune* (1965). As one of the most important linguistic elements in SF, neologies contribute to the worldbuilding of SF and create the estrangement from reality that is characteristic of the SF genre. Evaluating the translation of neologies is hence used as a tool to evaluate the transfer of the source text's (ST) estranging properties to the target text (TT). When the ST's neological estrangement is retained as a genre-specific feature of SF in the TT, the ST estrangement becomes accessible also for the TT reader. The study reveals that the translation has predominantly retained neologies, thus retaining the neological estrangement of the ST in the TT. The material of the study consists of the neologies in Frank Herbert's *Dune* and its Finnish translation *Dyyni* (2021 [1982]), which were analyzed to determine whether they retain or recreate SF estrangement.

Keywords: translation, estrangement, neology, science fiction

1. Introduction

The number of studies on different aspects of the translation of science fiction (SF) has been growing during the last decade. These studies have focused, for example, on the translation of SF tropes (Masmoudi), geopolitical influences on the translation of SF (Cordasco) and the translation of neologies into German (Schüler). Neologies can be considered “the intuitive feature” (Stockwell 106) of SF language, and this study focuses on the translation of neologies from the English source text (ST) to the Finnish target text (TT). Neologies can thus be

regarded as an important literary genre-defining element of SF, conveying the voice of the genre (Korpi, “Neologies”) through which the readers of SF recognize the genre and differentiate it from others (Stockwell 108). Neologies have also been considered to be the main translation problem when translating SF (Schüler, “Übersetzungsproblem”), and they are an essential means of indicating to readers that a text is science fiction (“Science Fiction” 4). The term *neology* refers both to the creation of new words and to the new words themselves, that is, *neologisms* (Stockwell 109). In this article, neology is used in the latter meaning.

The significance of neologies in SF has been studied from different perspectives. For the genre critic Istvan Csicsery-Ronay, neologies represent “the first beauty of science fiction” and “an aspect of SF that audiences desire from the genre” (5). The importance of neologies in SF worldbuilding has also been recognized by Stockwell, who argues that SF “creates new worlds by conjuring and coining new words” (125). Thus, I postulate that neologies are important in building up the *estrangement* of an SF text’s narrative world, which means that readers of SF are estranged from reality by means of “normalizing the alien” (Spiegel 376). The fictive neologies are linguistic representations of the new phenomenon, *the novum* (Suvin 79). They are the voice of the novum and the estrangement produced by it. Darko Suvin’s theory of *cognitive estrangement* has been criticized for vagueness by Simon Spiegel (369–372), who argues that instead of estranging the familiar, SF “*makes the strange familiar*” (372, emphasis original), *naturalizing* the strange and making the familiar strange by means of *defamiliarization* (372). In this study, estrangement is hence seen from this “spiegelistic” point of view, and the translations of neologies are analyzed accordingly.

This study follows Peter Stockwell’s categorization of neology into *neologisms* and *neosemes* (109). According to Stockwell and Csicsery-Ronay, neology in SF operates by either neosemes or neologisms. Neosemy refers to the development of new meanings for existing words (Stockwell 109). Hence, neosemes represent both their historical aspects and the possible futures they might have, inviting the reader to decipher the connection. For example, *spice* and *poison snoopers* in Frank Herbert’s SF novel *Dune* (1965) are neosemes. Neologisms, in turn, are new words which do not have histories (Csicsery-Ronay 19). Their strength in producing SF estrangement lies in their ability to generate imaginary differences (19). As an example, *baliset*, a musical instrument in *Dune*, is a neologism.

Ian Campbell notes that the SF genre largely developed within English and Anglophone cultures (7). As can be deduced from Jari Koponen’s bibliography of SF in Finland, a large portion of the SF published in the country also comes from Anglophone cultures. Koponen notes that since Finland gained independence in 1917, translations of Anglo-American SF have dominated the translated SF genre in Finland, preventing the Finnish audience from “seeing what happens elsewhere” (115, own translation).¹ Finnish readers are thus

¹ “Autonomianajan käännettyä tieteiskirjallisuusaineistoa tarkastellessa kiinnittyi huomio siihen, kuinka kansainvälistä materiaali oli. Euroopan eri maiden ja yhdysvaltalaisen tieteiskirjallisuuden käännosten ja esittelyjen kesken vallitsi tasapaino, ja tarjonta oli monipuolista. Tätä unohdettua perintöä olisi syytä kunnioittaa nykyään enemmän, sillä angloamerikkalaisen aineiston yksipuolinen ylivalta estää meitä näkemästä, mitä muualla maailmassa tapahtuu.” (Koponen and Sisättö, 115)

accustomed to aspects of SF that originate in Anglophone cultures. Furthermore, due to the long tradition of translating SF in Finland (Koponen and Sisättö), Finnish readers do not necessarily acknowledge that they are reading a translation rather than the ST. Therefore, it can be further deduced that translated Anglophone SF strongly affects the perception of the genre in Finland.

Based on this argument, the current study explores the extent to which neologies as genre-typical elements of the English ST have been transferred to the Finnish TT in Frank Herbert's classic Anglophone SF novel *Dune* (1965) and its translation *Dyyni* (2021 [1982]), which are currently regaining popularity due to the recent film adaptation, *Dune* (2021). When an SF text is translated, the choice of translation strategies (methods of translation, that is, how the elements of the text are translated) determines whether the neologies are preserved. The strategies can either domesticate (bring the text closer to the target culture) or foreignize (bring the text closer to the source culture). A certain amount of domestication is always present when a text is translated since the text is written in a different language for an audience in a different culture. According to Campbell, domestication removes the foreign elements of a text and disrupts this estrangement function, altering, weakening, or removing key elements of the text's meaning (7). As neologies are considered to be key elements of an SF text's meaning, translation strategies could affect the transfer of the SF estrangement function to the target language and culture by distorting or weakening the estrangement produced by the neologies. Therefore, this study aims to answer the following research questions: how are fictive neologies translated and how does their translation affect the adherence of the SF text's estrangement function, given that such neologies constitute one of the defining characteristics of the SF genre.

I have previously studied the translation of SF neologies into Finnish TTs from the point of view of *generic fluency* in the translation of SF (Korpi "Neologies," "Professional Subtitling," "Fansubbing"). These studies approached the concept of fluency in translation to determine if cognitive estrangement, in Suvin's sense (79), has been retained in the TT. According to the *Oxford English Dictionary*, the term "fluent" is associated with the ability to express oneself easily or speak a foreign language effortlessly (Simpson and Weiner 1098). As an essential element in producing SF estrangement, neologies make the translation of an SF text read fluently. In other words, fluency means that when the neologies are retained, the voice of the genre is expressed easily or effortlessly. Instead of focusing on traditional textual fluency, this generic fluency aims to determine if the ST estrangement function has been retained in the TT. A translation of an SF text is regarded as *generically fluent* when it preserves the voice of the genre, the fictive neologies. However, rather than focusing on generic fluency generally, this article focuses on assessing the translation of neologies purely from the point of view of the preservation of neologies as the voice of SF's estrangement function.

Notably, the expectations of readers of SF affect the importance of translation of neologies. When a text is translated, readers of the translation have expectations that are based on the genre characteristics of the translated text (Neubert and Shreve 126). Readers of SF anticipate words that refer to changed or alien worlds (Csicsery-Ronay 13). Hence, such readers expect to encounter neologies and to include them in the process of bringing the world of

the text to life in their minds. It is possible to attract and control the reader's attention with neologisms, to create coherence with the help of individual, core terms that are repeated (Erben, qtd. in Schöler, "Science Fiction" 62–63). Therefore, while it is not possible to argue that Finnish TT readers expect to find neologies in the TT identical to those in the ST, it is possible to evaluate whether the TT neologies are translated and produce SF estrangement in readers' minds similar to the ST neologies. Translators are responsible for carrying neologies as the voice of SF estrangement into another language, and thus they can control an important aspect of the TT's SF worldbuilding. The translator's interpretation of a text and its elements affects their chosen translation strategies, which again affect the SF estrangement produced by the translated neologies.

My previous research on the subject suggests that some neologies might be normalized in the translation as more conventional target-language expressions, altering the estrangement produced by the text in the translation process (Korpi "Neologies," "Professional Subtitling," "Fansubbing"). Therefore, this study begins from the question of whether neologies are preserved in the TT or if they become normalized in the translation. Normalization in translation has been discussed previously, for example, by Dorothy Kenny, who states that "normalisation occurs when translations contain fewer instances of abnormal or creative target language features than would be expected on the basis of their respective ST alone" (66). If neologies are normalized in translation, a potential explanation for this normalization may be found in what the translation scholar Gideon Toury calls "growing standardization" (267), which Anthony Pym aptly interprets to mean that "a source-text feature in some way specific to that text will tend to be replaced by a feature from the stock held in waiting in the target-language genre" (314). However, if neologies are preserved in the translation, SF neologies in the study's TT could be seen to adhere to Toury's law of "interference," according to which "in translation, phenomena pertaining to the make-up of the source text tend to be transferred into the target text" (275). As noted previously, neologies can be seen as genre-typical elements of the English ST, in other words, a phenomenon pertaining to the generic make-up of the ST. Toury suggests that considering the intercultural and interlingual relations of prestige and power, "tolerance of interference ... tends to increase when a translation is carried out from a 'major' or highly prestigious language/culture, especially if the target language/culture is 'minor,' or 'weak' in any other sense" (278). This would apply to the translation of English STs into Finnish.²

The material of the study, how it has been categorized, and the method of the analysis are described in the following section. The study's results are analysed with examples in Section 3. Section 4 then discusses the results and ventures to answer the research questions.

2. Material and Method

The material of this study consists of 2972 translations of neologies in the Finnish translation of *Dune*, *Dyyni*. According to Koponen's bibliography of SF

² There is no applicable research available on translation of neologies into Finnish in general.

in Finland, the translator of the Finnish edition, Anja Toivonen, translated at least two other Anglophone SF novels in 1980 (167) and 1982 (168), and the translator who inspected the translation in 2010, Ari Koskinen, translated four contemporary SF novels from the 1970s to the 1990s (Koponen 152, 179, 205). This suggests that both translators are at least somewhat specialized in translating SF novels, although it is impossible to determine whether they specialized in the genre conventions of SF in any way. I chose this classic SF novel due to its renewed popularity because of the recent film adaptation in 2021, *Dune*, in addition to its high number of neologies that consist of both neosemes and neologisms.³ Notably, the novel includes a glossary of neologies at the end of the novel titled “Terminology of the imperium” (Herbert 897–910) which provides an additional dimension for analysis.

The neologies in *Dune* have been previously studied, for example, by Csicsery-Ronay, who states that the novel’s “many imaginary neologisms ... continually challenge the reader’s ability to construct a comfortable, unified world” (39). Csicsery-Ronay divides the novel’s neologies into two groups of “loan-based neologisms; the Fremen’s, derived literally from Arabic, and the Galactic, derived from the power languages of Europe” (40). However, he further states that “judging by the commentary on the novel, few of the SF fans who have made *Dune* a success have reflected on the origins of its alien words” (41). Hence, while it is acknowledged that a part of the neologies in *Dune* are of Arabic, Latin, or Greek origin (40), it is noted in the analysis of this study that the etymological origins of the neologies did not affect the translation or, by consequence, their estranging or naturalizing function. The novel has also been studied earlier, for example, by Kara Kennedy, who notes that the names and cultures in an SF work have a significant role in making the story world understandable (100). As noted by Schüler, the translation method depends on the formation procedure of the neologism (“Übersetzungsproblem” 64), but the form and content of the neologism depend on the perception of the recipient (63). Therefore, the analysis focuses on translation strategies.

The neologisms and neosemes have been collected manually and analyzed to ascertain which translation strategy category they belong to.⁴ In order to answer the research questions and to examine the SF estrangement produced by both the ST and TT, the translated neologies are divided into two main categories, *retention* and *recreation*, depending on how the neologies have been transferred from the ST to the TT. The dichotomy between retentive and recreative global translation strategies was first introduced by James S. Holmes (48). This global translation strategy refers to “the translator’s general principles and preferred modes of action” (Jääskeläinen 116). In the current study, retentive translation strategies retain the ST’s naturalized estrangement function in the TT, whereas recreative translation strategies neutralize the estrangement function. In other words, retentive strategies retain the neology’s naturalized and estranging nature and preserve the neology. Hence, the ST genre estrangement function remains, from the point of view of neologies,

³ Further division of neologies into the subcategories presented by Stockwell (2000) was not seen to be necessary in order to evaluate the translations of neologies and answer the research question of the study.

⁴ The novel was processed in detail, identifying neologies one by one. It is recognised that the identification and analysis of neologies can be a subjective matter related to the person analysing the text. However, I have endeavoured to collect all the neologies in the novel.

accessible for readers in the translation also. For example, if the neoseme *sandworm* is translated as *hiekkamato* (“sandworm”), the estrangement function of the ST is retained. Recreation means the opposite, that is, the weakening or neutralization of the ST’s estrangement function. Hence, recreative strategies can either generalize (i.e., use a more common language expression) or completely omit a neology. The estrangement produced by a neology is lost when it is generalized as a common language expression. Complete omission of an ST neology from the TT is also an example of recreation since both its estranging and naturalizing aspects are lost. It is therefore suggested that omission of a ST neology is recreative as it contributes to creating the voice of SF anew. The smaller the overall percentage of retentively translated neologies, the more normalized the translation becomes, and the more the SF estrangement function is lost.

The dichotomy between retentive and recreative strategies was chosen in order to categorize the translation strategies based on Spiegel’s definition of SF estrangement (372). Suvin proposed that estrangement in SF must be explained scientifically (82), yet Spiegel has noted that this seems to be identical to what he calls *naturalization*, that is, normalizing the alien (373). Hence, Spiegel notes that estrangement in SF is achieved by *defamiliarization*, “making the familiar strange,” or by *diegetic estrangement*, “estrangement on the level of the story” (373). He notes that the novum must be naturalized before diegetic estrangement can happen (376). In the case of neologies, they first defamiliarize the language of an SF text. As readers interpret and understand the neologies (perhaps aided by a glossary), naturalization occurs. This, however, allows the neologies to take on a diegetically estranging function as novums that have been interpreted linguistically, yet causing estrangement at the story level of the text. Therefore, the translation strategies of neologies that, in this respect, render the TT neology both naturalizing and estranging (similar to their function in the ST) are considered retentive as they preserve the ST estrangement function. Conversely, translation strategies of neologies that neutralize either the naturalizing or the estranging aspect of a ST neology are seen to be recreative.

The retentive and recreative global strategies are divided into six local translation strategies: “specific activities in relation to the translator’s problem solving” (Jääskeläinen 116). Their selection follows the selection of strategies in my previous studies on the generic fluency of SF (Korpi “Neologies,” “Professional Subtitling,” “Fansubbing”); it is based on Jan Pedersen’s taxonomy of six categories of local strategies: retention, direct translation, specification, generalization, omission and substitution (73–74). Pedersen’s category “substitution” has been replaced with the category “compensation” to better suit the purposes of this study, and his category “retention” has been replaced with “direct transfer” to avoid confusion between the global and local strategies used in this study. The neologies in the material are thus divided into six local translation strategies: *Direct Transfer*, *Direct Translation*, *Specification*, *Generalization*, *Omission* and *Compensation*. These strategies may lead to either retention or recreation of neologies. Direct transfer refers to the direct transfer of a neology into the TT without changes, and direct translation refers to the literal translation of a neoseme, for example. Specification makes the neology more precise, rendering it more explicit or exact, while generalization, conversely, generalizes the neology, making it less

explicit. Omission means the complete omission of a neology from the TT, and compensation means adding a neology in close proximity to a generalized or omitted neology by means of specification. Examples of the use of each of these local strategies are given in the following discussion of the study's results.

3. Analysis

This section presents the overall results of the study before discussing examples of the translation strategies identified in the data. Notably, using a certain local strategy (direct transfer, direct translation, specification, generalization, omission, or compensation) does not guarantee a particular global strategy (retentive or recreative), that is, preservation (or loss) of the SF estrangement function in the TT. The results indicate that most of the local strategies can be both retentive and recreative, depending on context.

The study reveals that the majority of neologies in the TT retain the SF estrangement function of the ST. 97.78 percent of translated neologies are interpreted as retaining the estrangement function, and consequently, only 2.22 percent of neologies are interpreted as recreating the estrangement function. Table 1 presents the frequencies with which the different global and local translation strategies occur as percentages.

Table 1 Translation strategies

	Retentive	Recreative
Direct Transfer	1797 (60.46%)	3 (0.10%)
Direct Translation	1052 (35.40%)	1 (0.03%)
Generalization	14 (0.47%)	48 (1.62%)
Specification	39 (1.31%)	0 (0%)
Omission	0 (0%)	14 (0.47%)
Compensation	4 (0.13%)	0 (0%)
Total	2,906 (100.0%)	66 (100.0%)

The following analysis of examples demonstrates how the data is interpreted and categorized. The glossary of neologies at the end of the novel is analyzed to investigate how it affects the interpretation of the neology. Examples of each strategy are provided in the following paragraphs. The neologies are underlined and a back translation (BT) is provided in the examples.

- (1) ST: The Fremen have learned that you're Bene Gesserit," he said.
"There are legends here about the Bene Gesserit."
(*Dune* 49)
- TT: "Fremenit ovat kuulleet että sinä olet benegesseriitta", mies sanoi.
"Täällä on legendoja Bene Gesseriitistä."
(*Dyyni* 88)
- BT: Fremen, a benegesseress, Bene Gesserit

Example 1 demonstrates the primarily retentive strategies of direct transfer and direct translation, the most used strategies in the data. The example shows how the neologism *Bene Gesserit* is first translated with the strategy of direct transfer and subsequently with the strategy of direct translation. The reason for using a different strategy for the same neologism seems to be that, as the first ST neologism refers to a person and the second to a school of thought, the translator has decided to reflect this in a manner typical for the target language. These TT distinctive forms of the same neologism are also mentioned in the glossary at the end of the novel (Herbert, *Dune* 898; *Dyyni* 827). Hence, the glossary further explains the neologisms and their difference and thus naturalizes the initial defamiliarization produced by them. Both translations can be considered retentive. Example 1 also contains another neologism, *Fremen*, translated with the strategy of direct transfer. This neologism is also explained in the glossary (*Dune* 900; *Dyyni* 832). It, too, is considered to retain the ST diegetic estrangement function.

- | | | |
|-----|-----|--|
| (2) | ST: | “To begin, we’ll have an irrevocable directorship in the <u>CHOAM Company.</u> ”
(<i>Dune</i> 25) |
| | TT: | ”Ensiksikin me saamme peruuttamattoman johtokunnan paikan <u>YKESK-yhtiössä.</u> ”
(<i>Dyyni</i> 39) |
| | BT: | YKESK Company |
| | | |
| (3) | ST: | CHOAM was the key to wealth...
(<i>Dune</i> 25) |
| | TT: | CHOAM oli avain rikkauteen.
(<i>Dyyni</i> 39) |
| | BT: | CHOAM |

As mentioned, most of the translation strategies can result in both retentive and recreative outcomes. Example 2 presents the only instance in which direct translation has been interpreted as a recreative strategy. The acronym for the neoseme *CHOAM* is used throughout the novel and explained in the ST glossary to mean “Combine Honnete Ober Advancer Mercantiles – the universal development corporation controlled by the Emperor and Great Houses” (*Dune* 898). The full name “comes from multiple ancient Terran languages. It roughly translates as ‘Honorable Union for the Advancement of Greater Trade’” (“CHOAM”). The TT uses a translated acronym *YKESK* only once, and it is not explained in the TT glossary. However, the TT glossary does explain the acronym *CHOAM*, which is used in all other translations of the neologism in the TT. This is demonstrated in Example 3, which presents a clause in proximity to the clause in Example 2. The acronym is translated with the strategy of direct transfer, and the translation is interpreted as retentive with the accompanying explanation in the glossary (Herbert, *Dyyni* 829).

The reasons behind this inconsistency in the translation of this particular neology can only be speculated on. It could be surmised that the translator had a complete translation in mind for the TT acronym with a glossary explanation, which they decided against afterward, missing one instance in the text. Nevertheless, Example 2 demonstrates an instance of recreative translation that results in the loss of the neology’s naturalization. The TT neologism loses its potential to estrange at the story level because it is not

naturalized; therefore, the estrangement function is also neutralized. Example 3, on the other hand, can be regarded as a naturalized and estranging translation when interpreted with the context of the glossary explanation. Notably, the interaction of the text with the glossary has greatly influenced the naturalization of the estrangement function. The neologies in Examples 2 and 3 could both be regarded as losing the naturalization of the estrangement function without the explanation provided in the glossary, which makes the estrangement produced by the neology understandable to readers in Example 3.

Examples 4, 5, 6, 7, and 8 illustrate the less frequently used strategies of generalization and specification.

- (4) ST: They met in midmorning outside the Arrakeen landing field's administration building.
(*Dune* 94)
- TT: He kohtasivat aamupäivän puolivälissä Arrakeenin lentokentän hallintorakennuksen ulkopuolella.
(*Dyyni* 179)
- BT: Arrakeen airfield
- (5) ST: She recognised Galach words, read:
(*Dune* 66)
- TT: Hän tunnisti galaksinkielen ja luki:
(*Dyyni* 121)
- BT: The Galaxy language
- (6) ST: Gurney laughed, and he swung into Galacian Girls, his multipick a blur over the strings as he sang:
(*Dune* 36)
- TT: Gurney nauroi ja aloitti ”Linnunradan tytöt”, ja moninäppäin kieppui kielillä hänen laulaessaan:
(*Dyyni* 60)
- BT: Milky Way Girls

Generalization is the strategy responsible for the majority of the recreative translations of neologies, which lead to loss of the ST estrangement function. Example 4 demonstrates this recreative generalization. The neoseme *landing field* has been generalized by replacing it with an existing word, *lentokenttä* (“airfield”), which alters the meaning and renders the TT expression recreative. The estrangement produced by the ST neoseme is lost. Example 5 then presents an instance in which a neologism is generalized into a neoseme compound. Both the ST neology and the TT neoseme are further explained in the ST and TT glossaries (*Dune* 900; *Dyyni* 832). Even though the neology changes into an existing language expression, the glossary’s explanation enforces the estrangement it produces by explaining that the language is “the official language of the Imperium” (*Dune* 900; *Dyyni* 832). Therefore, the resulting TT expression can be seen to be retentive, thereby preserving the ST estrangement function. Example 6 again demonstrates recreative generalization of the ST neologism *Galacian Girls*, which is not explained in the glossary. The neologism can be interpreted as meaning the girls of an imaginary planet or race. The TT generalization refers to an existing concept. Even though it is understandable and seems to be naturalized for readers, this reference to the Milky Way galaxy may render the TT expression confusing rather than

naturalized. Although the Milky Way galaxy is the implied setting of the novel (“Known Universe”), the TT expression is not estranging. Hence, readers may wonder why it is suddenly introduced to the story. The TT expression thus loses the ST estrangement function.

- (7) ST: The thing’s sensor arms hung limply over the table, reminding Paul of some weird insect newly dead.
(*Dune* 91)
- TT: Nuuskiijan aistinlonkerot riippuivat velttona pöydän yllä ja muistuttivat Paulista jotakin kammottavaa, juuri kuollutta hyönteistä.
(*Dyyni* 173)
- BT: The snooper’s, sensor tentacles
- (8) ST: Leto lifted his water flagon, held it aloft where the suspensor lights shot beams of reflection off it.
(*Dune* 116)
- TT: Leto nosti vesikannunsa, piteli sitä ylhäällä, missä kellulamput loivat siitä heijastuksia.
(*Dyyni* 221)
- BT: floating lamp

Examples 7 and 8 demonstrate specification, an entirely retentive strategy. The neoseme *poison snooper* (*Dune* 91) is mentioned in the clause directly preceding the clause in Example 7, translated with the strategy of direct translation as *myrkynnuuskija* (*Dyyni* 173). The example clause refers to this same self-explanatory noun, which is not explained in the ST or TT glossaries. The translator has translated *thing* as *snooper*, reinforcing the estrangement produced by the neology by changing a common noun into a neoseme. The second neoseme in the example, *sensor arms*, is translated as the more specific neoseme, *sensor tentacles*, which reinforces the naturalization of the estrangement and connects it to the comparison with a dead insect that follows. Even though the neoseme is not mentioned in the ST or TT glossary, the TT expression is naturalized. Example 8 is another example of specification, in which the neoseme *suspensor lights* has been turned into a neoseme compound that explicates the object’s functionality, naturalizing it. The ST neoseme *suspensor* is explained in the ST glossary as nullifying gravity (*Dune* 908), but a similar explanation cannot be found in the TT glossary. Whereas the ST neoseme partly relies on the glossary explanation to naturalize the estrangement function, the TT expression achieves this without a glossary explanation. The absence of glossary explanations for the neosemes in Examples 4 and 7 reflects the neosemy’s self-explanatory nature within the text.

Examples 9 and 10 demonstrate the strategies of compensation and omission.

- (9) ST: The irony was that such deadliness should come to flower here in Arrakis, the one source in the universe of melange, the prolonger of life, the giver of health.
“What are you thinking?” she asked.
“I am thinking that the spice brings six hundred and twenty thousand solaris the decagram on the open market right now. This is wealth to buy many things.”
“Does greed touch even you, Wellington?”
“Not greed.”

- “What then?”
 He shrugged. “Futility.” He glanced at her. “Can you remember your first taste of spice?”
 “It tasted like cinnamon.”
 “But never twice the same,” he said. “It is like life – it presents a different face each time you take it. Some hold that the spice produces a learned-flavour reaction.
 (*Dune* 60–61)
- TT: Oli ironista, että sellainen kuolettava viha puhkeaisi kukkaan täällä Arrakisissa, maailmankaikkeuden ainoassa melanssin lähteessä – melanssin, joka oli elämän pidentäjä, terveyden antaja.
 ”Mitä ajattelet?” Jessica kysyi.
 ”Ajattelen, että rohdesta maksetaan nyt juuri avoimilla markkinoilla kuusisataakaksikymmentä tuhatta solaria deagrammalta. Sellaisella rikkaudella omistaa monia asioita.”
 ”Tarttuuko ahneus jo sinuunkin, Wellington?”
 ”Ei ahneus.”
 ”Mikä sitten?”
 Mies kohautti olkapäitään. ”Turhuus.” Hän vilkaisi naista.
 ”Muistatko kun maistoit rohtoa ensimmäisen kerran?”
 ”Se maistui kanelilta.”
 ”Mutta ei koskaan kahta kertaa samalta”, mies sanoi.
 ”Se on kuin elämä – se näyttää eri kasvot joka kerta kun maistat sitä. Jotkut väittävät että se aiheuttaa opitun maun reaktion.
 (*Dyyni* 110–111)
- BT: melange, melange, spice, spice, it

The least used strategy in the material was compensation. It denotes the instances where a generalized or omitted neology in the proximity of an instance of the same neology, or a neology representing the same novum, is added or translated with the strategy of specification. The two opposite instances are seen to compensate for or overrule each other, and the result is estranging. Example 9 demonstrates how the neology *melange* is repeated in the TT, which adds a neology in the text. After a few sentences, the neoseme for the common name of *melange*, *the spice*, is generalized as *it*. The relation between the neology *melange* and the neoseme *spice* is similarly explained in both the ST and TT glossaries (*Dune* 904; *Dyyni* 840). Thus, the demonstrated compensation is retentive and estranging. The example text also contains other neologies, but their translation will not be discussed here.

- (10) ST: Kynes shrugged. “Wait for the worm to leave.”
 (*Dune* 103)
- TT: -
 (*Dyyni* 196)
- BT: -
- (11) ST: “Too much spice beer,” Idaho said, attempting to straighten.
 (*Dune* 228)
- TT: -
 (*Dyyni* 246)
- BT: -

Examples 10 and 11 demonstrate the strategy of omission, which pertains to completely omitted clauses or sections. The reasons for this could be related to page count-related considerations or simple carelessness. Nevertheless, their

existence does affect the results of the study. Without them the percentage of estranging TT strategies would be even higher.

4. Conclusion

The aim of this study is not to suggest specific guidelines regarding how SF neologies should be translated, but rather to emphasize the role of translators as conveyors of SF's estrangement function through their translation decisions. It is necessary to examine translation strategies and to contemplate the reasons behind these decisions in order to understand the effect of translation on SF's estrangement function. Hence, the neologies of the TT have been analyzed in order to answer the research questions: how are fictive neologies translated and how does translation affect the preservation of neologies when they are considered to constitute a defining characteristic of the SF genre? To answer these research questions, this study has focused on neology translation strategies in the SF novel *Dune* and its Finnish translation, *Dyyni*, rather than on the influence of the neology formation process in either the source language or the target language on translation strategies, as has been the focus of previous studies.⁵ It seems that retaining all neologies would never be possible due to, for example, differences in interpretations of the ST and TT neologies, both by the translators themselves and the scholars interpreting the translations. Consequently, and based on the study results, it seems inevitable that if a translation of SF is studied with regard to the estrangement function, some form of neology normalization is always likely to be found.

Based on my previous studies on the subject (Korpi "Neologies," "Professional Subtitling," "Fansubbing"), this study questioned whether neologies would be retained in the TT. The results indicate that the majority of the neologies are retained in the translation. As presented in the previous section, only a small percentage (2.22%) of neologies are translated recreatively, neutralizing the estrangement function. Therefore, instead of becoming normalized as more conventional target-language expressions – thus altering the estrangement produced by the text – the results indicate that in the case of *Dune*, the translations of neologies are predominantly retentive (i.e., estranging). Instead of becoming a victim of Toury's "law of growing standardization" (267), the SF neologies in the study's TT could indeed be seen as adhering to Toury's "law of interference" (275). This could explain the estrangement the TT produces since it may be due to the dominance of Anglophone SF in the Finnish target culture. Furthermore, Suvin sees SF as educational literature, which bridges cultural gaps efficiently and "demands from the author and reader, teacher and critic ... a social imagination whose quality of wisdom (sapientia) testifies to the maturity of his critical and creative thought" (50). The translator has a role in this process, in which the nature of the SF genre calls for social imagination, for critical and creative thought.

As noted in the previous section, the predominantly recreative strategy of generalization is responsible for the majority of the small percentage of

⁵ Schüler, for example, studied the translation of neologisms from English to German in *Neologismen in der Science Fiction*, focusing on the word-formation process rather than translation strategies.

recreative translations of neologies that lead to neutralization of the estrangement function. While this may be a sign of standardization, it is only a minor indicator of displaced estrangement function and normalization of neologies as genre-specific features. Furthermore, keeping in mind the demonstrated occurrences of the strategy of omission, it is difficult to assess whether their role should be considered in the evaluation of the retention of the estrangement function in the TT or not. Without considering the omitted sentences, the percentage of estranging translation strategies in the TT would have been even higher. For this reason, it could be examined whether these omissions are a feature of the particular edition (rather than a genuine translation strategy) by comparison with previous editions of the TT.

This study indicates that defining translation strategies in detail and evaluating the neologies in their context are imperative in order to investigate whether ST neologies become normalized in the process of translation. The answer is not always unambiguous, and without specific context, the translation strategies cannot be generally defined as either retentive or recreative. Notably, the glossary of neologies at the end of the novel, can be seen as greatly affecting the results. Without the glossary supporting understanding of the text's neologies, the naturalization of the TT neologies could be weaker. Analyzing several SF novels with and without glossaries could reveal the glossary's influence on naturalization and the estrangement function. Furthermore, as neosemes have been observed to be more self-explanatory than neologisms without a glossary explanation, further study of the subject could differentiate between the naturalization of neosemes and neologisms to reveal their particular influences on the estrangement function.

In conclusion, the estrangement produced by neologies in the translation of SF could be further studied, as suggested above, and developed to answer the questions raised by this study: does the presence of a glossary influence the estrangement function and how does the form of the neology (neoseme or neologism) influence the estrangement function in translation? Furthermore, and more ambitiously, the method of combining genre studies with translation studies could be modified and applied to the study of other speculative genres as well.

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Korpi, Suvi. "Generic Fluency in Professional Subtitling. Neology as the Voice of Science Fiction in Audiovisual Translation." *Journal of Audiovisual Translation*, 4:3, 89–107, 2021.

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Ice and Ecotrauma in Isaac Asimov’s “The Martian Way”

Faeze Rezaii

Abstract: This article examines Isaac Asimov’s novella “The Martian Way” (1952) as a work that exposes the entanglements of the trauma of the environment with the ecological trauma of the humans. The narrative re-envisioned the Cold War energy crisis for a future era and visualizes the pursuit of hydropower as the appropriation of one of the ice fragments of Saturn’s rings. In doing so, it problematizes space mining and the traumatization of the environment. I examine the infliction of varied forms of violence on ice in “The Martian Way” and underscore human blindness to nonliving or inorganic matter. This analysis of the novella also focuses on how human characters suffer the consequences of their own violence on the environment they transform. Mobilizing the concept of ecotrauma, I demonstrate that the ice in “The Martian’s Way” agentially responds to anthropogenic violence. This article contributes to ecocritical discussions on the ethical mattering of inorganic matter such as water. My analysis encourages thinking beyond a singular species and necessitates a critical environmental perspective that includes nonliving entities within the domain of ethical mattering and thus moves beyond life-centered environmental worldviews.

Keywords: ice, ecotrauma, space mining, anthropogenic change, environmental ethics, matter, science fiction

1. Introduction

Isaac Asimov’s “The Martian Way” (1952) explores how the quest for unbounded water resources and territorial expansion is made possible through

anthropogenic change¹ but only at the expense of traumatizing the environment. The concept of ecotrauma is mostly understood as the distress humans experience in response to natural or anthropogenic ecological catastrophes, but it also describes the concomitant trauma experienced by the environment. Even though there is a growing body of work on ecocatastrophes and nonhuman agency, narrativizations of the traumas of the environment have received little attention in ecocritical research.² Through the lens of the human characters, Asimov's novella confers agency to nonliving matter and recenters the entanglements of human and nonhuman suffering as consequences of anthropogenic violence.

Colin Davis and Hanna Meretoja point to the root of the word trauma: "A trauma originally referred to a physical injury requiring medical treatment. It derives from the Ancient Greek word for 'wound'", but "since the nineteenth century the term has mutated so that it is now primarily used to describe emotional wounds" (1). In my reading of "The Martian Way," trauma is traced back to this original understanding of the term, and it involves both material and emotional experiences. Timothy Morton defines ecotrauma as "the very genuine pain felt by anyone with a pulse at the state of Earth today." Focusing on reciprocity between humans and the environment and building on Anil Narine's concept of ecotrauma in cinema as "the harm we, as humans, inflict upon our natural surroundings, or the injuries we sustain from nature in its unforgiving iterations" (9), I analyze not just harmful psychological and emotional experiences like grief and anxiety but also unpleasant physical and material experiences. The term ecotrauma is applied to both nonhuman and human subjects in my analysis of this novella, and it highlights the reciprocal suffering between them as the consequences of anthropogenic actions. "The Martian Way" depicts how territorial expansions in transplanetary science fiction come at the cost of traumatizing the environment. The narrative oscillates between wounds inflicted on the environment by anthropogenic activities and the trauma experienced by the human characters.

At the same time, the narrative also depicts the environment as agential and reactive. Agency is defined by Bruno Latour as the "power to act" (4, emphasis original). Carl Knappett and Lambros Malafouris oppose the conception of material agency as equivalent to "intentionality" and as being formed by human "consciousness" (ix). Interpreting the term non-anthropocentrically, Veronica Strang notes that "using the term 'agency' is indeed problematic if we assume that it entails sentience or intentionality," "but if we define it more precisely as a capacity to act (upon), it is possible to excise intentionality from the equation" and then affirms that all matter is agential (165-166). Within this framework, this article offers a reading of the text in which the environment or the ice, is traumatized, yet agential. This article's dual focus on the environment and the humans invites a dialogue with

¹ Horn and Bergthaller define "Anthropogenic changes" as caused by "human practices and technologies that have brought about the global change" (37). Davis & Turpin delineate "anthropogenic effects" as "including, but certainly not limited to: the rise of agriculture and attendant deforestation; the extraction of coal, oil, and gas, and their atmospheric consequences; the combustion of carbon-based fuels and emissions; coral reef loss; ocean acidification; soil degradation" (4).

² However, for instance in science fiction, the theme of planetary consciousness has been the focus of attention in works, such as Joan Slonczewski's *A door into Ocean* (1986).

ecotrauma, tackling both humanity's abusive relationship with the environment, which involves blindness to inorganic matter, and the potentiality of the environment to react to this relationship.

"The Martian Way" (1952)³ primarily problematizes the appropriation of water as a natural resource. The story opens as the Martians, the third generation of humans inhabiting the colonies on Mars, are experiencing a shortage of water resources. The story recounts events focalized through a third-person omniscient narrator. The protagonists of the story, Mario Rioz and Ted Long, through whose dialogues the plot unravels, are space scavengers. Meanwhile, an anti-waste campaign on Earth is gaining traction, and its spokesperson, Hilder,⁴ is campaigning to stop the transfer of Earth's water to the Martian colonies. The Martians are therefore at risk of having to abandon their homes and return to Earth. Under this pressure, the protagonists embark on a year-long journey to Saturn to remove a section of one of its ice rings⁵ and bring it back to Mars, where it will provide a natural resource for the much-needed water. While cutting and molding a fragment of Saturn's rings, the characters suffer the impacts of engineering, including physical injury and emotional distress. Ultimately, they succeed in dislodging a massive chunk of ice from Saturn's rings, which they take back to Mars to combat the shortage of natural resources on their planet.

"The Martian Way" problematizes mining and engineering in space by reflecting and underscoring a resource crisis that was foremost in the extratextual context of the novella and still is today. The novella's author, Isaac Asimov, along with Robert A. Heinlein, was the dominant figure in science fiction in the 1940s and 1950s (Patrouch 28). These decades were impacted by Cold War geopolitics and territorial expansions. Many of the thematic anxieties and tensions of the Cold War have fueled the ideology and world-building of "The Martian Way." For instance, the rivalry between the US and Russia over resource management and stellar expansion is parodied by the confrontation between the Indigenous people of Earth as the Russians and the immigrant Martians as the Americans. An urgent and prevalent resource crisis in the 1950s was that of water scarcity and drought due to low "precipitation," especially in the US "Midcontinent" (Nace and Pluhowski 1). During the Cold War period, the construction of dams on major rivers in "Asia, Africa, the Middle East, and Latin America" "under the auspices of programs of water resource development" was a strategy deployed by the US government as "an effort to convince newly independent states of America's support and good intentions" and to curb the "spread of global communism" (Sneddon 564). The dominance

³ The novella is among the most "critically acclaimed" short fictions in Asimov's monumental oeuvre, and it was selected by the Science Fiction Writers of America to be anthologized in the second volume of *The Science Fiction Hall of Fame* in 1972 (Patrouch 233). The text was also included in the collection of Asimov's short texts, *The Best of Isaac Asimov* (1973).

⁴ David Seed writes that "the fifties produced a number of specific parodies of McCarthy and his witch-hunts" (71), and "The Martian Way" is among these texts (80). In his autobiography, Asimov addresses the story and maintains that it revolves around his idea of "McCarthyism" and how the Martians, troubled by a "McCarthy-style politician," surpass the problem (*In Memory Yet Green* 650).

⁵ According to NASA "the particles in Saturn's rings are composed primarily of water ice" ("Saturn's Rings").

of water in the novella thus alludes to Cold War water management strategies and the appropriation of natural resources in general.

In the novella, the water shortage can only be resolved through expansion into outer space and the commodification and appropriation of untapped natural resources. Attention shifts from the local and finite resources of Earth, and even Mars, to the seemingly unending resources of the universe. By creating an imaginary of access to water beyond Earth, the novella also materializes the fantasy of the "cowboy economy," characterized by unending prairies with vast resources for humans to utilize (Boulding 339).⁶ In this novella, the environment beyond Earth is ideologically portrayed as an empty space without life that is fit for exploitation. As Long, one of the characters states: "The water there is just floating around in space for the taking" (Asimov 24). The text comments on a capitalist and colonial expansion that hinges upon the production or appropriation of new resources for living. This fantasy of transplanetary territorial expansion is the setting for the entanglement of human and nonhuman ecological suffering. I will first analyze the story's depictions of ecological anxieties and traumas experienced by the human characters facing a shortage of water resources, as well as the material suffering of the environment (particularly the ice rings of Saturn, which undergo anthropogenic intervention). Then, I will demonstrate how ice reacts to anthropogenic change. I argue that even though the story explicitly narrates violence against the environment, it implicitly opens up space for reflection on the environment's suffering. My analysis of ecotrauma in "The Martian Way" advocates for the rights of inorganic matter beyond the chains of life and contributes to discussions on environmental ethics by reflecting on space mining.

2. The Interplay of the Traumas of the Human and the Environment

The scavengers' experience on the ice rings of Saturn, as the point of narrative conflict, embeds the human traumas within those of the environment. There is an action-reaction relationship; the characters become suffering subjects as they damage the environment. These traumas are both emotional, i.e., sequences of anxiety and hopelessness, and physical, i.e., injuries and material harm. Having arrived on Saturn's rings, the protagonists experience anxiety and distress as they begin to shape the ice fragment. In the scene where the protagonists use a heat projector to mold some of the fragments for transport, this physical suffering of the human characters is tethered to their emotional distress. The text notes, "Rioz was swearing fluently and nearly continuously. He continued to have the impulse to drag the back of his hand across his forehead in order to wipe away the accumulating sweat" (36). The word "swear" parallels "sweat" and creates a sense of physical and sensory anxiety, while the habit of wiping away the sweat is rendered in a psychosomatic way. The

⁶ In line with the concept of "cowboy economy" (Boulding 339), Gerry Canavan notes that in spite of the ecological restrictions that humans confront, "late capitalism remains a mode of production that insists (culturally) and depends (structurally) on limitless expansion and permanent growth without end" (5).

character's behavior is explicated using the words "impulse" and "continuously," both of which resonate with a habit or a compulsion. Indeed, the novella ties the effect of being on the ice directly to the emotional state of the characters: "Ted Long wandered over the ridged surface of the ring fragment with his spirits as icy as the ground he walked on" (38). Asimov thus draws an analogy between the coldness of the environment and the character's emotional turmoil, highlighting how the character's emotional experience depends on the physical features of the environment.

The story also ties the physical experience of the characters to the physical damage and disfigurement inflicted on the ice rings. The text describes the process enacted on the ice fragment: "The material of which the fragment was composed bubbled and vanished under its touch. A section of the lip of the tremendous cavity he had already carved into its substance melted away and a roughness in its contour had disappeared" (36). The material violence inflicted on the body of ice, which ranges from creating holes to partial melting and total evaporation, is followed and paralleled by the physical hardship the characters endure. While Keralski, a crew member, is moving the heat projector to melt an area of the fragment, he injures his foot severely, and the situation is described as follows: "His crushed ankle had been the first casualty of the expedition" (36). Keralski's crushed ankle resonates with the disfigurement and physical change of the body of ice in this environment. This casualty is thus not the first casualty of the expedition but only the first human casualty, as the description of the ankle injury follows that of the cavity made in the body of ice and its subsequent shrinking. Where one is rendered as simply a change in state, from ice to water vapor, the other is rendered as a mutilation. Yet, these physical injuries to both humans and the environment can be read as actions and reactions; each reaction brings about another chain of occurrences. The narrative illustrates this interdependency by portraying the physical trauma of the human character as the consequence of the physical damage inflicted on the ice ring. The chain of actions and reactions continues further as physical injuries lead to psychic consequences: After the foot injury incident, the rest of the crew becomes deranged, restless, and exasperated. The initial ecstasy and euphoria that space travel had for them is gone, and they become the victims⁷ of their own violence.

The interlinking of physical and psychic, as well as human and environmental traumas, in the novella corresponds to Reza Negarestani's description of trauma: "There is no single or isolated psychic trauma (all traumas are nested), there is no psychic trauma without an organic trauma and no organic trauma without a terrestrial trauma that in turn is deepened into open cosmic vistas" ("On the Revolutionary Earth"). The traumas of humans are embedded within the environment's traumas; they are interdependent experiences. These entanglements challenge the conception of human psychological trauma as a distinct and exclusive experience separate from environmental traumas. However, the suffering of the environment mainly remains an epistemic blind spot within the text. The reader gains insight into the environment's suffering under space mining primarily through secondary subjects – humans – and their turmoil. This is partly because inert objects elicit

⁷ Zhiwa Woodbury points to human beings' "dual role as both perpetrators and victims" in climate trauma (4).

weaker forms of attention. We are more likely to pay attention to and have empathy for the loss or displacement of a plant than a stone because we associate the former with life, growth, and movement. The story does not portray the ice fragment as agential solely due to its motion being impacted by humans; yet it underscores the agency of ice mainly after the engineering work changes its motion. The novella casts light on this blind spot by highlighting the movement of the ring fragments impacted by human intervention on the rings as evidence of the environment's suffering, rendering the fragments as natural elements with their own agency.

3. Connecting Loops: The Agency of Ice

The narrative legitimizes the violence inflicted on the ice rings by depicting them as separate and independent fragments. The characters perceive the rings as separate, disconnected pieces that orbit around the planet, rather than as a complementary unit of a planetary system. Here, Saturn is not a self-contained holistic system, but the amalgamation of separate objects, bodies, and fragments. The initial confrontation with the fragment to be dislocated indicates this perspective:

Below him ... was one of the ring fragments. It looked like a large, irregular splotch, marring the symmetry of space, three-quarters in brightness and the night shadow cutting it like a knife. Other fragments were farther off, sparkling like star dust, dimmer and thicker, until, as you followed them down, they became rings once more. (Asimov 34)

In the fantasy of colonial appropriation, the ice fragments of the rings are extraneous entities and disposable objects. They are portrayed as potential assets to be exploited for the Martian economy. However, at times, the fragments are described as part of a whole. This approach is visible, for instance, when the narrator questions the possibility of the mission and says, "Would they be able to control jets with enough delicacy through leads slung across two miles of ice to manipulate out of Saturn's dragging gravity?" (40). Here, the ice forms part of a larger system surrounding and incorporating the planet Saturn.

Although the novella mainly portrays the human characters as individuals separate from their environment, and the ice fragments as separate from Saturn's planetary system, it occasionally connects them, as above, to highlight the situatedness of traumas. While the crew is conducting engineering and space mining on one of the ring fragments, attempting to detach it, they find solace in floating in space and gazing at the beauty of Saturn. Criticizing the people of Earth for their lack of adventurousness, Rioz notes, "They wouldn't appreciate what it's like to float and look down on Saturn" (35). The aesthetic visual pleasure of looking at a planetary being renders it possible to bond with it. The "traumatic loss of intimacy" with the environment is the main factor driving "human-upon-nature" "violence" (Amorok 29), and in the floating scene there is a suspension as the protagonists take a break from inflicting this violence and instead (re)connect with their environment.

Floating above Saturn offers the protagonists a unique way of relaxing and easing their distressed minds during mining and engineering. The novella explicates the contrast between their experiences working on the fragment and floating in space during intermissions: “The work shift of the ring fragment was the tail of the coin. The weightlessness, peace, and privacy of the space-float gave place to something that had neither peace nor privacy” (Asimov 36). The parallel between the detachment of the ice fragment from Saturn’s rings and the psychic detachment of the characters from the environment during their engineering work is followed by the sessions of floating in space and forming a visual and emotional connection with Saturn. Paradoxically, it is the human protagonists’ physical detachment from Saturn’s rings while they float that allows them to emotionally reconnect with the environment. This complex entangled relationship between physical and psychic attachments directs our attention to the dual violence of anthropogenic actions on both the environment and the humans themselves.

The novella portrays the movement of the ring fragments in a way that reaffirms their connectedness within a system. It exposes how human intervention on the fragment affects its motion and endangers the lives of humans. Matt Edgeworth defines material agency in the context of rivers, as “a force to be reckoned with” (159). The motion⁸ of the ice rings is also representative of a force and an action and renders the rings as agential. On a similar note, Karen Barad writes that “matter is not immutable or passive,” further defining matter as “not a thing, but a doing, a congealing of agency” (“Posthumanist Performativity” 821-2). According to Barad, “Matter feels, converses, suffers, desires, yearns and remembers” (“Matter Feels” 59). The text initially depicts the ring fragments’ momentum when the characters arrive at Saturn’s rings and notice the fragments for the first time: “The fragments were motionless, but that was only because the ships had taken up an orbit about Saturn equivalent to that of the outer edge of the rings” (Asimov 34). But it is only when the motion is interrupted by human conduct and the fragment on which they work goes awry, thus endangering their lives, that attention is given to the movement of the ring fragments.

Halfway through the engineering work, the characters realize that after blasting the fragment they are working on, they have “changed its orbit just a bit” (41), causing a nearby fragment to approach them threateningly. In a chain of actions and reactions, this movement imbues the fragment with agency, responding to the violence that has been imposed on Saturn’s system. The novella invests in the momentum of the ring fragments as a forceful action and represents the ice as an actant. In the discussion on the material agency of water and how it influences, for instance, the way it is contained and transported by humans, Strang writes that “all things will present specific constraints and opportunities” through their different characteristics, “thus bringing material agency to the design of the technologies and practices through which human agency is exerted upon them” (166). The human characters are subjected to the movement of the ice fragment they have selected to dislocate. Agency is not

⁸ Reflecting on the agency of ice in the context of Earth, a glacier’s movement as a result of “the pressure of its own weight” (“Science of Glaciers”) or its melting due to climate change can be understood as instances of its agency.

"one-sided and unshared" (Rezaii 116); humans impact the environment and are then affected by the environment.

The movement of the rings is portrayed as the reaction of Saturn's ice rings to the human-induced change, exposing the aftermath of space mining and illustrating the characters' fear of retribution by a planetary system. The text reads:

It was the nearest fragment of the rings, quite close considering that they were at the outer rim of the rings, where the pieces spread themselves relatively thin. It was perhaps twenty miles off, a jagged mountain, its shape clearly visible. (Asimov 40)

Ultimately, the protagonists ascribe a name to the fragment: the Shadow. The agency of the ice is only fully recognized by the characters for the first time when it is about to wreak appalling havoc on humans, at which point it is named. This situation is analogous to the contemporary concerns raised by NASA about the melting polar ice leading to sea level rise ("Understanding Sea Level"). Although scientists have long been aware of polar ice, it only garnered attention in the public domain when its melting threatened to provoke severe consequences on Earth, which would radically affect the everyday lives of human beings. The motion of the rings can be interpreted as a form of revenge by a planetary system. Ted's comment that "the Shadow is creeping in on" (Asimov 42) the characters is a paranoid imagery that metaphorically allocates some form of intentionality to the fragment and renders it a suffering subject that can wreak revenge.

The newly observed movement of the fragment causes fear and anxiety for the characters since the two fragments might collide. *The Comprehensive Textbook of Psychiatry* categorizes "intense fear, helplessness, loss of control, and threat of annihilation" as markers of psychological trauma (qtd. in Herman 33). Considering that the narrative renders the encroachment of the Shadow as a consequence of the protagonists' conduct on Saturn's rings, this approaching fragment could be seen as the Jungian archetype of the shadow. According to Carl Jung, the shadow can "be inferred from the contents of the personal unconscious" and forms the "collective unconscious" (144-5). He writes:

The shadow is a moral problem that challenges the whole ego-personality, for no one can become conscious of the shadow without considerable moral effort. To become conscious of it involves recognizing the dark aspects of the personality as present and real. (145)

When the characters encounter the Shadow fragment, they acknowledge the ethical implications of their work on the rings with the interpretation of the movement of the Shadow fragment as revenge. This is similar to the Jungian conception of the shadow, which entails a self-reflexive confrontation with moral obligations. The characters face the effects of their work through being exposed to the Shadow fragment of ice. They are indeed in the proximity of the Shadow fragment from the very beginning of the engineering process, but they do not notice it during this time. The Shadow's sudden appearance as a threat displays the material implications of space mining on the ice rings: in an environmental system, playing the role of God and altering elements always has

consequences. Along with the material implications, the sense of ecological anxiety that the characters feel when confronted with the Shadow fragment occurs because the Shadow exposes its “non-material agency” (Strang 166) too. As Strang notes, “things present potential symbolic imagery (such as visions of flow) as well as expressing energetic physical forces” and induce “human affective and imaginative responses to the materiality of things” (166). Here the characters’ interpretation of the movement of the Shadow fragment as revenge, which is influenced by the sense of their destructive conduct on the rings, presents the potentiality of ice to generate meanings.

The Shadow’s movement reminds the characters of the interrelated system of Saturn’s rings – a system that can be disturbed, diverted, and wounded and can ultimately return to traumatize other characters. Anil Narine states, “a traumatized Earth begets traumatized people;” the natural world “sustains and endures trauma as a human victim would” (13). Engineering the body of a system disturbs the equilibrium and causes other parts of the system to stray. Subsequently, the traumatized geography’s reaction causes anxiety and fear in the characters. The confrontation with the shadow is portrayed in one of the workers’ comments: “I’ll be damned!” (Asimov 42). The narrator resumes: “Once they noticed, all did. It became the most astonishing fact in the Universe” (42). Someone else says: “Look at the Shadow!” (42). As the text describes: “It was spreading across the sky like an infected wound. Men looked at it, found it had doubled its size, wondered why they hadn’t noticed that sooner” (42). Once Ted beholds the Shadow, he comments: “We can’t leave’ ... ‘Now the Shadow is creeping in on us because our blasting has thrown us out of orbit. We’ve got to change that by continuing the blasting” (42). In order to fulfil the mission and protect themselves, the characters need to continue the explosions. Yet, mining and engineering on this fragment inflicts localized pain on Saturn’s rings and on the characters. The team is thus aggravated by the possibility that, if the Shadow collides with the ring they are working on, the smaller one will be destroyed.

Portrayed as an “infected wound” (42), the Shadow embodies the material trauma of space mining, depicted as suffering a deep pain that may yet spread further. The “wound” resonates with the originary meaning of trauma as a material injury that all entities can experience. According to Hugo Gernsback, during times of difficulty or failure in experiments, humans always blame natural elements when the fault should lie with their “lack of knowledge of inanimate things” (166). “The Martian Way” illustrates how humans have figuratively and materially wounded the rings, provoking a chain reaction that echoes through the system of Saturn’s rings. Yet, in this scene, the characters project the environment as the origin of their troubles, as the culprit rather than the victim of human trauma. These conflicts are ultimately resolved before the environment can exact its revenge as the characters successfully load and transfer the ice fragment to Mars, heralding Martian independence from Earth. While this independence may be celebrated, it also shows how the Martians, rather than learning from the environmental mistakes of their forebears on Earth, have merely replicated their detrimental practices, turning Saturn into both the location and subject of their neocolonial expeditions.

4. Denaturalized Ice

Traumatization of the ice is followed by its denaturalization in the text. Brought to Mars, the fragment is portrayed not only as ice but also as an object of technological subjugation. While the crew is entering the atmosphere and attempting to land, the narrator notes, "As it dropped still closer, the bright dot at the upper end took on a crudely cylindrical form The cylinder dropped toward the ground with the ponderous slowness characteristic of space vessels" (Asimov 47). The fragment is visually similar to a spacecraft but yet is a piece of natural matter bearing scars on its body. The text further accentuates this analogy when, seeing the fragment for the first time, Sankov, the head of the Martian colony, points to this similarity and notes, "That thing that looks like a spaceship is just a mountain of hard water" (48). The storyline presents the ice as an amalgamation of the natural and the human-made, an in-between object that bears the marks of anthropogenic actions on its body. The ice that is ultimately brought to Mars is matter that testifies to its material suffering through its scarred and denaturalized body. The Martians stand still and look at the emaciated body of ice. The text indicates that the engineering work done on its body has impacted its naturalness. The novella accentuates the technological dominance of the Martians over nature as they not only transfer an ice fragment from Saturn to Mars but also transform and shape it. This technologically altered body of ice is in contrast with the representations of ice that are "raw and untrammelled by human intervention" (Dodds 101). The ice fragment is encountered by the inhabitants on Mars as a molded, scarred, and engineered body where the natural and the technological intersect.

Ultimately, the ice fragment ensures the Martians' access to hydropower. The presence of the fragment on Mars is material proof that the Martian colony has won the water war with the people of Earth. In the denouement, Sankov remarks:

Once we get this thing really organized, we can have water stations on the moons of Saturn and Jupiter and on the asteroids. We can scale in chunks of Saturn's rings and pick them up and send them on at the various stations. (Asimov 48)

Now, the Martians identify themselves as the colonizers of the entire galaxy. Here, the Martian way, much like the Cold War American way, evokes expansion and appropriation, reducing abiotic environments to objects for exploitation and commodification. Space mining, as the central trope of the novella, thus necessitates rethinking, ecocritically, of how matter matters.

5. Ecoethical Re-evaluations: On Mattering

Space mining is the central anthropocentric trope of the narrative, and it subjugates abiotic components and matters in geographies to legitimize the violence done to them. This theme perfectly reveals how entangled the experience of the human characters is with that of the environment and how they end up suffering the consequences of the violence they inflict. The story underscores that not acknowledging the connectedness of all matter in an

environment only reproduces anthropocentric actions and outlooks. Although biocentrism⁹ in environmental ethics aims to recognize this entanglement by disturbing the hierarchies among species (Torralba et al. 25), another ladder or hierarchical relationship still needs to be cast off. In the book *The Death of the Ethic of Life*, John Basl takes welfare as the criterion based on which an entity's moral status is estimated and argues that "nonliving" entities such as "artifacts" are also entitled to "having a welfare" (130, 139). In the case of the novella, the narrative disregards inanimate entities as unworthy of moral considerations and revolves around appropriating the ice fragment as an asset for Mars's economy, as Sankov joyously announces in the denouement: "Write down that we'll sell water to Earth" (Asimov 48). Thus, the ice is delineated primarily as a significant economic entity but one which, if we follow Basl, should also be worthy of welfare and care. Arne Næss's deep ecology as another strand of environmental ethics inclusively makes use of the word "life" to "refer also to what biologists classify as 'nonliving': rivers (watersheds), landscapes, ecosystems" (4–5). Næss's deep ecology allocates "inherent value in a natural object" (5) Reading the novella through the lens of ecotrauma allows us to rethink the protagonists' reduction of ice to an economic and material resource, considering instead how all matter that is part of an environment – whether living or nonliving – should be cared for. Environmental thinking must be disentangled from biocentrism for humanity to think beyond Earth-centric thought and their own species.

Without attention to inorganic and nonliving elements, such as water, environmental thinking would operate as the ideological doppelganger of anthropocentrism since it prioritizes one form of existence over another and then marginalizes and dismisses the rest. Environmental mattering does not stop with the animal and the living since the situatedness of these beings always makes them connected to each other and to the environment. As Elizabeth A. Povinelli notes, "Life is not the miracle – the dynamic opposed to the inert of rocky substance. Nonlife is what holds, or should hold for us, the more radical potential. For Nonlife created what it is radically not, Life" (176). In a similar vein, Aldo Leopold also points to the necessity of expanding the subjects of environmental ethics, writing that "the land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land" (204). Leopold's land ethic, drawing attention to the "biotic community," (204) aims to decenter the human and is "as he calls it, the ethics of the Earth" (Torralba et al. 18). On our planet, anthropogenic change affects the waters of an environment and disturbs different species, the "food chains," and the human beings (Neimanis 35). This circular chain of effects may make the human being care for their environment but only as a way to care for the health and wellbeing of one's own species. Thinking beyond a single species can only be achieved if we can move beyond Earth, networks of life, and our relational benefit-driven mindsets – an approach made possible by thinking with outer space stories or transplanetary science fiction.¹⁰

⁹ Francesc Torralba et al. map out biocentric thinking to ascribe all forms of life with "value" and note that in biocentrism, "life is the centre of the universe and is worth preserving in all its forms. Life has moral significance in itself without any discrimination between species" (25).

¹⁰ I am drawing the term transplanetary from the reading group, the Transplanetary Ecologies, organized by Rachel Hill and Makar Tereshin at University College London. Transplanetary science fiction brings expansion into focus in the genre.

The exclusionist approach in environmental thinking that differentiates between life and nonlife makes it antithetical to the purpose it aims to address. This way, one of the devastating consequences of the Anthropocene, geoengineering, is entirely excluded from environmental discussions. The Center for International Environmental Law defines geoengineering as intentional large-scale human activities designed to offset climate change through environmental modifications ("What Is Geoengineering?"). The extensive scale of this phenomenon and the role of the human as the agential figure raise concerns for environmental ethics. As Eric Katz writes, "geoengineering" is one of the "paradigmatic examples of the anthropocentrism of the so-called Age of the Anthropocene;" it demonstrates "the epistemological domination of human thought and meaning imposed on the entire planet" (29). This novella's space mining is a futuristic alternative to contemporary geoengineering. Contrary to Katz's argument, which calls for the reduction of anthropogenic interventions in the environment, the characters' interventions in the icy environment, including their attempts to "mold it into the desired shape" (Asimov 34) for transportation, suggest that inanimate entities do not reside in the paradigm of ethical mattering. Blindness to inorganic matter can be viewed as an extension of "plant blindness" – "the inability to see or notice the plants in one's own environment" – which reinforces the "anthropocentric ranking of plants as inferior to animals" (Wandersee and Schussler 3). Challenging blindness to inorganic matter necessitates cutting loose from the dualistic thinking that does not acknowledge the ethical mattering of inorganic entities. Discussing the rights of Mars and the ethical aspects of planetary engineering, Christopher P. McKay states that it is impossible to examine lifeless objects on Earth in isolation from life; thus, giving rights to inorganic objects is impractical (195). However, narratives of speculative geographies beyond Earth bring this ethical issue into focus. Discussing the ethical aspects of asteroid mining, the ethicist Reed Elizabeth Loder refers to the US Space Act of 2015,¹¹ which avoids "environmental issues in space mining, leaving an ethical cavern"¹² and maintains that "much of environmental ethics is tethered to Earth" (301). She points out that, "life-oriented bias might free space explorers from thinking they are under ethical constraints and encourage an unfettered human-centered attitude" (303). The environment that may not or does not sustain living organisms should have equal ethical value as the environment that does.

6. Conclusion

"The Martian Way" and similar transplanetary stories matter since they highlight our relationship with the environment and illustrate how we are physically and emotionally connected to it. My reading of "The Martian Way" highlighted this interconnectedness through an analysis of the interplay between the traumas experienced by the humans and the environment. Even

¹¹ The Act endows "property rights to private entities and individuals who harvest resources from asteroids or other celestial bodies" (Loder 276).

¹² Some space companies, including "Planetary Resources" and "Deep Space Industries," aim to do "space mining" for water and minerals (Shriya Yarlagadda).

though Asimov's novella is a colonial fantasy of environmental appropriation, by portraying the traumatization of the environment, it indicates that environmental mattering transcends the human, the animal, and the living to include the nonliving as well. All environments, with or without life forms, can be traumatized by anthropogenic change. In "The Martian Way," suffering occurs when material transformation is inflicted on the body of ice. All matter matters, and in this novella, suffering binds the human to the nonliving environment, most notably to the ice. As we realize regarding life on Earth, all matter is linked in an invisible web,¹³ whose appreciation as an interconnected whole benefits all its constituent parts. I therefore extend Jeremy Bentham's questions in the discussion of the rights of animals to the rights of the environment: "The question is not, Can they reason? nor, Can they talk? but, Can they suffer?" (311). Now, the questions we should ask are: Do environments have rights?¹⁴ Can they suffer pain and trauma? My reading of "The Martian Way" responds to these questions by extending mattering to the environment, be it living or nonliving, and by contesting exclusionary perspectives to open up a space for reflection on the traumatization of inorganic matter and environments. Studies of ecotrauma can create further opportunities for scholars to decenter humans and examine the traumatization of the environment through the perspectives of trees, soil, water, and other living and nonliving entities.

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¹³ As suggested, for instance, by James Lovelock's theory of Gaia or the "self-regulating" Earth (31).

¹⁴ As Evans notes "in 2017, New Zealand granted legal personhood to the Whanganui River," and as other countries followed this example, later "all rivers in Bangladesh also received legal rights". This is a positive step that can be extended towards other inorganic elements and environments beyond our planet.

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From Middle-earth to Duckburg, Worlds of Fantastic Mythmaking and Mythbreaking: On J.R.R. Tolkien’s Sub- Creation and Carl Barks’ Organic World Building

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Guest of Honour Speech, Finncon 2024. Jyväskylä, Finland. July 6,
2024. Keynote to Finncon Academic Track: “Worlds.”

I propose to speak about fantasy worlds, though I am aware that this is a rash adventure. Fantasy worlds are perilous lands, and in them are pitfalls for the unwary and dungeons for the overbold. And overbold I may be accounted, for I’ve been a lover of fantasy since I learned to read, and I have read a lot of research on it.

Like J.R.R. Tolkien, who I am quoting creatively here (cf. “On Fairy-Stories” 1), I have been mostly a wandering explorer (or trespasser) in the fantasy land, full of wonder and amazement. It has been a lifelong journey. In his essay “On Fairy-Stories” (originally published 1939/1947), Tolkien writes that “the realm of fairy-story [in this occasion meaning fantasy] is wide and deep and high and filled with many things: all manner of beasts and birds are found there; shoreless seas and stars uncounted; beauty that is an enchantment, and an ever-present peril; both joy and sorrow as sharp as swords. ...” (1).

Here, like Tolkien 85 years earlier, I attempt to share my thoughts on fantasy worlds. We will start our journey from Middle-earth, a place where mortals may wander; it is a small but most interesting part of Tolkien’s fantastic cosmos, Eä. Our journey will end in Carl Barks’ world of comics, which includes the fictitious American city of Duckburg and all its more and less realistic

surroundings. This is an author-centered essay. We will hear words straight from “the giants” of fantasy, the top picks in the “all-time-best-fantasy-authors” lists and best-selling authors in the world’s most popular literary genre.

In “On Fairy-Stories,” Tolkien first asks what fairy-stories are, what is “fantasy”, what is its origin, what is the use of it. Later, as if in passing or by accident, Tolkien ends up telling us *how* he creates fantasy worlds and writes fantasy. What are the inner drives of his imagination?

First, we have all read, and many of us have also written, a bunch of articles and books about the origins of fantasy, or fairy-stories. I am not going to waste our time talking about that. Secondly, what is the use of fantasy? We all know that it is one of the most ultimate desires we all have. So, enough of that. I am not going to bore you by telling you that fantasy is interesting, valuable, important, *precious*.

Therefore, I will end up answering the non-accidental third part of Tolkien’s famous lecture and essay: What is fantastic worldbuilding, and how is it achieved? I will approach this question by discussing works by Tolkien, Barks, and Sir Terry Pratchett, in terms of what I call *mythmaking* and *mythbreaking*.

Mythmaking and mythbreaking

Simply put, mythmaking is an artistic practice of creating new myths or reforming already existing ones. In Rick Riordan’s *The Lightning Thief* (2005), for instance, when Percy Jackson learns he is the son of Poseidon, the God of Sea from Greek mythology, we know we are stepping into a realm of mythmaking. When Tolkien rewrites the myth of Kullervo, from Elias Lönnrot’s *Kalevala*, he is also re-telling a myth; when he calls his Kullervo Túrin Turambar, he does so as a mythmaker, or a mythopoetic author.

Mythbreaking is a bit more complicated. I use the term here to describe situations where a myth is proven false, or where a known myth is converted to another form. Northrop Frye (159–170) uses the term “displacing of myths” when describing, for example, religious Christian myths reused in secular ways in the contemporary world. In fantasy and speculative fiction, mythbreaking can be used intertextually when, for example, Paul Atreides, the protagonist of Frank Herbert’s *Dune* (1965), uses myths to transform the truth in the inner context of the fantastic world. Then again, authors such as Pratchett or Douglas Adams have perfected comical mythbreaking, where myths from are reformed for humorous purposes.

Tolkien wrote that he drew all his fantasy and imagination from “The Cauldron of Stories” that holds all the myths and stories ever imagined, or anything that would ever be imagined. In his famous letter to publisher Milton Waldman in 1951, he continued that searching for the origins of a story did not interest him (*The Letters of J.R.R. Tolkien* 150). Instead, for Tolkien, fantastic worldbuilding starts from the *myth*: “Basic passion of mine ad initio was for myth (not allegory!) and fairy-story, and above all for heroic legend on the brink of fairy-tale and history, of which there is far too little in the world (accessible to me) for my appetite” (143). Later, he describes his own passion for mythmaking: “I had a mind to make a body of more or less connected legend, ranging from the large and cosmogonic, to the level of romantic fairy-story ...

which I could dedicate simply to ... England; to my country” (144). This was the creative reasoning behind his vast Legendarium: ranging from the fairytale-like *The Hobbit, or There and Back Again* (1937) to the heroic fantasy of *The Lord of the Rings* (1954–55), and to the mythopoeic, posthumously published *The Silmarillion* (1977), *The Book of Lost Tales* (1983), and most parts of The History of Middle-earth series (1983–1996).

In “On Fairy-Stories,” Tolkien states that the essential power of Faërie is the power of making effective by the will the visions of fantasy. He continues that fantasy, the making or glimpsing of Other-worlds, was the heart of the desire of Faërie. “I desired dragons with a profound desire (19),” he famously writes, and continues: “The human mind is capable of forming mental images of things not actually present. The faculty of conceiving the images is (or was) naturally called Imagination” (21). For Tolkien’s mythmaking – his fantastic worldbuilding – however, the fantastic elements and imaginative ideas are not the only important things. He wanted his fantasy world to also be realistic within the laws of its own sub-creation: “Probably every writer making a secondary world, a fantasy, every sub-creator, wishes in some measure to be a real maker, or hopes that he is drawing on reality: hopes that the peculiar quality of this secondary world (if not all the details) are derived from Reality, or are flowing into it.” (“On Fairy-Stories” 33). The fantastic world is made credible, even plausible, by giving it realistic and logical elements. There should be trees, plants, animals, the sun and the moon, stars, earth, wind and fire, songs, *et cetera*.

Pratchett and Barks are, by comparison, not just famous for their mythmaking, but for *mythbreaking*, since they take famous myths and stories from our (primary) world and give them imaginative twists and changes for comic purposes. Pratchett makes fun of, for example, grim Christian images of Hell and demons. He turns Death itself into a comic personification of the concept, he ridicules magic in many ways, and breaks the logic of story-building. He even laughs at the genre of fantasy as a concept – but it is a gentle laugh we can all join in if we want to.

Barks, in turn, makes comical uses of mythic milieus like the Seven Cities of Cibola (made of gold), the utopian lost city of Tralla La (a reference to James Hilton’s *Lost Horizon*’s Shangri La), or the land of Terries and Ferries beneath the ground. There are science fiction milieus of outer space, the Moon, and Mars. Barks also constantly remakes and breaks myths like the philosopher’s stone and the flying carpet, and depicts fantastic creatures like dragons, hydras, harpies, Loch Ness monster, witches and knights. He also creates his own mythical devices, such as the golden helmet of Olaf the Blue, capable of making its owner an emperor of America, or the first coin of Scrooge McDuck, thought to be a magical artefact by some. Barks’ comics also include lots of science-fictional elements like futuristic machines capable of shrinking or enlarging objects, brain-altering devices, forces of shapeshifting, hypnotism, teleportation, and time travel. His comics are certainly rich with fantastic and mythic elements.

Tolkien's mythmaking

Tolkien's mythopoeic vision could be seen as linguistically centered (Shippey 6–13): although his basic passion was for myth, he started his creation from the languages. He first created fictitious languages with his brother Hilary when they were children, with warm guidance from his mother Mabel, and he continued it throughout his life. He and his wife Edith wrote each other letters in secret writing, which had to be decoded to become understandable. He was a philologist, a professor of language, and a true lover of languages both real and imagined. Tolkien's fantastic *Legendarium* and his fantasy world – Middle-earth and its surrounding Arda and Eä – also started with a lingual play. Tolkien invented his first elven languages, and only after that started wondering what kinds of creatures might be speaking those languages, and inventing stories revolving around those speakers and their cultures.

As a sub-creator, a maker of his own world, Tolkien follows the mythopoetic logics discussed and pondered earlier by numerous thinkers, like Plato, Aristotle, Plotin, Origen, and later Sir Philip Sidney and Percy Bysshe Shelley. One of the (quite) modern fantasy authors, Scottish writer George MacDonald, also writes in his seminal essay "The Fantastic Imagination" (1893) that "man may, if he pleases, invent a little world of his own, with its own laws, for there is in him which delights in calling up new forms – which is the nearest he can come, perhaps, to creation." Expressing the same sentiment in "On Fairy Stories," Tolkien follows in the footsteps of earlier Victorian fantasists.

It is not, however, just the frames of the world – the big picture – that the fantasy author is creating. Tolkien, for example, was initially interested in those Elves who spoke his invented language, later known as Quenya. In the 1930s, for another instance, he wrote down a sentence in the back of an exam paper: "In a hole in the ground there lived a *hobbit*" (Tolkien, *The Hobbit* 1). He then began to ponder "what is a hobbit?" What is the meaning of that word? Is that thing a character of a story? This became a creative impulse for *The Hobbit*. As we all know, such *characters* inhabiting the fantasy world are vital; readers can become familiar with them, identify with them, and share feelings with them. These characters need places to be, and they need background, history, and future. There's the geography of the world, there are the (changing) maps of the world, as well as genealogies and family trees that give characters a sense of rootedness, history and pedigree. Characters can also be outsiders, unfamiliar with the surroundings, orphans, misguided thugs, or whatever you can imagine.

Carl Barks's mythmaking and mythbreaking – following Tolkien's footsteps?

Millions of readers were and are inspired by Tolkien's creative work. One of the authors who saw Tolkien's genius in worldbuilding was Barks, a comics author most renowned for his stories about Disney characters like Donald Duck. Walt Disney Company created the first few of these original characters, but Barks also did a huge amount of work inhabiting his comics world with new ones. Most importantly, he created Scrooge McDuck, who became the most successful character in the Disney adventure comics era. Scrooge is a peculiar

character; hermit-like but warm-hearted, when necessary. He is an extremely rich and mingy billionaire and adventurer, who goes into various fantastic journeys with his nephew Donald and grand-nephews Huey, Dewey, and Louie. Barks also created important side characters like Gyro Gearloose and Gladstone Gander, developed existing characters like the nephews and Daisy Duck, and created interesting villains like the Beagle Boys, Flintheart Glomgold, and the witch Magica De Spell. The names of these characters are witty, funny, and revealing of character traits.

Barks was already an esteemed author of comics, when he became familiar with Tolkien's fantasy, first introduced to Middle-earth by Barbara Anderson (under her maiden name E. B. Boatner). In the 1960s, American youth was infatuated by Tolkien's work. It is assumed that Barks never actually finished reading *The Lord of the Rings*, but he read large parts of it and was amazed by the amount of work Tolkien had to put into his trilogy – writing to Anderson in 1965: “How could anyone invent those family trees and surroundings and keep them all in perfect order, if he was not a genius?” In his letter to Malcolm Willits in 1960 Barks wrote that patience and a big trash bin are the writer's most important tools (283). When reading Tolkien's fantasy, accordingly, he was perplexed by the number of maps, family trees, languages and background stories of the books.

Barks, however, also saw some similarities between Tolkien's creative targets and methods and those of his own. He was pleased by Tolkien's insistence that his fantasy did not have any hidden messages. Like Tolkien, who once wrote that his goal was “literary pleasure” (*The Letters of J.R.R. Tolkien* 414), Barks emphasized the enjoyment of reading the stories – but was also glad that somebody took fantasy so seriously. On the other hand, he also contrasted his own use of mythmaking to Tolkien's. He writes that his style was not a result of researching classic, stating instead that “it was the summaries of classic fairy tales and stories that I've read when achieving my public-school education that left a permanent mark on my style for creating plots, choosing topics and milieus” (Barks 283). Barks even admitted that Tolkien's works were the first fantasy books he had ever read; he had, for instance, not read Lewis Carroll's *Alice in Wonderland* (1865) or the fairy tales of the brothers Grimm or Hans Christian Andersen – only summaries.

When Barks was reading *The Lord of the Rings*, as a strange coincidence, someone wrote him a fan letter from Seattle saying that “long Donald Duck and Scrooge McDuck adventures create that sense of wonder that is usually lacking in most fantasy stories.” Another fan had just earlier written to him, “You have created a great fantasy world – and you make it more plausible by humor aimed for the adult audience” (Barks 283). Surprised by such remarks, Barks started thinking about the fantasy aspects in his works. Earlier, he had considered his “speaking animals” – as he called them – just caricatures of human beings. Now he started wondering whether he was in fact a fantasy maker and wrote to Anderson that “maybe for the last 23 years I've written stories about Middle-earth, just not knowing it” (283).

So, is Barks writing fantasy? He is certainly (sub)creating “another world” and, in a way, he is also mythmaking and mythbreaking. Barks' creative style is what I call *organic worldbuilding*. His world is never created wholly; worldbuilding is a reactive and on-going, constant process of creation and recreation. Everything is invented for a reason, and those reasons focus on three

central frames of reference: milieus and atmosphere, the story, and characters. Barks' imaginative work expands when needed from the starting point of just telling a story. After all, he considered himself a "working man," who was simply paid for writing interesting comics for young audiences – and he did that to the best of his abilities. If the most suitable central character to tell the story was Donald Duck, he wrote about Donald. If not, he chose again. If the publisher wanted a story about Gyro Gearloose, Barks wrote about Gyro.

Barks would, then, perhaps not have called his creative work "worldbuilding" as such, but he was still following classical creative style. His work was greatly influenced by the working methods he learned as an animation maker at Disney studios, and he also rebuilt some characters taken from there for his comics. For instance, while Donald Duck of the original animations was an aggressive rascal whose speech was hard to understand, Barks recreated him in his comics as a lazy but occasionally enterprising, likable everyman character with whom the readers could easily relate. Even though Barks wrote what he was asked to by the publisher, then, he used his creative freedom when developing a story from that starting point. In Michael Naiman's interview in 1993, Barks states that his favourite subjects were treasure hunting, the resolution of old myths, and outer space (83). Quite fantastic and speculative?

If we compare Barks' organic worldbuilding to Tolkien's large-scale mythopoeic sub-creation, we can easily see that Tolkien, by contrast, does not worry too much about characters or the flow of the narrative. He concentrates instead on languages, races of people, larger structures and battles of cosmological depths. Barks, in turn, is not interested in battles of good and evil or philosophical questions of faith and friendship, struggle or defeat. He does, however, like Tolkien, consider milieus important. In 1963, Barks wrote that he always tried to tie his stories in a certain place: "If it is supposed to be the Andes, it should look like the Andes. Even the jokes should be something reflecting the atmosphere, locals, nature and geography of the Andes" (Blum, "Barksin klassikot" 9). According to Geoffrey Blum ("Barksin klassikot" 9–10), Barks always criticized contemporary adventure movies like the Star Wars trilogy (1977–1983) and the Indiana Jones films (1981–2023) for focusing on quick-paced action at the expense of storytelling, instead of the kinds of plot junctions and connections that he himself gave a lot of effort creating. "Milieus and atmosphere should be described accurately, because the plausible story is tied together by them," he writes (*ibid.*).

In "Mystery of the Swamp" (1945), one of the early Donald Duck adventure comics, Barks also practised some creative work similar to Tolkien's conception of *The Hobbit* – without being familiar with Tolkien's work at the time. When creating the gnome-like creatures of Gneezles, Barks used his own concept art of Disney's seven dwarfs, from 1935, as a starting point (the movie *Snow White and the Seven Dwarfs* came out two years later). He used the word gnome (no-me, noumi, with a folkstyle pronunciation) and gave these comic characters funny appearances with long beards, big noses and Amish-style hats, medieval helmets and halberds, and Oklahoman accents (Blum, "Myytti vie mennessään" 273). Barks describes his spontaneous creative work on the "Mystery of the Swamp:"

Suddenly I began thinking of the Everglades. What could Donald do there? What sort of creatures besides alligators would he find? And just like that, I thought of all these weird little people, like gnomes. The name Gneezle came from gnome. I tried to make them look strange, like fairy creatures rather than part of our human world. They had pointy ears and funny feet and wore crazy costumes, but they had lived in the area so long that they had become swamp Okies (Blum, "Myytti vie mennessään" 273).

Later, Barks created lots of similar "little people," like the funny-looking small humans in "Plain Awful" in "Lost in Andes" (1949), Terries and Fermies in "Land Beneath the Ground" (1955), and pygmy Indians in the "Land of the Pygmy Indians" (1957). There's something hobbit-like in his sympathy for these little humanoid creatures. The land of Gneezles, however, was Barks' first attempt to create a whole imagined world.

Conclusion: The legacy

Finally, what about Duckburg? In Barks' long active career, it started as an inconspicuous background for his Donald Duck comics, but later evolved into a fictitious city, located in the fictitious state of Calisota. It is not, however, always there; it travels a lot, moves, and changes. Barks writes in a letter to Pål Jansen in 1978:

Duckburg was originally supposed to be near Burbank, California, where the Disney Studios were. But it of course moved regarding what the story needed. It became an imaginative city, a sort of fairyland. It had a desert, a lake, a sea, snow and tropical thunders, whatever was necessary. I would have ended up with a lot of problems, if I would have kept it in California" (Blum, "Surffausta verkossa ja vesillä" 178).

Later, following Barks' trail, the so-called Donald Duck universe became a fictional shared universe of animations, games and comics that included his Duckburg. Most famously, comics author Don Rosa continued Barks' work, notably by retelling Scrooge McDuck's life story built up from Barks' own hints and details. Rosa rebuilt and developed both Duckburg and its characters in his stories from 1987 to 2006, and many others have continued in both of their footsteps.

Tolkien, then again, with *The Hobbit* and *The Lord of the Rings*, invigorated the genre of fantasy. He became the father of modern fantasy, and predecessor and godfather for generations of fantasy authors. Hundreds of millions of people have read his books and watched the film and tv adaptations (Korpua 1).

In fantasy, myths are remodelled, changed, and remade endlessly. Fantasy worlds are constantly created, and many of them follow the steps of the giants. Both Tolkien's and Barks' work lives on in that work of creation. Their legacy is to inspire us and open our imagination for many types of mythmaking and mythbreaking, mythopoeic creating and sub-creating, lingual creation, and organic making. The result is fantasy in its many forms, for us to enjoy as the authors themselves wanted.

Biography: Doctor Jyrki Korpua is a Researcher of Literature at the University of Oulu. He has edited and published books and articles for twenty years, including *The Mythopoeic Code of Tolkien: A Christian Platonic Reading of the Legendarium* (McFarland 2021) and *Tolkien and the Kalevala* (Routledge 2024). Korpua was one of the founders of *Fafnir* and served as the journal's editor-in-chief in 2014–2017. From 2024 on he has acted as the chairperson of *Fafnir's* Advisory Board. Korpua was the scholar Guest of Honour at Finncon 2024, Jyväskylä, Finland.

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Conference Report: SFRA 2024

Transitions
May 7–11th, 2024
Tartu, Estonia

Essi Varis

Spring, too, is a kind of transition. The wind was still chilly but the sun already warm on the second week of May when science fiction researchers from across the planet gathered in Estonia. Their destination: the quaint university town of Tartu, which our ten-strong Finnish delegation soon declared an ideal conference venue due to its beautiful historic buildings and peaceful cobblestone streets that could take an average conference-goer anywhere they might wish with just a few minutes' walk. Those needing a break from the briskly flowing conference discussions could also take a longer stroll – perhaps through the soaring cathedral ruins, across the Devil's Bridge and the Angel's Bridge, or along River Emajõgi.

In stark contrast to the old-timey, small-town charm of Tartu, *SFRA 2024*'s program booklet promised remarkably forward-looking and globally-minded scholarship with theme tracks focusing on environmental SF, co-futurisms, gender and queer SF, as well as societal change. The titles of individual panels – with their many mentions of crises, interventions, alternatives, and the end of capitalism – excited one's researcherly imagination further still.



University of Tartu Art Museum's plaster copy of the torso of the "Barberini Faun" meets Russian playwright Alexander Sukhovo-Kobylin's thoughts on bicycles as quoted in Meelis Friedenthal's keynote lecture.

Indeed, research is not only a business of reason and observation, but also a business of imagination. As the representative of University of Tartu's faculty noted in their welcome speech, from time to time, even biologists need to imagine entire lives of entire animals just by examining their bones or

droppings. This anecdote was likely meant to imply that the members of the Science Fiction Research Association are, in essence, investigating imagination – the very “bones” of all understanding and discovery. Yet, the more straightforward interpretation of the analogy is that in inquiring into works of speculative fiction, we are, in fact, investigating the “droppings” of human imagination – a profane-sounding pursuit on the level of metaphor, perhaps, but not at all in practice! If we think it important to understand what kind of creatures roam our forests, surely it is at least as important to understand what kind of creatures roam our minds.

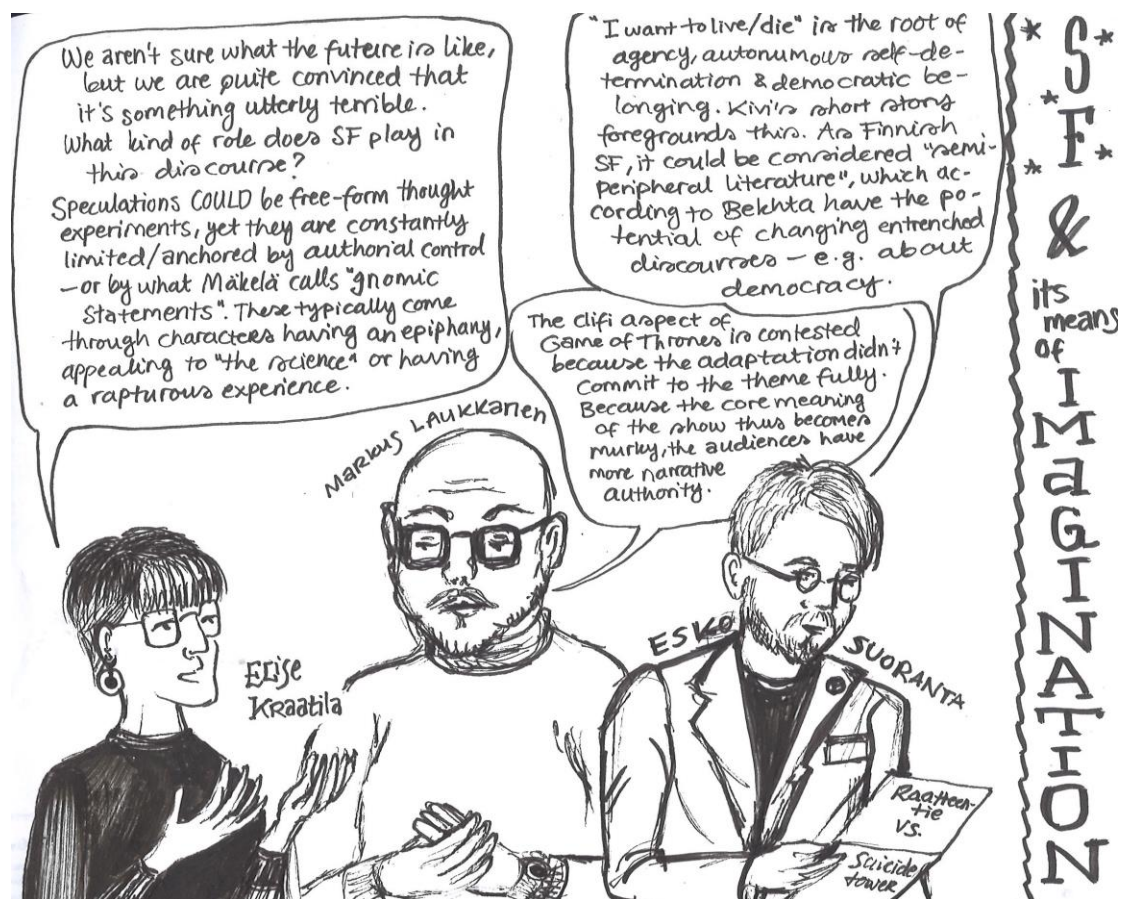
In their opening speech, SFRA’s President Hugh O’Connell went on to quote the famous words of Antonio Gramsci: “The old world is dying, and the new world struggles to be born: now is the time of monsters.” Monsters, by definition, defy the norms and boundaries on which we base rational thought and everyday routine; thus, they are more easily grasped and penned by the divergent practices of imagination and speculation. An unspoken understanding of this seemed to be shared by most participants across all panels as most presentations I witnessed hinged on the assumption that imaginative fiction can, indeed, provide privileged perspectives into the unpredictability of crises and transitions – and this is why we must discuss them especially, especially now.

Incidentally, “droppings” could also be appropriated as a somewhat disrespectful –but humorous! – term for works that have, for one reason or another, dropped outside of canon. These sorts of nearly forgotten SF stories have thankfully been excavated by, among others, Bogi Takács Perelmutter, whose keynote lecture took the audience on a tour of early queer and trans SF narratives. In addition to tracing the genealogies of various queer SF tropes, the lecture underlined the intertwining of censorship and language politics: while small national languages like Hungarian are vulnerable to state censorship, fiction written in globally spoken languages like English is much more difficult to repress. In spite of this, Takács Perelmutter discovered that the early queer narratives published in Hungary and the USA are surprisingly similar in terms of thematics, which could be explained by the transnational workings of self-censorship and religious pressures.

Questions of religion and imagination were also brought to the forefront in the second keynote speech, delivered by one of Estonia’s most celebrated fiction authors, Meelis Friedenthal. More precisely, Friedenthal argued that religions, imaginative narratives, and dreams share various functions: religions are born out of dreams and storied mythologies, while, conversely, both literature and religion create the kind of social cohesion that enables us to dream collective dreams. This makes religions and speculative fictions the social sites of apocalyptic and utopian imaginaries. Yet, Friedenthal concluded that literature should not be seen simply as “an extension of” or a secular alternative to religions. “Literature should work according to its essence, that is, like a dream” which can “model possible worlds for us,” he argued. After all, what we truly need at the dawn of global crises is not the nostalgic comfort of failing myths and old beliefs, but the ability to imagine something completely new, “a new morning in the world.”

What this “new morning” could or should be like is unfortunately not the kind of question that could be settled within the scope of one literary conference. On the global scale, however, there are well over 50 programs

dedicated to making SF-based interventions to reality, as Marie Roussie's presentation highlighted. These initiatives, such as Making Tomorrow Collective in France, employ interdisciplinary practices from art, design, science, science fiction, economics, and more to generate new visions and confront current policies. Such approaches are exceedingly important because, as the panels on "Speculative Divination" and "SF's Means of Imagination" both stressed, the frameworks of capitalism and the Anthropocene can easily create "false certainties" about the future. When all the news and trends continually and repeatedly point towards existential disaster, imagining other outcomes becomes increasingly difficult. Speculative fiction, on the other hand, can break – and has often broken – these molds: Charlie Toogood's presentation, for instance, suggested examining utopian literature from Victorian England because the futures imagined before the apprehension of the Anthropocene are not limited by the horizons of expectation it now casts.



Notes from the panel "SF and its Means of Imagination."

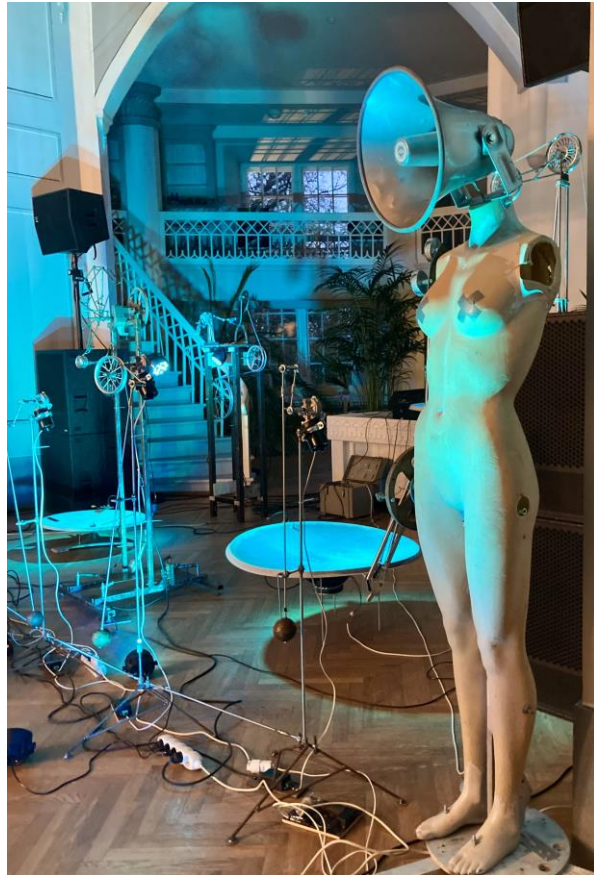
Indeed, some presentations were entirely focused on reframing what SF and speculative thinking are and what kind of roles they could play in our continuously transitioning reality. Jo Walton suggested understanding SF as a form of "boasting" because it is neither "revelatory nor obfuscatory," but, rather, a collaborative imaginative project – a dynamic modality between what is true and untrue. In my own presentation, I compared this kind of oscillation

between various domains and possible worlds to the work of mythological trickster figures. In the face of major transitions and radically uncertain futures, the cognitive toolkits of empiric sciences are going to prove inadequate by definition. Hence, the best way to face the unknown is to “think like a trickster” – that is, to conjure and juggle various alternative and parallel speculations as nimbly and cleverly as possible.



Some panels, such as “Breaking Print from Boundaries,” ventured beyond SF literature into other media and materialities.

To the delight of many, *SFRA 2024* also sought to open the participants' minds to new possibilities in other, more experiential ways. From April to May, University of Tartu's art museum housed an exhibition titled "Transforming Literary Spaces," in which artists from many different countries explored by the means of many different art forms how engaging with fiction reconfigures our engagement with places – and vice versa. The curators of the exhibition, Francesca Arnavas and Mattia Bellini, kindly gave the SFRA delegates a full tour of the exhibition on the first evening of the conference – whereas on the final evening, the conference banquet concluded with a captivatingly strange multimedia performance by the Estonian Posthumanist Hangover group. In a small but beautiful gesture towards a more hopeful future, the all-vegetarian banquet food was inspired by Palestinian dishes. All in all, the local conference team led by Jaak Tomberg deserve much credit for the entire event's exceptionally thoughtful and successful organization. Many Finnish SF researchers are certainly looking for an excuse to cross the gulf and visit Tartu again soon!



The setting for Posthumanist Hangover's performance in the University of Tartu Museum.

Biography: Essi Varis, PhD, has studied narratives across media from various cognitive perspectives since 2013. She is currently working on the final stages of her personal post-doctoral research project titled *Metacognitive Magic Mirrors: How Engaging with Texts and Images Enables and Extends Speculative Thought* (Finnish Cultural Foundation 2020–2025) and serving in the jury of Finland's national comic book award, Sarjakuva-Finlandia. She also served as an editor-in-chief of *Fafnir* in 2021–2023.



Interview with Nicolas Lietzau: Approaches to Storytelling, Worldbuilding and Fantasy Geographies in *Enderal* Mod and the *Twelfth World* Novels

Evgenia Amey and Garrett “Wereyoi” Moore

This essay is based on the interview with game developer and writer Nicolas Lietzau and focuses on the role of place and environmental storytelling in digital fantasy RPG (role-playing game) *Enderal: The Shards of Order / Forgotten Stories* (SureAI 2016/2019) and the approaches to narrative and worldbuilding that Lietzau adopted while working as a project lead for the game as well as in his ongoing work on his *Twelfth World* novel series (2019–). The essay offers perspectives from both production and reception points of view and draws on in-game content, earlier interviews with Lietzau,¹ and the interviews conducted by both authors: Evgenia Amey interviewed Lietzau in October 2023, and Garrett “Wereyoi” Moore interviewed Lietzau in 2018, during the creation of a four-part video analysis of *Enderal* on his YouTube channel.²

Focusing on the fantasy worlds of *Enderal* and *Twelfth World* novel series, we adopt cultural geography perspectives to consider approaches used in creating immersive fantasy settings and engaging narratives, while balancing the fantastic with coherence and realism with regards to worldbuilding. As examples of indie game development and fantasy writing outside of traditional publishing respectively, *Enderal* and *Twelfth World* allow the writer(s) relative creative freedom, also resulting in a more personal(ized) audience feedback,

¹ See Angelarts “Enderal Project Lead & Author of Dreams of the Dying: Nicolas Lietzau Interview (Part 1),” “Let’s Interview Ben Britton & Nicolas Lietzau (Part 2),” and “Let’s Interview Ben Britton & Nicolas Lietzau (Part 3).”

² See Wereyoi’s “Enderal: A Retrospective | Part 1 – Mechanics” and “Enderal: A Retrospective | Part 2 – Story.”

which offers an opportunity to look more closely at how creators' (sometimes unconventional) approaches and decisions resonate with readers and players.

Enderal: The Shards of Order / Forgotten Stories and Nicolas Lietzau's Twelfth World Novel Series

*Enderal*³ is a full-conversion, non-commercial mod⁴ for Bethesda's *The Elder Scrolls V: Skyrim* (2011), by a German developer team, SureAI. *Enderal* is an open-world dark fantasy single-player RPG, and although it is built on the *Skyrim* engine,⁵ it can be viewed as a game on its own – set in a unique world, containing original lore and narrative, being fully voice-acted (in English and in German), and featuring an original soundtrack – with a scope impressive for a non-commercial project. In addition to the core team of 7 to 10 developers, numerous other contributors included coders, testers, proofreaders, and more than a hundred voice actors,⁶ who invested their time and effort as unpaid volunteers.

During the production of *Enderal*, writing was done alongside the development, which prioritized the narrative and ensured the confluence between narrative, audiovisual and ludic aspects. Lead developer and writer Nicolas Lietzau wrote the story, dialogue, and some of the in-game books. The approach adopted by SureAI resulted in a compelling, story-driven experience that many players appreciated. The mod enjoyed an overwhelmingly positive reception, winning in the category Best Fan Creation at the 2016 Game Awards and being added to the ModDB Hall of Fame. In Steam reviews⁷ and online discussions on different platforms,⁸ fans particularly praised *Enderal* for its engaging and complex storytelling, soundtrack, and fleshed-out and realistic characters, which also inspired a variety of fan productions (such as fanfiction and fanart) on platforms like Tumblr and Archive of Our Own (AO3).

With the game's release, Lietzau began working on a novel series, which was initially set in the universe of *Enderal* and explores the past of one of the main characters from the game, Jespar. In 2019, Lietzau serialized the first book in the series, *Dreams of the Dying*, on his Patreon and subsequently released it, with notable edits, as a self-published debut novel in 2020. The novel, which chronologically precedes the events of the game, can be read as a stand-alone, and knowledge of the game is not required to understand the plot.

³ First released in 2016 as *Enderal: The Shards of Order*, the mod was subsequently released on Steam in 2019 as *Enderal: Forgotten Stories* alongside the DLCs (downloadable content, i.e., additional content for an already released video game that must be downloaded separately). *Enderal* is free to play for anyone who owns a copy of *Skyrim*.

⁴ Video game modding involves modification of aspects of a video game by means of software plug-ins, which are commonly produced by fans of the game (Gallagher, Jong, and Sinervo 32). See Rob Gallagher, Carolyn Jong, and Kalervo A. Sinervo's article "Who Wrote the Elder Scrolls? Modders, Developers, and the Mythology of Bethesda Softworks" for more information on *Skyrim* modding.

⁵ See Weryoi's "Enderal: A Retrospective | Part 1 – Mechanics" for a detailed analysis of the overhaul of the base game.

⁶ See the SureAI website, Weryoi "Part 1"

⁷ See Steam page https://store.steampowered.com/app/933480/Enderal_Forgotten_Stories/

⁸ See Reddit <https://www.reddit.com/r/enderal/>

In spring 2023, Lietzau issued a public announcement that due to a copyright claim, which made trademarking *Enderal* and producing further installments based in that universe problematic, thenceforth his novels would be set in a unique fictional universe, *The Twelfth World*.

***Enderal*: Fantastic Geographies, Environmental Storytelling and Sense of Place**

Exploring the fictional continent of *Enderal* in the course of the game, players encounter a variety of landscapes that include biomes ranging from snow-covered mountains and forests to deserts and jungles, and numerous locations, such as ruins, dungeons, and settlements. The story is delivered not only through quest content and dialogue, but also through overheard non-player character (NPC) conversations, bard songs, in-game books, and via environmental storytelling, soundtrack, and game mechanics. Environments in *Enderal* are actively utilized in telling the stories of particular areas, communities, and individual characters as well as the fictional world as a whole (Jenkins 122–126).⁹ Echoing Paul Martin’s observation in his study of *Oblivion*, the narrative elements are embedded in the landscape of *Enderal*, and even if the player decides to ignore the main story, the growing threat to the world manifests in a variety of instances: physical evidence of recent events, NPC utterances, and attacks by characters who have succumbed to the Red Madness – a mysterious and spreading disease. Side quests tell their own story, often through narrative embedded in the environment and without the presence of characters, leaving the player to piece the past events together (Jenkins 123–125).

In some regions and locations, the player is given hints of what to expect by reading in-game books, listening to bard songs, and overhearing bits of NPC dialogue. The capital city, Ark, where the player can rest, buy supplies, and purchase a home and where the major part of the main story events take place, is divided into districts based on residents’ status and occupation. In each of those, not only the audiovisual representation of the place is different, but the player will be treated differently by NPCs, invoking different atmospheres and inviting different styles of gameplay. Through players’ connection to NPCs and to in-game locations, *space* becomes *place*, that is, space is imbued with meaning and a sense of place is created, as described in Edward Relph’s 1976 *Place and Placelessness* and Yi-Fu Tuan’s 1974 *Topophilia* and 1977 *Space and Place*.

In an interview conducted in October 2023, Amey discussed the role of place and examples of environmental storytelling in *Enderal* with Lietzau. The interview excerpts have been edited for readability.

Evgenia Amey: Regarding the various regions and different biomes, how did you come up with the idea of including this many or these particular ones? And how did you discuss it with the team? Was everyone just throwing out ideas or was it mostly up to you [as a writer and narrative designer]?

⁹ Also see Westerside and Holopainen on environmental storytelling in video games. See Jansen on introducing a new dynamic to player-nature relationship in *Skyrim* through ecomodding.

Nicolas Lietzau: Well, half and half, I would say. There were certain biomes and regions that had a narrative purpose, so these were discussed beforehand. And besides that, we always knew that we wanted more biomes. Obviously, in video games, you sometimes have to cut corners in terms of realism because the transitions [between regions/biomes in games] are way too fast and some of this stuff wouldn't work in reality. But there was a driving factor in why we designed the world as we did – it was to have more visual diversity. Of course, there are some arguments for limiting something to a single setting, like *Skyrim* did, actually. But I think more diversity in [setting] is a lot better. So, that was one side of the coin, and the other was that some of the regions and areas were, of course, connected to the story.

EA: What was your favorite region, in the sense of geography and aura and also the narrative?

NL: Silvergrove was my favorite narratively, that's for sure, and there was also a great confluence between the story and the visuals. It came together quite nicely, I think, with this kind of uncanny beauty.

Silvergrove is an area visited during the main quest storyline. The seemingly idyllic, if eerie, seaside village is later revealed to have a darker side, which causes the player character to question the nature of reality during what has been considered by many players to be the most heart-wrenching quest in the game.

The uncanny, strangeness in the familiar, is also utilized in the prologue of the game. What seems to be the player character's childhood home evokes the atmosphere of an idyllic pastoral setting at the start before shattering into a nightmare.¹⁰ Dreams play a significant role in the narrative, so when the player character revisits their childhood home in a dream, it creates an unsettling feeling due to an anticipated encounter with a person from the player character's past.

EA: I noticed in my own and others' playthroughs that with the place from the [Prologue quest] – since the first encounter with [someone the player character used to know, as mentioned above] isn't really a nice experience – when you are transported there again, it evokes a sort of topophobia. You are like “oh shit I'm in this place again. I'm going to see [him] again.”

With Silvergrove, it's more gradual. It is a nice-looking place, but [as I enter it in the game] I feel that something is very wrong there. Things are going too well. Everyone likes each other, and they do not want to leave. I don't know if any other medium can do it – to actually be there, walk around, hear these NPCs talking to each other, and you're like, “I'm getting a bad vibe.”

What I also found interesting is that you create a sense of place, the meaning of the place, not just pure geography and atmosphere. And sometimes already in advance, before the player even gets there.

¹⁰ See Paul Martin's “The Pastoral and the Sublime in *Elder Scrolls IV: Oblivion*” on the sublime and pastoral settings in video games. See also Michael Sangyeob Lee's “Why are non-player characters not creepy anymore? The effect of schema creation on the perception of uncanniness in *Oblivion*” on the uncanny in video games.

NL: I think you touched upon something important with the sense of place. Every medium does that to a certain extent, and I think we can really feel it if it's well done. Something I came to realize a while ago – and most people would probably agree – is that games are nonlinear to a certain extent, especially open-world games, but I would argue that any interactive experience in any story is nonlinear. What I mean is that the narrative *is* linear, but you don't experience it in a linear fashion, and that everything touches upon something that happened previously. So, if I set up something at an early point in the story – and I think this again translates to every single creative medium – and then I put something else, let's say 60% into the [player/reader] experience, it changes how you see that early element. You are transported back. That's why I think “linear” is kind of misleading because, yes, a text and a movie and a game might be linear, but actually it's a construct. And you always go back. You go back and forth, and you recontextualize everything you experience.

And getting back to [the sense of place], I think that's why [the player has] this sensation you described in the dreamscape, like, “oh, shit,” it's because everything connects. You have the music, and the first time you get there, you just sense that something is amiss. There's a juxtaposition. You have some horror elements, but then you have this almost Arcadian beauty – the sunset and this beautiful house on the cliff – and so that works. But as you live through it again, as you have the dream again, you have so much more information now. You know what this theme music means. You know who this character is, and everything is starting to make sense. I think that's a very delicate and very fascinating way of creating immersion and actually infusing places with meaning. And because once you have established a certain symbol, whether it's visual, auditory, or contextual, then you can use these symbols to give meaning to your places and evoke certain reactions.

EA: And it resonates with our own experiences and other texts.

NL: Absolutely. It's intertextual. That's why it's interesting that in every game – especially if you work with humanoid characters or human-like characters and all that – it's almost impossible to create something that's entirely hermetic, completely isolated, and has no connection to the real world because it's connected to our experiences. It's connected to what happens in the world and the current *Zeitgeist* and all that.

Lietzau also mentions another region in the game, where, amidst the desolated landscape, the player encounters an abandoned village that had been struck by an extreme calamity in the middle of a celebration.

NL: I also really like Thalgard, the area that Max Ischreyt designed. I think that's a great example of environmental storytelling. There was no word spoken or no actual quests that took place there, but the visuals alone said so much. So that would probably be my second favorite area.

Thalgard and Whisperwood are two magically contaminated regions the player can explore. Part of the history of these regions is uncovered through in-game books, bard songs as well as side-quests, one of which gives the player a choice to help reverse the contamination in Whisperwood. When asked if, in making these areas, the developer team drew on actual-world ecological concerns, Lietzau commented:

NL: With Thalgard and the Whisperwood, it was Max [Ischreyt] and Johannes [Scheer] who created these areas. A lot of this was just their creative freedom, so I'm not sure if I can speak for them, but I will say that, of course, the idea of ecological disaster and that sort of dystopian, post-catastrophe landscape is obviously something that's very much on the minds of our generation. And also, it's something that deeply fascinates me in a sort of uncanny way.

Fantasy Worldbuilding: Worldview and Morality

Worldbuilding can be described as “the process of creating a representation of a fictional world” and covers various aspects of the fictional setting that include geography, society, politics, economics, mythology, history, and the combination of all of these into a consistent and immersive whole (Hergenrader 17). Further conversation with Lietzau in October 2023 revealed how his worldview was reflected in the narrative, worldbuilding and character creation in both the game and his novels. Reflecting on literary and cultural influences that affected his work and discussing how the context of production (Lietzau writing as a German) is different from the context in which the game and the novel were going to be received by Anglophone and wider international audience, he observes: “So much of this is subconscious. Some things that I do in my storytelling, I didn't even know they were particularly German.” The transcultural reception of the game and the novel provide some interesting insights as do the conversations he has had with international fans. The ending(s) in the game, well-received and appreciated by many, has been perceived as “a downer” by a number of players in the US, to Lietzau’s surprise: “I always thought it was bittersweet. I don't think *Enderal* is pessimistic at all. The endings offer a ray of hope”, he comments.

As mentioned earlier, *Enderal* was particularly praised for the story, and Lietzau’s novel likewise received positive reviews. On the other hand, some elements of the narrative did not sit well with all the audience members (Angelarts, “Part 3” 01:01:20–01:01:48). In an earlier interview with Angelarts, Lietzau mentioned that he had received comments criticizing his depiction of the so-called villain in the novel in a humanizing manner and writing protagonists as flawed, which was, in his view, intentional and justified (“Part 3” 3:30–4:20; 8:40–9:10; 16:50–17:19; 01:05:45–01:06:04; 01:08:00–01:08:40; 01:12:05–01:14:21). Lietzau notes, when interviewed by Angelarts (“Part 3”, 01:12:05–01:14:21) and, later, by Amey (see excerpt below), that the idea of there being a thin line between good and evil may not be received well by some audiences, and he acknowledges that, among other things, German history has informed his worldview and influenced how he approaches writing characters in his stories, particularly with regards to morality.

NL: I do think that Germany has a very unique position with our role in the Second World War and the Holocaust, and you don't even realize how much that influences you. I think that for the Germans – and I don't want to generalize – but I think it's very hard to think in terms of good and evil. Ironically, it's harder if you're a German to think that some people are good and some people are bad because you know that your grandmother was probably with the bad guys. This understanding, perhaps it's a European thing as well, but I can just speak for myself. I feel like that aspect of my cultural identity really suffuses much of my work – that [good and evil are] like a gradient. You see Dachau here in Munich, you see the concentration camps [when you are] in middle school, you see all these images, and you know that these were actual people like your grandparents who did this.

In line with Lietzau's point of view, he makes sure that his characters do not fall into the extremes of being pure and honorable or, on the other hand, utterly immoral. They have well-outlined motivations and often conflicting obligations, which are reflected in the choices they make, or which the player can make in the game. Lietzau further reflects on how German and other European literature informed his writing in terms of style and themes, which could be regarded as dark and gritty by some readers and players:

NL: If I think about the narrative style, German books tend to be very long-winded for the international market because [in German literature] it's seen as a virtue to be not only profound, which I think is a good thing, but also you're supposed to critically examine fundamental aspects of the world and the human experience. ... And also, of course, I do think that German literature tends to be quite [dark]. Especially if you look at the Brothers Grimm and all these fairy tales.

Writing Games and Novels: Production and Worldbuilding

Besides working on the novel series, Lietzau continues to work in game development. In earlier interviews, he mentioned that he always prioritizes narrative alongside other areas of game development, despite the common sentiment in the game development community “that nobody cares about the story, that people are just going to click through it” and that “storytelling doesn't matter” (Angelarts, “Part 2”, 42:35–42:57).

Interviewed by Amey in 2023, Lietzau talks about addressing aspects of worldbuilding in the novels after departing from the *Enderal* universe and the differences between writing for games and novel writing:

EA: If you compare writing for video games and novel writing, which process do you find more satisfactory or to your liking? Also, the freedom that you get, because now you have the novel in the *Twelfth World*, so you're no longer tied to *Enderal* in any way, what are your experiences regarding that?

NL: Freedom, yes. I have to say it was a difficult step. It was very much like “OK, now I can really do my thing and it's *my* thing now, and nobody can take that away from me.” Because it was just, even on top of the whole legal situation, that I was kind of frustrated as I developed as a writer – and I've been writing professionally for almost 10 years now – I did notice some things that I would have done differently or that I have felt restrained by. Whether it was Jespar's past and all that – though in general and broad strokes, it is still the same – but mostly some of the worldbuilding aspects were really holding me back. I felt, and it's not that I'm in any way ashamed of *Enderal* or anything like that, that the worldbuilding of a good book is just different. You think more deeply about certain things. You're kind of forced to because there's so much text and there are so many references all the time. You have to start wondering “OK, so was this catastrophe really a million years ago?” And then you realize, “Oh, had it been a million years ago, the world would look quite different. There won't be any ruins anymore.” So you start having to adjust this sort of stuff, and that's basically where I feel quite liberated.

As to comparing video games and novels, I would say that I do still love video game development deeply. [Working on] *Enderal* wasn't always easy, but we had so much creative freedom, and that was the only way a game like this could have been made, in my opinion. So, if I had the choice between video game development with an unlimited budget and great people or novel writing, then I would probably enjoy both equally. But for now, I'm enjoying the novel writing much more.

Before the edited version of *Dreams of the Dying* was published, Lietzau took the chance to perfect the text. He consulted a professional cartographer, a linguist, a zoologist, and a sword-fighting instructor to make different aspects of his world more consistent and, to a degree, realistic. Explanations for some of the changes are offered in the prologue of the book and are covered in detail in Lietzau's blog. One of his blog posts, for instance, describes the changes made to the map of a fictional archipelago, which serves as a setting for the novel, after a consultation with an expert: settlement placement and size, place names, and world origin were re-considered to make the fantasy setting more coherent (Niseamstories). Lietzau further commented on his approach:

“While there's absolutely nothing wrong with creating an unrealistic world, realism *does* affect the plausibility of a world. Taking these things into consideration will not only give your world more texture but might even provide you with some interesting plot points.” (emphasis in the original) (Niseamstories, “10 Lessons on Realistic Worldbuilding and Mapmaking”)

Establishing a unique universe in the *Twelfth World* also required changes and allowed for reworking of some of the aspects for consistency and further improvement. Lietzau commented in the interview in October 2023 that he has the story for the subsequent books in the series planned out but is open as to where the writing process will take him. He says he “would like to visit more locations as well, so long as they connect to the narrative in a meaningful way.” As of October 2024, the *Twelfth World* series is intended to be a tetralogy with the second book, *The Cure for Living*, forthcoming.

Acknowledgments

We would like to thank Nicolas Lietzau (<https://www.nicolaslietzau.com/>) for the interview. We are grateful to @Angelarts (<https://www.youtube.com/@angelarts>) for allowing us to draw on his earlier interviews with Nicolas and to Jasmine Poikela (University of Jyväskylä) for sharing her insights on narrative and worldbuilding.

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Lectio Praecursoria:
Technonaturalist Speculative Fiction and
Literary Affordance

Esko Suoranta

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Keywords: technonaturalism, speculative fiction, cognitive literary studies, affordance, cognitive estrangement

In 2014, author Ursula K. Le Guin received the National Book Foundation Medal for a lifetime of contribution to American Letters. In her acceptance speech, she attested the following:

“We live in capitalism, its power seems inescapable — but then, so did the divine right of kings. Any human power can be resisted and changed by human beings. Resistance and change often begin in art. Very often in our art, the art of words.”

I wish to discuss the power of the art of words, the power of literature. It is a power I am both hopeful and skeptical about when it comes to resisting the

seemingly inescapable power of capitalism and its harmful effects on earthly well-being. In my dissertation, I build a case for understanding literature's power in a way that does not render it ineffectual, but curtails the hype often associated with "stories" in today's society.

Around the same time as Le Guin was giving her speech, I was getting started with my academic career by studying contemporary Anglophone speculative fiction that seemed to anticipate and interrogate the development of capitalist power in the new millennium. It especially seemed to do so in relation to emerging digital technologies. I found that the novels I was reading somehow took seriously the inherently complex and abstract realities of contemporary capitalism. Some envisioned near-futures where capitalism had collapsed, others showed alternate presents where individual agency ran against capitalism's dehumanizing aspects. Many of them included traditional science-fiction elements like cyborg bodies or literal mind-reading, while others fashioned the real technologies of the year 2000 or so into their fabric.

It felt to me, and my feeling soon found support in relevant scholarship, that despite their differences, these books were all doing something similar when it came to discussing contemporary capitalism through speculative fiction. They represent a common thread in the tapestry of the art of words that was sparking my critical imagination. In my dissertation, I argue that the novels share a *technonaturalist mode*. By that I mean that they approach the contemporary moment of digital capitalism in a naturalist fashion. As a result, their poetic features are shaped by the material and social constitution of capitalism and its technologies. In addition, they incorporate features of the language of capitalism itself, and their plots resist both utopian and dystopian resolutions.

By saying that these novels are *speculative fiction*, I draw attention to the fact that the technonaturalist speculative mode is not restricted to, say, science fiction or genre fiction, nor to so-called literary or mainstream fiction. My corpus includes examples of various kinds of novels joined together both by their technonaturalist drive and by how they work through and gradually unfold their premises in a manner typical to speculative fiction at large. Overall, my analysis of eight novels from seven authors reveals the nuanced interplay between societal and technological development and artistic expression at a time when the complexity, acceleration, and effects of capitalism are often seen as remaining beyond the grasp of comparatively slow-moving cultural forms such as literature.

Throughout, my interest in the novels has been formal in nature. It is the specific formal features of these novels that reflect the ephemeral nature of their subject matter. Since digital capitalism will not fit in a novel, the novel must adapt and choose its manner of representing it, doing so in a necessarily limited fashion. Or, to be more specific, authors must manipulate the *affordances* of literary form so that readers can partake in the contemplation of the complex and abstract in a productive fashion.

A model of literary affordance is one of the central findings of my dissertation. To offer the briefest definition, an affordance refers to a relation of action potential between an organism and a feature of its environment. The term has its origins in ecological psychology and cognitive science, while fields like design theory have developed it further before its adoption into literary studies. To offer an example of an affordance, consider the chairs in a lecture

theater. For able-bodied human adults, the basic action they afford is sitting. For toddlers, they might better afford support for standing, climbing, or clanging them around. Some other chairs afford sitting in a more comfortable fashion, depending both on individual body dimensions and the choices of the chairs' designers.

This idea of action potential in relation to an organism applies, *mutatis mutandis* as argued at length in the dissertation, to literature as well. Literary affordances are the potentials of cognitive action with which writers and readers engage in their acts of writing and reading. Their analysis reveals what action the cognitive environment of literature invites, enables, hinders, or prevents. Like the more general theory of ecological affordance, literary affordance is marked by relationality, dynamism, and skilled action. That is to say that when we approach literary form through the potentials of action for authors and readers, the phenomena we call literature emerges as a cognitive environment in which interactions with texts occur from specific contexts and in accordance with individual preference and skill.

Let me give an example from my research corpus to illuminate this idea. In William Gibson's novel *The Peripheral* (2014), the story happens in two different times, one a near-future some decades from now and another in a century's time from that. Between these two futures, an escalation of social and ecological crises has eradicated most of human civilization and only the richest oligarchs survive. Eventually, they thrive with marvelous technologies and luxury, having made the most of the economic opportunities brought about by disaster.

However, despite its importance for the plot, this time of disaster remains outside the scope of what the novel's narration focuses on. Its attention remains in the here-and-now of the main characters in the two futures, neither of whom have experienced the times of destruction and crisis. Instead of offering focalized descriptions of events associated with the complex catastrophes looming in the respective future and past of the narrative strands, Gibson chooses to gloss them over in a short segment of exposition. The narrator tells how one character hears another character describe his second-hand knowledge of the catastrophe. The narration is three times removed from describing the event.

Even as the motif itself is a common one, I argue that the lack of representation that Gibson chooses to use creates a specific affordance for readers to contemplate the possibility of runaway systemic crisis heralded by the excesses of capitalism and climate change. This is to say that Gibson, as an author of fiction, employs the affordances of literary form and chooses exposition over description or character focalization of the catastrophic events of the storyworld. That exposition then offers another order of affordance for Gibson's readers, who are prompted into cognitive action about that which is not represented. How that cognitive action plays out is mandated by each reader's individual context, preference, and practice in reading.

For instance, a fairly experienced reader of speculative fiction, suffering from a certain amount of anxiety about the future of human life on the planet in the time of the climate crisis, will have a hard time not thinking about the implications of Gibson's passage of exposition, especially as the characters pondering over the disasters cannot but think about the people of the past — that's you, dear reader — who acted too late to stop or mitigate the effects of

their actions. On the other hand, a reader living a hundred years from now will have a whole new historical context to bring to bear on the interpretation and reception of the novel, even when the affordance crafted by Gibson stays the same.

This dimension of context-dependent, dynamic, and relational cognitive action is central to the conceptualization of literary affordance and I propose four necessary and interrelated criteria to aid literary scholars in better making sure that the concept stays true to its premises in cognitive science. Keeping these premises in mind is central for literary affordance to function as a specific analytical tool rather than a metaphorical borrowing from other fields of science.

First, it is necessary to validate whether the things identified as affordances truly are affordances and not features or properties. That is, the supposed affordance must afford some kind of action.

Second, if action is afforded, for whom does it apply? Is the affordance for authors, readers, or someone else? Is this clear from the way in which the concept is employed? When literature is understood as a cognitive environment, its affordances are always bi-directional; one set of affordances exists between author and text, another between reader and text.

This leads to the third criteria, understanding affordances as relational. It should be made clear that each individual author and reader makes use of literary affordances from their own individual contexts. For the same reason, the identification of a specific affordance does not mean that it will be employed in exactly the same fashion in each encounter. As such, affordances can help explain differences of interpretation both between individuals and over time — choices of literary form might be encapsulated in text, but what they afford might subtly change.

Fourth, it is important to stay mindful of the limitations of literary affordances. That is, even when literary form affords cognitive action, the results of that cognitive action are contingent and cannot be predicted with accuracy from the existence of an affordance alone. The Gibson example remains useful here: even if his passage of exposition stands out from the rest of his novel and is fashioned into triggering contemplation of Anthropocene crises, this does not yet mean that individual readers would spring into action to combat those crises.

This way, the power of literature — seen from this perspective of cognitive literary studies — has important boundary conditions. Nevertheless, it is clear that literature has an effect on its readers and that literary works differ in the specifics of what effects they create. This becomes clear when the influential theory of *cognitive estrangement* is recast in terms of literary affordance.

Originating in science-fiction studies, cognitive estrangement is the idea that science fiction specifically creates an effect of estrangement in a cognitive fashion as it makes the familiar strange. As science-fiction texts portray marvels of technology, other planets, or a future time, they do so in a way that somehow yields cognitive gain for readers, promoting critical and rational thinking when the marvels are cognitively grounded. This marks science fiction as separate from realist fiction — a type of fiction that does not estrange — and fantasy — one that estranges, but not in cognitive terms, according to the theory.

Cognitive estrangement so understood is possibly the most influential concept in science-fiction studies to date. It became evident to me that it was hence impossible for me to ignore the concept. It also remained impossible for me to accept cognitive estrangement as such.

For one, it harbors an inbuilt derision toward other genres where science fiction appears “better” due to its supposed basis in cognition. This flaw has been discussed by numerous scholars before me. Additionally, the theory espouses a narrow understanding of cognition as it sees cognition as pertaining mainly to rational or critical faculties. As such, the idea of cognitive estrangement is not much of a cognitive theory. But could it be?

To start answering that question, I adopted Simon Spiegel’s refinements to the original formulation of cognitive estrangement. He points out that the effect of cognitive estrangement cannot be a formal definition for science fiction if the elements that are said to induce it are the gadgets and wonders at the level of the individual science-fiction storyworlds. For Spiegel, science fiction is not, in fact, a mode where the familiar is made strange, but vice versa. Science fiction is what makes the strange familiar; it formally naturalizes the marvels of its storyworlds. It is then against this process of naturalization that estrangement can arise. Further, it is both formal and diegetic, or storyworld level, means that can effect estrangement.

This raises another question about cognitive estrangement. If it hinges on the naturalization of a strange storyworld and can arise from both formal and diegetic elements, why would the concept only apply to science fiction? Does not all fiction make us believe in another world, even if sometimes only minimally different from ours, and then accept a host of strange occurrences within it – and all the strange, artificial ways of telling those occurrences? In my dissertation, I offer examples from both canonically realist and speculative texts to show that this is indeed the case: all of literature relies on the dynamics of naturalization, formal estrangement, and diegetic estrangement to have its effect on us. Combined, these dynamics can be called cognitive estrangement and, I argue, they function in terms of literary affordance.

This new conceptualization of cognitive estrangement is, for one, a properly cognitive theory. It broadens the applicability of the concept from science-fiction studies to the study of literature at large. It reveals an underlying sameness across literary genres and modes, but can also offer an explanation about their differences. For example, what we usually call realist fiction is minimally concerned with diegetic estrangement – marvelous things and events – but very invested in making readers accept its world as almost as natural as the one around them. In contrast, speculative fiction is filled with diegetically estranging elements and it foregrounds its own constructedness as literature – as scholars like Brian McHale and Merja Polvinen have argued.

Despite all the diversity of topic, theme, technique, and form in all the literature of the world, what remains constant is that all literature happens in the curious encounter between text and a reading mind. We come to that encounter with our individual capabilities, moods, historical and social contexts, experiences, and embodiments. On all of us, literature does its work, exerting its power directly into our minds. Even when the specific effects of specific texts are difficult to generalize over a population of readers, it is clear that every book we read changes us. First, we are someone who had not read, then we read, have read, and sometimes we read the same thing again, and it is never quite the

same. In each encounter, we are a different reader, the plasticity of our mental architecture necessarily accommodating the shape of every new book.

And therein lies the power of literature. It can and will change us, but it also gives us the opportunity to make use of it as we wish. It is not a power in the instrumental sense for making the world into a specific image in accordance with what societies happen to demand of their individuals on a given day. Instead, it is one that gives each and every reader the opportunity of making what they will of its representations, speculations, and fabrications.

As such, the power of literature is the power of freedom itself. What follows is that the art of words has the potential to touch upon, interrogate, and challenge even the seemingly inescapable systems and conditions of our time, if that is what we are determined to do with it.



BOOK REVIEW:
*Space(s) of the Fantastic – A 21st Century
Manifesto*

Karl Bell

Punter, David and C. Bruna Mancini, editors. *Space(s) of the Fantastic – A 21st Century Manifesto*. Routledge Press, 2021. ISBN: 9780367681692.

The stated aim of this engaging book is to answer the question: “What is the fantastic?” Yet, as the title indicates, the focus is narrower and more specific than that. Rather than contributing to our understandings of definitions of the fantastic, it foregrounds the value of understanding the mode through contemporary literary geography. However, the collection never adequately explains the reasons for adopting a spatialized lens and the fresh insights that might be gleaned from it, although the various chapters work hard to make a convincing case for such an approach. The contributors, a combination of leading academics and those set to take the field forward in the future, demonstrate a rich variety of ways in which literary geography and the spatial turn can be usefully applied to the function and interpretation of fantastic literature.

The collection opens with a very brief introduction, a two-page think piece that throws out a poetic mix of conventional and novel reflections on the fantastic before shifting straight into the book’s ten chapters. There is no stated rationale behind the structure of the contributions. While they generally move from a focus on the nineteenth to the twenty-first century, certain chapters roam across a broad sweep of time within their relatively limited length. Although a short collection at 157 pages, the chapters cover a fascinating range of texts and topics. Focusing on British, European, and North American authors, the chapters provide an excellent illustration of the range of genres that can be included under the broad umbrella of the fantastic. These range from Thomas More’s *Utopia* and Jonathan Swift’s *Gulliver’s Travels*, through

Mary Shelley's post-apocalyptic *Last Man*, Victorian supernatural short fictions, the psychogeographical writings of Arthur Machen and Iain Sinclair, and the disturbing oeuvre of Daphne du Maurier, to more recent fantasy works, such as J. K. Rowling's *Harry Potter*, the science fiction of Octavia Butler and Nora K. Jemisin, and the (post-)New Weird works of China Miéville.

David Punter's opening chapter moves deftly from the histories of witchcraft to modern literary treatments of witches by exploring the idea of the witch as an absence, a figure who defies boundaries through shapeshifting and resurgence. While Punter introduces a political dimension to this study of the fantastical, a theme that resonates across a number of subsequent chapters, it falls to C. Bruna Mancini, his co-editor, to bring the book's central concern with spaces of the fantastic into sharper focus. Her chapter on the literary history of London's psychogeography takes us into occult histories, in terms of both the hidden and the magical. Bruna Mancini's brisk tour of key authors, from Thomas de Quincey and Arthur Machen to Iain Sinclair, Will Self, and Peter Ackroyd, demonstrates the ways in which the fantastical and everyday are brought into conjunction. Their liminality destabilizes the meaning of surface appearances so that the city is "endlessly recomposed, rewritten, inscribed on, fantastically reactivated" (34). Subsequent chapters all have something of interest to offer, but they vary greatly in their spatial and temporal scope or focus. This is part of the value of this book, for it sketches out the rich and varied possibilities afforded by spatialized readings of the fantastic.

Patricia Garcia's chapter explores the archetype of the Devil Architect in both folklore and literature. Shrinking the focus to specific constructions, such as cathedrals and bridges, Garcia offers compelling readings of aesthetic, physical, and moral monstrosity within select Devil Architect tales, and the role of the Devil in subverting the world-building purpose of the architect resonates with Punter's subversive witch. This is followed by Matthew Gibson's chapter on the nineteenth-century French author, Charles Nodier. While it outlines Nodier's earlier theorization of the fantastic in his *Du Fantastique en Litterature* (1830), the larger thematic insights latent in Gibson's subsequent analysis of one of Nodier's fictional works, *Trilby*, could have been teased out further.

The next two chapters provide an illustration of the ways in which the book's contributors radically contract or expand their spatial focus. Maria Teresa Chialant's intriguing take on the portrait as a fantastical space is followed by David Sandner's mapping of Mary Shelley's travelogue fictions, *Frankenstein* and *Last Man*. Rather than jarring, this juxtaposition of framed spaces and globetrotting rambles speaks to the collection's exploratory drive, one that seeks to locate and reflect upon the fantastical in all its dimensions, from the micro to the macro.

The following chapter, David Ian Paddy's reflection on the literary geography of Daphne du Maurier's fiction, covers a large number of texts. While this could have resulted in a sketchy overview, it adds weight to Paddy's argument that du Maurier was far more than a romance writer and that the strange, fantastic spaces in her stories expose both the unrealistic fantasy of dreams and the way domestic spaces can be rendered uncanny. Patrick Parrinder similarly draws on a broad range of texts to argue that utopian cities form a mirror world. While Parrinder's chapter draws out more overt political dimensions of the spaces of the fantastic, his interpretation of the mirror as a

fantastic space resonates with Chialant's examination of the portrait. Both represent non-existent spaces that involve reflection and distortion. Following Parrinder's references to mirrors, Lucie Armitt's chapter is similarly about looking. It focuses on portal fantasies that emphasize spatial and temporal disjunction. Comparing Octavia Butler's time-travelling novel, *Kindred* (1979) with China Miéville's *The City and the City* (2009), Armitt convincingly argues for the way the fantastic can be used to explore gendered violence by creating an imaginary space for social critique, which makes us view political and social realities afresh. The collection finishes with a second study of Miéville's work, this time comparing *This Census Taker* (2016) with Nora K. Jemisin's *The Fifth Season* (2015). Through this comparison, Nicoletta Vallorani studies porous geographies and boundaries, focusing on the hole as a representation of blank and often forbidden space.

At a basic level, this collection reiterates what the spatial turn has long emphasized: space is not merely a container in which plot takes place. Rather, it informs a fundamental interaction between the psychological and physical, the interior and exterior, the fantastic and the mundane. It is both an important perspective from which to read literary texts and a means of interpreting space and place as texts in themselves. The collected chapters succeed in convincingly demonstrating how spatialized readings of the fantastic can offer fresh and intriguing insights into both familiar and lesser-known literary texts. They also illustrate the varied and sophisticated ways in which the fantastic, in its many modes and genres, can inform a rich understanding of space and place.

The book's weaknesses revolve around its misleading subtitle. This is not a manifesto, at least not understood as a stated declaration of views, aims, or intentions. Rather than prescribing a challenge to existing scholarship or asserting an encompassing argument, the contributions demonstrate the value and varied uses of a spatialized understanding of the fantastic. As indicated above, there are resonances between certain chapters. For example, Bruna Mancini and Parrinder make a significant contribution to our understanding of urban fantastical spaces. Others such as Punter, Garcia, Sandner, Paddy, and Armitt demonstrate the political value of the fantastic in articulating social critique, subversion, and alterity. Chialant's, Parrinder's, and Vallorani's chapters are united by their framing tropes of bounded spaces – portraits, mirrors, and holes respectively – as a way of usefully thinking about the multitude of fantastic spaces. However, it is left to the reader to make such connections; these are never explicitly stated by the co-editors.

One is left questioning whether this was a deliberate ploy for approaching the fantastic, a literature defined in this collection by its fluidity and uncertainty, by its magmatic, mutant, and mutinous qualities. In seeking to remain open to this, the book shies away from anything that might be deemed overly rigid, prescriptive, or reductive. Yet, this reader at least, perhaps misled by the subtitle's use of "manifesto," found himself wanting a bolder statement, a little more structure. It does not seem wholly unreasonable to expect something that declares itself a manifesto to place some clear lines in the sand, to state a position. Even a conclusion explaining what the editors felt the assembled contributions amounted to and how it helps advance the literary geography of the fantastic would have sufficed.

In this regard, it is notable that across the collected pieces, scholars of the fantastic are still drawing upon and making constructive use of key

theoretical texts from the mid-to-late twentieth century. The chapters make repeated references to Mikhail Bakhtin's chronotopes, Tzvetan Todorov's notion of the fantastic as hesitation between the uncanny and marvellous, and Rosemary Jackson's reading of the fantastical as the literature of subversion. This is echoed in the use of seminal texts on spatial theory from a similar period, including those of Gaston Bachelard and Yi-Fu Tuan. While this can be positively interpreted as a body of theoretical work that has held up over time, it also suggests that it has not been sufficiently challenged by compelling alternative readings of the fantastical or cultural constructions of space in recent decades. This raises the question: what is distinctly "twenty-first century" about this "manifesto"? In terms of spatial theorizing of the fantastic, such a claim largely relies on some authors drawing upon two twenty-first century texts, Farah Mendlesohn's *Rhetorics of Fantasy* (2008) and Patricia Garcia's *Space and the Postmodern Fantastic in Contemporary Literature: The Architectural Void* (2015). This suggests that scholars are increasingly willing and possibly yearning to venture beyond the approaches of their noted twentieth-century forebearers. Again, the lack of a clearly articulated and coherent position on spatialized understandings of the fantastic and fantastical understandings of space means this is not really the text to fulfill that desire.

If readers are expecting something in the vein of Brian Attebery's recent *Fantasy – How It Works* (2022), they may feel slightly wrongfooted. In attempting to address the fantastic instead of fantasy per se, Punter and Bruna Mancini's book arguably possesses greater ambition, and there is undoubtedly skilled scholarship and insights aplenty here. None of the criticisms above should detract from that. The chapters' rich and varied engagement with fantastic spaces will certainly reward re-reading. The issue is that the collection struggles to amount to more than the sum of its parts. For all its merits, one cannot help but feel that this "manifesto" was a missed opportunity to make a more assertive declaration, one that may have more boldly informed future approaches to the fantastic.

Biography: Dr. Karl Bell is Associate Professor of Cultural and Social History at the University of Portsmouth. Co-director of the university's Centre for Port Cities and Maritime Cultures, he has published widely on the supernatural, magic, and folklore, with particular focus on their relationship to modernity and cultural constructions of space. His publications include *The Magical Imagination: Magic and Modernity in Urban England, 1780-1914* and *The Legend of Spring-heeled Jack: Victorian Urban Folklore and Popular Cultures*.



BOOK REVIEW:

*Uneven Futures: Strategies for Community
Survival from Speculative Fiction*

Jeremy Brett

Yoshinaga, Ida, Sean Guynes, and Gerry Canavan, editors. *Uneven Futures: Strategies for Community Survival from Speculative Fiction*. The MIT Press, 2022. ISBN: 978-0262543941.

The worldwide COVID-19 pandemic forced us as a human society and as a planet to confront a number of unpleasant home truths – multiple, even willful, instances of neglect of the health outcomes of underserved and marginalized populations, colossal failures of empathy for suffering, as well as epic political and social displays of selfishness and the exacerbation of extreme economic inequalities. Together with the ongoing existential threat of climate change, the pandemic was one of those earthshattering events that oblige us to reconsider our approaches to living and to our relationships with the planet. If there ever were a time for speculative fiction to exercise strenuously its traditional role of both imagining and reimagining futures, this would appear to be it. In aid of solving seemingly insoluble problems, the editors of *Uneven Futures*, who produced this book in COVID’s long shadow, gave their contributors a task: “choose an SF text you love and explore how it helps us think of ways to live in, survive, and grow beyond the inequalities and injustices of our times, with *SF*, *love*, *survive*, and *our* all open-ended categories that assume no clear or final definitions” (xiii).

If *Uneven Futures* has an operating mantra, it is social activist, writer, and editor Walidah Imarisha’s observation in her 2015 volume *Octavia’s Brood: Science Fiction Stories from Social Justice Movements* that “Whenever we try to envision a world without war, without violence, without prisons, without capitalism, we are engaging in speculative fiction” (3). As the editors argue (and as even a cursory glance at the news appears to confirm), the

speculative fiction enterprise at the present moment is operating within a world in profound crisis. In the editors' view, this requires a new dedication both to the centering of community power and to listening to disparate voices and experiences. These in turn can function as methods of overturning an international capitalist order that prizes corporations over people – an order relying on intrusive surveillance techniques, the censorship and misuse of information, and carceral mindsets to preserve elite power that only speeds on the continuing destruction of the natural environment. This volume's editors call for an Imarishan commitment to the imaginative power of speculative fiction to reshape the ways in which we consider the world around us, with stakes that are dizzyingly high. But as co-editor Yoshinaga notes in her heartfelt essay at the volume's midpoint, "Now is the time to talk of science fiction and ethos" (165), and she proposes a "Science Fiction Studies 3.0" which will examine the genre through its ability to help imagine methods by which diverse communities might hold back, withstand, and resist the forces of capital.

The volume is organized into four thematic and tactical sections of brief essays, each one representing "a collective strategy for survival" (xiv): *Emergence*, in which the considered texts are centered on values such as empathy and solidarity as engines for community development; *Rupture*, where the texts look to challenge normativity and bring inequalities into sharp relief; *Transformation*, in which texts offer or model community-based solutions including tactics of harm reduction, reformation, and alliance-building; and *Revolution*, which concerns texts that center on revolutionary acts or movements that reimagine people, societies, or systems. Not all the texts considered in *Uneven Futures* fall neatly into these categories, suggesting the limitations of this particular intellectual framework. However, the editors and contributors do recognize that the examined SF texts and the strategies they document inform one another, overlap, and form parts of a continuum in a process that requires multiple approaches. This also illustrates that texts are not islands, nor are they modular components that slot neatly into a large simple model, but rather they are complex narrative instruments that carry different levels and kinds of meaning.

With nearly 40 texts – including novels, short stories, films, television productions, games, operas, and even an active social movement – included in the volume, to discuss all of them would be unwieldy. Instead, this review focuses on two entries per section in order to provide examples of the myriad ways in which speculative fiction works may serve as powerful frames of reference for rethinking the social and economic order. In *Emergence*, Hugh Charles O'Connell examines Tade Thompson's 2016–2019 groundbreaking Africanfuturist *Wormwood* trilogy through the lens of what O'Connell calls *salvage utopianism*, an "alternative sense of apocalypse ... expressed [by] sifting through the detritus of capitalist modernity to reappropriate its means towards new ends" (48). That is to say, Thompson gives us a society in which people resist and thrive in the ruins of a post-colonialist society. The crisis is here and will pass, so we must choose how we plan to live in the legacies it leaves behind. In a world under immediate and lasting threat from anthropogenic climate change, this has deadly serious relevance for the way life will proceed in the human future. B. Pladek, meanwhile, looks at the Cartoon Network series *Steven Universe Future* (2019–2020) and studies the ways in which a cartoon based around the concepts of unconditional love and empathy creates an

aftermath in which the campiness yet earnestness of hope – hope that reparation is not impossible – allows for serious personal and societal redemption.

Within *Rupture*, Andrew Ferguson produces a fascinating analysis of the storyworld of the SCP Foundation, a fictional organization whose mission is to capture, contain, and study paranormal entities and phenomena. The SCP world is documented in a sprawling collection of short, born-digital horror stories now living on a wikified website, but with its origins in the notorious online stew of 4chan. Ferguson describes how the SCP experience – through the power of collaboration and imaginative buy-in from numerous creators – migrated (or, rather, escaped) from a harmful community marked by toxicity, misogyny, racism, and right-wing trollishness into a vast, monitored, creative shared space and in the process charted an ethical way forward for other online communities to carve out positive digital universes. Meanwhile, Cathryn Merla-Watson looks at Virginia Grise’s 2011 play *blu*, which adapts tropes from apocalyptic literature, mapping apocalypses (both in our modern understanding of the word and its original definition as an “uncovering” or “revelation”) onto the lives of a queer Chicana couple and their family. As Merla-Watson argues, Grise’s play makes the onslaught of injustices that affect and oppress so many marginalized people in the United States – police brutality, unfair labor practices, racist housing practices, domestic abuse, the weight of the military-industrial complex – into part of a mundane normalcy infused with elements of Aztec myth. The radicalness of Grise’s work – the *rupture* – creates, through the restructuring of these multiple apocalypses, an intimate and collective sharing of experience that hopes for a new way of living and the incitement of new, liberating beginnings.

As part of *Transformation*, Farah Mendlesohn looks at Joanna Russ’ 1976 novel *We Who Are About To...*, a twist on both the time-honored space colonization novel and its companion subgenre the robinsonade, a novel that, rather than humor the reader with the imperial positivity of a colonization narrative, radically reinterprets such narratives by uncoupling human endeavor from a hostile universe. As Mendlesohn puts it, Russ’ novel “is a novel of refusal: a refusal to present a false narrative, to center either the human individual or the human species” (191). Instead, Russ tells the story of the dwindling of a marooned group of interstellar passengers down to the last woman, and of her choice to die herself in the face of the realization that the universe was and is never about humanity or the individual human experience. In a world facing incalculable damage due to human-centered impulses and selfishness, the novel has particular resonance in its proposal that we rethink our relationship to life that does not need us, does not exist to service us, and that will go on in some fashion without us, and to its concomitant suggestion that choosing the manner of our death may be our ultimate, untouchable freedom. Ayana Jamieson imbues her emotional, even joyous description of Toshi Reagon and Bernice Johnson Reagon’s 2020 opera based on Butler’s prescient *Parable of the Sower* (1993) with the tenets of Octavia Butler’s Earthseed precepts. It is a work that (like the novel) prioritizes the vital significance of sharing resources, sharing voices, and weaving together a sharing community in the face of apocalyptic catastrophe, reminding us, as Butler did, that God is Change.

Two very different examples from the final section, *Revolution*, continue the volume’s laudable dedication to variety of examined texts, reflecting the

richness of the speculative genre. Gerry Canavan analyzes one particular issue of the legendary Alan Moore/Dave Gibbons/John Higgins comic book epic *Watchmen* (1986–1987), famous, of course, for its deconstruction-verging on disembowelment of the character of the superhero. Canavan rather creatively chooses to focus not on the overarching concern of the series with the failures and flaws of people calling themselves heroes, but instead with one particular and generally overlooked moment: Issue #11 of the series, in which ordinary, nonheroic New Yorkers collectively intervene in stopping a moment of public domestic violence in Times Square. Here, the comic creators, in the middle of an ongoing struggle between intensely flawed, even corrupt “heroes,” pause to offer a moment of ordinary heroism by people who only want to aid others. It is a short and quiet alternative to superheroic egotism, one that suggests another pathway out of the overwhelming forces of capitalism and imperialism that drive the world. As Canavan put it, “Neither Rorschach nor Ozymandias. No cops. No presidents. No gods. No masters. Only us – trying to help.” (255). The final essay of the volume brings the reader back to the Imarishan impulse of social activism as speculative fiction, as Bryan Kamaoli Kuwada offers the real-life story of Native Hawaiian activists coming together in 2019 to oppose a construction project at Mauna Kea. The piece frames the protest in terms of *mohihi’o*, the Hawaiian term for science fiction with links to the concept of experiencing or interpreting dreams. In exercising *mohihi’o*, the Mauna Kea protesters were not only imagining new futures, but doing so in light of their ancestors’ centuries of experience in interacting with the land and the natural ecosystems of Hawaii. It was in this deep, ancestral context that the protestors asked themselves speculative questions that go to the heart of the human experience and that speculative fiction asks of its readers – Who are we? What do we want from the world around us? What is the future we envision for ourselves? What can and will that future be?

It is those very questions that each of the texts examined in *Uneven Futures* asks and that each of the volume’s contributors asks, often in creative, clever ways. Overall, the book is refreshingly light on jargon and accessible by both academic and more casual readers alike, suitable for a volume whose mission it is to forge pathways through which we who love speculative fiction and center it in our lives can make new communities and new worlds.

Biography: Jeremy Brett is a librarian and archivist at Cushing Memorial Library & Archives, Texas A&M University, where he is the Curator of the Science Fiction & Fantasy Research Collection, one of the largest of its kind in the world. He has worked at many different libraries and received both his MLS and his MA in History from the University of Maryland – College Park in 1999. His professional interests include science fiction, fan studies, and the intersection of libraries and social justice.

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BOOK REVIEW:

*The Evolution of African Fantasy and Science
Fiction*

Ananya Buragohain and Lakshminath Kagyung

Barbini, Francesca T., editor. *The Evolution of African Fantasy and Science Fiction*. Luna Press Publishing, 2018. ISBN- 978-1-911143-51-2.

Edited by Francesca T. Barbini, *The Evolution of African Fantasy and Science Fiction* (2018) comprises five essays that provide insightful analysis of diverse aspects of African fantasy and science fiction. These essays trace the route of African science fiction's emergence, identify the forces shaping its development, survey readers' expectations, and examine the portrayal of African characters in popular entertainment. Overall, the anthology describes how African science fiction and fantasy address the social and political concerns of African societies while representing Africans through a fresh perspective. The essays in this book discuss how these genres add a new dimension to black studies by contesting the views of earlier critics who have defined African literature as linear, one-dimensional, and particularly focused on representation of the adversities faced by African people. In doing so, these essays re-trace past and contemporary socio-political themes such as racism, the portrayal of Africans in literature and popular entertainment, the impacts of the European colonization of Africa, and existing gender-based prejudices against black women.

In the opening essay, "On the Emergence of African Science Fiction," Peter J. Maurits studies the literary and socio-political dimensions associated with the emergence and rising popularity of African science fiction. Maurits contends that African science fiction is a joint tradition of science fiction and utopian writing that responds to dystopian tradition (4), and he identifies this genre as an efficient means to positively impact African literature while countering the literary gap fostered by colonization. Maurits also highlights

how African science fiction distances itself from colonial history and how increased access to mobile technology within the African continent has fostered the genre's market value, consumption, and circulation among readers (23). Thus, Maurits' essay can facilitate future researchers' re-evaluation of the processes of emergence and evolution of African science fiction in order to gain a better understanding of the specific context of criticisms often encountered by the writers of African science fiction.

In the second essay, "Forces Shaping the Development of South African Speculative Fiction Down the Ages," Nick Wood studies the socio-political contexts of the advent of South African speculative fiction. Wood also discusses how science fiction during the era of apartheid in South Africa was criticized as a medium used by black people just to represent their grievances. According to Wood, African science fiction has made a prominent contribution to addressing diverse concerns associated with the lives of black Africans, yet it has not garnered a significant audience among black readers. To rectify this, Wood suggests that publishing houses should recognize the importance of African science fiction, otherwise this genre will suffer a loss of readership. Wood further proposes that black readers' lack of appreciation for science fiction may also result in part from the policies of the apartheid era, which created an equality backlog in the education system and shaped a visible breach between the white and black populations (32–33). As a result, Wood's study examines how the importance of science fiction in South Africa was underestimated during the apartheid era as well as more recently since works by black authors have often been considered only a medium for political interventions and addressing grievances. Wood examines the impact of inequality between the African white and black populations in terms of the marketing, readership, and publication of science fiction. The latter part of this essay highlights how recent advances such as the formation of the African Speculative Fiction Society in 2016 and proper recognition of works by African authors through awards, such as the Nommo Awards, are significant steps towards centring African speculative fictions (45).

In the third essay, "The Dangers of Expectation in African Speculative Fiction," Ezeiyoke Chukwunonso studies how African writers enclose themselves in a constrained space through their rigorous attempts to meet a particular standard. This, according to Chukwunonso, restrains African literature and its authors in terms of style, theme, and genre. Chukwunonso argues that this adherence to a specific standard often limits authors to educating Africans and to providing a counterattack on the hegemonic principles of colonialism and neo-colonialism through their fiction. This essay warns black readers that similar expectations from African speculative fiction will limit authors to dealing with socio-political scenarios and prevent the genre from flourishing in terms of style, and themes. Chukwunonso also mentions how writers such as Chinua Achebe, Ngũgĩ wa Thiong'o, Flora Nwakpa, and Bessie Head laid the foundations of African literature. These authors created a novel tradition that addressed the history of Africa and taught people who Africans are by stepping outside the boundaries of representation determined for them during colonialism and neo-colonialism. However, this growing novel tradition gradually suffered in terms of style and themes by adherence to conventions established by earlier authors. Thus, Chukwunonso cautions the writers and the audiences that African speculative fiction should not be protest

driven and it should remain free from political tropes because fixation to a single theme or style can prevent it from exploring new horizons. Hence, Chukwunonso's findings suggest that the readers and practitioners of African speculative fiction should avoid fixation on set themes and remain open to experimentation so that this genre can secure a distinguished space in world literature.

In the fourth essay, "Scientists in Nigerian Science Fiction," Polina Levontin examines the representation of scientist characters in Nigerian science fiction through a socio-political lens. A particular highlight in this essay is its examination of how fictional representations of scientists can impact readers' opinions of Nigerian scientific research. Levontin notes that on a more general level, women have always been underrepresented both as authors and as characters in Nigerian science fiction. This leads the essay to highlight how the problematic issue of gender imbalance impacts portrayal of characters in the genre. Levontin also suggests that "When compared to reality, science fiction offers a more progressive view of gender in science, in both Nigerian and Western fiction" (91). However, Levontin re-evaluates this remark and mentions that although Nigerian science fiction is slowly approaching gender equality in representation of scientist characters, its pace is slow in comparison to Western science fiction (92). Overall, by pointing out how women, both as characters and as scientists, often suffer from the patriarchal ideals of society, Levontin's essay demonstrates the significance of considering how subjective interpretation and representation of characters can induce insights into public perception.

In the last essay, "Portrayals of South Africans in Popular Entertainment: Bad Accented Baddies, Prawns and Black Panther," Robert S. Malan examines representations of African people in popular entertainment. According to Malan, there has been a remarkable progression in the representation of South Africans in contemporary movies after suffering from a lack of true representation since the apartheid years. Malan notes how the entertainment industry is awakening to a more advanced outlook, casting black actors in progressive roles. Overall, Malan discusses how African actors' portrayals of central characters in popular entertainment will strengthen the confidence of black people, which in turn will progressively impact society. Malan's essay emphasizes that the casting of black actors in lead roles helps to weaken old racist stereotypes and to portray Africans as self-reliant individuals who are capable of directing their own progression by defending their own voice.

Taken together, the essays in *The Evolution of African Fantasy and Science Fiction* are significant in that they identify and introduce new horizons of African fantasy and science fiction. They do so by tracing its emergence and development, by cautioning readers and writers not to make the genre redundant through predefined expectations, by examining characterization in Nigerian science fiction, and by interpreting the portrayal of South Africans in entertainment. Thus, this book makes an important contribution to the existing scholarship on African science fiction and fantasy through theoretical and conceptual engagement with the social and political conditions of black people across the globe. This book is a must-read for those looking to gain a nuanced understanding of African science fiction and fantasy. As such, it supports research into the emergence of African science fiction, into factors that may

constrain this evolving genre, into portrayal of independent black characters in entertainment, and into the existing gender and racial prejudices in literature. Because of these strengths, this book can be recommended to scholars and critics who seek to explore new prospects of African fantasy and science fiction.

Biography: Ananya Buragohain is a full-time PhD Research Scholar in the Department of English, Dibrugarh University, Assam, India, where she is pursuing her research on contemporary Black Science Fictions. Her MPhil dissertation focused on Dalit women's livelihood, and her current research focuses on re-examination of aspects of Black representation in contemporary narratives. Her areas of interest are Feminism, Postcolonialism, Dalit Literature, and Black Science Fiction.

Dr. Lakshminath Kagyung works as an Assistant Professor in the Department of English, Dibrugarh University, Assam, India. His areas of interest are Postcolonial studies, African Literature, and South Asian Literature.



BOOK REVIEW:

*The Rise of the Cyberzines: The Story of the
Science-Fiction Magazines from 1991 to 2020*

Sabina Fazli

Ashley, Mike. *The Rise of the Cyberzines: The Story of the Science-Fiction Magazines from 1991 to 2020*. The History of the Science-Fiction Magazines Volume V. 2022. 444 pages. ISBN 978-180085648.

The Rise of the Cyberzines is the fifth volume in Mike Ashley's series of books on the history of the SF magazine. The first volume, *The Time Machines: The Story of the Science-Fiction Pulp Magazines from the Beginning to 1950*, appeared in 2000, followed by three volumes covering the subsequent decades with *Transformations: The Story of the Science-Fiction Magazines from 1950 to 1970* (2005), *Gateways to Forever: The Story of the Science-Fiction Magazines from 1970 to 1980* (2007), and *Science Fiction Rebels: The Story of the Science-Fiction Magazines from 1981 to 1990* (2016). This series, *The Story of the Science-Fiction Magazines*, is an expansive and ambitious undertaking considering its scope and volume as well as the difficulties that always beset periodical research, namely the sheer mass of text and access to archives. It is also overdue, given the rising interest in periodical print publishing in the present post-digital moment and the hitherto sporadic attention paid to SF magazines as an area of research. Indeed, in SF scholarship, discussion, or mention, of magazines tends to appear in the footnotes rather than the main body of the text. This reflects the entrenched hierarchization of publication outlets and the scholarly valuation of genres. The neglect of periodicals is not unique to SF studies and pervades other fields as well. In an oft-cited article on this issue, "The Rise of Periodical Studies," Sean Latham and Robert Scholes argue that magazines and newspapers should be studied for their own sake as "autonomous objects of study" (518) rather than as convenient quarries of bits of information used to prop up research that actually focuses on monographic

publications. This call resonated widely in periodical and literary studies, not only because it asserted the status of magazines and other periodicals as objects of research, but also, as Latham and Scholes point out, because this realigned perspective engendered a renewed interest in methodological and conceptual questions as they apply to periodicals (519). The latter, however, remains a lacuna in many studies on periodicals.

While Ashley does not reference Latham and Scholes, his multi-volume work does exactly what they call for and squarely centers the magazines themselves. His interest lies with the magazines as businesses operating in a specific cultural and economic field. As such, the book is not only situated in SF studies, but could also be read as an entry in periodical studies. With this latest volume in his series covering the turn of the millennium, Ashley approaches the present and considers the decades in which magazine culture as a whole is fundamentally transformed by the increasing availability and spread of digital media. Consequently, the book is divided into three main chapters pivoting on the rise of the internet: “Before the Web,” “Into the Web,” and “The Challenge,” followed by a conclusion, “Taking Stock.” The chronological story that Ashley tells through these chapters strings together the biographies of the major (and minor) SF magazines, their launches, cessation, relaunches, and general operation.

Additionally, Ashley highlights the literary content of the magazines and gives summaries of selected short stories that characterize a particular moment in the magazines’ development. These summaries are short and abundant, yet not always necessary. Cumulatively, they do, however, convey a sense of the variety and profusion of material that the magazines published and the different tastes they catered to. For students, these parts of Ashley’s study could prove a springboard for further inquiries into under-researched authors and themes. It is interesting to see the many (un)familiar names among the contributors – such as Paul Di Filippo’s publishing history at *F&SF*, or Shaun Tan’s work in *Eidolon* – and to follow their successes and failures in placing stories in various magazines. Recounting these histories, Ashley insists on giving the rates that magazines were paying per word – a persistent detail that seems irritating at first, but serves as a stark reminder of the financial considerations of publishing and the respective magazine’s economic position, professional status, and orientation. In the same vein, raising or reducing cover prices, winning advertisements, offsetting rising postage costs, and securing subscriptions become a refrain throughout the different magazines’ histories. Chronicling these economic considerations may at times appear repetitive, but nevertheless offers a concrete frame that is all too often neglected. A lot of the information on financial and practical issues comes from emails exchanged between Ashley and magazine editors so that the histories that Ashley unfolds very often follow the editors’ own accounts. The wealth of detail, even trivia, that emerges through these personal communications is impressive. For example, a footnote informs us that the idea of the magazine *Science Fiction Age* was almost dropped in favor of an exotic car magazine. The background information gleaned from email exchanges offers a glimpse, albeit subjective, into the practicalities, and vagaries, of magazine making and especially the personal networks, talents, and tastes involved in the process.

The magazines also operate in a field that is structured by institutions, a context to which Ashley regularly refers in order to chronicle the magazines’

successes and failures at the awards as an indicator of their popularity and identity. This is reflected in the fact that three out of the ten tables in the book lay out awards and nominations, which, among others, drive home the diminishing role of print compared to online outlets. Ashley also uses the institutional framework of the Science Fiction and Fantasy Writer's Association's (SFWA) wordage rates to indicate a magazine's professional, semi-professional, or amateur status under their regulations. While these frameworks remain themselves uncommented, they serve as grids to determine the magazines' positions within the field of SF.

The wealth of information that Ashley accumulates is astonishing, but presented in a very readable manner. He is indeed telling a "story" that proceeds chronologically and gains momentum, and interest, with the advent of digital media. The transition from print to digital is particularly engaging: The subchapter "Digital Dust" recounts the very early and experimental adoption of web publishing in the early 1980s with shared-world anthology *Thieves' World* and Orson Scott Card's *Ender's Game* among the first online SF works. Later in the 1980s and 1990s, the early online magazines paralleled the fanzines of the 1930s, and most have since been wiped from the web, a fact that makes this section of the book particularly valuable. The different ways in which magazines adopted electronic media is striking: CD-ROMs and cassettes featured alongside downloadable PDFs, ebooks, and podcasts/podzines, and regular websites accompanying the print version became a staple. This medial variety leads Ashley to raise the question of what a "magazine" actually is, especially in the face of electronic outlets. However, his brief theoretical discussion segues into the introduction of *Tor.com* and its blogosphere as another permutation of the SF magazine. Ashley suggests that by including the website under the umbrella of "magazines," "such a definition came to a head" (277). It is symptomatic of Ashley's approach that he abandons the conceptual discussion in favor of diving into the concrete history of *Tor.com*.

The last subchapter, "The Last Revolutions," makes an unsurprising yet important point: Online magazines were drivers of diversity, and some even formally committed to giving preference to minoritized writers. Another development that Ashley highlights in this short section is the rising interest in non-anglophone and "multi-cultural" SF, which he evaluates as the decade's most significant development (291). The conclusion in "Taking Stock," then, continues this argument that online magazine publishing is overtaking print, a process that is not the least driven by the aging readership of print. Although these conclusions seem unspectacular, the detailed account of the processes that lead to the rise of online magazines and websites and the survival of niche print is intriguing.

Ashley's book is an important reminder that SF not only takes place in book-form, in cinemas, and in games, but also in magazines, both online and in print. At the same time, it is also a reminder that SF publishing is predicated on financial and institutional frameworks and personal networks, a lens that informs Ashley's approach throughout. As he demonstrates, magazines still provide a dynamic, if messy, site for SF. Moreover, centering this seemingly marginal form of publication, which is, especially today, often seen as the "paratext" to monographic editions of texts, has the potential to productively challenge our understanding of where and in what forms we encounter SF. A drawback of Ashley's book for students and scholars with an interest in the

magazines themselves is that it does not reproduce covers or double-page spreads to give an impression of their visual tone and design. This might well be due to copyright or production issues.

The Rise of the Cyberzines is a bibliographic endeavor, and as such, its approach is not analytical or interpretative. There is a tradition of such writing in periodical studies that is concerned with recovering and preserving magazines and that aims to reconstruct their “biographies,” often veering into quantitative methods. On this front, Ashley succeeds unquestionably, but sometimes offers readers ever more details when they would have needed signposts to navigate this wealth of information. Contributing to the volume’s data-driven approach, Appendices I and II list all the magazines discussed, their editors, published issues, and the circulation figures or numbers of online unique visitors as they are available for the bigger, professional magazines. At the same time, what these kinds of bibliographical studies often lack is methodological awareness. The same is true for *Rise of the Cyberzines*: The extensive email correspondence with magazine editors, which undergirds large parts of the book, is never reflected on as a method with certain ingrained problems (and opportunities). In the same vein, the wealth of facts and numbers which Ashley collects could have profited from more contextualization. For the SF scholar, such context and a more analytical outlook would help to clarify the position and significance of the individual magazines within the field. However, given the scope of the project, such demands would be unrealistic, and they are outweighed by what the book *does* offer: a map of a vast and previously uncharted field that is set to inspire future in-depth studies of individual titles or themes. As such, *The Rise of the Cyberzines* is invaluable.

In the preface, Ashley already announces that another volume will follow: *No Limits* will focus on the SF magazine outside the Anglosphere. Like the readers of print magazines, we should look forward to this next installment.

Biography: Sabina Fazli is a postdoc in the collaborative research center Human Differentiation (SFB 1482) at Mainz University, Germany. She completed her PhD in Victorian Literature, and she has taught and published on speculative fiction. Her current research focuses on magazine studies, periodical studies, and affect.

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BOOK REVIEW:

*Tolkien, Enchantment, and Loss: Steps on the
Developmental Journey*

Carol Franko

Rosegrant, John. *Tolkien, Enchantment, and Loss: Steps on the Developmental Journey*. The Kent State UP, 2022. ISBN 978-1-60635-435-3.

John Rosegrant argues that a consistent coupling of enchantment and loss fundamentally shapes Tolkien's mind and art. Rosegrant locates Tolkien's most important definition of *enchantment* in his essay "On Fairy-Stories" where, while he doesn't use the exact word, Tolkien writes: "the primal desire at the heart of Faërie [is] the realization, independent of the conceiving mind, of imagined wonder" (qtd. in Rosegrant 112). This passage in Tolkien's essay, with its description of a desire for wonder that is both imagined and independently realized, becomes crucial to how Rosegrant's book is not only *about* Tolkien, but also situates Tolkien as a *critical partner* to psychoanalytic theories of human development. Himself a practicing psychoanalyst, literary critic, and fiction writer, Rosegrant has been publishing articles on Tolkien for a decade, and about half of his book draws upon such previous work. Readers coming to the book may have encountered his deft essay on enchantment in *The Hobbit*. Perhaps they have seen Rosegrant's argument that Tolkien gave artistic form in "The Music of Ainur" to his infant and childhood experiences of loss and renewed closeness with his mother or with another primary caregiver. However, *Tolkien, Enchantment, and Loss: Steps on the Developmental Journey* will also provide readers rich additional thematic and theoretical context on Tolkien's life and work.

Rosegrant's methodology is dominated by D. W. Winnicott's developmental theories of infant, child, and adult experiences of "transitional space" and "transitional phenomena" – experiences involving an intermediate

mental state that integrates the Me (subjectivity) and the Not-me (objectivity). Winnicott's theory holds that transitional experiences change in content and awareness as a person grows and matures, and that they form a necessary component to lifelong emotional growth and creative living. For example, as a toddler, a person has a beloved toy that functions as a transitional object. Conversely, as an adult, a person may participate in activities like art and religion, which grant opportunities to have experiences that can exceed the everyday rational, external environment and provide occasions for experiencing a state of mind that mingles the subjective and objective. Rosegrant argues that Tolkien's explanation of the desire of and for Faerie, quoted above, is a sophisticated description of a transitional mental state of artistic creativity and receptivity. In Rosegrant's references to *enchantment* throughout the book, the term connotes both this intermediate mental state and also the wonder, beauty, and danger that Tolkien posits as components of the enchantment of Faerie.

In addition to Winnicott's theories of transitionality, Rosegrant's psychoanalytic synthesis is informed by Sigmund Freud, and in some sections by Julia Kristeva's theories on the abject. In addition, he uses psychoanalytic concepts, such as splitting and idealization/degradation, as well as the psychoanalytic concept of complexes that are unique to an individual and that group together repressed or partially repressed desires and memories of an individual. Rosegrant puts his arguments in dialogue with Tolkien critics that include Patrick Curry, Tom Shippey, John Garth, and Verlyn Flieger. He also makes careful use of Tolkien's letters and other biographical materials, even as he acknowledges how some of his hypotheses must remain speculative. Each chapter shows Rosegrant as an engaging and insightful close reader who also ranges widely and makes rich connections within Tolkien's oeuvre. Throughout, Rosegrant maintains that a continual and ambiguous interplay of loss and enchantment characterizes Tolkien's oeuvre. He argues that the inseparability of these themes points to Tolkien's distinctive creativity. Through writing fantasy and writing analytically about fairy-stories, Tolkien dealt creatively both with his deeply personal losses and with his temperamental and philosophical refusal to fully accept "the disenchantment of the [modern]world" (Weber qtd. in Rosegrant 2) as sociologist Max Weber described the exclusively rational way that humans are situated to understand reality in modernity.

In keeping with his psychoanalytic method, which posits that the whole of a mind includes powerful unconscious elements, Rosegrant's analysis of Tolkien's fiction is fluid. Two dominant strands shape his blended literary and biographical analysis. In one, he constructs an intricate and compelling literary interpretation that he presents as evidence for a psychological reading that makes very personal connections to Tolkien's possible experiences of grief and trauma. The enduring effects of the deaths of Tolkien's parents – of his father when Tolkien was four and of his mother when he was twelve – are fundamental to Rosegrant's insightful interpretations of *The Lord of the Rings* (LOTR) and other works. Chapters 6 and 7 (both first published in the book) exemplify this strand and make major contributions both to studies of the Galadriel/Shelob split symbol and to interpretations and intertextual resonances regarding Galadriel's Mirror. Specifically, in Chapter 6, "The Man-Maiden and the Spider with Horns," Rosegrant argues that the dichotomy of Galadriel and Shelob,

sometimes regarded as representing how Tolkien's female characters tend to be idealized or degraded figures, may more accurately be understood as Tolkien processing his grief over the death of both parents. Rosegrant elaborates how Galadriel and Shelob each embody male as well as female and motherly traits, explaining that their dominant femaleness may result from how Tolkien's mother died eight years after his father did. He argues that these characters suggest psychological splitting of Tolkien's positive and negative feelings about his parents. This leads him to further suggest that the way Tolkien's narration links Shelob's attack on Frodo and Sam with their memories of Galadriel may be seen as Tolkien memorializing both parents in an episode resonant with loss, danger, love, and enchantment. Similarly, Chapter 7, "Seeing the Self in the Mirror of Galadriel," provides superb literary analysis that takes readers through an explanation of Winnicott's and Lacan's contrasting theories of mirroring as it situates Galadriel's mirror, the Mirrormere, and the death of Gandalf in an ever-widening set of examples from Tolkien's oeuvre that bring together stars, still water, grief, loss, and enchantment. The analysis suggests again an underlying theme of Tolkien memorializing his parents. As such, this chapter is the most sustained and persuasive presentation of Rosegrant's insistence that Tolkien recurrently insists on ambiguity and never resolves the tension between loss and enchantment.

A second major arc of Rosegrant's argument involves the enchantment and loss in Tolkien's experiences with his creativity, whether inspired or blocked. Here, Rosegrant's entry point is how Tolkien, in his essay "On Fairy Stories," described an adult transitional experience by naming a desire for wonder in Faerie that is imagined, but is also experienced as independent of the imaginer: "the primal desire at the heart of Faërie [is] the realization, independent of the conceiving mind, of imagined wonder" (qtd. in Rosegrant 112). In Chapter 8, "From the Ineluctable Wave to the Realization of Imagined Wonder," Rosegrant argues that Tolkien's letters and oeuvre support the hypothesis that Tolkien suffered from a psychological complex that seems to have started in early childhood after his father died. It contained fears and guilt connected to destructive hubris. Rosegrant's evidence for positing this psychological complex includes Tolkien's letters that describe a nearly lifelong recurring nightmare of being caught and drowned in a huge ocean wave. Also key are Tolkien's own words that this dream could be called his "Atlantis complex" and that he mostly "exorcised" the nightmare by "writing about it" (qtd. in Rosegrant 115). In conjunction with this, Rosegrant studies Tolkien's progress in writing *LOTR*, connecting times that Tolkien went from suffering from writer's block to crafting versions of the Fall of Númenor between 1936 and 1948 that include one unpublished draft and others that became part of the Silmarillion papers and the appendices to *LOTR*. As an important part of this discussion, Rosegrant argues that Tolkien's concept of recovery from "On Fairy-Stories" exemplifies a mature version of transitional experience through its loving perception of an Other. Rosegrant shows how details in the Fall of Númenor narratives emphasize this loving perception of an Other, arguing that this theme plays a role in Tolkien's artistic freeing of himself from the wave dream symbol (118). Rosegrant also notes that in his concept of sub-creation, Tolkien copes with the wave complex by explaining legitimate, non-hubristic creativity. Later in the book, Rosegrant turns to times when Tolkien seemed to lose the freedom that he had forged for his creativity, and the wave complex

that blocks invention seems to return. For example, Rosegrant explores Tolkien's late life experiences when his access to a transitional/enchanted state of mind was apparently blocked, and he was considering many revisions to his oeuvre that sometimes involved changes that scaled back fantastical elements.

Rosegrant seems to be the first critic to offer sustained application of D. W. Winnicott's psychoanalytic theories to Tolkien's oeuvre, and for that work alone, this volume is valuable for scholars of fantasy, science fiction, and related genres, while it is of special interest for Tolkien scholars and aficionados. He consistently frames his most biographically-based arguments as either involving speculations or as bringing additional meanings to those that readers glean from powerful episodes like Frodo's and Sam's encounters with Shelob. Just as importantly, *Tolkien, Enchantment, and Loss* is always in dialogue with other scholarly work on Tolkien. Rosegrant makes clear and thorough arguments for his psychoanalytic claims, and they are provocative and instructive. Most persuasive for me, though, is Rosegrant's literary as well as psychoanalytic illumination of Tolkien's myth-making – of those elements of his world-building that create through suggestion and connection, building enchantment with imagery, word choice, and story.

Biography: Carol Franko is associate professor of English at Kansas State University, where she teaches fantasy and science fiction whenever she can.



BOOK REVIEW:

*Science Fiction Cinema in the Twenty-First
Century: Transnational Futures,
Cosmopolitan Concerns*

Aino-Kaisa Koistinen

Gómez-Muñoz, Pablo. *Science Fiction Cinema in the Twenty-First Century: Transnational Futures, Cosmopolitan Concerns*. Routledge, 2023. ISBN: 9780367759063.

Considering the intensification of a wide range of transnational social, economic, and environmental phenomena, such as climate change, migration, and the uneven distribution of natural resources, Pablo Gómez-Muñoz's *Science Fiction Cinema in the Twenty-First Century* offers a timely and important analysis of the possibilities and limitations of science fiction cinema to interrogate transnational concerns. These concerns are studied specifically through the lens of transnationalism and cosmopolitanism. Gómez-Muñoz defines the latter as “an ideal, desirable horizon characterized by sociocultural connectivity, sustainability, and respect for human rights on a global level” (4). Transnationalism, then, refers to a broader set of “social phenomena and relations including (but not limited to) migration, intimate relationships, kinship, informal unpaid labor, access to and exploitation of natural resources, environmental degradation and protection, cultural connections, and violence” (4) – issues that, as the study establishes, are increasingly explored in contemporary science fiction cinema.

The introduction of the book convincingly guides readers into the themes of transnationality, cosmopolitanism, and science fiction cinema. In addition to cosmopolitanism and transnationalism, the chapter introduces interrelated concepts, such as globalization, international, and global. This makes the book easy to follow even for a reader not fully immersed in the theories and concepts related to the themes of the study. Gómez-Muñoz also

makes clear connections between transnationalism and/or cosmopolitanism and science fiction, arguing that due to its long-lasting fascination with borders – between “male/female, human/machine, virtual/real, rich/poor, powerful/helpless, human/monster, technology/nature, science/savagery, or inside/outside” – SF cinema is particularly well-suited to negotiating transnational and cosmopolitan concerns (11–12). That said, Gómez-Muñoz points out that previous studies tend to overlook the transnational aspects of SF cinema, or, when they are given attention, the focus is often on the figure of the alien other as an emblem of the foreign other. *Science Fiction Cinema in the Twenty-First Century* thus seeks to fill in these gaps in previous research by its devotion to transnational and cosmopolitan themes which are examined beyond the figure of the alien other.

The chapters of the book move onto analyzing specific examples of SF cinema that “draw attention to both prominent and often-overlooked concerns” (14). While doing so, Gómez-Muñoz delivers not only engaging thematic readings of the films, but also places emphasis on their narrative construction. Through this focus on both form and content, they are able to offer rich analyses of the workings of SF cinema.

The first chapter of the book, “Systemic Dystopias Through a Cosmopolitan Lens: Contesting Global Neoliberalism,” focuses on the cinematic dystopias *Elysium* (2013) and *In Time* (2011) that “explore the form and role of physical and symbolic borders of global economic structures at multiple scales” (18). For a scholar such as myself, immersed in gender studies, the emphasis on borders as not only national or geographical, but also embodied and experienced is particularly interesting: in the end, borders regulate what embodied subjects can or cannot do in society. Some borders are, indeed, “transcribed” onto the skin, which is visible in the films’ portrayal of race. The problematics of whiteness are, indeed, returned to many times throughout the book. All in all, Gómez-Muñoz argues that while *Elysium* and *In Time* perpetuate certain racial boundaries, they bring to the fore “key aspects and phenomena which are often overlooked,” such as “the central role of global corporate actors ... and the erosion of public institutions and welfare” (53). For a reader living in a country where public institutions and welfare are currently being eroded by a right-wing government, the chapter offers a chilling read and evokes the question: how far are we really from these (transnational) dystopias? The fact that science fiction – or a careful scholarly analysis of it – can raise such questions is testament to the genre’s potential to negotiate sociocultural concerns.

The next chapter, “Greening Apocalypse: Eco-Conscious Disaster and the Biopolitics of Climate Change,” delves into timely ecological questions and the ways these are (re)imagined in SF cinema: *The Day After Tomorrow* (2004), *The Day the Earth Stood Still* (2008), *Godzilla* (2014), and *2012* (2009), in particular. While doing so, the chapter delivers important information on humanity’s role in current environmental crises and developments. What struck me as particularly interesting in the approach here is the focus on the possibilities of spectacle. As Gómez-Muñoz notes, films that rely on spectacular audiovisual effects are often regarded as less serious than those that rely on more subtle or “sophisticated” means of expression. In the analysis of the thematic and formal aspects of SF cinema, Gómez-Muñoz is nevertheless able to showcase the power of the spectacle, exploring “how over-

the-top, seemingly meaningless spectacle can develop a detailed portrayal of the socio-environmental dynamics and impacts of climate change” (85).

The third chapter of the book, “Love for the Alien Same: Interplanetary Romance and Kinship as Harbingers of Ambivalent Cosmopolitanism,” foregrounds transnational love as “One of the main ways in which early twenty-first century sf cinema is structuring its discourses around globalization” (88). The chapter showcases that while intimate relations might not be the first thing one associates with transnational concerns, movement of people and different legislation related to the human rights of, for example, LGBTQI+ people make these relationships transnational and deeply political. The chapter focuses on two aesthetically different films: the commercial Hollywood-produced *The Host* (2013) and the zero-budget, B-movie-style *Codependent Lesbian Space Alien Seeks Same* (2011). According to Gómez-Muñoz, “despite their different aesthetics, [these films] develop a similar ambivalent position towards cosmopolitanism ... presenting the formation of transnational couples as harbinger of cosmopolitan attitudes,” yet “casting only white American actors as members of the transnational couple” (89). Drawing on the work of Richard Dyer and Dale Hudson, Gómez-Muñoz argues that the films present a sort of “multi-cultural whiteness” (110) where questions of inclusion and exclusion are dealt with in a predominantly white context. As someone fond of popular culture, I especially appreciate how Gómez-Muñoz again places emphasis on so-called “low-brow” genres and modes of expression. As in the discussion of so-called spectacles, here they highlight the possibilities of another less-esteemed type of film, the B-movie. Referring to José Muñoz’s work on queer utopias, they argue that the campy elements of the film help to construct imaginations of “cosmoqueer utopianism,” inviting viewers to consider sexual practices beyond familiar cultural norms and conventions (117).

The fourth and final analysis chapter of the book, “The Cosmopolitan Potential of Connections Across Time and Space,” explores how a sense of a shared humanity is thematically and formally constructed in SF cinema with special attention to the film *Cloud Atlas* (2012). The multi-protagonist, multi-storyline film is perhaps the most intriguing example of how narrative choices are used to construct multiple transnational and cosmopolitan connections in SF cinema. Gómez-Muñoz argues that using multiple techniques, such as the montage, visual matches, and recurring motifs like music, *Cloud Atlas* ties together the lives of separate characters, placing emphasis on shared experiences. Thus, the film contributes to the ideal of a shared humanity. In this chapter, I find the discussion of “ordinary cosmopolitanism” – meaning that sometimes cosmopolitanism manifests in small, mundane actions – particularly interesting as it highlights the everyday actions and concerns of people in the context of broader transnational phenomena. The chapter also foregrounds timely questions of (de)coloniality, arguing that greed and (the denouncing of) coloniality are the main drivers in all the narrative strands of the film. Gómez-Muñoz posits that even though the film makes visible the struggles caused by colonialism, it tends to present an “easy cosmopolitanism,” doing away with “radical differences” (149). In addition to this, *Cloud Atlas* also includes a mainly white cast, thus downplaying questions of race in cosmopolitan connections.

Overall, in *Science Fiction Cinema in the Twenty-First Century* Gómez-Muñoz showcases how SF cinema indeed is a suitable platform for discussing

transnational/cosmopolitan concerns. The tendency to discuss different kinds of borders, including radical imaginations of alien others, and the possibilities to offer breath-taking spectacles contribute to the ability of SF cinema to foreground these issues. However, as becomes evident from *Science Fiction Cinema in the Twenty-First Century* as well as from many previous studies in science fiction, sometimes SF imaginaries also fail in their radical potential. Indeed, what connects Gómez-Muñoz's analyses throughout the book is the finding that cosmopolitanism in SF cinema includes a certain inherent ambivalence. As Gómez-Muñoz's puts it, "All the films ... celebrate the weakening of borders and the development of more open positions toward the other," but this is downplayed by the overwhelming whiteness of the characters, including the alien ones, that they represent (161).

One could consider it a shortcoming of the study that all the discussed films come from a predominantly Western cultural sphere. However, this is a choice that Gómez-Muñoz reflects upon themselves – indeed, one of the aims of the study has been to deal specifically with "the paradox that it is often US American movies, major productions, and films from other affluent countries that tend to address cosmopolitan conflicts" (14). At the same time, in the discussions on gender, sexuality, and the question of aliens passing as human, a bit more space could have been given to feminist (science fiction) research. That said, *Science Fiction Cinema in the Twenty-First Century* delivers steadfast analyses on topical and increasingly prominent themes in SF cinema. The book can be recommended to anyone interested in SF cinema or transnational concerns as well as in questions of race, inclusion, gender, sexuality, and kinship. The clear and precise analyses could also prove useful for BA, MA, and doctoral students.

Biography: Aino-Kaisa Koistinen (PhD in Contemporary culture studies, Title of Docent in Media culture) works as University researcher at the University of the Arts Helsinki Research Institute. Koistinen's research interests include speculative fiction, creative writing and art writing, artistic research, feminist posthumanities, ecocriticism, and ecological/feminist/artist pedagogy. Koistinen is the former chair of the Finnish Society for Science Fiction and Fantasy Research and a former editor-in-chief of *Fafnir – Nordic Journal of Science Fiction and Fantasy Research*.

Note

Koistinen is a member of the editorial board of the Routledge Studies in Global Genre Fiction publication series (the series under which this book was published) but was not involved in the editorial process of this particular book and receives no royalties from its sales.



BOOK REVIEW:
*Gendered Defenders: Marvel's Heroines in
Transmedia Spaces*

C. Palmer-Patel

Carr, Bryan J. and Meta G. Carstarphen, editors. *Gendered Defenders: Marvel's Heroines in Transmedia Spaces*. Ohio State University Press, 2022. ISBN: 978-0-8142-5852-1.

Gendered Defenders is packed full of facts and contextual information about the publication histories, character arcs, and media battles of many of Marvel's famous female heroes. The volume's contributors point out the various ways that Head Editors and Executive Producers have sought to undermine the development of female characters over the years within both the movie franchises and comic book series, operating under the mistaken assumption that female leads are not profitable, despite evidence to the contrary. The authors of this collection gather this information, noting markers of success and contrasting them to the written and verbal testimonials of corporate bigwigs. It is a depressing, all-too-familiar history that unfortunately offers no surprises. While the impact of misogyny in the production of superhero franchises is not new information, the data and knowledge packed into *Gendered Defenders* is one of its biggest strengths. For instance, in Chapter 4, J. Richard Stevens and Anna C. Turner take us through the development of the character of Carol Danvers – or Ms. Marvel, later Captain Marvel – the first female character to get her own feature film in the Marvel Cinematic Universe (MCU). The character appears in 1968 as a damsel in distress, followed first by a pivotal plot point centring around rape (and perhaps also incest), and subsequent retconning¹ of these events to sweep any uncomfortable or misogynist elements

¹ Retconning occurs when later publications must acknowledge the original canonical material but seek to re-imagine the storyline in order to change these events. Devices such as memory erasure, alternate timelines, and false information are commonly used as plot devices to retcon

under the rug and dismiss them. By erasing Danvers' memory of the rape (along with some gaslighting), Marvel sidesteps the issue of having it define her or be a part of her character development, wiping the slate clean to deliver a more audience-friendly Danvers suitable for the big screen. Stevens and Turner fit this information against a backdrop of second-wave feminism, exploring how the development of Danvers fits with or is counter to feminist movements.

The editors, Bryan J. Carr and Meta G. Carstarphen, clearly outline the thesis of the book in their introduction, noting how "the evolution of Marvel's female characters mirrors the development, struggles, and triumphs of women in the real world" (7). For someone trained in literary criticism, this thesis is, I am sorry to say, underwhelming. All literature as a product of its culture is reflective of the real world. There is nothing challenging or controversial about this argument and nothing that would point to why Marvel productions should be considered unique. For instance, turning again to the rape of Carol Danvers, which sets the tone for the later essays since it is discussed in the first analytical chapter, Stevens and Turner offer this quick synopsis of the event: "Her 'son,' a being known as Marcus, explains that he abducted Danvers, used mind control to seduce her, impregnated her with his own essence, and then wiped her memory before returning her to Earth to give birth to him" (38). This summary is followed by a lengthy extract from a critic focusing on the response – or lack of response – to the incident, noting that rather than treating it as rape, many fans celebrated the storyline as Ms. Marvel finding a good man. With such a brief summary and with no accompanying literary analysis, I found it difficult to understand why fans might have reached this awkward conclusion: how does using mind-control to impregnate a woman equate to finding a good man?² And what about the semi-incestuous nature of the relationship? What are we to make of a being impregnating themselves into a woman?

To my surprise, rather than answering these questions, the authors shy away from even flagging them as areas of interest. And yet, after my initial disappointment with this lack of analysis, I found myself thrilled with the sheer amount of information collected in the book. As the contributors are trained in areas such as media, communications, and journalism, each page is filled with references to the original publications or to relevant criticism situated in an accessible history of Marvel comics. The strengths of this book are noticeable in establishing a greater narrative of publication and production history and placing them within the social-political context of the time. As a result, *Gendered Defenders* provides a handy reference guide to anyone who wants to become familiar with both the story arcs and publication histories of the most prominent of Marvel's female heroes, synthesizing information that is spread across multiple media (comic books, television, film, and video games). I have often felt that the MCU is too large and too confusing, and it is sometimes too much *effort* to absorb it through all of its facets, but *Gendered Defenders* does the work for you. The three-part introduction by the editors lays out a firm foundation for this history by first providing the aims of the book and its thesis.

a story. Reconning might occur for any number of reasons, such as to deal with ideas that might no longer be socially acceptable, or in order to match parallel storylines and character arcs.

² My own hypothesis is that the semi-incestuous nature of impregnating Danvers with the essence of himself might be equated with the Christ myth. But this is an unsubstantiated interpretation as I have not read the comic book myself.

In addition to the co-authored first chapter, this introductory part consists of a synthesis of the history of women in the comic book industry (Chapter 2, authored by Carr) as well as a reflection on the complexity and nature of transmedia productions (Chapter 3, authored by Carstarphen). The following chapters then explore in turn the characters of Carol Danvers (as already noted), Agent Peggy Carter (by Kathleen M. Turner Ledgerwood), Jessica Jones (Amanda K. Kehrberg), Shuri (Rachel Grant), Kamala Khan (Maryanne A. Rhett), Misty Knight (Stephanie L. Sanders), Black Widow (Julie A. Davis and Robert Westerfelhaus), Pepper Potts (Mildred F. Perreault and Gregory P. Perreault), Squirrel Girl (Carrielynn D. Reinhard), and at the end circle back again to Carol Danvers (Annika Hagley).

It is worth noting that roughly two thirds of the book (not counting the introductions) focuses on white feminism. Specifically, the focus seems to be on American white feminism since the majority of the authors are based in the United States. Although to be fair, the Marvel franchise itself is primarily an American production, even if the MCU is a global phenomenon. When diversity is brought to the forefront, I found myself uncomfortable with the presentation. Part 3, which collects the chapters on Shuri, Kamala Khan, and Misty Knight, takes as its central theme “the innate duality of the heroine and the complexity of feminine identity and probe[s] how various identity characteristics affect both character and reader” (9). That said, all three chapters focus on racial identity rather than considering other intersections, and while postcolonial feminism is an important topic, as a person of color myself, I am a touch disappointed that color is highlighted as the central defining feature of these otherwise complicated characters. That is not to say that I find fault with the way that either the contributors or editors approached the material as racism and colonization are discussed sensitively. Yet, there is a missed opportunity for providing more nuanced presentations of these characters alongside flagging possible elements of tokenism. With a title such as *Gendered Defenders*, I was also surprised and disappointed to find its focus purely on the female body as discussions of LGBTQIA+ in relation to the Comics Code Authority³ would have been a worthy addition to the collection.

However, my expectations for the collection are perhaps unreasonable, likely elevated due to my excitement that academic work on female superhero characters is finally gaining traction. It is an area of research – due to the ever-expanding transmedial world – that is never finished. I am thrilled to add *Gendered Defenders* to my own personal collection; as I said at the beginning of this review, with limited access to research facilities, I have spent countless hours trying to find the information provided in this book. Having a book that gathers this research together is definitely an asset for an independent researcher like myself, or for someone who is new to criticism in comics and needs a starting point, or simply for anyone who wants to know a little bit more backstory about some of their beloved MCU characters.

Biography: Charul “Chuckie” Palmer-Patel’s first monograph, *The Shape of Fantasy* (Routledge 2020), investigates the narrative structures of epic fantasy and was shortlisted twice for the Mythopoeic Non-Fiction Award. *Sideways in*

³ The Comics Code Authority policed how sex and violence was depicted in comic books; see Carr’s single-authored chapter for more detail.

Time: Critical Essays on Alternate History Fictions (Liverpool University Press, 2019), a collection co-edited with Glyn Morgan, was shortlisted for the British Science Fiction Association Non-Fiction Award. Palmer-Patel serves as a trustee for the Science Fiction Foundation charity group and is on the editorial board of Gold SF, a fiction imprint of Goldsmiths Press that publishes intersectional science fiction. Her next monograph, *Negotiating Motherhood and Maternity in American Fantasy Fiction* (Edinburgh University Press), will analyze texts published by a range of American identities.



BOOK REVIEW:

*Vision, Technology, and Subjectivity in
Mexican Cyberpunk Literature*

Michael Pitts

Tobin, Stephen C. *Vision, Technology, and Subjectivity in Mexican Cyberpunk Literature*. Palgrave Macmillan, 2023. ISBN 978-3-031-31155-0.

In *Vision, Technology, and Subjectivity in Mexican Cyberpunk Literature*, Stephen Tobin illuminates the centrality and significance of the screen in 1990s–2010s Mexican cyberpunk and post-cyberpunk fiction, namely how these works present and frame such technology. He examines “specular fiction,” which he defines as “literature whose principal thematic and rhetorical focus pertain to the dynamics involved in the changing visual sphere of contemporary Mexican society” (2). Tobin focuses his analytical lens upon the novels and short stories *La primera calle de la soledad* (1993) and “Esferas de vision” (1997) by Gerardo Porcayo, “Ruido gris” (1996) and *Punto cero* (2000) by Pepe Rojo, *Virtus* (2008) by Eve Gil, and *Él piensa que algo no encaja* (2014) by Guillermo Lavín. His interest is in visual regimes, which he defines as “particular modes of seeing that are expressions of given culture” (3), drawing upon the theoretical framework developed by Christian Metz and Martin Jay. Tobin asserts that three such regimes most clearly manifest in Mexican cyberpunk and post-cyberpunk science fiction from 1993 to 2014: the male gaze, the televisual, and the cybernetic. As he argues, contemporary Mexican speculative fiction makes a productive site through which to analyze the changes in the nation’s visual practices (3). The selected texts, Tobin claims, respond to the ever-growing societal influence of the screen by increasing the presence of visual elements within contemporary science fiction as they critique this technological and social development. He is particularly interested in how Mexican science fiction centers these changes to the *sensorium*, a term he adapts from Walter Ong to describe “the entire perceptual apparatus as an

operational complex,” of its originating culture (4n4). Like Valeria de los Ríos' earlier work in *Espectros de Luz* (2011), Tobin analyzes the significance of visual technologies in Latin American fiction. Unique to his monograph, however, is its narrower focus on a specific social and historical context.

Tobin organizes his monograph both thematically and chronologically. Moving from the oldest to most recent cyberpunk and post-cyberpunk texts, he centers each chapter upon the aforementioned visual regimes. Chapter 2, for example, analyzes the male gaze in Porcayo's novel and short story. Comparing these texts that are set within the same narrative universe, Tobin finds that they both employ a pivotal intersection of the male gaze and the visual. Specifically, he contends that *La primera calle de la soledad*, with its male protagonist who is able to disrupt corporate power by using an ocular prosthetic, is reflective of the time in which it was produced, a time marked by increased use of television and computer screens and the intensification of the male gaze via these technologies (81). Likewise, he demonstrates how Porcayo's "Esferas de vision" reflects this visual regime as this story also focuses on a protagonist who loses an eye. This narrative, however, follows a female protagonist, and unlike her male counterpart in the novel, she never succeeds in replacing the missing eye. According to Tobin, this lack of an eye reflects her lack of a phallus, thus demonstrating the narrative's adherence to the visual regime of the male gaze (78). Overall, Tobin argues that these texts "link to several socio-political phenomena operating in contemporary Mexico, such as the spectacularization of femininity and a particularly Mexican male gaze cast by, and constitutive of, neoliberal masculinities" (50). In this way, his discussion illuminates the tendency of Porcayo's fiction to reflect predominant visual apparatuses that manifested in Mexican culture in the final decade of the twentieth century.

Moving forward to works published at the turn of the twenty-first century, Tobin considers two narratives by Pepe Rojo that explore the televisual scopic regime in the third chapter. Examining "Ruido gris," he argues that the story "illuminates and critiques" the historical ramifications of NAFTA and specifically its impact on television (39). Observing how the impactful trade agreement led to the development of and competition between increasingly violent reality television shows, Tobin asserts that Rojo's story critiques this development "via a metaphorized, near-future dystopia set in a megalopolis where ocular journalists receive payment for seeking and filming acts of aggression and gratuitous violence" (39). Moving his attention to the televisual communication of the news in the private sphere, he focuses the second half of this chapter upon Rojo's novel *Punto cero*. Pivotaly, Tobin argues that the televisual regime permeates the structural and narrative elements of Rojo's text. Connecting these narrative aspects with the text's psycho-social dimensions, he asserts that *Punto cero* illuminates how visual media alter viewers' subjectivities and the way they experience time. Tobin effectively demonstrates how Rojo's novel and short story both chronicle televisuality as pivotal to the optical regime of the final decade of the twentieth century.

Rounding out his analysis in the fourth chapter of his monograph, Tobin explores the cybernetic, the most recent of the scopic regimes in his study, via two narratives appearing in the opening decades of the twenty-first century: Eve Gil's *Virtus* and Guillermo Lavín's "Él piensa que algo no encaja." Tobin ties these texts to the technological developments that shaped the environments in which they were published: the proliferation of computers in the 2000s and

the rise of the smartphone in the 2010s. He argues that *Virtus*, with its presentation of a president in hologram form, asserts that “politicians are constructs wholly created by media industries and controlled by national elites, and that this is most perceptible – and powerful – in the visual realm” (178). His analysis of Lavín’s story likewise emphasizes how it reflects the milieu of its creation. As Tobin compellingly explains, “Él piensa que algo no encaja” presents the complex nature of modes of knowledge in a society populated with cybernetic devices and in many ways predicts the post-truth world that succeeded it (179). Overall, Tobin asserts that these texts are directly tied to their originary societies and therefore reflect shifts in the Mexican sensorium and its attending technological advancements (132).

At its heart, Tobin’s book makes a compelling argument: technology, as demonstrated by his analyses, mediates vision in Mexico in the era of globalization. By moving chronologically, Tobin also manages to illuminate how the key features of the late twentieth and early twenty-first centuries – television, computers, and smartphones – correspond to scopic regimes. This enables a focus on how these regimes have a profound effect upon the individuals inhabiting them. Tobin demonstrates that these regimes shape subjectivity itself, that they are fundamental to the construction of the subject. It is this attention to Mexican subjectivity during a specific and pivotal milieu, the late 20th and early 21st centuries, that lends, perhaps, the greatest value to the monograph. Positioned at the intersection of visual culture, contemporary Mexican science fiction, and cyberpunk/post-cyberpunk narratives, *Vision, Technology, and Subjectivity in Mexican Cyberpunk Literature* is a sophisticated and valuable analysis suitable for graduate study and useful to scholars who are similarly focused upon these timely issues of technology, vision, subjectivity, and speculative literature.

Biography: Michael Pitts is director of media studies at the University of New York in Prague. He specializes in American literature at the intersection of science fiction, utopian studies, and gender, and his first monograph, *Alternative Masculinities in Feminist Speculative Fiction: A New Man*, was published by Lexington Books in 2021. He is currently co-editing a new book, *Manhood in 21st-century Science Fiction Television*, which will be published by Bloomsbury in early 2025.



BOOK REVIEW:

*Ancient Greece and Rome in Modern Science
Fiction: Amazing Antiquity*

Noah Slowik

Clare, Ross. *Ancient Greece and Rome in Modern Science Fiction: Amazing Antiquity*. Liverpool UP, 2022. ISBN: 978-180085-631-8.

The exigency for Ross Clare’s monograph comes from observing a trend of SF creators inspired by Greco-Roman culture. Through “classical reception studies” (1), Clare traces numerous examples of SF that implement stories and figures from antiquity. His objective is essentially to identify texts that fit the parameters of this phenomenon and to examine what the authors’ use of “ancient-SF” (Clare’s hyphenated term) says about the legacy of classical thought in popular culture. Ultimately, *Ancient Greece and Rome in Modern Science Fiction: Amazing Antiquity* (2022) is a handy reference book for tracking the various SF texts that deploy this adaptive type of narrative device. All the while, Clare provides in-depth coverage of the most exemplary cases that match his criteria, rather than encyclopedically listing every example that counts as ancient-SF.

As with any good project of this kind, the texts Clare chooses to analyze range from mainstream favorites to deep-cut hidden gems. That is, he includes in his study both works that most people will be familiar with, whether they are scholars of either topic or not, and some works that few people have likely heard of, unless they are specifically seeking how ancient Greece and Rome appear in SF. The four main chapters in Clare’s book are organized by medium (two chapters for literature, one on film and TV, and the last chapter for video games). Perhaps to be expected, the arguably most niche works are included in the literature chapters – the first on early- to mid-twentieth-century literary SF and the second on late-twentieth to twenty-first-century SF literature.

From chapter one onwards, Clare takes us through curated deep dives into concise case studies on works that incorporate antiquity as part of their worlds. At times, such as with the first novel he covers, Clare takes his examples from lesser-known works by famous authors. Though Arthur Conan Doyle is likely more recognizable for his Sherlock Holmes series, Clare instead draws attention to the novel *The Maracot Deep* (1928), which is one of the first of several SF tales about underwater expeditions to discover the lost city of Atlantis. Clare's analysis of this novel demonstrates his methodology of allowing the most prevalent aspects of the texts to remain the focal point, even as his discussion underpins the main thread of classical studies. For Doyle's novel, he focuses on the fictional explorers' surprise at the Atlanteans' dark complexion (Clare 10–12). Thus, while ancient-SF is the umbrella category binding each of these cases together, Clare's emphasis on the role that race, for example, plays in Doyle's novel nonetheless lets the text speak for itself as well. As a further example of Clare's capacious application of his framework, in addition to the racial component to the story of Atlantis, there are also women figures from Greco-Roman culture that SF writers of this period evidently turned to for inspiration. Authors employed the likes of the Amazons, Circe, or Medusa, such as in John Russell Fearn's *The Golden Amazon* (1944), Henry Kuttner's *Mask of Circe* (1948), or Theodore Sturgeon's *To Marry Medusa* (1958). Clare wrestles with the tendency of male writers of this kind of mid-century ancient-SF literature to depict women solely as villainous. That is, practically any time a female Greek or Roman figure is adapted into SF of this time and medium, their purpose is to instill fear into the hearts of men. Clare does not offer an explanation as to why women are portrayed this way, but he nonetheless tracks the problematic impulse.

The following chapter also extends the engagement with the genre of ancient-SF literature, although the progression in chronology alone is not a drastic enough change to warrant a new chapter altogether, which leads Clare to number this chapter 1.5 instead. As chapter 1 laid a lot of the groundwork on Clare's key themes and methods, the beginning of this subsequent chapter comes off as its direct continuation, arranged by SF novels of the 1980s and 90s that were particularly interested in adapting Roman militarism. This leads to first presenting the analyzed work as almost entirely wrapped up in hyper-masculinity and gratuitous violence, but then offering a contrast in the next section which examines another set of novels that use ancient Rome to potentially critique rampant colonialism and imperialism rather than celebrate those horrendous ideologies. In his discussion, Clare reads texts such as Jerry Pournelle and S. M. Stirling's *Go Tell the Spartans* (1991) or John Ringo's *The Last Centurion* (2008) as ancient-SF adaptations of the Roman military that are ambiguous as to whether they are praising or critiquing right-wing politics. Similar to his analysis of race and gender in earlier works, Clare acknowledges the prominence of nationalism in some of these SF novels and offers a few interpretations of their underlying ideological purposes. While Clare does not attempt to explain the reasoning behind such troubling -isms and the phobias of the right that are present in this literature – using his knowledge of classical antiquity – he nevertheless offers valuable insight into the connections between ancient Rome and SF. Through a less distressing case study, Dan Simmons's duology of *Ilium* (2003) and *Olympos* (2005), Clare concludes his literary examples and examines how these two novels can be seen to adapt the Greek

gods in a way that calls for questioning and rethinking standard Western notions of spirituality – an apt theme to end on for “when we move from page to screen” (Clare 105).

Somewhat unsurprisingly, the roots of ancient-SF film and television are grounded in familiar content represented in the literature. For example, Clare opens this next chapter with several 1950s films that incorporate Amazon-like women into their audiovisual worlds. Further illustrating parallels between the varying mediums, he notes ancient-SF cinema’s tendency to adapt Atlantis as readily as the Amazons (Clare 115–17). From there, however, Clare begins to trace how SF implements the ancient world in ways that are relatively specific to screen media, starting with monsters in the King Kong and Godzilla universes. In the grand scheme of the book, this organization emphasizes the way different mediums generate particular opportunities to represent various aspects of antiquity through futuristic science and technology. Clare’s attention to form in addition to content shows that genre is a feature of ancient-SF, disguised as a bug in plain sight. My takeaway from Clare is that the vehicle by which the story is delivered has a profound effect on the reception of the science fictional elements within the tale itself.

Famous highlights in the film and TV chapter include *Star Trek* (1966–69), *Doctor Who* (1963–89), *The Rocky Horror Picture Show* (1975), and *Star Wars* (1977). By addressing such popular franchises, Clare has the tall task of implicitly acknowledging and contributing to the plethora of ink that has already been spilt on these resonant universes. While much has already been said about these renowned examples, his stress on the influence of ancient Greece and Rome underscores how pervasive and embedded classical antiquity is in SF. It seems so prominent, in fact, that Clare even goes on to explain the ways in which ancient-SF appears in some children’s and young adult TV and film. To wrap up the chapter, he closely analyzes the use of Greek mythology in the *Battlestar Galactica* (2004–2009) television series (Clare 166–73). Although the space opera show does not advertise itself as preoccupied with Greek religion, I would find it difficult to watch it as anything but that after reading Clare’s elucidation.

Clare concludes his analysis with a chapter on video games, the newest of the various media he discusses. Opening with a defense of a burgeoning form that is still in the process of gaining scholarly reputation, Clare acknowledges that “humanities academics have really only just begun to devote serious time and effort to understanding games, compared with other pop-culture media” (176–77). After a brief overview of the function of video games in general, he theorizes how interactivity works uniquely within ancient-SF works. The first few of Clare’s examples actually date back to the 1980s, thus simultaneously providing an interesting history of the rapidly developing medium in addition to analyzing the games’ relevance to classical reception studies. In the latter half of his chapter on ancient-SF video games, Clare takes a closer look at three examples from the twenty-first century: *Fallout: New Vegas* (2010), the *Mass Effect* trilogy (2007–2012), and *Assassin’s Creed: Odyssey* (2018). Through these three representatives, he studies how games afford opportunities to convey the ancient world in a manner previously unimaginable within the restrictions of preexisting media.

Overall, I find that *Ancient Greece and Rome in Modern Science Fiction: Amazing Antiquity* may be both entertaining and useful whether you want an

introduction to ancient-SF or if you are looking to write more about an example that has not yet been extensively covered. Personally, there are no other instances of Greece or Rome in SF I can think of that Clare did not include, so I am not disappointed that “your favorite SF story might well not be here” (5), as he forewarns in the introduction. Another reviewer, however, found it necessary to note that Clare omits a “fairly obvious classical allusion” (Cousins 102) from a certain episode of *Doctor Who* in his review. Although it is quite a specific example left out, I sympathize with this reviewer’s impulse because if a complete list of all uses of classical antiquity in SF is not included here, then where else should it be?

Clare humbly admits in a footnote of the introduction to referencing online resources like Wikipedia and IMDb “in those early days of source-locating” (5). I wonder about the possibility of including a subsection in the bibliographic information for a comprehensive record – to the author’s knowledge – of ancient-SF to date, even if the case is not referenced in the text. Such a catalog could have been a way to address the other reviewer’s concerns and provide a source for future scholars to pick up the project where Clare leaves off. Nonetheless, in this monograph, he has already addressed what must surely be a majority of examples fitting the criteria to count as ancient-SF. So, regardless of whether an extensive inventory is necessary here, the criticism Clare delivers for the texts he does consider is thorough and a terrific classical perspective to bring to the field of SF studies.

Biography: Noah Slowik (he/him) is a Graduate Teaching Assistant and a second-year English PhD student at the University of Delaware. He has previously reviewed Sarah Annes Brown’s *Shakespeare and Science Fiction* for volume 10, issue 1 of *Fafnir*. In November 2024, he presented at the Midwest Modern Language Association on “Theorizing *Forbidden Planet* as a Science Fiction Adaptation of Shakespeare.” His current scholarly research interest is studying the ways speculative fiction creators incorporate historical figures from scientific revolutions into their works.

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BOOK REVIEW:
Self-Reflective Fiction and 4E Cognition

Essi Varis

Polvinen, Merja. *Self-Reflective Fiction and 4E Cognition*. Routledge, 2023.
ISBN 9781032263748.

Full disclosure: I am fortunate enough to have known cognitive narratologist Merja Polvinen for many years now, and during those years, I have developed a certain heuristic. Whenever a scholarly text I am reading discusses the simultaneous life-likeness and artificiality of fiction, I scribble in the margin: “the Merja Argument,” sometimes accompanied by a little smiley face. Other people might signpost such passages with more general terms, such as “the paradox of fiction,” but one has to be careful there, because – as *Self-Reflective Fiction and 4E Cognition* details – there is actually a crucial difference between the two viewpoints.

“The paradox of fiction” denotes the human tendency to care about fictional happenings as if they were real, while knowing full well that they are not. The paradox thus rests on the widely assumed ontological division between the immersive “belief” in the seeming reality of storyworlds and the more “detached” appreciation of the carefully crafted textual artifice. In narrative theory, these two levels of reading have typically been viewed like water and oil: they cannot mix in the vessel of consciousness. Thus, the best the reader can do is to swing their attention back and forth between the mimetic illusion and the textual-material design. “The Merja Argument,” by contrast, maintains that there is no ontological divide and, hence, no real paradox between the storyworld and the story design. Rather, reading is a form of “lucid self-delusion” (155), where the reading mind and the readable text open each other to the coinciding possibilities of mimesis and artifice simultaneously – inseparably. What is more, Polvinen goes on to argue that literary narratives constitute particular “cognitive environments” for fostering such layered effects of fictionality and self-reflection. Thus, interacting with them can potentially

give rise to entirely new “constellations” of thought (161–62). This mind-expanding potential of narratives is further underlined by Polvinen’s engagements with several carefully selected works of speculative fiction – in other words, works of fiction that expressly encourage their readership to reach somewhere beyond everyday realities.

These attractive new starting points for understanding literary imagination derive from a bundle of widely recognized narratological theories on the one hand, and from the recent wave of so-called “4E” cognitive theories on the other hand. The 4E paradigm is notoriously difficult to explain in any concise manner, but the first chapter of the book defines “cognition” as skillful action that is always deeply Embodied as well as Extended and Embedded in different kinds of environments. In explaining the fourth “E” – Enaction – Polvinen relies heavily on J. J. Gibson’s concept of “affordances,” “the action potentials offered by an environment to a particular cognizer” (5). This is the main move that allows Polvinen to redefine fictions as unique cognitive environments affording unique cognitive actions. The four subsequent chapters go on to explore the spectrum of the metacognitive qualities that differentiate these fiction-induced cognitive actions from everyday cognition: the metaphorical mode of understanding, the spatio-temporal structures of narratives, and fictionality.

Before peeking into the main arguments of the analysis chapters, however, a word of caution may be in order: *Self-Reflective Fiction and 4E Cognition* is one of those books that are far heavier than their size would suggest. Anyone who has read the first chapter of the book – or the preceding three paragraphs of this review for that matter – surely realizes that *Self-Reflective Fiction and 4E Cognition* traverses fairly abstract levels of metafiction and metacognition. It does not satisfy itself with merely analyzing metaphorical and spatio-temporal structures of narratives; it also critiques the spatial metaphors that proliferate in narratology. Polvinen suggests, for instance, that narratologists’ habit of thinking about what is “inside” and “outside” of storyworlds may be one reason for the unnecessarily ontological divide perceived between the mimetic and the artificial aspects of fiction. In addition, Polvinen’s undeniable expertise in narrative theory means that her argumentation is quite brief and to-the-point. There is no idle rambling in this book, which other cognitive narratologists are sure to appreciate. For others, however, these same qualities might make the discussion rather dense and difficult to approach. One can only hope that the combination of these fairly high levels of abstraction – both in terms of the topic and in terms of the writing style – will not deter potential readers, because *Self-Reflective Fiction and 4E Cognition* would offer valuable takeaways to narratologists, SFF researchers, and cognitive scientists alike.

The narratologists can look forward to interesting terminological discoveries. Polvinen suggests, for instance, that the “double vision” of fiction as both life-like and artificial as well as the analogous “seeing-as” prompted by metaphorical language can both be captured in A. S. Byatt’s notion of “lamination” – “a word she uses to describe the simultaneous presence of layers of experience” (27). In the chapter concerning temporal structures, Polvinen applies the idea of “vection,” “a partial experience of self-movement” created by eye movement, to the cognitive movement across narratological frames (98–99). Moreover, in the chapter concerning spatial structures, Polvinen’s own

coinage, “making space,” demonstrates the two-way interactionality of affordances: it refers both to the readers’ ability “to imagine the text in spatial terms” and to the text’s way of “becoming a space for them to inhabit” (76–77).

The SFF researchers, for their part, are sure to enjoy the discussions Polvinen orchestrates between her theoretical musings and the chosen literary samples. As I have already mentioned, the book’s self-reflective corpus consists not only of traditional metafiction – works by Byatt, Ali Smith, John Barth, and David Eggers – but also of speculative fiction: Catherynne M. Valente’s “Silently and Very Fast” (2011), China Miéville’s *The City & the City* (2009), Ted Chiang’s “Story of Your Life” (1998), and Christopher Priest’s *The Prestige* (1995). Seeing that the book’s overarching mission is to explore how thinking with fiction differs from real-life cognition, focusing on overtly artificial postmodern narratives and overtly imaginary speculative narratives seems like a natural choice, of course. Yet, saying that the literary samples are extremely well-chosen almost seems like an understatement because they are so clearly *formative* to Polvinen’s arguments.

This formative role of fictional works is so essential to the practice of 4E cognitive narrative studies it may be worth explaining in a bit more detail. What I mean is that the vast majority of narrative theory leaves the impression that the author has begun with a theory, a system, or perhaps a reaction to previous theories and then cherry-picked the most appropriate narratives to demonstrate their ideas. *Self-Reflective Fiction and 4E Cognition*, by contrast, reads like its theoretical notions have emerged more organically from the interactions between Polvinen’s theoretical expertise and the innovative aspects of the narratives discussed. They are hardly just “target texts.” Rather, Polvinen’s analyses seem to prove both Brian McHale’s claim that speculative fiction can function as literalized narratology (11) and the 4E theories’ conception of cognition as something that arises from the interactions between the cognizer and their environment. If these two notions gain popularity and traction, they might well revolutionize the entire field of literary studies, first, by highlighting SFF as a genre of exceptional (meta)cognitive value, and second, by dissolving the hierarchy between artistic works and the theoretical tools we purportedly use to dissect them.

Overall, the 4E paradigm is a paradigm of two-way interactions – or at least it ought to be. Just as literary theory should be shaped reciprocally by both literature and theory, cognitive literary studies would also be more fruitful as a genuine interdisciplinary dialogue than as the humanist monologue it currently is. While literary studies have adopted useful tools and terminology from cognitive studies, the insights that cognitive studies might gain from its intersections with literary studies remain largely unexplored. Thus, one can only hope that *Self-Reflective Fiction and 4E Cognition* finds its way to the more sciencey side of university campuses and does its part in realizing the optimistic vision the book concludes with: cognitive literary studies has real potential “to generate fruitful hermeneutic circulation around the study of the imagination in both the sciences and the humanities” (151).

Of course, in reading *Self-Reflective Fiction and 4E Cognition*, a skilled metacognizer can also see the roads Polvinen has not taken. Although the title of the book purports that it examines self-reflective “fiction,” its viewpoint is exclusively literary. That is to say, there are hardly any references to fiction in other media, even though the unity of form and content – and thus, the

indivisibility of mimesis and artifice – is arguably more salient in drawn images. On the other hand, some visual media require the reader to physically oscillate their attention between different structures: for instance, reading a comic requires adjusting one’s gaze back and forth, zooming into the individual frames and out to the full layout again. The perceptual apparatus of the reader thus resists the notion of “lamination” in the context of multimodal texts, at least to a degree, and the transmedial applicability of *Self-Reflective Fiction and 4E Cognition* remains debatable, at least for the time being.

Furthermore, while Polvinen is exceptionally observant about the metaphorical language used not only in literature, but also in its study, one could always go even deeper and explore the logic behind the metaphors. For instance, understanding abstract and imaginary things in spatial terms is by no means specific to narratology. It is a general, unavoidable offshoot of the fact that cognition is always embodied and embedded in lifeworlds – that is, 4E cognition is inherently spatial, and the primacy of spatial-visual thinking has even been proved by neuroimaging (see, e.g., Amit et al.). It is no wonder, then, that most writers and readers also understand literature as a kind mental space – or, indeed, a cognitive environment. To quote Mary Oliver, “the poem is a temple – or a green field – a place to enter, and in which to feel. Only in a secondary way is it an intellectual thing – an artifact” (12).

Of course, this does not contradict Polvinen’s main claims that literature is both an imaginary place and an artistic artifact all at once and that we can understand literature and gain something cognitively valuable from it due to this very duality, not in spite of it. Likewise, none of my points of criticism dispute that *Self-Reflective Fiction and 4E Cognition* is an erudite work of cognitive literary theory. While the corrections and additions it makes to state-of-the-art narratology may seem subtle on the surface, they seep deep into the very nature of literary and theoretical imagination. Polvinen’s self-reflective inquiries and speculative investigations should thus be considered far and wide in the ranks of narrative and cognitive theorists alike.

Biography: Essi Varis, PhD, has studied narratives across media from various cognitive perspectives since 2013. She is currently working on the final stages of her personal post-doctoral research project titled *Metacognitive Magic Mirrors: How Engaging with Texts and Images Enables and Extends Speculative Thought* (Finnish Cultural Foundation 2020–2025) and serving in the jury of Finland’s national comic book award, Sarjakuva-Finlandia. She also served as an editor-in-chief of *Fafnir* in 2021–2023.

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This issue is scheduled to be published in December 2025.