



Lectio Praecursoria:
Technonaturalist Speculative Fiction and
Literary Affordance

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Biography: Esko Suoranta received his PhD from the University of Helsinki in 2023. He is a former co-editor-in-chief for *Fafnir* and *Avain – Finnish Review of Literary Studies*. Currently, he works as a postdoctoral researcher in the Kone foundation project Imagine, Democracy! Narrative Fiction as a Tool for Imagining Democracy in Finland, affiliated with Narrare: Centre for Interdisciplinary Narrative Studies at Tampere University. With his co-editors at *Fafnir*, he won the World Fantasy Award in 2020. His doctoral dissertation *The Sky Above the Port Was the Color of Capitalism: Literary Affordance and Technonaturalist Speculative Fiction* is available at <http://urn.fi/URN:ISBN:978-951-51-9352-0>

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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.