Book Review

Ecogames: Playful Perspectives on the Climate Crisis, edited by Laura op de Beke, Joost Raessens, Stefan Werning, and Gerald Farca

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Abstract

A review of the voluminous anthology Laura op de Beke, Joost Raessens, Stefan Werning and Gerald Farca (eds.): *Ecogames: Playful Perspectives on the Climate Crisis*. Published by Amsterdam University Press in their Green Media series, 2024. ISBN: 978-9-463-72119-6, 612 pages.

Keywords

In their editorial to volume 14 of *Eludamos*, Holger Pötzsch and Kristine Jørgensen reflect on the position of games and play relative to multiple ongoing global crises, asking: "Given our current dark times, is there still a future for games and play?" (2023, p. 1). In line with ecocritical thinking, and theoretical work on climate fiction, they go on to emphasise the social, cultural, and political power of narrative in envisioning a way forward:

> If we want to get beyond the current post-political situation … we need narratives bringing forth progressive alternatives that inspire action and therefore matter for the real world—and urgently so. We need concrete livable utopias that can unite people in collective struggles for better worlds not only for humans, but for all living creatures on this planet—both present and future. (Pötzsch & Jørgensen, 2023, p. 2)

Similar themes are foregrounded in the recent 600-page anthology *Ecogames: Playful Perspectives on the Climate Crisis* (2024), edited by Laura op de Beke, Joost Raessens, Stefan Werning, and Gerald Farca, which is also infused with a persistent call to action—or even activism. Divided into four main sections—"Today's Challenges:

Games for Change", "Future Worlds: New Imaginaries", "The Nonhuman Turn", and "Critical Metagaming Practices"—each part spans seven articles penned by both established and early-career scholars, artists, and game designers. *Ecogames* is a welcome—and theoretically diverse—contribution to ecocriticism, green media, and game studies. Broad in scope, the anthology's 28 chapters between them cover and explore "the themes, politics, and aesthetics of ecogames; the material and discursive contexts in which they operate; as well as the ways in which players experiment with and negotiate environmental issues in play" (p. 9), making it in more ways than one a weighty volume. Obviously, a short review like this one cannot hope to do justice to its many interesting contributions or to the synergy effects produced by their collection. So, I will simply start by encouraging you to treat yourself to the experience of reading it.

From ecocriticism to the environmental humanities

The 60-page introduction does a thorough job of compressing and organizing the vast theoretical landscape that entwines game studies with perspectives from the environmental humanities, the primary field of scholarship in which the editors position the anthology (p. 22). One might expect, then, a more in-depth introduction to the field of the environmental humanities, but all that initially is offered is the somewhat vague remark that the term "delineates a much wider field of scholarship [relative to ecocriticism] including the disciplines of environmental history, ecological philosophy, and anthropology, among others," and the observation that the field is "characterized by a more radically interdisciplinary attitude [again, relative to ecocriticism], one that is in conversation with the natural sciences" (p. 22).

The editors do locate the emergence of ecogame scholarship in "the field of ecocriticism in the 2010s" (p. 18), but make no sustained attempt to trace key ecocritical methods and concerns that have been fruitful to the study of games—except to note how early eco-scholarship by Alanda Chang, Hans-Joachim Backe, and John Parham was indebted to ecocriticism, thus demonstrating that "a lot of ecocritical scholarship can easily be applied to game environments," since games, like other cultural constructions, "draw on styles, tropes, and registers that have long histories in literature and the arts" (p. 19). In a similar vein, they note that research on ecogames has benefitted from scholarship on climate fiction, and that ecogames often draw on "spectacular science-fictional imaginaries" (p. 19), thus implicitly acknowledging their reliance on their literary and artistic forebearers.

Further underscoring how "cross-pollination between ecocriticism and game studies has proven very fruitful" (p. 21) is the lingering ecocritical influence on the study of ecogames evident in chapter contributions such as Soraya Murray's "Postcoloniality, Ecocriticism and Lessons from the Playable Landscape" and Souvik Mukherjee's "No Cyclones in the *Age of Empires*: Empire, Ecology, and Video Games". Mukherjee, oriented in postcolonial ecocriticism, holds that "despite efforts of game companies to

begin to address issues of environmental destruction and climate change, the thinking around this is very limited and lacking provisions to include the diverse and the subaltern" (p. 170). The sentiment is echoed by Jordan Clapper in "What Do We (NDNs) Do with Games?", which stresses how indigenous games can offer "alternatives to Western imaginaries, medial histories, and naturecultures" (p. 465).

The editors' choice of grounding the anthology in the broader field of the environmental humanities is qualified by the argument that, due to the complexity of the climate crises, "ecocriticism has been caught up with by the environmental humanities" (p. 22) and that "there are more dimensions to the climate crises and its playful mediations than ecocriticism can attend to" (p. 21). This is likely true, particularly when more recent ecocritical developments, such as affective ecocriticism (Bladow & Ladino, 2018; von Mossner, 2017), empirical ecocriticism (Schneider-Mayerson et al., 2023), and material ecocriticism (Clark, 2019; Iovino & Oppermann, 2014) are disregarded, which they are here.

These remarks are to some extent a quarrel over labels, since there is considerable overlap between the ideas now travelling under the label of the environmental humanities and the thinking circulating in the entangled and diffuse fields of ecocriticism (Garrard, 2012; Glotfelty & Fromm, 1996), posthumanism (Braidotti, 2013; Hayles, 1999), new materialism (Barrad, 2007; Bennett, 2009), animal studies (Singer, 1975) and critical plant studies (Hall 2011; Kimmerer 2003). While similar, "environmental humanities" has emerged as a new umbrella term for cross-disciplinary efforts across the humanities and social sciences to address our current, global predicament, marked by environmental degradation due to an over-exploitation of natural resources that is triggering species mass extinction and global warming.

The influence of Donna Haraway

It is important to explicitly acknowledge that underpinning the thinking currently furthered under the label of the environmental humanities, is critical work undertaken for several decades by multiple feminist, queer, postcolonial and indigenous thinkers, often with Donna Haraway as a key congealing agent. Her writings in the intersection between gender, technology, politics, and play have contributed to environmental scholarship since the late 1970s. Continuously highlighting—as do Pötzsch and Jørgensen—how narrative is vital to the re-imagining of collective, sustainable futures, Haraway has striven to undo fundamental dichotomies underlying Western thinking, not least through the figure of the cyborg (1991), the rethinking of human-animal relations (2008), and, more recently, through engaging with indigenous traditions, adopting an emphasis on kinship (2016). One of Haraway's strengths has been to steadily put forward productive critical concepts, like "the humusities", "companion species", and *sympoeisis* (which is Greek for "collective creation").

Haraway is the third most frequently cited scholar in *Ecogames*' useful "index of names" (where only Alenda Y. Chang and Benjamin J. Abraham feature more often) and is mentioned in contributions across three parts of the anthology, in "Future Worlds: New Imaginaries," "The Nonhuman Turn," and "Critical Metagaming Practices." Some of her central ideas are conveyed by Raessens in his chapter "*Symbiosis*, or How to Make Kin in the Chthulucene", which borrows parts of its title from Haraway's latest book (2016). Discussing the virtual reality installation *Symbiosis* (Polymorf, 2020), which aims to create a "transformative player community" (p. 391), Rassens argues that its multisensory experience, like art more generally, impacts participants mainly on an affective level, while engagement with the work's paratexts—such as a booklet that accompanies the experience and a symposium where Haraway spoke on interrelationships between her own work and *Symbiosis*—might be necessary for the participants to "cognitively understand the meaning of *Symbiosis* and its behavioral implications" (p. 390).

An emphasis on the interplay between affect and critical frameworks comes to the fore in several of the contributions to the anthology, but often with sparse contextualization. In "Hiding in the Tall grass," where Merlin Sellers reads *The Last of Us Part II* (Naughty Dog, 2020) and *Flower* (thatgamecompany, 2009) in light of perspectives from critical plant studies, she quotes Aubrey Anabel's assertion that "video games are affective systems" (p. 365), but without mentioning, for instance, Jenova Chen's pioneering role in broadening the emotional register of games. Equally, when the persuasive and affective dimensions of games are discussed in the introduction, it is without reference to the broader "affective turn" within the humanities and social sciences. Such gaps must be filled by readers, without help from the "index of themes," where "affect" redirects to "change."

Ecogame-history: From analogue to digital games

In their tightly packed introduction, the editors map the complexities of the intersection of the environmental humanities with game studies (itself notoriously theoretically multifarious) by establishing a framework of referential parameters that, between them, manage to signpost, in indexical manner,[1] a number of key concerns currently occupying scholars in the environmental humanities and green game studies—and which are fleshed out in various and interesting ways by the individual contributions to the volume.

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[1] Showcasing, perhaps, how the label of *environmental humanities* spans such a vast number of research fields that in-depth discussion, contextualization, and careful discussion of how terms move across disciplines, is hampered. The field might have become a theoretical hyperobject, to borrow Morton's (2014) term.

The editors' first set of parameters name "three recurring perspectives" and over-arching methodologies in the study of games (p. 11), namely a focus on games as "texts" or media products (correlating with a methodological emphasis on narrative and aesthetic analysis), a focus on the media industries (spawning analysis of industry documents and conventions), and a focus on the players and their practices (in the form of reception studies or reflections on modes of play). All three areas are covered by (and sometimes within) anthology contributions, with rich possibilities for cross-fertilization between the volume's four sections.

The editors' tripartite game-studies-based schema precedes a brief introductory overview of environmental themes in early analogue games, starting with "one of the oldest games still played in the world today", *Mancala*, a sowing game described as "a kind of farming sim" (p. 13). Further highlighted are traditional hunting games, typically for two players, pitting one as the hunter and the other as prey—a genre that is still alive in analogue children's games like *hide and seek*, or the Norwegian game *hauk og due* ("kestrel and dove"), which may involve multiple players. Such traditional games are usually played outside and were originally often tied to ritual festivals, like spring festivities, the editor's note. They further underline that "the geographic spread of these hunting games points to the ways in which shared experiences with nature are translated into and communicated across generations [not least] through board games" (p. 14).

Discussing how the history of analogue ecogames reflect "changing environmental sensibilities," the editors reflect on how independent tabletop role-playing games (TTRPGs) tend to experiment with environmental gameplay through the reskinning and hacking of existing games. Such hacking practices are discussed in more depth by Chloé Germaine and Paul Wake in their chapter "Imagining the Future: Game Hacking and Youth Climate Action," which explores, with a contemporary educational emphasis on active youth collaboration, how "board games have a cultural, civic, and educational role to play in confronting and negotiating the problem of the contemporary climate and ecological crisis" (p. 483). Another contribution concerned with games in education is Hans-Joachim Backe's chapter "Between the Lines: Using Differential Game Analysis to Develop Environmental Thinking," where he examines the environmental features of four survivalist games, *Minecraft* (Mojang, 2011), *ARK: Survival Evolved* (Studio Wildcard, 2017), *The Long Dark* (Hinterland Games, 2017) and *Subnautica* (Unknown Worlds Entertainment, 2018), finding that they all share an anthropocentric perspective. Highlighting how cooperative play may modify play behavior and impact player understanding, Backe suggests that small tweaks in game parameters can form the basis for comparative discussions of the environmental aspects of games in educational contexts.

As acknowledged in the introduction, most of the chapters in the anthology concern themselves with videogames. This emphasis may reflect player patterns—or current interests in games scholarship—but is salient in an anthology concerned with sustainability and the climate crisis, not least since several of the chapter contributions

thematise how environmentally sustainable gaming may involve downscaling one's digital equipment or reducing one's energy expenditure, for instance by playing 8-bit games, as discussed by Chang in "Change for Games: On Sustainable Design Patterns of the (Digital) Future." Given that the editors have solicited chapters on specific themes (p. 12), one may wonder why they have not sought further contributions on analogue gaming practices, such as LARPs, especially since they choose to mention the "prominence of environmental titles at Nordic LARP festivals" (p. 18). In a volume dedicated to exploring the interrelationship between games and the environment, comparisons between LARPs, board games and online practices would be of great interest—and Nicolle Lamerichs' chapter on "Sustainable Fandom" takes some steps in this direction.

Political and policy frameworks

A conspicuous absence in the introduction is its lack of reference to the largest international political framework for sustainable policies and collective action, the 17 United Nations (UN) sustainable development goals (SDG), adopted by all UN member states in 2015, as part of the ambitious "2030 Agenda for Sustainable Development". However, the United Nations Environment Programme (UNEP)—which oversees 25 SDG indicators across several SDG goals—is mentioned by Chang (in association with the launching of the 2019 Playing for the Planet or P4TP initiative) and by Sonia Fizek, who discusses "Material Infrastructures of Play: How the Games Industry Reimagines Itself in the Face of Climate Crises". Fizek argues, in line with recent work by Abraham (2022), that making games with green content is not enough:

> If the games industry wants to become truly sustainable, it needs to tackle video game development and production as well as the manufacturing of hardware such as games consoles and computers. And if game studies wants to become truly ecocritical, it needs to engage with video games as material as well as labor and energy-intensive products." (p. 526)

In a close reading of the industry document *Green Games Guide*, Fizek finds that it pays considerable attention to the impact of individual player behaviours, while downplaying the environmental cost of device manufacturing, something that showcases the need for continued critical effort—and the tendency of the industry to shift responsibility onto the player.

Ecocritical dimensions of player agency

In game design, player agency tends to be heralded as a plus, but in green metagaming things are not so simple. In Péter Kristóf Makai's analysis of the climate change

games *Fate of the World: Tipping Point* (Red Redemptions, 2011), *Democracy 4* (Positech Games, 2022), and two *Sims 4* expansions (*Island Living* (Maxis, 2019), and *Eco Lifestyle* (Maxis 2020), Makai observes that they all, whether difficult or less demanding, supercharge the player's agency with respect to climate impact. The tendency of videogames to position the player as a user of resources, in control of the game environment—thus reproducing an anthropocentric environmental attitude—has previously been noted by Chang (2013, p. 9), whose pioneering work still forms the backbone of ecogame studies. In "Green New Worlds? Ecology and Energy in Planetary Colonization Games", Paweł Frelik argues that a player attitude of environmental domination is central also to planetary colonization games. Discussing what he terms the "Anthropocene ideologies" of games like *Aven Colony* (Mothership Entertainment, 2017), *The Planet Crafter* (Miju Games, 2022), and *Factorio* (Wube Software, 2020), he points out how "player's options and activities in these games often closely reflect the trajectory of the last five hundred years of Western history, allowing us to engage in the same processes as the colonial powers and industrial societies between the 1400s and now" (p. 278), thus inviting players to "reimagine colonial conquest" (p. 277), while obscuring how such activities degrade the environment by envisioning new and speculative forms of energy as harmless and benevolent.

In contrast, the term *petrofiction* (coined by Amitav Gosh in 1992) has given rise to a new ecocritical sub-field, namely the study of petrocultures, or the imaginaries surrounding the consumption and cultural dependence on oil (see Buell, 2012; Scott, 2018; Szeman, 2019). In "Dark Play and the Flow Time of Petroculture in Oil-Themed Games", op de Beke deepens the discussion of energy representation in games by drawing on this recent field, demonstrating how games like *Windfall; The Oil Crisis Game* (David Mullich, 1980), *The Oil Blue* (Vertigo Gaming Inc. 2010), and *Oil Mogul* (CHG Games, 2020) do not obscure petroleum infrastructures but rather "wear oil on their sleeve" (p. 295). Linking her discussion of oil imaginaries to the concept of "dark play" (Mortensen et al., 2015), she proposes that in oil games, dark play "is used to indulge in climate nihilism and misanthropy" (p. 298). Drawing on Csíkszentmihályi's well known concept of flow, which she glosses as "the illusory feeling of productivity" (p. 300), she further argues, rather elegantly, that "a world dominated by the aesthetics of oil" tend to politically quell dissent "for the sake of smooth flow," setting up a "cultural register of lubricity" that is reflected in the gameplay of games like *The Blue Oil* (p. 305).

Running out of space long before I run out of reflections spurred by engagement with *Ecogames,* I will round up by highlighting how the anthology contributions, in addition to pondering over game mechanics and aesthetics, foreground various forms of environmentally oriented player response—including dark play, hacking, ecomodding, regenerative play (Farca), "patient gaming" (Scully-Blaker), boredom (Ruffino), sustainable fandom and eco-cosplay (Lamerichs), remediation as green citizenship (Werning), engagement with the "orthogame" (Backe), and "nonideal play" (Murray). While the editors draw inspiration from Gretha Tunberg's *The Climate*

Book (2022), the volume as a whole provides diverse formulations of how games, play, and the making and study of games may contribute to a more sustainable world.

For instance, "a new angle on the transformative potential of games" (p. 182) is offered by Vervoort, Carien Moossdorf, and Kyle A. Thompsen in "Games for Better Futures: The Art and Joy of Making and Unmaking Societies," where they discuss how games may realise institutional change. Defining institutions as "any stable, socially constructed pattern of behavior between people," thus including not just governmental structures but also legal structures, informal conventions, and traditions (pp. 182–183), the authors find that "players enjoy playing with institutions and institutional change—and so games become a potential space for active, engaged learning" (p. 184).

Their explanation for this enjoyment is ported from theories of interaction rituals, where four ingredients are necessary: "physical gathering, barriers to outsiders, a shared mood, and a shared focus of attention," which together foster a sense of group membership. But how does one safeguard from the danger that such rituals may also foster mobs? This is a valid question, when the authors go on to argue that "the value of awareness raising as a change mechanism is disputable," instead calling for "games that stir up the trouble needed for systemic change"—specifically "games focused on tearing down existing structures and systems" (p. 189). However, the dedication to remain within broader, democratic structures is signaled when they cite as examples games that "allow players to organize court cases against powerful fossil fuel actors" (p. 191), as well as approaches that may help shift "the imagination structures of the game industry" (p. 193).

In a related vein, the editors emphasise how change may occur at either a micro- (individual), meso- (community), or macro- (societal) level, and systematise different dimensions of change in a table that—inspired by Tunberg's call for *understanding*, *feelings*, *alternatives*, and *actions*—outlines how changes along the axes of systems thinking competency, motivation, imaginings, and lifestyle choices may result in a "progressive ecological identity" (p. 26). As empirical ecocriticism has found, however, there is reason to caution against a strong belief in the ability of ecogames to help foster, on their own, a "progressive ecological identity," since the effect of any game depends on its interaction with the beliefs and capabilities of individual players. This perspective is borne out in the reception study of the diving game ABZÚ by Gabrielle Trepanier-Jobin, Maeva Charre-Tchang, and Sylvie Largeaud-Ortega, who, in "The Underrealized Ecocritical Potential of ABZÚ", found that only a small fraction of players (56 of 2421 comments) thematised the apparent environmental dimensions of the game:

> Thanks to its procedures, images, and sounds, ABZÚ theoretically holds out potential to conscientize players to the threat posed by the overexploitation of nature to life on Earth and to humanity. However, as our

reception study indicates, there is no guarantee that this potential will be actualized by a majority of players in an ordinary context of play. (p. 324)

Given that players may not play with a "conscientized" mindset without sufficient prior knowledge, external input, or some form of provocation, the significance of volumes like *Ecogames* can hardly be overstated—and the contributions not mentioned here are all worth their ink.

The future depends on (conscientized) games and play—aided by the powers of reflection.

References

Abraham, B. J. (2022). *Digital games after climate change*. Palgrave Macmillan.

Barad, K. (2007). *Meeting the universe halfway*. Duke University Press.

Bennett, J. (2009). *Vibrant matter: A political ecology of things*. Duke University Press.

Bladow, K., & Ladino, J. (Eds.). (2018). *Affective ecocriticism: Emotion, embodiment, environment.* University of Nebraska Press.

Braidotti, R. (2013). *The posthuman*. Polity.

Buell, F. (2012). A short history of oil cultures: or, the marriage of catastrophe and exuberance. *Journal of American Studies*, *46*, 273–293. https://www.jstor.org/stable/23259137.

Chang, A. (2013). *Playing nature: The virtual ecology of game environments*. [Doctoral dissertation, University of California, Berkeley]. https://escholarship.org/uc/item/9ch2w332

CHG. (2020). *Oil mogul* [PC]. CHG Games. (Initial release 2019).

Clark, T. (2019). *The value of ecocriticism*. Cambridge University Press.

Garrard, G. (2012). *Ecocriticism*. Routledge.

Glotfelty, S., & Fromm, H. (Eds.). (1996). *The ecocriticism reader*. The University of Georgia Press.

Hall, M. (2011). *Plants as persons: A philosophical botany*. State University of New York Press.

Haraway, D. (1991). *Simians, cyborgs and women: The reinvention of nature*. Routledge. (Original work published in 1985)

Haraway, D. (2008). *When species meet*. University of Minnesota Press.

Haraway, D. (2016). *Staying with the trouble: Making kin in the Chthulucene*. Duke University Press.

Hayles, N. K. (1999). *How we became posthuman*. The University of Chicago Press.

Hinterland Games. (2017). *The long dark* [Multiple platforms]. Hinterland Studio.

Iovino, S., & Oppermann, S. (2014). *Material ecocriticism*. Indiana University Press.

Kimmerer, R. W. (2003). *Gathering moss: A natural and cultural history of mosses*. Oregon State University Press.

Maxis. (2019) *The Sims 4: Island living* [Microsoft Windows, Mac OS]. Electronic Arts.

Maxis. (2020) *The Sims 4: Eco lifestyle* [Microsoft Windows, Mac OS]. Electronic Arts.

Miju Games. (2022). *The planet crafter* [NVIDIA GeForce NOW, Microsoft Windows]. Miju Games.

Mojang Studios. (2011). *Minecraft* [Multiple platforms]. Mojang & Xbox Game Studios.

Mortensen, T. E., Linderoth, J., & Brown, A. M. L. (Eds.). (2015). *The dark side of game play: Controversial issues in playful environments*. Routledge.

Morton, T. (2014). *Hyperobjects*. The University of Minnesota Press.

Mothership Entertainment. (2017). *Aven colony* [Multiple platforms]. Team 17.

Mullich, D. (1980). *Windfall; The oil crisis game* [Apple II]. Edu-Ware.

Naughty Dog. (2020). *The last of us part II* [Playstation 4 & 5]. Sony Interactive Entertainment.

Op de Beke, L., Raessens, J., Werning, S., & Farca, G. (Eds.). (2024). *Ecogames: Playful perspectives on the climate crisis*. Amsterdam University Press.

Polymorf. (2020). *Symbiosis* [VR installation]. Studio Biarritz.

Positech Games. (2022). *Democracy 4* [Multiple platforms]. Positech & Tri-Synergy.

Pötzsch, H., & Jørgensen, K. (2023). Editorial: Futures. *Eludamos: Journal for Computer Game Culture*, *14*(1), 1–7. https://doi.org/10.7557/23.7324

Red Redemptions. (2011). *Fate of the world: Tipping point* [Microsoft Windows, Mac OS]. Red Redemptions Ltd & Lace Mamba Global.

Schneider-Mayerson, M., von Mossner, A. W., Malecki, W. P., & Hakemulder, F. (2023). *Empirical ecocriticism: Environmental narratives for social change*. University of Minnesota Press.

Scott, H. (2018). *Fuel: An ecocritical history*. Bloomsbury Academic.

Singer, P. (1975). *Animal liberation*. HarperCollins.

Studio Wildcard. (2017). *ARK: Survival evolved* [Multiple platforms]. Studio Wildcard.

Szeman, I. (2019). *On petrocultures: Globalization, culture, and energy*. West Virginia University Press.

thatgamecompany. (2009). *Flower* [Multiple platforms]. Sony Computer Entertainment & Anapurna Interactive.

Unknown Worlds Entertainment. (2018). *Subnautica* [Multiple platforms]. Unknown Worlds Entertainment.

Vertigo Games BV (2010). *The oil blue* [PC]. Vertigo Gaming.

von Mossner, A. W. (2017). *Affective ecologies: Empathy, emotion, and environmental narrative*. The Ohio State University Press.

Wube Software. (2020). *Factorio* [Multiple platforms]. Wube Software.