

# BEYOND THE TEXT: ANALYZING ETHICAL AND ECOLOGICAL PLAY IN INTERACTIVE CRISIS NARRATIVES

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**Abstract.** When analyzing ethics and ideologies in crisis narratives, literature and film traditionally rely on a fixed textual basis. Interactive and ergodic media, however, often highlight choices to teach the player ethical behavior. This article poses the question of how to identify the ecological messages taught by interactive and ergodic media. To answer this question, I define markers of ecological play by combining existing methodologies with an ecocritical approach. For that I analyze two games, *Against the Storm* (2024) and *Terra Nil* (2023), both of which feature minimal traditional storytelling. I draw upon my previous work on analyzing ergodic media, preferred playing specifically, and combine this with recent studies on ecocriticism and games. These markers of ecological play can be applied to other forms of interactive storytelling.

**Keywords:** game studies, ecocriticism, preferred play, ecological play, ethical play, ergodic media, interactivity, methodology

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## 1. Introduction

For the last two decades, the world has been ending between pages and on screen. Apocalyptic and postapocalyptic narratives that are heavily inspired by the climate crisis and the earth's predicted future have sparked numerous best-selling titles (Kemmer 2014: 97). In 2012, Alexa Weik von Mossner noticed a “remarkable increase in [...] ecologically themed dystopian science fiction narratives [which] indicates their relevance in a time of ecological uncertainty and change” (Weik von Mossner 2012: 42). This trend still persists. Over ten years later, movies like *Furiosa: A Mad Max Saga* (Miller 2024) premiere on screen, while popular postapocalyptic video games are adapted

as movies and series, such as *Borderlands* (Roth 2024) or *Fallout* (Robertson-Dworet & Wagner 2024).

Most of these iterations paint a fatal picture of our future. Genres like Solarpunk, which put emphasis on future societies with photovoltaic technology and utopian environmentalism and thereby might inspire change, are still in the minority (Frelik 2024: 275–276).

Especially in video gaming, however, many developers have tried to foster ecological thinking in their games, as video games and other forms of interactive or ergodic (Aarseth 1997: 162) media offer a chance for active participation in crisis narratives. These narratives are deemed especially effective in provoking change because they let the player experience a problem interactively rather than just witness it passively (Bruhn 2020: 7).

However, when analyzing ethics and ideologies in crisis narratives, literature and film traditionally rely on a fixed textual basis. Interactive and ergodic media frequently present the player with choices in order to teach the player ethical behavior. This is often seen as a challenge in designing meaningful game experiences but also complicates analyzing games for ethical implications. This is especially true when the narratives within the analyzed games are not set in our world, but in a different one, where parallels to our own climate crisis are harder to grasp.

In the past, I have already proposed a methodology for tackling the indeterminacy of games and other ergodic media with the *preferred playing* method (Meier 2022) as well as for framing ethical dilemmas to foster empathy in players (Meier & Bellini 2021). As another methodological tool, which can be used in addition or separately to *preferred playing*, this article presents markers of ecological and ethical play, which can then subsequently also be used to tackle other forms of new media which highlight choices (e.g. interactive movies or *Choose Your Own Adventure* books).

I will highlight these markers in two games, namely *Against the Storm* (2024) and *Terra Nil* (2023), which are both indie games.<sup>1</sup> As they are very recent, little has been written about them despite their commercial success. As with most contemporary texts, these games are meant primarily for entertainment purposes and feature minimal

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1 The term *indie games* refers to games that do not rely on a big game studio or a major publisher.

traditional storytelling yet foster sustainable behavior through gameplay and choices.

The article begins by showing how ecocriticism and the notion of crises (especially climate crisis) relate to games, and how ethical and ecological behavior play into the development and consumption of games. I will then show how ecological and ethical play are framed within the two games by close reading them for their dominant meanings and their markers of ecological play. I will focus on the games' representation of 1) balancing the capitalist need of a society with the need to preserve or restore nature, and 2) rewards on the level of gameplay, visuals and audio. I will analyze the game primarily for two sets of markers for ecological and ethical play: those encoded in the goals of the game, and which might help the games to foreground their ecological messages, and those that are embedded in gameplay. With the second set, I will inquire whether ecological gameplay can be neglected or if a form of oppositional play is possible.

## **2. Beyond the anthropocene: crisis in games and their potential for change**

Using games to provoke ecocritical thinking seems counter-intuitive at first since games are undoubtedly not part of the natural world but products of a rather power-consuming and oftentimes money-driven economy. Ecocriticism as a scholarly discipline was initially based on North American nature writing and British Romanticism (Dodson 2011: 5). The early scholarship suggested that nature should be appreciated firsthand by studying nature's aesthetics alongside environmental texts (e.g. texts by Thoreau, an author and philosopher who is famous for his work *Walden; or, Life in the Woods*) (Dodson 2011: 7). Since then, ecocriticism has tried to shift the focus from the impact of the collective to the individual, while including the overarching historical, geographical, political, economic, and cultural dimensions of climate change (Soper 2016). While older ecocritical texts deem "[n]ature and technology [...] mutually exclusive realms" (Chang 2011: 57), numerous studies (e.g. Ulman 2001; Chang 2009) have shown that this is not true. Over the last decade, games have established themselves as serious objects of research as well as tools for social change (Chang

2024: 73–74). Video games with ecological themes or games that solely focus on the environment like *Plasticity* (2019), a game about waste management and recycling, have now been developed for over a decade (e.g. Bjørner 2021; Chang 2019). Games that do not focus on ecological messages, however, have been around for much longer and can still contain valuable ecocritical themes when analyzed through an ecocritical framework. Chang (2011: 58) states: “Games can offer a compelling way to reconcile a deep connection to nature and the nonhuman world with an equally important connection to technology and the virtual.” This holds true due to the nature of games. As Lawrence May (2021, n.p.) explains,

“play is liminal, emergent, and necessarily incomplete, and this allows its various actors [...] to come together in nonauthoritarian, imaginative and potentially radical ways. Through play, audiences are offered new and novel modes for envisioning ecological problems, solutions, and futures.”

Therefore, it is possible for players to experience the climate crisis, ecological policies and, most importantly, attempts to foster change through different points of view (see also Gee 2007: 7; Bianchi 2024: 560). They can also experience the outcome of, for example, global warming in a safe space (Raessens 2019: 234; Schrier 2019) and complex notions such as a crisis<sup>2</sup> from different angles.

Games not only help to simulate processes that take years, if not decades, in the real world, they also foster different kinds of engagement with the topic, among them intellectual, physical, sensory, social, narrative and emotional engagement (Schönau-Fog & Bjørner 2024). As games frequently offer text, visual and auditive input as well as

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2 While the concept of crisis is “omnipresent in the history and historiography of the twentieth and twenty-first century” (Graf & Jarausch 2017, n.p.), what qualifies as a crisis is largely up to debate. This, however, makes it universally applicable (Bauman & Bordoni 2014: 1). It is suitable for ecocritical discourse, especially because it reduces the complexity of an infinitely complex matters and makes it – in this case – playable. Ecological anxieties (Robbins & Moore 2013) and “fantasies of apocalypse” (Ginn 2015: 352) are part of the concept of crisis (Graf & Föllmer 2012: 1). Zygmunt Bauman & Carlo Bordoni (2014: 3) also deem that the concept “expresses something positive, creative and optimistic, because it involves a change.” It forces the public’s hand and is the “defining catalyst of the modern environmental movement” (Dodson 2011: 5).

interactive gameplay at the same time, they can contain ideological, environmental and ethical messages<sup>3</sup> on different levels (Frelík 2024: 280; Muriel & Crawford 2020; Backe 2017). Due to them being primarily developed for entertainment, they have the potential to become “properties of things and states of affairs that we care about and strive to attain” (Flanagan & Nissenbaum 2016: 5).

This is reflected in the concept of conscientization. Conscientization is “a driving force that motivates people to question their relationship to a given reality and to take concrete actions to bring about changes to that reality” (Freire et al. 1971: 21). It is a process that does not only raise awareness for a problem but also equips players with the capacity to bring change (Humbert 1987: 290; Freire et al. 1971).

How to measure change brought about by playing video games remains a topic for discussion. Analyzing the impact of games on players is complicated because games are the most complex media with several layers (audio, video, text, meaning, interactivity among others) interacting with each other and the player (Schønau-Fog & Bjørner 2024: 137; see also Kapp 2012). However, developers can still control the messages put into games and influence the likelihood of players choosing certain gameplay paths in order to experience ecological play. Games are, after all, rule-based media (Backe 2024: 111). When these rules are put into action, the game is generated and with it its procedural rhetoric (Bogost 2010 [2007]).

As I have discussed previously, I propose to apply a two-step methodological approach to map out interactive and ergodic media in order to analyze them for ideological messages. Clara Fernández-Vara (2015) devised the concept of *space of possibility*, which makes it possible to map, for example, all potential goals or rules within a game and

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3 One might argue that terms like “ethical” and “ecological” are highly contested, therefore analyzing a text within that semantic framework is a rather subjective matter. Ethics as a neutral term describe the way in which “we live in the world and how we interact with one another” (Dimmock & Fisher 2017: 199). In this work, I aim to explore whether a game is effectively able to teach ethics to foster a more ethological thinking, which means that I use “ethics” and “ethical” in a normative way, tightly connected to ecocriticism. Carol Gilligan coined the term *ethics of care*, which has attentiveness, responsibility and competence as its core values (Tronto 2005: 251-263). Therefore, when I ask whether a game conveys an ethical message, I ask if the game allows the player to care and become more attentive towards environmental issues, as well as to act responsibly while also gaining competence regarding the topic of climate crisis.

to give a broad overview of the type of agency the player has. With that, it is possible to see which actions and choices, i.e. ideological stances, the player is able to take. This is the space in which players can navigate a problem and try out different outcomes (Makai 2024: 90), which, in the case of ecological games, may range from a selfish to an empathetic approach, so that their outcomes can be observed. Outcomes are often visualized by experiencing a different story or via separate screens that show the outcome of a game, ranking the player's performance.

To narrow this oftentimes vast space down even more, I developed an approach that counteracts some of the indeterminacy and subjectivity of previous approaches to game analysis. My *preferred playing* is heavily influenced by Stuart Hall's *preferred reading* (1973) and allows for a game analysis to identify the *most likely* text resulting from a playthrough. "Preferred playing marks the way in which the game is intended to be played. The created text, in return, forms a certain meaning." (Meier 2022: 39) This takes into account the concept of *nudge* by Richard H. Thaler and Cass R. Sunstein (2008). *Nudge* interferes with the decision-making process in a "relatively weak, soft, and nonintrusive [way] [...] because choices are not blocked, fenced off, or significantly burdened" (Thaler & Sunstein 2008: 5). Markers of *preferred play* in games differ vastly, but rewards and goals on different levels (from gameplay to visuals) can make for especially strong nudges. With these, the "particular ideological framework" (Magnet 2006: 142–143) of a game can be deduced.<sup>4</sup>

### 3. Conveying ethical and ecological messages through ergodic media featuring crisis

The games which I will analyze belong to the strategy genre. These games in particular have been deemed a "postcolonial playground" (Lammes 2010: 1). While games are actively used to foster change, many still show fantasies of neoliberal capitalism, colonialism and imperialism. Ecology in these games is oftentimes the same as economy

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4 Especially in the past, when video games were seen as playthings for children, it was often assumed that games do not carry any ideological meaning. However, Cameron Kunzelman (2022, n.p.) clarifies, with reference to all art, that, "There is no imagination without an attendant ideology."

(Abraham & Jayemanne 2017: 82) and growth is the ultimate goal. Moore (2017: 7–8) sees nature in those games as a freely available resource. This thinking is firmly anchored in the so-called Capitalocene,<sup>5</sup> the era of settler colonialism in the Americas and in Africa.<sup>6</sup>

The two games on which I demonstrate my proposed markers of ecological play are *Against the Storm* (Eremite Games 2023) and *Terra Nil* (Free Lives 2023). I chose these games because they show how games belonging to a genre which has been criticized as anti-ecological can be used for different ideological messages. I also chose them because they are fairly recent and both are developed by smaller studios, which shows the impact that even a small team can have. They are well-liked by the community and not set in a recognizable location such as the Earth or even one of the known planets. Furthermore, the games were not developed primarily for education but for entertainment. *Serious games*<sup>7</sup> are often preferred in the analysis of ecological games because their whole gameplay is focused on “enhancing comprehensive knowledge related to the climate crisis” (Schønau-Fog & Bjørner 2024: 129). While they foster engagement with climate change, they usually are less popular with the community, sell much fewer copies and therefore leave less of an impression on the genre’s player base. In agreement with Megan Condis (2015: 93), I argue that “unserious games”, commercially designed games for entertainment purposes that feature fewer but well-designed and entertaining mechanics regarding ecological thinking and climate change, are even more useful in fostering empathy and ecological thinking.

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5 The term Capitalocene is meant to shift attention away from a generalized, undifferentiated “humanity” to more deliberately expose the role of industrial capital and the capitalist class (Haraway 2016).

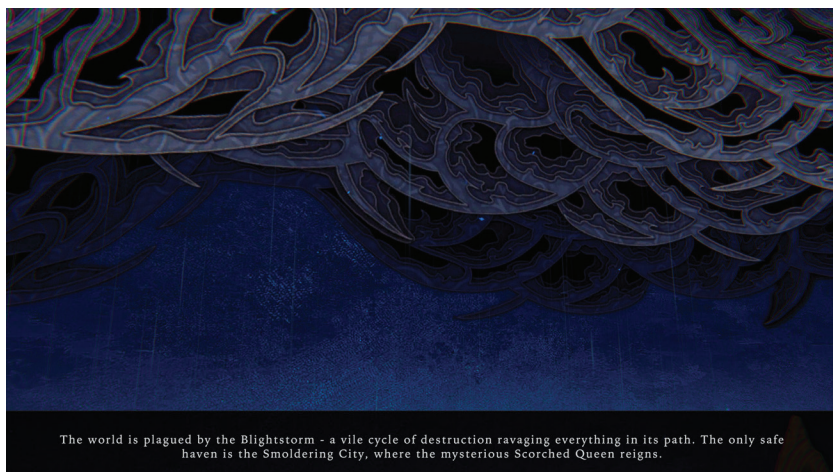
6 Anthropocene is contrasted with the Anthropocene, which is equally represented in games. This can be defined as “the prevalent term for the current geological era of the Earth; a time where our planet is directly at the mercy of the disfiguring capabilities of humankind. The term centers humanity as the leading culprit for [*sic*] changing climates, dwindling species, and permanently altered landscapes, and as such condemns humanity to rebuild the disaster of our own creation” (Freye 2023: 1).

7 The term *serious games* refers to games that are primarily developed for educational purposes rather than for entertainment.

### 3.1. The *space of possibility*: *Against the Storm*'s and *Terra Nil*'s gameplay and the possibility for ecological play

As the first step of the two-step methodological approach, I will introduce the general setup for the *space of possibility* (Fernández-Vara 2015), outline what kind of simulation one can expect and what agency the player generally has. Doing this helps to determine whether it is possible to consider ecological play.

*Against the Storm*, developed by Eremite Games, is a roguelike and a city-builder game, which won, among other rewards, *Best Design* at the Taipei Game Show 2024 and sold over a million copies on Steam as of May 2024. It is set in a unique fantasy world ravaged by the “Blightstorm” (figure 1), a cyclic event that destroys all human progress, such as settlements, at the end of each cycle. The cycle ends after a set number of maps are played. Only the Smoldering City, which is set in the center of the map, remains, as well as some permanent benefits that carry over to the next playthrough. The goal of the game is to gather resources during individual playthroughs and open the seals, which end the cycle. Judging by these overarching goals, the game appears to fall into the traditional, established strategy game format by encouraging the gathering of resources and subduing of nature, typically associated with colonial expansionism (Mukherjee 2017).

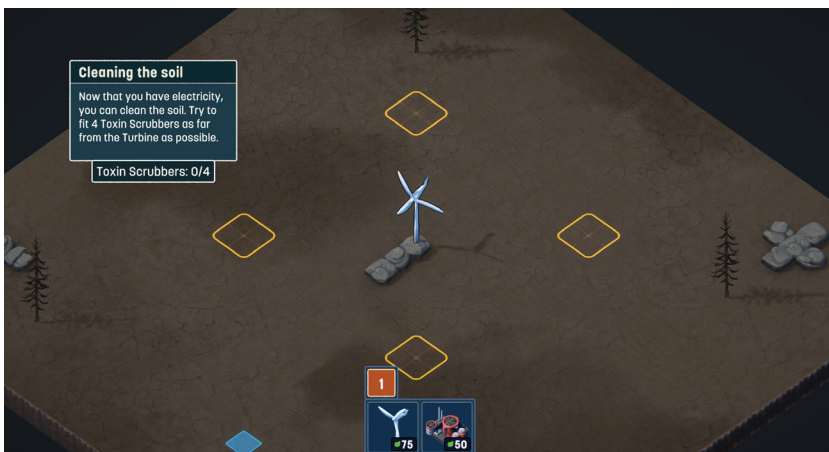


**Figure 1.** *Against the Storm* is cyclic on every level: the playthrough is shaped by the cyclic Blightstorm and the cyclic seasons in each individual round (*Against the Storm* 2024).



Interestingly, the player has to build a city on each map, but contrary to traditional city-builders, two forces have to be balanced: the Scorched Queen, who strives for economic progress, and the Forest, which demands the player to balance their villager count carefully, gather resources in a responsible way and also explore carefully. These two forces clearly represent the dichotomy between capital and nature. If the player does not satisfy the Queen's need for progress, she destroys the settlement as it is not profitable for her. If the player progresses too fast and angers the Forest, it strikes back with natural disasters and wrecks the settlement. Thus, while the ultimate goal is colonial, it is also hardcoded that the player has to balance expansion and conservation. Furthermore, natural disasters as a consequence of the mistreatment of nature are very much in accordance with the real climate crisis. The game thereby aims to conscientize the player towards environmental issues.

*Terra Nil* is a game developed by Free Lives and published by Devolver Digital. It calls itself an “intricate environmental strategy game about transforming a barren wasteland (figure 2) into a thriving balanced ecosystem” (Terra Nil on Steam 2024). It is, strictly speaking, a puzzle game, where each time the player chooses a level, they are faced with a different layout of the land and different tools to purify the soil, plant trees and reintroduce wildlife. On some maps, the player must deal with active volcanoes; other maps consist of multiple islands that have to be purified individually.



**Figure 2.** *Terra Nil*'s maps always start off as barren, poisoned land, ruined by mankind (Terra Nil 2023).

With this setup, however, *Terra Nil* positions itself in opposition to colonization or strategy games such as *Civilization: Beyond Earth* (Firaxis Games 2014) or *Surviving Mars* (Haemimont Games & Abstraction 2018), which have been notoriously criticized for their colonial rhetoric. *Terra Nil* presents the player with a planet and its continents, each polluted, destroyed and stripped of flora and fauna by humans. It illustrates the potential consequences of failing to curb overproduction and consumption. This narrative, however, is merely implied, not explicitly told. Procedural and environmental storytelling is more subversive in nature but also has a stronger impact because the player has agency over ruined lands and remains of human skyscrapers. The ultimate goal of the game is to revive the planet and then erase all traces of human interference by strategically collecting all the machines and buildings used for the rejuvenation. This means that *Terra Nil* has no room for a counter-narrative but always fosters environmental thinking. The game can still be seen as primarily meant for entertainment because it does not force any kind of deeper knowledge about the climate crisis upon the player. The only exception is an in-game book that contains further information on animals, plants and climate change, encouraging the player to deepen their knowledge.

### **3.2. The human dilemma: balancing needs and nature**

For the second step I propose to look inside the human dilemma, which is the need for resources while striving to live in harmony with nature. I will examine colonial structures in detail and investigate how this act of balancing nature vs. humans is represented and whether we can move beyond that binary opposition.

As I already mentioned, the genres of the two games are usually known for their colonial framework, which consists of claiming the land, establishing dominance over nature and expending natural resources to build settlements. Especially in *Against the Storm*, these characteristics are still visible. The player settles on a map that is already inhabited by the mysterious Forest, which is a power of its own. There are different glades, separated by barriers of woods (figure 3), which must be felled in order to progress to the next glade. These glades contain a random quantity of resources and enemies. Resources are needed to enable the settlement to grow, while the enemies can be defeated by sacrificing

resources. They serve as a system of risk and reward. A failure to defeat the enemies can endanger the settlement, while defeating them successfully yields additional resources after the initial investment.

Wood as a resource is indispensable in the early game, ore and metals are important for the later stages. It is impossible to avoid these upgrades, therefore there is no opportunity for *oppositional play* (Meier 2022), i.e. a way to progress in the game without burning through resources.



**Figure 3.** A typical middle-stage settlement. The glades are hidden. (Against the Storm 2024)

As a result, as Paweł Frelik (2024: 279) also concludes, “[N]arrative and gameplay conventions like the management of settler demands and desires, resource extraction, defending against hostile environments, and growing your colony in (financial) strength and number.” This, however, does not make it less of an ecological game. Instead, the human dilemma is part of the preferred playing. The game teaches players that the human need for resources must be balanced against nature – human-kind cannot exist without claiming any space or resources. The main goal is to use less and to use what they use more responsibly. If the player fails to satisfy the Queen’s need for expansion, the settlement crumbles. However, to avoid angering the Forest, expansion must be handled carefully by preserving nature, only taking what is absolutely necessary and avoiding overpopulation and overconsumption. For

Alenda Y. Chang (2011), this strikes at the heart of environmental texts and ecological play. Lawrence Buell (1995: 7–8) states that “[t]he non-human environment is present not merely as a framing device” and “[t]he human interest is not understood to be the only legitimate interest”, as well as the human being accountable for the environment and the environment being understood as a process rather than a constant.

Because the difficulty of the game automatically increases when the player progresses through the story, the game never fails to produce involvement. The player is taught that in order to maintain balance, they have to keep learning about the processes involved in keeping that balance, which is another factor for a successful ecological game (Chang 2011: 73). This heightened difficulty might lead to players struggling, but Gerald Farca (2024: 243) sees this struggle not only as a metaphor for the actual hardship in maintaining the balance on earth but as a very realistic part of building better futures.

Furthermore, *Against the Storm* is played in loops. Loops are most important for the interpretation of games (Sellers 2018), as they embody the goals and rules of a game put into action. Loops are repetition with variation. Due to the roguelike aspects of *Against the Storm*, the initial setup is usually about the same every time the player starts a new map. They must then reach the goal without angering the Queen or the Forest. This, as Frelik (2024: 278) argues, is the most powerful rhetoric colonization games have to offer: the more repetitive something is, the more it sticks in the players’ consciousness. As the player needs to balance the Anthropocene and nature, they are confronted with the same dilemma, which they need to resolve (or at least manage successfully) because otherwise, they lose their colony and, therefore, fail the mission. In contrast to most games, this is not the end in *Against the Storm*. One can lose a colony and still open a seal by succeeding in winning other maps. This furthers the learning experience because it gives the player the opportunity to gain wisdom in one simulation, which they can carry over into the next. It offers the player a safe space to learn about the act of balancing human needs (such as food or their need for entertainment) and nature.

*Terra Nil* is, due to its basic premise, more of an ecological game. It is, however, less realistic in its vision. The machines and technology given to the player to restore humankind are utopian. It may be

something to strive towards, but it is arguably impossible for at least a few hundred years into the future. Therefore, the tutorial ultimately teaches about possible solutions to an environmental apocalypse, yet the tools provided are not easily transferred to the real world. The human dilemma is not visible in its truest form.

*Terra Nil* focuses on regaining balance that has already been lost – the scale has already been tipped. Here, the “human exceptionalism, expressed most often in the form of conceptual or rhetorical dualisms that separate the human from the nonhuman” (Grusin 2015: X) is mirrored in the fact that the ecosystem is destroyed. Humans have failed to coexist with flora and fauna. The maps are barren, and the land is infertile. Whenever the player starts a fresh game, there is no life. The remains of human cities are visible on some maps in the form of skeletal skyscrapers, hinting towards the fact that the environment has been destroyed by humans. The game’s aim is to restore nature and then erase all traces of human life from the planet. This, however, is not framed as the death of humanity but as its evolution toward coexistence with nature. To regain balance, *Terra Nil* enforces a form of regenerative play as a way of conscientization. The goal of regenerative play is to “[bring] us affectively and aesthetically in touch with the natural world [...]” (Farca 2024: 244). Being confronted with destruction in *Terra Nil* promotes reflection on the player’s own consumption, and also, due to the fact that restoring nature is framed as the main goal, self-serving viewpoints are rejected and the importance of nature is foregrounded.

### **3.3. Rewarding the ethical: gameplay feedback, visual feedback and auditory feedback**

One of the most important tools to let players strive towards an ethical solution in a game is to reward ethical behavior (Meier & Bellini 2021: 7). Thanks to the nature of games, this can be done in many ways and on many levels, as I aim to demonstrate here.

Gameplay rewards can take many shapes: they can be benefits within the game, but also outside of it, as some games grant achievements within platforms like Steam or GoG, which host the game. A prerequisite for calling something a reward, however, is the active participation of the player in gaining it. Rewards handed out for simply

enduring something (e.g. watching through cutscenes) are not as effective (Meier & Bellini 2021: 7–8).

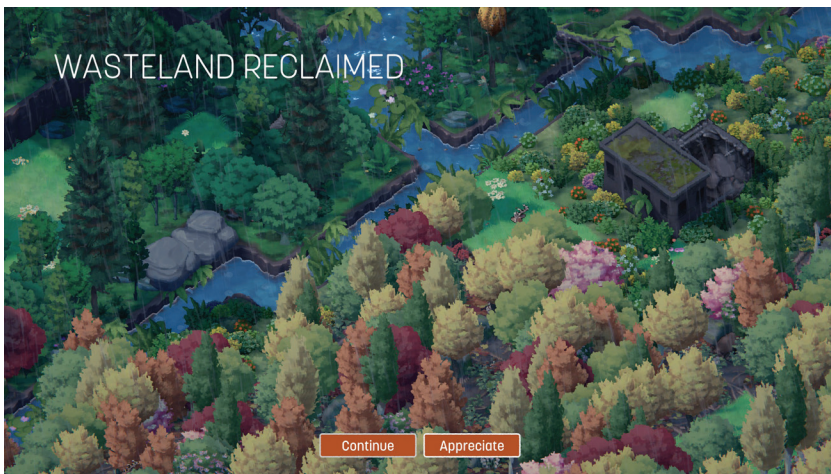
Some rewards are obvious: if the Forest in *Against the Storm* is satisfied, positive effects on the map encourage colonization and gameplay, which marks course of action as the ideal state and as *preferred playing*. On the maps that contain boss fights, which are necessary to open the seals, trying to destroy as few trees as possible is usually a prerequisite for winning. If the player chops down too many trees, the Forest's hostility rises so fast that winning is made impossible. The reward for thinking ecologically here is simply being able to continue playing and being able to defeat the boss, which results in new resources and skills. Thinking ecologically is thereby also thinking economically without necessarily acting colonially.

If the player gets too destructive and tries to subdue nature, the game encourages ecological thinking in making “slow violence” (Nixon 2011) perceivable. If the Forest is transgressed against, it turns against the player, ultimately resulting in defeat. This goes hand in hand with in-game climate changes (e.g. acid rain, imbalance in nature with swarms of insects), which can also be seen as metaphors for real climate change. However, we have a harder time grasping the wrongs of humanity from the time of the Industrial Revolution until now, resulting in the more convenient belief that the current weather extremes might not be connected to our behavior at all (therefore “slow violence”), we can accelerate the time in *Against the Storm* and make the causality more tangible. Outcomes are shown directly, and lessons can be learned immediately. This is further stressed by the game's music changing into a darker melody when the Forest is angered.

*Against the Storm* is a colorful game to begin with. The comic-like houses and the animal-like characters resemble classics like *World of Warcraft* (2004). The maps are usually covered in greenery. Planning the outline of the city and adding houses to the limited space is, in general, visually more rewarding than keeping the greenery. Angering the Forest, however, leads to additional effects – like the parasitic blightrot – which starts to grow on houses to fight back the colonization attempts. There are also visual effects that become more prevalent when the Forest is disturbed, e.g. strange lighting, fog, and a hailstorm. The game reacts if the player diverges from the preferred form of playing, which is the ecological and ethical one. The more the player angers nature, the more

the idyllic forest becomes dark and twisted, which also forces the player to act fast and decisively in order to restore the balance, as effects such as “Under an Open Sky” lower the resolve of villagers, which eventually makes it impossible for players to win.

*Terra Nil* also rewards the player for ecological and ethical actions. If the right actions are taken (e.g. the right biomes exist next to each other on the map or an atmosphere with rain is restored), animals immediately appear on the screen. The player is rewarded through visual feedback. Furthermore, all achievements that can be unlocked on platforms like Steam are connected to either winning the map or reaching extra goals – among them an achievement called “Screensaver”, which is granted to players who “[a]ppreciate the beauty of nature for at least 60 seconds” (Terra Nil on Steam 2024) (figure 4).

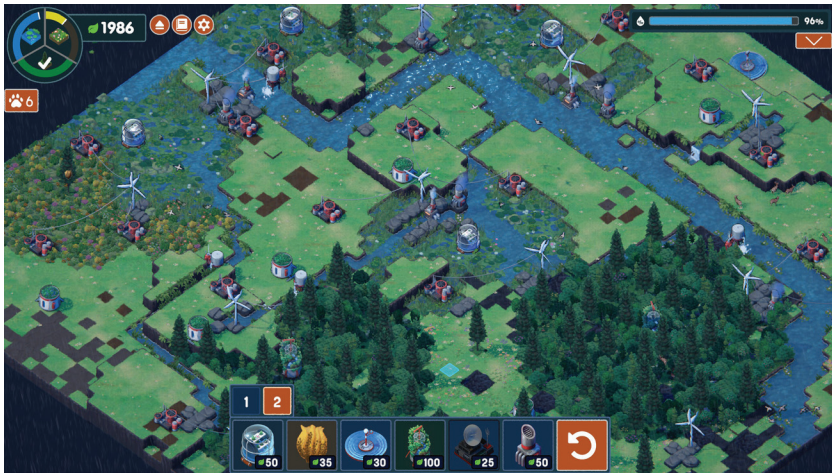


**Figure 4.** *Terra Nil* offers a traditional ecocritical approach by letting the player appreciate nature (Terra Nil 2023).

*Terra Nil* predominantly rewards the player with aesthetic experiences. Visuality is the key element in conveying ecological messages, as it can relate ideological implications much faster than text or narrative (Frelik 2024: 285), which are hardly present in *Terra Nil*. The color scheme, the displayed object, and the God’s-eye perspective emphasize reflection and empathy. Through the player’s actions, the map slowly turns green and gains detail, both visually and mechanically, a common design feature of the genre (Chang 2011: 60). The God’s-eye



perspective is usually seen as hegemonic and empowering for the player (Steyerl 2011) and feeding into the colonial narrative. Here, however, the meaning remains more ambiguous, as the perspective allows the player to witness not only the results of their own actions but of those carried out by nature, captured in both its harmonic glory and destructive force. Causing it to rain creates an atmosphere, which is considered a special event. It is rewarded with its own upbeat tune.



**Figure 5.** Restored habitats are extremely rewarding visually (Terra Nil 2023).

As the player is forced to design environments in such a way that the animals find enough food, shelter and habitats, the game encourages the player to adopt the perspective of the animal as another form of conscientization. By “becoming-animal” (Chang 2019: 110), the player is thus taught to embrace empathy as an essential virtue of human life.

#### 4. Conclusion

This article has demonstrated the relationship between video games and nature as well as video games and ecocriticism. Due to the interactivity and ergodicity of the text, this article deems video games an excellent way to convey ecological messages and foster a more responsible treatment of the real world. Interactive and ergodic media let their recipients actively experience the crisis rather than forcing them



to be mere spectators. Interactive movies and texts could, therefore, be a vehicle to tackle the climate crisis by encoding messages on different levels while still being entertaining.

Regarding the analysis of those media, I proposed a two-step model to spot the ecological markers within *Terra Nil* and *Against the Storm*. For the first step, I listed the general goals and the gameplay of the two games, thereby showing whether ecological or economical interests are foregrounded. I chose *Against the Storm* because the game is not marketed as an ecological game but still includes a narrative that is most important in the climate crisis, namely expansion vs. nature. *Terra Nil*, on the other hand, openly strives for regenerative play. With other interactive media, this step could be done by listing the endings of interactive movies and texts or by identifying how elaborate (long, complex) each individual narrative thread is.

I proposed to look deeper into the actual gameplay and see what can be neglected and how the opposition of nature vs. humans is represented or possibly even overcome. While *Terra Nil* represents ecological play at its core, it is much less realistic. It is a utopian vision of technology beyond our grasp. *Against the Storm*, however, does paint a realistic picture of the careful balancing act that results from humankind living *with* nature rather than *against* nature. The human dilemma is already made visible within the framework in which the world operates. This analysis of the framework can also be transferred to other forms of interactive or ergodic media.

The fight against the climate crisis is framed as an ongoing effort. Due to the fact that the games are played in loops, their rhetoric is more prevalent than in traditional media like literature or movies which are traditionally read/watched once (with the exception of those media one likes best). In other ergodic and interactive texts, this could be achieved by making the medium attractive for a reread (or replay), by, for example, providing different endings.

I looked into the multi-layered rewards awarded by both games for ethical and ecological behavior. First, I explored how the games operate, whether they punish unethical behavior or reward ethical behavior. *Against the Storm* punishes the player for what it deems wrong behavior by making it lead to climate extremes, which can easily be seen as metaphors for our own climate. *Terra Nil* is rewarding in a traditionally ecocritical sense by showing nature's wonders and aiming

to aesthetically appeal to the player. Using pictures and melodies as rewards can easily be transferred to other media as well. Interactive media also has the means to show the direct consequences of actions that often do not result in immediate collapse of the ecosystem (like certain forms of pollution).

This article shows that interactive and ergodic media offer unique opportunities to foster ecological thinking, even if they were originally not designed for that purpose. *Against the Storm*, which clearly is a strategy game, a genre which normally disregards environmental messages, has proven to be even more multi-layered in this regard. This approach of showing which reading or playing is prevalent or preferred in a game and also subdividing the messages into layers can be further developed to fit the unique preconditions of other media. Whether in the future more media meant for entertainment purposes adopt ecological and ethical messaging remains to be seen. However, newer trends in indie video games, such as *Terra Nil* and *Against the Storm*, do represent a rising trajectory of these themes in the industry.

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**Kokkuvõte. Marie-Luise Meier: Tekstis sügavamale: eetilise ja ökoloogilise mänguviisi analüüs interaktiivsetes kriisinarratiivides.** Kriisinarratiivides eetikad ja ideoloogiaid analüüsides lähtuvad kirjandus ja filmindus tavaliselt kindlast tekstilisest alusest. Interaktiivne meedia ja ergoodiline meedia kasutavad aga sageli valikute tegemist, et õpetada mängijale eetilist käitumist. Artiklis uurin, kuidas tuvastada neid ökoloogilisi sõnumeid, mida edastavad interaktiivne ja ergoodiline meedia. Selleks määratlen ökoloogilise mänguviisi (ingl *ecological play*) markerid, ühendades olemasolevad metodoloogiad ökokriitilise lähenemisega. Analüüsin kahte mängu – „Against the Storm“ (2024) ja „Terra Nil“ (2023) –, mis kasutavad tavapärast loojutustamist minimaalselt. Analüüsimeetod on eelistatud mänguviis (ingl *preferred playing*), mille valikul tuginesin oma varasemale teadustööle, kus uurisin, kuidas analüüsida ergoodilist meediat. Kombineerin eelistatud mänguviisi hiljutiste ökokriitiliste ja mängu-uuringutega. Tuvastatud ökoloogilise mänguviisi markereid saab edaspidi rakendada teistele interaktiivsetele lugudele.

**Märksõnad:** mängu-uuringud, ökokriitika, eelistatud mänguviis, ökoloogiline mänguviis, eetilise mänguviis, ergoodiline meedia, interaktiivsus, metodoloogia