Ecogames:

The Abstracts

This document includes the abstracts for all chapters from the four sections of the planned Ecogames anthology.

Section 1: Games for Change

Section Editor:

- Prof. dr. Joost Raessens, Utrecht University

Hans-Joachim Backe: Différance in Analyzing Ludic Ecologies: Minecraft and the Ecocriticism of Survival Games

When discussing Games for Change, there is a tendency to focus on the didactic potential of playing one specific game with its well-researched representation of ecological issues and carefully encoded values. While such arguments are doubtlessly needed, they may underestimate the importance of the context in which play makes meaning. This contribution highlights two important contexts within which players understand their actions in a particular game: their experiences in similar games, and their personal play compared to that of and with others. It presents deep readings of four survivalist games played both solo and cooperatively, and shows how much ecocritical reflection is produced not by engagement with the individual example, but the comparative perception of games and players.

Alenda Chang: Change for Games

This contribution looks at the UN's Playing for the Planet initiative and the International Game Developers Association's new climate special interest group. Notably, the climate SIG has been working to develop both "climate games" and "design patterns" databases that will theoretically provide models "from finished games to individual mechanics" for developers to emulate. These efforts manifest a key underlying question: what is a sustainable game, and is it the same thing as a sustainably developed game? Are we talking about games with overt environmental messaging? Or games, as Benjamin Abraham has argued, whose production carbon footprint has been offset before the point-of-purchase, obviating player agency? Are they games designed with efficient energy consumption in mind? Or, are they games we refuse to play?

Péter Makai: Do You Want to Set the World on Fire? Transmediating Climate Science into Playful Agency in Earth System Games

The chapter will investigate how climate change games incorporate climate science and policymaking into commercial digital games where game mechanics allow players to meaningfully affect the climate of the gameworld. My approach focuses on the medial affordances of digital narratives and the way they shape our reception of scientific knowledge about the biosphere as a complex system. The case studies will focus on *The Fate of the World* (Red Redemption 2011), *Democracy 3* (and *4*, depending on its release) and *The Sims 4: Eco Lifestyle* and *Tiny Living* game packs to showcase how player decisions on the global, national and individual levels are affected by climate science and reveal the designer's practices of transmediation in implementing its results.

Joost Raessens: VR for Sustainability

Founded in 2004, Games for Change is a non-profit organization driving real-world impact through games and immersive media. XR for Change—XR standing for "extended reality", an umbrella term that covers virtual reality (VR), augmented

reality (AR) and mixed reality (MR)—was launched in 2017. This lecture will investigate whether, and if so how and to what extent, virtual reality can shape, strengthen, and/or change the basic dimensions of our ecological identity: knowing, feeling, acting and imagining. Its focus is on VR installations that let the user experience the world from a non-human perspective. It presents readings of installations that allow the user to gain empathy towards trees (Tree), animals (BBC Earth Life in VR), and the planet itself (SpaceBuzz). I will use a mixed-method approach to study the representation of encoded ecological values, the discours around and the affordances of VR as a medium to promote climate change awareness.

Joost Vervoort, Carien Moossdorff and Kyle Thompson: Games and Sustainability Transformations

In recent years, interest has grown into how games can meaningfully engage with sustainability and ecological thought. As evidenced elsewhere in this book, there is a particular interest in the potential of commercial games as avenues for engagement with sustainability themes. In this chapter, we will explore a key perspective on sustainability which has not been examined so far when it comes to commercial games – societal transformations. Sustainability research shows that deep transformations of societal systems (energy, food, water, deep economic structures) are urgently needed; and moreover, societal systems are in fact transforming rapidly and in dangerous directions.

Our research shows that there are games that excel at using institutional and systems complexity to engage players into deep worlds and narratives. However, while transformations may be central to game narratives, their dynamics and consequences are often only partially or implicitly explored. Moreover, there are many games that, through their structures of interaction and wider community dynamics, have strong transformative potential as 'utopian processes'. We will propose a multi-dimensional paradigm for engaging with transformations in the game sector – examining how this may inform games, but also the economics and organization of the game sector itself.

Section 2: Future Worlds

Section Editor:
- Prof. dr. Gerald Farca, Macromedia University Leipzig

Colin Milburn: Mutate or Die. Neo-Lamarckian Ecogames and the Responsibilities of Modulation

Several neo-Lamarckian video games, including *Maneater*, *Biomutant*, and *Evolve*, feature nonhuman protagonists in environments that have been damaged by extractive industrialization and who must mutate to survive. While seeming to endorse a dystopian politics of accommodationism, acquiescing to the inevitability of climate change and ecosystem collapse, these games also thematize anticipatory practices of governance and stewardship. Tasking players to take responsibility for living in a critically destabilized world, these games allegorize—and actuate—the imperative to change tactics, to renovate our ways of life in advance. By turning directed mutagenesis into a gameplay mechanism, they emphasize preadaptation in concert with environmental modulation: not mutating merely in reaction to environmental crisis but mutating in proactive ways that make the whole world more survivable as time goes by.

Victor Navarro-Remesal and Mateo Terrasa-Torres: Stop and smell the (apocalyptic) roses: Hypoludicity, catalysis, and slowness in ecodystopian AAA games

Futures, in which society has collapsed and nature has healed, are a common setting in contemporary videogames, especially after the Great Recession. The "post-apocalyptic trope of regeneration through violence" (Pérez-Latorre et al., 2017) and "collapse" (Chang, 2019) are central in games like *Enslaved: Odyssey to the West* or *Nier Automata*.

Though action-oriented, these games feature moments of calm, such as the encounter with a herd of giraffes in *The Last of Us*. We study the combination of hypoludicity (Conway, 2012) and narrative catalysis (Barthes, 1968) to produce respites defined by an aesthetic of slowness in otherwise oppressive game worlds. Through this device, these games favour ecosophical (Panikkar, 2021) and transcendentalist readings that connect with progressive and conservative views of the anthropocene.

Gerald Farca: Ecology and the Post-Apocalypse: Regenerative Play in the Metro series

The chapter examines the utopian trajectory of *Metro 2033* and *Exodus* and the re-generative aspect this entails for the players. Whereas *Metro 2033* envisions a world where humankind lives underground in the Russian Metro, trapped in a never-ending loop of conflict and mistrust of the Other, Exodus embarks on a different, more hopeful route. The third installment of the series sends players on a journey towards Utopia, away from the enclosure of linear ideologies and towards a considerable ecological direction where a restart seems imaginable. The chapter will thereby lay focus on the re-generative aspects this journey entails for the players and the power of fiction to sensualize us to ecological issues but as well to the splendor of the natural world. The aspects of the re-generative that will be under scrutiny include: the affective, reflective, aesthetic, ethical, communal and cyclical elements of the *Metro* games.

Jordan Youngblood: Burying the Strange Strangers: Queer Dark Ecology and the Landscape of Kentucky Route Zero

This paper combines the dark ecological methodology of Timothy Morton in his analysis of ecological landscapes as meshes populated by uncanny, unknowable beings he calls "strange strangers" to the queer theoretical approaches to failure and mastery found in Jack Halberstam's *The Queer Art of Failure* and applied to video games via writers such as Bo Ruberg and Edmund Chang.

Ruberg, in particular, suggests a Morton-esque approach to game criticism where the relationship between player and game is one based on uncomfortable intimacy and lingering unknowability that produces queer potentiality. I apply this framework to the recent 2020 release of Act V of *Kentucky Route Zero*, a magical realist video game that ends in a largely deserted flooded Appalachian town haunted by the ghosts of mine workers and the legacy of two dead horses. The gameplay consists of controlling a cat who speaks to human and animal alike in a language that is never translated while running around a loop that traces the spiritual walking path of a long-absent Indigenous tribe.

Amid these epistemological spaces, the player must confront a mesh of decaying houses and fading histories now populated by a nascent queer family: a human boy and his eagle brother, a pair of nonbinary singing robots, and the choice to make a home among what Morton would deem a charnel ground of ecological destruction. Ultimately, the game asks the player to enter a space of dwelling where the strange stranger is welcomed and accepted, a process brought about by the nature of its mechanics. In refusing the player the opportunity to fix or "restore" the place they arrive at, *Kentucky Route Zero* instead welcomes a different kind of being, one that sees community as queerly emergent, sustained, and fought for rather than the often normative rhetoric of the "natural."

Lauren Woolbright: Dark Ludology in Outer Wilds

In "Why Discard Studies," Max Liboiron introduces the concept of dark ludology, which this chapter will examine using the game *Outer Wilds*. Facing the catastrophic collapse of civilization in a small solar system and the mystery and whiplash of being stuck a time loop, players in *Outer Wilds* must navigate tornados that can throw islands into space among other environmental perils as they seek information about what happened to cause the apocalypse they are endlessly reliving. I am interested in the tension between collective and individual action in games and in how we conceptualize issues like environmental collapse through both lenses in a broader, cultural sense in the Global North.

Pawel Frelik: Green (?) New Worlds: Ecology and Energy in Planetary Colonization Games

The questions of both ecological balance and climate crisis intersect in a number of ways and many of them have been explored in speculative video games of varying genres. One of them remains conspicuously absent in many games, though: the issue of energy and its sources. In fact, to talk about late capitalism and the condition to which it has led the planet is to talk about petromodernity driven by the energy unconscious. In my chapter, I want to look at a selection of titles belonging to the genre of planetary colonization games, a significant body of texts with the broader category of simulators, and analyze their interplay of ecology and energy. In that, I want to explore whether titles such as *Farlight Explorers* (2015), *Earth Space Colonies* (2016), or *Aven Colony* (2017) envision new models of ecological sustainability or whether they perpetuate speculative visions of unlimited growth based on the availability of cheap energy.

Section 3: Metagaming Practices

Section Editor:
• Dr. Stefan Werning, Utrecht University

Kyle Bohunicky: Eco-Lewdology: Examining the Ethics of Sexecology and Ecosexuality within Video Games

My chapter explores how players enfold environments and ecosystems into erotic forms of play. Both projects aim to identify and trace how the erotic frameworks of dendrophilia, sexecology, and ecosexuality can modify the typical relationships that players have with environments. Beyond introducing a significant ecocritical vocabulary missing from the study of video games, I'm interested the potential for this work to uncover a means of doing and being with our environs in ways that the typical resource- and aesthetic-based approaches to environments in games fail to accomplish.

What might it mean to encounter digital environments that help us glitch and glide our digital embodiments into positions and interactions that stimulate our bodies beyond the screen? How can "natural" objects lead us to embodied pleasures and entanglements that move us beyond the stagnant romanticism of environmental love and instead bring environments to life through

the messy play of sexuality? Can procedurally and visually pornographic lexicons for sexecology and ecosexuality within video games promote environmental ethics that promote further eco-exploitation? My talk and publication will engage with these questions and others through a theory and methodology for eco-lewdology drawn from both critical examinations of the topic as well as an archive of player-produced documentation of their lewdic practices.

Rainforest Scully-Blaker: Re-Framing the Backlog: Radical Slowness and Patient Gaming

This paper uses the findings of an investigation into the /r/patientgamers subreddit to account for the ways that our leisure time and our play have been assimilated by the logics of neoliberal, late capitalism. The figure of the patientgamer was selected not just because of their explicitly protracted approach to video game consumption, but because the community has grown out of a frustration with the financial and temporal costs to accessing leisure. In particular, users' anxieties around possessing a video game backlog (a term which once referred to something held in reserve and has since come to mean quite the opposite – an accumulation of tasks unperformed) is argued to be emblematic of the way that video game play has been rendered productive according to capitalist logics. Even so, I argue that the patientgamer ethos suggests ways that play may yet be reframed to undercut logics of efficiency and productivity through the practice of what I call "radical slowness," a deliberate failure to keep up with the pace of capitalist consumption as a political, ecocritical act. This paper concludes by arguing that the case of the patientgamer may serve as the grounds for theorizing an emancipatory form of interdependence that spurs collective action and cultivates communal care in the face of impending economic and ecological collapse.

Stefan Werning: Remediating Landscape Photography and Nature Documentary Filmmaking as Epistemic Eco-Practices in Digital Games

The chapter examines how contemporary forms of digital metagaming, specifically in-game photography and in-game wildlife documentaries, re-enact and re-interpret constitutive practices of earlier environmental movements (see e.g. Cronin 2011 on the connection between photography and early national parks).

It defines these practices (e.g. nature photography) as epistemic eco-practices, drawing on related concepts like "green practices" (Lewis 2012), "ecostrategies" (Sandell 2016) and Lavery's (2018) work on "weak theatre" as "an alternative kind of eco-practice".

The analysis explores how in-game photography (Gerling 2018; Möring and de Mutiis 2019) in games like *Red Dead Redemption 2* (2018) and *Beyond Blue* (2020) as well as fictional nature documentaries using footage from games like *GTA Online* (2013-) and *Destiny 2* (2017-) remediate earlier epistemic eco-practices, and how the focus gradually shifts from photographs and documentaries as (digital) 'objects' to replicable and inclusive practices. To conclude, the chapter demonstrates how this approach can be adapted to the remediation of other epistemic eco-practices, e.g. how players of *Stardew Valley* (2016) and *Animal Crossing: New Horizons* (2020) have transferred "community gardening", an activity directly linked e.g. to "eco-identity" (Hoffman and Doody 2015) and green citizenship (Lewis 2012), into digital spaces during the Covid-19 pandemic.

Chloé Germaine Buckley and Paul Wake: Play and the Environment - Games Imagining the Future

This chapter explains the methodology and research design of a current participatory project that investigates how board games can support young people's understanding of, and action on, the climate crisis. The project contends that the climate crisis is a social problem and an imaginative challenge, especially for young people whose futures are most affected by it. This project thus moves beyond the consideration of board games as a tool for climate education, and self-consciously investigates them as a means for young people (aged 16-19) to explore and communicate their ideas about climate change, social transformation and the future. Our methodology follows Mary Flanagan's (2009) question as to whether games function 'as a means for creative expression, as instruments for conceptual thinking, or as tools to help examine or work through social issues'.

Answering Flanagan's question in the positive, our project works with young people to interrogate the affordances of board games in a time of climate crisis. In our project, young gamers are co-actors in an exchange of knowledge between games, game designers, academics and young people themselves. The project methodology is a synthesis of YPAR methods (Camarotta and Fine, 2008) and a game 'hacking' process developed through the artistic practice of our project partner, Matteo Menapace. YPAR is a praxis that provides young people with opportunities to study social problems affecting their lives and then determine actions to rectify these problems. We propose that board games, due to the hands-on and collaborative play that they engender, are a good fit for YPAR methods since games are themselves a site of critical enquiry, engaging players in questions of the rules, structures and norms that frame play. It is precisely such rules, structures and norms at the level of society and institutions that YPAR methods seeks to challenge and transform, empowering young people as they do so. As a game designer and artist, Menapace deploys game hacking to foster collaboration and creativity in educational settings. Our application of his method in a research context further draws inspiration from Anna Anthropy's (2012: 90) contention that what is 'really valuable about hacking and modifying games is the realization that there are ways of interacting with games other than just playing them: roles beyond the consumer'. Through the application of this methodology in our project we aim to identify how board games might better support young people's understanding of the climate crisis and aid them in communicating their ideas about the climate crisis. Finally, with our co-researchers, we aim to develop principles for future game design in a time of climate crisis. Though our research questions pertain specifically to the relationship between young people and climate change, we present our methodology in this chapter as having broader applications for the study of board games and social issues.

N.N.: Abstract Forthcoming.

Section 4: The Nonhuman

Section Editor:
- Laura op de Beke, University of Oslo

Kara Stone: Transforming into the Environment: Imagining the Multi-Species Perspective

This paper discusses three videogames made by the author: *UnearthU* (2021), *the earth is a better person than me* (2018) and *Humaning* (2017) in relation to their positioning of non-human and more-than-human actors and the ways in which this focus can open up alternate imaginings of environmental futures. *Humaning* is a table-top RPG that asks players to role play as bacteria, metals, and plants and in doing so, influence and construct a human life. the earth is a better person than me takes on an ecosexual position wherein the environment is not a mother but a lover—a complicated lover with many different desires, intents, and formations. *UnearthU* follows an A.I wellness coach as she explores her own connection to the earth, her material body, the energy she consumes in order to be powered, and a transformation (back) into the environment. These games grouped together asks: what can role-playing or identifying with narratives about non-human species do for environmental justice? How can they enable us to understand the earth better, as well as human's role on it? Through analyzing these games as well as the process of creating them, this paper argues that games can not only communicate the importance of thinking more-than-humanly but that designers can move towards creating in a way that lessens their negative environmental impact.

Melissa Bianchi: A Field Guide to Monsters: Discursive Practices of Wildlife Watching in Video Games

Mainstream games, though often rife with (un)intentional misrepresentations of nature, can nuance what we know about how games encourage thoughtful considerations for the nonhuman. This essay continues conversations about the value of popular video games to ecocriticism by applying Krzysztof Jański's (2016) game animal categories and Hans-Joachim Backe's (2017) descriptive ecocritical matrix for games to mainstream releases, including *New Pokémon Snap* (2021) and *Monster Hunter Rise* (2021). Connecting analyses of these games to writings about watching and photographing actual animals illustrates how mainstream games can extend and subvert discursive practices of wildlife observation. Moreover, these games demonstrate how design and play might reify troubling aspects of the human-animal divide while supporting critical perspectives on nonhuman agency and ethics in ecotourism.

Paolo Ruffino: Title: Inhuman(e) Games and All-too-human anxieties

The chapter investigate players' responses to the failures of techniques of automated videogame development such as Procedural Content Generation (PCG). In particular, it explores how players have articulated their affective responses to the release of *No Man's Sky* (Hello Games, 2016) on YouTube and other social media. While PCG appears to delegate game development to a nonhuman agent, the case of No Man's Sky reveals a complex structure of feeling that triggers novel anxieties among game consumers. Anxieties concern the inhuman(e) boredom of a simulation that exceeds the control of any individual human player. At the same time, players have been attributing responsibility for the game's failures to an all-too-human agent, the indie auteur Sean Murray. The case of *No Man's Sky* and its reception opens new questions regarding the political and affective implications of automated game development.

Merlin Seller: 'Hiding (in) the Tall Grass: Rethinking Background Assets in Videogame Plantscapes'

This chapter will explore the significance of 'grass' assets, bringing Critical Plant Studies (Marder, 2013; Pollan, 2002) and the Anglo-American lawn's cultural historiography (Steinberg, 2006; Marusek, 2012) to textual analysis of ludic backdrops. While Chang critiques "functionally inert" plants in "predominantly visual" videogame environments (2019: 23), this risks repeating what Marder (2013) identifies as Western marginalisation of flora's rooted, acephalic alterity - underestimating invisible plant monocultures subtending society (Pollan, 2002; Steinberg, 2006) and reifying anthropocentric values of agency and centrality.
Indeed, passivity is key to videogames (Fizek, 2018; Keogh, 2019), and Game Studies regrettably marginalises visuality (Keogh 2018). I propose that 'visual' and 'inert' background assets (exemplified by grass) offer rich and underexamined terrain for analysis wherein the 'plantscapes' dwarfing humanity (Hall, 2011:3) might challenge disciplinary understanding of agency/interactivity.

Laura op de Beke: Nonhuman and Inhuman Temporalities in Petro-Capitalism

In response to the mostly human, even individual-centred histories of petroleum Tim Kaposy argues we need another approach, one that is more attentive to the nonhuman temporalities of oil, for instance the slow violence of pollution, or the nonhuman temporalities that are involved in the increased automation of oil extraction and manufacturing (2017). In this chapter, not only do I want to attend to how these nonhuman temporalities are engaged with in videogames. I also want to touch on the inhuman, or anti-human elements of their representation. By 'inhuman' – not only do I mean cruel, or brutal, but also, following Andrew Pilsch, "actors that exist at temporal or physical scales beyond our limited perception" (2017, 344).

Drawing on Richard Grusin's book *The Nonhuman Turn* (2015), I understand affect theory and new materialism to be important branches in its genealogy. Grusin argues that although "it is not always readily apparent how human affect can be nonhuman," in foregrounding the wilfulness of the body, affect theory decentres humanist notions of bounded individual autonomy. On the contrary our bodies are pervaded by petro-chemical waste products like microplastics and the derivatives of chemical fertilizers and pesticides. The opposite is true as well, our bodies are leaky and wasteful, and there is constant interchange between us and the environment. My first move in this chapter will be to explain, drawing on Cara Daggett's work, how such free-flowing exchange is threatening to petro-masculinities. I then close read *The Oil Blue* (2010) to theorize how the affect of flow can be understood as part of a more general resource aesthetics of petrocapitalism, and how flow, as the gamified sublime, sits within a more general framework of the petro-chemical sublime (Burnham 2017). Afterwards, I'll shift my focus to the base-builder *Oxygen Not Included* (2017), to discuss how its simulation of flowing, comingling materialities – oil among them – in a closed ecology, and where the human sits within this system.

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