



GAMES CULTURES

Activity 3: *Ecocritical Game Analysis*



University students, M.A. level



Advanced



3 hours



3-6 participants



Critical game literacy, including the ability to analyse games as both rule systems and meaning-producing structures



Printed or digital materials, sources assigned for reading before the session

CONTEXT

As rule-based models or real-life processes, games in particular have the potential to both procedurally represent reality and critique it. Yet, such critical approaches often go against the conventional wisdom of game design defining games as activities that need to: a) be 'fun', b) facilitate a winning condition, and c) present the player with a challenge to be solved.

Often, mechanistically following these principles and reproducing the mechanics and dynamics of existing games results in games that address environmental issues in superficial, oversimplified, or even counterfactual ways. It is important for game researchers and designers alike to develop the critical skills for recognising and deconstructing such problematic representations.

TASK

This activity involves students reflecting on how video games can engage (often problematically) with environmental issues. It involves students analysing fictional game concepts and then generating concepts that focus on the same issue but address it in a more critical way.

If the instructor is working with game design students and wishes to put emphasis on developing more detailed game concepts, the task can be expanded to 4 hours by allocating more time to Steps 3 and 4. Additionally, if the instructor wishes, they can start by introducing the concept of procedural rhetoric, or providing a short recap of it, if the students are already familiar with it.

SUMMARY

This activity aims at encouraging students to critically approach the environmental messages presented in video games. Students are presented with a selection of fictional game concepts inspired by real-life examples of video games approaching environmental issues in a shallow ecological framing. They analyse these examples in terms of the implicit environmental messaging they embed. Then, they problematise these messages and come up with suggestions for alternative ways of representing the relevant issues in a game context.

LEARNING OUTCOMES

The aim of the activity is to promote **critical game literacy** and **eco-critical reflexivity**. By completing the activity, learners will have developed a critical and reflective approach to the representations of environmental issues in games. The activity will also teach them to conceptualise alternative, more critical ways of engaging with environmental themes in video games.

PREPARATION

Source materials can be printed out or prepared digitally (e.g., as shared documents). It is a good idea to provide paper and/or whiteboards (or digital equivalents) for teams to map their ideas.

Assigned readings:

Naess, A., 1994. The shallow and the deep, long-range ecological movement. *Inquiry*, 16, pp.130-140.

Imbierowicz, E. 2023, Consumerist Environmentalism in "The Sims 4: Eco Lifestyle" · <https://doi.org/10.19195/0301-7966.61.2.4>



Ready, steady, go!

In this activity, your team will reflect on how video games represent, and sometimes misrepresent, environmental issues. While many modern games touch on environmental themes and issues such as sustainability, not all of them represent them in ways that are helpful for promoting change and tackling these issues in the real-world. Your task is to analyse several fictional game concepts that are based on representations found in existing games and identify what issues they represent and how they do it. After this, you will come up with alternative ways of representing the same issues that are more critical and impactful for players.

Step 1 *Warm-up (15 minutes)*

Think of the games you have played (digital or non-digital) that in some way addressed topics related to the environment or nature more broadly. Share your examples and discuss how these topics were addressed in each game. For example, was nature treated as a resource you need to harvest? Or a force you must overcome and conquer? Or did the game force players to think about the environmental impact of their actions?

For example, *Age of Empires* treats nature as both a resource (you must harvest wood to construct buildings, fish and hunt to gather food, etc.) and an obstacle (e.g., you need ships to traverse water). It does not involve the player replenishing the natural resources by, for example, planting new trees. Even though on smaller maps, it is possible to run out of trees to gather wood from, this is not a common issue, and the player does not have to face the consequences of deforestation: every new map has a new forest. It was probably not the designers' intention, but the implicit message the game contains appears to be: maximise immediate profit, because there will always be a new forest.

Step 2 Analysing game concepts (45 minutes)

Below are three concepts for video games that touch on environmental issues. Please read them carefully.

1: Ecopoly

Ecopoly is a digital board game that can be played online. It is a real-estate business simulation similar to Monopoly, where the player who makes the most profit in 15 turns wins. At the same time, players must work together to protect the environment. Every property purchased by any player adds to the overall CO2 level, and if it reaches 10, the environment collapses and the game is over for everyone. To prevent that, players can play carbon offset cards to reduce the CO2 level.

2: Eco-House

Eco-House is a house management simulation. You move into an empty house and must purchase windows, flooring, heating equipment, and various household appliances. Your ultimate goal is to make the house as energy efficient as possible, but your limited income prevents you from doing this immediately. However, upgrading to appliances with lower energy consumption, reducing heat loss, and other steps towards energy efficiency ultimately save you money, helping to save up for further upgrades.

3: Eco-Planet

Eco-Planet is a strategy game about terraforming. You are in charge of the first colony on planet Zephyrus, whose environment is poisoned with radioactive waste and toxic chemicals left by a previous non-human civilisation, now extinct. You must collect resources found on the planet and invest them into constructing safe facilities for the colony and conducting research into new technologies. There is a research tree that unlocks various technologies (similar to a skill tree in role-playing games), which in the long run help you to solve the pollution issues and make Zephyrus better suited to human habitation.

Now that you have read the concepts, let us reflect on them. For each concept, discuss the following:

- What issue related to the environment does the game address?
- How does it represent the issue? What implicit message does it contain with regards to the issue?
- What parts of the issue does the game leave out, oversimplify, or misrepresent?

Break *Drink, exercise, snack (15 minutes)*

Step 3 *Alternative concept generation (60 minutes)*

For each of the three game concepts, think of an alternative game concept that tackles the same issue, but includes some key parts that the original concept omitted or misrepresented. Remember that it is impossible to capture all the complexity of the real-life issue, and creating a perfect simulation of reality is not the solution. Instead, you need to be selective about what you choose to highlight and what you choose to omit, taking into account the implicit message you want the game to convey.

You can start with individual brainstorming (5-10 minutes) and then discuss as a team, then choose and develop your chosen game concepts.

The result should be three short game concepts, similar in length and structure to the ones in Step 2. Some things to keep in mind:

- What do players actually do in the game?
- How do their actions represent the relevant issue (and how do they improve on the original concept's approach)?
- What aspects of the issue does your concept leave out?

Step 4 *Open discussion (30 - 45 minutes)*

Present your concepts to the other teams and compare your ideas. Give feedback to each other. You can focus both on how the concepts represent the issues they deal with and suggest ideas for how these concepts could be expanded and developed. The facilitator will also provide their feedback.

What this activity aims to highlight is that there are many ways to represent the same issue (environmental or otherwise) in the form of a game. As both players and game designers, it is important to recognise what the rules of the game say about the issue and whether it is a thoughtful and helpful message.

Credits & Acknowledgements

Author

Dr. Maria B. Garda, University of Turku

All Team Members

Prof. Dr. Sonia Fizek, TH Köln

Dr. Laura Frings, TH Köln

Prof. Dr. Mata Haggis-Burridge, Breda University of Applied Sciences

Tuki Clavero, Breda University of Applied Sciences

Dr. Lukáš Kolek, Charles University

Andrea Hubert, Charles University

Karoliina Koskinen, University of Turku

Layout design: Noa Marcon (BA student at CGL, TH Koeln)

Logotype design: Sara Mohamed Badawy Omar Alkotkat (BA student at CGL, TH Koeln)

This educational material has been created within the framework of the project “Greening Games. Building Higher Education Resources for Sustainable Video Game Production, Design & Critical Game Studies” (2021-2024) that supports educators in addressing the interdisciplinary nature of green digital gaming. The project has been funded by the Federal Ministry of Education and Research in Germany within the framework of the Erasmus+ Programme of the European Union (KA220-HED – Cooperation Partnerships in Higher Education).

Project reference: 2021-1-DE01-KA220-HED-000029501

More information may be found at: <https://greeninggames.eu>.

This publication is distributed free of charge and is funded with the support from the European Commission. The sole responsibility of this publication lies with the author(s). The European Commission or the National Agency (FRSE) are not responsible for any use that may be made of the information contained therein.

This work is subject to a **Creative Commons CC BY-SA** license.



30.06.2024 Köln – Breda – Praha – Turku



With the support of the
Erasmus+ Programme
of the European Union