

Of Mice and *Lemmings*: Ludic Subjectivity and Interface in a Historical Context

Jaroslav Švelch

Charles University
Smetanovo nábřeží 6
Prague 1, Czechia
jaroslav@svclch.com

Daniel Vella

University of Malta
Msida, MSD2080
Malta
daniel.m.vella@um.edu.mt

Keywords

Lemmings, mouse, interface, ludic subjectivity, puzzle, agency

INTRODUCTION

Lemmings (1991) has a peculiar place in the history of video games. Produced by the Scottish company DMA Design, it was a massive critical and commercial hit at the time of its release, selling an estimated 15 million copies across various platforms (Dailly 2006). However, save for several sequels from the early to mid-1990s, it has had relatively little influence on subsequent games, especially compared to DMA Design's later hit *Grand Theft Auto* (1997). It has likewise attracted very little attention in game studies, save for brief mentions such as by Pérez-Latorre (2013). This paper will argue that the game's design was tied to a specific moment in the history of computer hardware and game industry practices, and that it presents a unique type of ludic subjectivity. The paper is based on secondary historical sources (especially published interviews and memoirs) and our analysis of the game.

As opposed to following existing genre templates, *Lemmings* was a game that grew out of experimentation and tinkering. It combined two unused ideas: a tiny animated character originally designed for *Walker* (1993), and a terrain-tracing algorithm originally intended for a missile in *Blood Money* (1989) but later used to control lemmings' movement. Importantly, the game was designed to be controlled with a mouse. At the time, the mouse had become a common personal computer peripheral, allowing for new types of interaction. As pointed out by Gaboury, mouse-controlled graphical user interfaces refigured "the act of computing [...] from a set of procedural calculations into an interactive environment, understood as a spatially embodied field of discrete computable objects" (2021, 17). The mouse as a controller has come to stand in for "easy access" (Atkinson 2007). In gaming, the mouse has been likewise used for fast selection and manipulation of objects, or - in the case of *Lemmings* - instantaneously assigning tasks to individual lemmings, and thereby solving the game's puzzles.

The increasing popularity of mouse-based interfaces in the late 1980s and early 1990s led to the rise in popularity of PC gaming genres like the god game (*Populous* (1989)),

Proceedings of DiGRA 2023

© 2023 Authors & Digital Games Research Association DiGRA. Personal and educational classroom use of this paper is allowed, commercial use requires specific permission from the author.

the 4X game (*Civilization* (1991)) and the real-time strategy game (*Dune II* (1992)). Besides the interface, *Lemmings* shares with these subgenres some of the foundational assumptions that shape the player's subjective positioning towards the gameworld.

In *Lemmings*, the player adopts a transcendent ludic subjectivity (Vella 2016), not tied to embodiment in an avatar or player-character that exists as an entity in the gameworld. Instead, they relate to the gameworld as a disembodied set of functions to be wielded with a point of the cursor and a mouse-button click: a point of action (Thon 2006) that can roam freely.

For the player, through the cursor, every animate entity in the gameworld is immediately available as something to be clicked on and commanded. Just like the icons laid out on the computer desktop, all the entities in the gameworld are ready-to-hand, tools waiting to be used. At the same time, in relation to the gameworld, the player exists at a remove, on a higher ontological level, untouchable and unreachable. The player can act upon the gameworld, but they cannot be acted upon.

This ontological distinction between player and gameworld entities has further implications. In *Lemmings* - as in many of the games listed above - the player is the sole human agent relating to a host of non-individuated, identical and interchangeable "computational others," beings "whose behavior is machinic, and driven by computational algorithms" (Švelch 2019, 277). Left to their own devices, the Lemmings will either remain stuck in an endless loop - performing what Galloway might term an "ambience act" (2006, 10) - or lead themselves to their death. Rather than interacting with each other or with other simulated entities, they interact almost exclusively with the terrain.

While Lemmings follow their own procedural logic, this is no idle game in which the player is present as "a bystander or delegating agent rather than the primary performer" (Fizek 2022, 55). *Lemmings* adheres to the more conventional idea of the player as "an intentional subject acting upon dead matter" (ibid., 3), tasked with "constant attention and care" emerging from "the responsibility to keep the game 'alive'" (ibid., 38). This idea, we argue, is common to the aforementioned list of game genres that rose to prominence in the late 1980s and early 1990s, and is founded upon the logic of the mouse-based interface they share.

While the mouse-based interface situates the player as a god towards the gameworld, it also gives them the responsibility to care for the computational others making up that world, and for the preservation of the algorithmic system as a whole (Möring 2019). However, the game recognizes and even indulges the player's temptation to turn towards mischief or sadism. In fact, this was a primary impulse in the game's development: Stanton notes that "very early in development the team knew killing lemmings was entertaining," and the first animation tests for the character sprites involved them being killed by a variety of traps (n.d.).

Lemmings thus embodies the ontology of the mouse-based interface; however, it also diverged in marked ways from other games and genres that adopted this interface. First of all, it is primarily a puzzle rather than a strategy game. Its levels consist of abstract or semi-abstract topographies foregrounding a puzzle to be solved. Relatedly, despite the apparent level of control granted to the player's, each level is structured around a single solution they are required to work out in order to progress to the next level. In effect, the player's ludic subjectivity - at least, in terms of the implied player position - is just as circumscribed by the game system as the Lemmings'. *Lemmings* can be

therefore likened to a God game without god-like agency and even without a believable world to rule over. This paradox, along with the waning novelty of mouse control and the fact that puzzle games almost disappeared from blockbuster production, can help us understand the limited influence of the game in the decades after its release.

BIBLIOGRAPHY

- Atkinson, Paul. 2007. "The Best Laid Plans of Mice and Men: The Computer Mouse in the History of Computing." *Design Issues* 23 (3): 46–61.
- Bullfrog. 1989. *Populous*. Commodore Amiga. Electronic Arts.
- Dailly, Mike. 2006. "The Complete History of DMA Design - Chapter 4: 1991 (Lemmings)." 2006. http://www.javalemmings.com/DMA/DMA4_1.htm.
- DMA Design. 1989. *Blood Money*. Commodore Amiga. Psygnosis.
- . 1991. *Lemmings*. Commodore Amiga. Psygnosis.
- . 1993. *Walker*. Commodore Amiga. Psygnosis.
- Fizek, Sonia. 2022. *Playing at a Distance: Borderlands of Video Game Aesthetic*. Cambridge, Massachusetts: The MIT Press.
- Gaboury, Jacob. 2021. *Image Objects: An Archaeology of Computer Graphics*. Cambridge, Massachusetts: The MIT Press.
- Galloway, Alexander R. 2006. *Gaming: Essays on Algorithmic Culture*. Electronic Mediations 18. Minneapolis: University of Minnesota Press.
- Meier, Sid. 1991. *Civilization*. PC. MicroProse.
- Möring, Sebastian. 2019. "Expressions of Care and Concern in Eco-Critical Computer Game Play," presented at DiGRA 2019 "Game, Play and the Emerging Ludo Mix," August 6-10, Ritsumeikan University, Kyoto
- Pérez Latorre, Óliver. 2013. "The European Videogame: An Introduction to Its History and Creative Traits". *European Journal of Communication* 28 (2): 136–51. <https://doi.org/10.1177/0267323113477365>.
- Stanton, Rich. 2015. "The Making of Lemmings". Read-Only Memory. 12 February 2015. <https://readonlymemory.vg/the-making-of-lemmings/>.
- Thon, J.N. 2006. "Perspective in Contemporary Computer Games." In *Point of View, Perspective and Focalization*, edited by Peter Hühn, Wolf Schmid and Jörg Schönert. 279-299, Berlin, Germany: Walter de Gruyter.
- Vella, Daniel. 2016. "'Who Am 'I' in the Game?': A Typology of the Modes of Ludic Subjectivity," presented at the 1st International Joint Conference of DiGRA and FDG, Abertay University, Dundee
- Westwood Studios. 1992. *Dune II: Battle for Arrakis*. PC. Virgin Games.