Fringe Game Craft: An Exploration of Fantasy Consoles and Exotic Game Tools

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ABSTRACT

This experimental submission is an exploration of fantasy consoles, exotic game engines/tools and the communities around them. It is a journey of the space of game tools that embody the "unconventional mixed with practical" (Natalie Lawhead, 2019)

As someone who is outside of academia, I see this as a way of doing a hands-on showcase that may offer new perspectives on the craft of game creation and consumption, especially since these playful tools usually live in the "space of cultural and economic activity that includes hobbyists, artists, gamemakers with day jobs, (...) modders, and students" (Brendan Keogh, 2023).

It will be presented as an interactive web journal, with embedded playable versions of the works that I create with each tool, and a contextualisation with thoughts / a micro dev log of the development experience. The source code for each micro-game will be also accessible.



Figure 1: Pixel Vision 8, official engine screenshot.

Keywords

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META-NOTES

From a technical perspective, it draws from my experience of 20 years in game design and development.

My general portfolio can be accessed at: www.oddgoo.com. If selected for DiGRA 2024 in Guadalajara, this experimental web site would be made available in late May 2024.

This experimental submission shares text and related motivations from my other submission "Ludum Finalem".

THE TOOLS AND GAME ENGINES

A core driving factor behind this submission is the personal need to approach game development as a playground in itself. As so, through the Journal, I will pay particular attention to how these tools exist in the interplay of gameplay and creation.

Some examples of these tools and games include:

Arduboy



Figure 2: A bicycle-riding simulator about Guadalajara, made in Arduboy specifically for DiGRA 2024

Retroachievements.org

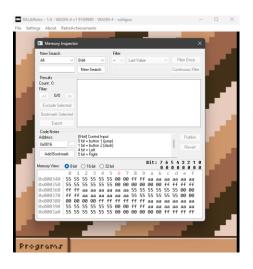


Figure 3: RALibretro's Memory Inspector

While achievements are considered superficial or unnecessary by a percentage of game audiences, the **Retroachievements** project has attracted a large community that shares a goal of rediscovering titles in old and non-commercial systems.

Towards this end, they have developed robust toolsets that allow the inspection and mapping of a game's memory to create conditions and meta-logic. This allows "achievement creators" and site administrators to design challenges and interconnected events that span decades of game history.

Retroachievements is not-for-profit and is managed by volunteers.

PICO-8

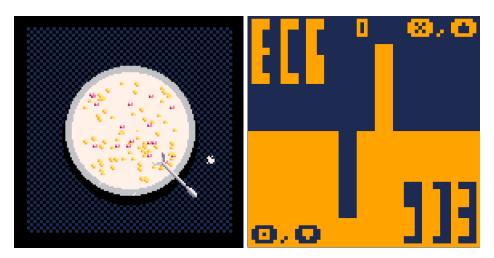


Figure 1: Cereal Eater and Electrocardioground, made in PICO-8

An exploration of fantasy consoles cannot be considered comprehensive without PICO-8, which has been the most popular one since its inception in 2015

WASM-4



Figure: Poly's Pond, WASM-4

WASM-4 is an WebAssembly fantasy console. One of its interesting features is the limitation of having only 4 colours, but being able to modify the palette at any time

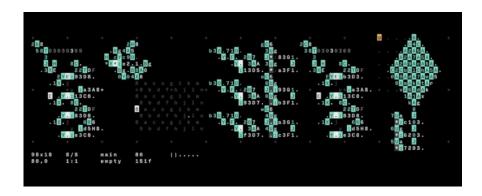


Figure: Orca, official video screenshot

Moving more towards the realm of tools rather than full game frameworks, Orca is a "a flexible livecoding environment capable of sending MIDI, OSC & UDP". It is part of Uxn/Varvara, a "a personal computing stack based on a small virtual machine" (100r.co/site/uxn.html)

Other tools being explored, tinkered or considered include: Bitsy, Pyxel, Uzebox, TIC-80, GB Studio, Chip8, engine.lol, microstudio, PuzzleScript, Decker, raylib and more

REFERENCES

Bates, K. 2105. Arduboy. https://www.arduboy.com/.

Freeman, J. 2017. *Pixel Vision 8 - A Next Gen 8-Bit Fantasy Game Console*. https://pixelvision8.github.io/Website/

Garcia, B. n. d. WASM-4 https://wasm4.org/.

Keogh, B. 2023. The Videogame Industry Does Not Exist: Why We Should Think Beyond Commercial Game Production. United States: MIT Press.

Lawhead, N. 2019. "Announcing the Electric Zine Maker!" Candybox Blog. Accessed January 30th 2024,

https://www.nathalielawhead.com/candybox/announcing-the-electric-zine-maker-about-my-new-art-tool-toy-game-thing-being-developed-the-direction-its-taking

Lexaloffle Games. 2015. *PICO-8 Fantasy Console*. https://www.lexaloffle.com/pico-8.php

Rek & Devine. 2018. Orca. https://hundredrabbits.itch.io/orca.