Playground Games:
A Gameboy Color Platform Study

What is a Platform Study?

Platform studies are a family of research approaches to new media that carefully consider the hardware aspects of computational systems (Bogost and Montfort). A platform in its most abstract form is a set of specifications which define the limits and possibilities of the games and digital art they host.

Platform Study Examples:

In I Am Error, Nathan Altice delves into the history of the Famicom/NES, examining how its hardware contributed to the style of games it hosted, how the platform was translated from Japan to America, and how fuzzy the concept of a platform is in a world emulation. He describes his approach as 'hardware humanities', approaching how the limitations of the hardware influenced the art on the system.

Contrast that with Dominic Arsenault's study on the Super Nintendo, Spoony Bards, Silverware, and Super Power which focuses on how that platform and the culture and marketing around it betray Nintendo's troubles growing up with the console market in the 90's and beyond. Both examine their respective platforms, but from very different fronts.

The Game Boy and Game Boy Color

The original Game Boy was released by Nintendo in 1989, and was a major success in portable gaming, outperforming the far more technically impressive Sega Game Gear. Its display was limited to four shades of gray, but was incredibly battery efficient. In 1998, Nintendo iterated with the Game Boy Color while up to twice as powerful, it shared the same CPU as the Game boy, allowing full backwards compatibility.

What questions will you be asking?

Spoony Bards, Silverware, and Super Power, Arsenault describes Nintendo's abandoned plans for the backwards compatibility from the Super Nintendo to NES games as a result of its rushed development in the face of market competitions.

What lessons did Nintendo apply to the evolution of the Game Boy that they learned through their struggles outside of the portable game market?

Nintendo would maintained backwards compatible in its line of hand-held consoles up until the later versions of the Nintendo DS -picking up again with the 3DS-, while new generations of its home consoles, the SNES, Nintendo 64, and GameCube were not.

Did Nintendo not pursue hardware innovation in the portable game market because there was no competition or did Nintendor calculate it just far more profitable to sell a new system with the promise it won't obsolete the games they already have?

Game Boy Color as Two-Faced Janus

While the first Game Boy stands true to Gunpei Yokoi's philosophy of "lateral thinking for withered technology" (Altice, 23), the Game Boy Color epitomizes a strategy of forward iterative design with proven technology, while still keeping a set of eyes on supporting the games of the last system. We see the pattern continue with Nintendo's later hand-held consoles, whose bevy of variations mirror the original Game Boy's.

The Project

I will research primary sources which cover the release and marketing of the Game Bo, Game Boy Color, and Game Boy Advance and examine a range of games for these consoles and how they behave across platforms. I will examine how Nintendo designed the graphics processing unit of the Game Boy Color to host games in full color, while maintaining game compatibility with the Game Boy. I will explore how Nintendo designed game cartridges for interaction with its home consoles, through add-ons like the Super Game Boy and Game Boy Transfer Pak.

Buzz Tilford

Altice, Nathan. *I am error: The Nintendo family computer/entertainment system platform*. MIT Press, 2015.

Arsenault, Dominic. *Super Power, Spoony Bards, and Silverware: The Super Nintendo Entertainment System*. MIT Press, 2017.

Bogost, Ian, and Nick Montfort. "New media as material constraint. An introduction to platform studies." *Electronic Techtonics: Thinking at the Interface. Proceedings of the First International HASTAC Conference*. 2007.

Project Timeline

	2	4	6	8
2 Weeks Researsch	1.5 Weeks Outlining	3 Weeks to Complete Initial Draft	1 Week Test Reading	2.5 Weeks Complete Final Draft