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## HUNGRY SPACE CAT: A CRITICAL INTERVENTION

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## **Background and Problem**

### **The Game**

*Hungry Space Cat* is a 2D-feline-inspired arcade game featuring a hungry astronaut cat pursuing purple space bugs. At the same time, it has to evade UFOs, flying hamburgers, asteroids, ghost dolls, spaceships, snails, or a combination of these opponents to keep on pursuing the adorable pickups. More specifically, regarding its gameplay, it draws inspiration from Namco's *Pac-Man*, a 1980 maze action game, and Atari's *Asteroids*, a 1976 space shooter, with its galaxy-themed setting and the ability to shoot enemies (Pal 2024, p. 3).

The game was developed using the Unity engine and C#, utilising 2D development to honour the original design of arcade games, while including a modernised look and feel, emphasising customisability and accessibility to stand out from other arcade games by being available to diverse players, including those on the spectrum (Pal, 2024, pp. 3, 10). It also pays tribute to the gentle gameplay that the creator of *Pac-Man*, Toru Iwatani, intended for his game (Retro Gamer, 2016, p. 48), while following the philosophy of arcade games by featuring a simplistic design but challenging gameplay to master via increasingly difficult levels (Therrien, 2011, p. 2).

### **Accessibility in Games**

Video games are becoming increasingly popular with a wide range of players, often serving as the only platform that enables them to communicate with others on an equal footing. Furthermore, video games frequently provide stress relief and entertainment, contributing to feelings of well-being, thus emphasising the importance of designing games that prioritise accessibility. Moreover, the increasing seniority of players is another factor affecting accessibility, as advancing age brings specific health issues, such as decreased vision, mobility, and hearing (Cairns, 2019, pp. 64-65).

Yet video games are made with a particular audience in mind, without addressing the complex needs of those who may require more adjustments. Developers adopt a singular quality of a disability, ignoring the nuanced complexity of users who come with varying degrees of disability or suffer from multiple disabilities at once. Commercial concerns also usually trump the need to adapt a game for an audience with specific needs (Cairns, 2019, pp. 65-66), with a survey finding that 91% of players with a disability are unable to fully enjoy games due to a lack of features that cater to their needs (Baltzar et al, 2023, p. 1). Consequently, such accessibility issues prevent many players from playing mainstream games and rob companies of potential revenue (Oliva-Zamora & Mangiron, 2025).

### **Critical Frameworks Applied**

For the following intervention, code studies will be the main critical approach to draw upon, as, according to Marino Mark (2017), with interest in programming languages continuing to grow, the need for them to become more readable to a broader range of people has become vital (pp. 472-473), especially within the context of video games.

Therefore, more precisely, one way of looking at code is to view how it interacts not just with humans but also with other systems; programming should be seen as a creative process, framed by the fact that the people writing the code come from a variety of backgrounds. Thus, in such a line of enquiry, code

is not analysed in terms of what it does, but who it was written by (Mark, 2017, p. 472-473). In the context of video games, this means that how they are developed is significant.

Platform/infrastructure studies also play a role in this intervention, as James Malazita (2004) states that such game engines are part of platform studies, naming the *Unreal Engine* as an example that streamlines the development and publishing of digital games. He describes games as complex, reconfigurable, and flexible software systems that enable the development of a wide array of games and find engagement in other areas, such as urban and military simulation (pp. 1-3). As mentioned earlier, *Hungry Space Cat* was built on the Unity game engine (Pal, 2024, p. 3).

(631 words).

### **Theoretical Framework**

#### **Code/Space**

In *Code Space*, Rob Kitchin and Martin Dodge (2011) argue that software has become part of everyone's daily lives and plays a pivotal role in the information technical sphere, much as steam did in the industrial age. They state that, beyond code, software is quite diverse, ranging from assembly language to more formal programming languages; its unifying function is to take some form of input and produce visible results with the help of computer hardware. It is also noteworthy, they state, for creating and processing *capta* -- which they specify as data carefully chosen for a specific purpose (pp. 3-5).

In a similar vein, video games reflect the versatility of programming languages, with a wide range of genres available for players to explore and the emergence of hybrid genres that blend mechanics from other genres. In addition, online games allow players to explore a wide range of styles within a single title (Dale & Green, 2017), with data from these games used to improve the gameplay experience, for example, in server load balancing and maintenance, with the caveat that gathering this data is quite tricky, with no standard API available to allow for the development of immersive visualisations (Fleck et al, 2024, p. 1).

Kitchin and Dodge (2011) further state that software is used across a range of domains, from simple household items to complex machines, often classified as coded objects, infrastructures, processes, and assemblages. Coded objects are objects that rely on software to perform as expected, either requiring it to be embedded in them or being rendered utterly useless plastic without the use of software (e.g. credit cards). Coded infrastructures are networks that hold coded objects together, with software used to monitor them; coded processes represent the data flows and transactions taking place within these networks. Code assemblages, meanwhile, cover an infrastructure of such networks in parallel (pp. 5-7). Further demonstrating their complexity, video games have gone from simple arcade games such as *Pong* in the 1970s to online games that enabled players to connect worldwide in the 2000s (Goh & Khan, 2023, p. 2).

Additionally, Kitchin and Dodge note that computing power has grown over the years, leading to greater adoption of software in the mainstream and an increase in systems that control and monitor. At the same time, reliance on software has led to cases in which failures or faults in such systems can have disastrous consequences, but it has also driven innovation. Thus, a *code/space* framework analyses how software and the space of everyday life become increasingly entangled, for example,

through a check-in system at an airport or a supermarket checkout (2011, pp. 9-11, 16). Moreover, the rise of always-online multimedia games has posed challenges for the game industry, which must ensure that its infrastructure not only enhances players' experiences but also contributes to society by reaching its intended audiences (Mirowski & Harper, 2019, pp. 238, 240).

## **Infrastructure and Platform Studies**

Jean-François Blanchette (2012) notes that scholars such as Jeannette Wing have argued for a broader understanding of the computational methods used to develop a wide range of technologies. Blanchette agrees with the sentiment but feels that scholars place too little emphasis on the social implications of computer infrastructure, which, due to their complexity and the regulations they entail, raise a host of questions that students and people in these fields are required to answer (p. 32).

Some of these questions include: what data storage options are available to ensure this infrastructure is sustainable in the long term, and what the long-term costs are for companies that use cloud computing services, with emphasis on how specific trade-offs can be justified in light of constant innovation. Another set of questions focuses on the utilisation of open-source software, with professionals in these areas needing familiarity with these subjects to ensure that this kind of technology continues to evolve (Blanchette, 2012, pp. 32-33).

Blanchette (2012) notes that while users are more interested in applications that make their daily lives easier, computer scientists place significant focus on maintaining computer infrastructure. They often balance a fine line between economic interests and serving the public; Blanchette also notes that computer infrastructure evolves more slowly than other technologies. However, given the high cost, it is more important for the computer infrastructure to grow moderately to remain stable (pp. 33-34).

Historically, video games have served as social lubricants, bringing people together in the 1980s and 1990s through arcade games that fostered relationships and created communities focused on board games. Nowadays, online video games transcend these experiences by connecting people worldwide and fostering bonds through shared experiences. They are no longer just social experiences but shared social infrastructures, driving the need not just for stable but also for responsible design that keeps these infrastructures running and ensures they are safe and social (Voll, 2023, pp. 1-2).

## **Alternative Approaches**

The versatility of game engines, Malazita believes, represents the material side of game studies and accounts for their diverse, changeable nature, even though viewing them through this lens can seem shallow. In fact, he states that game engines are composed of a multitude of objects that are treated differently by the people working on them. Accordingly, Malazita argues for the need for other viewpoints in this area, including those of feminists focused on the technical sphere, as such an approach can illuminate the various regions that platform studies often overlook (2004, pp. 5-15).

In particular, data feminism refers to a way of capturing data that acknowledges that power is not shared equally, showing a way of thinking about data that encompasses its uses and limits, using intersectional feminism to challenge this distribution of power. Therefore, one objective of data feminism is to challenge power, not only to end the discriminatory status quo but to create a future that gives everyone the same opportunities (D'Ignazio & Klein, 2020). In video games, this entails

challenging existing norms and encouraging alternative perspectives to create games that are playable by everyone.

Similarly, postcolonial studies, whether in literary studies or in DH, hold the view that European colonisers have dominated culture (Risam, 2019, p. 25). Thus, postcolonial studies do not just place importance on the previously unseen rhetoric of marginalised communities, but also, with the help of digital tools, bring to the surface how such communities have been rendered silent. Consequently, this allows a new generation of intellectuals to engage further with the subject matter (Moore Pewu, 2021, p. 120). Applying postcolonial viewpoints to video games not only challenges perspectives that may be hard to understand from Western perspectives but also, unlike data feminism, encourages a reshuffling of the mainstream and the inclusion of more accessible features.

(1099 words).

### **Critical Intervention**

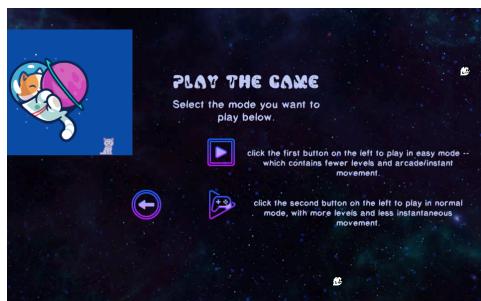


Figure 1  
The game offers two play modes.  
Note. Screenshot.

Although *Hungry Space Cat* has features such as the option to play an easy mode as indicated in Figure 1 (Pal, 2024, p. 8), it does not offer any accessibility features for visually impaired players, such as audio, tactile, or haptic feedback, that would enable them to participate in the game (Archambault et al, 2027, pp. 6-7). Unity offers free

packages that facilitate the development of accessibility features for blind players, such as screen readers and spatial audio; however, these tools often provide only limited support (Strasser & Pirker, 2024, p. 2646), implying that while software comes in many shapes and forms (cf. Kitchin & Dodge, 2011, pp. 3-5), the majority of game developers are blindsided by their lack of awareness when it comes to disabilities or forget to acknowledge them altogether (cf. Cairns, 2019, pp. 65-66).



Figure 2  
The game contains visual feedback depending on player actions.  
Note. Screenshot.

At the same time, the game supports deaf and hard-of-hearing players by giving visual feedback (Naranjo et al., 2021, p. 110), such as a cyan flash when the player eats a bug (Pal, 2024, p. 12) and text that appears during loading (Figure 2). Despite the presence

of visual feedback, it does not provide subtitles, which would give deaf players additional cues about what is happening on screen: subtitles offer the extra benefit of being highly customisable, allowing players to adjust the size and or the font according to their need; however, the implementation of these features can be rendered tricky due to the lack of toolkits that provide such features (Naranjo et al., 2021, pp. 110-111).

This issue highlights the same lack of awareness among game developers as when it comes to developing for the visually impaired (cf. Cairns, 2019, pp. 65-66). Like these game developers failing to provide appropriate toolsets, *Hungry Space Cat* falls short of providing an inclusive social infrastructure by not offering accessibility features that would limit access for a broader range of players (cf. Voll, 2023, pp. 1-2). Yet it does indicate a step in the right direction, offering neurodiverse players a repeatable plot, gentle gameplay, and straightforward tutorials (Ellis, 2023); its simple progression allows people with cognitive barriers to play the game without feeling overwhelmed or disoriented (Oliva-Zamora & Mangiron, 2025).



Figure 3  
The game has many configurable options.  
Note. Screenshot.

Lastly, while *Hungry Space Cat* offers many configurations in its *Settings* (Pal, 2024, p. 8), as seen in Figure 3, such as muting or unmuting the audio, these features are not necessarily accessibility-related. Furthermore, the UI and the game's overall design elements are often too loud, too bright,

and too omnipresent, as evidenced in Figure 2, where the space background, contrasted against the very purple and plentiful bugs, may be too distracting for some players. Instead, limiting the elements would have been a better approach, as minimalism allows a player with cognitive issues to focus more on the elements in the UI (Oliva-Zamora & Mangiron, 2025).

(470 words).

## AI Statement

The use of AI for this paper was limited to Grammarly for proofreading (using commonsense) and Microsoft CoPilot to aid me in formatting the references below ❤. Any errors are mine and mine alone!

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