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The World Ends with You: Exploring the post-human affective NPC using character-centric game design

by

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Abstract

The construct of the non-player character (or NPC), mechanically, is seen in most modern video games and is an important point of interaction for players. In this paper we take a look at an affective-based approach to examining NPCs based on both their capacity for companionship with the player ascribed through affect theory, as well as their existence as a self-impelled entity through post-human performativity theory. With this approach in mind, we have synthesised a gameplay experience with the companionship of the NPC as a driving force to examine how such a relationship can be defined. In this gameplay, the player is bound to a character that they become emotionally attached to throughout the narrative. We identify a temporal approach to NPC relationships that may enhance interactions with characters by making them non-repeatable through narrative intervention.

Disclaimer

The author would like it known that portions of this thesis have been submitted previously via a draft in Term 2 (specifically portions of the Literature Review and Conceptual Framework). Thus I am self-referencing here in the interests of academic integrity [Wallace, 2022].

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Abbreviations

AI	Artificial Intelligence
NPC	Non-Player Character
PLR	Practice-led Research
RPG	Role Playing Game

*The World Ends with You: Exploring the post-human affective
NPC using character-centric game design*

Anthony Wallace

Chapter 1

Introduction

Since the popularisation of the interactive computer game in 1972 with Atari's *Pong* [Alcorn, 1972], we as players have always enjoyed the company and competition of the non-player character (NPC) to aid or hinder our progress. However, in our contemporary world, could it be constructive to view the non-player character not as a construct but as a companion?

My practice will be an adventure video game featuring a companion NPC accompanying the player character as they ascend a metaphorical mountain and begin to question the nature of their existence within the context of the game. Along the way, I will enhance the latent relationship between player and non-player character through both scripted and unscripted scenarios that build upon the agency of the companion. By the end, the NPC as a construct will be perceived as real and self-aware.

The current literature concerning post-humanist practice in the context of gaming usually explores the relationship between the player and the avatar, where the virtual body embodies the intent of the player within the game world [Giddings, 2007].

However, this approach is still anchored to the politics of the body in meat-space; the virtual body is merely seen as a projection of the mind [Dixon, 2007]. My practice instead focuses on the NPC virtual body as having the potential to exist outside of its

CHAPTER 1. INTRODUCTION

common perception as a game object. On the grounds of affect theory, the NPC can become both the emotional core of a project and an emotional agent in its own right.

Through my practice-led research, I seek to explore possible avenues addressing the following research questions: **How might one utilise affect theory to explore a post-human perspective of performative virtual entities?** And to this end, **How do we re-contextualise the virtual body outside of the notion of simulation?**

In pursuing these questions, this thesis will look at the contemporary literature concerning the virtual body and the NPC as being, as well as the potential of the artistic medium of games as performance. This thesis will explore conceptual and theoretical frameworks such as post-human performativity and remediation as building blocks for a new method of repositioning the non-player character as central to narrative-focused game-play experiences. Through building the game prototypes central to this practice-led research, this thesis will examine the structural methods of production used such as the characteristics of character believability and specific gameplay design patterns, before evaluating past and current iterations of the work based on a practice-led research cycle.

Chapter 2

Literature and Precedent Review

2.1 Literature Review

In both reconciling my own knowledge in this domain and expanding the knowledge base for the proceeding work, I seek to explore the following in relation to the field of post-human study and the virtual.

- The nature of reality and how the virtual body can be reconciled within conflicting realities via the simulacra.
- Current contemporary understanding of the virtual body, both in relation to physicality and within virtual space.
- Avenues of how practitioners have applied affect theory to develop emotionally nuanced characters and NPCs.

2.1.1 Simulacra in Gaming

In contemporary research, the simulacra, or phantasma, is important to performative artworks and by extension the interactive game as it is a facsimile resembling the real

CHAPTER 2. LITERATURE AND PRECEDENT REVIEW

world [Heyd, 2000]. Baudrillard's understanding of simulacra takes this further as simulacra constitute symbols of abstract meaning that construct a perceived reality, the *hyperreal* - in general society the real is becoming less so [Baudrillard, 1994]. In the context of critical art theory, the concept of simulacra is threatening as it obfuscates and appropriates in a way that renders criticism meaningless. In performance works, the performance becomes the embodiment of the work lending it immunity from reproduction and granting it ephemera, and by extension the *performance* of playing a game exists in this same space [Heyd, 2000].

The notion of simulacra in the practice is important here if we consider the work as a performative play in addition to a game. This notion of ephemera is persistent, and by considering the work as performative we challenge the notion of the game world (and by extension the entities within) as static. The non-player character (NPC) inherently is a reproduction and a facade produced by the author to convey a certain message - yet it also exists in a quantum state as an unscripted entity. As their embodiment is not based on an existing entity we can even consider them as second-order simulacra. If applying the *hyperreal* to virtual game worlds (and NPCs), we can compare the two as hyperreal is often token and monocular, yet game simulations combine this with nuanced relational dynamics of the real world to produce a model with *essence* that simulacra lacks [Giddings, 2007]. Hyperreal in this context is also unhelpful as it contextualises the virtual world through the lens of the physical world, when we can consider embodiment purely within the confines of such a virtual world.

2.1.2 Virtual Bodies

Writings on the virtual body are usually concerned with the Cartesian notion of the mind/body split as theorised by numerous contemporary cultural theorists: that there is (or is not) a relationship between mental perceptions and the physical body. Within a digital performance, there is debate as to whether the consciousness is disembodied in the virtual or projected from meat-space, and the ramifications this has for interactivity within increasingly digital spaces [Dixon, 2007]. In this context, Peter Lamborn Wilson

states "cyberspace... involves a curious form of disembodiment, in which each participant becomes a perceptual monad, a concept rather than a physical presence." [Dixon, 2007] The disembodiment of society via the Internet sees our personal lives increasingly becoming contextualised via the screen in social media, and subsequently via gaming [Wilde and Evans, 2017].

One approach to resolve this is by rejecting the indivisibility of the body assumed by the liberal humanist viewpoint and instead considering the *permeable body* as an amalgam of human and informational entities [Wilde and Evans, 2017]. Post-human subjectivity as a framework can work to re-shift focus from mono-entities to something more constructive [Barad, 2003].

As focus is directed primarily at the player character, there is little reflection of the embodiment that NPCs experience as performers regarding the mind/body split. If we accept agency as constituting *mindness* through the principles of post-human performativity, then the materiality of the body comes into question. Karen Archey speaks to the abstraction of the physical body within digital space as personal and digital identity becomes indistinguishable [Archey, 2014], and Hayles speaks to the materiality of data extant as binary on physical yet distant infrastructure [Hayles, 1999].

2.1.3 NPCs and Affective Responses

The construct of the NPC within the game setting is malleable, constantly being altered and explored to produce a more affective entity for whatever story a practitioner wants to tell. NPC construction differs from general autonomous agents within games as they are geared more for player-agent interactivity, and thus they must be more believable and aware. Indeed, this coincides with the shift in *intelligence* in AI agents to consider emotional and social intelligence as well as computational intelligence [ElSayed and King, 2017]. The development of these affective machines enables stronger believability and in turn drives user engagement with the agent. Indeed, many practitioners and theorists identify the inherent effect that the player and game system have on each other as a qualitative bond, which some like Tadeusz Kantor have coined the bio-object [Janik,

2018]. The conflict between mind and matter allows for the development of play and meaning, as both player and game impose their will on the other. Understanding this dynamic as a bilateral relationship is therefore important when addressing what affect a developer wishes to impart on the player.

Affective-based systems in terms of design also allow for tailored experiences that are more resonant with the player and are thus more nuanced in dealing with complex narratives. In Audrey Anable's writing on the presence of affect theory in video games, she elaborates on the notion of agent/system symbiosis as games giving texture and tone to computational systems, and positions it within the overarching framework of affect theory. She defines affect as "aspects of emotions, feelings, and bodily engagement that circulate through people and things", the inarticulate space where objects embody the inexpressible [Anable, 2018]. Within that affect theory, Anable pushes the hypothesis that video games offer an interface for providing an affective response detached from the representational and mechanical nuances that games studies tend to be limited to; thus realising game objects themselves as existing in an affective context that resists structuralisation and promotes duality between the virtual object and the player object [Anable, 2018].

2.2 Precedent Review

2.2.1 Ian Cheng's Emissaries



Figure 2.1: Emissaries (2015-2017) - “a video game that plays itself [Cheng, 2017]”

Emissaries by practitioner Ian Cheng is a live simulation experience comprised of three separate works, each depicting an *emissary* acting and reacting in a dynamic game world free from player influence [Cheng, 2017]. In these simulations each entity or non-player character is given its own agency to aid or hinder the world around it using predictive machine algorithms. Cheng approaches video game narratives in *Emissaries* by moving away from a linear cinematic style to favour an open-ended approach that favours the system of the game itself; speaking on the intention of his work Cheng cites *SimCity* and *The Sims* creator Will Wright about how it is "important to be able to fall in love with a system... as you might look at something more relatable, like an avatar or a character" [Comer and Cheng, 2019]. In researching precedent work I found this simulation angle fascinating in its fleshed out approach to the greater game world.

2.2.2 Everything and David O'Reilly



Figure 2.2: Everything (2017) - The player has the freedom to embody all objects within the world of the game and playfully interact with the world

The work of David O'Reilly's *Everything* from 2017 [O'Reilly, 2017] is a clear precedent that personifies the concepts behind post-human performativity through its gameplay design, whilst using its gameplay to reinforce its linking nihilistic narrative. Within the game, there is no set gameplay objective; instead the player is freely able to possess any game object in the world and interact with the macrocosm they find themselves in infinitely [Fizek, 2017]. Here O'Reilly gives a unique perspective on the embodiment of objects and the potential for them to have agency and purpose within a simulated environment.

ment of an object by repositioning it as a performative object when inhabited by the player. This perspective is interesting as it intersects with interspersed audio excerpts from philosopher Alan Watts, speaking on how the universe embodies consciousness at different scales. There is a fundamental repositioning of the world around the concept of self which is certainly intriguing, especially considering the contention of this thesis regards character-centric game design: thus I see this game (plus *Mountain* [O'Reilly, 2014], a similar game by O'Reilly that touches on the same points) as a clear precedent for the work.

2.2.3 Contemporary Indie Gaming

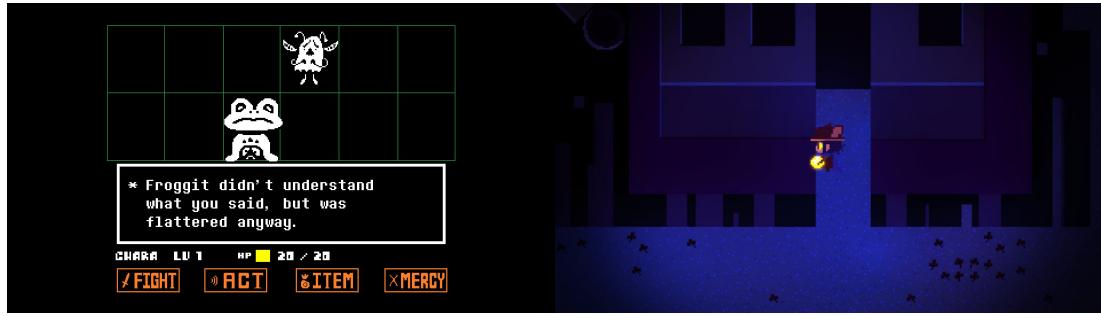


Figure 2.3: Undertale (2015) [left] and OneShot (2017) [right] both reposition NPC characters as affective entities rather than mechanical characters

A contemporary game precedent, the relationship indie games *Undertale* [Fox, 2015] and *OneShot* [Future Cat, 2017] have with non-player characters as performative entities that evoke empathy in the player is very interesting; not just regarding the way such character-driven games have resonated so strongly with the gaming public. Although the games themselves do not utilise AI or any form of reactive decision making, the use of affect theory through affective writing and framing of both the in-text narrative and meta-narrative work in conjunction to drive the player to empathise with these

¹The unique combat system allows players to Fight like a typical RPG, or defuse the situation using the Act command

²In the game you play as Niko, a child stuck in a surreal other world full of simulated characters

characters and believe they are true entities with their own goals and aspirations. In producing my own practice I seek to follow these games in developing character-centric experiences that drive complete player engagement - to make the player fully empathise and believe in the character as an embodied performative entity.

2.2.4 Posthumanist Texts

An initial inspirational precedent for the work was the masque *Prometheus as Performer: Toward a Posthumanist Culture?* written by Ihab Hassan. I sought to include this work for its use of performative entities as a method of disseminating a message, in this case post-humanism, whilst embodying said concept [Hassan, 1977]. I felt it would be remiss not to mention such a work for being such a significant initial building block for future iterations, even if it is not prevalent in the current practice-led outcome.

Chapter 3

Conceptual Framework

3.1 Post-human Performativity

My work is based on the theory of post-human performativity written about by Karen Barad; performativity in this context refers to how materiality and meaning inform each other, as information regarding any object is contextualised and re-contextualised through the performance of existence [Barad, 2003]. Barad defines materiality in this context as being comprised of phenomena or ephemera without inherent properties; that require the context of intra-action. Thus there is no existing anthropocentric entity defining an action - performativity is inherent in everything material. Agency becomes a relational performance between the actor and the acted upon that has the capacity to transform both entities [Janik, 2018].

Non-player characters, or NPCs, are in a unique position as characters in a work of fiction that can be given autonomy, making them more akin to actors in a play than an extra in a movie. The materiality of an NPC as a static object is constantly challenged through player interaction and empathy, instead pushing us to consider them as living performative entities.

I wish to explore how a post-human identity can be explored through the construct

3.2. HISTORICAL PERSPECTIVES AND REMEDIATION

of the non-player character. My practice will approach this question using three considerations in the design process: showing how the digital form can demonstrate novel conflicts in the narrative sense, exploring epistemological responses to perceiving the virtual body as performative, and examining how the immersion and embodiment of the virtual body can inform how we interpret character performances.

3.2 Historical Perspectives and Remediation

A historical understanding of the NPC is increasingly important in examining how the modern player currently perceives and interacts with performative entities - and how such a perception can be deconstructed. Using a remediation approach, theorised by Bolter and Grusin, could be an interesting approach to developing this historical context. Even within the realm of video games there has been multiple paradigm shifts that have shifted public perception, such as the jump from 2D to 3D graphics. Bolter and Grusin write how "visual media can best be understood through the ways in which they honor, rival, and revise linear-perspective painting, photography, film, television and print." [Bolter and Grusin, 1998] I believe approaching my practice-led research through this lens will help inform the outcomes of my research well.

Primarily, the historical uses of non-player characters can be divided into two main categories: mechanical and narrative. Mechanical NPCs are those that primarily exist to service the gameplay and to give a symbolic representation to the computational actions taking place (for example, enemies that lower your health or shopkeepers that increase your inventory). These NPCs, often with little narrative importance, experience the most interaction with the audience. Narrative NPCs however, do not primarily service a gameplay element and instead are emotional actors that work off the affection of the player to tell a story. Whilst appearing for a minority of the time, they are often the more remembered and emotionally resonant NPCs³.

³This comes from my own personal observations as well as others who participate in games

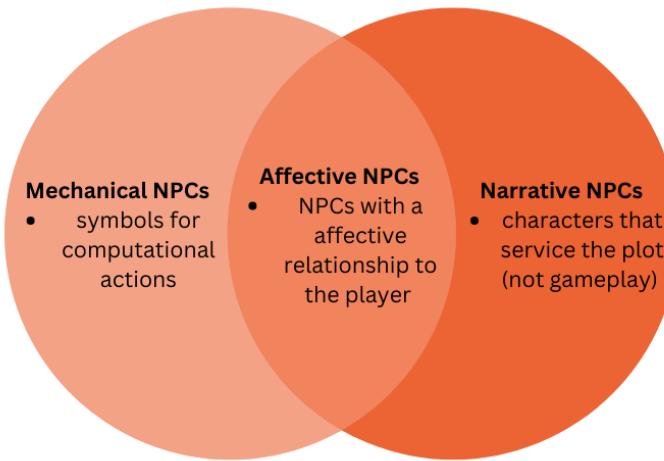


Figure 3.1: NPCs can be categorised as either mechanical or narrative based. In the intersection I identify the affective NPC type

By subverting this framework, the practitioner has the freedom to bring emotionally resonant characters to become the majority focus within a game. There is a kind of providence and history of non-player characters that the audience will recognise that will shape their interactions with more dynamic characters with agency.

3.3 Prometheus as Performer

As referenced in Subsection 2.2.4 in my initial iterations of the work I had planned to use the text *Prometheus as Performer: Toward a Posthumanist Culture?* as a framework as well as a precedent. Specifically, the practice would have been a hyper-textual/meta-textual analysis of the text that examines the notions of post-humanity put forth by Hassan in the context of the Prometheus myth [Hassan, 1977] but in a contemporary setting. In practice this would have included references to the original characters including quotes, as well as analysing the themes from a historical context compared to current understandings of the virtual body. As iterations continued I decided to limit the influence of this framework, but as a foundational conceptual approach I felt it important to retain in this thesis.

3.4 Practice-led Research

In rounding out this section I wish to formalise the understanding around practice-led research as a research framework. In the context of this thesis, practice-led refers to the use of practice to identify new methods of thinking [Candy, 2006]. Hence, through this practice I am exploring a new understanding of NPC performativity and NPC-centric design.

Chapter 4

Methodologies of Practice

4.1 Characteristics of Character Believability

Within cinema study, it is generally accepted that the following traits inform character believability in media [Petri and Staffan, 2007]:

- *Human Body*: The character has a humanoid form.
- *Self-Awareness*: The character is 'aware' of and reacts realistically to events in the world.
- *Expression of Emotions*: The character can express emotions consistent with the current situation.
- *Natural Language Ability*: The character can use language that feels natural and obeys Grice's maxims of conversation [University of Pennsylvania, 2005].
- *Persistent Traits*: The character has character traits that are consistent throughout run-time (e.g. selfless, nervous).

I plan to use these traits in two ways: firstly considering them as guidelines for design, and secondly flaunting them to challenge common anthropocentric assumptions.

In gameplay, the interaction between player and virtual agent is important as there is an assumed social script. If the agent breaks from expected behaviour this breaks immersion and interpellates the player back to reality [Petri and Staffan, 2007]. When constructing non-player characters (NPCs), using these guidelines better maintains gameplay believability. This will be beneficial for building empathy with the NPC entities and for immersion into the game reality. For example, through the design and development process I will make sure that characters show Expressions of Emotion by reacting angrily to disparaging dialogue responses and enthusiastically to encouraging responses.

I will also knowingly flaunt some of these established patterns to better clarify my points on readjusting to a post-human interpretation of NPC behaviour. For example, a character that flaunts the visual human body challenges the assumption of NPC as a human-centric actor and re-contextualises them as their own digital agent.

4.2 Gameplay Design Patterns

Like the traits above, gameplay design patterns are frameworks of reoccurring interaction within gameplay that describe how players interact with games and how developers design interaction [Bjork and Holopainen, 2004]. These patterns proposed an interaction-centric model that allows developers greater freedom in designing more cohesive worlds and characters with greater ludo-narrative synchronicity. By identifying and utilising such design patterns generally, developers can substantiate abstract game concepts and further develop them into subsets of patterns and sub-patterns allowing for a rhizomatic approach to generating concepts.

Design patterns, with the exception of the most obvious tropes, are usually not codified and are defined within the making process. In saying this, in my practice I have self-identified some patterns that I will explore to give my main characters and supporting characters a better sense of awareness within both the game world and the meta-world outside game space: *Emotional attachment, temporary presence, and awareness of game*

*surroundings*⁴.

Throughout the narrative of the game, through dialogue choices and non-scripted interactions, I will develop scenarios that help build the emotional attachment between player and non-player character to redefine their relationship as companionship. While the player is initially unsure of the NPC presence, small acts (e.g. holding umbrellas or remembering dialogue choices) would endear them. With this emotional attachment in mind, this would lead into the second pattern, wherein the NPC is only present once and is erased for subsequent play-throughs. At the end of the narrative they will sacrifice themselves and won't be present from then on. This adds an ephemera to the relationship developed in the first play-through that the player has to reflect on in hindsight.

As a game that will serve as a deconstruction of NPC behaviour, having the non-player character gradually become more aware of the nature of the game world as simulated would both give a sense of quiet contemplation on the NPC's part, and would allow for meta-commentary on the nature of being between physical and virtual realities.

4.3 Processes of Practice

For the specific techniques and processes I implemented in my practice I found myself utilising a practice-led research cycle as shown in Figure 4.1 of implementing exhibition feedback of a particular iteration for future making of iterations; this process of exhibition included the Honours Forum on the 17th of August, as well as the UNSW ADA Open Day on the 3rd of September.

For the initial physical iteration of the work (pre-Forum showing) I performed all the programming work locally using the Unity engine as a base development platform, due to its ease of use and versatility. I programmed a demonstration of NPC dialogue using the YarnSpinner tool as it allowed for the easy use of dialogue triggers and branching

⁴Whilst I have identified these patterns for the sake of analysing my practice, these are by no means exclusive or undiscovered practices



Figure 4.1: Practice-led research cycle: My process comes from a similar model by Deb Turnbull Tillman using an iterative exhibition cycle [Tillman, 2022]

dialogue paths consistent with the Natural Language Ability characteristic. When writing the dialogue I opted to implement the design pattern of emotional attachments in line with my character-centric game design philosophy (Figure A.1). I modelled rudimentary environments for traversal to demonstrate the playable game space, and placed a grouping of NPC characters within the space. I used a bill-boarding method to have the characters face the player, as I felt the use of 2D assets would provide an inherent affective appeal to the NPC.

I was able to observe the play-testing of the demo during the Forum, and brought that feedback into my second iteration. I had identified that people were often walking past characters mid-dialogue making it feel more one-sided, so I implemented a camera lock to limit movement during dialogue. This method allowed me greater interaction between player and character. The largest inclusion was exploring the pattern of game surroundings awareness through a gallery stage, which demonstrated concept art for the game and had the characters within elaborate on the intention behind design choices (Figure 5.3b). This added a much stronger meta-textual element to the experience.

Chapter 5

Analysis of Practice

The production of the resolved work, in exploring the nature of NPC (non-player character) interaction with the player has yielded very interesting outcomes. The practice-led approach of investigation has given a large amount of insight into the nuances of virtual characters, through the iterative process of producing an experimental game. The process of reframing of the NPC as an entity rather than a tool allows for a more nuanced writing and scripting pattern, and allows for the shift in attitudes away from a mechanical fetishisation to an affective relationship [Anable, 2018].

Upon reflection, the work has somewhat evolved from being simply a self-contained game work that has emotive NPC characters to instead encompassing the development of this fictitious game world with all the nuances that that brings, including the relationship that I as a practitioner have developed with the characters and world I am building, speaking to that notion of bio-object and the relationship a player has with a computational system [Fizek, 2017].

5.1 Distinct Production Processes

The primary split between my current direction of research and other practitioners mainly derives from the approach and attention given to the sentient actors within the

5.2. RESOLVED PRACTICE-LED OUTCOMES

game space. In most productions the NPC actor is in the game to provide some sort of purpose or utility to the player and are not primarily designed to be engaged on an intimate level, such as with shopkeepers or cannon-fodder enemies. Where this is not the case and more narrative focus is placed on a character, such as in a visual novel or romance subplot in an RPG (Role Playing Game), there is still a ludo-narrative dissonance when they do not acknowledge your relationship in a second playthrough or outside the "designated" scripted relationship.

In my practice, I am approaching game design with an affective-oriented response where the world is more designed for the characters and not the other way around. In achieving this I am exploring methods such as adding temporality to the lifespan of a prospective human-NPC relationship, as well as challenging the integrity of the relationship the NPCs as performative actors have with their narrative world. For the former, I am acknowledging the symbiotic relationship of a player with a computational system and how that can be manipulated emotionally, whilst for the latter I am playing with the fundamental structure of video gaming to break the mechanical conventions of the genre.

5.2 Resolved Practice-led Outcomes

5.2.1 NPC Character Design

Within the work, the central premise will be the relationship the player develops with the NPC character, a unique affective experience depending on how the player chooses to engage with the content. Having a character design that helped evoke that relationship was important to me. Having the character be vulnerable and emotionally available was a core tenet in design (Figure A.5); in Figure 5.2 I used more child-like proportions and posture to signify that. Upon reflection, while this was visually appealing, later on in the design process I wanted to introduce more tragic elements showing such a character's growth over time until they are removed from the game space (Figure A.7). Whilst this design was usable I endeavoured to add more temporal variations to

CHAPTER 5. ANALYSIS

show the evolution of the character and their relationship. Having the character grow over time I feel would provide a lot of context about their embodiment of the virtual body.



Figure 5.1: First Design Iteration of NPC Characters - "post-human" designs

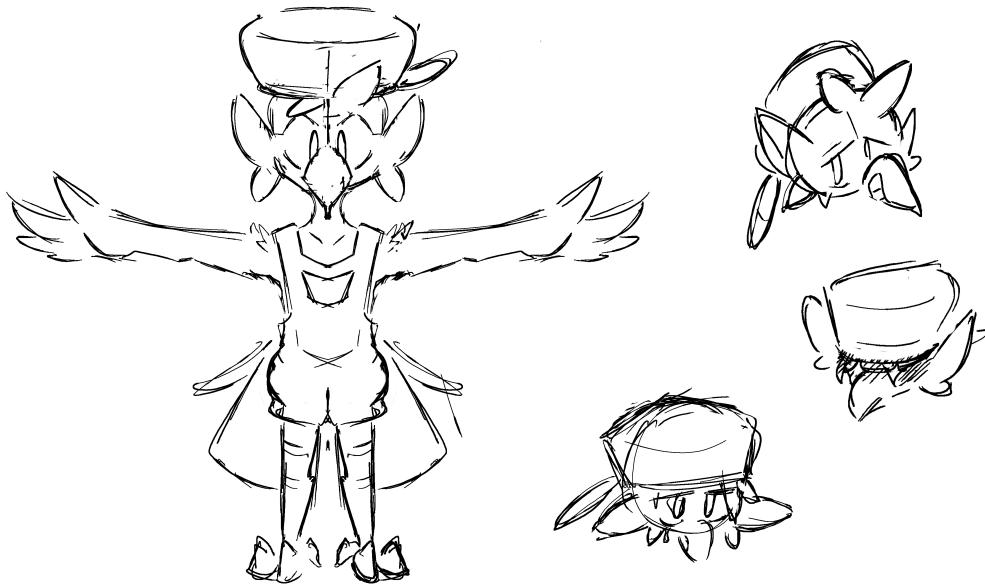
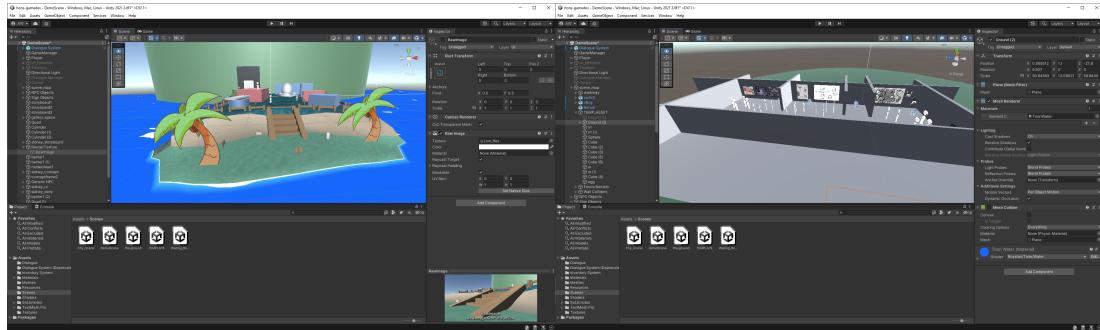


Figure 5.2: Second Design Iteration of NPC Character

5.2.2 Prototypes

Through investigating this topic the gameplay itself went through many prototype versions, as seen in Section 4.3. The most fully realised demo at this point in time (Figure 5.3a) consists of an island setup from the original mountain-climbing concept. Game-

play at this stage consisted primarily of interacting with and building relationships with static characters on the game stage through conversation (Figure A.6) - this included meta-textual elements such as information signs and the replication of the gallery space.



(a) First Demo - showcased at TRUC (b) Alternate Demo - shown at Open Day

Figure 5.3: Playable Demos Showcased at Honours Forum

In terms of building an affective response in the player towards an NPC character this demonstrated a mechanically sound *method* to achieve this, however I feel the narrative elements were not developed yet. In figure 5.3a there is a playful tongue-in-cheek world that is interesting to explore, following conventional game design routes of wanting to experience each encounter. Playful gameplay elements like platforming and dialogue flesh out the greater character of the game world. As a technical demo however, this does not include the dialogue, the world-building, and the narrative elements to build a compelling character at a sound level. In experimentally playing with this laissez-faire attitude to world and narrative design, Figure 5.3b shows a more self-referential look at the game design process with a mock gallery space, reminiscent of the satirical work *Bubsy 3D: Bubsy Visits the James Turrell Retrospective* with its cross-media juxtaposition of postmodern and game art [Arcane Kids, 2013]. Having a knowing self-referential space; and having the characters in the narrative participate in that space I felt could be an interesting method to shift that perception away from being a game element.

As a speculative design, further developed iterations on the work plan to add this narrative element, having the player undergo a multi-versal journey to engage with the NPC character rather than whatever role they play in the game world. By adding a

temporal finality to the relationship at the end of the work, this is a method to reframe the NPC relationship as an emotional one instead of a mechanical one.

5.2.3 Speculative Outcomes and Aims

In previous iterations of experiments for this work, in planning the characters I had chosen to have each character embody an *aspect* of post-humanism that I identified (i.e. difference in species, scale) - the gameplay loop would involve breaking the player's preconceived anthropocentric assumptions of game design to play the game. The main problem, apart from the scale of work this would require, was that there was no conceptual base to these character designs. Similarly, basing these characters on existing text⁵ anchored the work to a necessary preliminary reading that I felt would not be accessible enough for my intended audience⁶.

Applying a speculative approach to future iterations, I aim to further develop the dialogue trees behind each character in such a way that they greater mirror the complex inter-personal relationships that are often seen in real life social circles. As mentioned before, placing the game world within a temporal context (and a greater spatial context) would produce a profoundly more nuanced understanding of character as being formed and reformed by the relational dynamics present in the game world [Giddings, 2007].

5.3 Reflection on Greater Practice

In relating the work to greater practice, we can definitely consider the paradigm shift in how game developers and interactive artists can communicate and interface with non-human digital actors, and how those actors can embody post-human behaviours.

In resolving the perception of NPCs as dynamic systems with complex interrelationships between players, developers and players both experience a greater consideration of the

⁵See: Prometheus as Performer

⁶Refer to appendix for storyboards

5.3. REFLECTION ON GREATER PRACTICE

affective nature of NPC characters both within and outside the greater narrative. As a further challenge of the Cartesian notions of mind and body, theorists can better deconstruct the notions of the disembodied body.

Further implications of this research could consider the following:

- Greater consideration of the affective nature of NPC characters in narrative
- Novel applications of AI and deep learning in further pushing NPC agency
- Further post-human theories regarding the disembodied body

Chapter 6

Conclusion and Future Directions

Through my practice-led research I investigated the underlying possibilities behind the following research questions: **How to utilise affect theory to explore a post-human perspective of performative virtual entities?** And, considering this, **How to re-contextualise the virtual body outside of the notion of simulation?**

Based on my practice, I posited that the NPC as a construct can be considered an embodied performative entity that possesses its own agency. Investigating the latent relationship that can be formed between player and computational systems, I experimented with methods to build an affective response between the two using the tenets of affect theory and post-human performativity. In examining the literature surrounding post-human theory in gaming, the notion of the virtual body outside the notion of the avatar was scarce, yet some writings did indicate the notable agency that game systems display.

I put forward a new design method that internalises these principles of considering the performative entity foremost when developing a game space; of designing game worlds around characters instead of designing characters to fit in game worlds. I suggest in this thesis a framework to re-frame the NPC as an integral affective being with near-limitless potential for emotionally fulfilling relationships with players. These NPCs have a capacity to exist outside of the confines of a conventional game structure and

rather within a nuanced game world.

In developing this design philosophy for consideration, this thesis experimented through the development and redevelopment of an affective-based game, pursuing several new methods to develop and strengthen an affective bond between the player and a variety of game characters that have awareness of their position within a simulacra. This practice-led process refined understanding on how a player can connect with a fictitious performative character, and how these NPCs can be considered as more than a mechanical gameplay device.

To finish off, the author of this thesis proposes to the reader to engage with and consider the lives of the characters that we all meet with in our favourite games.

APPENDIX A. SUPPLEMENTARY ASSETS

Appendix A

Supplementary Assets



Figure A.1: Early demonstration of dialogue system in game - here you can see the use of dialogue trees in influencing the conversation



Figure A.2: Storyboard 1 - Storyboard of the starting village in the original concept

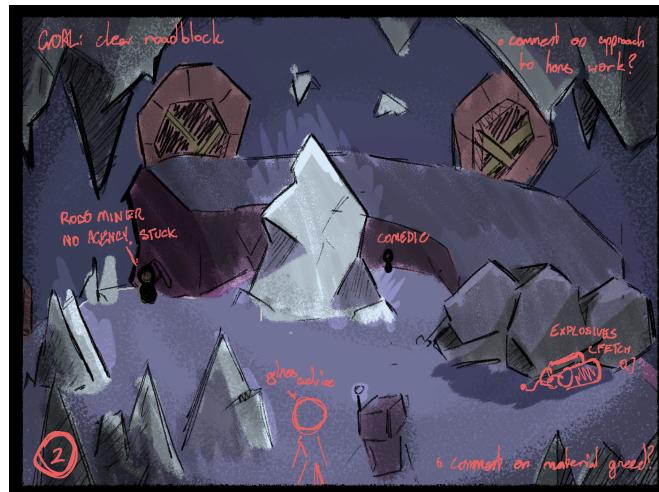


Figure A.3: Storyboard 2 - Storyboard of a planned mine stage in the original concept

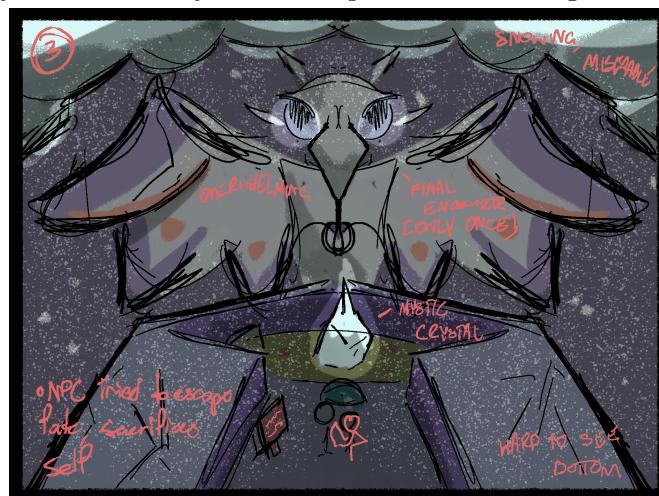


Figure A.4: Storyboard 3 - Storyboard of the final stage in the original concept

APPENDIX A. SUPPLEMENTARY ASSETS



Figure A.5: Mockup of the main NPC character sleeping



Figure A.6: Mockup of a cutscene showing dialogue interaction

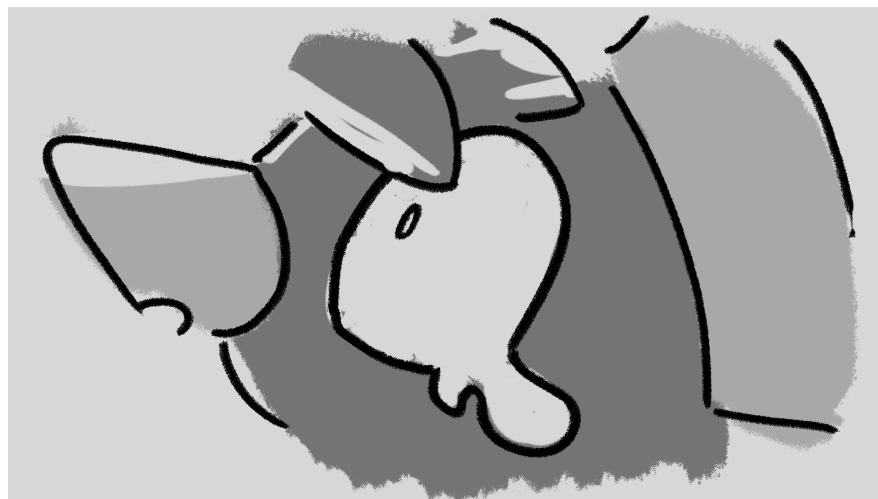


Figure A.7: Mockup of the main NPC character in states of distress

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