THE JOURNEY HOME

CIM401.2

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Overview

'The Journey Home' is an interactive, virtual-reality, experience designed to explore and expand upon my own narrative design and implementation skills. In order to provide myself with a wealth of content, and meaning, I decided to focus this narrative upon the real events of my own childhood. To further stretch myself, I also decided to design this experience for viewing within an Oculus Quest, a newly released VR headset that I had not worked with before.

Thus, I faced myself with technical, personal and mechanic challenges, with the sole aim of achieving as much meaning experimentation as I could within the bounds of this project.

Raw Results

My materials, at the time of writing, include:

- 2 / 5 scripts (explained in following chapters)
- 1 'experience'
- 2 Artificial Intelligences
- 1 Web server
- 1 Web page

All materials can be sourced at http://www.draconinteractive.com.au/study-materials.html

Base Results Analysis

As you may have surmised, this project has led me in some very unexpected directions.

The largest influence upon this result is undoubtedly the trouble I experienced developing content surrounding my own life.

Over the course of this project, I developed 5 separate scripts, not including drafts and re-writes. Each of these scripts contains a different perspective of the events detailed within them. It is important to note that the scripts covered the same events, however as they were written, the tonality and approach toward the topics radically changed.

In my limited experience of narrative design, I had never had to face this problem before. My core ethos is generally solid enough that when writing, I can maintain a characters attitude and thought process. However, during this project, I found myself questioning the truth of my writing. And whilst there are many discussions to be had around the concept of objective and subjective truth, it suffices to say that as a result of this conflict, I had difficulty developing my experience surrounding it.

This development halt was compounded by the traumatic nature of my topic. My scripts deal with issues that I have faced my entire life, and previously thought myself come to terms with. During this project, I found myself so confronted that my ability to work was inhibited by my brains natural desire to protect itself. To withdraw from the contention.

This resulted in slower work, and in immense amounts of frustration. So much so, that without thought, I deleted 3 of my scripts, deeming them useless. Of course, with reflection, it is obvious that even failed scripts could be learned from. A lesson to take with me into future projects.

This trouble not only resulted in slower work, but often in redirected energy. I am a habitual tinkerer, so whilst working on this project, I would also work on tools, and functions to 'help' me.

These tools became their own programs, and my procrastination has resulted in 2 artificial intelligence units. The first is a simple call and response, which I use for data encryption, and running a simple web server, and the other is a machine-learning conversation bot, possibly the most natural bot I have made to this day.

I am including them in this project, as I feel that they are still offshoots of my experimental endeavour, and if they are not the targeted result, then they are at least a non-targeted result, a common occurrence in my experimental work.

Note, if you want to get the full experience of the Draconic AI III, use 'activate admin' with the passcode 'dracona veritas'.

The Experience

The Narrator.

Early on in my work, I decided to use a 'narrator' as a foci for the player to interact with. The narrator could be used to convey not only words, but expressions and tone.

My final result was this (Fig 1.0):

At the core of the narrator was its appearance, and so I developed a custom shader for him using Unity's new shadergraph tool. This itself involved a bit of experimentation, but not so much, as I am fairly familiar with this process. It consisted of 3 main areas.

1. Color
2. Animation
3. Cracks
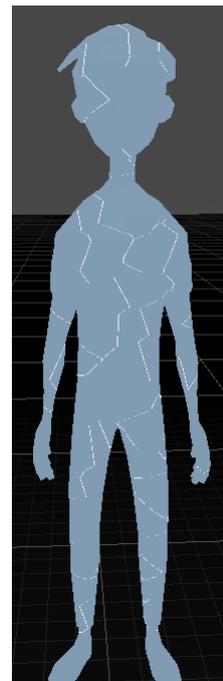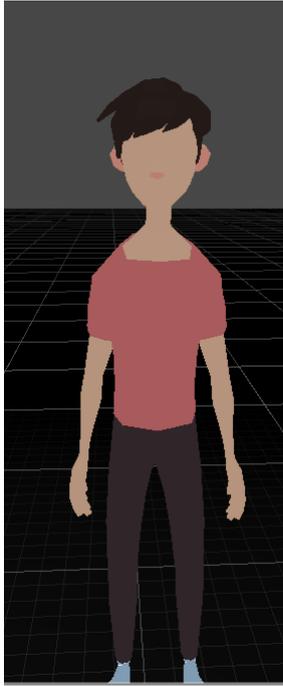
Originally, I kept the narrators native model colors (See Fig2.0), however I felt that I wanted to be able to have a finer level of control over the models color during runtime. Thus, using color, I could signal changes in mood. Above in Figure 1, we can see that I set the figures default color to a pale blue. I used this as a base color to return to a more sombre mood.

I then added animation. To do this, I modified the vertices of the model so that they swayed from side to side, similar to an old school hologram effect. By making this effect extremely slow and subtle, and then localising it to the centre of the models UV coordinates, I was able to make his chest rise and fall within a random range of time. This helped a lot in reducing the uncanny valley effect.

Finally, I used 2 octaves of Voronoi (also called Whorley or cellular) noise to generate procedural cracks on the model. These cracks are attached to a variable, allowing me to control their width and density. Whilst I never got a chance to implement this fully, I had planned to use this to symbolise my mental stability at points during the story.

The Environment

In my limited work on immersive story environment design, I have found myself enjoying minimalistic and sparse environments, allowing me to focus the players attention toward my topic of choice.

Thus, for this project, I chose to suspend the player in the dark, with only the narrator and whatever environment I chose to use as points of reference.

Originally, I used a "Ruin" kit from the Unity Asset Store. This kit was dark and foreboding, but also very gothic. I spent some time making a dissolve shader, which could cause parts of it to appear and disappear, but I soon chose to do away with this, and replace it with solitary pieces of furniture.
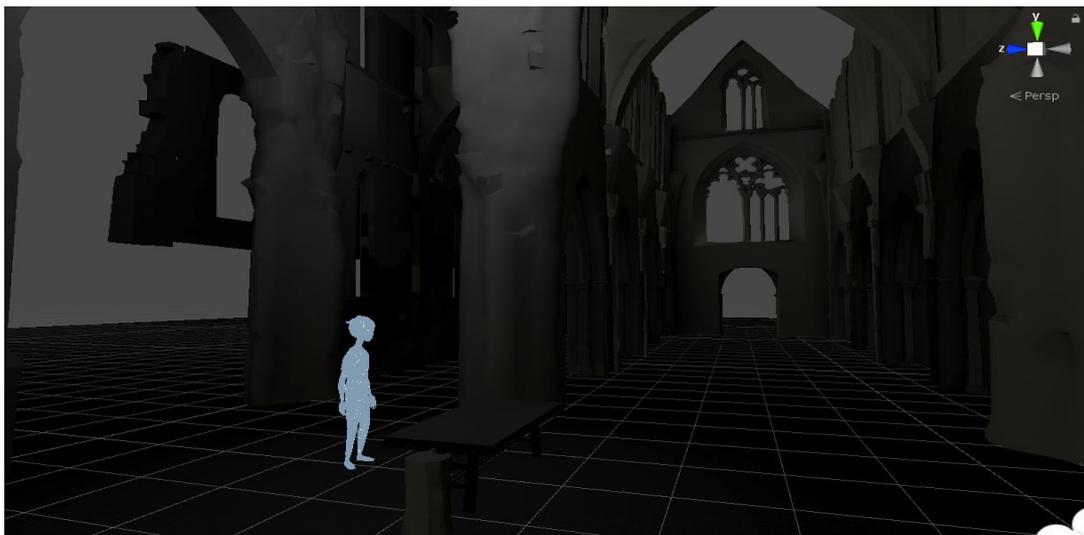
This worked fairly well, allowing me to simulate environments via hints, instead of spelling it out. For example, my bedroom (Fig. 3):
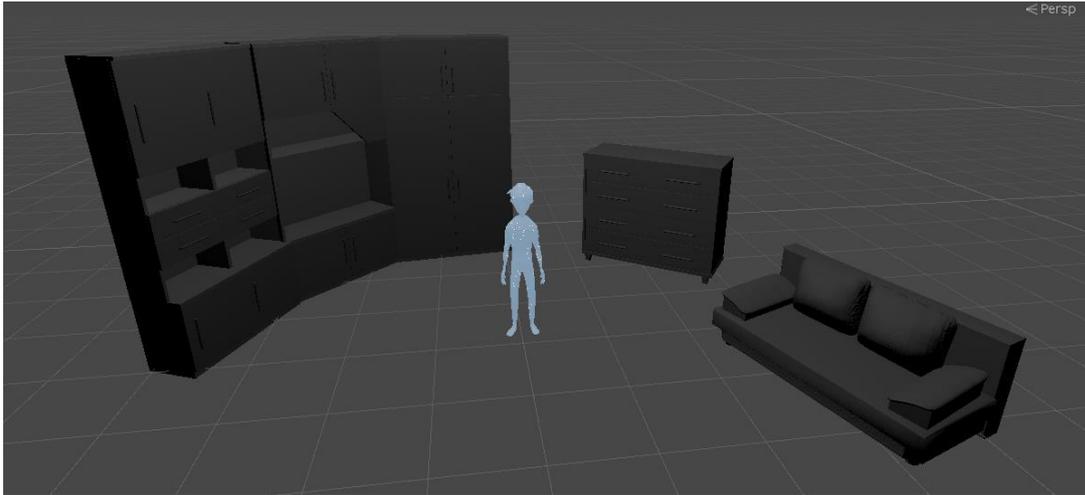
Audio

With the core experience of the aesthetics and player interaction (minimal as it is) established, I then began to implement the main auditory stem, aka the narrators voice.

My work at my main job uses a very useful little sequencing system, which allows the developer to group actions by stage and sequence. This leads to easily implemented linear storylines, with objects performing their roles as per the players interaction, or the current time ingame.

For this project, I created an offshoot of this system, that allowed me to control the pacing of the audio. I could enable/disable objects as they became the focus of the narrative, and could control the narrators animation state as he talked.

None of this has been implemented in the final version of the game however. Due to my current work hours, I have not been able to record this audio for implementation. This, and the nature of the audio's topics, mean that I have reached this late stage of the project with the words in the scripts, but not the audio.

Conclusion

From the beginning, this project was treated as fundamentally focused upon experimentation. Whilst this focus has not resulted in success, I believe that the sheer amount of lessons learnt from this project classify it as a success.

While I may not look forward to finishing this project, it is an undertaking that I believe will continue to be beneficial to myself as a developer.

Credits

Design, Produced and Developed by Peter Carey

"Furniture Pack" – Gesta2

"Oculus SDK" – Oculus Studios

"Unity Game Engine 2019.1" – Unity Technologies