

EMBODIMENT, ROLEPLAY, AND *CURIO*: DESIGNING AN
IMMERSIVE NARRATIVE GAME FOR VIRTUAL REALITY

by

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This thesis is a conversation between the theory and practice of game design as they relate to the creation of an original virtual reality video game: *CURIO*. This work utilizes creative scholarship and practical application to create a title that explores the boundaries of virtual reality experience design. Through the process of ideation and development I examine the aspects of virtual reality games that create or break immersion in the experience, and explore the influence of immersive theatre and screen-based video games on virtual reality content. I identify embodiment and roleplay as essential parts of virtual reality, discuss how these qualities are implemented in *CURIO*, and describe the process of executing a personal narrative through mechanical and environmental design. By creating *CURIO*, I aim to interrogate the limits of virtual reality as a medium and call for further reflection on video games and interactive art as a method for immersive storytelling.

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This project would quite literally not exist without the truly incredible work of my dear friends and collaborators: Dante Douglas, Jalan Ember, Lexie Mason-Davis, Jonathon Tree, and Tegan Valo. They have dedicated themselves to *CURIO* over the last year and I could not be prouder of us or of the game. I would like to also acknowledge the near-infinite patience and support of my committee members, Professors Michael Salter, Rick Silva, and Daniel Rosenberg, for not only having faith in my work during this long journey but also for the wisdom and encouragement I needed when I was stuck in one of many slumps. I could not have had a better group of faculty who challenge me every day to be honest, critical, and rigorous in my practice—creative, academic, or otherwise. Lastly, I would like to thank my family for supporting me in whatever path I follow.

Table of Contents

Introduction	1
PART ONE: IMMERSIVE NARRATIVE IN VR	4
Ideal Immersive Experiences	9
PART TWO: <i>CURIO</i>	14
Oculus Launch Pad	15
Developing <i>CURIO</i>	18
Moving Forward with <i>CURIO</i>	24
PART THREE: REFLECTIONS	26
<i>CURIO</i> 's Immersive Narrative	28
Concluding Thoughts	33
Appendix A: Oculus Launch Pad Application	35
Appendix B: OLP Build Development Logs	38
Appendix C: “The Professor” Story Document	47
Appendix D: OLP Build Preliminary Pitch (7/31)	55
Appendix E: Preliminary Pitch Feedback	58
Appendix F : OLP Build Script	60
Appendix G: OLP Build Game Design Document	63
Appendix H: OLP Build Final Pitch Document	65
Appendix I: GDC Build Demo Outline	69
Appendix J: GDC Demo Puzzle Outline	70
Appendix K: OLP Build Final Feedback	72
Works Cited	74

List of Accompanying Materials

1. *CURIO* Demo: <https://aerialshading.itch.io/curio>

List of Figures

Figure 1: Morton Heilig's <i>Sensorama</i> patent illustration	4
Figure 2: <i>CURIO</i> Concept art by Lexie Mason-Davis	19
Figure 3: Ukiyoe Small Museum inspiration image.	21
Figure 4: <i>CURIO</i> Introductory Scene	29
Figure 5: OLP Build main scene	30
Figure 6: GDC Build puzzle desk	31

Introduction

“Sometimes things come together in a neat point. Sometimes they don’t.”¹

So proclaims Dr. Elizabeth Park, the protagonist of my virtual reality (VR) video game, *CURIO*. As with most creative endeavors, this project falls into the latter category; the above quote quite concisely describes the thesis development process as I have experienced it over the past two years. What began as a project that I thought would be about data visualization in VR evolved over the course of several months and a few significant life events to become *CURIO*, a narrative-focused puzzle exploration game that takes inspiration from “walking simulators,”² roleplay, and immersive theatre to tell a surreal story about the preservation of history and community in the Pacific Northwest.

In some ways, this thesis seemed to happen backwards. I began working on *CURIO* in June 2017 as part of Oculus Launch Pad, a VR incubator program from Facebook and Oculus that was intended to jumpstart diverse and underrepresented voices in VR content creation; at the time I had no intention of exploring it as a thesis topic. However, as I got deeper and deeper into development, I realized that *CURIO* had forced me to directly confront and elucidate the questions that drive my creative practice; I was then obliged to immediately apply the answers into my current praxis. I soon realized that in this way, *CURIO* is an ideal thesis framework; it is a practical

¹ Appendix F, “OLP Build Script”

² Clark defines “walking sims” as games that commonly “lack puzzles or any sort of barrier to experiencing the narrative, with the exception of finding objects. You cannot fail a task in a way that forces you to repeat it, and you cannot die. Most of these games prioritize some kind of storytelling, be it linear or variable depending on your in-game decision making.”

inquiry into my own interactive art practice as well as a discussion of design priorities in both video games and virtual reality content.

Though all of these research questions began as personal investigations, I found that I could apply them to more general inquiry. Firstly: why do I make games and interactive art in general? By examining *why* I am inspired to create games, I was able to interrogate why these specific forms of interaction are so unique and particularly compelling to a wide audience. Secondly: What were my aesthetic and mechanical priorities in developing *CURIO* and what do they say about the act of creating interactive narratives? I found myself designing an experience around the ideas of embodiment and roleplay; how do these concepts interplay with each other and influence narrative immersion? *CURIO* is also an experiment in storytelling. It was a priority to me to tell a story with a diverse cast; *CURIO* was a chance for me to develop characters with backgrounds I had not often seen represented in media and to design a narrative inspired by the kind of themes I often find myself discussing with other diverse and underrepresented creators.

Through the creation of an original virtual reality title, I was able to examine and put these theories into practice, so finally: to what extent does *CURIO* actually succeed in implementing the idea of embodied roleplay in its execution? This manuscript is a record of 11 months of ideation and development of an original virtual reality title for the Oculus Rift: *CURIO*.³ Originally developed for a summer VR incubator, *CURIO* became a long-term passion project that led to the formation of an

³ The Oculus Rift is a virtual reality headset developed by Oculus VR. It has room-scale tracking, six degrees of freedom movement capability, and two fully-tracked Touch controllers that translate hand gestures to the VR space.

independent game studio under my leadership, and, most recently, demonstration of the game at the Game Developers' Conference as an attempt to secure a publishing deal.

Over the last year, *CURIO* became much more than just a game developed by a group of friends; rather, it allowed me to examine my practice, my priorities for developing games, and the current state of the market in terms of narrative-focused and indie games.

This thesis discusses theories of roleplay and embodiment that are essential to the practice of crafting immersive experiences, and explores how *CURIO* succeeds or fails to implement these methods throughout the development process.

My thesis consists of both this document and *CURIO* itself. I hope that through this written manuscript I will have successfully conveyed the depth of thought and intense work that has gone into *CURIO*'s development and simultaneously laid the groundwork for the work that remains to bring this project to fruition.

PART ONE: IMMERSIVE NARRATIVE IN VR

“There is nothing fundamentally new about virtual reality,” claims Ted Schilowitz in the foreword of *Storytelling for Virtual Reality*.⁴ While this claim might be surprising, Schilowitz is entirely correct; the history of VR goes back much further than the Oculus Rift or even Ivan Sutherland’s Sword of Damocles, which, built in 1968, is widely considered to be the first VR head-mounted display (HMD). In fact, the term “virtual reality” was first coined in 1938 by avant-garde playwright Antonin Artaud, who argued in his collection of essays *Le Théâtre et son double* (“The Theatre and its Double”) that the theater is “la realite virtuelle,” and the stage is a combination of illusory and fictitious realities. This conception of virtual reality is a far cry from the computer-aided experiences that come to mind when we think of VR today, but these roots make the legacy of influence between virtual reality games and theatre much more obvious.

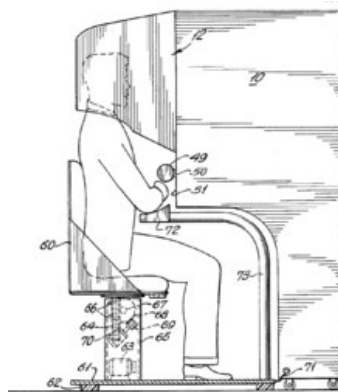


Figure 1: Morton Heilig’s *Sensorama* patent illustration

In the 1950s, cinematographer and multimedia specialist Morton Heilig developed an “experience theater” called the *Sensorama*, a technology that combined a 3-D

⁴ Ted Schilowitz, foreword to *Storytelling in VR: Methods and Principles for Crafting Immersive Narratives* (Routledge: 2018), ix-xi.

stereoscopic color display, motion tracking and tilting, stereo sound, and effects like wind and smell to fully immerse a viewer in the film that was shown inside. The 1962 prototype of the *Sensorama* is one of the earliest known models of an immersive media technology that could “stimulate the senses of an individual to simulate an actual experience realistically.”⁵

It is now useful to define what I mean by immersion, particularly in VR and video games. Merriam-Webster defines “immersive” as “providing, involving, or characterized by deep absorption or immersion in something (such as an activity or a real or artificial environment).”⁶ This definition is too broad for our purposes, however, because one can easily describe an especially interesting piece of writing (like, for example, this thesis) as “immersive” in the sense that a reader can become easily absorbed into the narrative. In *Hamlet on the Holodeck*, Janet Murray writes that “A stirring narrative in any medium can be experienced as a virtual reality because our brains are programmed to tune into stories with an intensity that can obliterate the world around us.”⁷

The concept of immersion in VR specifically is often used interchangeably with “presence,” which is “a psychological state or subjective perception in which even though part of all of an individual’s current experience is generated by and or filtered through human-made technology, part or all of the individual’s perception fails to

⁵ Morton L. Heilig, *Sensorama Simulator*, 28 August 1962.

⁶ Merriam-Webster, s.v. “immersive,” www.merriam-webster.com/dictionary/immersive.

⁷ Janet Murray, *Hamlet on the Holodeck: The Future of Narrative In Cyberspace* (Cambridge: MIT Press, 1997), 98.

accurately acknowledge the role of the technology in the experience.”⁸ In other words, it is the phenomenon of “being there.”

The simplest and most easily achievable form of presence in VR is *spatial* presence. Spatial presence occurs when "media contents are perceived as ‘real’ in the sense that media users experience a sensation of being spatially located in the mediated environment.”⁹ Generally, spatial presence is merely a technological limitation,¹⁰ and can often be achieved with even the simplest computer-generated environment when viewed through an acceptably high-quality HMD. Spatial presence and immersion in VR is improved by richness as more senses are stimulated by the VR apparatus;¹¹ 3D visuals and spatial audio are much more effective than vision alone, and implementing touch and sensation elevates VR interaction to new heights.

Establishing narrative immersion in VR is much trickier. Because spatial presence is created in part by consistency with reality,¹² the existence of realistic (or at the very least, believable) interaction in the VR space is an incredibly important factor in immersion. If a player is able to interact with objects in a realistic and believable way by picking them up, turning them over, or throwing them, for example, this creates a sense of consistency with the reality with which the player is familiar. However, the

⁸ Teo Choong Ching, “The Concept of Presence in Virtual Reality,” *Medium*, August 27 2016, <https://medium.com/@choongchingteo/the-concept-of-presence-in-virtual-reality-6d4332dc1a9c>

⁹ Jamie Madigan, “Analysis: The Psychology of Immersion in Video Games,” *Gamasutra*, August 25 2010, https://www.gamasutra.com/view/news/120720/Analysis_The_Psychology_of_Immersion_in_Video_Games.php

¹⁰ Michael Abrash, a VR researcher at Valve, lists the technical requirements for spatial presence in VR in his talk “What VR Could, Should, and Almost Certainly Will Be Within Two Years:” A wide field of view, adequate resolution, low pixel persistence, a high enough refresh rate, global display, optics, optical calibration, rock-solid tracking, and low latency.

¹¹ Madigan defines richness as “multiple channels of sensory information, completeness of sensory information, cognitively demanding environments, [and] a strong and interesting narrative, plot, or story.”

¹² Madigan

limitations of current computing and VR technology do not allow for such realistic interactions when it comes to narrative delivery mechanics. In a perfect *Star Trek*-style VR Holodeck, for example, a player would be able to interact with characters intuitively—that is, with natural language processing— and they would act as we expect them to; we could converse with AI characters and they would speak back in whatever language we do. Of course, this is outside the realm of possibility for game and experience developers at this point in time, so designers must implement other modes of storytelling (i.e. audiologs) with maximum possible consistency lest immersion be broken through disbelief. It is worth noting that these virtual worlds do not have to be consistent with *our* reality as long as they are consistent with *a* reality; that is, the logic of the constructed universe must make sense within that particular universe.¹³ To that end, humans are incredibly willing to find sense in a universe even when the rules of that world are not entirely complete; our ability for pattern-finding and logic allows us to “actively create belief. Because of our desire to experience immersion, we focus our attention on the enveloping world and we use our intelligence to reinforce rather than to question the reality of the experience.”¹⁴

Two factors that can influence narrative and spatial immersion in a positive, constructive way are embodiment and roleplay. Embodiment, simply the act of inhabiting a body or body part, is a critical factor in establishing spatial immersion in

¹³ For example, a virtual reality experience where characters disappear immediately breaks immersion if the world does not establish that teleportation is possible; conversely, characters that talk to the player without moving their mouths can be immersive if the universe allows that telepathy is a valid mode of communication.

¹⁴Murray, 110.

VR.¹⁵ Placing the player camera at the correct height, for example, is a simple but powerful effect that can either enhance immersion or break it. As evidenced by the classic rubber hand illusion, it is incredibly easy to create spatial embodiment in virtual reality as long as physical body tracking is sufficiently accurate;¹⁶ in fact, this cognitive willingness to embody a virtual body or body part is so strong that VR has been used to treat phantom limb pain in amputees.

In addition to spatial immersion, it is also possible to create narrative immersion with embodiment through the act of roleplay. Just as a player can embody a virtual avatar, they can also embody an identity. In many traditional screen-based (non-VR) video games, this identity can range from an anthropomorphic cat to an alien bounty hunter to a genderless android; the range of genders, roles, species, and personas are seemingly limitless. In VR, however, the range is often much more limited; this appears to be due to the ease of embodied identity in non-VR versus VR games. In non-VR games, the fourth wall of the screen creates a physical detachment which allows the player to play, but not necessarily embody, the role of the protagonist. One could argue that the difference between roleplay in a screen-based game and roleplay in a first-person VR game is similar to the difference between sympathy and empathy; in the case of VR, the player is quite literally putting themselves into the shoes of the VR protagonist. Somewhat counterintuitively, this kind of “empathetic” embodiment is much harder to roleplay in VR due to the direct spatial immersion; a player realizes that it is in fact very hard to roleplay someone else in a game when you are inhabiting their

¹⁵ James Gee, “Video Games and Embodiment,” *Games and Culture* 3, no. 3-4, 2008, pp. 253–263.

¹⁶ Mel Slater, Bernhard Spanlang, Maria V. Sanchez-Vives, and Olaf Blanke, “First Person Experience of Body Transfer in Virtual Reality,” *PLoS ONE* 5(5): May 2010.

body. The second a character calls the player character (PC) by something that is not the player's name or refers in the second person to a bit of plot that the PC knows but the player does not, narrative immersion is broken regardless of the strength of spatial immersion.

This theory is supported by the titles available in the VR marketplace currently. In the list of the top selling VR titles of 2017 on Steam, Valve's digital game distribution platform, only three of the top 24 games feature specific static protagonists (*Rick and Morty: Virtual Rick-ality*, *Batman: Arkham VR*, and *Raw Data*) and the rest utilize identity-less or player-designed characters.¹⁷ This allows the player to seamlessly become the protagonist of the story being told in VR, and creates a frictionless roleplaying experience.

Ideal Immersive Experiences

Even today, the Holodeck from *Star Trek* continues to be the emblematic example of a completely immersive experience. Murray describes the holodeck accordingly:

First introduced on *Star Trek: The Next Generation* in 1987, the holodeck consists of an empty black cube covered in white gridlines upon which a computer can project elaborate simulations by combining holography with magnetic "force fields" and energy-to-matter conversions. The result is an illusory world that can be stopped, started, or turned off at will but that looks and behaves like the actual world and includes parlor fires, drinkable tea, and characters...who can be touched, conversed with, and even kissed. The *Star Trek* holodeck is a universal fantasy machine, open to individual programming: a vision of the computer as a kind of storytelling genie in the lamp...[*Star Trek*] crew

¹⁷ *Virtual Rick-ality* is actually debatably in this category; the game has you play not as the character Morty, but as a personality-less *clone* of Morty. It is a clear attempt to avoid the problem of establishing a VR player character while still keeping the player's role within the rules of the fictional universe of *Rick and Morty*.

members have entered richly detailed worlds...in order to participate in stories that change around them in response to their actions.¹⁸

Through this description, we can see why the Holodeck remains the paragon of theoretical immersive experiences. The Holodeck allows for complete presence: items can be touched and interacted with in an internally consistent manner and by doing so create spatial presence, characters create narrative presence by reacting to the player naturally, and the narrative flow of the experience reacts intuitively to the player's choices and actions.

Of course, the Holodeck is far from a real possibility right now. Though innovations in haptics are close to being able to simulate touch in VR and improvements in game AI and language processing are making responsive characters a bit more feasible, we are far from replicating the kind of experiences shown on *Star Trek*. However, many of these experiences are replicable in other formats--most notably immersive theatre and related experiences.

Probably the most notable example of contemporary immersive theatre is Punchdrunk's *Sleep No More*, an adaptation of Shakespeare's *Macbeth* that takes place inside a 100,000 square foot performance space designed to look like a restored 1930's hotel. *Sleep No More* is a three-hour performance in which attendees are given masks to wear and are encouraged to wander the space at their leisure, following whatever characters or scenes they wish to pursue during the performance. Though the show itself is not an interactive narrative (the audience cannot influence the actors' performances or the plot of *Macbeth*) patrons are encouraged to explore the sets, read documents, search

¹⁸ 15

through drawers, and even eat some of the candy in the hotel's confectionery. By allowing patrons to physically engage with the environment (and sometimes even the actors), *Sleep No More* creates an incredible sense of presence in the audience. Though the performance and plot remains largely the same between shows, *Sleep No More* is by its very definition intensely interactive. The sheer size and depth of the performance and the performance space creates an environment where the audience is allowed to make decisions that dictate their own personal narrative; by choosing to watch one scene over another each patron has an incredibly different experience. The possibility space of the show is limited both spatially and narratively, but the combination of environmental richness and player agency creates the illusion of deep narrative immersion without character interaction.

Another example of immersive/interactive theatre, *Westworld*, was until recently only a fictional conceit; HBO turned the concept of the interactive theme park into a reality at the 2018 South By Southwest festival in Austin, Texas. The fictional Westworld, originating from the 1973 sci-fi film *Westworld* and later the 2016 HBO show of the same name, is a Wild West themed amusement park where guests can roleplay their gunslinger fantasies in a town occupied by android characters; the androids, called "hosts," have a set of programmatically determined narratives in which guests can play a significant part if they choose to do so. HBO describes Westworld as "a meticulously crafted and artfully designed park offering an unparalleled, immersive world where you have the freedom to become who you've always wanted to be—or who you never knew you were." The fictional Westworld achieves the same goals as the similarly-fictional Holodeck, though it does so through physical set-building and

advanced robotics rather than holography and force-fields; they both create spatial presence, environmental richness, narrative agency, and world consistency. The real-life version of *Westworld*, installed at SXSW 2018, creates the same deeply immersive experience not through complex AI but through a 440-page script and 60 actors trained to improvise with guests.

The similarities between the real life experiences of *Westworld* and *Sleep No More* illustrate what great immersive narrative can look like. Though neither experience utilizes highly-advanced technology to tell a story, each one is an incredible embodied experience. So what makes these examples so strong, and what can we learn from them?

Firstly, each experience creates a strong sense of presence through richness and consistency. Because both experiences are physical installations, guests can interact with the environment in a way that is familiar to them. The rules of the universe that exist inside the worlds of *Westworld* and *Sleep No More* are easily understood.

Secondly, narrative immersion occurs through player agency. In *Westworld*, guests are allowed to interact with hosts and become part of their storylines. In *Sleep No More*, though the audience is not allowed to interact with the cast, individual guests can tailor their own narrative experience by following the path that most interests them. Both these examples show that deep narrative immersion happens when the player has agency and is allowed to roleplay, regardless if that role is as a Wild West cowboy or an anonymous voyeur snooping through a hotel and watching a tragedy unfold before them. Most importantly, though the modes of roleplay are different, each experience has the player roleplaying as *themselves* to some degree. The “character” that each guest

embodies has the same knowledge and experience conditions as the guest; that is, the guest does not have to “get into character” and are no roadblocks to narrative presence. The fantasy of experiences like *Westworld* and *Sleep No More* is that the viewer is the most important person in the room. Each experience is unique to them, and they are allowed to exercise their agency in crafting their own narrative.

Finally, both *Westworld* and *Sleep No More* utilize the juxtaposition of the ordinary and the extraordinary. *Westworld* takes place in an allegedly realistic Wild West style town, but allows players to “exist free of rules, laws or judgment. No impulse is taboo.” There is no magic in *Westworld*; the allure is being allowed to act out extraordinary adventures and secret vices in a novel but mundane world. *Sleep No More*, similarly, exploits viewers’ voyeur fantasies. By creating these immersive worlds, players and viewers do not have to experience dramatic visual or special effects to have an extraordinary experience; the magic happens when the mundane and the fantastic are mixed.

These examples make it clear that strong immersive narratives are most interesting when the roleplaying is embodied; that is, immersion is most immersive when you are roleplaying yourself. Embodied roleplay is incredibly rewarding when it is responsive to interaction in a tangible way, allows the player to experience something familiar but inaccessible in everyday life, and does not create any narrative roadblocks to experiencing the world.

PART TWO: *CURIO*

This thesis, and *CURIO* itself, evolved in ways I could not have predicted at the start of this process. As evidenced by several documents written during the last year, I intended to produce a health-related VR visualization application and instead found myself producing a narrative-driven video game and founding my own independent game studio. What began with a two-word email from a professor turned into a journey that most recently climaxed with myself and my creative partner pitching *CURIO* to more than a half-dozen video game publishers at the world's largest professional game industry event, the Game Developers' Conference (GDC) in San Francisco.

Very little of the technical detail of *CURIO* is relevant to the actual aim of my thesis project, which was to craft a VR experience that utilizes embodied roleplay to convey narrative through immersive interaction. I will very briefly describe the technical specifications of the project and the rest of the sections of this thesis will go into detail about the process of design and development, the creative goals, and to what extent *CURIO* succeeds or fails to achieve my desired creative and scholarly outcomes.

CURIO is a virtual reality experience for Oculus Rift. It is a narrative-driven single player video game that was developed in the Unity Engine, which is a free multipurpose 2D, 3D, and VR development platform and game engine. A game engine is a particular piece of software used to build video games, and I chose Unity due to its free-to-inexpensive pricing structure, its ability to integrate easily with Oculus Rift hardware, and its ease of use. Similarly, I chose to build for Oculus Rift as opposed to Gear VR (Oculus's mobile VR option) in order to avoid having to optimize for lower performance mobile VR, which would have been a drain on development resources that

were better spent polishing the game. For the initial submission to Oculus and Facebook (henceforth referred to as the “OLP Build”), I chose to produce a vertical slice¹⁹ demo that showed off the story beats, interaction, and environment of the final game. For demonstration at GDC, my team and I decided to rework the demo and put more focus on puzzles and exploratory gameplay, implementing a new puzzle desk environment that allowed us to condense the story into a tighter space and a shorter timeframe (Appendix J). As I was told at the conference, software is never finished, it’s only released; as such, *CURIO* is still in active development and this thesis acts as documentation of a year of progress and work on a project that will continue into the foreseeable future.

Oculus Launch Pad

In mid-April 2017, I was made aware of the Oculus Launch Pad (OLP) program when Associate Professor Rick Silva emailed me a link to the online application. I had been experimenting in VR content creation due my interest in video game development and the recent acquisition of an Oculus Rift + Touch by the Art & Technology department, and Professor Silva thought that the Launch Pad program “sound[ed] good” and was a fit for my interests and current game design and interactive art practice. I applied for the program with an essay that described my “underrepresented perspective” and outlined how I would “contribute to the diversity of VR as a community as well as the content ecosystem;” I was accepted a few weeks later. The full text of my

¹⁹ A “vertical slice” is a demonstration of progress across all features of the game. It is a proof of concept used to demonstrate a game’s systems, story, and visuals when attempting to find funding for the rest of the project.

application is included in Appendix A; it's especially interesting to note that I applied with the intent of developing a health care application.

Oculus describes their Launch Pad program as a “program designed to support promising VR content creators so they can take their unique ideas and bring them to market... [Launch Pad] focuses on helping professionals grow as emerging leaders.” The program is focused on supporting diverse VR creators, and through Launch Pad, Oculus

hope[s] to inspire developers that represent our global audience to share their voices with the world. By investing in developers with unique perspectives, we can bring more exciting content to VR fans everywhere. This includes women, people of color, members of the LGBTQ community, and anyone who is willing to share how their perspective adds to the ‘diversity of thought’ in our community.²⁰

The Launch Pad program consists of a “weekend boot camp, followed by continued mentoring and support as participants develop their own VR experiences.” This continued support was comprised of bi-weekly lectures about VR development, a mid-program review of each participant’s project pitch, and hardware and software support which included a Samsung Gear VR and Galaxy S7 phone, a Samsung Gear 360 camera, and two Oculus Rift + Touch setups.

The Oculus Launch Pad boot camp took place over the weekend of June 10th and 11th, 2017. During the boot camp, I joined 99 other VR developers and enthusiasts at Facebook headquarters for two days of seminars, lectures, and workshops that focused on developing compelling VR content like VR games and 360 degree film. These lectures included topics like “Legal and IP Law for Gaming,” “Launch Your

²⁰ “Boot Camp 2017,” *Launch Pad* | Oculus.

Own Game Studio,” and “Storytelling in Immersive Technology,” as well as small group workshops on working in the Unity game development engine and optimizing content for mobile VR. The boot camp was purportedly designed to provide aspiring and current VR developers the tools and support they need to create VR content, regardless of skill level or actual hands-on experience with VR content creation.

During the weekend, we were introduced to the lengthiest part of the program: the Oculus Launch Pad Fund. This scholarship, part of Oculus and Facebook’s \$250 million “diversity” investment, was earmarked to provide up to a dozen Launch Pad fellows up to \$50,000 to develop an original virtual reality experience for Samsung Gear VR, Oculus Rift, Oculus Rift + Touch, or WebVR.²¹ To maintain eligibility, participants were asked to produce a functional VR demo in three months and fulfill certain requirements:

- Full attendance at the onsite Oculus Launch Pad Boot Camp
- Maintain weekly developer blog posts after boot camp attendance
- Build must include the following:
 - Submission overview
 - Complete upload of demo build to the Oculus Store
 - Image assets for project
 - Submission demo must be a minimum experience of 30 seconds
 - Submission demo must run without crashing for 10 minutes²²

According to the Oculus documentation, submissions would then be judged according to three criteria:

- Passionate understanding of VR (35%)
- Represents diversity of thought in the industry (35%)
- Demonstration of Technical Ability (30%)

²¹ At the end of the program, 14 projects were awarded funding totaling \$620k.

²² “Boot Camp 2017,” *Launch Pad | Oculus*.

Submissions were due September 10th, 2017; then began a review period where each project would be evaluated by the Oculus and Facebook content team, and the winning participants would be notified of their success by “mid-November” 2017.

Developing *CURIO*

Development of my then-untitled VR project began during OLP Boot Camp weekend; during the program we were asked to complete a preliminary draft of our pitch document for the second phase, where we would begin development. Before boot camp weekend, I had envisioned creating a health care visualization app, but this idea changed as the weekend went on, as described in my first development log (Appendix B) dated June 25, 2017:

I arrived at Launch Pad bootcamp prepared to work on a VR health data visualization application, which has been the focus of my undergraduate thesis over the last year. However, after meeting everyone and hearing about their projects, I realized that 1) there are many, many capable professional people working on things of the sort, and 2) this OLP project should be more of a passion project than anything else. I decided that I would embrace my artistic and games background to try and create a narrative game/experience instead of an application.

Many of the weekend’s lectures focused on creating diverse content, and I was subsequently inspired to alter my original concept and instead develop a pitch based on my maternal grandfather’s experience as a refugee during the Korean war. I envisioned a VR experience that consisted of a room with a single large window; the room would be filled with objects of significance to my grandfather and as the player picked them up and examined them, the environment outside the window and the architecture of the room would change in order to tell his story.



Figure 2: *CURIO* Concept art by Lexie Mason-Davis

The experience would begin with his childhood in a humble folk village in the Korean countryside, transition to his adolescence as a refugee in the American South, and conclude in the Pacific Northwest, where he raised a family. This story is one that, naturally, is very close to my heart; it is also a story I had never seen told in video games, let alone in a virtual reality experience. Because VR is often touted as an “empathy machine,”²³ I saw an opportunity to tell a deeply personal story, potentially with the explicit backing of a billion dollar corporation.

I knew that I would not be able to create a full demo solely by myself, so I decided to approach a few of my most talented collaborators to help me work on this 3-month project. Quite fortunately, the timing was right for everyone’s schedules and I was able to recruit five fellow artists, writers, and game developers to assist me: Dante Douglas, a games journalist and writer who penned the script for the game and later

²³ Bucher, 19.

became my PR person; Jalan Ember, a fellow Digital Arts graduate who did visual effects and some 3D assets for the game; Lexie Mason-Davis, another Digital Arts graduate and my lead 3D artist; Jonathon Tree, composer and audio engineer; and Tegan Valo, a C# programmer and my lead Unity developer.

We continued to iterate on the concept as evidenced by these logs from the first weeks of development, dated July 2:

We do have a strong concept after some meetings, and the game plan is to create a single room-scale experience centered around environmental storytelling and object interaction... We are taking inspiration from narrative games like *Gone Home* and *That Dragon, Cancer* to craft a storytelling experience through environmental design.

At this point, I was still pushing the idea of a non-fiction biography of my grandfather, as described in the same devlog: “We are currently developing a script for our ‘pilot episode’ that is inspired by my grandfather's memoir of coming to America during the Korean War.” An excerpt from a second development log, dated July 9, is the first recorded mention of curation and museums, a thread that would continue throughout the rest of *CURIO*’s development: “we came up with a more robust narrative idea for the project... The main scene will take place in a niche-type museum where you learn about the proprietor through their curated collection of objects.” Particular inspiration was drawn from this image of the Ukiyoe Small Museum in Kyoto, Japan, shown here:



Figure 3: Ukiyoe Small Museum inspiration image²⁴

At this juncture, I decided that instead of centering a narrative directly around my grandfather's memoirs, I would use my family's story for inspiration when it came to designing our primary protagonist, Dr. Elizabeth Park. To some degree, I realized I didn't necessarily want to tell my grandfather's story in a medium I was only experimenting with at the time, and wanted to fully utilize the mechanical and aesthetic advantages of virtual reality in developing the experience. As such, I realized that using my family's background as inspiration for character rather than narrative provided a reasonable compromise that would allow for creative freedom in mechanical and interaction design while still preserving and celebrating the unique experiences of Asian-Americans in the Pacific Northwest. To that end, I also felt comfortable with the narrative changes because I believed that it was important to not only tell stories explicitly about marginalized experiences but also to feature and normalize

²⁴ Thornet, "Ukiyoe," *Flickr*, 31 Mar. 2012.

underrepresented voices as the protagonists and storytellers that we see in narrative content. Too often the only stories that are told about marginalized people are only about the acts of oppression and violence committed against them; it is important to create stories and media that feature diverse casts in roles that don't exploit identity-based trauma and instead acknowledge unique experiences through genre or as backstory. This is not to say that we were trying to avoid discussing the identity of our characters explicitly; rather, we wanted to feature a loaded cultural background as a deeply embedded part of the protagonist's character and one that influences every aspect of her life, though perhaps not always explicitly. In addition, the themes of community, preservation, and loss embedded in the narrative reflect the ways I and the rest of my team reflect on our own identities even though they do not directly address the anxieties of the mixed-race experience.

After consultation with the rest of my team, it was agreed upon that we would develop the rest of the plot along these lines; the game that we later christened *CURIO* would feature a mixed-race Korean-American protagonist, Dr. Elizabeth Park, and tell the story of her life, her career as a scientist and preservationist, and, later, her peculiar disappearance. Development logs from July 16 describe the updated premise:

It's the story of a society of Curators and preservationists who disappeared under mysterious circumstances in 2004. Our first installment (the demo) focuses on Dr. Elizabeth Park, the daughter of Korean immigrants whose life was shaped by the Tacoma Narrows Bridge collapse and the mysterious creatures in the water below. You, the player, are tasked with looking through her Collection to piece together what happened to her and the two other Curators (the stars of the second and third acts). The game will be a magical-realism exploration game, with audiologs and environmental changes to enhance the story.

This devlog and the plot synopsis outlined within describes fairly accurately the final product that we pitched after the three-month development period. Appendix C includes the final story document, written by Dante Douglas, that we would use as backstory for the rest of the project. We decided to frame the story in a magical-realism plot to take advantage of the real-surreal juxtaposition at which VR excels; the decision to feature a sea monster narrative was simply due to the team's fondness for big monsters and the richness of the Pacific Northwest's cryptid folklore. In addition, including the reveal of a titanic sea creature at the climax of the game again highlights one of the significant strengths of VR over screen-based games: conveying scale.

The remaining five logs written during development, included in Appendix B, were rather uneventful as far as concept development and mainly consisted of design milestones and a summary of assets and tasks as they were completed.

During this time, OLP program leaders asked participants to submit a mid-development project description in order to have the Oculus team review our project idea and give us feedback that might help to shape the rest of the development phase. This review opportunity allowed me to put into explicit writing what we were intending to do with *CURIO*. The new pitch document, written July 31 and included in Appendix D, contains the following description:

CURIO is an exploration of objects that are left behind.

Two weeks ago, three persons vanished into thin air. Each missing person was a member of the North American Society of Preservationists, a small but tightly connected group of small museum curators scattered across the United States. The disappearances occurred all, improbably as it may be, simultaneously. Each member of the North American Society of Preservationists kept a public museum of their life. It's the only link we have to figure out what happened to them.

CURIO is an episodically-structured VR experience that asks the player to figure out what happened to the missing Preservationists. Each episode features a Curator and their museum- a public collection of their life's work and the work of the Society. Museums, as dictated by the Society, consist of single rooms that embody the Curator's experiences; they are filled with objects and documents that will allow the player to piece together the mission of the Society, learn about each Curator, and eventually discover why and how the Curators disappeared.

This document was reviewed by the Facebook and Oculus content teams and was returned with feedback about the pitch and the concept, all of which is included in Appendices E and K. This feedback will also be discussed in detail in later sections. My team and I reflected on this feedback and implemented some changes, most notably in the budget document, as the final deadline drew closer.

The final project including demo, pitch document, and budget was submitted September 10, 2017. We were informed that winning submissions would be selected mid-November 2017, and we would receive feedback about the decision and the judging process by December 15. I was notified on November 30 that *CURIO* was not selected for funding via the Oculus Launch Pad program, and I received a final feedback document seven weeks later, on January 23, 2018.

Moving Forward with *CURIO*

Development of *CURIO* did not end with the news that we would not be receiving funding from Oculus and Facebook to continue work on the game. In the time between learning I had been turned down by Oculus and traveling to GDC to pitch the game to publishers, I was able to discuss and process the feedback I had received from the Oculus review committee with my team. (This feedback is discussed further in the

“Reflections” section below.) We decided to rework the vertical slice from a slow-burn exploratory narrative into a more puzzle-focused, condensed experience more suited to showing during 30- minute pitch meeting slots at GDC. During the OLP program, Oculus was able to keep up with the development process and therefore had a creative context against which they could judge the demo, but we knew that once we began showing the game externally, we had to have a tighter experience with a hook that could convince a complete stranger to consider a financial investment in the game. Ultimately, we decided to keep all the story and visual assets we had created and develop a brand new puzzle system in order to guide the player through a more accelerated journey of discovery, which relied on the satisfaction of solving puzzles to drive exploration. This change is evident when comparing game design documents from the “OLP build” and the “GDC build,” as shown in Appendices G and I, respectively. Instead of presenting an open, exploratory game flow where the player is allowed to discover items in any order they wish in order to piece together the story, the GDC build features a direct flow from discovery of one object/audiolog, then to a puzzle, then to the next object/audiolog, in order to hit discrete story beats in a specific order.

CURIO will continue to be developed throughout 2018.

PART THREE: REFLECTIONS

CURIO went through several rounds of changes from its inception to the latest build that was shown at GDC. In my role as a producer and creative director on this project, I was primarily responsible for reflecting on the scope and features of the game's development and make decisions that not only allowed my team and I to finish the demo on time but also to achieve my aesthetic, narrative, and creative goals in a way which I felt remained true to the original intent of the project.

One of the largest factors I had to consider in making decisions on the direction of *CURIO* is that ultimately, *CURIO* would be pitched for funding, both to Oculus and Facebook and to indie/AAA publishing companies at GDC. I had to keep in mind the marketability of games like *CURIO*, and whether the current VR content ecosystem would be a viable market in which we could produce the game. The feedback from Oculus (Appendix E) was valuable in this sense; we were able to perceive the company's creative and technical priorities through the notes we were given. However, this feedback was sometimes at odds with my values and the values of my studio and it became a lesson in assessing the worth of critique. For example, the Oculus reviewers suggested that "there is an opportunity to really showcase people indigenous to the areas/regions that represented in the office spaces, and not just the environment. For example, if it's the PNW, you could lean heavily on the many tribes of Native Americans that used to reside there." This was one suggestion we largely ignored for several reasons, the first and most important of which is that it appears to disregard my entire intent with creating Dr. Park, a character whose background was drawn almost entirely from my own family history. In receiving this feedback, it made me worry that

my priorities in creating a diverse character that I had not seen represented in media (and the importance of doing so) were not clear enough in my final pitch document (Appendix H).

By accepting me into the Launch Pad program, Oculus was explicitly endorsing my perspective as a valuable one to support within the larger VR ecosystem, and it concerns me that by telling me to arbitrarily integrate indigenous narratives, they simultaneously undercut the value of a story about Asian-Americans in the Pacific Northwest and also inappropriately conflate the experiences of Asian and indigenous peoples in America. In making *CURIO*, I have had the opportunity to share a unique experience that is underrepresented in games; it is not my or my team's place to talk about stories I have no ability to tell. While there are many excellent and affecting VR experiences that directly address the struggles of the oppressed, the conceptual divide between "empathy" experiences and video games seems wider than ever. In making *CURIO*, I aimed to take advantage of the full spectrum of work that could exist between these two categories. Unfortunately, the video game industry as a whole continues to struggle with this grey area; due to the particular newness of the VR industry, I am confident that there is a certain apprehension within first-party VR publishers like Oculus to fund projects that are not explicitly either "VR For Good"²⁵ and themed around social justice or visually or mechanically thrilling games with a high "wow" factor. This will undoubtedly change in the near future but in order to do so, artists and creators must be constantly pushing the limits and norms of the medium forward—a sea change I am hopefully contributing to with my own work.

²⁵ VR For Good is the Oculus social good initiative that aims to create VR content that spreads awareness of meaningful causes and calls for social change in communities.

Other parts of the feedback, like the advice to “confine the users to a smaller space, and focus on the items around them. For example, placing the user at a desk, with bookshelves to the sides, drawers in the desk, etc.” ended up being integrated into later builds. Initially, we changed the build from room-scale²⁶ to a more contained experience in order to make demoing at GDC easier; I later realized that scaling down the experience would allow us to add more robust interactions that aligned more closely with our design goals.

There were few changes implemented between the initial and final pitches to Oculus (Appendices D and H). Many of the significant decisions I made to alter the flow of the story came forth when I was able to reflect on the experience after the Launch Pad program was over; I was able to treat *CURIO* more like a text than an ongoing project. In terms of developing my theories about immersive design, I feel that *CURIO* was able to guide my research in a practical way. By creating an immersive VR experience, I identified what I valued most in immersive design.

***CURIO*’s Immersive Narrative**

How does *CURIO* use embodied roleplay to create an immersive fantasy? The game takes place largely inside Dr. Park’s office, where the player is asked to explore her belongings in order to discover the story. The game begins with a short introductory

²⁶ VIVE’s Matthew Gepp defines room-scale thus: “360° Roomscale VR leverages positional tracking technology allowing you to use a play area of up to 5 meters diagonally across as a stage to walk inside the virtual environment. By being able to seamlessly move around, your state of presence is heightened letting you feel fully immersed in the virtual world you’re exploring.”

scene in a dark, void-like room, where the player is introduced to the game's mystery through an audilog.



Figure 4: *CURIO* Introductory Scene

This scene establishes the tone and main mechanic of the game. The first thing the player sees is a desk with an audio recorder sitting on top of it; though the rest of the environment is obfuscated by darkness we are able to establish that the player is in a semi-familiar environment with a scale identical to that of the real world. By simplifying the setup we also teach the player the primary mode of interaction: picking up objects. When the audio recorder is picked up, an expository audio log plays. After the audio finishes, the room fades to black, shows the title screen, and then puts the player into the main office space.



Figure 5: OLP Build main scene

This space is mundane and immediately familiar to the player. They are easily transported to the space and experience spatial presence, creating physical embodiment. The player is asked to pick up and interact with objects as they do in real life, which creates world consistency and cements the immersive experience. In addition, the 6-degrees-of-freedom²⁷ Oculus Rift allow the player to crouch, move around, and look at the furniture from different angles, which is incredibly satisfying in VR, and again supports immersion. The later GDC build features a puzzle desk with which the player interacts to advance the story; after playtesting, I felt that the more open, room-scale environment as shown in Figure 5 did not direct the story enough to drive the game forward. Unfortunately, consumer expectations for VR do not necessarily lend themselves to slow-burn narrative. Though I still wish *CURIO* was more pensive and meditative in its pacing, we eventually found that play was much more rewarding with

²⁷ Snyder defines 6 degrees of freedom: “The Degrees of Freedom of an object represent its ability to move around in a space. In a three-dimensional space, there are a total of six degrees of freedom. Half of which represent rotational movement (yaw, pitch and roll) and the other half represent translational movement (moving along the x, y and z axis)... When people think of virtual reality, they usually think of it with six degrees of freedom. Allowing the user to not only look around, but also move around the virtual world and look from above or below objects. To have a true VR experience, the hardware must provide all 6DOF and provide both orientation tracking (rotational) and positional tracking (translation).”

an explicit directive of fully opening the puzzle desk. The rework also allowed us to have a deeper, rather than broader, level of detail in the game. Many of the games that inspired *CURIO* featured environmental storytelling through the use of high resolution textures that inspire close inspection, and though we had to compromise by scaling the play space down to just a desk, we were able to add a level of detail and care in set dressing that we had not been able to when the space was larger. Additionally, there is something especially gratifying about the ability to read the text and discern textural detail on in-game objects, a phenomenon that is surprisingly uncommon in many screen-based games.



Figure 6: GDC Build puzzle desk

CURIO situates the player in the fictional space without establishing the “player character”²⁸ in order to promote frictionless roleplay. I did not want to force the player

²⁸ A “player character” is the fictional character that the player directly controls in a game. In screen games, this is usually the protagonist; in VR, it is often the player themselves.

to learn who *they* are at the same time they are learning who Dr. Park is; the design of the narrative leaves room for a stranger (the player) to intuitively insert themselves in the story. One of the things I feel is most successful about experiences like *Westworld* and even things like puzzle escape rooms is that the canonical experience of the player is that of the outsider; the character that the player embodies knows exactly as much as the player themselves do about the ensuing experience. There is no work required to mentally prepare for the game.

Finally, because *CURIO* is a magical realism game, it aims to juxtapose the real and the surreal. The environment of the office is as mundane as possible in order to increase the contrast with the fantastic elements that make up the climax of the game: the reveal of the sea monster that has been plaguing Dr. Park's dreams. The visual style of the game relies on realism to amplify this dissonance; the *CURIO* design document describes surrealist visual effects to gently subvert the player's expectations of the universe. The mechanics also consist of searching through a person's belongings without them there, which, like *Westworld* and *Sleep No More*, satisfies the fairly mundane fantasy of breaking social norms. By designing the world of *CURIO* to appear like our world with some slight—but important—differences, I was able to take full advantage of the magic of VR to create a deeply immersive experience. Though there is much to be said for bombastic alien or fantasy worlds in VR, *CURIO* locates itself in a fictional space that argues that mystery and magic *could* be a part of our world, if we only just look for it.

Concluding Thoughts

CURIO has been the center of my life for the last year, and the most ambitious, frustrating, and rewarding project I've produced to date. My work is guided by discovery both as a principle and as praxis; the process of development has allowed me to simultaneously interrogate my interest in game design and my interactive art practice. What compels me to make games is that they are never complete until they are played. As they interact with a game, each player has a unique experience with the work, and that relationship engages the artist and the viewer in an ongoing conversation.

This conversation also reveals itself in the creation of this thesis. By working on *CURIO* I was able to identify embodiment and roleplay as the aspects of interactive narrative that I feel create particularly strong experiences, and then apply those theories back to the development and refinement of the game. At the same time, *CURIO*'s review and pitch process also offered insight to the values and priorities of the VR and game industries, and I was able to reflect on the project's successes and failures from an industry standpoint. Though I believe *CURIO* utilizes the strengths of VR to create embodied roleplay and tells a complex story that engages themes of identity, community, and loss, I also realized through the process of pitching the game that perhaps the growing VR industry is not quite ready for this kind of work. Regardless, I could not be more proud of the work I or my team have done.

At its core, *CURIO* is a reflection of the people that made it. While Dr. Park was inspired by my family, the Pacific Northwestern setting and the mysterious cryptozoological backdrop was born from my team's love of the region and our appreciation for the rich lore that underlies the place where most of us grew up. Our

deep passion for video games drives us to continue making work that engages and challenges players both ludically and narratively. Games are a unique method of sharing an experience; VR even more so.

Games are undeniably an art form and should be treated as such; space needs to be made especially in the VR industry to create content that utilizes the strength of the medium to push the boundaries of games as a whole. The VR industry continues to segregate “fun” and “serious” experiences, a delineation that reflects the larger game industry’s arbitrary separation of mechanics and narrative when discussing works. I hope that in making *CURIO* I can contribute to the disintegration of these lines and perhaps be on the forefront of a new wave of VR games that treat virtual reality as a medium to be explored rather than a platform solely on which games happen to be played. We have always constructed virtual realities, but we are only now seeing them inside headsets; we have the ability to make these realities more personal, more tangible, and more fantastic as the technology improves. However, just as the novelty of *Pong* wore off and game developers were forced to iterate on the form, so too must VR games. We cannot sustain a creative industry on ludic novelty alone; we must instead consider what makes immersive narratives so compelling and VR so unique in order to create exciting and affecting virtual experiences.

Appendix A: Oculus Launch Pad Application

What perspective do you bring to the games/VR industry that you believe is currently underrepresented? Please explain how you can contribute to the diversity of VR as a community, as well as the content ecosystem.

In addition to my identity as a queer woman of color, my background in digital arts and biomedical science allows me to bring a unique perspective to the creation of VR experiences. As a mixed-race, interdisciplinary creator, both I and my work engage with liminality and the permeability of categories; I believe this work is needed in the VR industry in order to showcase the value of cross-disciplinary and cross-cultural narratives. I aim to create content that highlights the interplay of art and science and promotes VR as a medium for collaboration and innovation specifically across disciplines. I believe VR can aid in demystifying scientific research and due to my position as an artist-scientist I am able to use creative visualization to design experiences that further scientific literacy and accessibility; additionally, I utilize my diverse background to encourage experimental visual and experiential communication in the sciences. My experiences as a creator who transcends disciplinary and demographic categories make me an ideal catalyst for the diversification and increased accessibility of the VR ecosystem.

How do you plan to leverage your passion to impact the VR industry (360 filmmaking, games, or experiences) by in the next five years?

My current creative research involves discussions of identity and the body in the digital age; I focus specifically on how conceptions of the self engage with interactive

technology. Because so many technologies including VR engage directly with the body in a uniquely symbiotic way, I hope to continue my work in interactive experience design to promote greater engagement with and awareness of both the physical and mental self. VR can create near-magical, transportive experiences and I aim to utilize that “magic” in order to facilitate discussions on the relationship between health, identity, and community as cultural and societal categories become increasingly variegated and permeable.

I aim to promote more cross-disciplinary and collaborative work, as I feel VR is the ideal platform for multimedia, multinarrative experiences that promote empathy and diverse thought. I believe the most important characteristic of interactive experiences is that they ultimately make us better people; I hope to leverage my perspective and skills to advocate for an empathetic, human-centered design philosophy in the tech industry.

How do you think VR content will enhance our daily lives, communities, and/or entertainment in the future?

The physical act of putting on a VR headset is often a solitary and intimate experience; my hope for the future of VR content is that the industry will be able to utilize this intimacy to create personalized content that can motivate understanding and change in larger communities.

To me, one of the most exciting potentials for VR is in education; VR visualization and interaction will be a powerful tool for understanding the world and the people around us. The ability to explore the systems of the human body or the ecological communities at the bottom of the ocean will create a more nuanced

relationship with our universe that I hope will persuade us to think more carefully and critically about our lives and our relationship with others.

In addition to greater community awareness, I hope that VR will enhance our relationship with ourselves; by viewing other realities we will be able to reflect on our own. VR has the potential to motivate us to become healthier, more empathetic, more creative, more productive, and more humanist humans, and I hope to be a part of that future innovation.

Appendix B: OLP Build Development Logs

Week 1: June 25

This week has been all about thinking and drafting and sketching and puzzling. I arrived at Launch Pad boot camp prepared to work on a VR health data visualization application, which has been the focus of my undergraduate thesis over the last year. However, after meeting everyone and hearing about their projects, I realized that 1) there are many, many capable professional people working on things of the sort, and 2) this OLP project should be more of a passion project than anything else. I decided that I would embrace my artistic and games background to try and create a narrative game/experience instead of an application.

Due to this change of heart, however, I was unable to think of a good pitch for the demo. Most of the time since I returned from Facebook HQ was spent talking to my very talented friends and contacts who also make games. The goal that I accomplished this week (and maybe the most important one?) was putting together a crack team of amazing artists, programmers, and writers to help me with this project. Since I'm still an undergraduate, I feel like I have a disadvantage in terms of experience, and though I've made several small games (a few of which were VR) none of them have the level of professional polish seen in the Oculus store. The ultimate goal of this game is to create a piece of art that can be distributed widely from the storefront.

I have put together 1) a professional 3D artist with experience at three studios 2) a games writer with several credits under his belt 3) a developer/programmer who has also shipped several specifically Unity games and 4) an asset artist/programmer with lots of Unity experience.

I am really optimistic about this team! I see my role as a designer and producer (now that we know what a producer does!) and I will serve as the main VR lead- I have the new Gear gear, and I have access to a Rift for testing and development.

I am having a meeting this week with the team where I hope to have a fully realized idea worked out.

Week 2: July 2

Week 2: I have my team!! I've assembled [sic] four of my most excellent and talented friends as co-collaborators on the project which I have codenamed Project Memento for the time being- only because we don't have a name yet. However, we do have a strong concept after some meetings, and the game plan is to create a single room-scale experience centered around environmental storytelling and object interaction. We are taking inspiration from narrative games like Gone Home and That Dragon, Cancer (which is appropriate considering one of my teammates is a 3D artist and Fullbright contractor) to craft a storytelling experience through environmental design. I believe that this strategy will be advantageous, as we are all current or recently graduated students and artists, not professional VR developers. I think our experience telling stories through gamemaking will serve us well through the summer.

We are currently developing a script for our "pilot episode" that is inspired by my grandfather's memoir of coming to America during the Korean War. I and my other artists are working on sketches and moodboards to get the feel down, and I'm currently experimenting with Unity plugins and modes of interaction as that's my job on the team.

This is a constant worry and a repeating thought from last week, but I am constantly reminded by the AMAZING and INCREDIBLE work that i've been seeing in

the OLP group that many of my fellow launchpadders are professionals in some capacity. I'm inspired and challenged by you all and your work, and though my impostor syndrome gets in the way sometimes, I know that I was chosen for OLP for a reason and I didn't somehow trick everyone into thinking I was a capable developer. That being said, I want to prove my ability as an artist and a dev and I'm holding myself and my team to the standard that you all exemplify. Onward and upward!

Week 3: July 9

Not going to mince words- this week was slow. Half my team is off at the Oregon Country Fair currently without access to their tech or even the internet, so we mostly spent the week relaxing and enjoying the holiday. We did have a great in-person "meeting" at my apartment's pool where we enjoyed each others' company and took a great studio group photo in the hot tub. 4th of July was another "meeting" where we drank beer and watched the fireworks! Morale is definitely up right now.

This is not to say that we didn't get anything done, though- we came up with a more robust narrative idea for the project (thanks to the beers? who knows). The main scene will take place in a niche-type museum where you learn about the proprietor through their curated collection of objects. This is our current main inspiration image:



I've also been messing around with Google Blocks to see if it will be a feasible modeling system to use. It's fun, but Blender may win the day.

Week 4: July 16

Lots of progress this week- I had several dinner meetings with the team and a four hour call in the middle of the night with my writer, where we fleshed out the entire story for *CURIO*- the official name of our VR game!!! It's the story of a society of Curators and preservationists who disappear under mysterious circumstances in 2004. Our first installment (the demo) focuses on Dr. Elizabeth Park, the daughter of Korean immigrants whose life was shaped by the Tacoma Narrows Bridge collapse and the mysterious creatures in the water below. You, the player, are tasked with looking through her Collection to piece together what happened to her and the two other Curators (the stars of the second and third acts). The game will be a magical-realism exploration game, with audiologs and environmental changes to enhance the story. We have complete design documents and a game plan for production- this week's goal is to produce a prototype and begin modeling the Collection.

Week 5: July 23

Interesting week logistically- we have the game 90% designed and written, with a game plan and a concept map developed for our dev work moving forward. However, our entire team is out of town/out of contact, so for this week I had our weekly "studio" meeting mostly to give marching orders for our regroup in a few days. Even though this week has been one of the most productive of all, I actually have very little idea what's going on outside of my own laptop! Our modelers have been given object descriptions and a mood board, our writer is working on dialogue, and our programmer is testing out visual effects. In a day or two we'll all be back in our respective offices with reliable internet and our group Discord for the weekly dev chat. I'm writing our pitch doc for submission tomorrow and have really been thinking about why *CURIO*, being a narrative experience, deserves that sweet sweet Oculus cash. It's been a really reflective and illuminating process trying to describe why what we're doing is important- as an artist it's truly the hardest part of my practice. So much of what we do as creatives is convincing ourselves that this work is worth our time, and a lot of time switching gears to external sources is a lot harder than it seems!!

Next week I hope to have actual photos in my blog- for now i just continue my tasks and trust my team to make awesome stuff.

Week 6: NO POST

Week 7: August 6

My team is still chugging along on their assigned tasks, and finally I'm back home and able to work in my lab again. This last week has been a whirlwind of tasks and problems and it's been quite the ride. We had a meeting early this week to decide

game plans for the next week as our 3d artist is currently moving to Australia. Our programmer now has direct access to a Rift rig and has implemented an interaction system and a teleportation system as well as some scripts for triggering audio logs. It was definitely nice to pass off my rudimentary scripts to a competent developer! Our other 3d artist sent me a message that just said "I'M HAVING A BLAST WITH THIS" along with screenshots of a half dozen models that he had made that day, so I'm very happy with the momentum we have with *CURIO*. I have also consulted a composer who has made some demo tracks for our experience, and as soon as my department's recording studio is revamped I'm going to have a go at recording some VO.

Since my wonderful team is hyped up and making incredible strides, I've been learning what it means to be a producer. I've realized over the course of this project that my role (that we've jokingly referred to as Professional Cat Herder) is actually, well, what a producer does in a studio anyway! I've been lucky enough to go to several events with my team including the launch of Fullbright's Tacoma, and I've been picking the brains of artists and actors and developers and producers about what they do. It's an interesting thing to discover, that I've fallen into a role that frankly, I didn't even know existed until the bootcamp this year.

I know these posts are supposed to focus on the progress of our experiences, but reading back a lot of the things i've written this summer has taught me a lot about what games are, what it takes to be a studio, and what I need to do to be successful- and I think overall the most important thing i've learned is that my skills are important and valuable to the team. This is something I struggle with a lot! But doing this thing and

having Oculus believe in my ability to do and make great things- that's what's really pushing me to make something really, really cool.

Week 8: August 13

This week's achievements:

- First tracks composed by our music guy
- More items modeled
- Room greyboxed
- Finished teleport system
- Implemented object interaction
- Script written
- Full room sketched
- Items textured

Next week's goals:

- Record script
- Finish modeling
- Model out room furniture
- Effects
- Add sound interaction

I accidentally got my modeler a full time 3D job (thanks women in vr/ar!!) so he's now going to be out of commission for a few weeks while he gets paid for his work :D Hopefully it won't slow us down too much!

Week 9: August 20

This week my main task was recording VO for the demo, as we don't have a professional voice actor yet. We plan on hiring one for the full experience but our sound studio is being renovated right now so we're putting placeholder audio in to get the point across but with less quality. Unfortunately I'm working remote right now, away from the rig we're using, so I still frustratingly don't have assets to share here. I went to

the Intel Buzz workshop this weekend and saw the excellent Jessica Outlaw and Robin Hunicke speak and that was the highlight of this week! It's been exhausting, and hopefully this week we'll make some more progress.

Week 10: August 27

WE HAVE PLAYABLE!!!! I just got done with a marathon VO session with my audio guy who lives in Australia :O It was my first time working with VO and it was a tough, tough session, but my guy is insanely talented and he walked me through the audio mixing process. It was great. Though this week was a general nightmare because I had to move in the middle of it and didn't have internet for most of the time, I'm so proud of my team because we have a really excellent experience so far. Unfortunately the next two weeks are gonna be crunch, which I hate to put us all through, especially since I and my modeler are both sick at the same time. (Here's something they don't tell you about game development- sometimes you schedule international VO sessions when you can barely get out of bed and you still have to do them :\\)

Week 11: September 3

I wish I had posted this before PAX- I'm exhausted and my brain is fried. We're texturing furniture and placing objects in the room, and I have a second draft of my pitch ready to go. Our script has been recorded and edited, the teleport and audio systems are working, our lighting is working, our demo script is written, and our modeler is churning out objects quicker than i can assign them. We're hoping to avoid feature creep, but everything's going super well and we're trying to implement new

systems and objects that really nail down the feel we're going for. In non-demo news, I also was able to promote *CURIO* to reporters from Waypoint, Kotaku, and Polygon! I was so proud to talk about both this and OLP as a whole. This week is gonna be crazy!

Appendix C: “The Professor” Story Document



The Professor,
Dr. Elizabeth Park.

Born November 15th, 1940, in Tacoma, Washington, at 8:13 AM. (Scorpio, Sag rising, Taurus moon)

Birth & Parentage:

Elizabeth, or Liza as she was called by her parents and no one else (on her insistence) was born on November 15th in Tacoma, Washington, only 8 days after the [Tacoma Bridge Collapse of 1940](#). Her father, George Park, was a [Korean immigrant as of 1935](#) and settled in Tacoma and worked as a camera repairman. A week before Elizabeth's birth, he and his wife witnessed the bridge collapse and George filmed the event.

Her mother, Helen Park (nee Mayfield) met George three years earlier, as she was working as a nurse at a local hospital in Tacoma. They married a year later, and a heavily pregnant Helen stood by George's side as the bridge collapsed. A week later, Elizabeth Gertrude Park was born.

Early Life (1940-1952)

Elizabeth's early years were underscored by the harrowing experience of living as a mixed-race Asian-American during WWII and the [Alien Registration Act](#). Her father, comfortably employed in a white-owned establishment before the war, was spared of many of the more direct blowback from the Act, but children can be ruthless. On the schoolyards, Elizabeth wasn't immune to taunts and teasing from other children.

She wasn't afraid of fighting back, however, and it wasn't uncommon for other children to come home with a bruise or bloodied arm from Elizabeth's retaliations.

Teen Life (1952-1960)

Elizabeth attended middle and high school in Tacoma, and began her lifelong interest in physics. She found herself excelling in classes during this time period, and her teachers appraised her 4.0 grade average. She also enjoyed knitting in her free time. She had few friends, but considered those she had to be very close.

Outside of classes, she began idly studying the history of the Tacoma Bridge Collapse, a subject that would fascinate her for decades afterward.

University Life as an Undergrad (1961-1965)

Elizabeth applied to [MIT in 1960](#), and received notification of admittance later that year. In 1961, she began her undergraduate studies at MIT, focusing on physics, in the growing field of structural dynamics. Her lifelong interest in the Tacoma Narrows Collapse had turned into a career.

Undergraduate Thesis (1965)

Her undergraduate thesis, on the collapse, proved statistically that the prevailing theory behind the collapse (the resonance hypothesis by way of the Von Kármán vortex street) was incorrect. While the thesis passed her undergraduate review, it was widely considered to be suspect due to her identity, gender, and racial background. Her theory would only rise to prominence thirty years later, [in 1991](#).

However, her thesis also noted something that Billah and Scanlan in 1991 would not notice: her interpretation of the data available at the time indicated that there was a unstable gravitational field present at the time of the collapse. Her thesis, in brief, detailed that that the origin of the fluctuations were present *underneath* the bridge, at a depth of about 600 feet.

Due to this observation, her findings were widely considered antithetical to modern teachings and partially outside her field. Despite her (correct) finding that the Resonance Theory was incorrect, most dismissed the work as improbable.

Her thesis was published in an internal MIT review, but would not be seen by the general public for quite some time.

Graduate Life (1966-1972)

After finishing her undergraduate studies, Elizabeth quickly returned to MIT to finish her doctorate, spending an additional six years in graduate study. Her post-grad studies focused on Civil Engineering, a discipline, again, fueled by her interest in the Tacoma Bridge Collapse.

It was in this time that her studies began to take on a more experimental bent, as she continued to dive into theoretical physics in her spare time. Her dissertation was on the theoretical applications of undersea architecture for civil expansion, but it wasn't her most fervent cause. That lay under the bridge, as it always had.

Tallahassee (1973-1976)

Following her doctorate, Elizabeth decided she needed a break. Moving from Massachusetts to the sunnier and warmer Tallahassee, Florida, she spent a short time working at the counter of a small bookstore. While the job was a far distance from academia, she found the break relaxing, and enjoyed the slower life in Tallahassee.

It was also in this time that she first began dating, an experience that seemed distasteful to her earlier in life. She found the experience of being tied to another person generally unpleasant, and preferred solitude in her romantic life. While she occasionally found herself in flings with different persons, she never felt much want to remain in a relationship for very long.

In 1975, she was approached by the lead of a research team in Chicago looking for an expert in theoretical physics for an expedition into the waters of Canada studying reports of gravitational flux and unexplained phenomena.

She didn't need much convincing. By January 4th, 1976, she was on a plane to Chicago. By January 15th, she boarded an experimental research boat off of Banks Island.

The Banks Island Expedition (1976-1980)



The University of Chicago, in a joint agreement with the University of British Columbia in Canada, financed a four-year exploratory mission in the waters off the coast of Banks Island for a small international team of researchers. The focus was on a series of unexplained phenomena documented in the area, ranging from unexplained sound detection to strange water and tidal patterns.

Over a four-year mission, the team would document and study all unusual readings found in the area, using a combination of sonar, radar, and diving equipment. The research team consisted of seven individuals:

- Dr. Redmond Collins (Research lead, Physicist, age 40)
- Dr. Elizabeth Park (Theoretical physicist, age 34)
- Jonathan Erdson (Radar/Sonar technician, age 28)
- Dr. Allison Young (Marine biologist, age 32)
- Dr. Ruben Price (Climatologist, age 37)
- Dr. Julius Lynch (Geologist, age 34)
- Emily Webster (Archaeologist, age 30)

The controversial [why] expedition was chiefly spearheaded by University of Chicago doctorate Redmond Collins. The ship, the NOAA research vessel [*Steady Onward*](#), had a crew complement of 18, with Captain George Peterson presiding. With refueling stops every month, the crew and team were in close quarters for the majority of their time. Holiday shore leave found them in various small towns along the B.C. coastline.

Days on the *Steady Onward* were tumultuous, both literally and metaphorically. Long stretches of very few anomalies would culminate in three days of feverish data-gathering and analysis after a single, minor event. Often they were red herrings. The first six months or so of the expedition was dry and rather uneventful, though the scenery and natural beauty of the area along the coastline was a sight to behold even on the dreariest of days. Elizabeth fought restlessness by busying herself with knitting, reading up on the books she brought aboard, and trying to get to know her crewmates better.

For various reasons, scientific and personal, she began writing in a journal during this time.

Anomaly 87 (0834 hours, April 12, 1977)

The dawn broke early over the coastline and Elizabeth was woken from her slumber by Dr. Collins. Frantically, in the excited chattering that she had become so accustomed to, he broke the news: They found something. Something bigger than they'd ever seen before.

Rushing to the detection room, young Jonathan Erdson was hunched over the radar screens, surrounded by about half the rest of the research team. The boat, idle through the night, was suddenly rocking as if in a strong tide. Elizabeth ran to the deck, dry of rain but rocking heavy. To the starboard side, the blue was rolling like a bottle on deck, and it took a moment for Elizabeth to understand what she was seeing.

Breaching the cold waters off the coast was something much larger than their instruments were meant to detect. This wasn't a gravitational anomaly, it was the ocean itself taken corporeality, a flesh so large its movements dwarfed the waves it lived within. Dr. Young, marine biologist fresh from her doctorate studies, was already transfixed- estimating numbers and distances in her head while shaking hands sketched furiously on a small notepad, capturing what could be captured in the dim morning light- and it took Elizabeth's panicked yells to wake her from her momentary stupor as the first of the water's undulations struck the hull of the *Steady Onward*.

Her hull was knocked to a near 50-degree pitch (estimated Elizabeth in a state of adrenaline-fueled mental mathematics) and Dr. Young fell backwards, tumbling starboard-to-port as Elizabeth grabbed for her hand over the wooden deck. A grip, a straining grunt from Elizabeth, and the two of them clung tight to a central walkway railing as *Steady's* body began its return tipping.

It was in the moments of righting itself that Elizabeth and Dr. Young saw the thing they thought impossible. The beast (for it was a beast, it must have been), larger than a whale, larger than anything either of them had seen before, was visible only for a moment, seen as a black shape rising out of the water. Long, impossibly long, and sleek: rippled with movement as an eel, constantly shifting muscles under a pockmarked and inky skin.

It was visible for only a moment, but after it plunged into the water again it was clear it was headed to swim directly under the *Steady Onward*. With no time to react, Elizabeth yelled for Captain Peterson, but if he heard or did not it was unclear, the beast had dove under the hull already and for an interminable series of seconds, moved so deep as to be unreachable.

The waters, rumbled but not frothed, as if cut through by a knife, settled in moments. Later, Dr. Young would theorize that this was part of the beast's methods of hiding, that its size was camouflaged by its speed and silence. Elizabeth, in the chaos, barely noticed, but yes: it was almost silent.

On returning to the research chambers and warming up under some blankets, Erdson confirmed: despite the creature's enormous size, it had somehow evaded their standard detection technology. He theorized, cautiously (for he knew he was the youngest on the crew) that the radar may have not picked it up due to its skin, acting as a stealth bomber deflects detection. Elizabeth agreed, having been only one of two to see the beast up close.

From that point onward the expedition became more focused, more specific. There was something out there. They knew it. They saw it. Allison had her sketches, Elizabeth her moment of unearthly fear, Erdson his radar blind spots. But no hard data, no material, no specimens. No photographs.

Elizabeth had another theory, too, one she kept from the crew. If there was one of these things, maybe there were two. And if there were two, there could be

reproduction. Could be more under the ocean than we expected... than one research boat could handle. But she was still left wondering: why now? Why so close to her, again?

That was, of course, it, at the end of things, the end of all theories. What lay under the bridge, what came so close to a fetal Elizabeth Gertrude Park and then saw her again, 35 years later?

And all this came before the nightmares.

Dreams (April 19, 1977 - onwards)

In the weeks following the encounter with the beast, Elizabeth's nights were often interrupted by strange, nightmarish visions. The nature of them were tracked by Elizabeth in her journals.

The dreams, at first incoherent and disturbing, began to coalesce into more defined imagery. She saw deep waters, shapes moving within them, ghostly sounds. Sometimes her own memories would enter: the sound of the barking dog from the Tacoma Bridge Collapse; her parents snapping photos; her elementary and college years; snapshots of essays or journals, sometimes her own, sometimes unknown to her.

In her time on the *Steady Onward*, the dreams would occur infrequently. She didn't bring them up to the crew.

Continued Life on the *Steady Onward* (April 19, 1977 - September 15, 1979)

Elizabeth's days on the research vessel were mostly consumed with day-to-day tasks, monitoring the various instruments onboard the vessel, and occasional refueling stops in towns on the coast. It was a strange lifestyle for Dr. Park, but she was accustomed to changing lifestyles. Life at sea suited her, and she spent long hours using the time to her own betterment.

She brought books with her onboard, but by about 1978 had read through all of them. Trips to port towns often resulted in searches for bookstores or libraries, somewhere to find new material. It was a quiet, studious life.

While continued anomalous events were found, and often investigated, they were most often turned out to be explainable. Whirlpools, vortexes caused by tidal patterns, killer whale migrations- understandable phenomena. Nothing like the events of 1977. The great beast they had seen once was so rare as to be unfindable, and even their most sophisticated equipment could not find any trace of it. It seemed vanished.

The Second Encounter (September 16, 1979, 1400 hours)

Life on a research vessel is not without its quirks. There is a sort of slowing of time, a momentary lapse of awareness of the outside world. It lulls you into a sense of studious calm about the goings-on outside of the vessel. Life is small. Life is contained, measurable, understandable. Predictable, even.

It had been two years since the previous encounter with the creature. The crew often called it Banks, after the Banks Island it was seen so close to. Banks became a sort of mascot, with Elizabeth and Allison's sketches copied and mimicked (in good spirit) and hung up all over the living and research areas. Banks was their quarry, but also their compatriot, a fellow creature adrift from the life of humankind.

Fittingly, their next encounter was amicable.

It was a cool and breezy day on the *Steady Onward*. Captain Peterson had her anchored a good thirty miles off the coast, and the crew was busying themselves with

idle tasks. John in the radar room, Allison on the deck with her notebook, Elizabeth knitting from her cabin. Redmond, humming quietly along to a tape cassette player, one cabin away from Elizabeth.

Elizabeth put down her needles, on the plastic-and-aluminum tables that folded down from each cabin wall. There was something off the port-side. At first she thought it a bit of debris, a floating piece of driftwood, until it rose, higher and higher, a great midnight mass dripping with sea-brine and ragged weed. Elizabeth's breath caught in her throat- here, again, the creature.

Scrambling, slipping on the floor and rushing out her cabin door, Redmond behind her, Elizabeth rounded the corner to the deck-side stairs. Gasping her way onto the port-side of the *Steady Onward's* top deck, Allison already at the railing, the creature was easily thirty, thirty-five feet out of the water and seemingly barely close to its full height.

Allison, her glasses slipping down her nose and mouth agape, could only mouth incredulously at what was in front of them. Slowly, as if mesmerized, the rest of the crew stepped onto the deck. The creature was motionless, hovering, impossibly large and impossibly still.

For Elizabeth, the moment is so emotional as to be heartbreaking. This, the hunt, the research, the bridge, all of it came rushing toward her all in one burst. It is a difficult thing to see one's life work in front of them, all theoreticals gone and the salty smell of its body only meters from their vessel.

It took a moment for Elizabeth to realize that her crewmates were similarly transfixed, but each seemed quietly content in their own way. It was as if the creature itself was influencing them, not maliciously, but calmly, to feel no fear. No frustration, no impatience, not even a drive to *understand* necessarily, but simply to accept. To accept what they had always knew, that this was not a mere beast, but a creature of equal intelligence and dignity to humankind. Impossibly older, impossibly more grand, but filled with a quiet respect.

In her mind, Elizabeth saw a montage of images in quick succession: The bridge collapsing. The barking dog. Her childhood. The cruelty of the second world war. The cruelty of segregation. The cruelty of racism, sexism, even homophobia. The Stonewall riots. Japanese internment camps. The rapid sprawl of suburbia. Cars, millions of cars, spewing gasoline. Drilling and environmental damages. Children, innocent babies. The hippies. The disco clubs. The soldiers at Ohio State. The barking dog on the bridge. The bridge, warping unnatural. Her parents. Herself, again.

It would be years until she could piece together what she thought it meant. What it meant in the context of her dreams, what it meant in the context of her life. With shaking fingers, she reached for the Leica camera around her neck and snapped a single picture of the creature.

The snap hung in the quiet air, as if it were holding the beast above the sea itself. As the moment fell, so did the creature. Silently, slowly, the great mass of the thing sunk back into the sea, with barely a nudge of the *Steady Onward*. As suddenly as it had appeared, Banks was gone.

Her crewmates, dazed, woke from their stupor. It was hard to speak for a few moments, as each found their bodies again, limb by limb. They weren't harmed, but they certainly did not live the same experience that Elizabeth did.

In the next few weeks and months, Elizabeth would find that they remembered seldom little of the encounter at all- they remembered the creature, yes, but none of the visions. In their recollection, it surfaced, ducked, and vanished. A quick momentary lapse. Jonathan Erdson would even confirm it belowdecks.

“Look, Dr. Park- not a second has passed on my radar computers.

Return to Land and Academia (March 12, 1980-1987)

The dawn of the decade had Elizabeth returning to land, after four years at sea. The team was, on paper, unsuccessful, their only verified encounter being sparsely recorded. However, their finds in aquatic geology and biology were substantial enough to not be a black mark on anyone's resume. The team stayed in contact over the next few years, but drifted, as old friends often do.



Elizabeth decided to re-enter academia, this time as a professor, first at the University of Chicago, then after four years there to her hometown university, the University of Puget Sound in Tacoma. She kept an interest in the events that occurred on the expedition (reasonably, how could one not?) and claimed to have other encounters with the beast in her life afterward.

She bought a small [O'Day Mariner](#) sailboat and a 1970 Jeep wagoneer with boat trailer in 1982. Wages as a professor were not luxurious, but land was cheap and rents were low. It wasn't hard for her to find a small house near the sea to relax in, grade papers, and have a break from the academic life. The salt water was good for her skin, she believed, and it allowed her to stay near her parents.



Elizabeth's father passed in 1985, her mother a year later, in 1986. While the town was small, they were beloved for their life's work and were celebrated by their friends. Elizabeth spoke at both funerals. She was short in her speech, but respectful. The rain was relentless at her father's lowering. Her mother's was sunny. Elizabeth found this amusing. He would have loved to snap photos of everyone in the daylight.

She kept in touch with those she cared for, but mostly lived a solitary life. Her family home, [a small cabin on Point Fosdick road](#), across the Narrows Bridge. It was tucked away just enough to her liking.

Interlude: Moving the Notebooks (Sometime in 1987)

It had been almost a decade, and the creature was still on Elizabeth's mind.

There was something alluring about it, something so alien but so intelligent. It wasn't like seeing a chimpanzee or a similarly-intelligent animal, with your own brain rushing to cover up their more humanoid movements with the swift explanation of their own bestial nature. No, this was something else, a sentience, a mind.

Her position as a professor meant that her summers were consumed with searching. For what, she wasn't quite sure, but something that would lead her back to the beast. The creature. The... thing. She didn't have a great word for it. She toyed

with calling it 'Nessie' for a few years but that didn't quite fit. This wasn't something from the past. It was the future, or a future.

The dreams had continued. Disturbing, at times, comforting at others. Flickers of her past and of the pasts of others. Dark things moving in the water. Crying- her own, she realized- as an infant. Industrial machinery. Polar ice cracking. Huge beasts under the surface.

She believed the dreams were meant to be communicating something, and began writing them down obsessively- reams and reams of paper, notebooks upon notebooks piled high next to her bed, on her desk. At some point she moved a few cartons-worth to an exterior shed. It was a long weekend. Hot. Muggy. The summer-flies buzzing relentlessly. She did it alone, as she did so many things.

Meeting the Librarian (November 7th, 1988)

It wasn't uncommon for Elizabeth to go on long drives along the coast, especially on her longer weekends or times off. On one of those excursions, she found herself in a small bookstore in a coast town. It wouldn't have warranted notice, had she not noticed something on the wall, visible from the outer window.

It was a sketch, a biological one, detailing the shape and contours of an aquatic creature that happened to match exactly Elizabeth's memories of the creature in the waters outside Banks Island. It wasn't just close- she was sure it was the same beast.

Entering the small shop, she was struck by how catalogued and noted all the items were. It wasn't so much a small library as it was a museum, tagged and noted by date and reference. As she stepped over the threshold, a small bell rang in the back.

The owner introduced herself as Hazel Dolores. Hazel Dolores Washington, if you wanted to be formal. She was a few years older than Elizabeth, and Elizabeth found her mannerisms more than a little odd- she was overly talkative, for one thing, and despite her age would conduct herself as if she was barely over twenty. When she mentioned that she knew of the creature whose likeness hung on the wall, Elizabeth was completely, totally hooked. This woman could help Elizabeth find what she had been looking for all her life: the Leviathan of the Northwest Waters, as Hazel called it.

Hazel Dolores was a member of a society of explorers, activists, and transdimensional artificers (Elizabeth winced at this) who have been a part of cryptid research for hundreds of years. They weren't always so few, but times were lean and the world was changing. The North American Society of Preservationists, or NASP, was down to just her. Just Hazel and the mighty beasts that Hazel had seen- and yes, she assured Elizabeth, she had seen them- wandering the globe.

The creature that Elizabeth had seen, Hazel explained, was one of a few that NASP had catalogued in the past century. NASP believed strongly in the virtue of record-keeping, they were anthropological in origin.

Recruitment to NASP (1990)

Hazel is Elizabeth's recruiting member to the NASP. The society requires a sponsoring member before a new member can be initiated, so Hazel acts as one. At the time that Elizabeth is inducted (1990), NASP is down to a measly 4 members. By the time they meet in person in 1993, it is three.

Elizabeth Learns of Its Mortality Elizabeth Tracks the Creature The Disappearance

Appendix D: OLP Build Preliminary Pitch (7/31)

oculus launch pad

Aidan Grealish, CURIO

PROJECT DESCRIPTION

CURIO is an exploration of objects that are left behind.

Two weeks ago, three persons vanished into thin air. Each missing person was a member of the North American Society of Preservationists, a small but tightly connected group of small museum curators scattered across the United States. The disappearances occurred all, improbably as it may be, simultaneously. Each member of the North American Society of Preservationists kept a public museum of their life. It's the only link we have to figure out what happened to them.

CURIO is an episodically-structured VR experience that asks the player to figure out what happened to the missing Preservationists. Each episode features a Curator and their museum- a public collection of their life's work and the work of the Society. Museums, as dictated by the Society, consist of single rooms that embody the Curator's experiences; they are filled with objects and documents that will allow the player to piece together the mission of the Society, learn about each Curator, and eventually discover why and how the Curators disappeared.

Our first episode focuses on Dr. Elizabeth Park, an experienced Curator and physicist from Tacoma, Washington. Born a week before the Tacoma Narrows Bridge Collapse, she was fascinated with the mysteries of the Puget Sound and the creatures that she knew lived beneath the bridge. She was recruited to the Society after she began documenting her several supernatural experiences, beginning with her childhood fascination with the Tacoma Narrows and continuing through her time on an oceanic research vessel, investigating several gravitational anomalies on the coast.

The player visits Dr. Park's Museum where they sort through her collection and discover why she suddenly disappeared with her fellow Curators. However, these Museums are not just shelves and dusty objects; as the player explores and learns about the absent owner, the environment changes to reflect newfound knowledge. The player becomes fully and immersively integrated into the Museum itself. This most recent visitor becomes part of the narrative that the Society hoped to preserve through these collections.

CURIO is heavily inspired by Pacific Northwest Gothic and magical realism. As a team of native and adopted Cascadians, we are interested in developing and telling stories that showcase the people and the environment of the Pacific Northwest. Though our Curators come from across the country, they are drawn to the PNW and its inhabitants, human and otherwise (just as we are.)

As a new team of creators, it is also important to us to reflect our own diversity in the stories we tell. It is a priority for us, a group of artists with diverse backgrounds, to create characters that we can relate to- and as such our characters, such as Dr. Elizabeth Park, are inspired by our lives and histories.

CURIO will address themes of identity, history, myth, and community. We draw from Pacific folklore and urban legends to tell a story about monsters and mystery, but most importantly, people and the things they leave behind.

DESIGN AND STRUCTURE

CURIO will be an episodic experience. We envision a three-act structure consisting of three 30- to 40-minute episodes (depending on speed of play) that each focus on a single Curator and their Museum. This structure allows for a cohesive and tight story, but with potential to expand to a second “season” featuring more Curators and Museums. We feel strongly that the Telltale model of episodic storytelling would work well in a VR format, and we believe that this episodic format will allow for a deeper dive into character than a longer, singular experience.

Each Museum is a single room utilizing room-scale VR. The virtual Museum will be a reflection of each Curator, with decor and objects designed to convey each person’s history. Each object will be interactable, with certain key items triggering audiologs that share major story beats. “Flavor” items may trigger much shorter audiologs or have small descriptive labels to add detail. Ultimately, the act of exploration and interaction with these objects will affect the environment through visuals and sound (e.g. non-diegetic effects like the ocean or birds, and environmental changes like foliage, color, or fauna).

TIMELINE

Timeline: 6 months

Stage 1: Ideation and Writing (COMPLETE)

Stage 2: Prototyping and Modeling (ONGOING)

Stage 3: Effects Programming and Level Design

Stage 4: Polish/Bug Testing

SCHOLARSHIP FUND PITCH

BUDGET BREAKDOWN:

CONTRIBUTORS:

1 Full-time Producer, \$20/hr , 400 hours: \$8000
1 Full-time 3D modeler @ \$20/hr, 400 hours : \$8000
1 Part-time developer @ \$20/hr, 200 hours : \$4000
1 Full-time VFX artist/modeler @ \$20/hr, 400 hours: \$8000
1 Scriptwriter- \$2500 script fee

EQUIPMENT:

VR-Ready PC: \$1000
Rift + Touch: \$600

CONTENT:

Soundtrack: \$2000
Unity Asset Budget: \$500
Voice Work, \$50/hour, 20 hours: \$1000

Total Budget: \$35,600

Appendix E: Preliminary Pitch Feedback

Project NAME	Represents diversity of thought in the industry	Passionate understanding of VR	Demonstration of Technical Ability	Launchpad Participant	NOTE SECTION
<u>CURIO</u>	1. Diversity in Curio is represented by environments you interact with, and which Curator's office you are exploring. Because of this, I would lean in on the objects having clear significance to the area in which they represent.	1. Exploring the different offices aligns nicely with the power VR, since you are interacting with objects around you. The key will be how magical that experience can be made by changing the room, which also represents a lot of work.	1. I'm not sure this needs room scale in order to execute this project. You could confine the users to a smaller space, and focus on the items around them. For example, placing the user at a desk, with bookshelves to the sides, drawers in the desk, etc. This would be a way to mitigate the risk of there being too much content to produce. With room scale, you introduce a lot more content because you want to make sure there is enough to do.	Aiden Graeish	1. There is a real opportunity to highlight the people and myths of the area the office represents. 2. I would focus on one environment, instead of three. Understanding the work related to one environment is going to be really important. Once you have a MVP (minimum viable product), you can really get an understanding of the work. The completed first one will get you a blueprint for the remaining experiences, which could be released later. 3. Resources seem low in number and salary. Looking forward to the final work!
	2. There is an opportunity to really showcase people indigenous to the areas/regions that represented in the office spaces, and not just the environment. For example, if it's the PNW, you could lean heavily on the	2. The overall vision of the release of content seems very ambitious. Three 30-40 minutes experiences represent a lot of work for such a small team. I would focus on one of the areas for full production. As a reference there have been only a handful	2. Both the resource numbers and the salaries for the resources seem low. One, I think you'd need an environment artist to build out the environments. The 3D modeler would be focusing on the objects. Two, the developer (assuming engineer here) would need to be		

many tribes of Native Americans that used to reside there.

to create this length in a short amount of time. Building these experiences for the longterm of this project will work. For the short term and prototype needed for submission, try to focus on the high concept area of work.

full time. Three, all of those salaries are very low. Maybe there are friends? If not, they'll need to be doubled. At least for everyone except for the producer and script writer.

3. Equipment – One PC for the whole team? You'll need a good PC for all the developers. You'll also want more than one Rift.

Notes to Creator

Keep in mind the above feedback is intended to assist in growing your project so that you not only have a guide pace on development but that its a reasonable executed prototype at the end of the program, Sept 10.

Unfortunately, you will not be able to have direct communication with the Oculus Team Member that reviewed your work but the team was overall impressed with the creations, ideas and innovation of this cohort. The review committee would like you to consider their feedback as you move forward in creating your app. We know the hardwork that you have put into this project and we are looking forward to your final submission!

Finally, if you have any questions regarding your feedback, please feel free to ask during one of the Friday Office Hours.

Appendix F: OLP Build Script

Introductory:

This is a record for the North American Society of Preservationists, local five-sixty-eight, Tacoma Washington, officiant member... Hazel Dolores Washington.

My name is Doctor Elizabeth Park. I'm a professor, at the University of Puget Sound, Tacoma Washington. Date of birth... November the fifteenth, nineteen-forty. Inciting incident: Tacoma Bridge Collapse.

The time is... seven-forty-five AM, September the sixth, two-thousand and four. It is a crisp and cold morning.

This is an Exodus Communication.

Contact has been achieved.

90s GPS Tracker

It's strange to think I spent so much time with Marx. Thinking about it, tracking it, dreaming about it. I started to feel like I knew it. The dreams started after the first encounter, but they kept at me for years, decades. It was like it was calling me to something. The flashes of light and meaning were always so hard to pin down... but somehow/.. I knew this beast meant us no harm. Us, that is, humans.

Binder from Expedition

We were all so young. I mean, we weren't kids, but it was before everything. Experiences like that change you, age you. Let's see... me, Dr. Collins, Johnny in Radar, Allison, Ruben who never talked much, Julius and his rock books, and Emily. I never talked much to Emily, but she seemed nice.

Allison and I kept in touch until she died in '99. Heart failure. I wonder if she was dreaming, then, too.

Chunk of tacoma narrows

It all started with the bridge. Dad always talked about it when he worked at the film shop back home. The warping, the twisting of the concrete. I couldn't stop thinking about it. It wasn't til the 60s that I could study it in an academic setting.

They don't tell you this, but Scanlan and Billah got their theories from my undergrad paper. I've always felt a certain kinship to Rosalind Franklin in that way.

Expedition Item (Mug or Hat)

1977. We all got these at the beginning of the cruise. We called it a cruise, sort of as a joke, but after a while me and Allison just kept calling it that. It made sense, it was a sort of vacation. I got to get out of Florida, Allison got to actually do field work in Marine Biology for the first time. It was exciting. We were finding things no one had ever seen before. It felt new.

Picture of NASP people

Hazel Dolores introduced me to NASP soon after we met in 1990. I couldn't believe it was real-- all these people knew what I was talking about. Marx, the dreams,

the communications, for the first time after the expedition I felt like I was among friends who knew what I had been through. We all had seen things. We all thought we knew what was coming.

Sextant:

In 1976, I was recruited by Dr. Redmond Collins, whom I would later call a friend, to join a field expedition outside of Banks Island in British Columbia. We were assigned to the *Steady Onward*, a NOAA research vessel and our home for the next four years. We had plenty of advanced equipment, sure, but it wasn't uncommon for us to use older tools if we needed to. "The stars won't do you wrong," Collins said, "They're the one thing you can depend on out here."

Sketch in Notebook

Marx. We called it Marx.

Big, bigger than anything we'd ever recorded. Massive, big. Skyscraper big. The first time we saw it in person it didn't even hit our radar. Johnny nearly fell out of his chair down in the computer room when we told him what we were seeing abovedecks. There was nothing like it. Black as night, huge beyond reason. And that was just the physical. Everything else was much harder to describe.

Ending:

Sometimes things all come together in a neat point. Sometimes they don't.

We knew that something was coming, but we didn't expect it this soon. At a certain point, our predictions stopped being as reliable. Global temperatures were rising. Marx was agitated, we knew that much.

I- I couldn't help but feel a connection. Like its pain was my pain. The others, they knew of the creature but not- not like I did. At least I don't think so.

I didn't tell Washington- Hazel. I- I'm sorry, Hazel. I think I... I think you know what we have to do. I hope to see you there.

--MINOR AUDIOLOGS--

Binoculars:

Useful, sturdy. Just what we needed.

Book by Dr. Collins:

Once I had to beg him to sign this.

Books:

Never finished all of these.

Camera:

Dad's camera.

Crew Manifest From Expedition:

Here we all are- I mean, were.

Diploma:

Thanks, MIT.

Jar of Rocks/Detritus:

I always liked these little mementos.

Knitting needles:

Nothing more soothing than a good knitting session.

Photo From Childhood:

Dad, Mom, and me. I miss them, you know.

Photo from expedition:

Good times.

Plushie

It doesn't look like Marx, but it's comforting nonetheless.

Portable Radio

Don't know what I'd do on tracking sessions without this.

Receipt for O'Day Sailboat

Best purchase I ever made.

Road Map of PNW Coast

I know there are digital maps now, but I like this one.

Squid Beak

Biologically similar. Not the same though.

The Double Helix by Watson

Not the nicest account of Rosalind Franklin's groundbreaking work.

Appendix G: OLP Build Game Design Document

CURIO

Basic Premise:

Two weeks ago, three persons in various areas of the United States vanished into thin air. Each missing person was a member of the North American Society of Preservationists, a small but tightly connected group of small museum curators scattered across the United States. The disappearances occurred all, improbably as it may be, simultaneously.

Each member of the North American Society of Preservationists kept a public museum of their life. It's the only link we have to figure out what happened to them.

Structure:

Each 'episode' will take place in a single room, filled as a museum with the objects of a person's life. The objects will be displayed in small groups around the room usually arranged by subject matter, or perhaps time period.

Objects:

Broadly speaking, objects are divided into two categories: key items and flavor items. While key items are always accompanied by audiologs and fill out the major story beats, flavor items flesh out smaller stories or details within the greater narrative of the Curator or the Society.

Audio:

when objects are picked up by the player, they'll begin playing an audio cue. Audio cues will be around 30 seconds to a minute long. These will serve as the backbone of narrative delivery. When objects are first picked up, the object will 'lock' to the player's hand until finished. At other times, the object will play the cue until it is dropped. Picking the object up again will restart the track.

The Pre-Room:

Black void. Player activates trigger item, leading to next scene transition. Introductory audiolog plays. Player is transported to game scene.

The Rooms:

Each room will be structured as a real, lived-in space, something indicative of the Curator's personality and history. For the alpha ver, the room will contain around 6 key items and 12 flavor items.

The Timeline:

The events of the game will occur on September 12, 2004. That's an arbitrary date that may change later, but I think it's important to establish a timeline in order to get dates in order.

The Curators:

THE PROFESSOR. Real Name: Elizabeth Park. Age 64 on disappearance. Born

November 15th, 1940. Physicist turned professor later in life. Academic approach, as far as things go

THE LIBRARIAN: Hazel Dolores Washington. Older than Elizabeth. Paranormal researcher, focused on magic rituals and whatnot. Bookstore owner.

THE NEOPHYTE: the youngest of the trio, probably in mid-to-late 20s on disappearance.

Notes:

The monsters are being threatened by climate change and are cognizant of the fact that it is corporatism and unfeeling megastructures. the key message to come out of the game is that climate change itself is the enemy.

Aidan: You can only kill a lobster. It will never die.

Tegan: The Oregon coast isn't for you, it's for the ocean.

Monster notes:

Sea spiders, spider squids, long things to fit in shallower but longer waters

Sea creatures in places where they are usually not

Sea creatures flying through the air as if it's water

Lake Chelan: long but narrow. Something long and narrow could live there

Questions for the inevitable return:

How does the setting & story of this game reinforce the theme of "Pacific Northwest Gothic"?

By that, more specifically, I mean that PNW Gothic, like Southern Gothic, should expose and exaggerate the horrors that already exist. The monstrous undercurrents become realized.

What is the role of Marx, and the beasts in general, in this grand(er) narrative?

Are the beasts on the side of humans? Themselves? Somewhere in the middle?

Something else entirely?

What, or who, is threatening earth? How are they doing it?

Appendix H: OLP Build Final Pitch Document

Aidan Grealish, *CURIO*

PROJECT DESCRIPTION

CURIO is an exploration of objects that are left behind.

Two weeks ago, three persons vanished into thin air. Each missing person was a member of the North American Society of Preservationists, a small but tightly connected group of small museum curators scattered across the United States. The disappearances occurred all, improbably as it may be, simultaneously. Each member of the North American Society of Preservationists meticulously organized their belongings. It's the only link we have to figure out what happened to them.

CURIO is an episodically-structured VR experience that asks the player to figure out what happened to the missing Preservationists. Each episode features a Curator and their office- a meticulously curated record of their life's work and the work of the Society. These offices are filled with objects and documents that will allow the player to piece together the mission of the Society, learn about each Curator, and eventually discover why and how the Curators disappeared.

Our first episode focuses on Dr. Elizabeth Park, an experienced Curator and physicist from Tacoma, Washington. Born a week before the Tacoma Narrows Bridge Collapse, she was fascinated with the mysteries of the Puget Sound and the creatures that she knew lived beneath the bridge. She was recruited to the Society after she began documenting her several supernatural experiences, beginning with her childhood fascination with the Tacoma Narrows and continuing through her time on an oceanic research vessel, investigating several gravitational anomalies on the coast.

The player explores Dr. Park's office where they sort through her belongings and discover why she suddenly disappeared with her fellow Curators. These rooms are not just shelves and dusty objects; as the player explores and learns about the absent owner, the environment changes to reflect newfound knowledge. The player becomes fully and immersively integrated into the story of the Society itself. The most recent visitor becomes part of the narrative that the Society hoped to preserve through these collections.

As a new team of creators, we are interested in developing and telling stories that showcase the people and the environment of the Pacific Northwest. It is a priority for us, a group of artists with diverse backgrounds, to reflect our own diversity and create

characters that we can relate to- and as such our characters, such as Dr. Elizabeth Park, are inspired by our lives and histories.

Dr. Park in particular is inspired by the real-life experiences of our Creative Director's mixed-race Korean-American family and of her immigrant ancestors. The narrative design of *CURIO* is heavily informed by the experiences of Pacific Northwest immigrant and minority populations and the need to preserve marginalized histories within the region. Further principal characters introduced in later episodes will continue to draw on this theme, highlighting the diverse experiences of other underrepresented voices.

CURIO is strongly inspired by Pacific Northwest Gothic and magical realism. Our VR game will address themes of identity, history, myth, and community. We draw from Pacific Northwest folklore and urban legends to tell a story about monsters and mystery, but most importantly, people and the things they leave behind.

DESIGN AND STRUCTURE

CURIO will be an episodic experience. We are envisioning a three-act structure, consisting of three 20-40 minute episodes (depending on a player's *curiosity* and speed at traversal). This design structure has a number of advantages, not the least of which being that it's an agile design process that builds on technology as we introduce it to the project: development on a single room can be compartmentalized and, eventually, shipped as a piece of standalone episodic content.

Each episode will focus on a single 'Curator' and their life's findings, set in a room-scale VR environment. The VR space will be a reflection of each Curator, with decor and objects designed to convey each person's history. Most objects will be fully interactable, with certain key items triggering audio logs conveying major story beats. "Flavor" items may trigger much shorter audio logs or include world and character details. Ultimately, the act of exploration and interaction with these objects will affect the environment through visuals and sound (e.g. non-diegetic effects like the ocean or birds, and environmental changes like foliage, color, or fauna).

All the rooms will build on the previous (in both a player experience sense and a development sense) and rooms subsequent to the first can be built faster on the technology developed in previous rooms. Additionally, a smaller VR space means that more time can be allotted to detailing the environment, creating a more rich and immersive gameplay experience.

We're heavily influenced by the recent trend of story-focused game design in mainstream titles, such as those of Cardboard Computer, Fullbright (*Gone Home*, *Tacoma*), and Campo Santo (*Firewatch*). We emphatically believe that VR is a strong arena for this style of storytelling, and that current offerings on the market do not offer this sort of experience.

PROJECT WEBSITE

<http://aidangrealish.com/curio>

TEAM VISION

We are a new development team with diverse and flexible skillsets that allow us to work quickly and efficiently together with minimal friction. Within our core six-person team, we have an extensive amount of individual and collaborative game development experience, focusing on story-driven content. Our team culture concentrates on producing interesting and immersive narrative adventures within the VR ecosystem and we believe that an emphasis on narrative-focused VR experiences will help bring an equally diverse audience to VR. In addition, it is part of our core values to build a diverse team: we are proud that our Creative Director is a queer, female developer of color and that the entire team features a majority of queer members, gender diverse members, and members of color.

PROJECT TIMELINE

Stage 1: Concept Development (COMPLETE)

- Worldbuilding
- Character Design
- Narrative Design

Stage 2: Demo Development (COMPLETE)

- Vertical Slice of Episode 1
 - Reduced number of key objects/audio logs
 - Technical VR integration/mechanical interaction
 - Condensed story
 - Demo VO (will hire professional actor for final episode)
 - Basic effects/transitions (due to time constraints, will heavily focus on environmental changes/special effects for final episode build)
 - Focus on gamefeel and emotional storytelling to highlight team strengths and experience with narrative-based games
- Oculus Launch Pad Pitch

Stage 3: Episode 1 Development (November 2017- Early 2018)

- Focus on special effects
- Additional 3D assets/environments
- Expanded story and audio logs
- Polish and QA test mechanical aspects of game
- Write Episode 2 script and audio logs
- Promote to publications/social media

- Build *CURIO*/studio web presence
- Release early 2018

Stage 4: Episode 2 Development (Early 2018 - Summer 2018)

- Continue developing novel effects for continued VR immersion/wonder
- Create 3D assets/environments
- Record Character 2 (Hazel Washington) VO
- Expanded worldbuilding/narrative
- Begin pitching to conferences/showcases
- Polish, bug testing, QA
- Release Fall 2018

Stage 3: Additional Episodes, Promotion

- Ideally, if funds allow, produce Episode 3 for demo during Fall convention season
- Continue to promote *CURIO* at dev/game events and through web presence
- Consider alternate methods of distribution (after Oculus exclusivity period has ended)

Oculus Forum Dev Blog

1. https://forums.oculus.com/developer/discussion/comment/530307#Comment_530307
2. https://forums.oculus.com/developer/discussion/comment/531924#Comment_531924
3. https://forums.oculus.com/developer/discussion/comment/533376#Comment_533376
4. https://forums.oculus.com/developer/discussion/comment/536293#Comment_536293
5. https://forums.oculus.com/developer/discussion/comment/539617#Comment_539617
6. No Submission
7. https://forums.oculus.com/developer/discussion/comment/546135#Comment_546135
8. https://forums.oculus.com/developer/discussion/comment/548640#Comment_548640
9. https://forums.oculus.com/developer/discussion/comment/550765#Comment_550765
10. https://forums.oculus.com/developer/discussion/comment/552902#Comment_552902
11. https://forums.oculus.com/developer/discussion/comment/554413#Comment_554413

Appendix I: GDC Build Demo Outline

Player begins the game in a void space. In front of them is the tape recorder, on a version of the Desk that is at about 30% opacity.

When the player picks up the tape recorder, it sticks to their hand and the intro monologue begins.

As the intro monologue is playing, around the player a forest is gradually revealed from the blackness (ideally through some sort of rendering that would allow the trees to be part of the scene the whole time and only revealed during the monologue). As the monologue reaches the 80% point, the title should fade up in large capital, white letters in front of the player.

Notes on intro scene: There should really only be like 5-10 trees modeled. The player is on the ground level of a forest (we'll need a ground texture, trees, and an exterior skybox that constitutes the rest of the "forest"). Via some rendering techniques, we should be able to simulate the forest "fading into view" via probably a sphere around the player's head gradually decreasing in opacity.

At this point, the opening theme should be playing as the intro scene fades out and fades into the game scene.

The game scene is a recreation of the Room, but with no room-scale so that players can reach everything on the Desk easily.

This constitutes the majority of the game scene, with the objects & ephemera hidden throughout the desk etc etc

On the final object being activated, the scene fades to the final scene after the monologue completes.

Notes for ending scene: Maybe touch up marx to make him look more... monstery? Eyes, tentacles, ridges, etc etc

Appendix J: GDC Demo Puzzle Outline

- Opening script alludes to **the location of Marx**
- On desk is sticky note with **phone number**
- **Phone number**
 - Has (clue 1) for **Top Left Drawer** in general inbox
 - Reveals **private mailbox**
- **Top of Desk**
 - Two coasters (left and right side)
 - these act as pressure plate locks for top left & right drawers, see below
 - **Mug With Expedition Logo** on right side coaster
 - **Picture of NASP People**
 - **Squidbeak model**
- **Center Drawer**
 - **90s GPS Tracker**
 - Various story detritus
 - no lock
- **Upper Left Drawer**
 - Left drawer of desk. Opens halfway, preventing full pull out
 - Right drawer, symmetrical to it, opens all the way
 - Drawer audibly clanks on half pullout
 - Two coasters, one mug on top of desk. Move mug to left side coaster to unlock drawer (pressure plate)
 - Inside drawer:
 - **Chunk of tacoma bridge** audiolog item (shrink this)
 - **Photo From Childhood**
 - on the back is "Elizabeth, 7 years old, 1947"
 - This is one clue for **mailbox code**
 - This is one clue for **birthdate**
 - **Key to Hutch**
- **Hutch**
 - **Binder From Expedition**
 - Has the name of the Steady Onward on front
 - **Steady Onward Missing Book** with missing **three character code** number
 - **Hutch Keypad**
 - when code is entered, swing open **lower safe shelf**
- **Steady Onward Puzzle Shelf**
 - Player needs **Steady Onward Missing Book** in the right spot
 - it reveals a three character code (glowing)
 - code opens the **Hutch Keypad**
- **Lower Left Safe Shelf**
 - **Sextant**
 - **Knitting Needles**
 - The end of the knitting needles should have a particular shape in them that slots into the peg in the **Upper Right Drawer** hole
- **Upper Right Drawer**

- **False Bottom**
 - Accessed by using knitting needles in hole
 - **Tacoma Narrows News Clipping** which shows date but not year
 - **Sketch of Marx**
- **Final Mailbox**
 - Code is 110740
 - Told the **number of digits** via the NASP phone line
 - Told the **year** via the family photo (conveys date of Liz' birth)
 - Told the **date** via the newspaper clipping in the upper right drawer false bottom combined with the fact that Liz was born EIGHT DAYS AFTER the event
 - Told the **importance** via an audiolog

Appendix K: OLP Build Final Feedback

Feedback Template: Oculus Launch Pad 2017

Name: Aidan Grealish

Project: *CURIO*

Diversity:

Diversity in *CURIO* is represented by environments you interact with, and which Curator's office you are exploring. Because of this, I would lean in on the objects having clear significance to the area in which they represent.

There is an opportunity to really showcase people indigenous to the areas/regions that represented in the office spaces, and not just the environment. For example, if it's the PNW, you could lean heavily on the many tribes of Native Americans that used to reside there.

Innovation:

Exploring the different offices aligns nicely with the power VR, since you are interacting with objects around you. The key will be how magical that experience can be made by changing the room, which also represents a lot of work.

The overall vision of the release of content seems very ambitious. Three 30-40 minutes experiences represent a lot of work for such a small team. I would focus on one of the areas for full production. As a reference, there have been only a handful to create this length in a short amount of time. Building these experiences for the long-term of this project will work. For the short term and prototype needed for submission, try to focus on the high concept area of work.

Technical:

I'm not sure this needs room scale in order to execute this project. You could confine the users to a smaller space, and focus on the items around them. For example, placing the user at a desk, with bookshelves to the sides, drawers in the desk, etc. This would be a way to mitigate the risk of there being too much content to produce. With room scale, you introduce a lot more content because you want to make sure there is enough to do.

Both the resource numbers and the salaries for the resources seem low. One, I think you'd need an environment artist to build out the environments. The 3D modeler would be focusing on the objects. Two, the developer (assuming engineer here) would need to be full time. Three, all of those salaries are very low. Maybe there are friends? If not, they'll need to be doubled. At least for everyone except for the producer and script writer.

Equipment – One PC for the whole team? You’ll need a good PC for all the developers. You’ll also want more than one Rift.

Budget:

None

Additional Notes:

1. There is a real opportunity to highlight the people and myths of the area the office represents.
2. I would focus on one environment, instead of three. Understanding the work related to one environment is going to be really important. Once you have a MVP (minimum viable product), you can really get an understanding of the work. The completed first one will get you a blueprint for the remaining experiences, which could be released later.
3. Resources seem low in number and salary.

Looking forward to the final work!

-----New Note: This probably has the most likelihood of success on our platform, but would need a lot of asset love and story guidance. Right now the player is just dropped into a space with no purpose, but with some more time in development this could turn into a reasonable hidden object game.

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