FOR WHAT WE ARE: AN INTERACTIVE EXPERIENCE WITH A

BIFURCATED PERSPECTIVE

An Undergraduate Research Scholars Thesis

by

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ABSTRACT

For What We Are: An Interactive Experience with a Bifurcated Perspective

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Despite its abstract nature, *Blind Vaysh*a was nominated for an Oscar, even when competing Disney short *Inner Workings*, produced on a much higher budget, was not (Victoria, 2017). *Blind Vaysha* told the story of a young girl, Vaysha, who saw the past in one eye, the future in the other, and therefore struggled to live in the present (Bertrand & Ushev, 2016). At multiple times throughout the short, the screen would be split between these two views, each 'eye' portraying its own perception of Vaysha's reality. Perhaps it was the novelty of seeing two worlds at once, but perhaps it was also the sensation of being placed in a unique perspective different from that of our own, that made this short so successful.

Another piece of media that bifurcates the screen in a similar way is Google Play Music's Through the Dark, an interactive visual piece of a song by the same name (n.d.). It tells the story of the songwriter's son undergoing leukemia treatment, showing a clear distinction between a light and dark perception of the story that can be manipulated by the viewer (Stewart 2016). Unlike *Blind Vaysha*, this case provided a sense of agency to the viewer, to the extent that one could control what they saw, but not influence the story or results in any way. According to

Lebowitz and Klug (2011), the power to "change events and explore different possible outcomes" causes the bond between the player and the character to strengthen.

Taking those words into consideration, perhaps this concept of a bifurcated perspective could be pushed further into the realm of interactivity. This of course, urges the question: when provided with the ability to interact with the story itself, does a bifurcated perspective engage the viewer, or confuse them as they attempt to navigate the screen? Just as Lebowitz and Klug suggested, this study predicts that by introducing the power of choice to the player when presented with a bifurcated perspective, the bond between the player and character will strengthen, and engage the player further in this new kind of experience.

This project is the development and creation of an interactive story using a method where the user's screen is bifurcated into two related but differing perspectives of the same environment. If successful, Ushev's concept of splitting the screen into two different perspectives of the same world will be used to achieve a new kind of experience that contributes to the field of interactive media. Storytelling is constantly evolving as technology does, and it is always important to find new ways to draw in one's audience and continue innovating new techniques.

The study design consists of three parts: two tests during the development of the experience, followed by the creation of a final experience. At each stage of testing, participants will be asked to play through the experience(s), before answering a brief questionnaire intended to measure their engagement with the experience. The first two tests would feature two versions of the experience each, with the initial test exploring two methods of bifurcating the screen, and the second test's versions implementing further refinements of whichever method proved more

successful in the initial test. Results from the first two tests would influence the experience's overall design. This would result in the development of a complete, web-published experience.

In the story used for the experience in this research, the main character, Avery, sees the world as it is in one eye, and the truth behind people in the other. The title *For What We Are* acts as a play on the phrase 'seeing people for who they really are'. These will be web-based experiences, made with the use of three.js, a library for WebGL graphics. WebGL was also used in Google Play Music's Through the Dark and makes for an easily accessible experience that will be easy to implement into this research. For the sake of the tests, these experiences will each consist of the same first 'day' of what will be the final published story, which spans over seven story days.

ACKNOWLEDGEMENTS

CHAPTER I

INTRODUCTION

It is one thing to witness an animated short, to engage with a story from your seat in a cinema and allow it to play out before you. You never know what to expect, and are taken on an adventure unique to film, observing a world and its inhabitants as they play out on screen. On the other hand, interactivity renders the audience an active participant during events that unfold throughout a story. This isn't to say that watching film is a passive experience, but interactivity can provide many opportunities for an audience to influence and even direct a narrative's progression. This ability to make decisions throughout a story makes for a whole new kind of experience.

Whether all the freedoms of representation belonging to film can translate into the realm of interactivity is at the core of this research, and in this case, we explore how this applies to the methods of bifurcation shown in the animated short *Blind Vaysha*. While the animated short could freely toy with the user's perception, it can be argued that interactive experiences shouldn't always behave as sporadically, to establish with the viewer a consistent way in which the experience works. Therefore, when translating the visual concepts that made *Blind Vaysha* such an impactful short film into an interactive piece, it became important to establish a single visual language for the user to adapt to throughout their playing of the experience. In this research, and by extension, in the experience that this research seeks to develop, this language pertaining to *Blind Vaysha*'s unique perception is divided into two aspects: the method by which the screen is bifurcated, and an accompanying method by which the user can analyze this bifurcation of the screen.

CHAPTER II

DESIGN

First, we take a look at the design of this experience, as that in and of itself requires its own dedicated chapter. Since the purpose of this research is the creation of an experience implementing the bifurcated perspective, it is pertinent to delve into every phase of development, from the chosen digital platform of its execution, to the design elements that will be studied in testing.

Platform

The development of this project has taken it through multiple potential virtual platforms in search of the optimal medium for an interactive experience of this nature. Prototypes were initially made in Processing, a graphics-based programming language that can manipulate two different images of the same environment in a pixel-by-pixel manner producing a bifurcated effect. A more portable platform was then sought in LÖVE, an open-source two-dimensional game engine that could accomplish the same pixel-by-pixel manipulation of images through the combination of the programming languages Lua and Open GL Shading Language. However, the most effective platform turned out to be a three-dimensional graphics library for the web known as threejs.

The benefits to developing a web experience using the threejs library include greater accessibility, simpler development, and easier asset creation. Just as *Blind Vaysha* can be viewed through multiple video players online, this experience inspired by the film's bifurcated visuals could now be accessed in the same way. This allows for easier accessibility during testing, as the participants, all of whom will be college students, will presumably have prior experience

interacting with an internet browser. In addition, the development is simplified through the elimination of the need for pixel-by-pixel manipulation of the screen to generate the bifurcated effect. The threejs library allows for multiple cameras peering into multiple scenes to be displayed simultaneously on the screen. Through the careful aligning of two such displays; the bifurcation technique is achieved with fewer lines of code than in the previous media explored. This also meant that assets no longer needed to be created in a distorted manner to accommodate for the distortion caused by the previous method.

Core Elements

With the platform established, it only seems appropriate to look at the interactivities most relevant to the platform itself - ones that remain the same across all conditions of the study. In terms of input from the user, only a mouse and keyboard are needed, and we selected the former as the key method of interaction. This method of input was deeply considered on how to best integrate it into the experience's design as both a tool for the user and an indicator of progression throughout the narrative. The user interacts with the experience via the clicking of different elements on the screen. To navigate, the mouse is clicked and dragged across the browser window, causing the camera to rotate within the three-dimensional environment. In addition, the mouse contains various visual states to communicate to the user performable actions, a total of four: an indication of navigation speed, progression through dialogue, progression through the narrative's scenes, and a neutral state (Fig. 1).

Figure 1. The different states of the mouse.

Dialogue provides the opportunity for an interesting deviation from *Blind Vaysha*. While the short film provided spoken word, it was not feasible for a project of this scope to seek out actors and record the various characters' speech. Instead, a common visual paradigm from comic books was adapted: the use of speech bubbles. However, as this form of dialogue is as stated, visual in nature, we can explore visually bifurcating these as well, altering the text in the 'eye' that saw the truth behind people to further enhance a given character's mood, as seen in Figure 2. To progress through these bifurcated speech bubbles, users click on the character at their source, until the bubble vanishes from sight. However, this technique only applies to the characters Avery observes and interacts with. Avery's voice is a special case that will be touched on later.
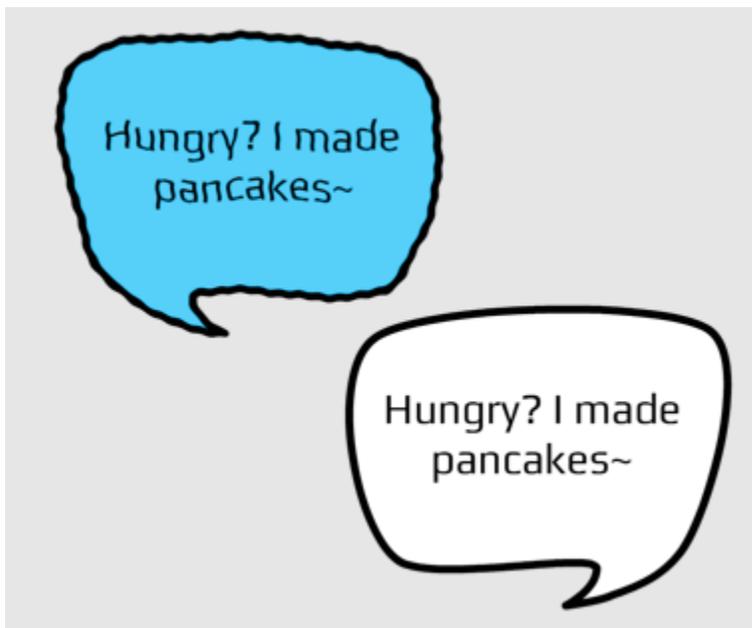

Figure 2. An example of two views of the same speech bubble portraying different moods.

As for traversing from scene to scene, whenever the next scene is ready for the user, a placard will appear that they must then locate and click to progress. When they progress, the screen will visually portray the 'eyes' closing and opening into the new scene. In addition, at all times throughout the experience, the user will witness a similar effect meant to mimic the natural

blinking of the eyes. Since this is a story told through the eyes, it only makes sense to use this to further engage the user by visually informing them that this new perception is indeed their perception.

Bifurcated Display Techniques

Throughout *Blind Vaysha*, two methods of bifurcated display can be found. That is to say, two ways that the perspective was divided into either side of the screen were shown in this short. The first and most prevalent method was discrete in nature- the first half of the screen was replicated in the second half and changed in nature to portray the difference between the eyes that saw the past and future (Fig. 3). For instance, when Vaysha viewed a boy her age as a young woman, in one eye she saw a child, and in the other she saw an old man. Contrariwise, the second method - far less prevalent than the first and only truly found in one scene - is continuous. The perspective flows from one side of the screen to the other, without the doubling of content (Fig. 4). Were that same scene to be portrayed using this method, we would have seen in the very center of the screen, where it splits, half of a young boy, and half of an old man, spliced together in the middle to show unity.

Figure 3. The Discrete Bifurcated Display, as seen in *For What We Are*.

Figure 4. The Continuous Bifurcated Display, as seen in *For What We Are*.

The reason we explored both methods in this research, as opposed to the more common discrete method, is for the sake of allowing the chance for both to state their case when implemented into an interactive paradigm. The hypothesis is that the continuous method will be more successful, because it flows more seamlessly across the screen and may be easier to navigate in an interactive experience, as opposed to discrete, where the navigation may become cluttered when the user is forced to perceive things twice whilst also deciding where the character is looking.

Bifurcation Analysis Techniques

The research could stop there, with the determining of which method of bifurcated display is more successful in the realm of interactivity, but it would be remiss not to explore further into how we can implement a bifurcated perspective into an interactive paradigm. Thus, two techniques of bifurcation analysis are proposed in this study. These are methods via which the user can further navigate this unique perspective; tools meant to assist in analyzing characters as they differ between either eye.

The first proposed tool is simple in nature: the closing of one eye versus the other. This tool is best attributed to the discrete bifurcated display, where the eyes repeat in such a way that

closing one or the other simplifies the screen for just a moment so that one side versus the other can be analyzed by itself for details. When applied to the continuous display, some adjustments are required. To avoid only seeing half of a character when one eye is closed, the view must be rotated slightly to provide the same effect. To provide balance in the experiment, a similar technique is implemented in the second proposed bifurcation analysis technique, which better suits the continuous method of bifurcated display.

For the second tool, this study proposes the opportunity for the user to click on and drag the line of bifurcation- the split going down the center of the screen, to quickly look between the content of either eye by pushing away the other. This method best suits the continuous display, as it enables the user to make either half the perspective complete by dragging the center back and forth. Just as the previous method had to be adjusted for the continuous display however, this one requires a balanced adjustment for the discrete bifurcated display. Since dragging the center line off to the side would provide an unbalanced composition and leave the eye an increase in screen volume with empty space, rotation is also needed to keep the subject of analysis center for the user.

Narrative Design

Lastly, the narrative design comes into play in that, as a new story distinctive to that of *Blind Vaysha*, certain artistic elements differ between this experience and that from which it draws inspiration. However, some similarities still exist. For instance, the art style of *For What We Are* is very simplistic in nature; it uses clear geometry in both environment and organic forms to portray the complex theme of trust (Fig. 5). Likewise, *Blind Vaysha* uses the same linocut technique all throughout, tying it together with clear shapes and forms like that of *For What We*

Are. In both cases, it can be argued that realism is foregone in favor of using stylistic elements to bluntly portray complex themes.
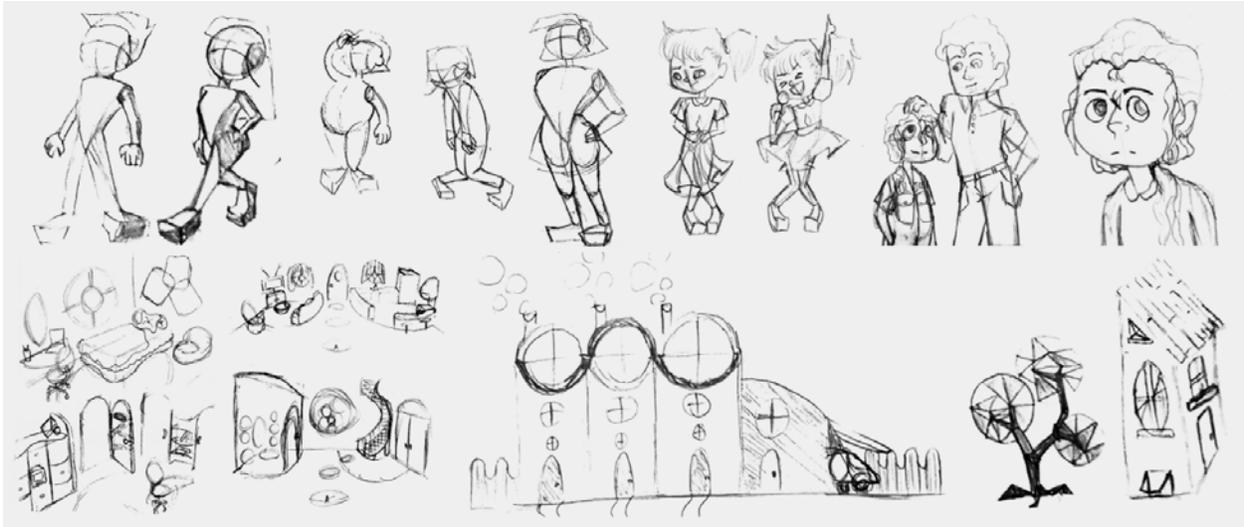

Figure 5. Original concept art from *For What We Are*.

Another element *For What We Are* experiments with as a narrative tool is the web-based technology known as Speech Synthesis Markup Language (SSML). Using SSML, coded text within an HTML document can be transformed into an artificially generated message using the synthetic voices that exist on most modern devices. Throughout the experience, the user will be able to occasionally hear Avery's thoughts and dialogue conveyed through the computer's speakers. Though it was only feasible to incorporate one voice for now, this opens the possibility of using technology previously only known for its assistive capabilities as a means of enhancing digital narratives online. It could be that one day, creators without access to a cast of actors for their stories can instead use code to create engaging digital performances. Though this research does not investigate this element of *For What We Are's* storytelling experience as an independent variable, it could promote future avenues for research into the use of SSML in digital narratives.

CHAPTER III

METHODS

Participants

Though initially sixteen participants were going to be recruited, in the end, after the

development of two versions using either one of the bifurcated display techniques, there was

only time to test with six individuals. These participants were all students recruited from Texas

A&M's College of Architecture and were assigned to either of the two conditions tested, three to

each. Assignments were alternated randomly between conditions 'AB' & 'BA', which indicated

the order of which the participants played the two available versions of the experience, 'A' being

the discrete method of bifurcated display, and 'B' referring to the continuous method. A number

was added to indicate whether the participant was the first, second, or third to be assigned to

their specific condition.

Materials

The experiences ran on a 17-inch laptop running Windows 10 Pro and were operated

using solely the keyboard and mouse in a Firefox web browser window. Audio was played

through the same laptop, and each test was set up on a flat surface with a chair for the participant

to sit upon as they played through the experiences.

Study Design

To gain feedback and results pertinent to comparing the two pairs of versions of the

experience, the study implemented a counter-balanced, within-subjects design. After playing the

first version of the experience, half of the participants would play the second version, and vice

versa. This way, the participants could convey which version in their condition was more

successful for them after playing through both in either of the pairs: the two bifurcated display methods or the two bifurcation analysis methods. In the case of the two bifurcation analysis methods, they would be applied to the more successful bifurcated display method. The independent variables were which two versions the participant experienced, and in what order. The dependent variables were immersion, character attachment, ability to control the experience, and enjoyment. Immersion and character attachment were adapted for the experience from pre-existing quantitative scales, while ability to control the experience and enjoyment were qualitative in nature and presented to the participant as free-response questions. A few additional free-response questions were included as well, inquiring about things such as involvement and ability to adapt to either version. There was one extraneous variable, which was prior experience with interactive stories.

Procedure

At the beginning of each participant's test, they were asked to fill out a brief survey indicating their experiences with interactive stories, in general terms and how much of said experience was spent using an internet browser. The participant would then be asked to play one version of the experience, after a brief tutorial. Upon either completion of the experience or after 10 minutes had passed (whichever came first), the participant was asked to fill out the initial section of a questionnaire, regarding the version they had just played. Then, the participant would play a second version of the experience under the same conditions, before filling out the rest of said questionnaire, which included a section regarding the second version, and one comparing both versions together. After this had been accomplished, participation in the study for the individual was over.

Initially, the procedure also included the recording of the time it took for the participant to complete each part of the experience, but the experience was never developed to the extent of being able to output the time spent interacting with it, thus no times were recorded.

CHAPTER IV

RESULTS

Prior Experience

  The results of the initial survey showed that each participant had very little experience with interactive storytelling. All six who participated engaged with interactive stories for 1.5 or fewer hours weekly, with two reporting 0 hours total (Fig. 6). Here, condition 'AB' indicates those who played the discrete bifurcated perspective before the continuous version, while 'BA' are those who played the two versions in the opposite order. On the survey they were requested to fill out, interactive stories were defined as a game or experience where you make decisions that influence the plot. An example would be visual novels or narrative-based games where your decisions influence the outcome. This was measured to account for different individual's abilities to adapt to interactive stories in general between participants.
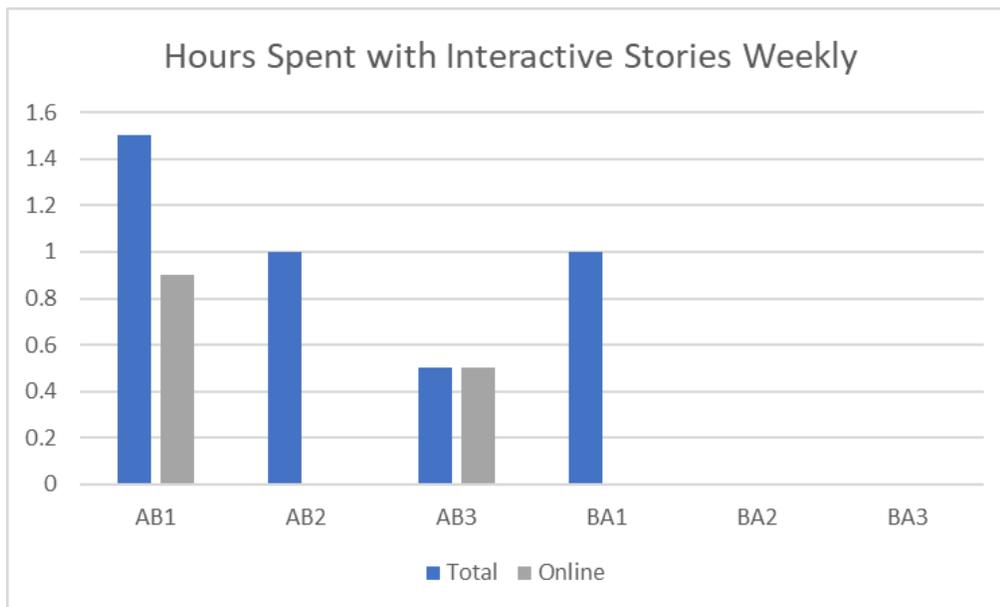

Figure 6. The number of hours each participant spends with interactive stories weekly.

Immersion

An immersion scale was used after the playing of each version, adapted from a study on measuring immersion in the context of computer game narratives (Qin, Rau, & Salvendy, 2009). Items from seven different components were averaged then added together to get a sense of each version's immersion compared across participants and conditions. The seven components included were: curiosity, comprehension, challenge and skill, empathy, concentration, control, and familiarity (Qin et al., 2009).

In the case of immersion, the trend seemed to be in five of the six participants that they at least marginally preferred the second version of the experience they played over the other, except for participant BA3, who strongly preferred B, the continuous method of bifurcated display (Fig. 7). Looking at this from an order-nonspecific standpoint, the continuous method of bifurcated display was more successful, albeit by very slim margins save for participant BA3 & AB3.
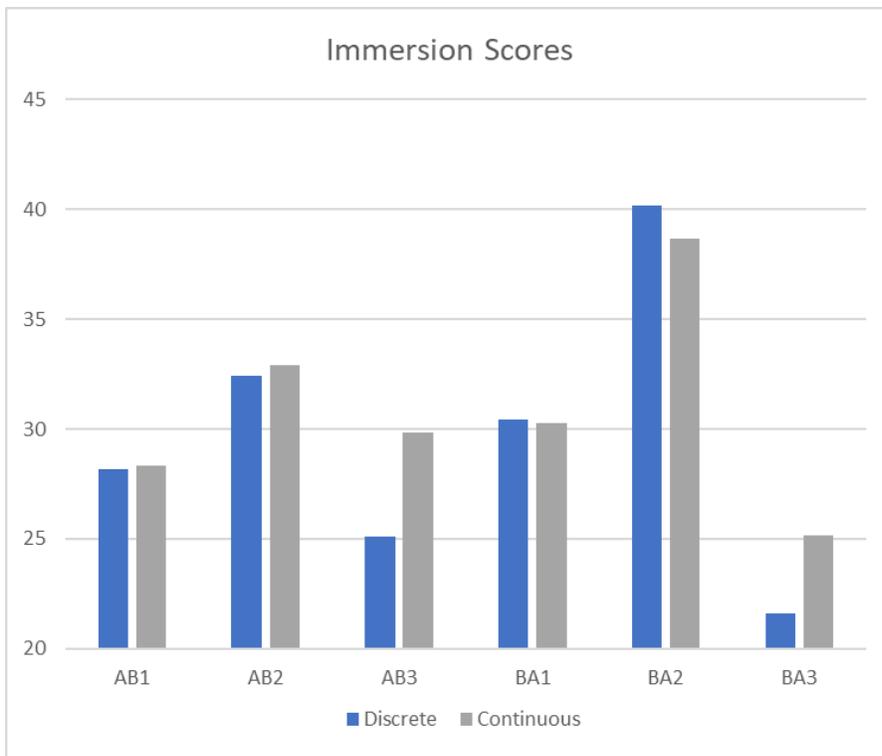

Figure 7. The final immersion scores for both versions each participant played.

Character Attachment

     A seventeen-item character attachment scale was used to measure the level of attachment each participant had with Avery, the character they played as after going through each version (Lewis, Weber, & Bowman 2008). It possessed a total of four factors: identification/friendship, suspension of disbelief (which was reverse coded), control, and responsibility. To determine the final character attachment scores, each factor was averaged and then summed together (accounting for suspension of disbelief as reverse coded). Here, we find that four of the six participants found the continuous method of bifurcated display to be the more optimal for feelings of attachment with Avery, by varying amounts (Fig. 8).
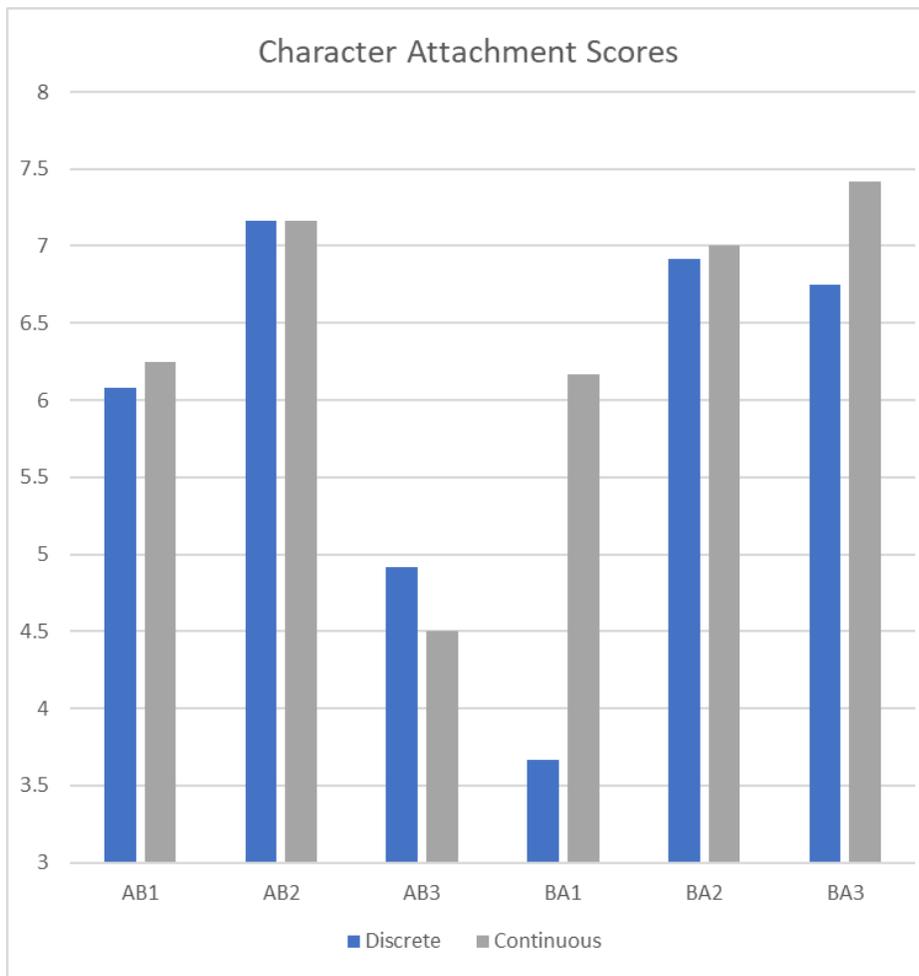

Figure 8. The final character attachment scores for both versions each participant played.

Qualitative Items

After playing through each version, the participant was given the following prompts: "How connected did you feel with the character you played (Avery)?", "Describe how involved you felt in the story", "Describe how well you were able to navigate the experience", and "How well were you able to adapt to the way the view was split into two separate perspectives? Did you have any notable difficulties?"

Only a few participants expressed that they felt a connection to Avery, with one mentioning that the SSML made them sound robotic, thus making it difficult to imagine them as a real person. Opinions on the matter did not tend to change between versions of the experience, save for one participant mentioning that when it was easier to explore the environment in the second version they experienced, they felt more connected to Avery, which will be addressed later.

When it came to the question regarding involvement, results were similarly mixed. Most had similar things to say across both versions played, reporting low levels of involvement overall outside of a couple of participants.

Most were able to navigate the experience well, though a couple disliked the speed at which the rotation of the camera would occur to look around the environment, reporting that "sometimes it would lag," and that certain elements were "a bit slow for my liking." One participant reported that clicking on things appeared unresponsive at times, while another noticed that clicking through the scene would occasionally occur during attempts to navigate. This will also be mentioned and reflected upon later.

When asked how well the participant was able to adapt, no participant reported having trouble adapting. Although, one participant didn't seem satisfied with the continuous method,

reporting that they adapted "Reasonably well. However, due to the placement of the characters & speech bubbles, I have to scroll from side to side to see both versions. It makes me wonder if I could somehow align the camera to see both at once." In this case, they seemed to wish for an ability capable of the discrete bifurcated display whilst playing the continuous version, which happened to be this participant's second experience played. Or perhaps, by using the verb 'align', this participant was looking for an active way to quickly look at either view of their environment, such as in the still untested bifurcation analysis techniques.

In addition to the above items that were posed to the participant after interacting with either version in regard to said version alone, two additional questions were asked at the end of each test requesting that the participant compare the two versions he or she played and yielded far more interesting results.

CHAPTER V

DISCUSSION

Technical Difficulties and Time Restraints

It is hard to pull any thoroughly sound conclusions from these results, due to the performances of the two versions during testing. At certain points throughout the study, the experience's audio would not play, the screen would go black and require refreshing, character sprites would not appear, the experience would hop to the next scene at the wrong time, it would lag, or some combination of these problems would occur. This lack of consistency between each participant's interaction with the versions appear to have heavily impacted their perceptions of either version they played, thus explaining many of the observations made by participants in the free-response prompts. With the immersion and character attachment questionnaires, it is not feasible to derive what these impacts might've been from the data alone.

Additionally, due to restraints in time, a fully cohesive narrative was never developed and implemented into the final two versions. The participant woke up as a teenager named Avery, went downstairs to briefly greet their mother, before going to a town square to observe four additional characters through the bifurcated display presented to them. Dialogue was more minimal than originally intended, and many participants mentioned they couldn't quite understand what was going on, one stating "I just felt like I woke up, then was told to go interact with people."

Qualitative Insights

However, while it is difficult to pick apart what was or was not influenced by technical errors in the quantitative data, some insight can still be derived from the qualitative data in the

third section of the questionnaire, after both versions had been played. It is here that the

participants had the opportunity to voice their opinions and experiences with the two versions in

precise ways, acknowledging the presence of bugs while also denoting their preferences on the

bifurcated displays alone. Luckily, a couple of participants did this rather well, and we can begin

to gain a sense which bifurcated display technique was more successful.

These two questions that compose the third section of the questionnaire yielded the most

meaningful feedback: "Which version of the experience did you find easier to control, the first or

the second?" and "Which version of the experience did you find more enjoyable?" As previously

mentioned, most preferred the second experience they played, but when you filter out the reasons

why, a few distinct observations come from the participants, by categorizing their comments into

three groups: display-specific, technical errors, and adaptation over time.

Display-specific comments can be found in Table 1, where two participants elaborate on

what aspects of the displays were or weren't successful. Between these two responses, a clear

preference for the continuous method can be found for its apparent ease of use, participant AB2

mentioning that the discrete method felt more suitable for a VR application, which similarly

renders a scene twice to duplicate it between either eye and produce the illusion of depth.

Table 1. Display-Specific Comments from the Questionnaire.

Participant	Which Question	Display-Specific
AB1	Control	The unified perspective in the second version (continuous) made navigating the space easier. However, it also made it difficult to keep track of both sides of Avery's perspective.
AB2	Control	…. Also, there was less discrepancy between the split views in the 2nd version (continuous); it was a straight cut between the 2 views. The 1st

		version (discrete) felt like 2 views that should be presented to each eye separately, like in a VR headset.

Also present were many comments that were tied to causes that lie outside of what this research intended to measure, because of the design of the study and the technical difficulties experienced. For instance, some participants gave preference to one version over the other due to the inconsistent number of technical bugs encountered, as shown in Table 2. These comments are valid, as they express a concern with the development of the experience that could not be resolved within the time allotted and due to my current level of expertise as a web developer. Loading and rendering so many three-dimensional and two-dimensional assets into a web browser can cause performance issues for those still new to learning the ways to prevent them from happening. As such, in all three of the comments in which technical errors were addressed, the second version was preferred, regardless of condition. This is because in the set-up of each test, the second version had a longer time to load than the first, thus giving the appearance that the second version the participant played performed better.

Table 2. Technical Error Comments from the Questionnaire.

Participant	Which Question	Technical Error(s)
AB2	Control	I found the 2nd version (continuous) easier to control because it was faster/smoother/less "laggy".
AB2	Enjoyment	I found the 2nd version (continuous) more enjoyable because it was easier and faster to control, as stated in my previous response.
BA1	Control	The second (discrete). I didn't notice any changes in navigation only in performance.

Last, but far from least, many participants noted that the experience was easier for them to navigate in the second version they played, as the controls were the same between both versions and they had become more familiar with them after the first. All but one instance in Table 3 shows this, the exception being participant AB3 noting that they enjoyed the first version they played more, because of the sense of discovery that came with playing the experience for the first time. This still however falls under the category of adaptation over time, even though in this case the adaptation took away something for the user's experience in the second version.

Table 3. Adaptation Over Time Comments from the Questionnaire.

Participant	Which Question	Adaptation Over Time
AB3	Control	The second (continuous), but only because I was more familiar with what to do.
AB3	Enjoyment	I think the first (discrete), because there was more of a sense of discovery.
BA2	Control	I found the second version (discrete) of the experience easier to control. I believe this is due to my familiarity with the navigation after experiencing it the first time. I applied the thought of not double-clicking to my second run-through, so as not to skip anything by accident. This made me take my time to explore more as well.
BA2	Enjoyment	I'd say I found the second version more enjoyable (discrete), mainly because I was able to finally grasp hold to the concept of better navigating with the mouse. This in turn, helped me to take my time analyzing my surroundings a lot more than I did with the first version (continuous). I also think that the interaction with the mother helped out with that as well. I stopped to pay more attention to the compares and contrasts of her conversation.

Comments that were not included were those that gave indeterminate answers such as "Both were the same" (participant BA3) or "No strong feelings either way" (participant AB1).

Final Thoughts

Though in the quantitative and qualitative analyses there seems to be a slight preference for the continuous method of bifurcated display, the study ran into both technical and time-based issues that limited the ability to draw firm conclusions with the data collected.

One could also argue that the observations made by participants in the table consisting of comments addressing adaptation over time is a side effect of the study's within-subjects design. However, it is through the within-subjects design that allows the opportunity for participants to draw comparisons between either version and we achieve a sense of which method of bifurcated display is possibly more effective within an interactive paradigm.

CHAPTER VI

FUTURE WORK

This research attempts to contribute a new technique for consideration to the discipline of interactive storytelling, by adapting said technique from the field of animation. The unique, globally applicable aspect of this research is the ability of the bifurcated perspective to address deep, contemplative themes. We are all influenced by the entertainment we consume, and my hope is that it will encourage the manipulation of perspective in interactive experiences further so that we can become more comfortable placing ourselves in the shoes of people who experience the world differently from us. *Blind Vaysha* was a successful short on an international level for a reason. We empathize with a character more effectively when we see the world through their eyes, and I predict that novel approaches such as the bifurcated perspective plays with our curious natures to enhance our ability to do so.

Although this study struggled in producing solid results, it simply provides the opportunity to approach this subject again, with room to improve upon the research. Further in the future, more methods of analyzing the methods of bifurcated displays can also be explored, as well as perhaps more methods of bifurcated displays themselves, and even other innovative methods of manipulating visual perspectives. It is my intent to continue the story of *For What We Are* and to pursue more themes by placing the user in the shoes of even more characters with this and other unique methods of perspective. The opportunities for the manipulation of perspectives in interactive storytelling are limitless, and if they are limited, it is only by the bounds of our imagination.

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