

Digital Video Scenography:
Scenic Design for *Dead Man's Cell Phone*

by

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Abstract

Dead Man's Cell Phone by Sarah Ruhl was presented as part of the 2010/ 2011 University of British Columbia theatre season at the Telus Studio Theatre from January 20th to 29th, 2011. The show was directed by Chris McGregor and stage managed by Collette Brown. The design team included Steffi Lai (Costume), Wladimiro Woyno (Lighting), Nathan Shapiro (Sound) and myself (Set/ Projection). This report examines the creative journey of designing the set and projections for *Dead Man's Cell Phone* and the technical process that went into realizing the design and staging the production. Emphasis is placed on the use of digital video projection as the primary scenic element and alternative lighting strategy.

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Chapter One - Introduction

1.1 Introducing *Dead Man's Cell Phone*

In the age of advanced technologies and hyper acceleration, most of our daily lives are dependent upon machines and much of our culture is now technologically driven. It is becoming increasingly apparent that our society is losing the human touch as cursive letters are replaced by e-mails and the postal service becomes obsolete. *Dead Man's Cell Phone*, written in 2007 by Sarah Ruhl, is a modern drama, which explores the themes of human relationships, love, and death in the 21st century and the impact of digital technologies on how we communicate, as well as our society as a whole.

The story begins in a non-descript diner, where Jean, the eccentric protagonist, encounters Gordon while writing a thank-you letter. Annoyed by Gordon's continuous cell phone ring, Jean slowly makes her way over to him only to find that he is dead, although his cell phone lives on. Jean picks up the phone and becomes entangled within the relationships that Gordon failed to resolve in his lifetime, which begins a whirlwind of events. As Jean discovers more about Gordon's struggles in life, the failed relationships with his family and his unfinished underground affairs, she constructs a web of well-intentioned lies in an attempt to redeem Gordon's life for him, as a way of taking charge of her own life. She also finds love with Gordon's quirky brother, Dwight.

By incorporating multiple levels of reality in the play, Ruhl takes her protagonist through a series of events, which straddle Jean's physical reality and her own subconscious. In a surrealist writing style, Ruhl carefully constructs an intricate web of inter-relationships with imaginary events, while making specific realistic references to modern experiences and characters that reflect our 21st century society. This makes the story easy for today's audience to connect with. Throughout the story, Ruhl often introduces characters in a very dramatic way by setting the scene in a very specific but exaggerated physical environment, such as the introduction of Gordon's mother through

a rather distasteful speech at her son's funeral in a cathedral, or Jean's encounter with Gordon's mistress, a femme fatale assassin, at a film-noir café. Ruhl also puts an emphasis on the notion of transformation in the characters and their physical surroundings. Gordon is brought back to life in the middle of the play and reenacts his last day. As he fights his way through the bustling subway, he complains about his distasteful life and defends his successful business in underground organs trading. Ruhl then subtly teleports him back to the diner where he meets Jean and dies. Jean also meets Gordon in his afterlife in her own "hell", back at the diner where they first met, while Gordon shows Jean a "cell phone ballet" which takes place in the rainy streetscapes of Chicago where no one's voice is really heard except in the afterlife. There are many instances where these transformations transcend reality and characters are teleported to a metaphysical environment.

1.2 Conceptual Drivers and Design Intent

Ruhl's writing style and storytelling technique encourage a flexible scenic design that can be easily manipulated to emphasize the notion of transformation as the fantastical encounters and story unfold. The references to digital communications and the dilemma it causes in contemporary society inspire a design language that draws from the same influence. The writing suggests using digital media as a design motif to construct the surrealist environments that Ruhl describes with her writing. Instead of telling the story as a linear passage of time and events, Ruhl has written a story about an intricate web of inter-relationships, which revolve and grow as different characters travel through time and space. This was a particularly interesting design challenge, especially when the notion of transformation, of spaces in particular, is such a prominent element in the plot. These concepts were discussed in our first design meeting among director Chris McGregor and all the other designers on the production team. We believed that it was essential to strive for quick and smooth transitions between scenes and that all design aspects should integrate well to enhance the narrative. Chris introduced the use of a chorus ensemble for the cell phone ballet scene, as well as to facilitate scene changes. This was an exciting idea and provided for design

opportunities to explore the idea of developing each set transition as a scene that is part of the theatrical experience, rather than an interlude that hinders the rhythm of the performance. Since it was important to develop a set that encouraged fluid and theatrical transformation that would support and enhance the narrative and performance, I began to explore ways to design for a theatrical experience with visual and tactile elements that would alter the spatiality of the performance space without needing a physically fixed set.

1.3 Spatial Analysis: The Venue and The Audience

The venue of the production was also an influential factor in the conceptual design of the set. The performance was to be staged at the Telus Studio at the Chan Centre for the Performing Arts, a multi-purpose black box studio with a flexible seating system consisting of movable audience towers. These multi-storey towers can be re-arranged into various seating arrangements for different style of staging, such as an end-stage, a thrust, a semi or full arena. Three different seating options were explored and discussed with the director for this specific performance.

Figure 1.1: Seating Configuration Option 1 – The Semi-Arena

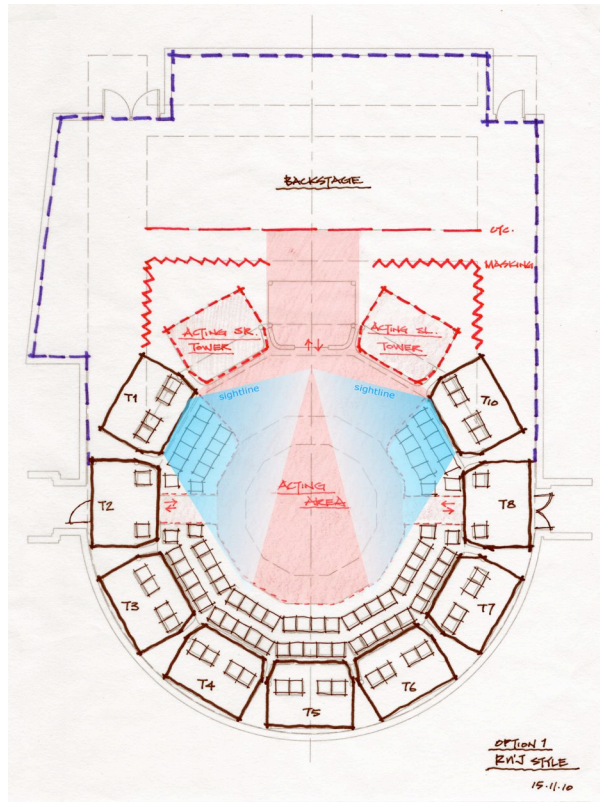


Figure 1.1: The semi-arena configuration with only nine towers in place appears to be a natural configuration and design choice as it offers a large upstage area with a prominent entrance and exit for performers, but it creates a deep upstage acting area and poor sightlines for the audience. It also does not offer enough seats to meet the minimum number required.

Figure 1.2: Seating Configuration Option 2 – The End-Stage Thrust

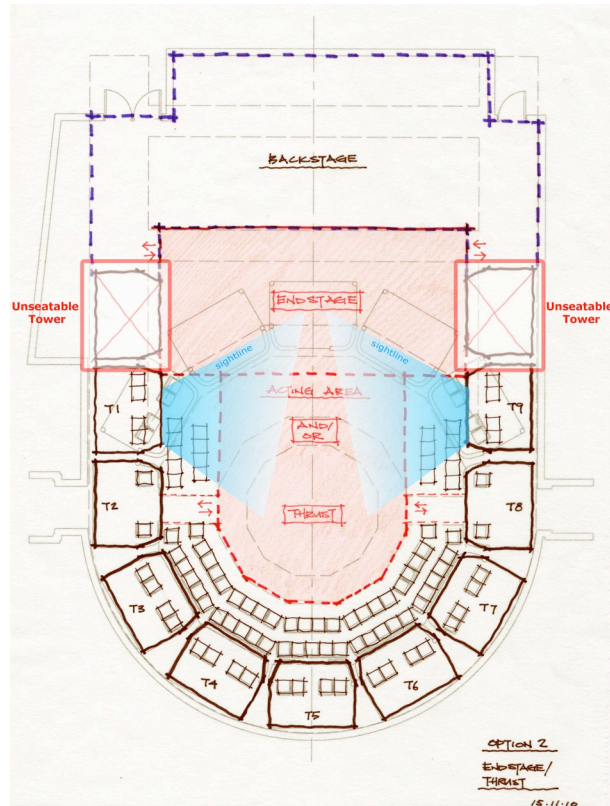


Figure 1.2: The end-stage thrust arrangement creates more problems than advantages. Not only is the main acting area deep and far upstage, the arrangement creates limited sightlines and poor acoustics. This option also does not provide the number of seats required.

Figure 1.3: Seating Configuration Option 3 – The Arena

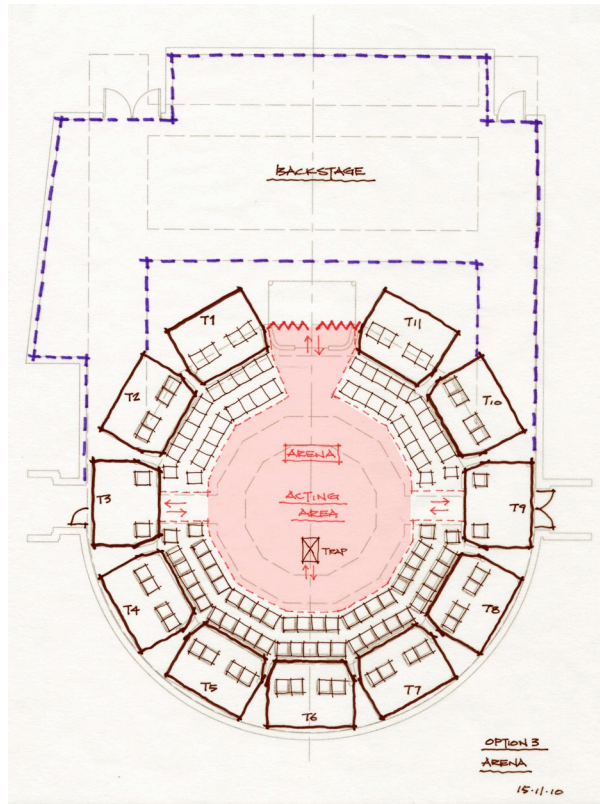


Figure 1.3: The arena configuration is what the original architectural design had intended. Making use of the existing architectural features, it allows for best sightlines and maximum number of seats. Removing the far upstage tower opens the performance area with a prominent stage entrance and exit while maintaining the intimacy of the space.

Despite Chris's initial worry about blocking in the round, the use of the arena configuration was a direct response to the existing architecture (See Appendix A) which provided many advantages to the production. We studied the three different configurations and decided that the arena configuration would not only aid the performers' vocal delivery in the space, but it also creates a more intimate setting for the scenes which are mostly two-handers. Staging in the round also creates a more welcoming and engaging environment for the audience.

The Telus Studio has quite a few flaws as a theatre in terms of practicality, such as the lack of overhead lighting positions; nonetheless, it is a very interesting piece of architecture with unique design potentials that set it apart from other black box or conventional proscenium style theatres. For example, the unique flexibility of the Telus Studio comes from the twelve movable towers that hold the audience seating, although six of them remain attached to each other to form a semi-arena of box style seating, from which there is no escape. The fact that there are three separate floors of seating in each tower creates an enormous sense of height within such a small space. This imposing sensation of enclosure is not only felt by the performers but also affects how the audience perceives the space.

Figure 1.4: The Seating Towers



Figure 1.4: The Telus Studio with overhead catwalks and seating towers

Most often the audience members seated on the towers sit at the edge of their seats and lean over the ledge in order to see the actions below on stage. If the unique architecture and spatial features of the theatre are appropriately utilized and appreciated, it can reward any production with a great theatrical experience. Rather than imposing a rigidly fixed set in the already limited space, I decided make use of the existing spatial qualities of the venue by designing on the stage floor using digital media projection and perspective imagery that would alter the audience's perception of the space throughout the performance. While embracing the stage floor that already existed as the central focal point of the space, it was also important to utilize the sensation of height created by the towers. It was essential to address the design of the space as a three dimensional volume, offering the performers an immersive virtual environment and the audience a theatrical experience unique to the Telus Studio and this particular performance.

Chapter Two - Design Process

2.1 DVS: Conceptual Overview

Figure 2.1: Immersive Virtual Environment



Figure 2.1: By using Digital Video Scenography, performers were immersed in a virtual scenic environment.

The spatial analysis led to an unconventional design approach, very much like the unique style of Ruhl's writing and the non-linear flow of *Dead Man's Cell Phone*, challenging the "fourth-wall-picture-frame" perception established in proscenium theatres. Also inspired by the theme of digital technology, the central design concept revolved around the idea of a virtual stage floor. Our initial concept was to use still projection on the floor as the primary scene setting while utilizing animated media with lighting and sound effects to facilitate fluid scene transition. This was achieved by combining the powers of computer generated graphics, video projection and live performance control technology – Digital Video Scenography (DVS). The use of various multimedia imagery and light from multiple video projectors sculpted and morphed the space into different locales as the story unfolded. As the visual focus of the space, the

stage floor was the primary design feature that established the acting area and contextualized the action in the play. The visual quality of the computer graphics projected also added to the overall cybernetic reference of the modern age. Performers were provided with real furniture and essential props, while it appeared that the characters they played were immersed in a virtual environment. As the projected imagery on the floor changed along with the actions and mood, the characters were teleported through time and space. This instantaneous and fluid transformation of the space between scenes and locations became as theatrical as the fantastical encounters and events within the play, as well as making the performance space just as performative as the performance itself. The set would only exist during the performance, making the design a temporal experience just as any live performance is.

2.2 Projection Design: The Virtual Stage Floor

Figure 2.2: The Stage Floor and the Audience's Perspective



Figure 2.2: This photo was taken during rehearsal from the second level of one of the audience towers. It demonstrates how the performance is seen from the audience's perspective and how the space is perceived.

Figure 2.3: The Spatial Volume

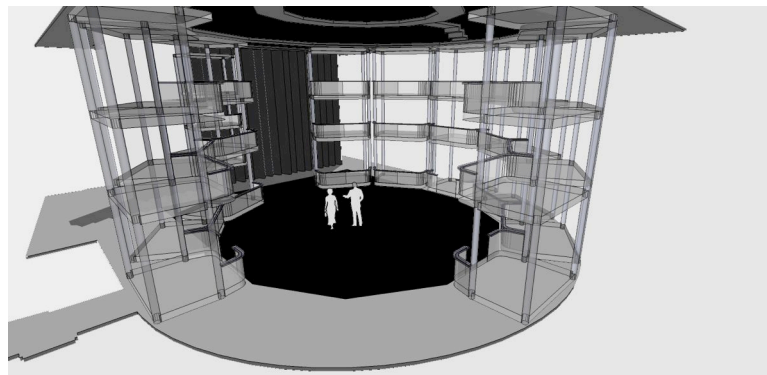


Figure 2.3: The spatial volume created by the arena seating arrangement

Figure 2.4: The Spatial Extension Beyond the Existing Architecture

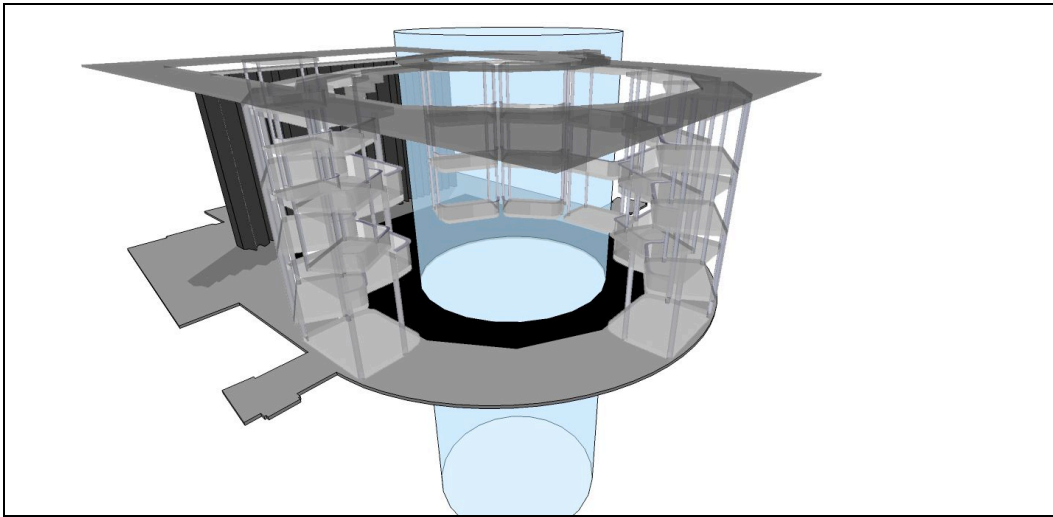


Figure 2.4: The hypothetical treatment of extending the spatial volume beyond the floor

The design process began with series of explorations in conceptualizing the virtual stage floor and the design of each individual scene. As a result of the arena configuration and the elevated seating, the majority of the audience in the towers would be watching the performance from a very unusual point of view and perspective. Inspired by the tunnel effect that the seating towers created in the arena arrangement, I began experimentations with perspective drawings as a design motif to support the surrealist dream-like world where the story takes place. The stage floor was to be painted grey as a neutral projection surface during the performance, which would all begin and end with a bare empty stage (see Appendix B and C). By treating the floor as a projection surface for perspective drawings, an illusory sense of depth could be achieved, enhancing the existing tunnel perspective. The floor, then, would appear to extend beyond its ground and became a spatial extension of the physical volume of the space. This technique was especially useful in creating optical illusions of three-dimensional objects on a two dimensional surface, blurring the boundary between the real and the virtual.

Figure 2.5: Early Experimentation with One-Point-Perspective Drawing Technique

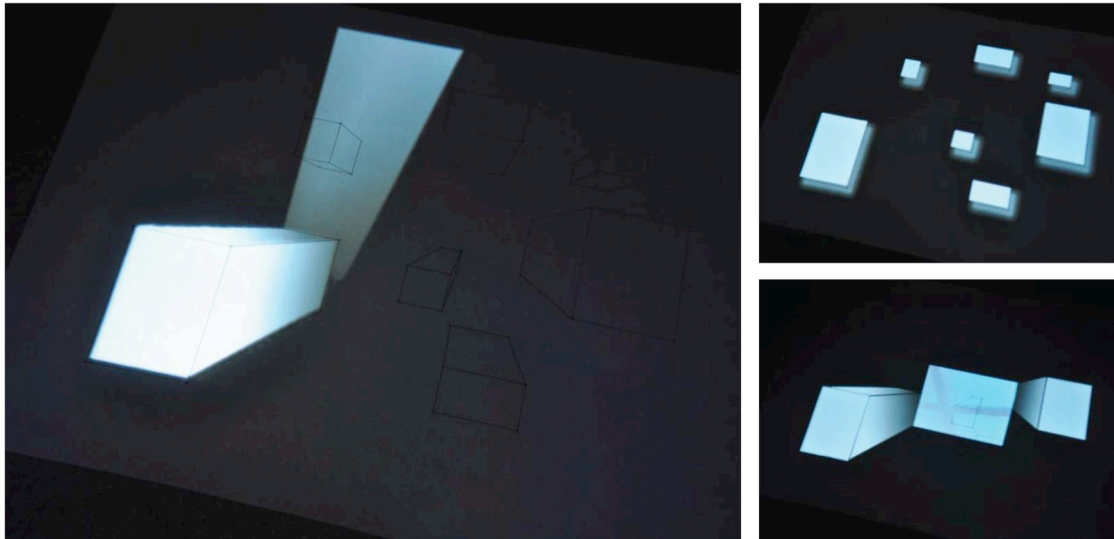


Figure 2.5: An early experimentation with one point perspective drawing rendered by light emitting from a video projector. Objects drawn in perspective vanishing into one point will appear to be three dimensional with light and shade.

The script provided both literal and abstract descriptions of the characters' immediate surroundings. The places in which they interacted with each other played a large role in the narrative. For example, Gordon's mother made a direct reference to the overwhelming sensation of height in the cathedral church at her son's funeral and drew parallels about how digital technology had created great psychological and emotional distance between people. Along with the seating towers, which already surrounded the acting area in an imposing gesture, the perspective drawing technique offered various virtual platforms at different levels in space. This design method was adopted for other scenes and repeated as a technique throughout the rest of the play as a consistent design motif (see Appendix D).

Figure 2.6: Preliminary Sketch – The Church Scene

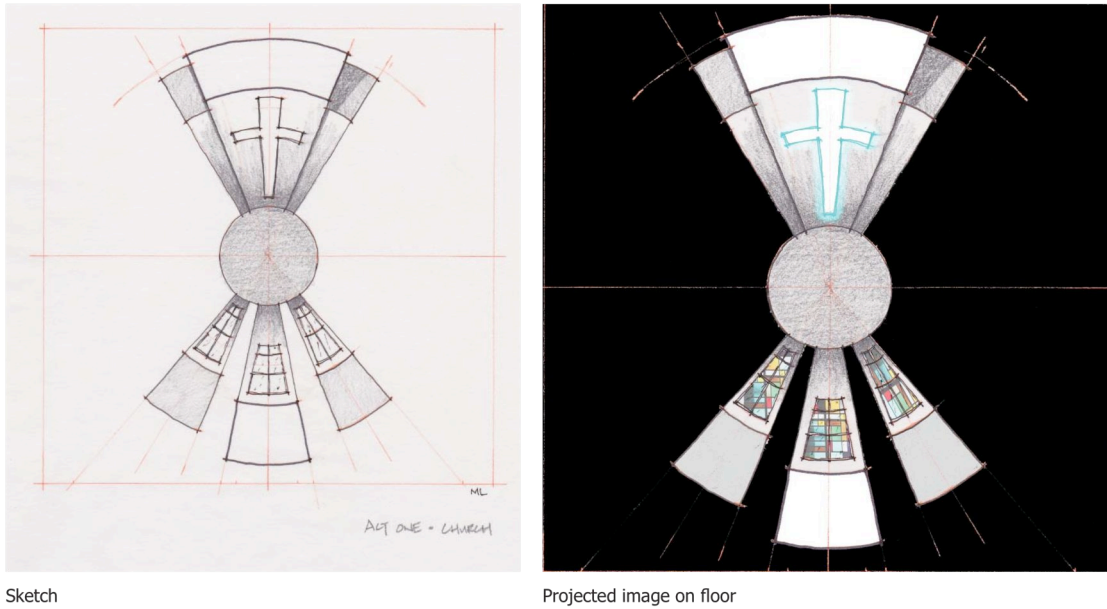


Figure 2.6: Design sketches to show the progression from a hand sketch to a digitally enhanced concept image as a projection on the floor

Figure 2.7: Rendering – The Church Scene

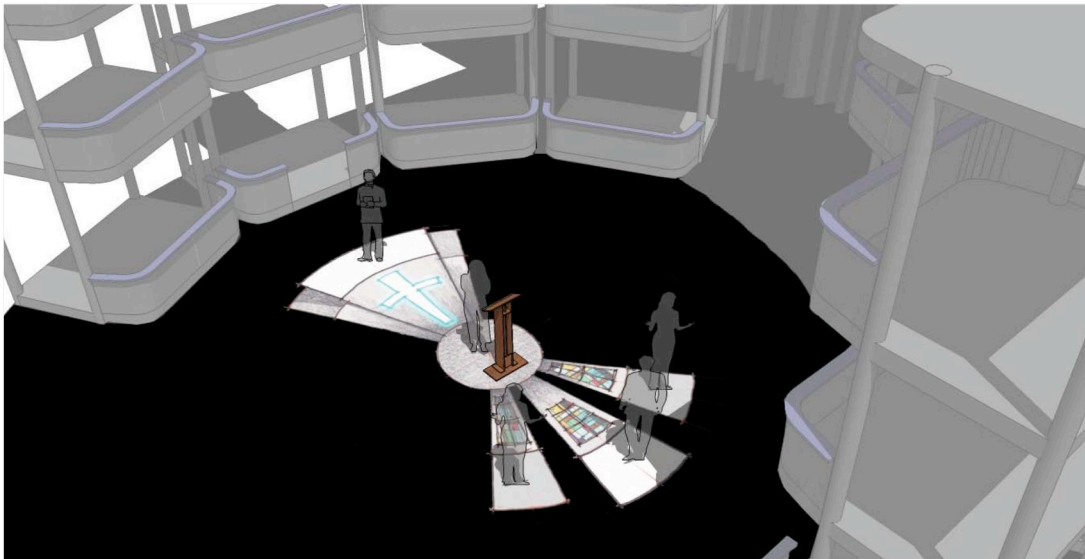


Figure 2.7: A computer rendering demonstrating the church scene from the audience tower at the third level

Figure 2.8: Preliminary Sketch – The Attic Scene

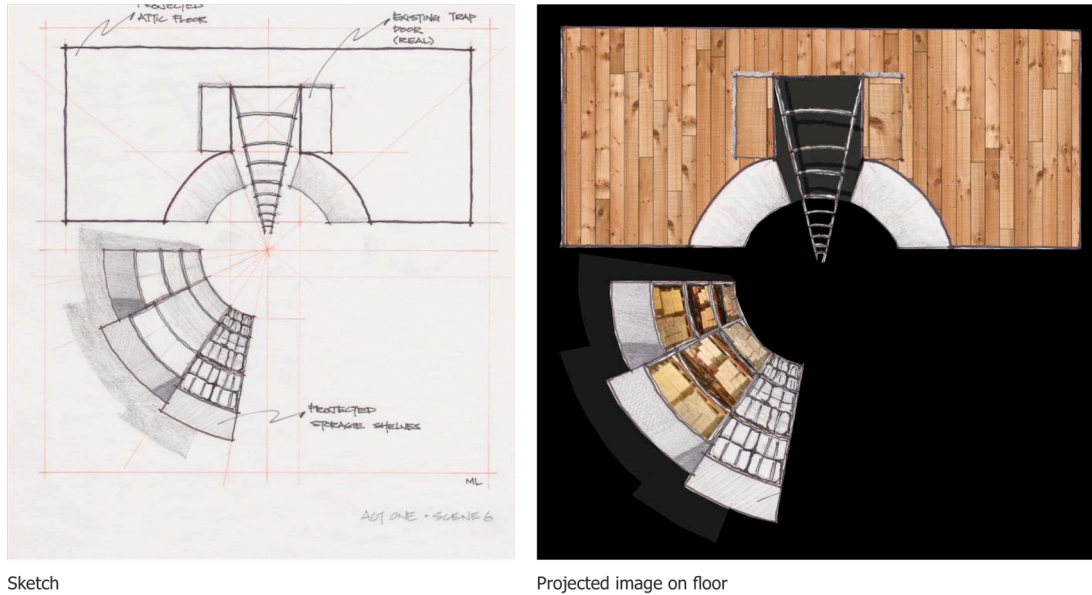


Figure 2.8: Design sketches to show the progression from a hand sketch to a digitally enhanced image as a projection on the floor

Figure 2.9: Rendering – The Attic Scene

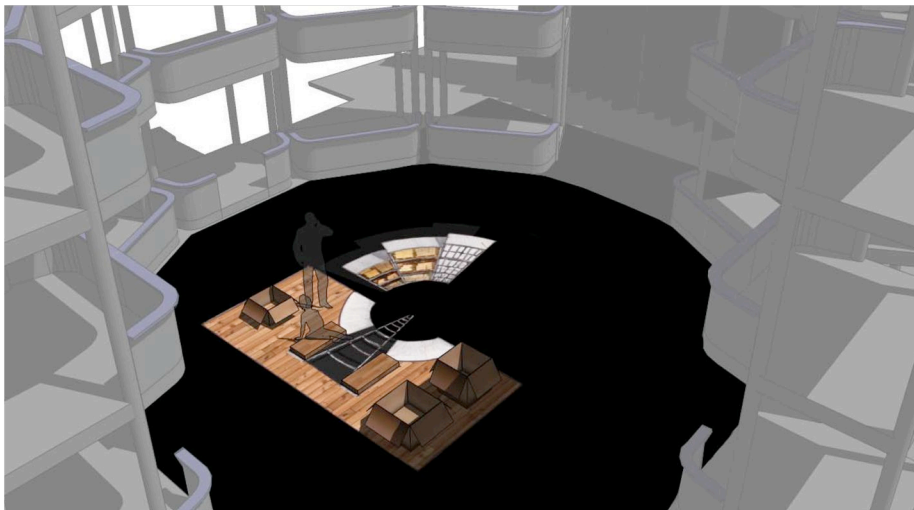


Figure 2.9: A computer rendering demonstrating the stationary attic scene from the audience tower at the third level

Figure 2.10: Production Photo – The Attic Scene

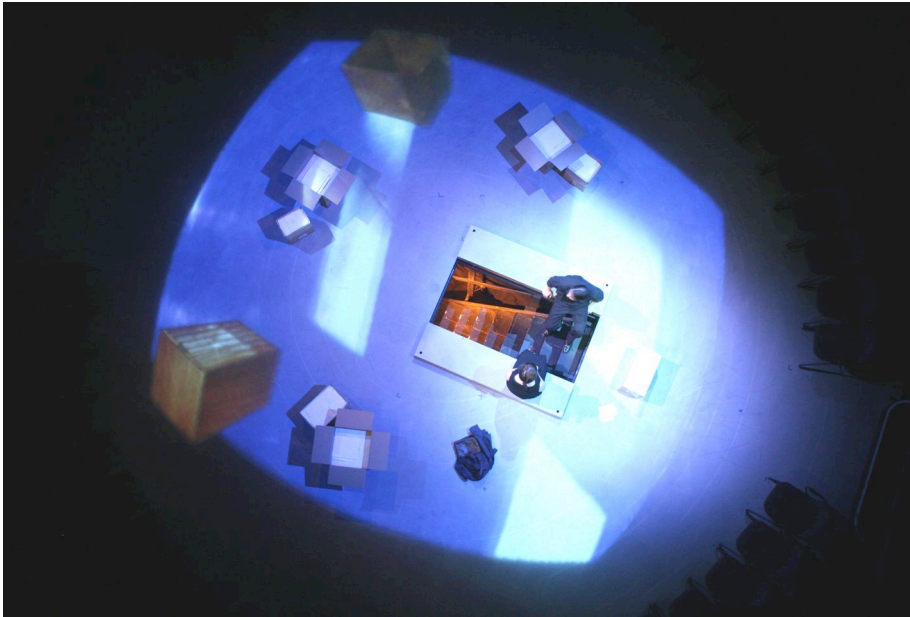


Figure 2.10: A production photo of the final projected digital image for the attic scene. Virtual boxes drawn in perspective were integrated into the scene along with real cardboard boxes. The ladder from the original sketch was replaced by a real staircase that was part of the venue's trap room. This change reinforced the physical dimension of the elevated attic while further blending the real and virtual worlds.

It became evident through the process of designing other scenes that smaller objects, such as props, drawn in five-point perspective, were more apparent as three-dimensional than the virtual walls and platforms in the same drawing. The discovery of this technique led to the mixing of real furniture and virtual props that helped contextualize the major scenes, as well as created a unique juxtaposition of real and virtual elements within the composition.

2.3 Set Design: Furniture Design and Other Scenic Elements

Although it was entirely possible to integrate virtual furniture into the various projection drawings and digitally enhance them for each scene, for obvious reasons there was a need to have real physical elements in the performance. Real scenic elements such as furniture and props were crucial for the performer's bodily

movement and interactions. They were also used as accents and character pieces throughout the play that supported and reinforced the design of each individual scenic location and moments in various scenes (see Appendix E).

Chris had been very supportive of the digital minimalism of the set, while requesting very specific items of furniture, which really added flavor to each scene. Since the play itself is rather timeless, Chris drew inspirations from very distinctive artistic styles that Rhul referenced in specific scenes. This led to a setting for each scene that expressed and reflected the personality of the individual character. For example, Jean's first encounter with Gordon took place in a 1960's non-descript diner; Gordon's mistress, a femme fatale assassin, intimidated Jean at a film-noir café; and Gordon's Disney-inspired evil mother hosted a dinner at her lavish mansion. The concept of integrating simple hand props with projections was especially successful in the cell phone ballet scene. As part of the choreography, each chorus member danced with a black umbrella and a cell phone. These umbrellas provided an extra layer of projection surface, which resulted in a more interesting visual composition with the choreography and floor projection.

Figure 2.11: Furniture Design Rendering – The Diner and The Lounge

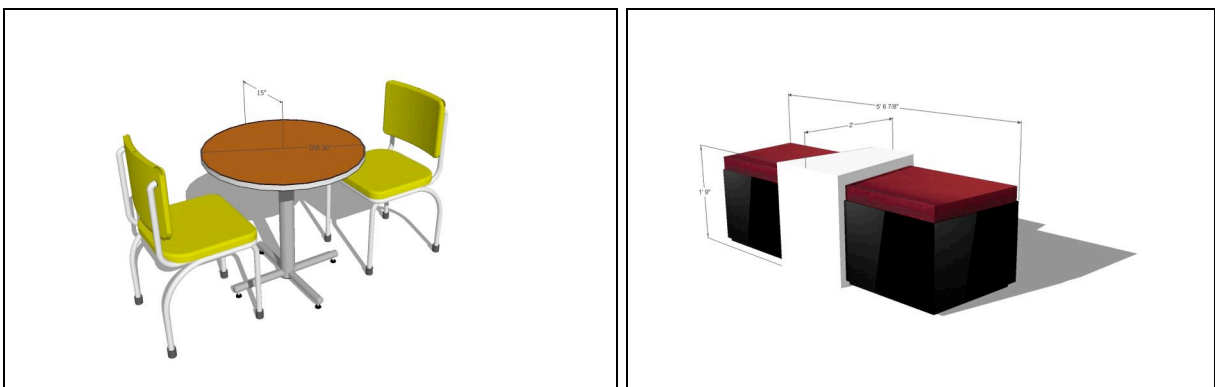


Figure 2.11: Example renderings of furniture construction in different scenes. The design and style of different furniture expressed the character of individual places.

Figure 2.12: Production Photos – The Diner Scene



Figure 2.12: Integration of furniture and props into the virtual floor established the scene and character of the diner.

Figure 2.13: Rendering – The Cell Phone Ballet Scene

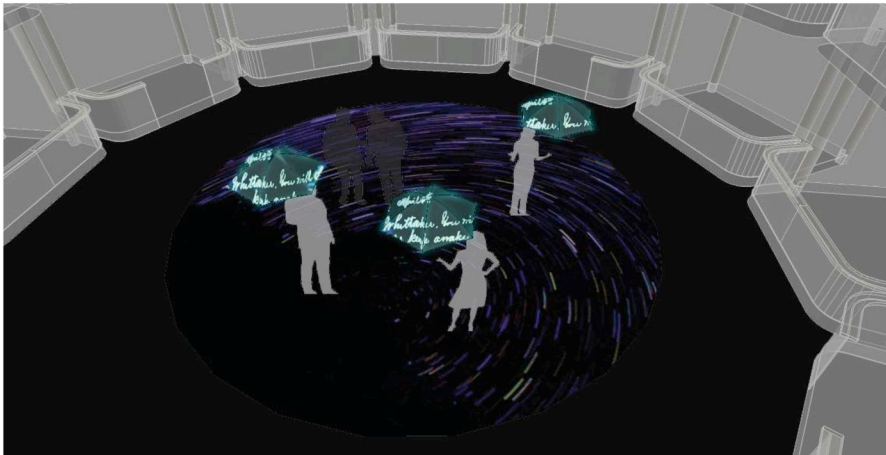


Figure 2.13: A computer rendering of the cell phone ballet scene, which was one of the more surreal and stylistic moments in the play. Umbrellas were to be used as hand props by the dancing chorus, as well as projection surfaces for stylized text from real phone conversations, which were played along with the music in the scene.

Figure 2.14: Production Photos – The Cell Phone Ballet Scene



Figure 2.14: The use of digital video scenography made it possible to change the scenic environment instantaneously accordingly to the actions and mood.

Chapter Three - Technical Execution

3.1 System Setup Overview

Four Panasonic digital video projectors were used in the production. One of the four served primarily for projections of the set while they were all used as lighting instruments illuminating the performance. The locations for these projectors were planned in ways similar to developing a lighting plot in traditional lighting design. The projectors' technical specifications, such as lens and beam angle, brightness and display resolution, were all factors in determining their locations. It was decided to designate and locate these projectors on the four cardinal points of the stage circle, for an evenly distributed beam of light and projection from all four opposing angles (see Appendix F).

Figure 3.1: Video Projection Coverage Area

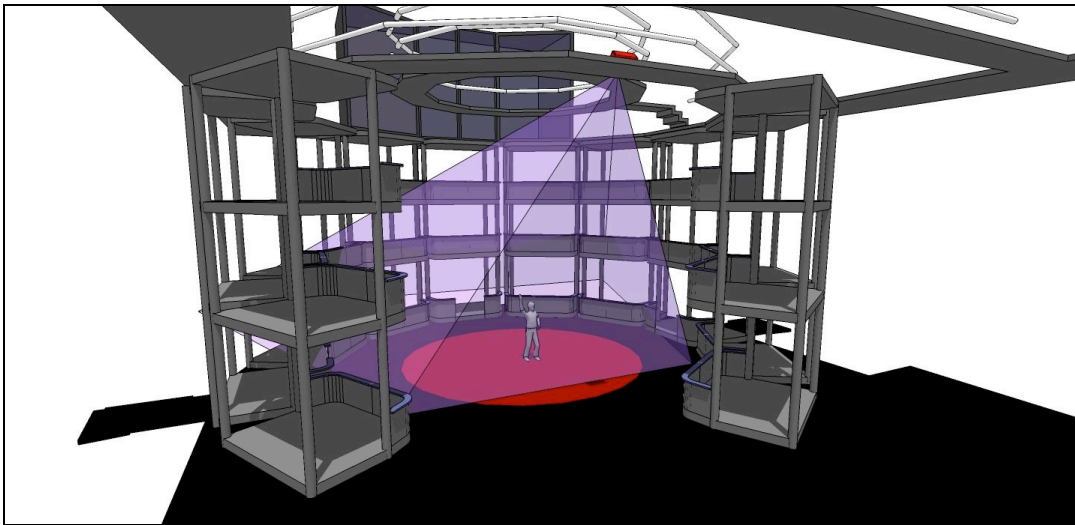


Figure 3.1: A graphical representation of the projection area at the designated location. The coverage area is calculated according to the projector's lens angle, the position and angle of the rigged projector and the throw distance.

Figure 3.2: Projection Beams from Opposing Angles

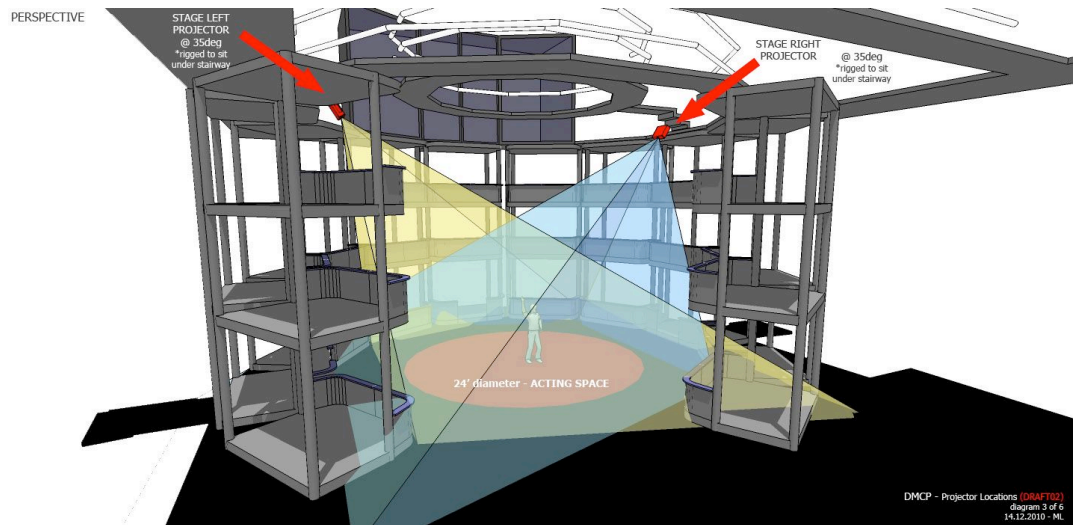


Figure 3.2: A graphical representation of the projection beams from two opposing projectors on opposite cardinal points.

All four projectors were connected to and controlled by one single computer with multiple video outputs via a multimedia control software named Isadora. Written especially for live events and multimedia performance, this particular software enabled a cue construction and playback suitable for theatre performance. While all media contents were prepared in other graphic design software and imported into Isadora, the program allowed for real-time manipulation and effects programming, which encouraged a more creative and experimental design process through instant visual results. This unique ability enabled the media content and projection design to be much more integrated into the rehearsal process.

3.2 Media Content and Cue Construction

In order for the projection to accurately define stage area and support the movement and actions of the performers in all the major scenes, a more precise method of perspective drafting was needed for the floor projections than the initial freehand drawings. Well-developed concept sketches were translated into precise computer drafting using AutoCAD, a computer-aided drafting program. Individual drafting was

done for each scene, which provided for a basic but accurately scaled outline for each location described in the play. These drawings were then photo-manipulated and digitally enhanced to create final renderings for projection. Since the projectors were rigged at different locations and projecting at various angles and throw distances, the final output images all had to be digitally distorted to compensate for the angle at which the projector was rigged. These manipulated images became the primary media content that were imported into Isadora although other abstract visuals and imagery were also used. A cue set was then constructed to control the media playback during each scene throughout the run of the performance. This set of cues was developed in ways similar to a lighting cue synopsis so that the projected imagery would change as the scene or mood of the story changed, in the same way as a lighting cue.

Figure 3.3: The Church Scene – Concept Sketch and Perspective Drafting

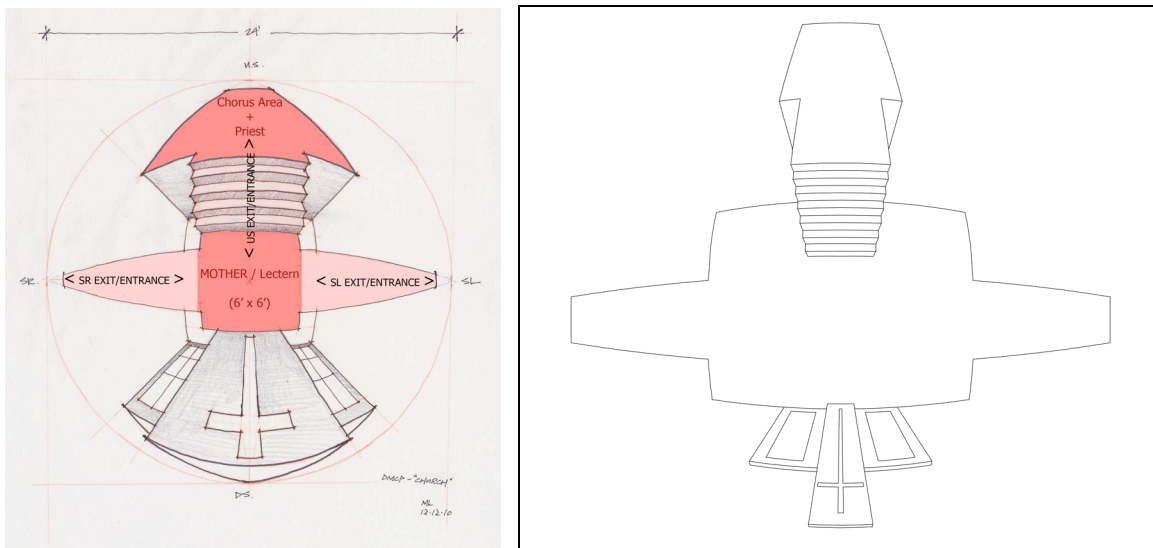


Figure 3.3: The key elements in the design were maintained while the spaces defined were translated into a more precise drawing to ensure accurate spatial relationship between the projection and the performers.

Figure 3.4: The Church Scene – Digitally Enhanced Image and Final Output

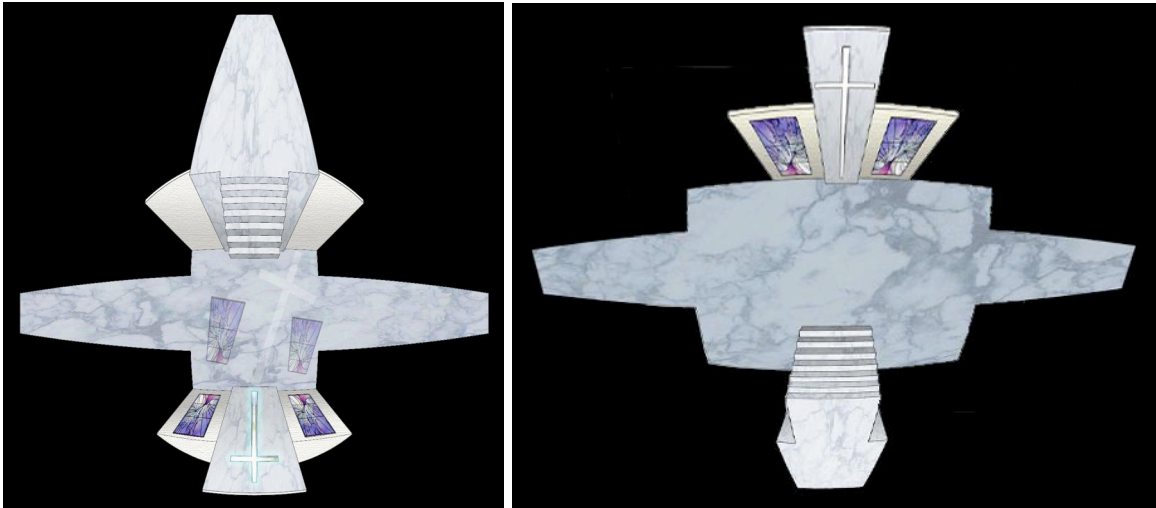


Figure 3.4: Comparison between the enhanced image (left) and the final manipulated output (right) used as projection. Each of the final design images had to be digitally distorted and corrected in perspective before importing into Isadora, in order to compensate for the angle at which the projector was rigged.

Figure 3.5: Production Photos – The Church Scene

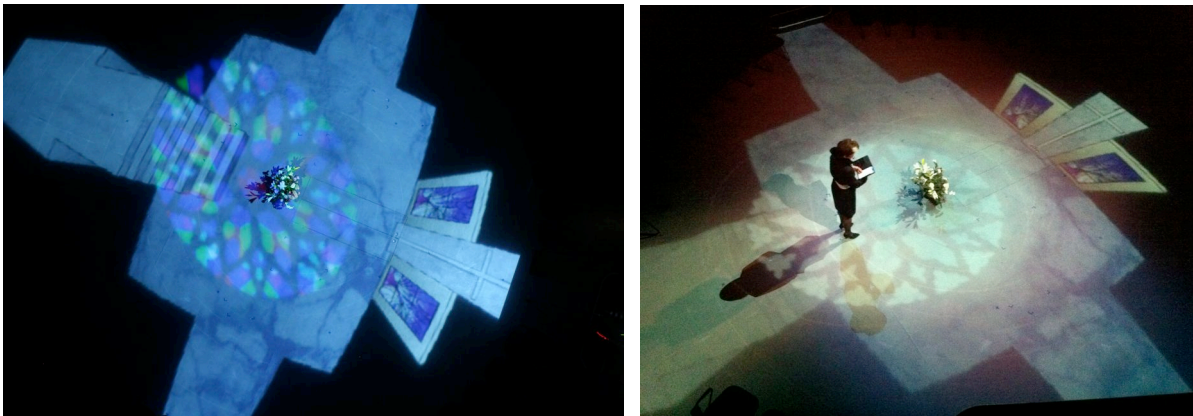


Figure 3.5: Production photos of the final projected digital image for the church scene.

Figure 3.6: Isadora Example Cue Screenshot – Live Media Control

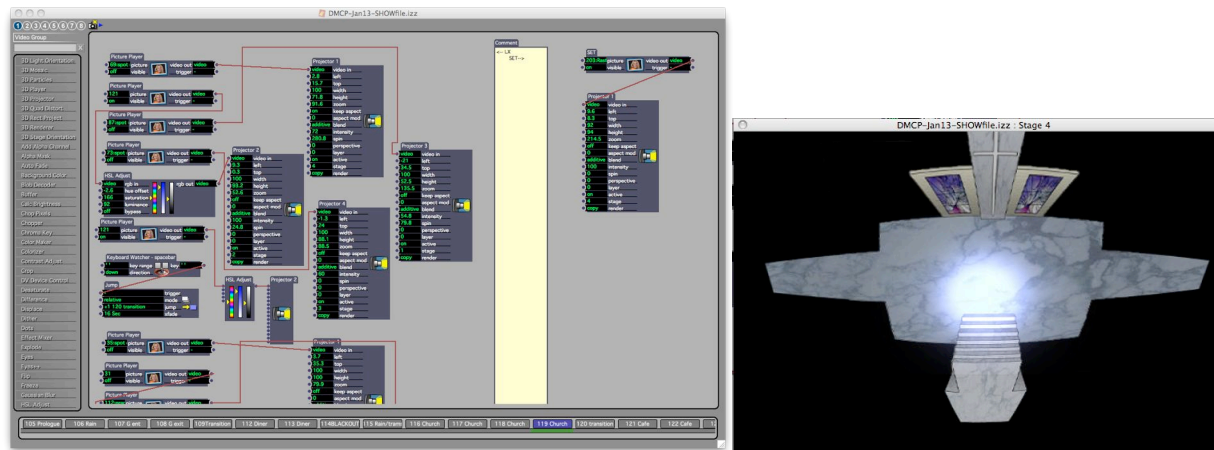


Figure 3.6: The Church Scene – An example cue from a timeline based programming sequence.

3.3 Effect Programming Example: *The Flying Houses Sequence*

Figure 3.7: *The Flying Houses Sequence* – Preliminary Rendering

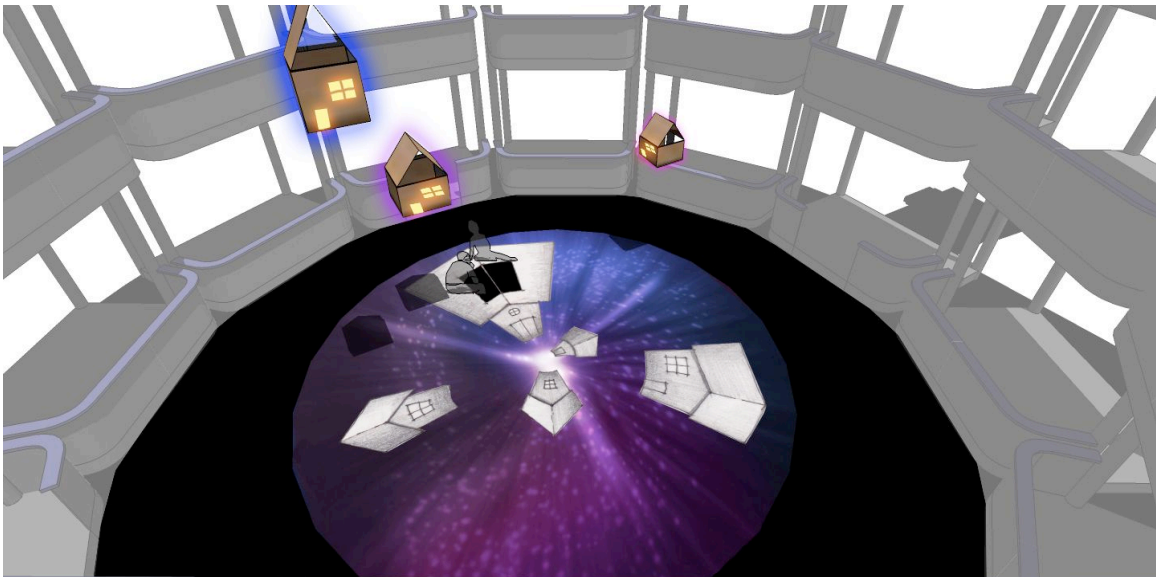


Figure 3.7: Initial concept rendering for *The Flying Houses* sequence at the end of act one.

Since the initial design meeting with Chris, *The Flying Houses* sequence at the end of Act One had always been a design priority as an emotional climax and visual highlight of the performance. The sequence was one of the most surreal and emotional moments in the play. The design and intention of the sequence was to transform the two lead characters' immediate physical surrounding and emotional atmosphere from the romantic scene in the attic into a theatrical moment. As Jean and Dwight shared their fantasy romance with the audience, Ruhl's minimal stage direction described a change in their environment by simply surrounding the couple with flying paper lanterns. Inspired by the stage direction, Chris and I were determined to "fly" scenic elements despite the lack of a flying line-set in the theatre. Our initial concept was to transform the existing cardboard boxes situated on the floor and light them from within as they flew out of the space, but cardboard boxes proved to be too over-powering and heavy visually. We decided to make a visual reference to the "paper houses" that Jean and Dwight make in the attic. The core concept of transformation came back into our discussion and I suggested the idea of pop-up paper houses. We were very excited about the element of surprise within the scene, as these "houses" would remain as flat pieces of ordinary paper in boxes and transform themselves into three-dimensional houses as a mobile in flight with music and light.

Ruhl ended this romantic scene with Gordon entering and about to speak as the stage snapped into black. This gesture marked the scene as a climatic moment in the play and left the audience in suspense through intermission. To take advantage of this cleverly staged moment and the intricate inter-relationships between the three characters, the timing of the individual projection cues along with the integration of various scenic elements was critical. In order to create a holistic visual composition with the actions of the performers and flying scenic elements, a storyboard was developed with Chris (see Appendix F). Utilizing the volume of the space in the venue, flying paper houses and gliding paper bits in the air were used in combination with animated projection cues to achieve the theatrical transformation. Simple media manipulation capability within Isadora allowed for real-time programming and instant visual results

during rehearsal with the performers, and a more artistically integrated projection design.

Figure 3.8: Paper Houses and In Flight

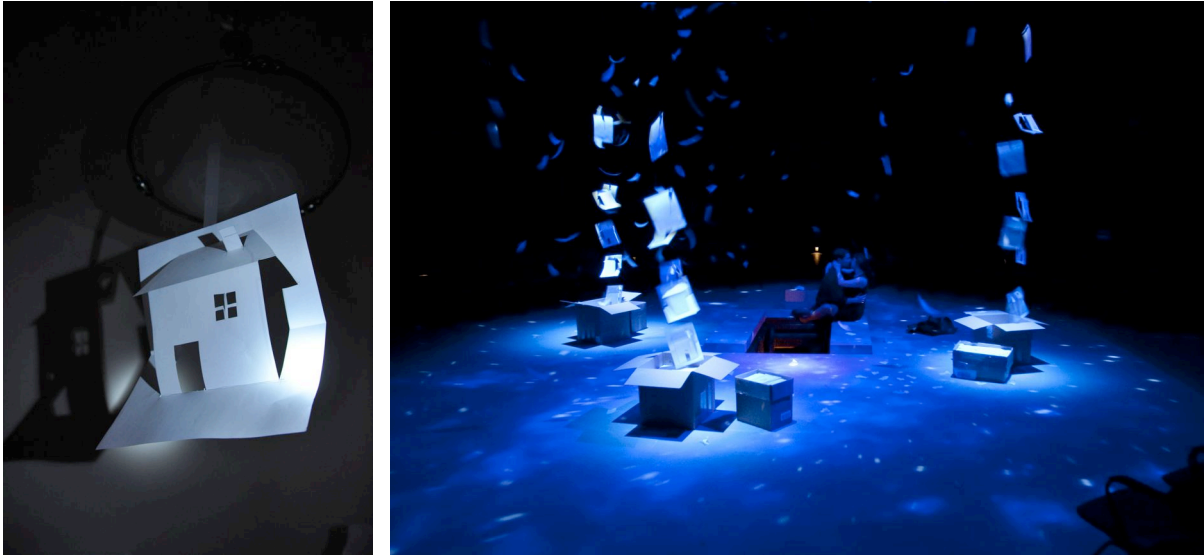


Figure 3.8: Design of the pop-up paper houses (left) and a production photo of the mobile in flight (right)

Figure 3.9: Production Photo – Long Exposure Photo of the Animated Projection

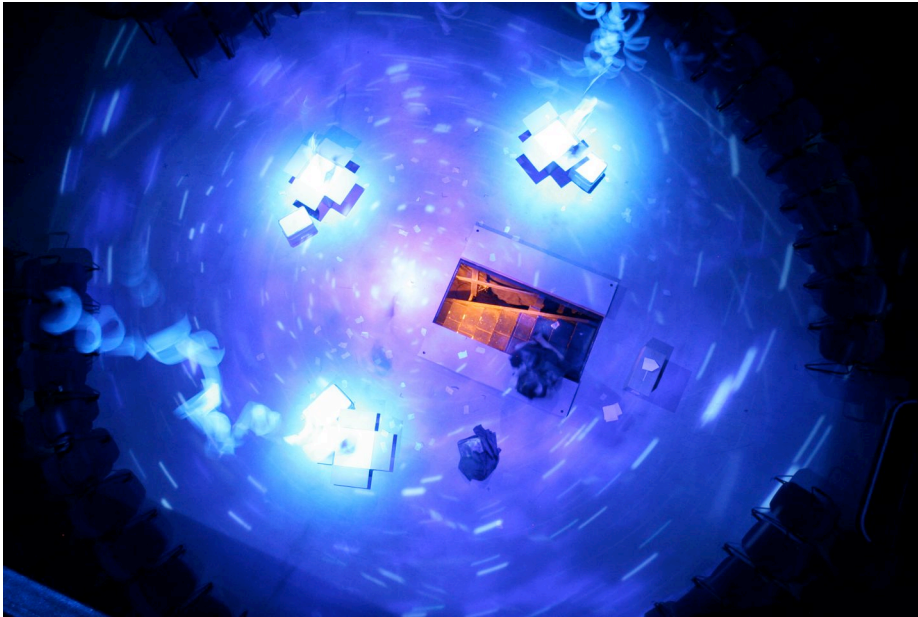


Figure 3.9: A long exposure production photo from top view of the animated projection cue during the flying houses flight sequence.

Figure 3.10: Production Photo – Gordon Walking In

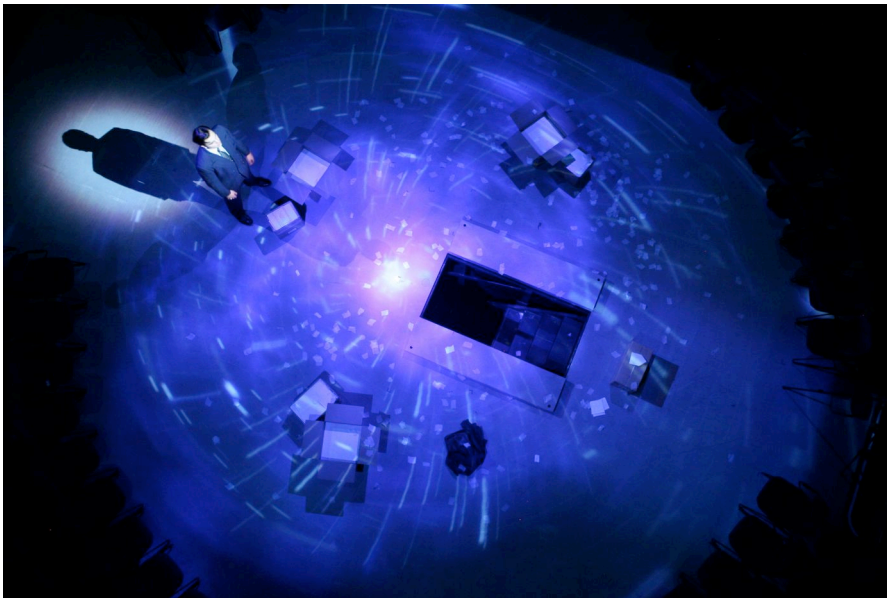


Figure 3.10: Gordon walking into the scene just before the end of sequence.

Chapter Four – DVS: Reflection and Evaluation

4.1 Technical Limitations and Specific Design Challenges

Since the Telus Studio was a relatively flexible and intimate performance space compared to other venues, it was believed to be a suitable space for the use of Digital Video Scenography. However, the majority of the technical limitations and design challenges lie within the technical equipment, as well as the process of developing the use of DVS as a design methodology.

Four Panasonic DLP (Digital Light Processing) mid-range consumer projectors were used in the production. Large scale projection from any DLP projector will appear to be pixilated. This phenomenon was particularly apparent when viewing the projection from a short distance in an intimate venue like the Telus Studio, and was problematic in the application of *Dead Man's Cell Phone*. As the performers were immersed in the projected environment, they became part of the projected surface and a grid-like effect was cast upon them. This was very distracting for both the performers and the audience. There exists no true solution to this technical problem but experiments were conducted to minimize the effect. A diffusion filter can be used to soften the beam of light on a conventional lighting fixture, and the same concept was applied to the projectors. Although these filters were able to minimize the pixel-grid, the solution functioned at the cost of image quality, both in sharpness and contrast. Different kinds of diffusion filters were tested and one was chosen based of its ability to maintain the balance between diffusion and image quality.

Figure 4.1: The Problematic Pixel Grid and The Diffusion Filter



Figure 4.1: A comparison between the pixel grid appearing on skin (left) and the application of a diffusion filter (right). It was also apparent in the background that there was a decrease of image quality in the projected content.

To compensate for the loss in color contrast and image intensity, it was possible to counteract the problem by using multiple projectors to project the same media content and reinforce the visual quality. Unfortunately, the process of manually and properly key-stoning each of the individual projected images to all four projectors proved to be too time consuming for it to be effective. A more flexible method of content creation and sophisticated system of live media control was necessary to overcome these problems.

Another major problem to this particular production was that three of the four projectors were in fact alternative lighting instruments. Since these projectors were all controlled by one computer, a single Isadora show file had to be developed and shared by both the lighting designer and myself, requiring the integration of lighting and projection cues. Although this was a conscious design decision between the designers

to ensure a coherent visual style and holistic scenography, it created many problems in logistics and raised intriguing questions in regards to the design boundaries between lighting and scenic projection design. In this particular production, priorities for the use of the projectors and the computer control were given to the lighting designer during technical rehearsals to ensure the performers were artistically sculpted and lit, while the majority of the scenic projection design took place in between rehearsals. Light was the shared medium between both design fields and acted as the primary artistic element in the overall production design concept, but it was understood that the priority of light in any live performance should be given to illuminating the performers.

4.2 Specific Advantages to *Dead Man's Cell Phone*

The use of digital video projection as the primary scenic element in *Dead Man's Cell Phone* proved to be successful in creating multimedia visuals for theatrical effects that suited the nature and style of the play. The use of DVS as a method of design was far more flexible than conventional set design and construction in terms of creative experimentations and artistic development. It was also influential in the style and aesthetics of the visuals. The immersive virtual environment that DVS created reflected the associated discussion about our technologically orientated society in the play. The cool and crisp quality of light emitted by the video projectors also enhanced the perception of the performers being immersed in a digital environment.

Furthermore, digital video projection allowed for instantaneous and visible transformation of the space along with the change in actions and mood. This concept was essential for this specific play not only as a theatrical feature, but also as a symbol for the characters' own transformation through different spaces and times. The effect was also used extensively as scene changes to create artistically articulated transitions that supported the actions of the chorus ensemble. This technique ensured fluid transitions throughout the play, as well as drawing connections through the very different worlds between characters and scenes.

4.3 General Artistic Advantages as a Design Method

In the conventional process of scenic design, set designers and directors must agree upon and commit to a design weeks in advance of rehearsal, where the built set is then imposed upon performers and lighting designers. The use of DVS not only allowed for a more creative design through instantaneous results, it also encouraged a more integrated and organic rehearsal and production process, knitting together the director, designers, and performers, resulting in a more holistic performance.

The use of DVS also offers the opportunity to integrate lighting and scenic design to achieve a coherent design language and theatrical spatial experience. Two separate designers sharing the same equipment to design for the same concept was logistically difficult in this particular production. However, the design methodology and philosophy would have functioned smoothly if either one of the designers were to take on the scenography in its entirety. It was proven to be possible to successfully illuminate performers while creating a theatrical setting by using DVS.

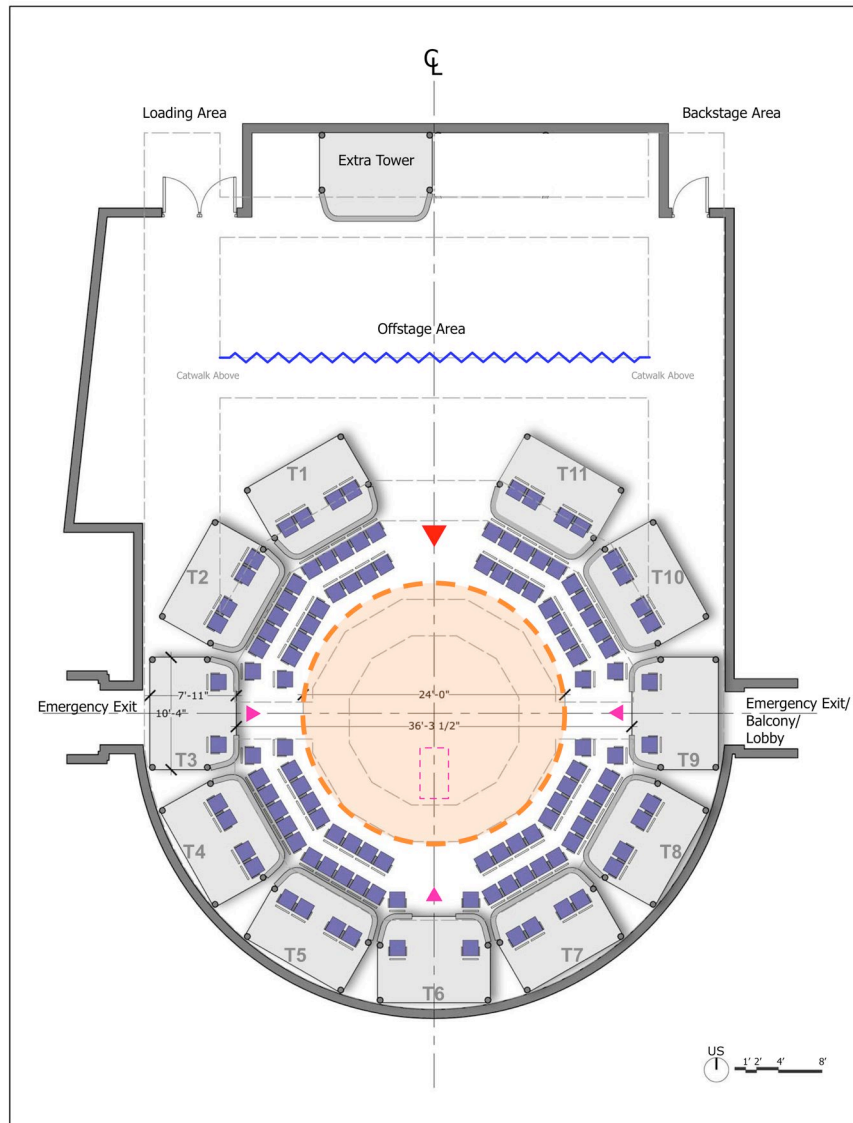
Light is a very powerful artistic medium. Not only does it express as much information about a specific space as tangible tactile elements, but it also conveys the intangible dimensions of time and mood. The qualities of light, such as intensity and colour, have the ability to enhance the narrative to a much higher level, just as a physical set can contextualize the story. The attributes of spatiality, such as shape, form and texture, are best conceived in the presence of light. Digital Video Scenography takes advantage of the unique quality and powerful capabilities of light to develop a new approach to scenic design and an innovative design process. Instead of constructing a fixed set and imposing it upon performers and the existing architecture of the venue, DVS has the ability to create an infinitely flexible design, making scenography a spatial experience rather than a fixed visual composition.

Chapter Five – Conclusion

The use of DVS was a successful design choice as the primary artistic tool and scenic design method for *Dead Man's Cell Phone*. Not only did it create a virtual representation of the frustratingly digital world that Ruhl had written about, it also supported the various dream-like events that her characters encountered. As an artistic tool, it contributed to the development of a design language and motif that reflected upon the contemporary genre and specific style of the writing. In comparison to the linear and structured scenic design conventions, DVS is a more flexible and creative method of design, which encouraged and emphasized an integrated and organic production process. With light as the primary design medium, DVS offered the unique ability to instantly morph and sculpt spaces with real-time visual results. This was not only advantageous in designing the physical environment for that play, but also offered the audience a fluid theatrical experience that was unique to this specific performance and venue.

Appendices

Appendix A: Seating Configuration and Layout



LEGEND:

- Potential Curtain Position
- Available Stage Area
- Trap Below
- Primary Stage Entrance/ Exit
- Secondary Stage Entrance/ Exit

Seating Plan 1/8" = 1' @ Tabloid

seats on floor: 80
seats @ 1st level: 38
seats @ 2nd level: 44
seats @ 3rd level: 44

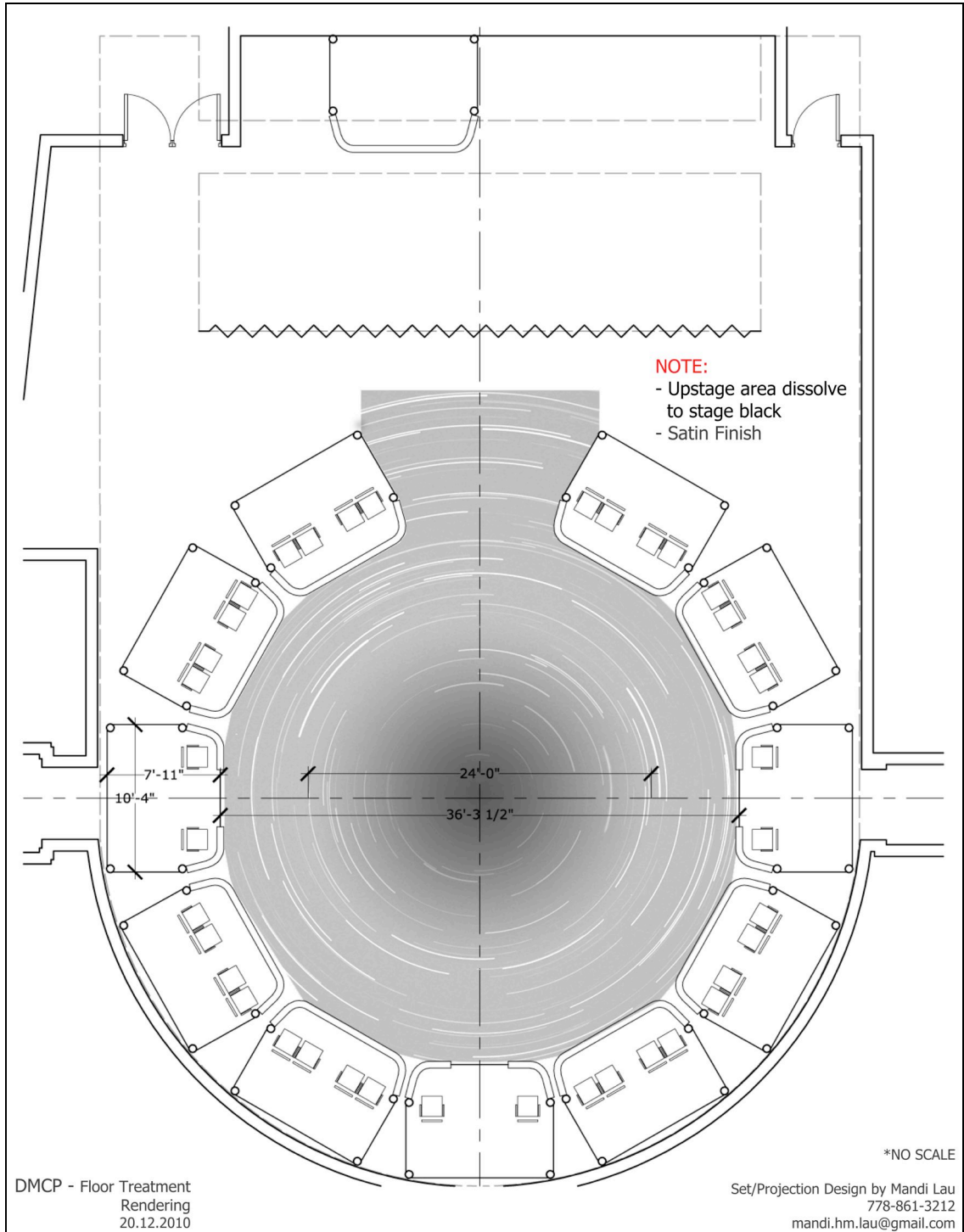
TOTAL SEATS: 206

DCMP//Telus Studio Theatre
Directed by Chris McGregor

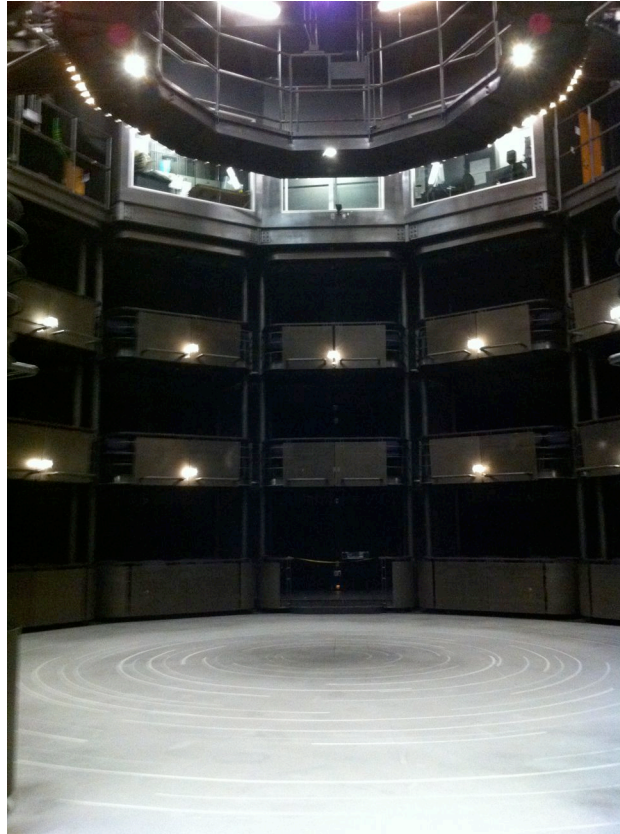
Theatre at UBC

ML_20101130

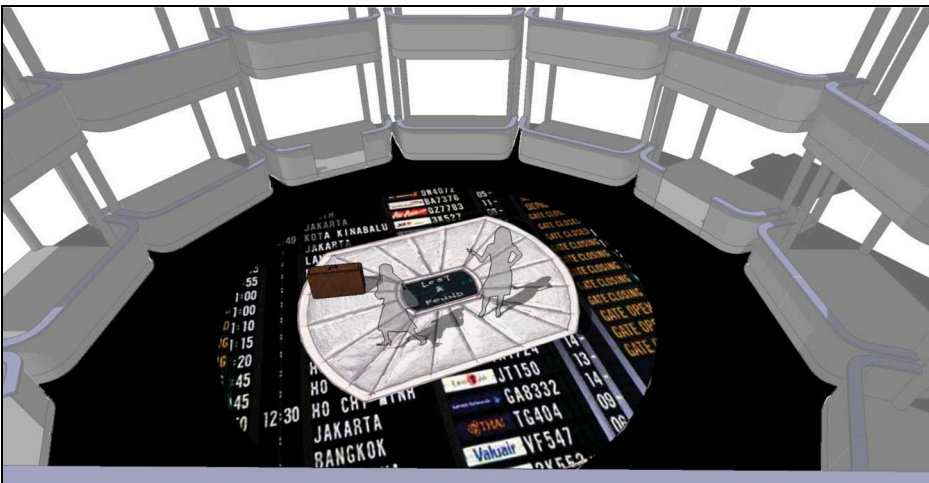
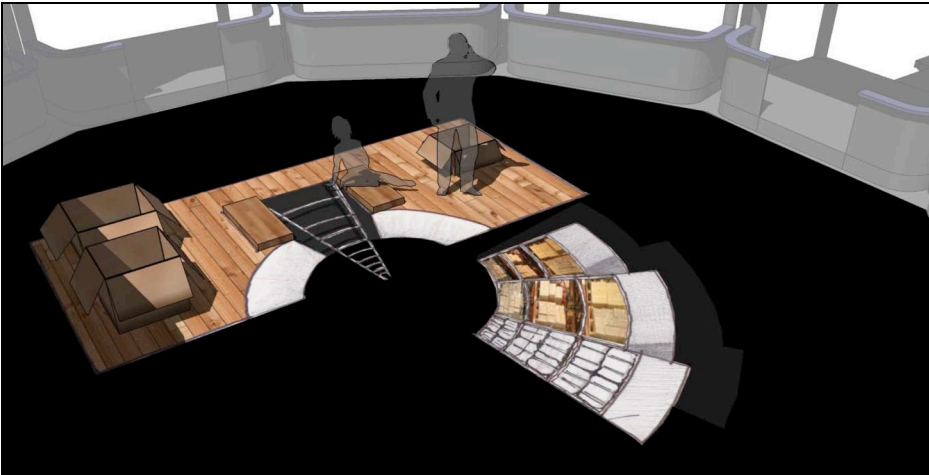
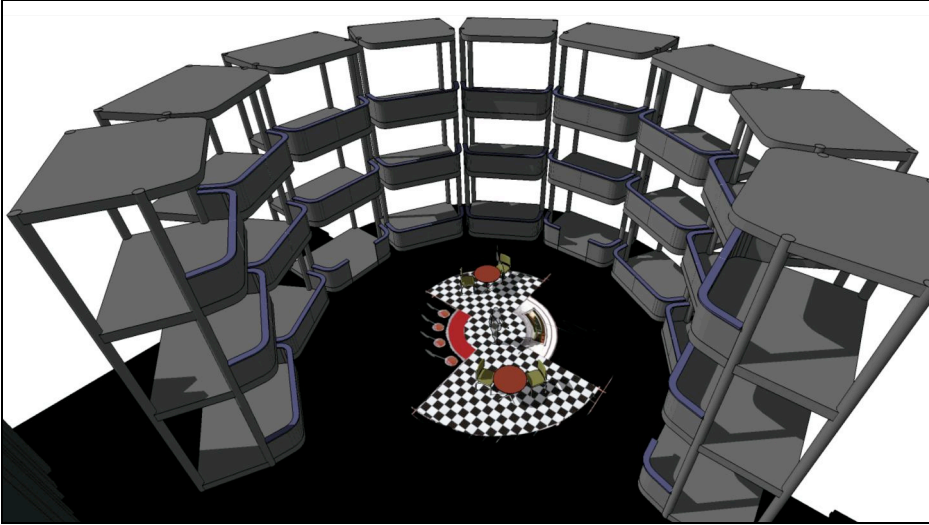
Appendix B: Paint Plan



Appendix C: Photographs of the Painted Stage Floor

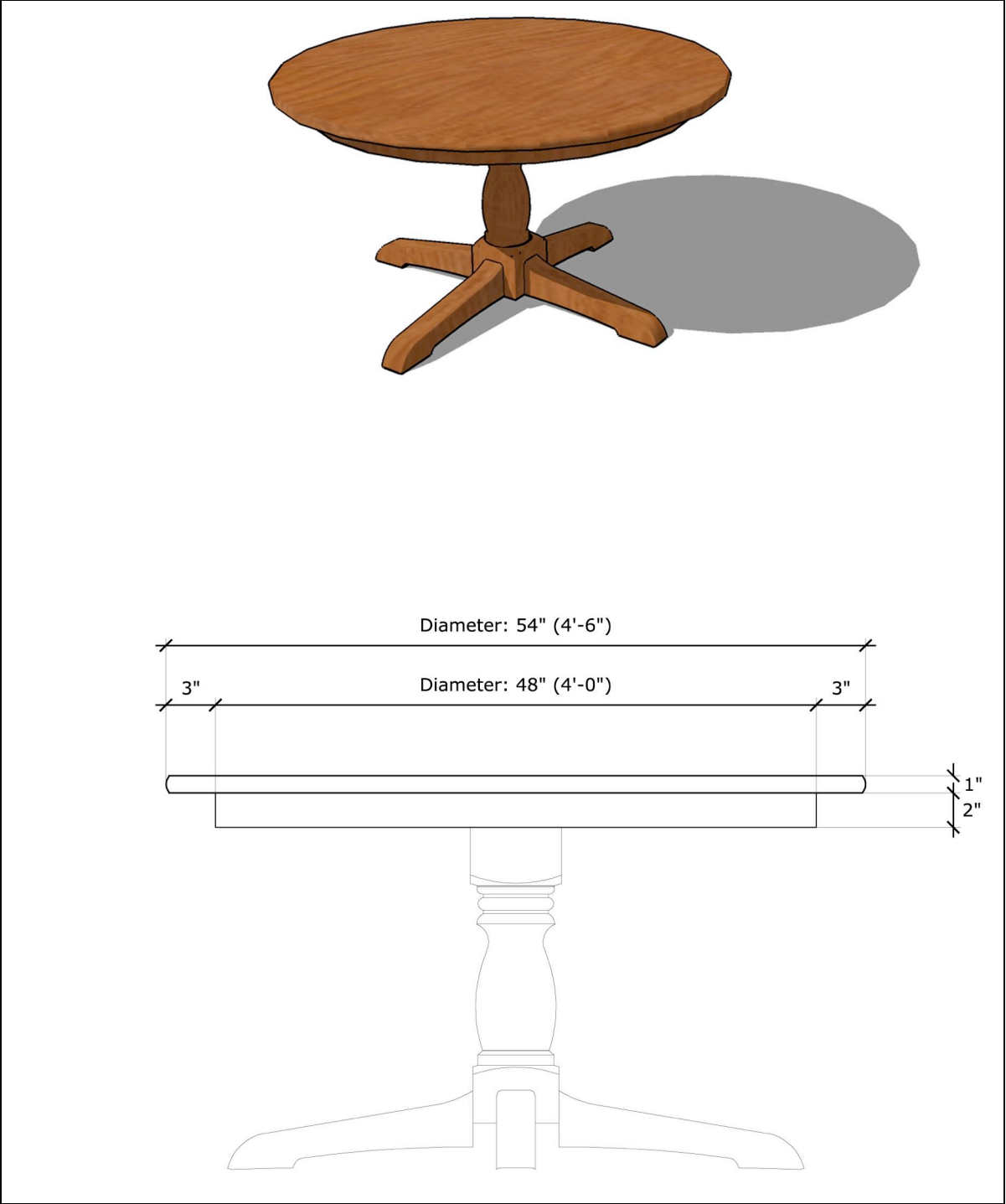


Appendix D: Additional Concept Design Renderings



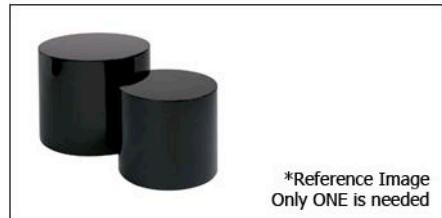
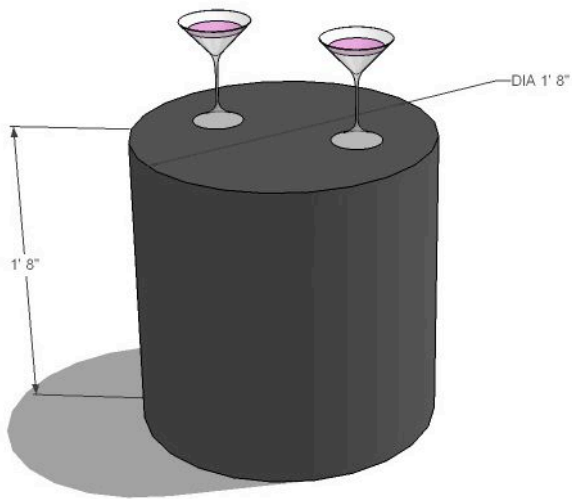
Appendix E: Additional Furniture Design Renderings

The Family Dining Table



The Lounge Table

ACT TWO - Scene 3
"The Lounge"

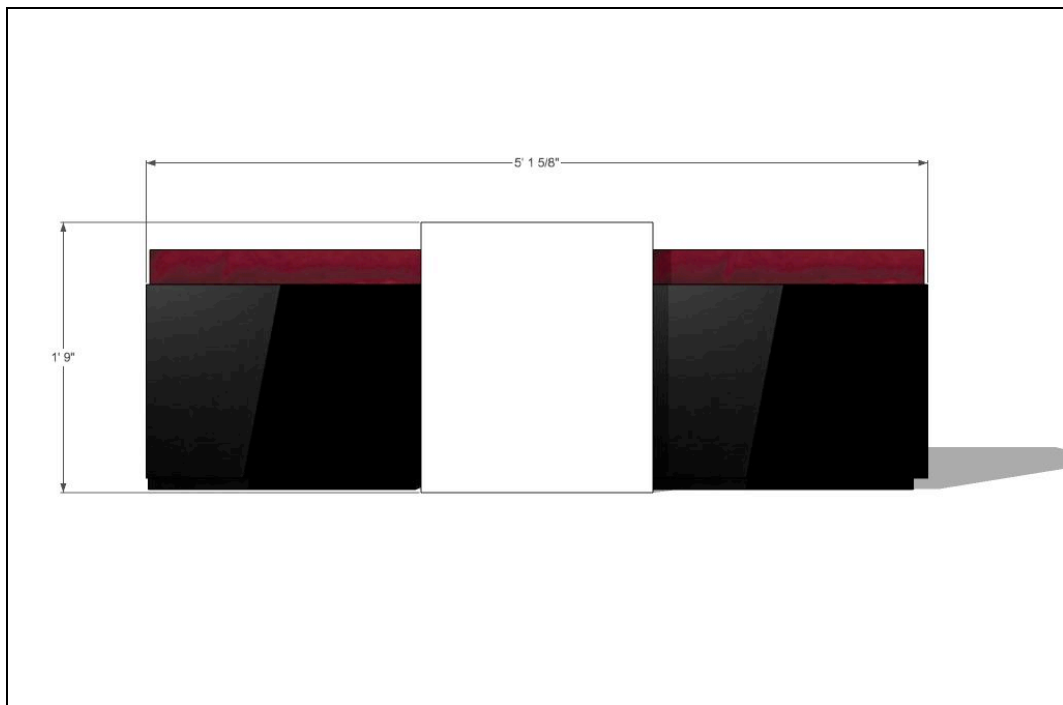
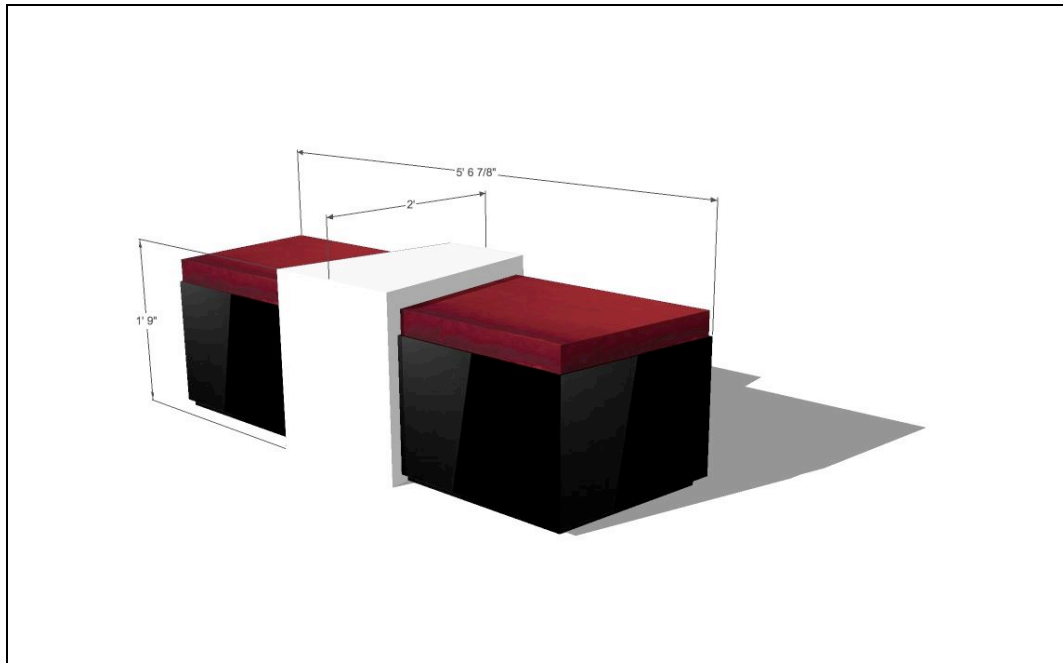


NOTES:

- Wooden internal frame support
- Bent 1/8" thick skinply as outer shell
- Black paint with high gloss finish same as the lounge seats

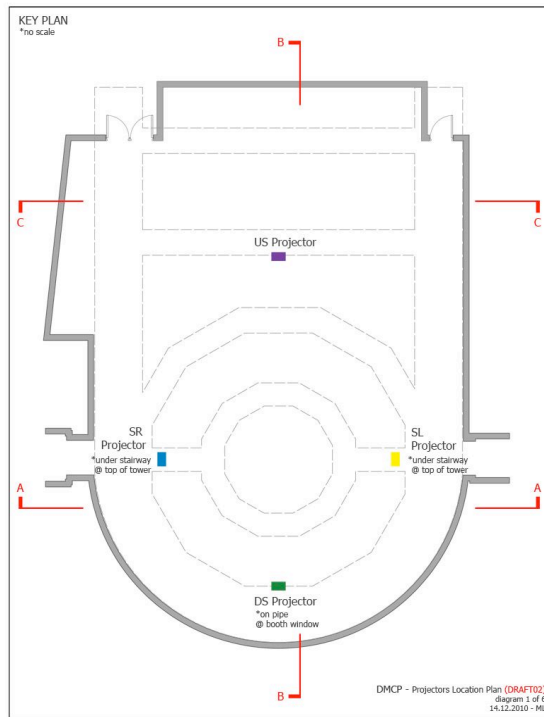
DMCP - Lounge Table (REVISED)
sheet 1 of 1
16.12.2010 - ML

The Lounge Seat

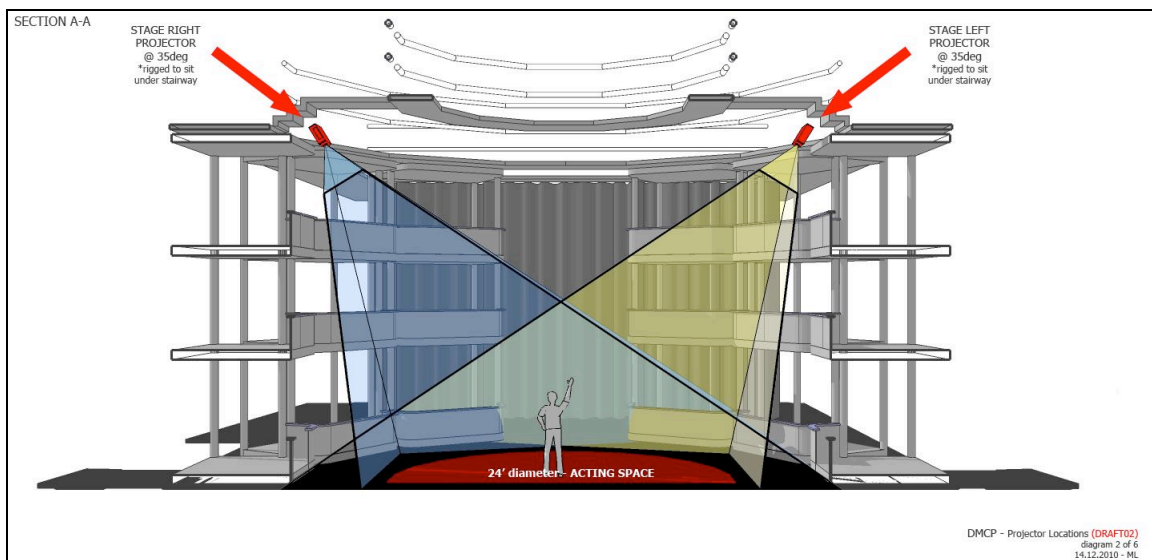


Appendix F: Technical Analysis – Projector Hanging Positions

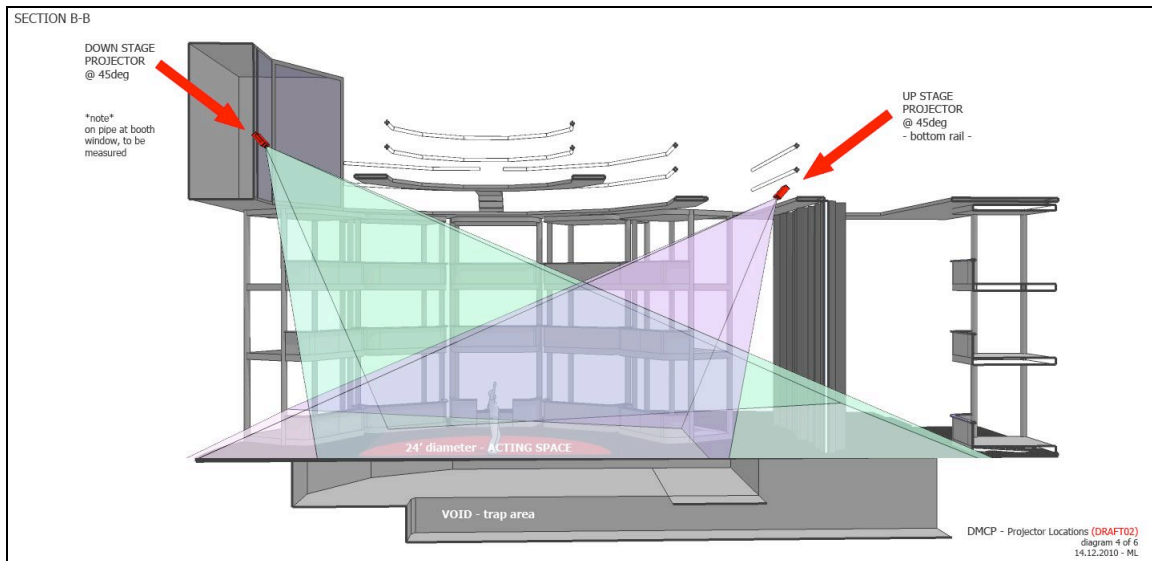
Layout Plan



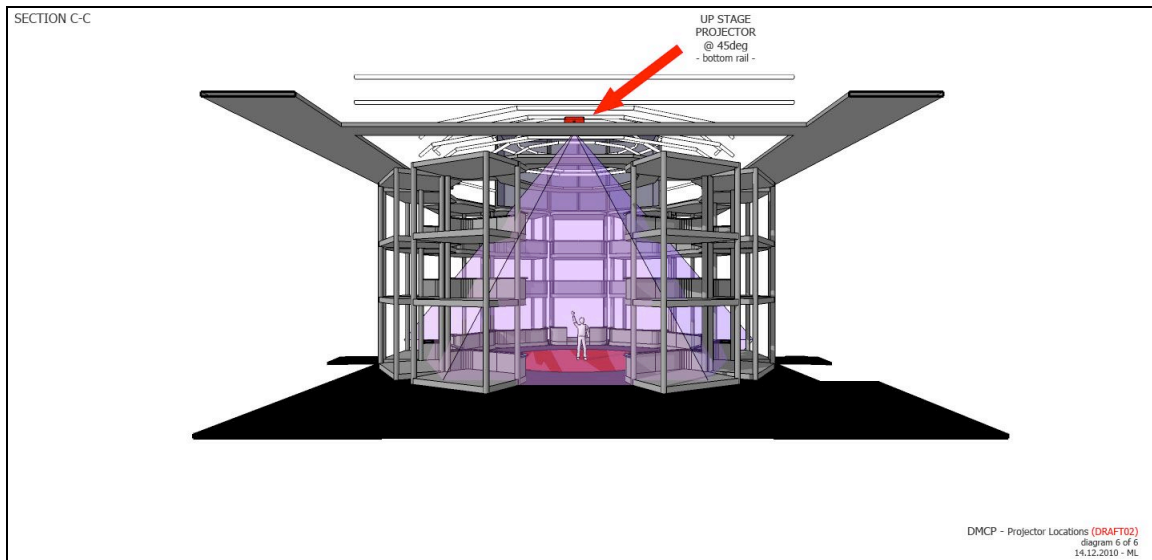
Sectional Analysis



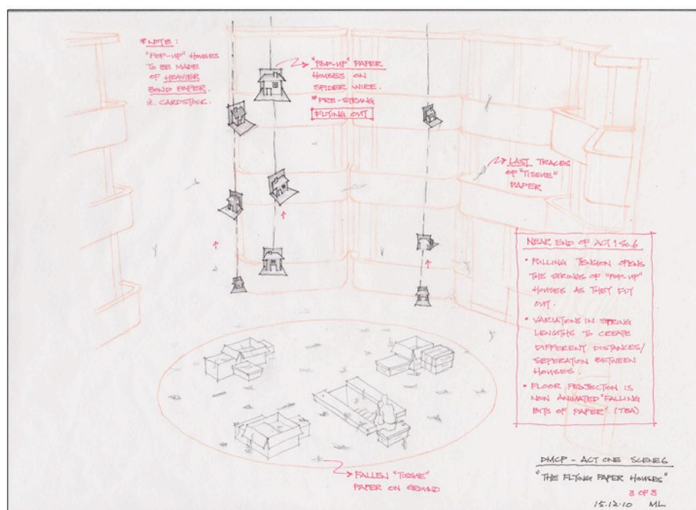
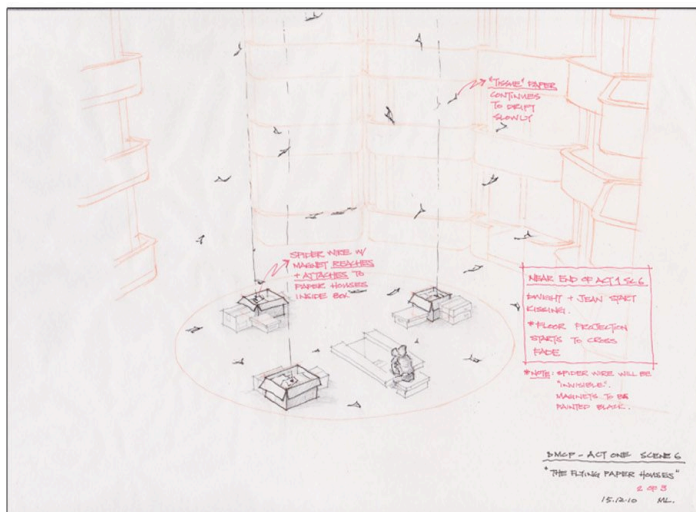
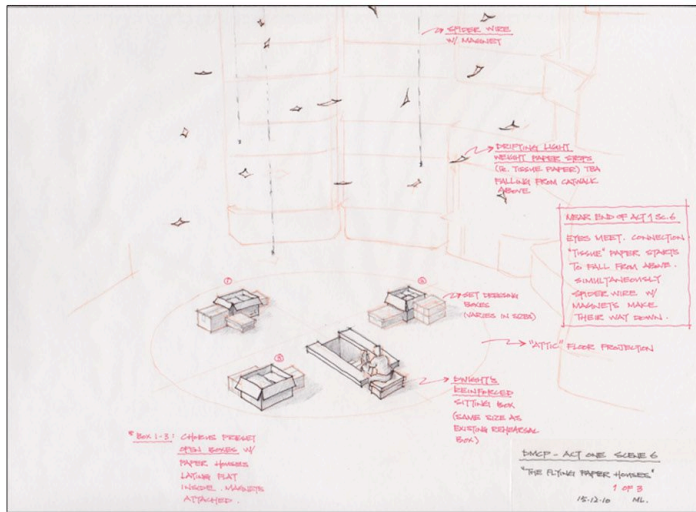
Sectional Analysis



Sectional Analysis

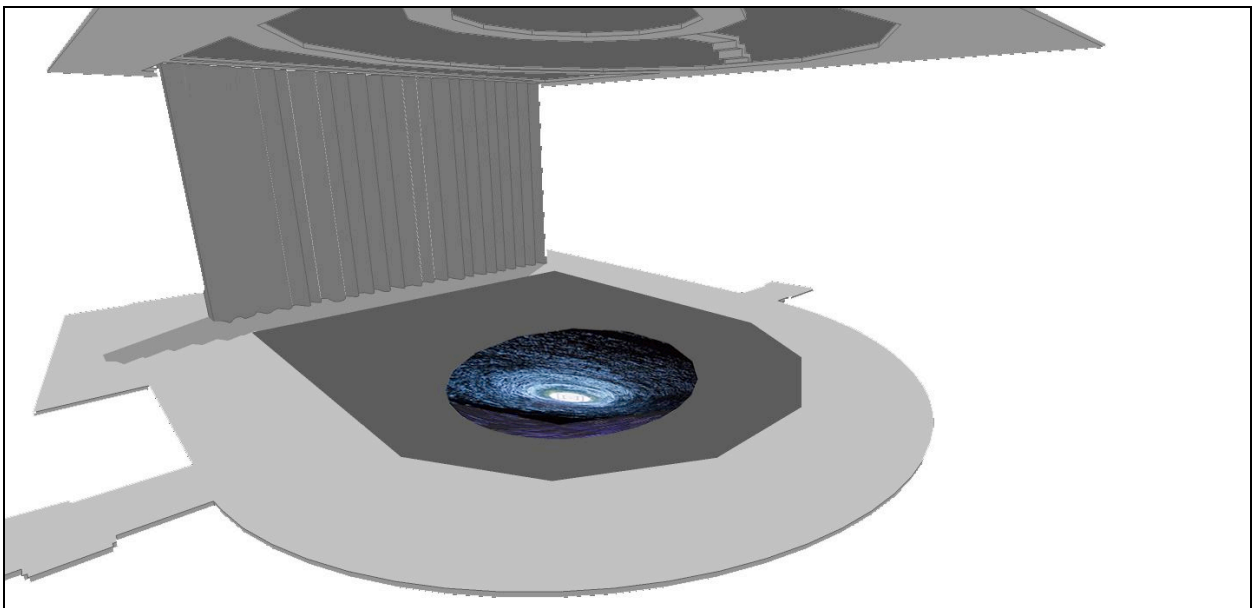
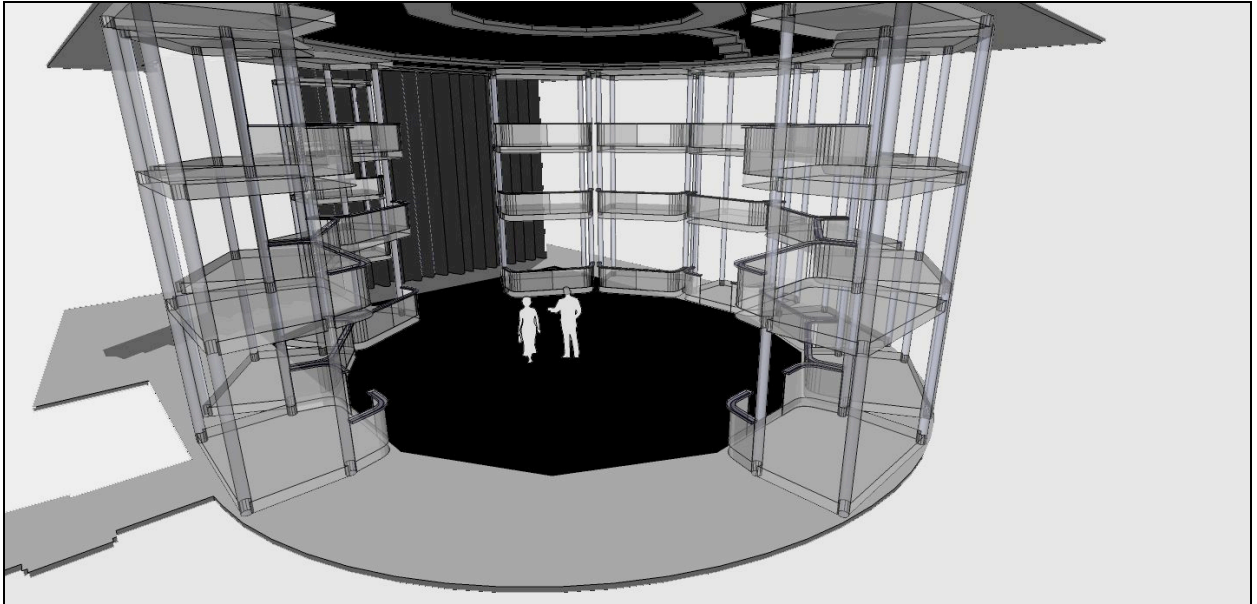


Appendix G: The Flying Houses Sequence Storyboard

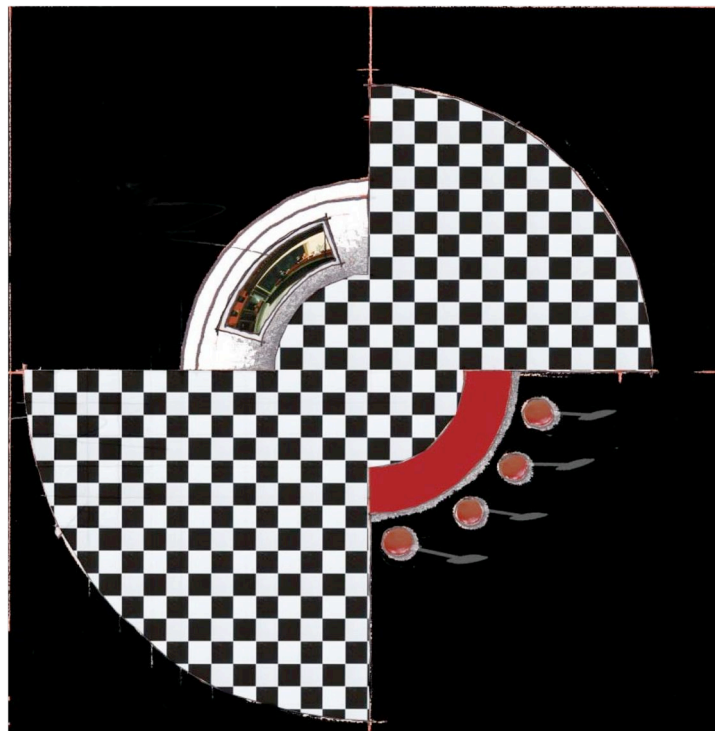
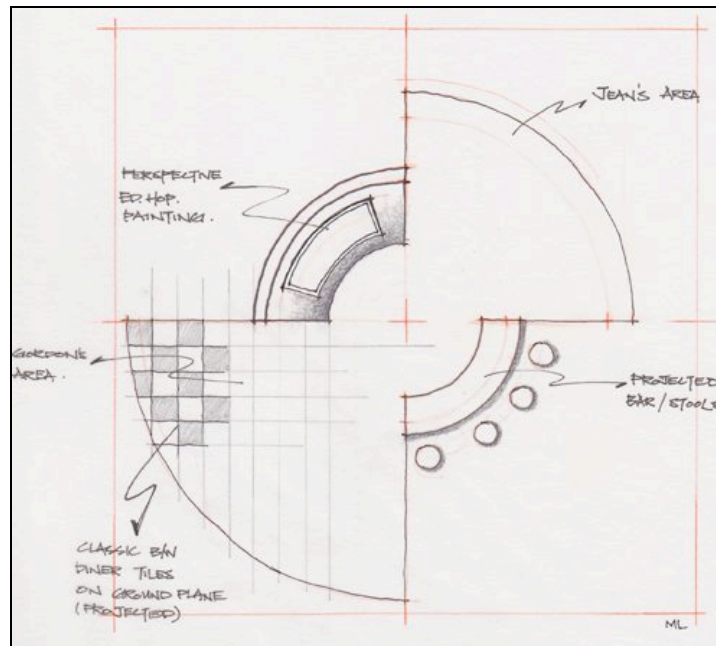


Appendix H: Complete Design Documents

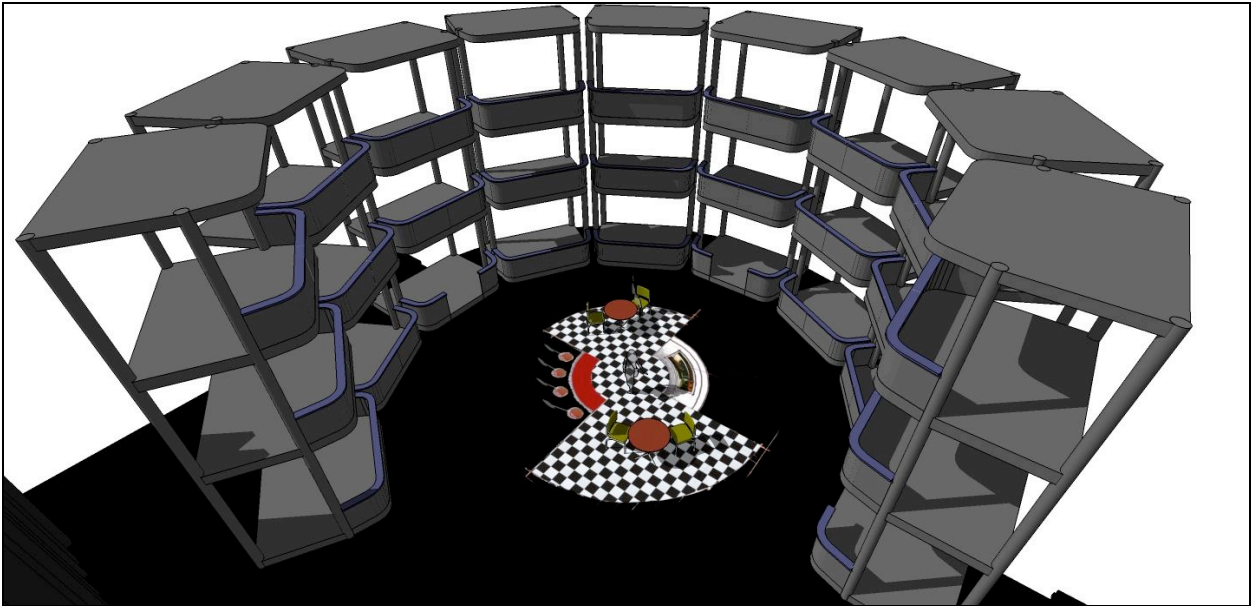
Virtual Model – The Arena Configuration



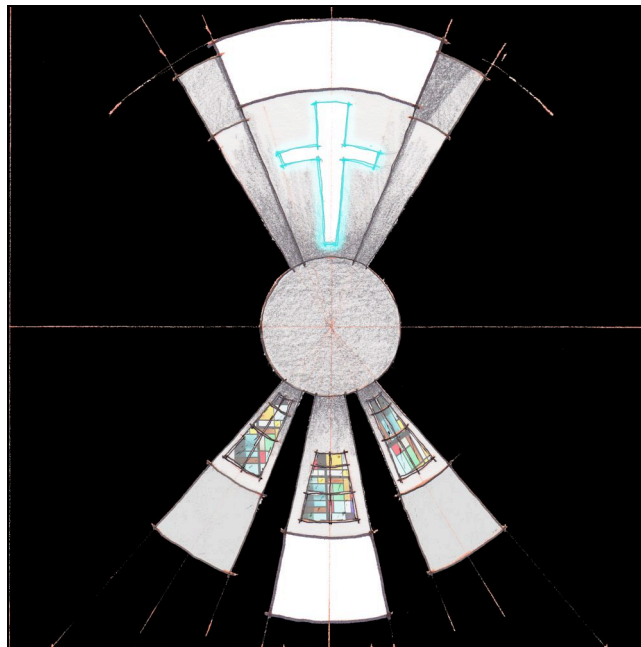
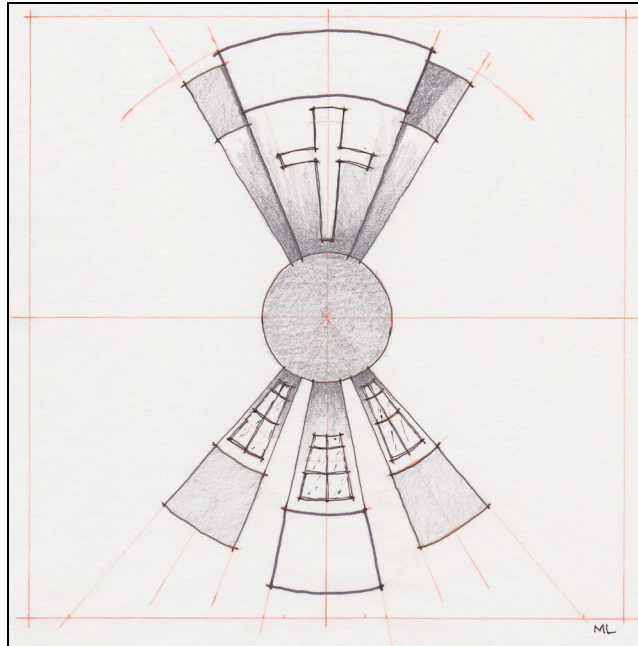
The Diner Scene – Concept Sketches



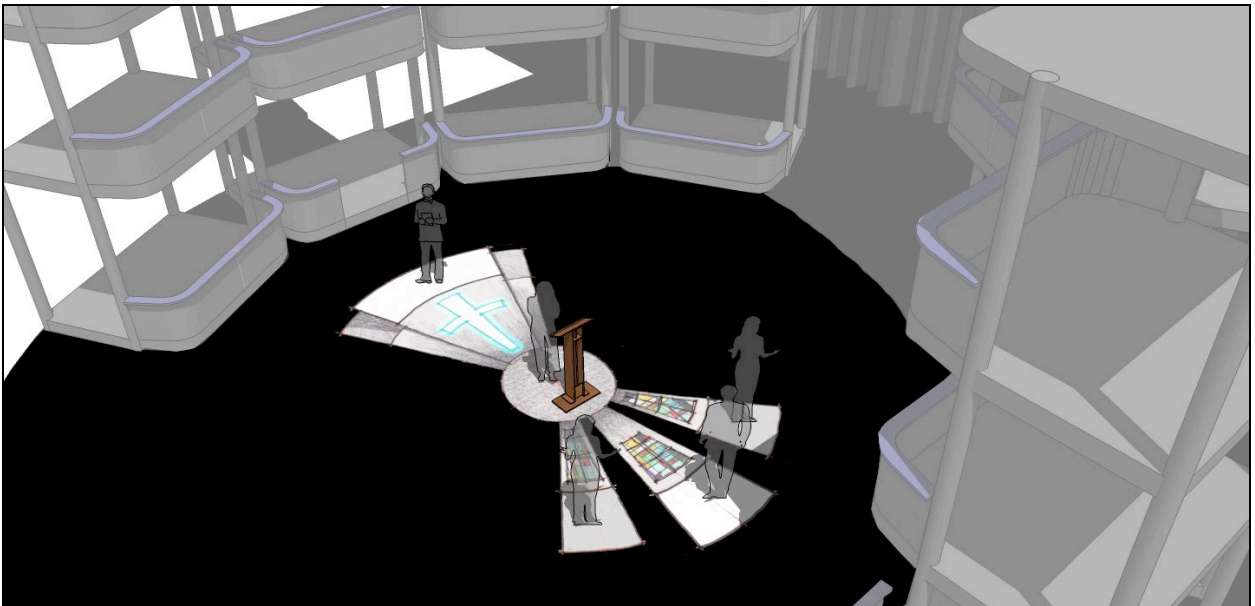
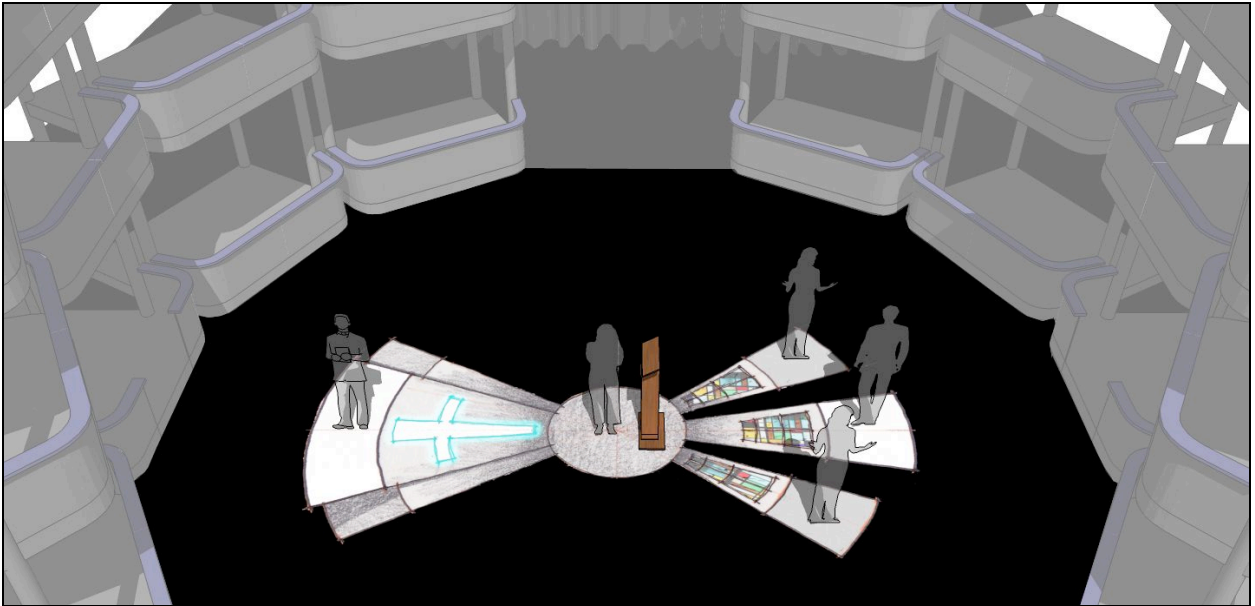
The Diner Scene – Concept Renderings



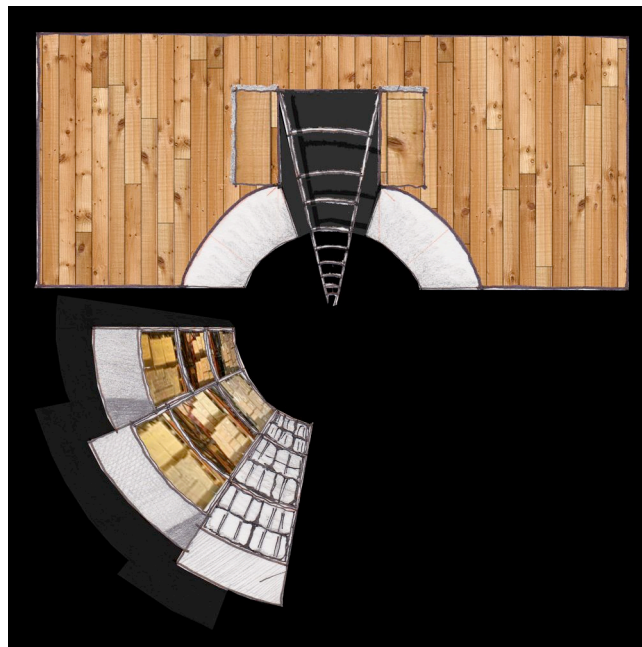
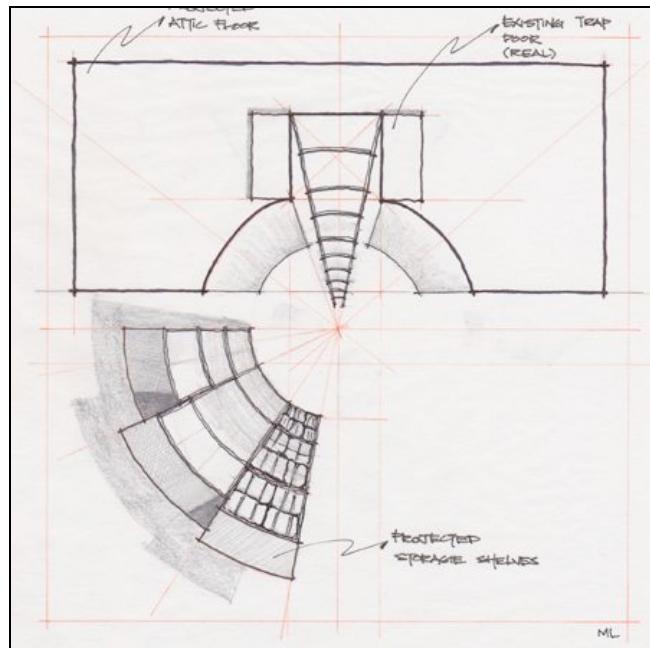
The Diner Scene – Concept Sketches



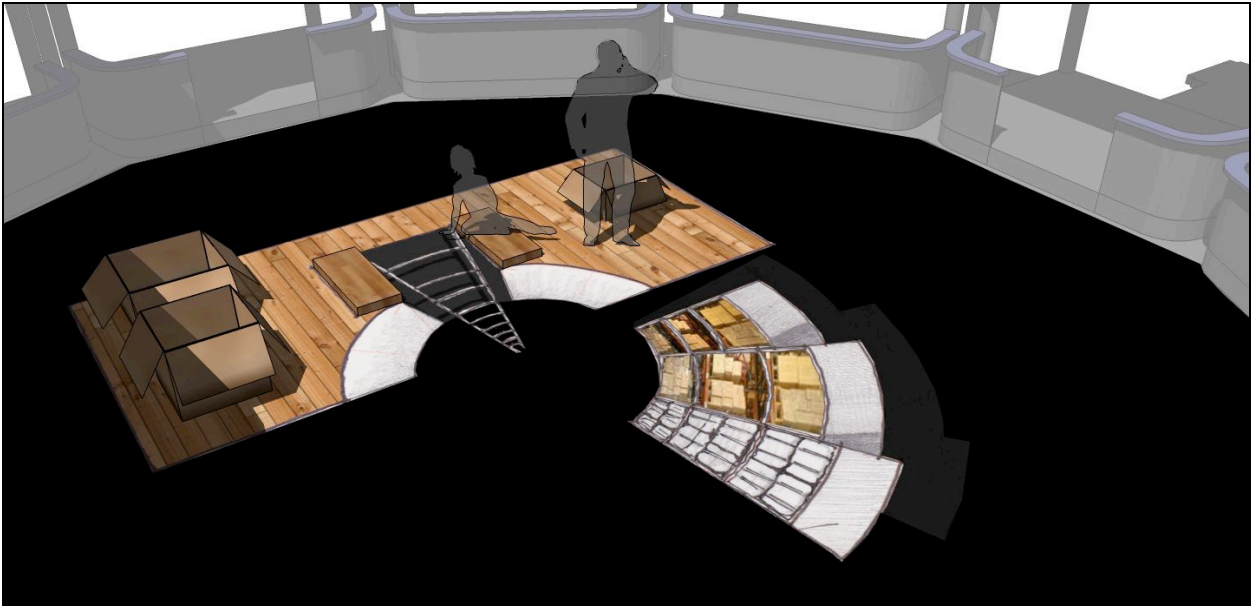
The Church Scene – Concept Renderings



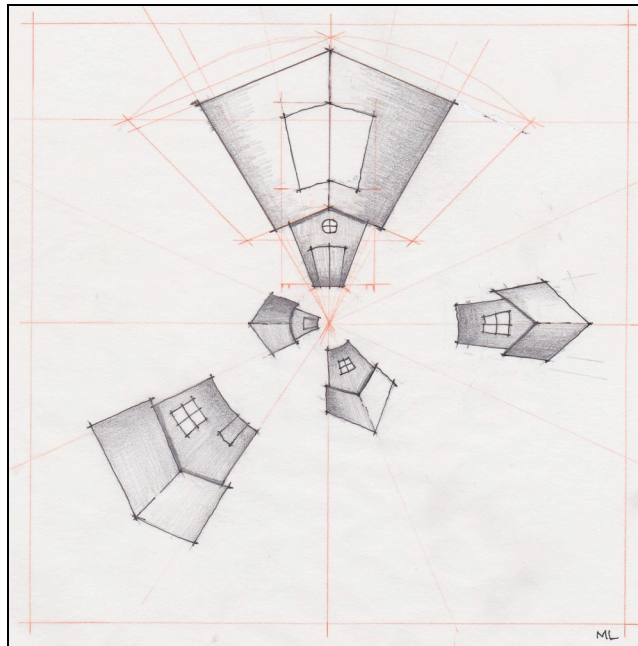
The Attic Scene – Concept Sketches



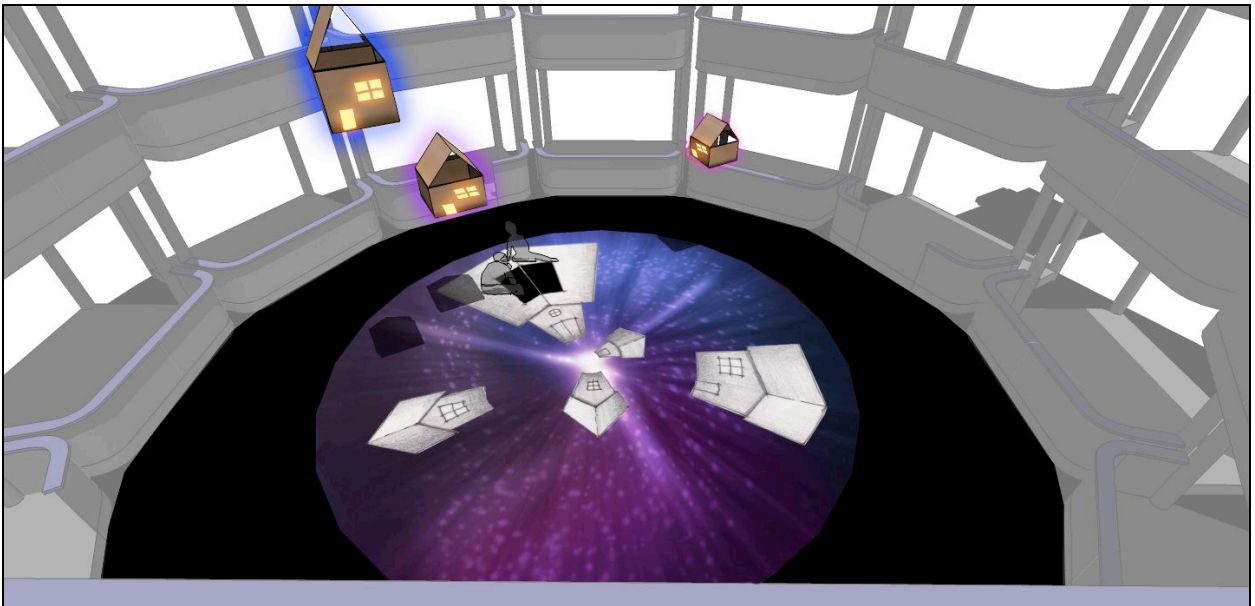
The Attic Scene – Concept Renderings



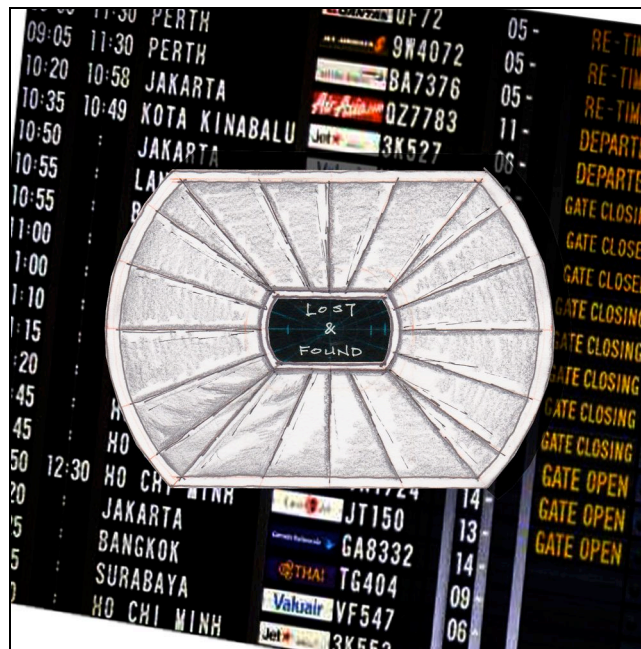
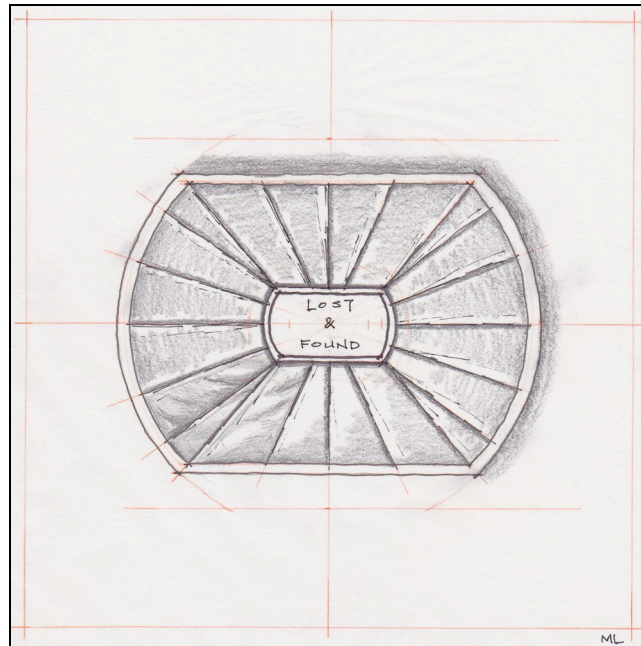
The Flying Houses Scene – Concept Sketches



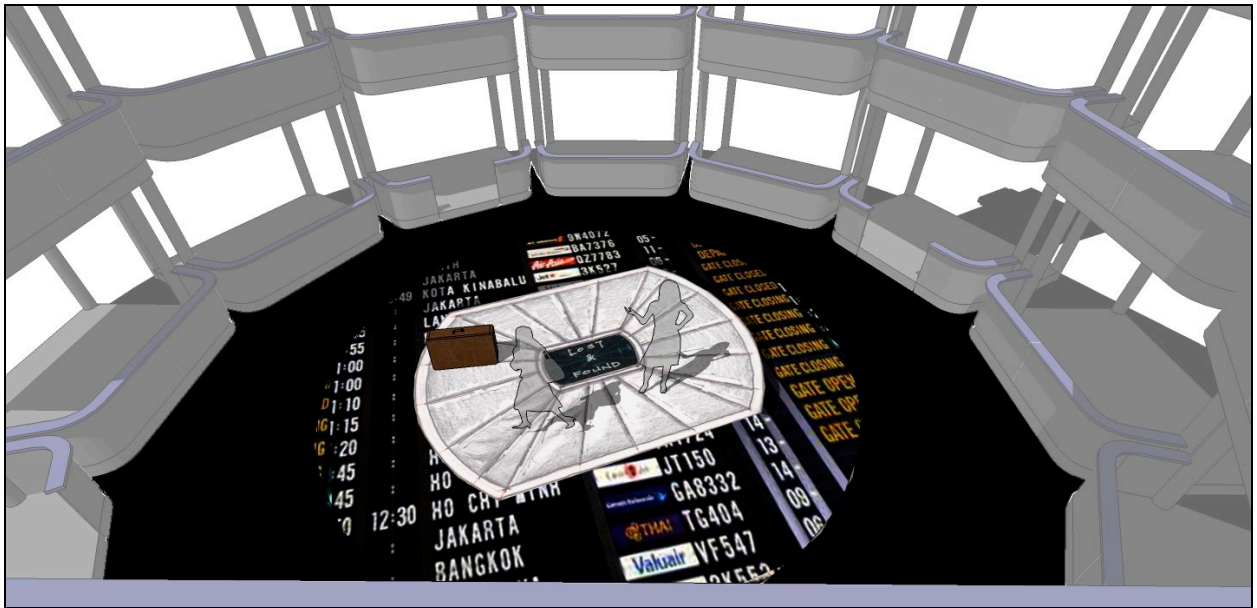
The Flying Houses Scene – Concept Renderings



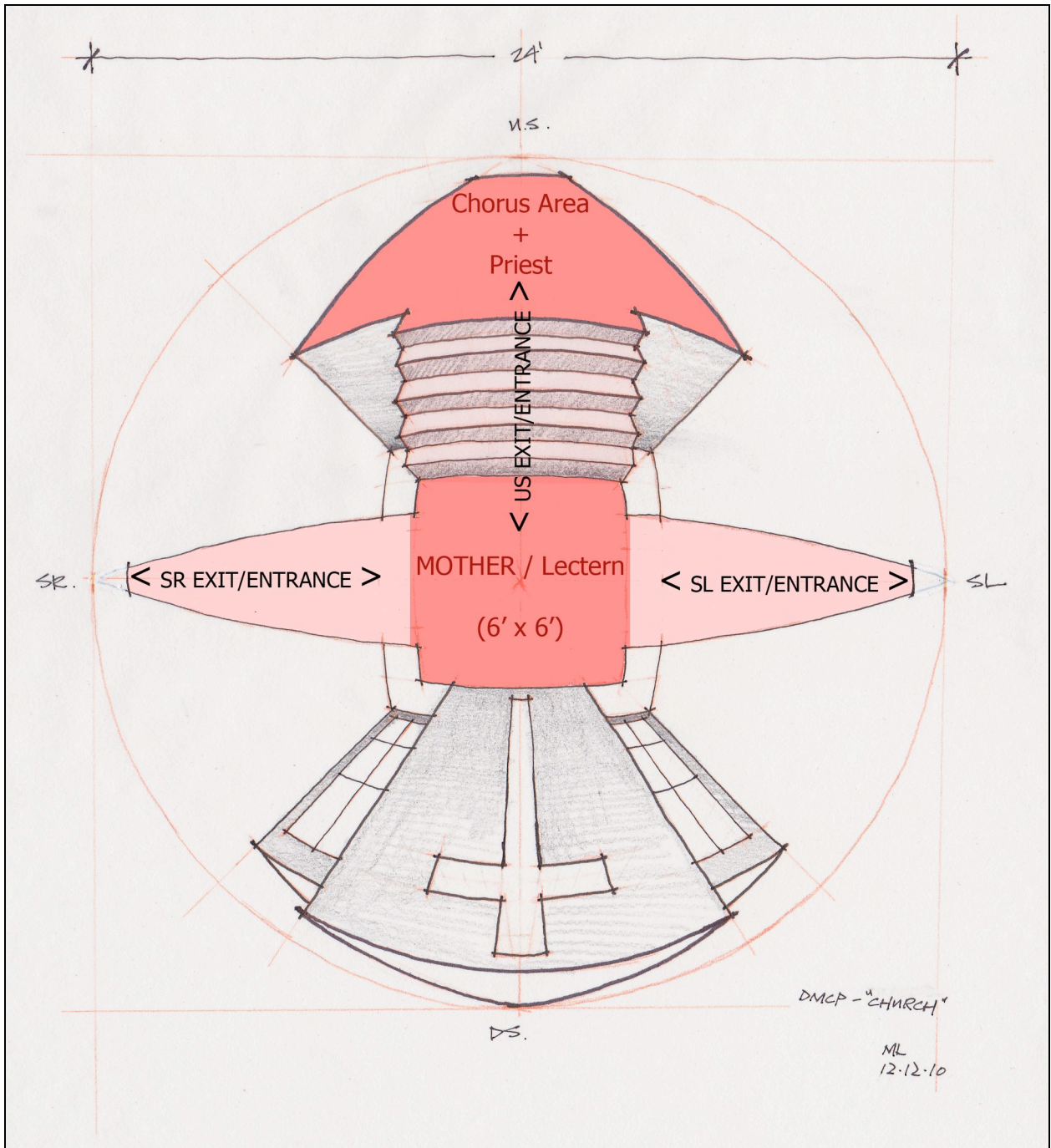
The Airport Scene – Concept Sketches



The Airport Scene – Concept Rendering



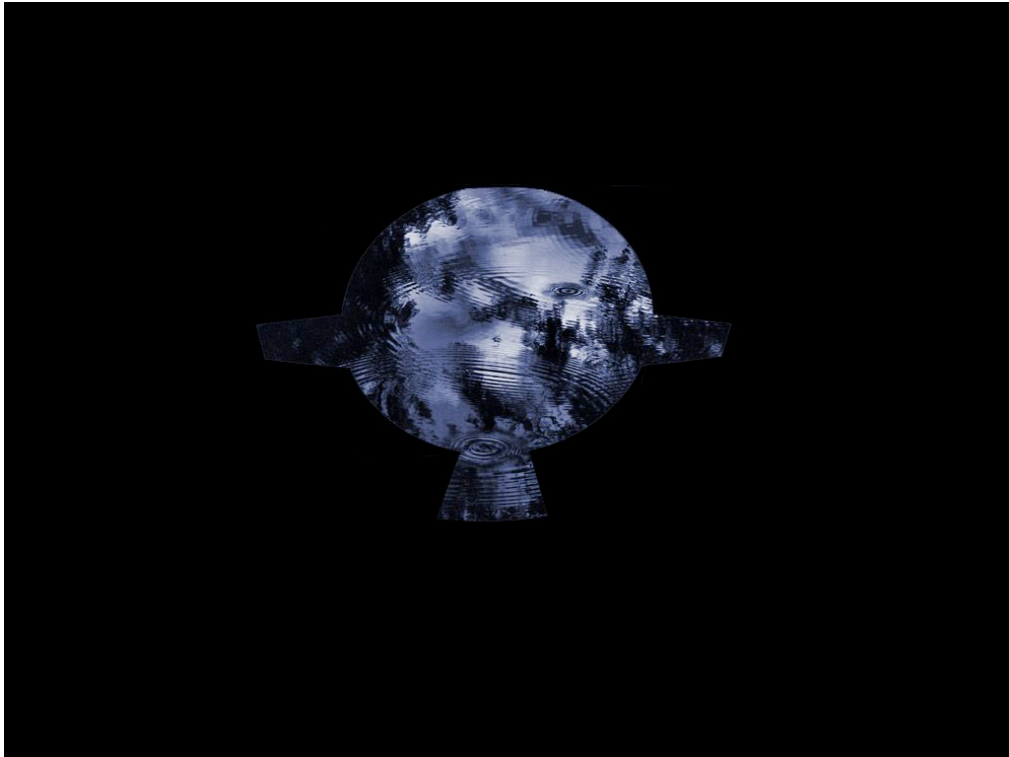
The Church Scene – Five Points Perspective Concept Sketch



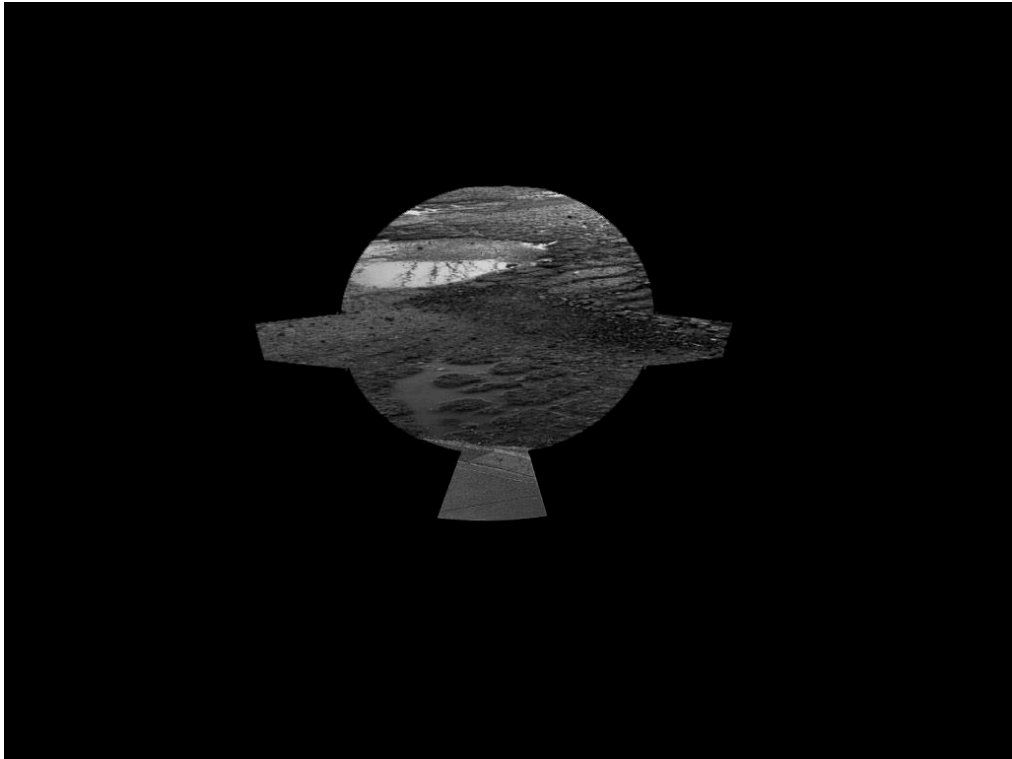
Final Projection Image and Production Photos



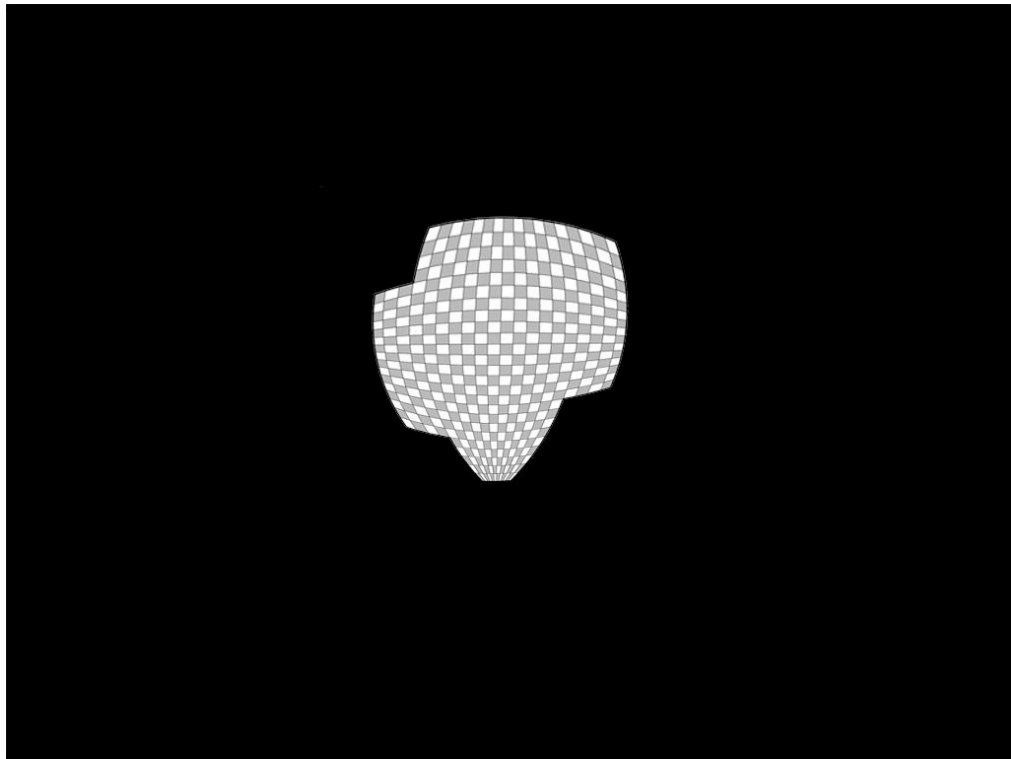
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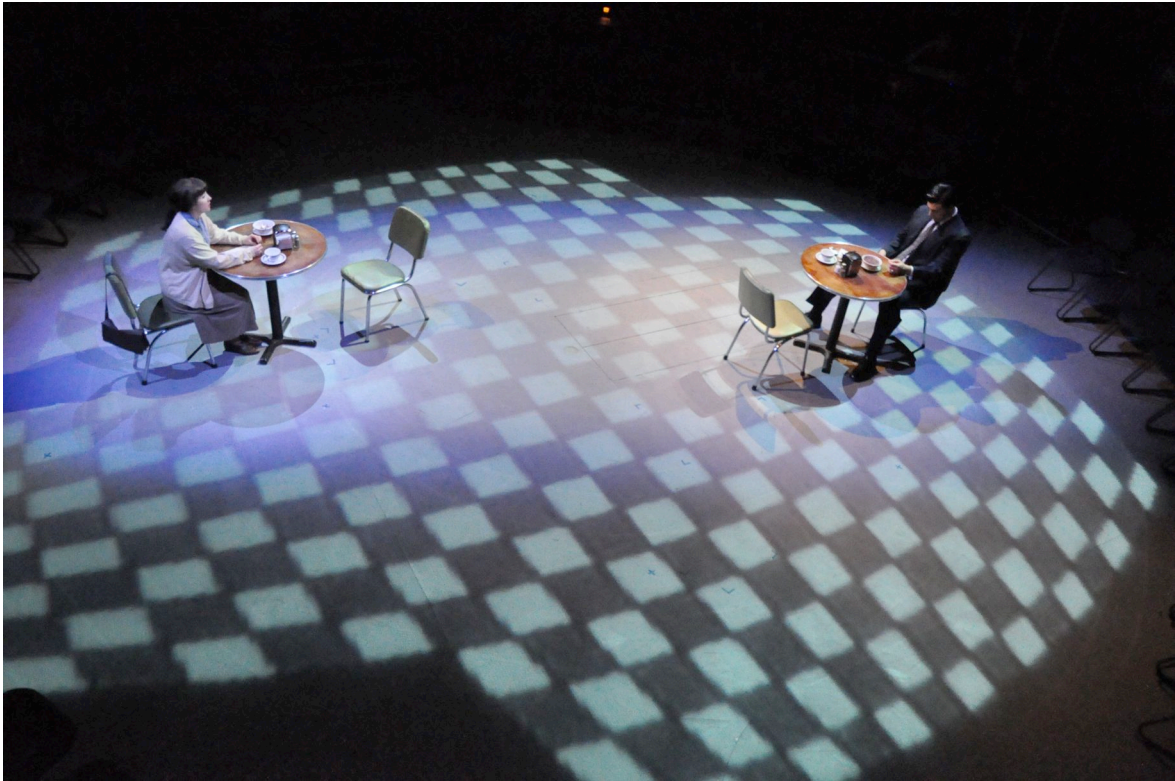
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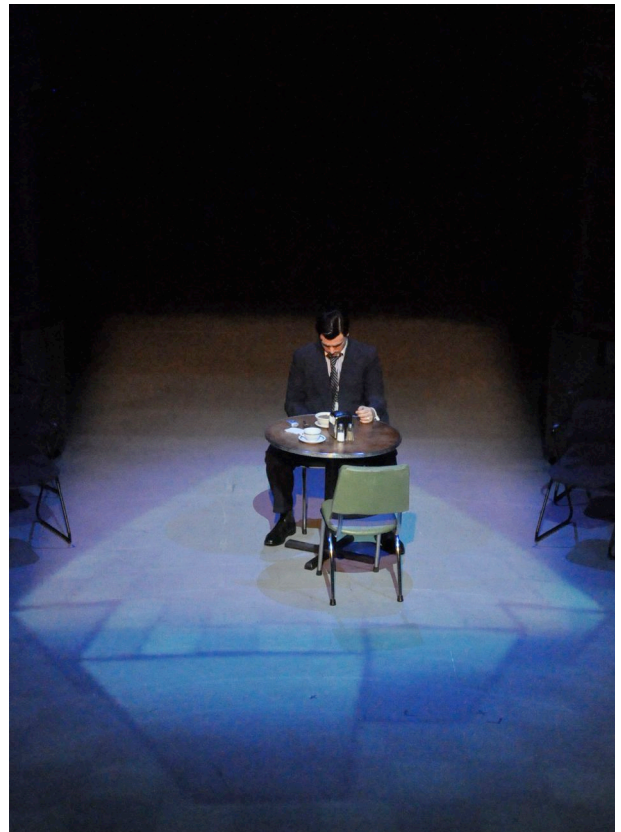
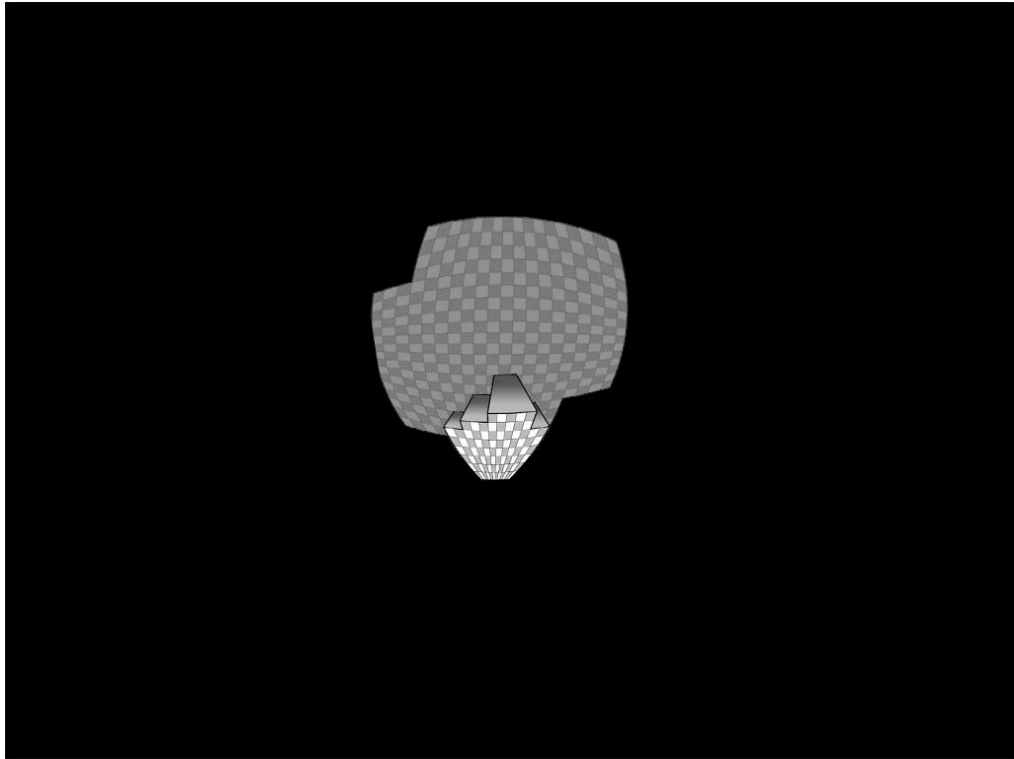
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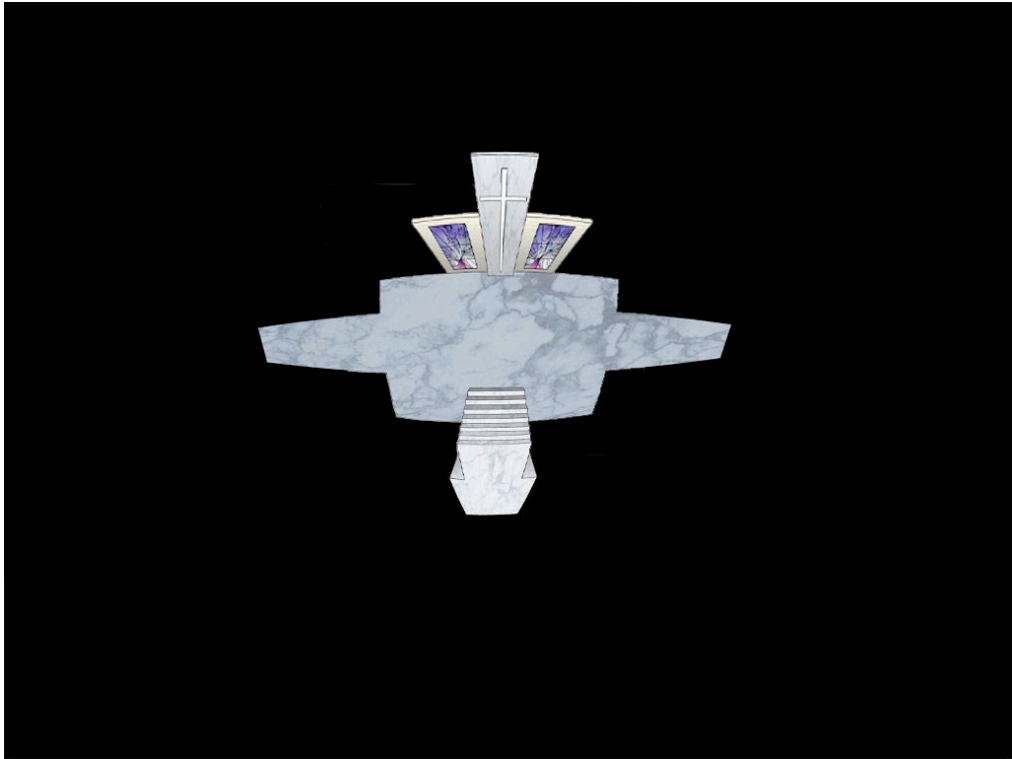
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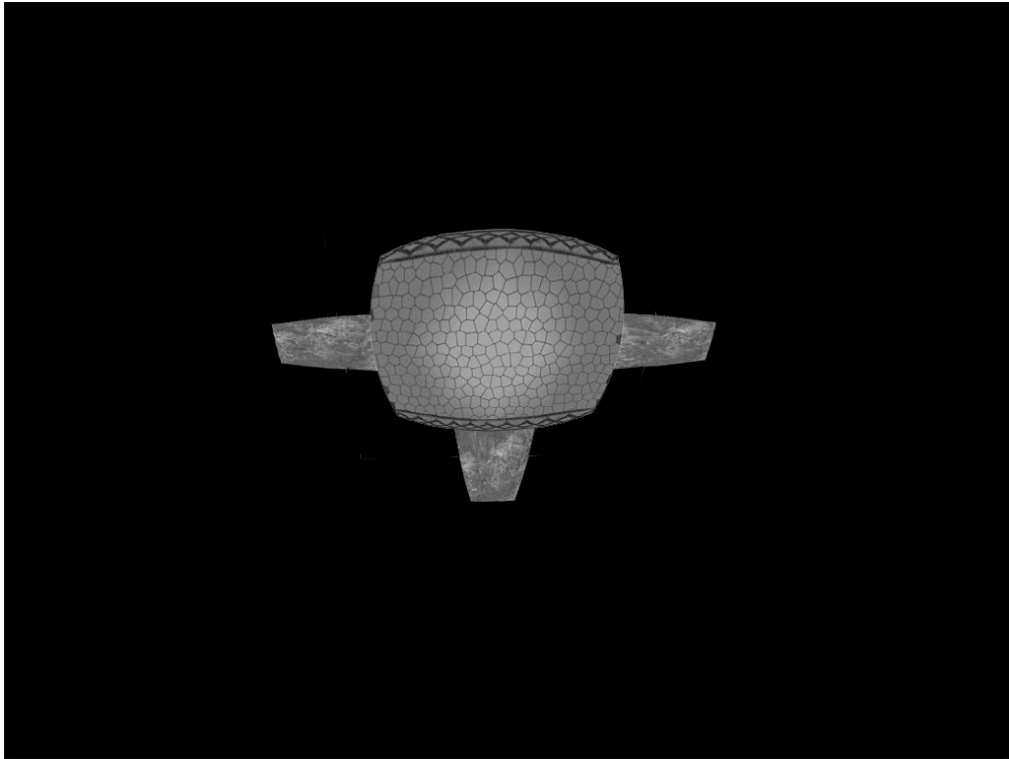
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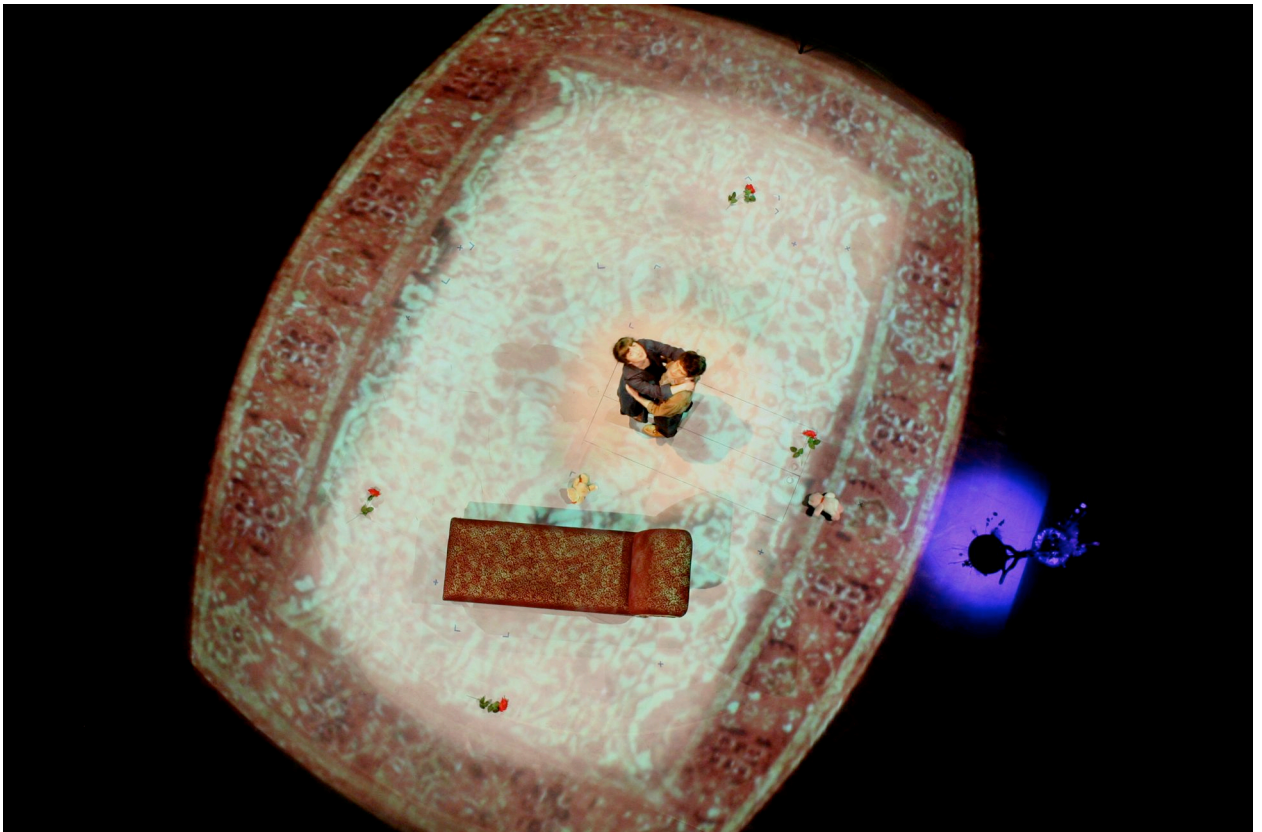
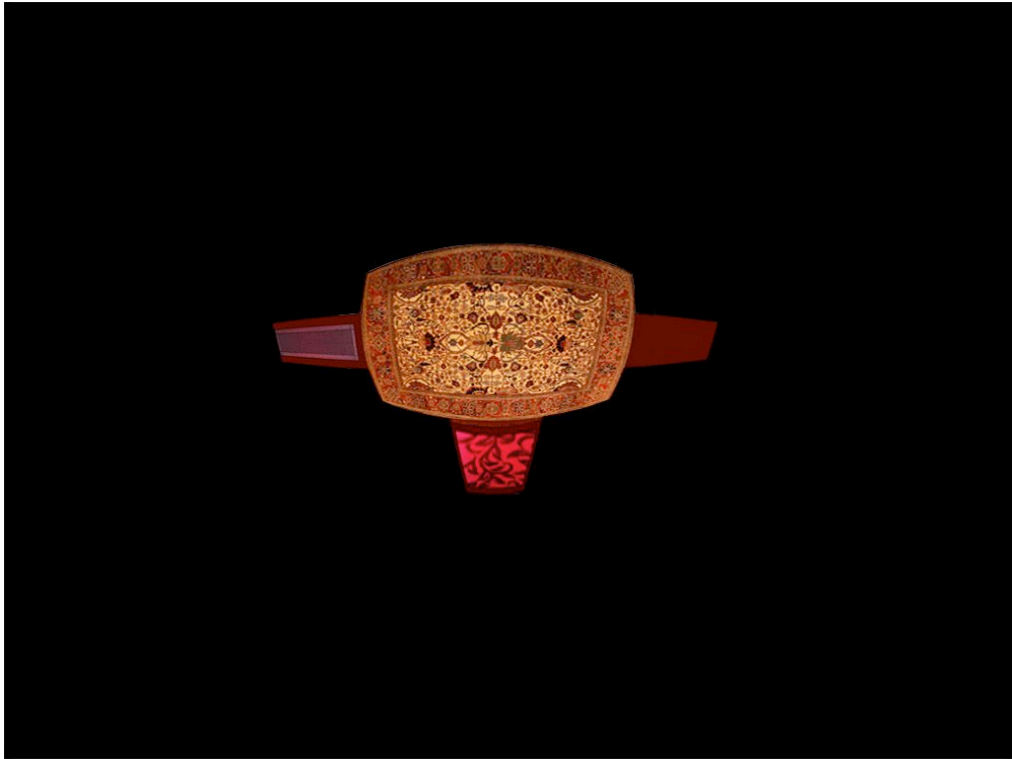
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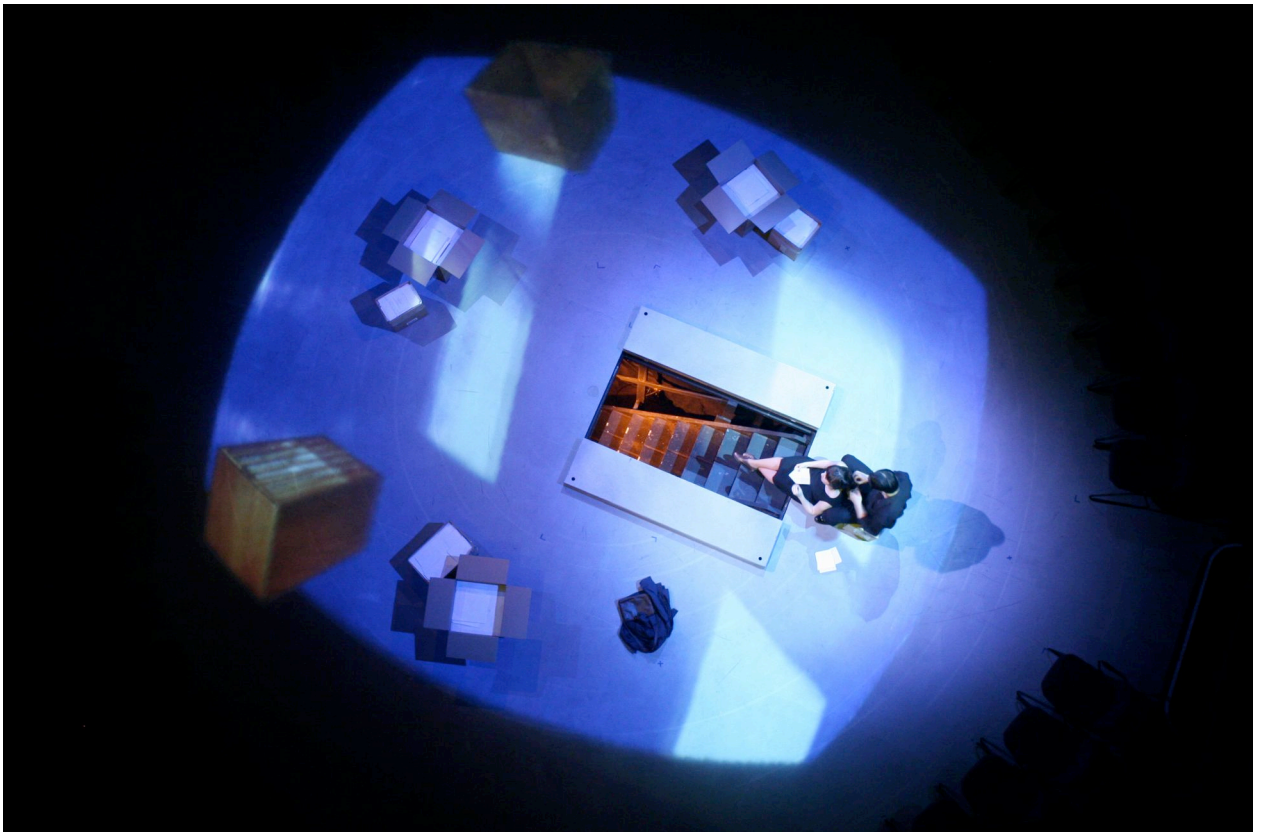
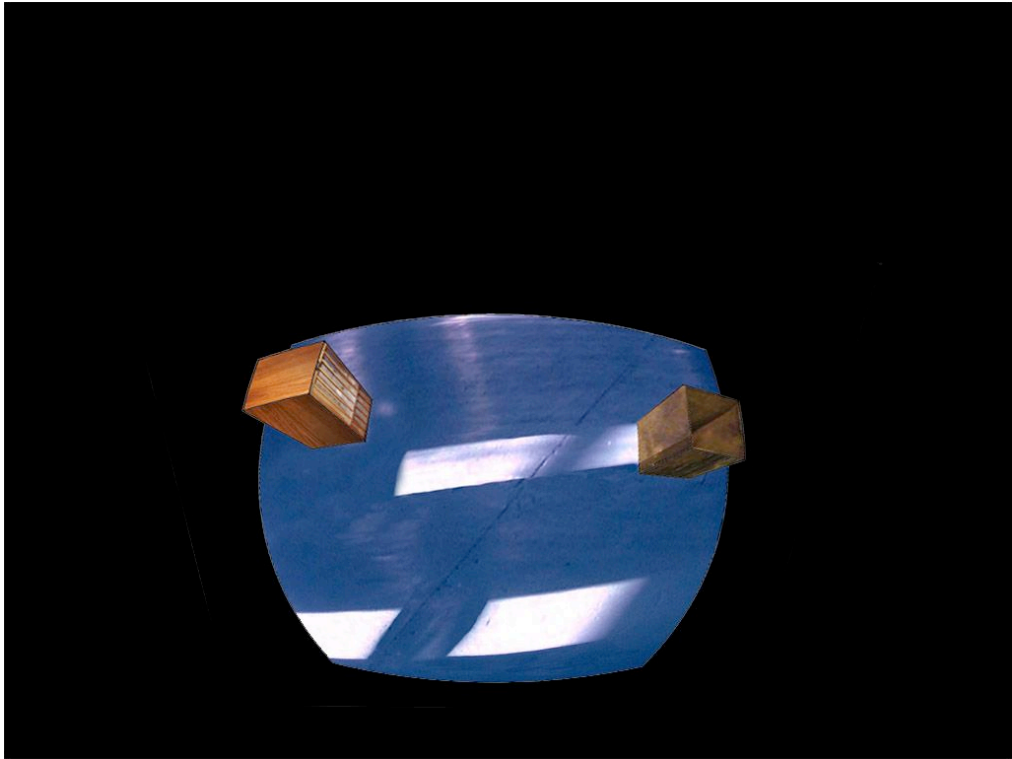
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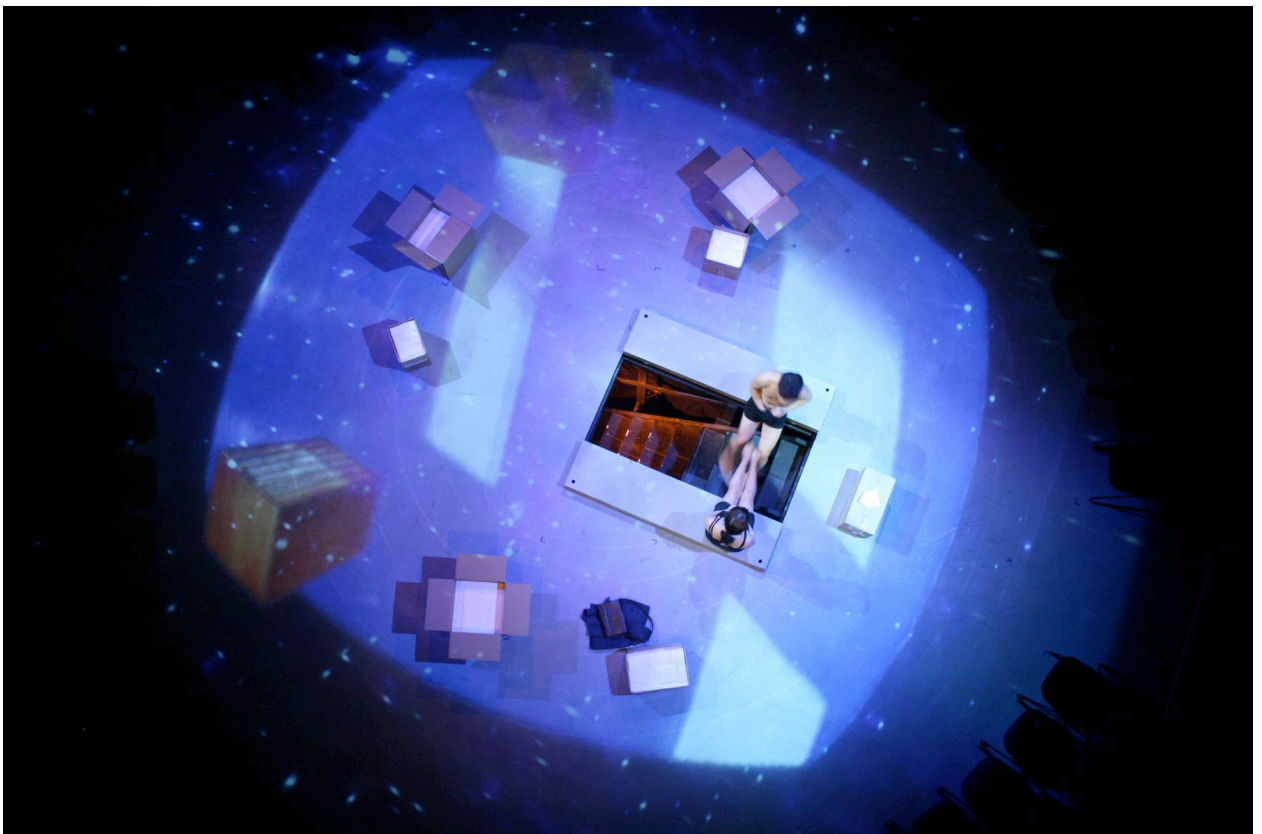
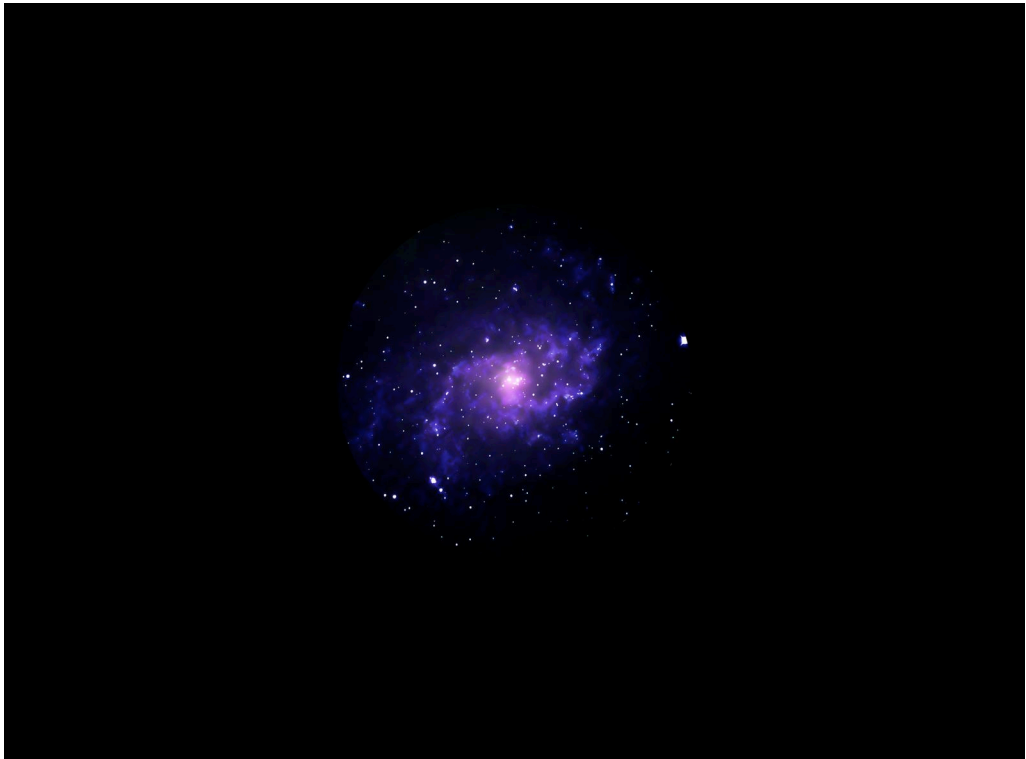
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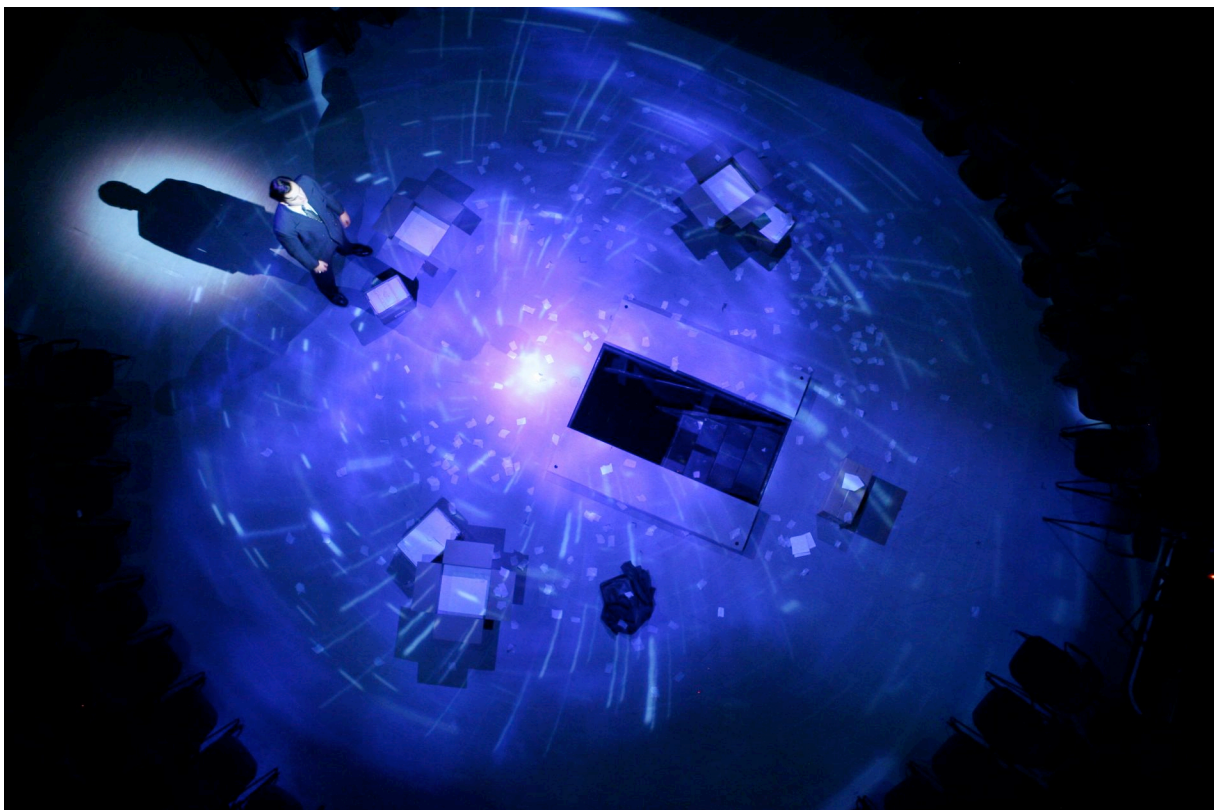
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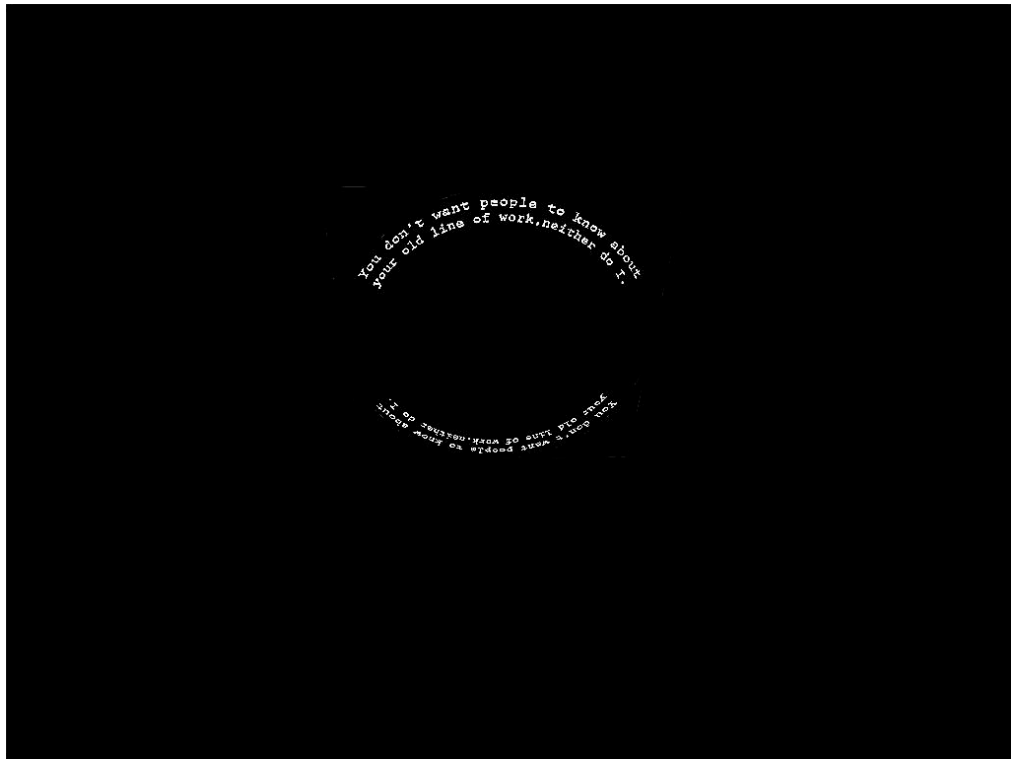
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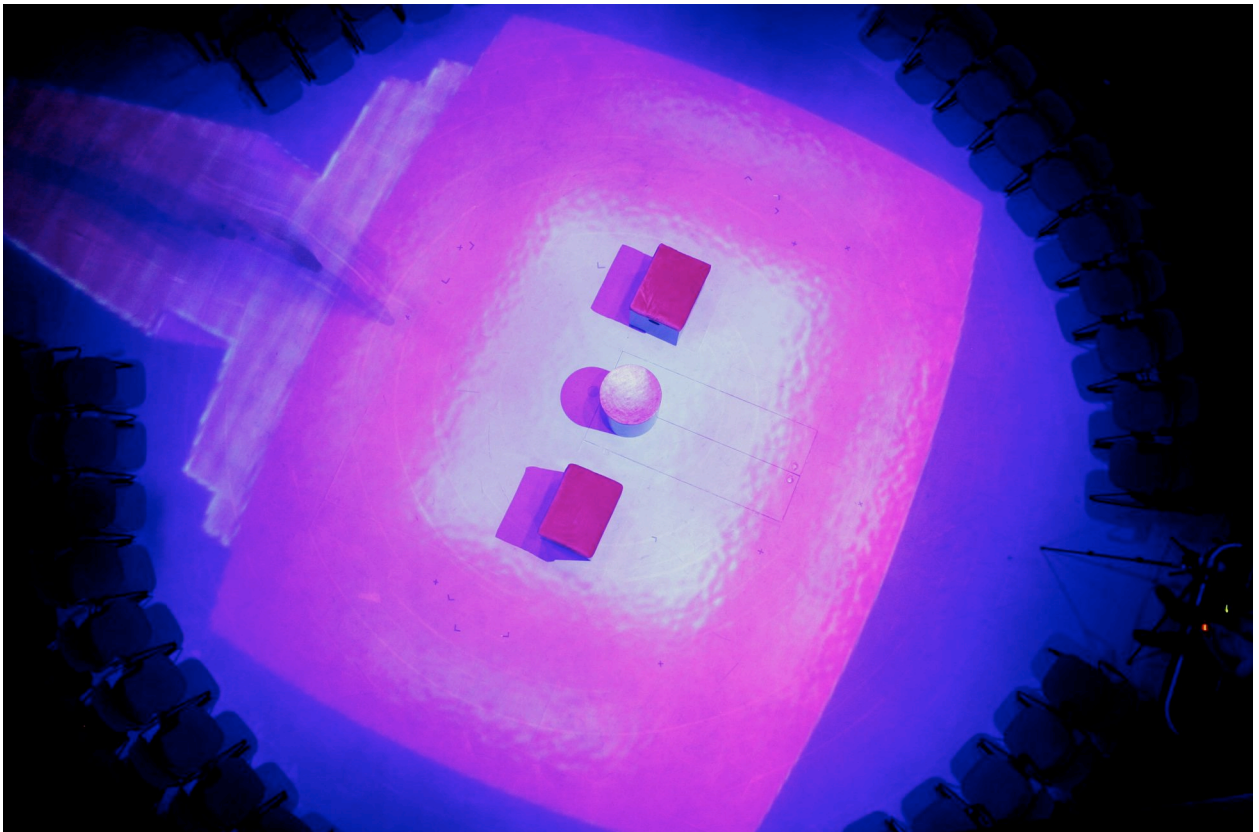
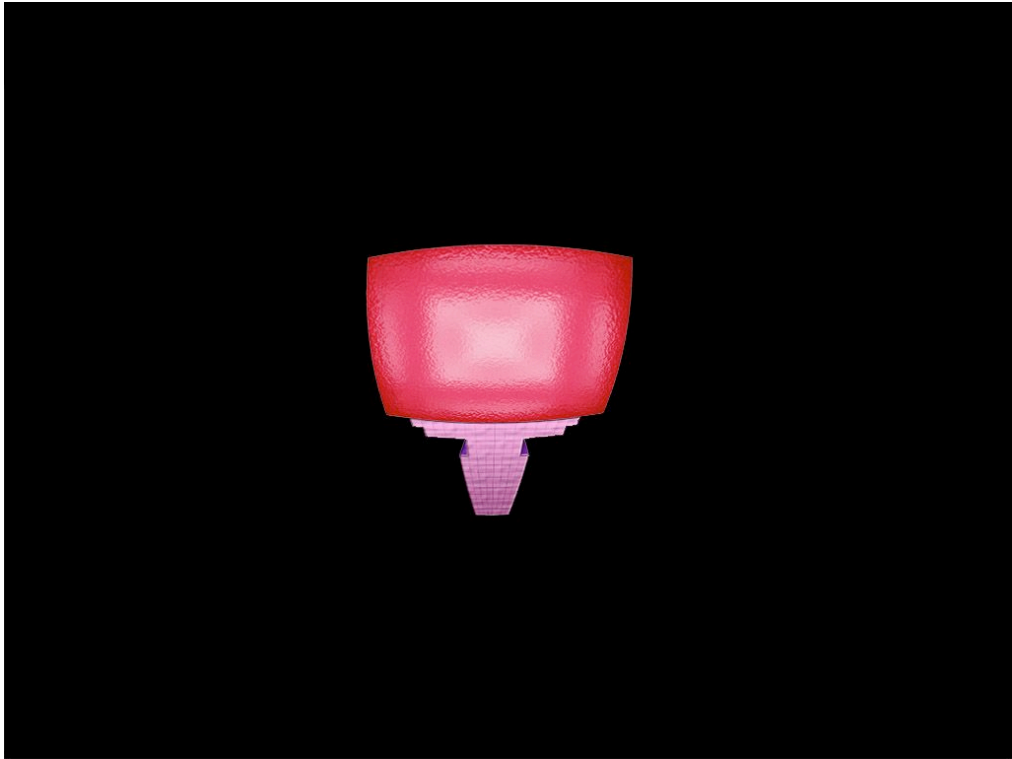
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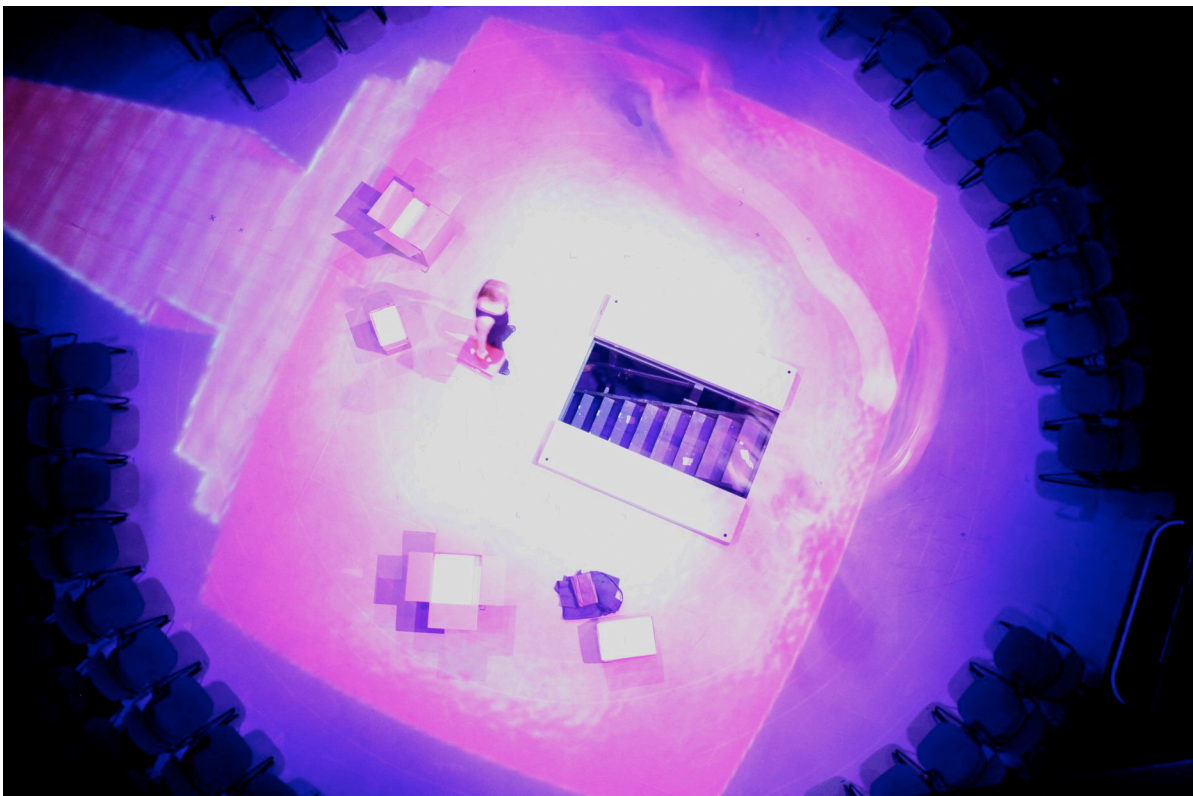
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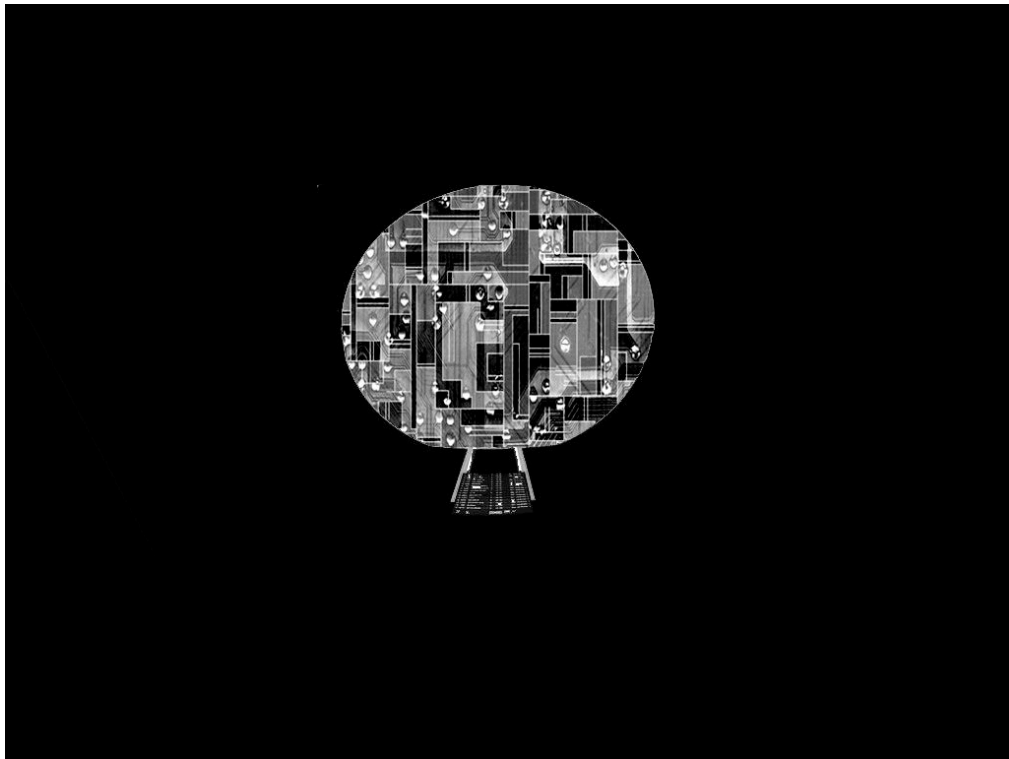
Final Projection Image and Production Photo



Production Photos



Final Projection Image and Production Photo



Production Photos



Final Projection Image and Production Photo

I think my husband is starting to expect something.

Oh! Ya! I would like to go! What time does it start?

I have to go.

No, I don't understand.

I've told you tons of times to stop calling me!

A, B, or C?

Do you want to meet me on the corner at the coffee shop over on 62nd?



Production Photos



Production Photos



Production Photos

