

UNIVERSITY OF CALIFORNIA SAN DIEGO

Light House to Playhouse

A Thesis submitted in partial satisfaction of the
requirements for the degree Master of Fine Arts

in

Theatre and Dance (Design)

by

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DEDICATION

To all the teachers who've offered guidance and experiences. To the advisors who freely gave their time and wisdom. To the friends I've made here who've made this journey a happy one. To the friends back home who kept me sane and encouraged me. To my parents who always have my back. Simply and complicatedly, thank you.

Go raibh maith agat. Míle buíochas. Tá grá agam dhuit.

EPIGRAPH

The past three years have been filled with the most violent of experiences.

Sharp.
Cutting.
Assaultive.
Penetrative.
Eviscerating.
And ending.

The sharp scent of eucalyptus trees on the long walk after tech.

The cutting sound of laughter echoing through the hallways.

The assaultive chaos of excitement of the first read through.

The penetrative and exhilarating conversions.

The eviscerating drop as the lights come down.

And the ending uproarious applause of congratulations.

Yes, the past three years have been the most violently satisfying and fulfilling of times.

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ABSTRACT OF THE THESIS

Light House to Playhouse

by

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Master of Fine Arts in Theatre and Dance (Design)

University of California San Diego, 2021

Professor Christopher Kuhl, Chair

The pandemic changed everything. The theater world was thrust onto darkened stages. Surrounded by feelings of chaos and uncertainty I began to bring those emotions into my work. Without performances to focus on I turned my attention to creating large-scale light installations as interactive performances, inspired by the last in-person production designed before everything shut down. And as a result I became enthralled by the need for communication and connection, which, even when it had diminished in one area, was heightened through creating virtual performances. Zoom conversations combined with dramaturgical and theatrical theory coursework formed an interest in the role of empathy within design or more specifically the role

of the designer in portraying trauma onstage. Through looking at my own designs I investigate how empathy has played a role and grown within my process.

COVID-19 gave me the time to discover more about myself and the art I want to pursue and to reflect upon the things I've learned during my time in the department. Or my journey to help understand the importance of communication, and embodiment, and touch in the expression of my inner voice as an artist.

LIGHT HOUSE TO PLAYHOUSE

There's an energy that happens when we walk into a performance space; feelings of excitement, anticipation, and frustration seep into the walls. As theater-makers so much of our craft is dependent upon people and the spaces we work in, but what happens when the spaces are removed? COVID-19 has drastically changed the landscape of theater production, bringing about a new expectation of the collaborations that occur between the people and in turn redefining what performance is.

In February 2020 I completed the design for *An Object, Screaming*, a project in collaboration with MFA Choreographer Paulina Colmenares. The design pulled inspiration from meditative gestures within the creative act. In collaboration with scenic designer, Sam Keamy-Minor, and costume designer, Daniella Toscano, we began to experiment with our own gestures. I started by searching for what those repetitive motions meant for me during the first week; studying my previous designs to find the gestures, or tools, I'm drawn to. For me that was looking for the ideas that I kept returning to. Three things stood out across the majority of my most recent designs: use of heavy texture, electrifying color, and an increasing amount of geometric shapes. Those strokes became the toolbox I leaned into. Building systems of overhead textures, side lights with color scrollers to allow easy changes between color, and a grid of shuttered boxes across the entire floor. The set consisted of four benches, for the audience, surrounding two parallel plastic curtains set into the center of the space like an installation piece. The central structure was where I focused the lighting; turning the scenic elements into a lighting installation as well. Programming effects, often pulsating or shifting color, this central piece became an additional dancer. Movers and rovers were used to shape the performers. Rovers operated on the deck as a sort of follow spot, physically moving through the space with the

dancers instead of fixed location. The two rovers consisted of a ladder on wheels with 2 lights attached at different heights, which allowed me to get the more typical dance lighting side lighting. These ladders were then moved across the floor by deck electricians tracking the dancers with the light. Movers, lights with mechanical abilities that allow it to move beyond a stationary fixed point, were placed on the four corners of the room so that a dancer could be lit at any location. This became especially important when we drew focus, using lighting, to some quieter moments on the benches, happening at the same time as one in the center of the space. This need to pull focus was due largely because the majority of people want to focus on the thing that is moving in the space instead of the quieter details, so in turn the quieter thing needs a bit of help. This is achieved by making the details brighter, more colorful, or contrasting in some way to pull them out. The illuminated structure at the center caused figures to become objects within the space, where the focus was on composition of shape and juxtaposition between stillness and movement. Through this exploration of the scenic element a fifth dancer, *An Object, Screaming* reignited the installation artist within me.

Installation has always provided a sense of play for me. A moment to try new textures, colors, materials, locations, or subject matter. This aspect of art was always important to my process as a photographer when I explored the use of placing objects in the frame that don't typically belong within that space. Lighting and sculpture always remained fairly separate forms of installation. Within my process sculptures were meant to be photographed, not intended for an audience to stand within or interact with. The separation afforded by an image of an installation created an envelope of safety similar to that of a design of another's words within a play or choreography. Until *An Object, Screaming* I had always made sure to maintain that distance. In many aspects I was playing it safe, trying not to put too much of myself into a design or artwork,

and using photography as a way to maintain that cushion of protection. Because to me that was where I was safest and had the most control. The idea of combining image with experience to emphasize the object remained through a lens. In one sense this gave me the ability to control what people could see. It gave permission for the imperfections to be framed out of the shot. That was a way in which I could control my want for perfection without it overwhelming me. Through creating *An Object, Screaming* I was forced to take those risks and become invested in the experience created by the installation of lighting. And, in turn, it opened my mind to the possibility of building installations for people to experience themselves.

A few weeks after *An Object, Screaming* opened everything shut down due to COVID-19. In a state of lockdown I began to play with sculptures. Larger ones. Pieces that held the same spirit of installation I discovered within *An Object, Screaming*. And installations intended for the audience to interact with and experience beyond a photograph. I began pulling from my own experiences to find connections between lighting and performance. *Ripple* and *Light House* are two that have been heavily influenced by the events of the past year.

For me much of the past year has been a constant battle between the realization of my own fragility, flickering hope that it's only momentary, a constant baring of fears, and an influx of responsibilities to keep pushing through. Yet, there were so many constant sparks that illuminated it as well. By not having a schedule packed to the brim at every moment of the day I was able to try things that I have been thinking about for awhile, but on the other hand it was more difficult to get the supplies without feeling like I was taking some insane risk. People became something to fear, because I never knew if someone had been exposed to COVID-19. But while I didn't want to be around strangers I could also see how people supported each other through the chaos. People and community came together. New ways of communicating allowed

us some form of connection in a world where it was so severely limited. The past year felt like a house of stained glass, equal parts beautiful and fragile.

Light House is inspired, in part, by that sentiment. It is, in its simplest form, a house of glass. Only a thin metal frame, in the elementary shape of a house, provides any support. A house provides protection. In dreams it represents your whole being, each room representing significant memories or different aspects of one's personality. The word home evokes feelings of warmth and comfort that contradict the fragile, coldness of glass. Glass is a form of invisible protection that can be easily broken. The strength and support of the structure depends upon the walls. There is structure and support, but it's minimal. The metal support beams, designed to maintain the angle of the glass, rely upon the glass in order to remain upright. Just as the glass depends on the metal. Glass, when two sides are angled to refract the light into rainbows forming a prism. I remember reading sentiment early in lockdown that the Pink Floyd prism represents life, the resulting spectrum is the result of lived experience. However, due to the flat walls required to maintain balance in the support beams the prismatic structure couldn't be achieved to create this effect, instead the glass walls are covered in chameleon film, which emits different colors depending on how light goes through. With the structure in place it needs light to make it come alive. I wanted *Light House* to be illuminated from within, but to not see the source of the light. In a way becoming a beacon of hope, not unlike its namesake. In order to achieve this a floor of light is placed underneath the whole structure using an LED screen underneath frosted acrylic. These LED panels push through the film on the glass into the space beyond to turn the room into a prismatic cloud. It is a recognition of the intense fragility and uncertainty of the year.

Where *Light House* plays with the idea of hope within fragility *Ripple* is about pieces missed during the year. At its heart *Ripple* is about touch which, as someone living alone for the

majority of the year, became something that was increasingly important and desired. Feelings of isolation and loneliness rose as the amount of touch diminished. And an understanding of how touch is important to communication came about. It is a way to exchange information when visibility or audibility is difficult. Sign language is pressed onto the palms of those without sight or hearing. Cave divers use it to get each other's attention or to guide each other through the rocks. Tesla explored the use of Radio signalling called Through-The-Earth (TTE) by using low-frequency waves with the minerals within mines to connect with individuals in the mines. Touch screens on electronic devices like cell phones and tablets work by sending electrical currents, which notate the coordinates of the point of contact upon the surface, to the motherboard to formulate a response to someone placing their finger on the screen. Waves, vibrations, and currents are forms of touch. The result of the exchange that happens through physical contact. One that heals and comforts, provides a confirmation of well-being. In the past I knew I could find comfort if wanted. Due to lockdown restrictions my apartment felt more like a cave than a home, even more so after my roommate decided to move back home to be with her family. I was alone for twenty-four hours every day.

Ripple started as a structure of angles, rails of lights forming triangles imagined during the first year at UCSD for a project then put aside to gather dust on the shelf as other projects took precedence. In quarantine I started looking at the incomplete structure again. As I began working on the piece I made changes that helped tell the story the longing for touch and connection. The angles became the faces in the interior of a cave. The internal structure changed from a heart into a graphic representation of a stalactite and stalagmite almost connecting. Instead of the lights being pre-programmed, as they were in the original imagining, they would be interactive and dependent upon the involvement of the audience. The bars would serve as both

a light source and capacitive touch screen sending electrical signals which respond to touch in a ripple, as a stone entering the water. When someone touches the structure at any point it ripples out, but when someone connects the points of the stalactite and stalagmite it sends a signal out to the entire structure. This is design as a form of connection, the piece responds to people and in turn people respond to it. This symbiotic response is why I've missed touch so much. Close physical association is expressed through touch, but through the deprivation of it I became far more dependent upon other forms of connection to actively express and convey everything. As a result of COVID, by creating a need for social distancing, I relied far more on the exchange of ideas without the benefit of body language. I discovered that design and connection both require those other forms of communications, or a lot of active listening and sensitivity towards the feelings and stressors of others. This was never more evident than through virtual production.

Virtual production presented a type of lighting design that was completely different than the responsive decision making process that I typically use. During an onstage production I have the ability to react to all of the pieces combined. There is a lot of planning before entering the space, but it's fluid and able to change during the tech process. If something isn't working there is the ability to go back and fix it every day until the show opens. This is not the case in virtual production, in this form the decisions made in the planning stage are finalized once the order has been sent in. This finalization stems from two branches, the restrictions on meeting in person because of distance or lockdown and the timeline set in place for filming. Because everything has to be delivered to the actors, changes, like needing a more saturated color or more extension cords, are not as quick as they would be in an onstage production. Things that would take a matter of a day in person could take upwards of a week virtually. I've done two virtual productions, *HEAP* and *A Midsummer Night's Dream*. During the virtual production of *A*

Midsummer Night's Dream I began making decisions on products that would afford me a bit more flexibility during the tech process, turning to lights that had the ability to change color instead of relying on gels, as I had done in *HEAP* in the fall. This change provided the opportunity to change my mind about color in the moment. An option that proved to be a useful element to control because color tests, which I rely on for an onstage production, are not as dependable in the virtual world. Just as color varies on different skin tones onstage it also varies depending upon how the camera reads color and light. The ability to customize color provided me with a tool to create a touch more evenness across those differences. Virtual theater also brings about a type of collaboration between the designer and actors that I've never used during in-person tech processes. Online the actors are their own crew and electricians staff, they're responsible for setting up equipment and making the changes to help realize the design I imagined. In person I tend to rely upon stage managers and directors to relay notes to the actors which, in turn, minimizes the connection I form with the cast. I learned far more about the actors in this virtual production than in any other time we've worked together.

I made sure to have conversations with the actors and to form connections in the hopes that it would help them feel more at ease, more excited to collaborate. I invited them to actively exchange ideas with me to create scenes. In *Midsummer* the Mechanicals exist within a Zoom-like world and I invited the cast to play with all the bad lighting tropes that we've seen in the past year over the platform. We had some people completely backlit while others relied only on their computer light. I made the decisions about the equipment everyone would receive, but I invited them to play along with me. What resulted was a wonderful combination of the characters personalities and lighting. Through this process the cast began to see a bit more of what I was hoping to achieve, taking it upon themselves to get rid of hot spots on the wall or

adjusting the color temperature of a light to better suit their skin tones. These actions made it that much easier for me to be able to focus on the details.

Midsummer made me aware of the strain that I might put onto an actor while trying to realize my vision. It made me question the importance of perfection versus the practice of empathy. Empathy became more important in my process. The knowledge of building a world within someone's home made me conscious of how much space I was taking up. I made selections for equipment based on size over features, forgoing the perfect angle to avoid the additional space needed for a light stand. I also learned to read the actors more. Finding the balance between when I could keep going and when it was too much. I found myself pulling back when it was obvious that the details were too much. And it was strangely therapeutic for me to do this. The ability to accept imperfections that weren't happy accidents didn't bother me as much. And it paid off. I was able to get more from my collaborators and actually have them see what I was hoping for.

There was a moment in *Midsummer* where I realized another aspect of lighting design that I hadn't considered before, the topic of light sensitivities. I was notified by stage management early in the process that one of the cast members had sensitivities to flashing lights. Taking it as an opportunity to learn we set up a time to speak on the subject. This conversation with Grayson Heyl instilled an even greater importance to listening to the cast. I had worked with her on *HEAP* and had no idea that she was having difficulties with the brightness of the lights. I made sure to select products for her that didn't have flashing capabilities and that had the ability to dim, providing her with control that she didn't have in *HEAP*. And through her making it known other cast members also felt more comfortable speaking to me about their own sensitivities. And I took it on as something that needed to be addressed in the design. I want to

start implementing this topic into my first rehearsal design presentations. Making a point in front of everyone that I want to hear their voice. I want to encourage the cast to reach out to me, or stage management, if they have any light sensitivities early in the process. This will provide me with the knowledge so that I know, going forward, either who to alert if there is going to be something triggering or to avoid putting those simulations into a scene while the performer is onstage. But there's another aspect beyond asking them to alert me of any light sensitivities, I also want to hear if there's something that they believe will assist them in playing their character that I can facilitate in lighting, much like we accomplished for the Mechanicals. Going forward I can see how much taking the time to get to know the actors and check in with them can help a production. This was one form of empathy that I have begun to implement into my process, but there is another type that I've been thinking about as well, namely how design uses representation of trauma and realism to tell a story.

There is an aspect of theatrical production that depends upon spectacle; meaning something exhibited to view as unusual, notable, or entertaining especially an eye-catching or dramatic public display. In theater that translates to something that gets people talking about the show. Aristotle defined spectacle as all the visual aspects of a production, noting it as the least important of the six components of tragedy. Spectacle is the event of representing elements of a culture's cultural and emotional lives through symbolic gestures. These symbolic motions have the potential to enforce trauma through language and actions. Traumas are disruptions experienced by survivors of devastating events. They can cause physical and psychological pain by fracturing an individual's notion of well-being, stability, and security. Traumatic events are often used within the narrative of plays as a way of giving space to understand how we, as

humans, react and overcome it. While the use of these events in themselves is not problematic the handling within the design for spectacle can be.

The history of trauma is one which is exceedingly complicated to navigate and can feel like a minesweeper game without a solution. And, to a point, that is the case, but there is a difference between exploiting trauma for the sake of spectacle and portraying it to tell the story. Every production should take the time to address how those events should be handled, and if possible find a method in which to avoid exploitation. For instance when portraying a battle onstage what is the best way to handle it? On one hand there is a drama and extravagance to realistically portray the scene with blood bags and muzzle flashes, but could something similar be achieved by using dance-like slow motion or dramatic lighting instead? Which would be less likely to cause someone to have to leave the theater in panic? Different forms of these questions are things that I've begun to consider in the handling of my designs. The objective is to find a language to tell the story which plays more into theatricality and less into realism. With every production I look at with this approach the more I learn about how to handle it. One such production was *Man in Love*.

Man in Love is a play that takes place in the 1930s in a metropolitan area with two segregated areas separated by the Zoo, an area where segregation is a bit more lax. Within the script topics of race, gender, sexuality, and safety are all brought to a head. There are scenes that are incredibly violent in actions or suggestive language. Within the span of two scenes the same character is almost assaulted and then murdered by her best friend. And any one of those scenes could become problematic is mishandled. And it would have been so easy to lean into the murder mystery aspect of the script. Upon my first reading of the script I could see the spectacle of being able to see the blood on the victims, or seeing realistic skin patches on the wall of the

protagonist's apartment, or extending the scenes where the serial killer is hunting for his next victim just enough to see him in action. Over the summer I began to educate myself on the history of these segregated cities, on the position of civil rights in the 1930s, on trans rights, on women's rights, on the history of serial killers. Everything that was within the script I tried to research over the summer. After which I read the script for a second time, with all the knowledge I had accumulated. And I saw something different. The Zoo was more about equilibrium, this was the space where people could, as much as possible in the time, live the lives they wanted. This was where life happened. The idea of using film noir to emphasize the light and dark within the script made sense. It gave us permission to give a sense of eeriness through shadow play and low visibility without relying upon realism. I let the script lead me instead of me trying to pull it into some design scheme.

During my time within the program I've designed seven department productions, nine regional productions, and assisted on six others. I've had 4 productions cancelled due to Co-vid. And I've designed 2 fully virtual productions. I've always called myself a storyteller, it was the one linking thread between all of the different mediums I use. And I still abide by that title. But after the past few years here I can fully say that perhaps a few adjectives could be added as well. Perhaps I'm an empathetic, collaborative, hands-on storyteller who happens to use lighting, photography, writing, and sculpture.

References

- Admin. "Cave Diving Communication: Blue Label Diving." *Blue Label Diving | Technical Diving and Public Safety Diving Courses Facility*, Blue Label Diving, 19 Sept. 2015, www.bluelabeldiving.com/cave_diving_communication/.
- Aristotle: Poetics*, CriticalLink- University of Hawaii, www.english.hawaii.edu/criticalink/aristotle/terms/spectacle.html.
- Becker, Andrea. "How Do Prisms in Optics Work?" *Education*, Seattle Pi, 21 Nov. 2017, education.seattlepi.com/prisms-optics-work-4817.html.
- Beeman, William O. "The Anthropology of Theater and Spectacle." *Annual Review of Anthropology*, vol. 22, no. 1, 1993, pp. 369–393., doi:10.1146/annurev.an.22.100193.002101. Accessed 1 Mar. 2021.
- Cancelmo, Jesse. "Cave Diving: Lessons from Overhead Environments: Dive Training Magazine." *Scuba Diving News, Gear, Education | Dive Training Magazine*, Dive Training, 10 Nov. 2019, dtmag.com/thelibrary/cave-diving-overhead-environment/.
- Cocozza, Paula. "No Hugging: Are We Living through a Crisis of Touch?" *The Guardian*, Guardian News and Media, 7 Mar. 2018, www.theguardian.com/society/2018/mar/07/crisis-touch-hugging-mental-health-strokes-cuddles.
- Gibson, David. *Cave Radiolocation*. D. Gibson via Lulu Enterprises, 2010.
- Handel, Steven. "The Ripple Effect of Kindness: How One Good Act Multiplies Into Many More." *The Emotion Machine*, The Emotion Machine, 19 Nov. 2020, www.theemotionmachine.com/the-ripple-effect-of-kindness/.
- Hanson, Molly. "Sign of the Times: Can Hugging Machines Solve the Touch Crisis?" *Big Think*, Big Think, 24 Oct. 2019, bigthink.com/technology-innovation/can-machines-solve-touch-crisis?rebelltitem=1#rebelltitem1.
- Hasan, Maham. "What All That Touch Deprivation Is Doing to Us." *The New York Times*, The New York Times, 6 Oct. 2020, www.nytimes.com/2020/10/06/style/touch-deprivation-coronavirus.html.
- Jacobson Assistant Professor, Kelsey. "Theatre Companies Are Pushing Storytelling Boundaries with Online Audiences amid COVID-19." *The Conversation*, 14 Jan. 2021, theconversation.com/theatre-companies-are-pushing-storytelling-boundaries-with-online-audiences-amid-covid-19-141583.
- Krishna, Goteti Mysr. "How Does a Mobile Touch-Screen Work?" *The Guardian*, Guardian News and Media, 2013, www.theguardian.com/notesandqueries/query/0,,-203801,00.html#:~:text=Touch%20screen%20t

technologies%20used%20in,and%20surface%2Dwave%20based%20systems.&text=When%20a%20user%20touches%20the,are%20calculated%20by%20the%20processor.

Liles, Honah. "Zoom Can't Give You the Comfort of a Hug, but Other Technologies Can." *Slate Magazine*, Slate, 6 May 2020, slate.com/technology/2020/05/technology-touch-substitutes-robots-weighted-blankets.html.

Mackintosh, Leigh. "Flash and Smoke: The Importance of Spectacle and Music in Theatre." Digital Showcase @ University of Lynchburg, 2006.

McCluskey, Megan. "Why Lack of Human Touch Can Be Difficult Amid Coronavirus." *Time*, Time, 10 Apr. 2020, time.com/5817453/coronavirus-human-touch/.

Mehta, Niharikaa. "How Touch Deprivation Impacts Our Mental Health." *Psychreg*, 31 Dec. 2020, www.psychreg.org/touch-deprivation-mental-health/.

Morgan, Eleanor. "Lost Touch: How a Year without Hugs Affects Our Mental Health." *The Guardian*, Guardian News and Media, 24 Jan. 2021, www.theguardian.com/lifeandstyle/2021/jan/24/lost-touch-how-a-year-without-hugs-affects-our-mental-health#:~:text=%E2%80%9CTouch%20is%20a%20modulator%20that,greater%20anxiety%2C%E2%80%9D%20says%20Fotopoulou.

Nigh, Katherine Jean. "Performing Nation, Performing Trauma: Theatre and Performance After September 11th, Hurricane Katrina, and the Peruvian Dirty War." *Arizona State University*, 2011. *ASU Electronic Theses and Dissertations*, repository.asu.edu/items/9143.

Polack, Ellie. "New Cigna Study Reveals Loneliness at Epidemic Levels in America." *Cigna Newsroom | New Cigna Study Reveals Loneliness at Epidemic Levels in America*, Cigna, www.cigna.com/about-us/newsroom/news-and-views/press-releases/2018/new-cigna-study-reveals-loneliness-at-epidemic-levels-in-america.

Schuchert, Jenny. "The Ripple Effect of Communication - Inspiring Change and Results." *IT Asset Knowledgebase*, ITAK, 1 Aug. 2017, itak.iaitam.org/the-ripple-effect-of-communication-inspiring-change-and-results/.

Singh, Nathan Devanand. "Theatre of Trauma." *DePaul University*, The Theatre School MFA in Directing Theses, 2017, via.library.depaul.edu/tts/3 .

"Spectacle." *Merriam-Webster*, Merriam-Webster, www.merriam-webster.com/dictionary/spectacle.

"Theatre and CoVide-19." *Drama League*, Education at the Drama League, dramaleague.org/programs/resources/theatrecovid.

"Through-the-Earth Mine Communications." *Wikipedia*, Wikimedia Foundation, 27 Sept. 2020, en.wikipedia.org/wiki/Through-the-earth_mine_communications.

Wexler, Matthew. "Theatre's Changing Landscape." *Dramatics Magazine Online*, Dramatics, 17 Nov. 2020, dramatics.org/theatres-changing-landscape/.