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**Alchemy as Restorative Practice:
A Case-Study of { remnants } of a { ritual }**

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TABLE OF CONTENTS

LIST OF FIGURES	vi
ABSTRACT	viii
Dedication	ix
Acknowledgement	x
VITAE	xi
INTRODUCTION	1
Constructions of Value	4
CONCEPT	7
Defining the <i>Wunderkammer</i>	8
Defining the <i>Autotopography</i>	11
Amalia Mesa-Bains' <i>New World Wunderkammer</i>	11
Defining the Alchemy of { }	14
THE ALCHEMY OF { MEMORY }	15
Discovery	15
Digital Alchemy	19
Physical Alchemy	21
THE ALCHEMY OF { RITUAL }	26
Ritual Materials	27
Ritual Crafting	30
THE ALCHEMY OF { IMMERSION }	31
The Magic Circle	33
Behind the Curtain	35

THE ALCHEMY OF { PARTICIPATION }	36
Open Work	37
Yoko Ono's <i>Wish Tree</i>	37
Experience Design	40
Observations	42
Performative Transmutations	43
THE ALCHEMY OF { AESTHETICS }	46
Kunst = Kapital	46
Speculative Play	49
Love Letters	49
SPECULATION	50
APPENDIX	52
A) A Gift that Could Never be Sent	52
B) Familia Sandoval	52
C) "A Guayana" by Isidro González Rodríguez	53
D) Text Formatting	53
E) Corporal Interactivo Residency	55
F) On Diaspora	55
G) love letters to { }	56
H) Technical System Diagram	56
I) Preset Looks for Show	57
J) Preset Builder	59

K) { remnants } of a { ritual } Instagram	60
L) Previous Work	60
M) Studio Review Critique Topics	60
BIBLIOGRAPHY	61

LIST OF FIGURES¹

Figure 1	2
Figure 2	3
Figure 3	3
Figure 4	6
Figure 5	6
Figure 6	13
Figure 7	16
Figure 8	17
Figure 9	18
Figure 10	18
Figure 11	19
Figure 12	20
Figure 13	22
Figure 14	22
Figure 15	23
Figure 16	25
Figure 17	25
Figure 18	26
Figure 19	28
Figure 20	28

¹ Note: all images were taken by the author unless otherwise stated.

Figure 21	29
Figure 22	29
Figure 23	30
Figure 24	34
Figure 25	38
Figure 26	39
Figure 27	41
Figure 28	43
Figure 29	44
Figure 30	44
Figure 31	45
Figure 32	48

ABSTRACT

Alchemy as Restorative Practice: A Case-Study of { remnants } of a { ritual }

By Zoe Sandoval

Through the lens of ritual studies and playful design, this paper reevaluates past traditions of collecting to reimagine new rituals of offering. *{ remnants } of a { ritual }* is an exploration of memory crystallization and social exchange; a new framework for offering as manifested by a site-specific, autotopographical *wunderkammer*. This immersive installation is a refraction of my nostalgia for Venezuela, and an invitation to reimagine our relationship to diaspora.

By creating a cycle of offering and receiving, *{ remnants } of a { ritual }* reinterprets the *wunderkammer* as a site for social healing: subverting hegemonic capitalist structures to serve as a catalyst for speculative play. Pulling from notions of transmutation and alchemy, I examine representations of memory, ritual, immersion, participation, and aesthetics to deconstruct the emergent processes that led to the development of *{ remnants } of a { ritual }*

Key words: ritual, play, performance, nostalgia, diaspora, installation art

Dedication

Para mis antepasados Margot González, Hector Sandoval, Isidro González Rodríguez, y todos los que no pude conocer. Para los Venezolanos que siguen luchando para su libertad y salud. Los que siguen viviendo en Venezuela y los que ya no pueden regresar.

To my ancestors: Margot González, Hector Sandoval, Isidro González Rodríguez, and all those I could never meet. To Venezuelans who continue to fight for their liberation and wellbeing. For those who continue to live in Venezuela and those who can no longer return.

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Thank you to my parents for their love and guidance, and for helping digitize and catalogue my grandfather's negatives. To my aunt for giving me her bolívares, and sharing stories of Venezuela. Thank you to my partner for helping me navigate this incredibly personal process. For helping me understand the intricate workings of computer programming, and for keeping me whole even when I felt fractured — *mi media naranja*.

VITA

I am a documentary filmmaker, new media artist and experience designer. My work spans traditional documentary, immersive installations and mixed-reality experiences. I make pieces about my personal history, feelings of wonder, and the serendipity of everyday life.

I was born in Los Angeles, California to a Mexican mother and Venezuelan father. When I was young, we moved to south Florida and traveled frequently to Venezuela to spend time with my father's family. We danced to Gaitas, explored the mountains and swam in the Caribbean's clear water. Soaking in the sun's rays, I was mesmerized by the iridescent refractions that painted the sandy floor. I tumbled in the crystalline waves and collected seashells along its pristine beach. In the streets I found quartz crystals and couldn't believe such a magical place existed. I never wanted to leave and counted the days until I could return again. I last visited Venezuela in 2008 and have yet to return.

{ remnants } of a { ritual} was inspired by nostalgia for Venezuela, a longing for better times, and the prompt, 'A Gift that Could Never be Sent' (Appendix A). In sharing this, I hope to contextualize the experiments and rituals that led to my master's thesis project.

INTRODUCTION

{ remnants } of a { ritual } is an immersive site-specific installation: both a sacred place outside of time, and a confluence of the past, present and future. It exists at the intersection of two apparatuses: the *wunderkammer* and the autotopography. Both are practices of collecting. The former born out of the Age of Discovery and colonial imperialism, and the latter an intimate personal curation of objects. In this paper I will explore how the intersections of the *wunderkammer* and the autotopography generated a meta-ritual, which I call the *alchemy of { }*. I will be using this concept in conjunction with ritual studies and speculative play to further deconstruct the work.

{ remnants } of a { ritual } is both a personal, intergenerational collection of artifacts, and an emerging curation of mementos generated by gallery visitors. The media in the piece is drawn directly from my family's personal archive. The photography projected on the walls is from my grandfather's time as a photojournalist in Venezuela from 1944 to 1978 (Appendix B). This archive consists of landscapes of the city, beaches, mountains, and agricultural fields that I remixed using style transfer — a specific classification of machine learning. Projected on the floor are stanzas from the poem, "A Guayana", which was written by my great-grandfather in the mid-1950s (Appendix C). The chandelier that hangs in the center of the room is reminiscent of a mobile that hung in my grandmother's home in

Venezuela. All of the media was remixed, translated, and reimagined as part of the *alchemy of { } process*.

On the perimeter of the installation are four pedestals with unique prompts for writing love letters (Figure 1). They are provocations to consider themes of longing, nostalgia, diaspora, and wonder. Visitors are invited to inscribe their love letters on Venezuelan bolívares; a currency in flux, in need of reimagination. At the center of the space, hangs an 8-foot-tall chandelier comprised of crystallized vellum and Venezuelan currency. Underneath it sits a large bowl filled with a solution where participants can offer their love letters to become crystallized (Figures 2 - 3).



Figure 1. Establishing shot of the installation



Figure 2. Detail shot of the chandelier



Figure 3. Close up of bowl with love letters

{ remnants } of a { ritual } is an enveloping experience: a mix of atmospheric projection, dynamic lighting, and ambient sound creates an ethereal, otherworldly environment. Over the course of an hour, the space is transformed in one-minute intervals. These transitions encouraged spectators to linger and be lost in the installation. Gallery visitors were invited to witness the unfolding of an autotopographical archive and participate in the authoring of love letters. This intermixing of archival media with objects of the present creates an intergenerational link between myself, my ancestors and gallery visitors; thus, creating a *wunderkammer* of memories, and an autotopographical altar to nostalgia and timelessness.

Constructions of Value

Venezuela is in crisis. Today, yesterday and likely tomorrow. Thousands will continue to flee the country due to violent crime, unsafe living conditions, a scarcity of resources, and escalating inflation rates. As of 2019, roughly 3.7 million or 1-in-10 Venezuelans have fled the country seeking refugee protection due to, “the worsening political, economic, human rights and humanitarian situation.”² This state of crisis has been slowly escalating since the mid 1980s due to Venezuela’s oil-dependent economy.

² Liz Throssell, “Majority Fleeing Venezuela in Need of Refugee Protection,” UNHCR: The UN Refugee Agency, United Nations High Commissioner for Refugees, May 21, 2019, Accessed May 23, 2019. <https://www.unhcr.org/news/briefing/2019/5/5ce3bb734/majority-fleeing-venezuela-need-refugee-protection-unhcr.html>.

In the early 2000s, political corruption and the mismanagement of resources led to a series of destabilizing events: protests and strikes by oil workers, currency control, food shortages, media and power blackouts.³ When I visited in 2004, my uncle expressed concern over the inability to find common goods like milk and cheese for us to have during our visit. I remember him saying that it took almost two weeks, and all he found was powdered milk. At the time, these shortages were shrugged off as being *raro* or strange. However, it was this volatility of resources compounded with hyperinflation that led to the country's economic collapse.

After the death of former president Hugo Chavez in 2013, the rate of inflation jumped from 38% to 929% in 2018 leaving the Venezuelan bolívar nearly worthless.⁴ Photographer Carlos Garcia Rawlins did a photo series showing everyday items like food and household goods juxtaposed with the number of bolívares needed to buy them (Figure 4-5). Even if these items were stocked in supermarkets today, Venezuelans would have a currency unable to pay for them due to constant economic manipulation, hyperinflation and devaluation. If a family is unable to reliably access common resources, and live in fear that the power will go out any minute, spoiling the only food in their refrigerator — what are they to do?

³ Peter Millard, et al., "A Timeline of Venezuela's Economic Rise and Fall," February 16, 2019, Accessed May 23, 2019, <https://www.bloomberg.com/graphics/2019-venezuela-key-events/>.

⁴ Peter Millard, et al., "A Timeline of Venezuela's Economic Rise and Fall."



Figure 4. A chicken next to 2,600,000 bolívares (August 2018)⁵



Figure 5. Baby diapers next to 8,000,000 bolívares (August 2018)⁶

⁵ Carlos Garcia Rawlins, "Venezuelan bolivar - what can it buy you?," *BBC, Reuters*, August 20, 2018, <https://www.bbc.com/news/world-latin-america-45246409>.

⁶ *Ibid.*

I give this brief summary of Venezuela's socio-economic turmoil to contextualize its state of disaster, and to foreground my nostalgia for a different time. Although I never lived in Venezuela, I visited often in the 2000s while living in Florida. Like many Venezuelans who have fled, my family now live outside of the country and are struggling to find solace and meaning in these uncertain times. Rather than determine their worth through the valueless currency they've brought with them, they are healing through new interpersonal connections and rituals of diaspora.

CONCEPT

“The collection is never really initiated in order to be completed.”

- Jean Baudrillard

In order to discuss the process of creating *{ remnants }* of a *{ ritual }*, I will first expand on the politics of collecting, personal curation and the transformative nature of public autotopography. In “The System of Collecting,” cultural theorist Jean Baudrillard describes the practice of collecting in relation to the ‘*objet*’ of which he defines as, “anything which is the cause or subject of a passion,” or more simply, “the loved object.”⁷ He goes on to describe collecting as a ‘serial game’ — a search for unique objects that fulfill the self. Which objects do we collect for personal gain? What constitutes the collecting of a given object? It is futile to seek the

⁷ Sean Baudrillard, “The System of Collecting,” in *The Cultures of Collecting*, ed. by Roger Cardinal, (London: Reaktion Books, 1994), 7.

answer, “for it is invariably *oneself* that one collects.”⁸ It is important to state the subjectivity that creates a given collection in order to understand that a collection’s value is determined through the lens of its curator, not necessarily through institutional inscriptions of worth.

On the temporality of objects, Baudrillard asserts that perhaps collecting is a form of ‘nostalgic escapism’ whereby, “the setting-up of a collection itself displaces real time.”⁹ Through collecting, we assert control over objects, imbue them with our own personal meaning, and create imaginative models of the world. Both the *wunderkammer* and autotopography are formalized practices of collecting; the latter being a personal curation, and the former a precursor of the modern museum. In discussing their phenomenological intersections and subsequent permutations, we can see how a transmuted form of ‘collecting’ has served as the design foundation for *{ remnants } of a { ritual }*.

Defining the *Wunderkammer*

Wunderkammers, made popular during the Age of Discovery by European elite, have traditionally been described as private collections of colonized objects. Known by many as the *kunstkammer*, *curiokammer*, and later the cabinet of curiosities, the *wunderkammer* was in its most basic form a room filled with ‘curious’ or marvelous objects. Some of the earliest

⁸ Ibid., 11.

⁹ Ibid., 15.

forms of these collections occurred at the end of the Middle Ages during the rule of the Holy Roman emperors, the Austrian Habsburgs.¹⁰ They used the *Schatz*, or treasury, as a way of protecting personal goods such as family jewels along with, “forms of minted and unminted metal... as well as other items that supported the dynasty’s claims.”¹¹ In this historic example, the value of objects were inherently related to their capitalistic worth and ability to reinforce the hegemonic rule of the royal family.

Over time, the Austrian treasury expanded to include artifacts of more obscure value such as, “scientific objects, natural specimens, exotica from overseas, and *artificialia*,” or things made by hand.¹² In this shift from a monetary vault to a more ‘universal’ collection, the treasury came to be known as a *Kunstkammer* or, “chamber for art.”¹³ Collections of this kind quickly swept through Europe as aristocratic sport. The *wunderkammer* became the chief apparatus for organizing cultural objects that were taken during imperial conquests.¹⁴ This ‘prestigious’ activity of collecting, merely tilted its axis from personal goods to colonized artifacts. Usually rare or

¹⁰ Thomas Dakota Kaufmann, “From the Treasury to the Museum: The Culture of the Austrian Habsburgs,” in *The Cultures of Collecting*, edited by Roger Cardinal and John Elsner, (London: Reaktion Books, 1994), 137.

¹¹ *Ibid.*, 138.

¹² *Ibid.*, 142.

¹³ *Ibid.*, 141.

¹⁴ Anthony Alan Shelton, “Cabinets of Transgression: Renaissance Collections and the Incorporation of the New World,” in *The Cultures of Collecting*, ed. Roger Cardinal and John Elsner, (London: Reaktion Books, 1994), 179-180.

sacred, these objects were used to curate a sublime model of the world — one viewed through the lens of aristocratic privilege — meant only to fill, “collections of the loftiest Imperial house.”¹⁵

The objects collected for *wunderkammers* were renowned for their rarity and extraordinary quality, but were also considered mundane by outside eyes: shells, minerals, animal teeth, horns, etc. Objects that came from the New World, for example, were viewed through the lens of elite materiality and, “indigenous concepts of worth, often based on materials or artefacts not valued in Europe, were of limited interest.”¹⁶ The objects zealously collected during imperial conquests were largely taken without knowledge of their cultural importance or worth. Thus, the critical examination of a collector’s actions is necessary to understand the value of a given collection.

{ *remnants* } of a { *ritual* } is an inverted *wunderkammer*, exchanging power from the collector to the collected. Those who visited the installation collaborated in the authoring of the collection, which I discuss in more detail in the Experience Design section. This collective aggregation of artifacts is founded on voluntary participation rather than an assertion of imperial control. This transmutes the *wunderkammer* from a private aristocratic vault into a communal space that honors individual contributions and the ephemera of our shared experiences. In this sense, { *remnants* } of a { *ritual* }

¹⁵ Thomas Dakota Kaufmann, “From the Treasury to the Museum: The Culture of the Austrian Habsburgs,” 152.

¹⁶ Anthony Alan Shelton, “Cabinets of Transgression: Renaissance Collections and the Incorporation of the New World,” 190.

is a collection whose value is constantly transforming from private to public, personal to social, mundane to sacred.

Defining the *Autotopography*

The autotopography — an evolution of the *wunderkammer* — is the intimate curation of mementos, photographs and autobiographical artifacts.¹⁷ In *Prosthetic Territories: Politics and Hypertechnologies*, Jennifer González defines autotopographies as, “museums of the self,” or memory landscapes manifested through the collection of mementos, tchotchkes and other miscellaneous objects important to the curator or ‘self’.¹⁸ The spatial arrangement of personal artifacts creates emotional links to past events, memories, and act as nostalgic souvenirs. These collections are often found in our homes, our offices, on shelves, in personal altars, and have been seen on display in art installations.

Amalia Mesa-Bains’ *New World Wunderkammer*

Mexican-American artist Amalia Mesa-Bains creates altar-installations that share personal history through the curation of mementos, family artifacts and found objects. In *Subject to Display: Reframing Race in Contemporary Installation Art*, González characterizes Mesa-Bains’ installations as intimate depictions of ritual, “focusing on the domain of

¹⁷ Jennifer González, “Autotopographies,” *Prosthetic Territories: Politics and Hypertechnologies*, (Westview Press, 1995), 133-135.

¹⁸ *Ibid.*, 134.

private spaces to explore larger historical themes.”¹⁹ Her work often showcases Chicana feminine intimacy through the use of *ofrendas* or temporary home altars, and other cultural representations of collecting.

Mesa-Bains’ *New World Wunderkammer* (2013), an exhibition at the UCLA Fowler Museum, showcased a cabinet filled with artifacts from the museum’s private collection, personal objects from the artist, remixed photographic prints, and investigation tables to explore the colonial history of the Americas.²⁰ I had the pleasure of seeing this work as an undergraduate, and was inspired by the intermixing of private and personal objects to create an autotopographical cabinet of wonder. In the center of the installation were three tables filled with flora collected by the artist, her journals and illustrations, and other found objects (Figure 6). In *Cultural Dynamics*, Professor Lucian Gomoll interviewed Mesa-Bains about *New World Wunderkammer*, and stated that:

“Visitors [were] encouraged to participate in a collective investigation directed by Mesa-Bains, complete with examination tools such as a microscope, beakers, and a magnifying glass...The study tables thus bring together an assortment of diverse objects and people, involving them in a common process, a living form rather than a frozen one.”²¹

¹⁹ Jennifer A González, “Amalia Mesa-Bains: Divine Allegories,” In *Subject to Display: Reframing Race in Contemporary Installation Art*, (Cambridge, MA, MIT, 2008), 122.

²⁰ Lucian Gomoll, “The performative spirit of Amalia Mesa-Bains’ New World Wunderkammer,” in *Cultural Dynamics* (27, no. 3, 2015), 359.

²¹ Gomoll, “The performative spirit of Amalia Mesa-Bains’ New World Wunderkammer,” 369.



Figure 6. Study table in Mesa-Bains' *New World Wunderkammer* (2013–2014)²²

Mesa-Bains subverts the traditional norm in museums where visitors are not allowed to touch the art, and instead invites them into her personal exploration of *mestizaje*. She uses these tables as 'contact zones' or, "social spaces where cultures meet, clash and grapple with each other, often in contexts of highly asymmetrical relations of power."²³ By inviting gallery visitors to participate in a subversive, tactile examination of the art, Mesa-

²² Joshua White, "The performative spirit of Amalia Mesa-Bains' *New World Wunderkammer*," 370, figure 6.

²³ Mary Louise Pratt, *Imperial Eyes: Travel Writing and Transculturation*, (London: Routledge, 1993), 607.

Bains transforms the power of display and encourages a critical investigation of collecting practices.

{ remnants } of a { ritual } begins as an autotopography — a collection of seashells, crystals, photographs, and family mementos — to become a meta-topography of crystallized remnants submitted by participants. By expanding the collection to include these offerings, the autotopography is no longer my own or solely under my control. It transforms into an assemblage of personal introspections and collective experience.

Defining the Alchemy of { }

The desire to construct a sublime model of the world found its way into several practices during the Age of Discovery. Alchemical experiments, like the *wunderkammer*, strove to transmute ordinary objects into precious rarities. Often known as a pseudo-science and the precursor to chemistry, alchemy was more significantly a philosophical system centered in, “the transmutation of one form of inanimate matter into another.”²⁴ The experiments in metallurgy to change metal into gold were attempts to prove the alchemical belief of a greater metaphysical transformation. Alchemy thus became a way for me to understand the underlying transformations of the material, digital, and social processes in *{ remnants } of a { ritual }* (Appendix D). For the purposes of this paper, alchemy is defined as the transmutation of value from an original form to its new manifestation — both literal and

²⁴ John Read, “Alchemy and Alchemists,” in *Nature* no. 4279, (Nature Publishing Group, November 3, 1951), 759.

metaphoric. In the following sections I will cover the specific alchemical processes that led to *{ remnants } of a { ritual }*, and will expand on the transformative quality of ritual experience.

THE ALCHEMY OF { MEMORY }

{ remnants } of a { ritual } emerged as a collection of objects spanning physical, material, digital and ephemeral forms. The curation was informed by my nostalgia for Venezuela; a glimmering memory that stands in stark contrast to the present state of the country. González claims that we collect objects as a way to represent, “the imaginary body,” in our minds.²⁵ The Venezuela I remember is ethereal, crystalline, and abundant with resources. Remembering Venezuela and collecting objects that reflected these fleeting imaginations, required a personal alchemy and interrogation of an expansive family archive. The production of this project started with a series of experiments that brought together the traditional manifestations of the *wunderkammer* and a desire to create new rituals for autotopographical artmaking.

Discovery

During the summer of 2018, prior to my thesis year, I visited Florida to spend time with my Venezuelan family and help them organize a long-forgotten family archive. This collection belonged to my late-grandfather,

²⁵ Jennifer González, “Autotopographies,” 141.

Hector Sandoval, and was a mix of photographs, letters, newspaper clippings, old bank notes, and rolls of film negatives (Appendix B). Included in one of his old suitcases were a series of poems written by my great-grandfather, Isidro González Rodríguez. “A Guayana,” a poem written in four stanzas, describes a magical Venezuelan landscape filled with celestial beauty and an abundance of minerals (Figure 7). This poem reflected my own recollections of Venezuela, and informed the curation of objects and photographs presented in *{ remnants } of a { ritual }*.

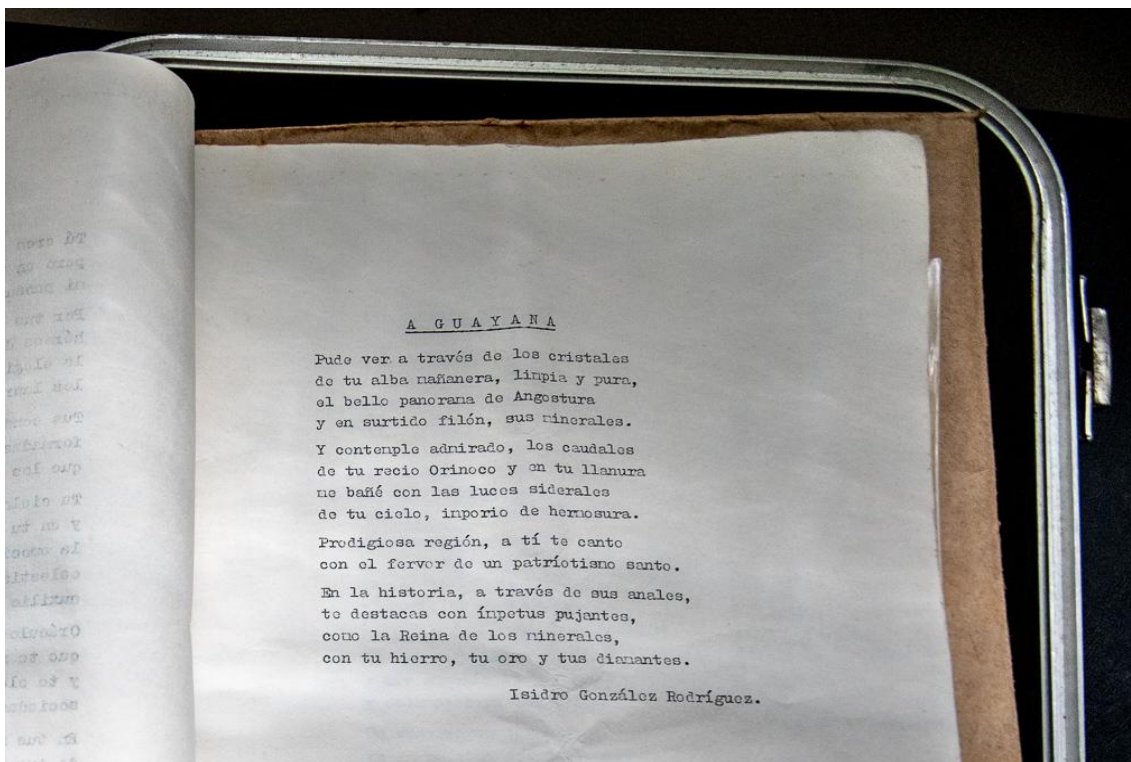


Figure 7. Original copy of “A Guayana” by Isidro González Rodríguez



Figure 8. A light table showing negatives in the process of being organized.

The breadth of my grandfather's archive included negatives from his time as a photojournalist in Venezuela from the 1940s to the 1970s. I spent the majority of my trip exploring these negatives, cataloguing and digitizing them (see Figure 8). After reviewing thousands of images, I curated a set of photographs that showcased Venezuela's breathtaking landscapes to reflect the place my great-grandfather described in his poem. Throughout this process I considered how I could share my own memories of Venezuela, seeking to visualize this nostalgia with my ancestor's media.

I was inspired by a series of negatives that showed a gallery of familiar looking tapestries (Figure 9). I remembered seeing a similar one that hung on the walls of my childhood home. After much searching, we found the old tapestry tucked away in storage, and realized it was from a similar

region (Figure 10). My family shared that this tradition of weaving is native to the Wayúu people indigenous to the Guajira peninsula in the northwestern part of Venezuela. Their craft is known for its colorful shapes and tessellated patterns. This iconic tapestry not only reminded me of the past, but mirrored my kaleidoscopic recollections of Venezuela. Its vibrance, form, and texture served as source material for my visualizations, and subsequent alchemical experiments (Figure 11).



Figure 9. An unknown artisan in an art gallery (mid 1960s)



Figure 10. Wayúu tapestry from my family's home



Figure 11. Initial experiments mimicking the Wayúu tapestry

Digital Alchemy

During my first year as a graduate student, I participated in a performance and technology residency coordinated by UCLA. We explored concepts of machine learning for media design in experimental theater (Appendix E). Building from our research, I expanded my visual sketches to incorporate style transfer. Deep Neural Networks are a subsection of machine learning that can be used to create, “artistic images of high perceptual quality.”²⁶ In *A Neural Algorithm of Artistic Style*, Gatys et al. cover techniques used to generate new ‘filtered’ images from trained styles. Combining the style of one image with a desired content image:

“Renders the photograph in the style of the artwork, such that the appearance of the synthesized image resembles the work of art, even though it shows the same content as the photograph.”²⁷

The Wayúu tapestry provided an exciting first image to build a model, and to try and understand the algorithm. I used it as the ‘artwork’ that was then applied as a model to my grandfather’s photograph (Figure 12). Resembling

²⁶ Leon A Gatys et al., “A Neural Algorithm of Artistic Style,” *ArXiv:1508.06576 [Cs, q-Bio] (2015): 1*.

²⁷ Gatys et al., “A Neural Algorithm of Artistic Style,” 4.

colorful pointillism, this new image was a vibrant representation that highlighted the circular features of the tapestry.



Figure 12. A Wayúu tapestry, my grandfather's photograph, and a style transferred image

In a recent talk at Google, artificial intelligence researcher, Ali Rahimi serendipitously stated that, “machine learning has become alchemy.”²⁸ Despite working at the cutting edge of technology research, Rahimi stated that the entire field of machine learning is experiencing the same trial and error process found in medieval alchemy. Though critics discount the value of this methodology, Rahimi acknowledges the importance of these micro-experiments and how they are necessary to the development of the field as a whole. The process of creating coherent stylized images required a lengthy process of trial and error. In the eighty-three models that were trained for *{ remnants } of a { ritual }*, only a small percentage produced images that were unreadable. A further curation was required to select models that

²⁸ Rahimi Ali, *NIPS 2017 Test of Time Award, "Machine Learning Has Become Alchemy,"* Accessed May 10, 2019, <https://www.youtube.com/watch?v=x7psGHgatGM..>

mirrored the Venezuela in my mind. Despite the imperfection of this alchemy, the majority of the image transformations were provocative and added a magical quality to my grandfather's archive and helped showcase my nostalgia for Venezuela.

Physical Alchemy

While I was in Florida in 2018, the Venezuelan government issued a new currency as a way to combat the country's hyperinflation; leaving millions of Venezuelans with an old currency that would soon become invalid.²⁹ This is not the first time their government has manipulated the bolívar. They have previously attempted to remove certain banknotes, take away zeroes, and change the banknote design — all futile attempts to address Venezuela's economic and social turmoil.³⁰ Analysts have gone so far as to claim that these changes have had, "more to do with alchemy than economics."³¹ But what kind of alchemy is this? Where is the transmutation? The currency has remained worthless.

As an act of protest, Venezuelans have burned their money and thrown it in the streets (Figure 13). Others have transformed their bolívares

²⁹ Joe Sterling, "Venezuela Issues New Currency, amid Hyperinflation and Social Turmoil," CNN, <https://www.cnn.com/2018/08/20/americas/venezuela-currency/index.html>. Accessed May 10, 2019.

³⁰ Ibid.

³¹ Mariana Zuñiga, et al., "Venezuela's Crazy Currency Swap Looks like Alchemy, Not Economics," Washington Post, December 17, 2016, <https://www.washingtonpost.com/news/worldviews/wp/2016/12/17/venezuelas-crazy-currency-swap-looks-like-alchemy-not-economics/>.

into new artifacts: handbags, wallets, paintings, and intricate paper sculptures. Selling these craft goods in the face of their diaspora — on the streets, in Etsy stores, wherever they have access (Figure 14). Venezuelans everywhere are trying to find ways to reimagine the value of the bolívar.



Figure 13. Someone burning a 100-bolivar bill during a protest in Venezuela (2018)³²



Figure 14. Wallets and Bags made out of Venezuelan Bolívars (2019)³³

³² Luis Romero, “With 1,000,000% inflation, Venezuela Slashes Five Zeroes from Its Bills,” Quartz, July 26, 2018, Accessed May 25, 2019, <https://qz.com/1341092/venezuela-is-slashing-five-zeroes-from-the-bolivar/>.

³³ Anne Marie McCarthy, “Artist Are Making Beautiful Crafts from Venezuela’s Devalued Currency,” Lonely Planet News, May 20, 2019, Accessed May 25, 2019.

Having recently immigrated from Venezuela, my extended family brought with them a currency that was no longer valid. A worthless bag of money, sitting in a closet, gathering dust. As I looked through the bolívares, I saw that they were a mixture of pastel colors — red, blue, green, beige — and had beautiful illustrations of Venezuela's wildlife. I experimented with collaging the money and folding the notes into new forms. Slowly, this valueless currency began its alchemical transmutation into pinwheels, petals, leaves, and shells — all reflections of my nostalgia for Venezuela (Figure 15). No longer the money it once was, these new sculptures became the subject of further transformation.



Figure 15. Folded Venezuelan bolívares in the shape of a pinwheel

<https://www.lonelyplanet.com/news/2019/05/21/venezuela-currency-art-crafts/>.

Crystallization

In remembering Venezuela and working with my great-grandfather's poem, I found recurring themes of crystals and crystalline materials. In the opening stanza of "A Guayana," Isidro invokes Venezuela's mineral rich landscape:

"I could see through the crystals
Of your morning dawn, clean and pure,
The beautiful panorama of Angostura
And in the assorted paths, its minerals."³⁴

He describes a region in central Venezuela near the winding Orinoco river. Its deltas and pathways filled with minerals: iron, gold, and diamonds. A panorama glimmering in the ethereal morning light. Even though this poem was written decades before I was born, it clearly expressed my own nostalgic recollections of Venezuela. Of a place so magical, there were crystals and iridescent refractions everywhere you looked.

I decided to begin at-home crystallization experiments to capture this whimsical aesthetic. I used sodium tetraborate — also known as borax — to crystallize a series of mementos, found objects, and folded Venezuelan bolívares (Figures 16-18). With each batch of crystallized remnants, my memories of Venezuela became more tangible and I could see the world described in my great-grandfather's poem. This practice of crystallization was the evolution of my alchemical research and became part of my weekly thesis rituals.

³⁴ This is my translation from the original Spanish version.



Figure 16. Mementos in a solution of borax



Figure 17. Mementos crystallized after 36 hours



Figure 18. Folded and crystallized Venezuelan bolívar

THE ALCHEMY OF { RITUAL }

In developing the framework for my thesis, I used ritual studies to contextualize my creative process, and conceive the physical environment of my installation. For this paper, ritual is viewed through the intersecting lens of action theory, performance studies, and play theory. Rather than giving a strict definition of ritual, scholar Catherine Bell considers, “ritual as a way of acting, namely, the ritualization of activity.”³⁵ Her contribution to ritual studies has broken away from traditional notions of ritual to consider more deeply the series of actions and behaviors within a, “symbolically structured

³⁵ Catherine Bell, *Ritual Theory, Ritual Practice*, (New York: Oxford University Press, 2009), 219.

environment,” that create the ritual itself.³⁶ In the section of her book titled, “Rethinking Ritual as Practice,” Bell goes on to propose this new framework of *ritualization* as a way to contextualize ritual action for a specific culture.³⁷ She does not take on an anthropological or ethnographic perspective of ritual, but instead considers the meta-perspective of the *production* associated with ritual acts. I use Bell’s notion of *ritualization* to help describe the patterns of behavior that led to the craft of *{ remnants } of a { ritual }*.

Ritual Materials

The *alchemy of { memory }* ritual described in the previous section emerged out of experimentation and iteration of materials. Due to the fact that I had a limited number of bolívares to work with, I needed another material to supplement my limited supply (Appendix F). Vellum had a sheer lightness that reinforced the ephemeral aesthetic I was seeking. I laser cut the vellum to replicate the bolívares’ dimensions, and included it in my rituals. I documented the process of folding through a series of photographs and blog posts that I shared with others (Figure 19).³⁸

By formalizing the *alchemy of { memory }* into a daily practice, I produced a structured set of actions that generated *{ remnants } of a { ritual }*. I would individually fold each of the papers in petals, and then crystallize

³⁶ Ibid., 93.

³⁷ Ibid., 140.

³⁸ Zoe Sandoval, “folding ritual [wip],” *Vimeo*, April 2019, <https://vimeo.com/329233261>.

them using the borax solution (Figure 14). This process took approximately 24-hours for each batch. After the crystallized petals dried, I would individually attach them to the wire frame of the sculpture (Figure 20-22).

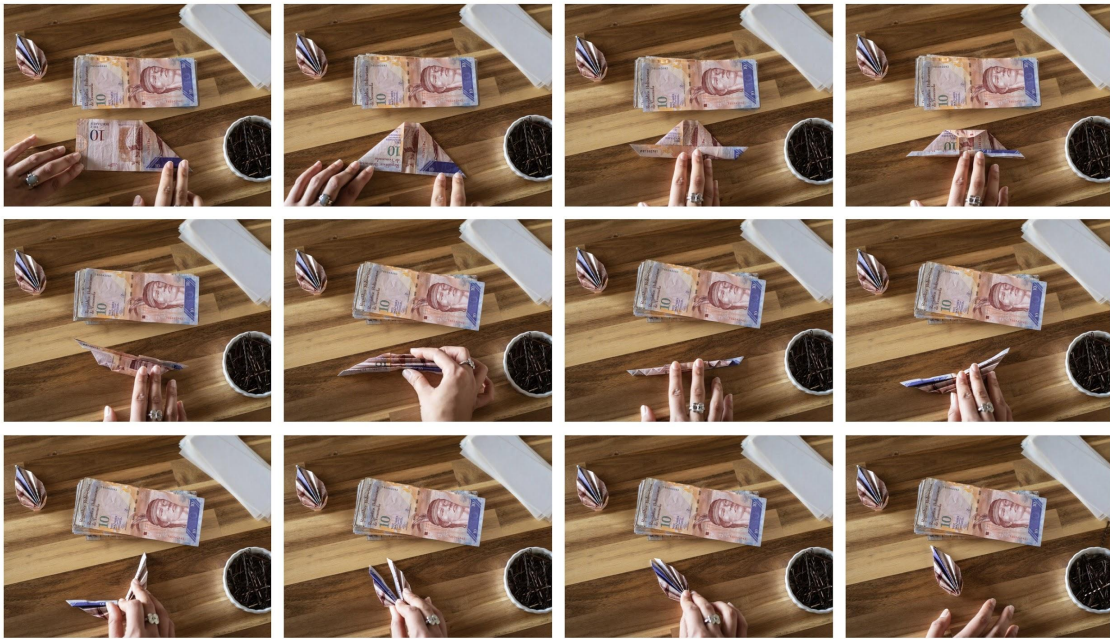


Figure 19. Step by step process of folding Venezuelan bolívares



Figure 20. Vellum petals being crystallized



Figure 21. A table with dried, crystallized petals



Figure 22. Attaching the petals to the sculptural form³⁹

³⁹ Photograph courtesy of Matthew Ragan

Ritual Crafting



Figure 23. Sculpture at the center of the installation

The sculpture's form was inspired by a chandelier that hung in my grandmother's home in Venezuela. As a child I remember standing under a large mobile, staring up at its spiraling tendrils, tracing the lines up to its circular crown. It looked like the intersecting strands of a DNA helix. From it hung small porcelain figurines: birds, wings, and other fantastical creatures. Unfortunately, there are no photos of the original mobile, so the sculpture I made for *{ remnants } of a { ritual }* was largely crafted from memory. At 8-foot tall, it has five concentric mesh rings with petal applique, and three

spirals of fishing line and crystallized love letters (see Figure 23). The letters that hung from the sculpture were remnants generated from a previous installation, *love letters to { }* (Appendix G). For me, the act of folding and crystallizing gave me a way to connect with my ancestors and to demonstrate the fragility of memory.

Throughout the ritualization process, I considered how I could invite others into this practice of memory exploration and crafting. Though the piece is inspired by my nostalgia for Venezuela, I hoped to design the installation in a way that spoke to a more universal human condition. As I looked through the lens of play and participatory art practices, I found that I could create an immersive space that was both very personal to me, that also engaged others in the concepts and rituals I was designing.

THE ALCHEMY OF { IMMERSION }

In the opening line of his seminal work, *Homo Ludens*, Johan Huizinga describes play as being older than culture, and a way to impart meaning to actions in the liminal spaces outside of “ordinary life”.⁴⁰ Play is described as an activity in the ‘interlude’ of our daily lives and, “belongs to the sphere of festival and ritual — the sacred space.”⁴¹ Many critics take issue with the delineation of a special place where play can occur, and have given other

⁴⁰ Johan Huizinga, *Homo Ludens: A Study of Play-Element in Culture*, (Routledge & Kegan Paul Ltd, 1949), 1-9.

⁴¹ *Ibid.*, 9

metaphors to describe the dynamism of play.⁴² I am not going to argue that play can only exist in ‘sacred spaces’; however, this supposition that play manifests outside of everyday life relates to the design and experience of *{ remnants } of a { ritual }* as a curated installation space.

Performance studies scholar Richard Schechner sees play as being deeply interconnected to both ritual and performance; stating that like play, “rituals take place in special, often sequestered places, [where] the very act of entering the ‘sacred space’ has an impact on participants,” and their behavior.⁴³ He gives examples of celebrations, rites of passage, and the arts and entertainment as ways to experience ritual that are both sacred and secular with transformative properties for their participants.

Part of sharing my ritual process with others was creating an environment that represented the magical qualities of my nostalgia for Venezuela. These memories, filled with fleeting images of crystalline waters and quartz crystals, conjured a sense of the sacred that found its way into my installation. *{ remnants } of a { ritual }* invokes the sacred as a way to create a ritual space outside of ordinary time and place, and allows for play and actions that are not common in ordinary life.

⁴² Stenros Jakkos, “In Defense of a Magic Circle: The Social and Mental Boundaries of Play,” <http://www.digra.org/wp-content/uploads/digital-library/12168.43543.pdf> (2012), 1-3.

⁴³ Richard Schechner et al., “Ritual,” *Performance Studies: An Introduction*, 3rd ed, (London; New York: Routledge, 2013), 71.

The Magic Circle

Though often contested, ‘the magic circle’ describes the specific playground and sacred space that Huizinga constitutes as a site for play. He considers the magic circle as a temporary world, “within the ordinary world, dedicated to the performance of an act apart.”⁴⁴ In parallel, practitioners of the magickal arts — like witchcraft and shamanism — use the magic circle as a way of crafting ceremonial ritual spaces. The creation of a magic circle marks, “the sacred center in which formal rituals take place.”⁴⁵ I use the magic circle to not only describe the ephemeral play space created within *{ remnants } of a { ritual }*, but also as a reference for the physical layout of the installation.

{ remnants } of a { ritual } was exhibited in the Light Lab, a studio space, in the Digital Arts Research Center on UC Santa Cruz’s campus. Visitors would enter the installation from an outdoor breezeway, through an open door with two-sets of floor length curtains. Upon entering they stand on the outskirts of the magic circle, and can see a pedestal with a prompt and writing instructions. In the installation there are four pedestals to mimic the four-quartered segments of the ‘Circle of Magick,’ which are commonly used in ceremonial rituals.⁴⁶ At the center of the pedestals hung the

⁴⁴ Huizinga, *Homo Ludens: A Study of Play-Element in Culture*, 10.

⁴⁵ Zell-Ravenheart et al., “Book 1: The Magick Circle, *Creating Circles & Ceremonies: Rituals for All Seasons & Reasons*, (Franklin Lakes, NJ: New Page Books, 2006), 15.

⁴⁶ *Ibid.*, 17.

chandelier sculpture, and below sat the bowl where participants could deposit their offerings. This placement references the altar, which is commonly found at the center of 'Magick Circle Mandalas.'⁴⁷ The layout of the pedestals, bowl and additional floor projection together explicitly call on the magic circle to create a sacred atmosphere in the space (Figure 24).

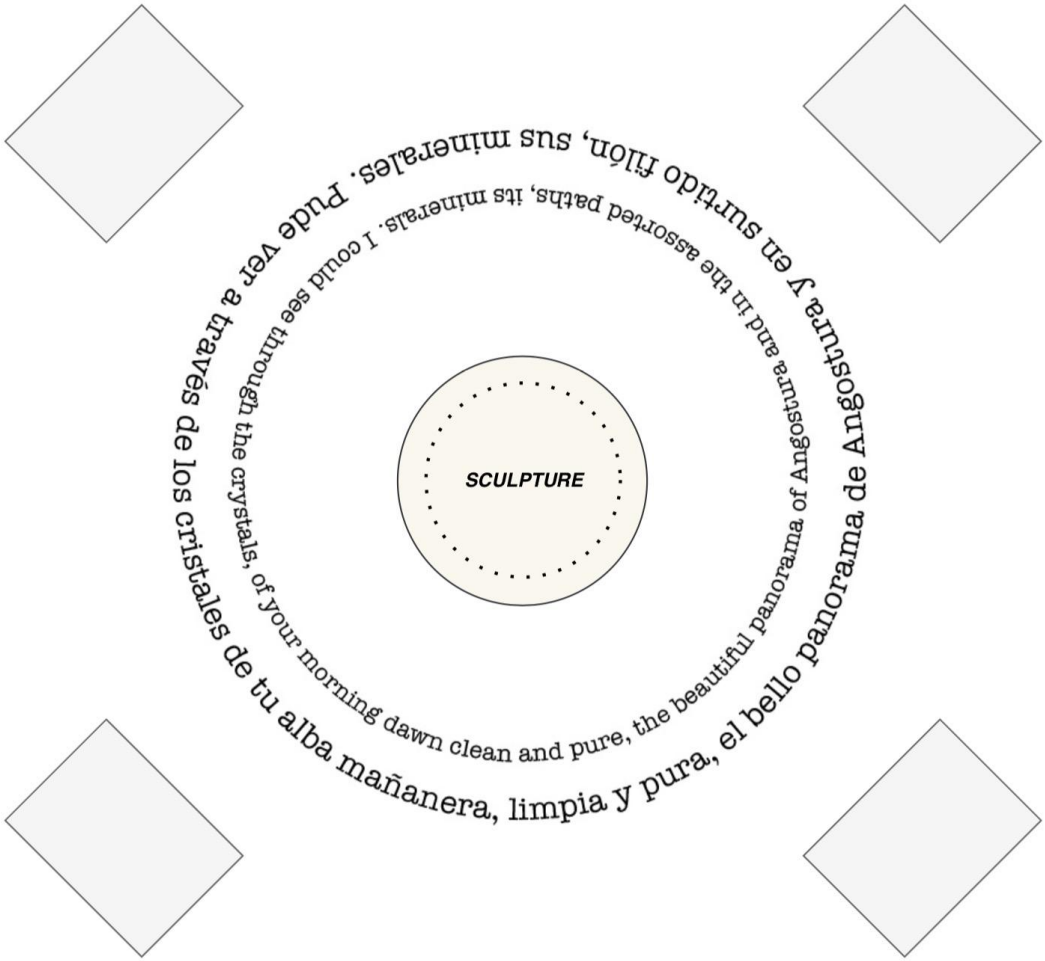


Figure 24. Elevated floor plan of the installation

⁴⁷ Ibid., 18.

Behind the Curtain

“Any sufficiently advanced technology is indistinguishable from magic.”

- Arthur C. Clarke

While the affective experience created for *{ remnants } of a { ritual }* was akin to magic, the execution required considerable technical engineering. The installation was comprised of four-channel video projection, two channel audio, a single DMX lighting instrument, and four smart RGB lights (Appendix H). The projection was divided into two sections — the walls and floor — and were each blended to create the illusion of seamless images. The walls showcased the panorama photography from my grandfather’s archive as well as the style transfer experiments I discussed in the section on Digital Alchemy. Projected on the floor were segmented stanzas from my great-grandfather’s poetry. The sound was selected from an open-source library that was recorded in Venezuela. The lighting design emphasized the central sculpture, and layout of the four pedestals to ensure readability of the prompts. The choice of color for the lights was selected to match the color pallet of the projected photographs, and changed dynamically over time to create a cohesive visual experience.

The computational load for driving the installation was divided across two servers, one primarily dedicated to audio and another dedicated to projection, lighting, and operating control devices. The synchronization of the experience was facilitated by a networking layer, acting as the communications backbone for the technology. Over the course of an hour,

the space cycled through a series of curated scenes. Each comprised of a stanza from the “A Guayana” poem, a photograph that related to the poetry, two style transferred images, and diegetic sound (see Appendix I). The scenes would change every sixty seconds with individual parameters for the color of the lighting, placement of the DMX fixture, and choice of projection and sound (Appendix J).

These invisible technical elements are worth noting as it was my intention to create a gallery-ready installation. *{ remnants } of a { ritual }* ran as an automated, reliable, and self-contained application. While there was significant time spent ensuring the smooth operation of the installation, the technology was not intended to be the epicenter of the participants experience. More than just individual parts, as a whole the experience was designed to transport visitors into a refraction of my dream-like memories of Venezuela, which exists in a sacred place outside of time.

THE ALCHEMY OF { PARTICIPATION }

Not only did I hope to immerse visitors in a space that *felt* magical, I invited them to participate in the same ritualistic process of folding and crystallizing that I had been enacting to create the work. By prompting visitors to consider and share their own personal experiences of nostalgia and diaspora, I hoped to expand the relationships between their subjective reception, my personal reflection, and the cultural context through which they were experiencing the work.

Open Work

Semiotician Umberto Eco describes an abstracted approach to this discursive nature of art in, “The Poetics of Open Work.” Eco uses compositional music and the autonomy of the individual performer as way to describe ‘open work’ where, “the author offers the interpreter, the performer, the addressee, a work *to be completed*.”⁴⁸ This dialogue between the author and the interpreter/performer of the work creates a dynamic ‘work in movement,’ that is a product of the author’s structure and the performer’s interpretation. Eco goes on to state that it is this, “personal imprint that makes [the work] a specific, vital and significant act of communication.”⁴⁹ In this sense, value is derived from the individual’s collaborative, social, and creative exchange with the artist and the work.

Yoko Ono’s Wish Tree

Participatory art was popular during the 1960s counterculture movement with the, “breakdown of medium-specific art,” and the developments of avant-garde theatre, the happenings, and performative work of Fluxus.⁵⁰ Multimedia artist and Fluxus member, Yoko Ono has a

⁴⁸ Umberto Eco, “The Poetics of Open Work,” in *Participation*, ed. by Claire Bishop, Documents of Contemporary Art, (London : Cambridge, Mass: Whitechapel ; MIT Press, 2006), 36.

⁴⁹ Ibid, 37.

⁵⁰ Claire Bishop, “Introduction//Viewers as Producers,” in *Participation*, Documents of Contemporary Art, (London : Cambridge, Mass: Whitechapel; MIT Press, 2006), 10.

longstanding body of work that spans performance art, conceptual writings, and peaceful interventions. Her installation series *Wish Tree* (1996) has been shown around the world as a provocation for individual reflection and collective healing. Inspired by temples she visited as a child in Japan, Ono's *Wish Tree* engages others in a similar ritual:

“Make a wish
Write it down on a piece of paper
Fold it and tie it around a branch of a Wish Tree
Ask your friends to do the same
Keep wishing
Until the branches are covered with wishes.”⁵¹

This site-specific installation invites visitors to write down their ‘wish,’ add it to a tree filled with other wishes, and a call to invite others to participate (Figure 25). Like Yoko Ono's *Wish Tree*, *{ remnants } of a { ritual }* is both an ‘open work’ and a ‘work in movement.’ The installations invite participants to add to the work through their own personal reflections and participation.



Figure 25. Ono's *Wish Tree*, Studio One, New York (1996)⁵²

⁵¹ Yoko Ono, “WISH TREES,” *IMAGINE PEACE TOWER* (blog), Accessed May 23, 2019, <http://imaginepeacetower.com/yoko-onos-wish-trees/>.

⁵² Ono, “WISH TREES,” <http://imaginepeacetower.com/yoko-onos-wish-trees/>.

In *Conversation Pieces: Community and Communication in Modern Art*, professor of art history, Grant Kester states that these dialogical aesthetics are a durational, “cumulative process of exchange and dialogue rather than [the] single, instantaneous shock of insight,” in the reception of a given work of art.⁵³ Shifting the role of the audience member to be a co-collaborator in the work creates dynamic avenues between the *artist*, *audience*, *artwork* and its *context* (Figure 26).⁵⁴

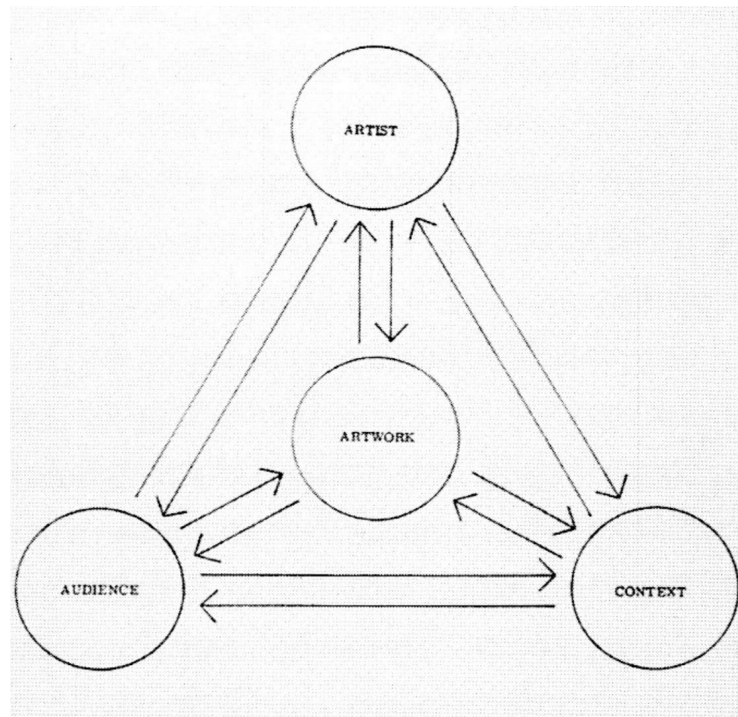


Figure 26. “A Socially Interactive Model of Art Practice” by Stephen Willats (c. 1970)⁵⁵

⁵³ Grant H. Kester, *Conversation Pieces: Community and Communication in Modern Art*, (Berkeley Los Angeles London: University of California Press, 2013), 12.

⁵⁴ *Ibid*, 92.

⁵⁵ Stephen Willats, *Conversation Pieces: Community and Communication in Modern Art*, (Berkeley Los Angeles London: University of California Press, 2013), 92, figure 16.

This discursive interaction between the ‘audience’ and work of art is seen most often in socially-engaged art practices, and in works like Yoko Ono’s *Wish Tree*, Amalia Mesa-Bains *New World Wunderkammer*, and within *{ remnants } of a { ritual }*.

Experience Design

Within *{ remnants } of a { ritual }* there were four pedestals with different prompts to encourage visitors to reflect on core themes: longing, nostalgia, diaspora, and wonder. Framed as love letters, the prompts mirrored my own romantic nostalgia for Venezuela, and conversations I had with family members and Venezuelans navigating diaspora. The prompts were used to create intimacy, and an opportunity for others to envision a world that’s founded in a bittersweet affection for the unknown. Each of the pedestals had one of the following prompts (Figure 27):

- ❖ Write a love letter to someone you haven’t met
- ❖ Write a love letter to a place you can no longer return to
- ❖ Write a love letter to the unknown
- ❖ *Escribe una carta de amor al futuro*⁵⁶

Underneath each of the prompts was additional instruction that described the necessary steps to complete the ritual:

- ❖ Fold your letter and place it in the water to become crystallized.
- ❖ *Dobla la carta y suméjjala en el agua para que se cristalice.*

⁵⁶ This can be translated as, “write a love letter to the future”

A shorter instruction was placed on the pedestals to convey the instructions in both English and Spanish:

- ❖ Inscribe, fold, submerge
- ❖ *Escribir, doblar, sumergir*



Figure 27. Example layout of the pedestal layout

The pedestals were also supplied with an example of a folded crystallized object, writing utensils, and either Venezuelan bolívars or vellum. Three of the four pedestals had prompts in English and were provided bolívars to write on. One pedestal was given the prompt in Spanish, *escribe una carta de amor al futuro*, and provided vellum to write on. The use of a prompt and instructions in Spanish was to reference the language predominantly used in Venezuela, and to be inclusive of the community coming to visit the exhibition. The use of vellum in conjunction

with the prompt in Spanish served to represent a future for Venezuela (and other nations) that is not contingent on the capitalist gains of its currency and resources.

Observations

Over the course of the exhibition, I had the opportunity to act as a docent in the space and was able to observe the behavior of the visitors and participants. I do not have a comprehensive user study of the experience, but I compiled a series of notes based on recurring patterns in visitor performance. Upon entering the installation, participants would often walk the outer perimeter of the pedestals in a circular motion that mimicked the design of the poetry projected in the floor (see Figure 15). During this ritualistic performance, participants either read the poetry itself or were reading the prompts listed on the pedestals. It appeared that they were doing a survey of the pedestals. After completing the rounds of each, they would decide which of the prompts they wanted to complete. If a visitor did not display this walking pattern, they would often complete the prompt closest to the entryway or would choose not to participate in the writing.

Many of the participants would fold their love letters in simple ways, i.e. halves or quarters, while others left their love letters open for others to read. There were only a handful of participants that folded complex objects, e.g. boats, cranes, elephants, etc. Though unprompted, there were also a series of love letters that were rolled into tubes. Additional subversive acts, though few, included drawing on the faces of figures on the currency or

writing comical notes. Of all the observations, the predominant action by those who wrote love letters was to sign their name as is common in letter writing. Once visitors finished writing their love letter, they would then place it in the bowl in the center of the room to become crystallized.

Performative Transmutations

During the two weeks the show was open, I enacted a series of ritual performances to facilitate the *alchemy of { } process* I had begun with the conceptualization of the work (Figure 28). After the love letters crystallized overnight, I would visit the installation in the morning to empty the bowl and separate the love letters (Figure 29). I would individually place them to dry, and begin the process of refilling the bowl with boiling water and the borax solution. In order to ensure that participants were not burned by the solution, I started the ritual two hours before the show opened. When the show opened at noon, the water would be almost filled.

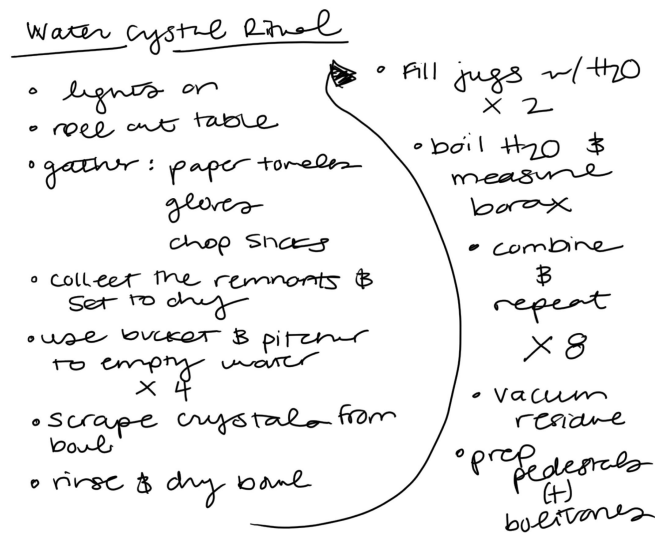


Figure 28. Description of the 'Water Crystal Ritual'

During the two weeks the show was open, I would intermittently hang the artifacts within the space (Figure 30). In total, 283 love letters were written and crystallized.



Figure 29. Love letters drying after being crystallized



Figure 30. Close-up of hanging, crystallized love letters

The openness and dynamism of the work yielded emergent changes to the installation, and to the expression of media in the space. After hanging the love letters, I designed a new scene that moved the spotlight to each of the pedestals to highlight the remnants co-created in the ritual (Figure 31). Truly a ‘work in movement,’ *{ remnants } of a { ritual }* is a rhythm of offering and receiving: an exchange between the participants, myself, the work and its future implications. As Eco states in the closing paragraphs of “The Poetics of Open Work”:

“The poetics of a ‘work in movement’ (and partially that of an ‘open’ work) sets in motion a new cycle of relations between the artist and [their] audience, a new mechanic of aesthetic perception, a different status for the artistic product in contemporary society.”⁵⁷



Figure 31. Image of the spotlight show addition

⁵⁷ Umberto Eco, “The Poetics of Open Work,” 39.

THE ALCHEMY OF { AESTHETICS }

The aesthetic transmutation of currency in { *remnants* } of a { *ritual* } was material, conceptual and metaphysical. The bolívares – initially flat, flimsy, weightless and worthless – transformed into crystalline sculptures that were dimensional, solid, heavy and meaningful. This alchemy helped reimagine the ‘currency’ not as monetary capital, but as value that’s constructed through communal processes and intrapersonal exchange. Before concluding, I will examine the transformative aesthetics found in the political work of Joseph Beuys, the framework *speculative play*, and the ritual of writing love letters.

Kunst = Kapital

“Art can no longer be art today if it does not reach into the heart of our present culture and work transformatively within it.”

- Joseph Beuys

German Fluxus and performance artist Joseph Beuys was known for creating socially-engaged art that centered on, “the spiritual transformation of society,” through the creativity of the individual.⁵⁸ In the 1980s, Beuys generated a series of lithographs, blackboards, and banknotes imprinted with the slogans *Creativity = Capital* or *Art = Capital*, interpreting his idea that, “creativity and capital are the fundamental forces for the reformation

⁵⁸ Christian Lotz, “Art=Capital? Reflections on Joseph Beuys’ *Das Kapital Raum 1970-1977*,” in *Against Value in the Arts and Education*, ed. by Sam Ladkin, Robert McKay, and Emile Bojesen, (London ; New York: Rowman & Littlefield International, 2016), 197.

of society.”⁵⁹ For Beuys, creative action had the potential to change social, political, and economic systems through the reinvention of ‘capital’.

Professor of philosophy Christian Lotz examines the of work Beuys in “Art = Capital?,” and explores more deeply the notions of value and worth in capitalist society. In a section titled “Human Creativity as the True Source of Wealth,” Lotz expresses that it is through our creative capacity as individuals that we can manifest social transformations to reimagine economic value.⁶⁰ This intertwined relationship between the individual and art-as-process produces new speculations on how we interpret currency. Beuys’ *Das Kapital Raum 1970-1977* is a large-scale installation that appears at first glance to be an artist’s studio filled with slate blackboards, notes, machines and tools (Figure 32). Like other works mentioned in this paper, *Das Kapital Raum* is an encounter with *process*; presenting itself as a creative work-in-progress that engages visitors with performative potential:

“It is as if *Das Kapital* calls for action, and more specifically for transformative action. The piano calls for playing, the microphone calls for speaking, the blackboard calls for reading, the spear calls for throwing, the projector calls for showing.”⁶¹

The individual elements in the piece invite expressive behavior; they are charged with potentiality, movement and action.

⁵⁹ Ian Alden Russell, “‘Creativity = Capital’ by Joseph Beuys,” David Winton Bell Gallery (blog), November 15, 2011, Accessed May 23, 2019, <https://bellgallery.wordpress.com/2011/11/15/creativity-capital-by-joseph-beuys/>.

⁶⁰ Christian Lotz, “Art=Capital? Reflections on Joseph Beuys’ *Das Kapital Raum 1970-1977*,” 205.

⁶¹ *Ibid.*, 210.



Figure 32. Beuys' *Das Kapital Raum* at Hamburger Bahnhof Museum in Berlin, Germany (2016)⁶²

As whole, *Das Kapital* is, “a praxis based on creativity and productive communication rather than capital.”⁶³ In this we see the *alchemy of { capital }* — a transformation from monetary economic rule to value that is determined through individual action and social engagement. *{ remnants }* of *a { ritual }* harnesses this alchemy. It creates a space of magical transformations where currency is defined by its inscriptions of love and attention.

⁶² A Place Called Space, “Joseph Beuys at Hamburger Bahnhof/Museum für Gegenwart, Berlin,” October 13, 2017, Accessed May 24, 2019, <http://a-place-called-space.blogspot.com/2017/10/joseph-beuys-at-hamburger-bahnhofmuseum.html>.

⁶³ *Ibid.*, 210.

Speculative Play

In her dissertation *Speculative Play*, interdisciplinary artist and game designer, Mattie Brice provides a framework that, “activates play to facilitate the creation of new cultural practices through interacting with alternative presents and speculative futures.”⁶⁴ Like Schechner, Brice considers ritual as a form of play that can help us reimagine our present and future culture(s). In designing new rituals, actions, and behaviors we can, “facilitate play for the purpose of cultural intervention.”⁶⁵ The prompts in *{ remnants } of a { ritual }*, invite participants to play with money in ways that are outside of their traditional use. Rather than using the Venezuelan bolívares as a form of capital, the money becomes instead a currency for altruism — acting as a vessel for love letters.

Love Letters

We often author love letters as if they are permanent, as if our feelings carry weight, and are not ephemeral or fleeting. The subject of a love letter is often the pinnacle of our affection. What happens when the love letter is to an unknown? Does it matter that its intended reader does not exist? What is the meaning then of its future consumption? The love letters from *{ remnants } of a { ritual }* undergo cultural and alchemical transformations. This alchemy challenges the visitor to confront the

⁶⁴ Mattie Brice, “Speculative Play,” *New York University*, (Tandon School of Engineering, 2017), 1.

⁶⁵ *Ibid.*, 19.

impermanence and ephemerality of complex emotional experiences like love, nostalgia, and place-making. The diaspora of displaced love is a parallel to the diaspora of displaced communities and culture. This is an imperfect comparison for an imperfect world, but we need touchstones like love letters in order to engage with complex, nuanced conversations about the present and the future.

Crystallization is an act of solidifying; making tangible the fleeting refractions in our minds. Memory freezes the moments in our life — sometimes beautiful and sometimes bittersweet. Through crystal lattices we see these shifting images. Reflections of our experiences, our selves and others. The crystallization of our memories is a recovery of the past. A delicate interweaving of our most intimate recollections. A necessary practice in uncertain times.

SPECULATION

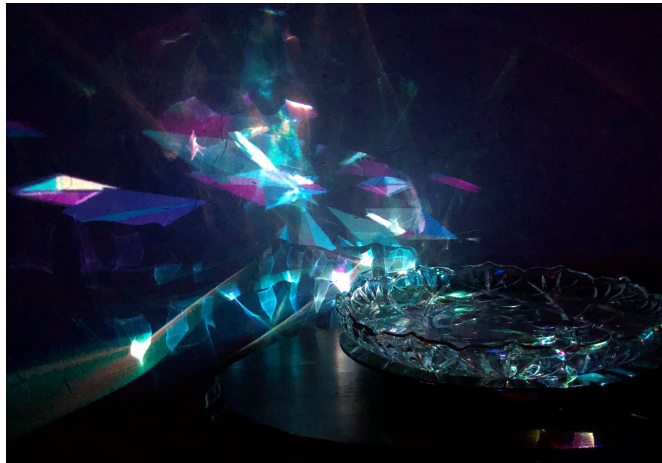
{ remnants } of a *{ ritual }* is a love letter to a Venezuela I can no longer return too, to my family, to my anxieties about the future, to communities in diaspora. As the artist, my final ritual consisted of archiving the crystallized love letters and sharing them with others around the world (Appendix K). Through the morning dawn, I could see new crystals forming on these ritualized remnants — refractions of my nostalgia and reflections of a future process of healing. These love letters are an echo of the visitors and participants; their hopes, dreams, and memories. They transformed

{ remnants } of a *{ ritual }* from being my own personal archive into a site-specific, social collection of offerings. Transferring the power between myself as the collector to the participants as emergent co-collaborators. Together, creating rituals of the future.

APPENDIX

A) [A Gift that Could Never be Sent](#)

“For my experimental play research class, we were given an awesome prompt for our 1week pressure project: *A GIFT THAT COULD NEVER BE SENT*. I decided that I would create a piece for my grandmother, Margot, that would be about memory and timelessness.”



B) [Familia Sandoval](#)

“My grandfather, Hector Sandoval, was a photographer and photo-journalist in Venezuela from 1944 to 1978. Up until 1958, Venezuela was in a military dictatorship until it became a democratic country. He documented the country’s transition from a dictatorship through its golden years before the corruption of the oil industries in the 1980s.”



C) “A Guayana” by Isidro González Rodríguez

Original poem written in Spanish (left), and translated to English by Zoe Sandoval (right):

Pude ver a través de los cristales
De tu alba mañanera, limpia y pura,
El bello panorama de Angostura
Y en surtido filón, sus minerales.

I could see through the crystals
Of your morning dawn, clean and pure,
The beautiful panorama of Angostura
And in the assorted paths, its minerals.

Y contemple admirado, los caudales
De tu recio Orinoco y en tu llanura
Me bañe con las luces siderales
De tu cielo, imporio de hermosura.

And in awe I admired the flow
Of your resolute Orinoco and in your plains
I bathed within the celestial lights
From your sky, an emporium of beauty

Prodigiosa región, a ti te canto
Con el fervor de un patriotismo santo.
En la historia, a través de sus anales,
Te destacas con impetus pujantes,
Como la Reina de los minerales,
Con tu hierro, tu oro y tus diamantes.

Prodigious land, I sing to thee
With the fervor of a sacred patriotism
In the history, through its annals
You stand out with your thriving impetus
Like the Queen of the minerals
With your iron, your gold and your diamonds.

D) Text Formatting

In order to categorize the different forms of alchemy, I've borrowed a formatting technique from the object-oriented language, Python. In this particular case I'm using the member function '**format()**.' Member functions or methods are, "operation(s) defined by a class," and are, "called to operate on a specific object."⁶⁶ `format()` is a text substitution method that's commonly used for filling in placeholders with a specified word or number

⁶⁶ Stanley B Lippman et al., *C++ Primer*, 5th ed, (Upper Saddle River, NJ: Addison-Wesley, 2013, 27.

at the time of execution. The common notation for substitution is a set of curly braces — { }. At execution, a value is passed to this function which then replaces the { }. Below is a simple example of the notation and its translation on the subsequent line:

```
print( "Hello {}".format("World!") )
```

```
# this returns the following
```

```
Hello World!
```

I am not asserting that this is the way that methods work in all computer programming, nor that this is how they are commonly used, rather I am broadly using the concept of ‘methods’ to describe an object’s alchemical transformation. For *{ remnants } of a { ritual }*, we can understand the notations as follows:

```
print ("{ parts } of a { whole }".format(whole = "ritual", parts = "remnants"))
```

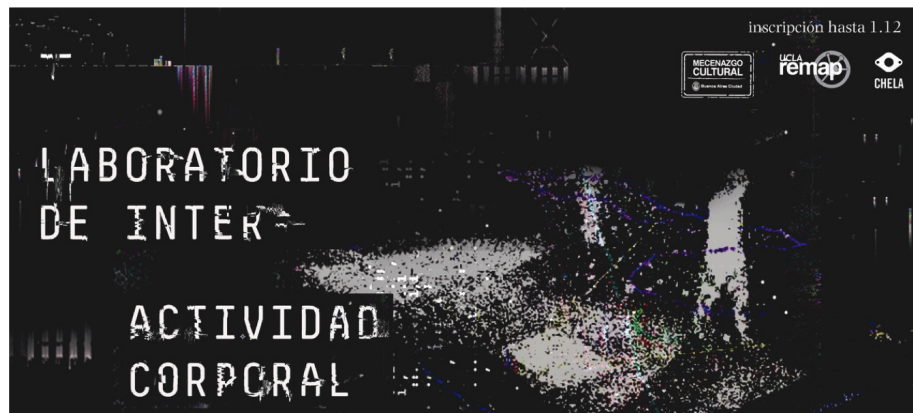
```
# this returns the following
```

```
{ remnants } of a { ritual }
```

Applying this formatting to *the alchemy of { }* is a way of thinking about the transformative qualities of a given subject, e.g. { memory }, { ritual }, { immersion }, { participation }, etc.

E) Corporal Interactivo Residency

“As part of this research effort, I have been tasked with creating the ‘associations’ that the main character uses to trigger memories. The associations can be thought of a collage of memories that are captured using a live feed camera that a performer wears onstage. As part of our machine learning experiments, I have been working with another programmer to select, create and implement different looks for style transfer.”



F) On Diaspora

“With the end of the quarter, I’ve ramped up on crystallizing more artifacts for my thesis demo as well as augmenting the cabinet I will be using for this installation.”

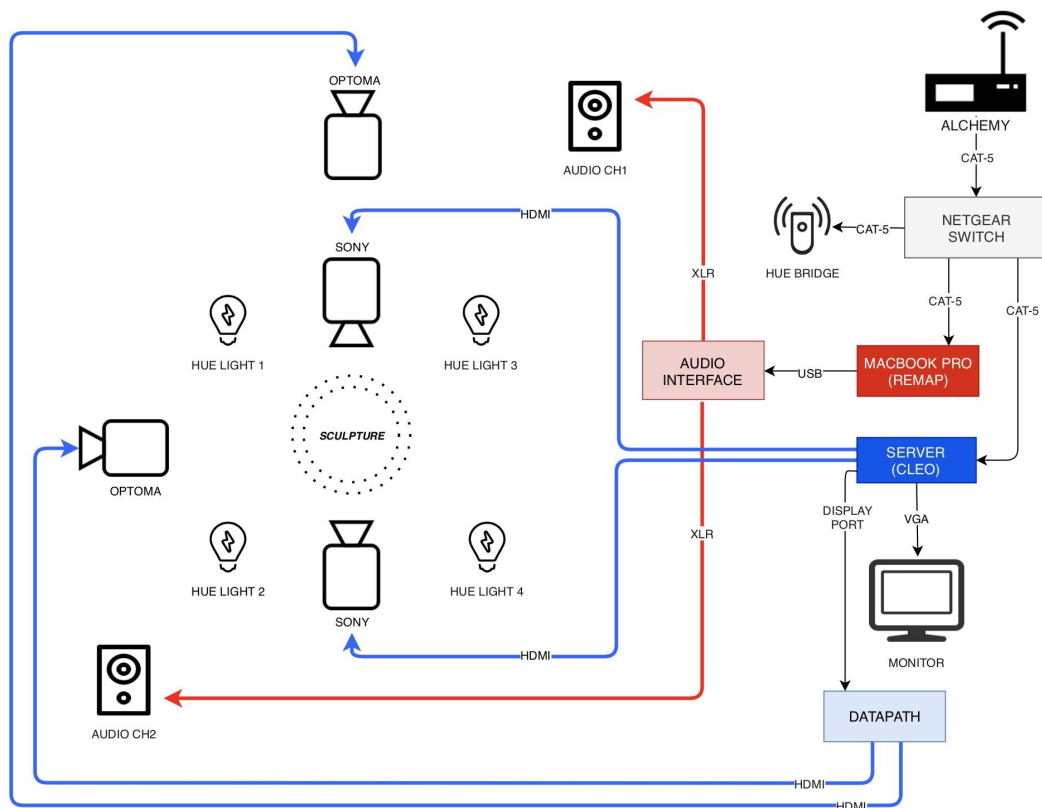


G) love letters to { }

“love letters to { } is a participatory installation that invites participants to write a love letter to the future, the unknown, sunrise or sunset, and then to place it into the bowl to become crystallized.”



H) Technical System Diagram



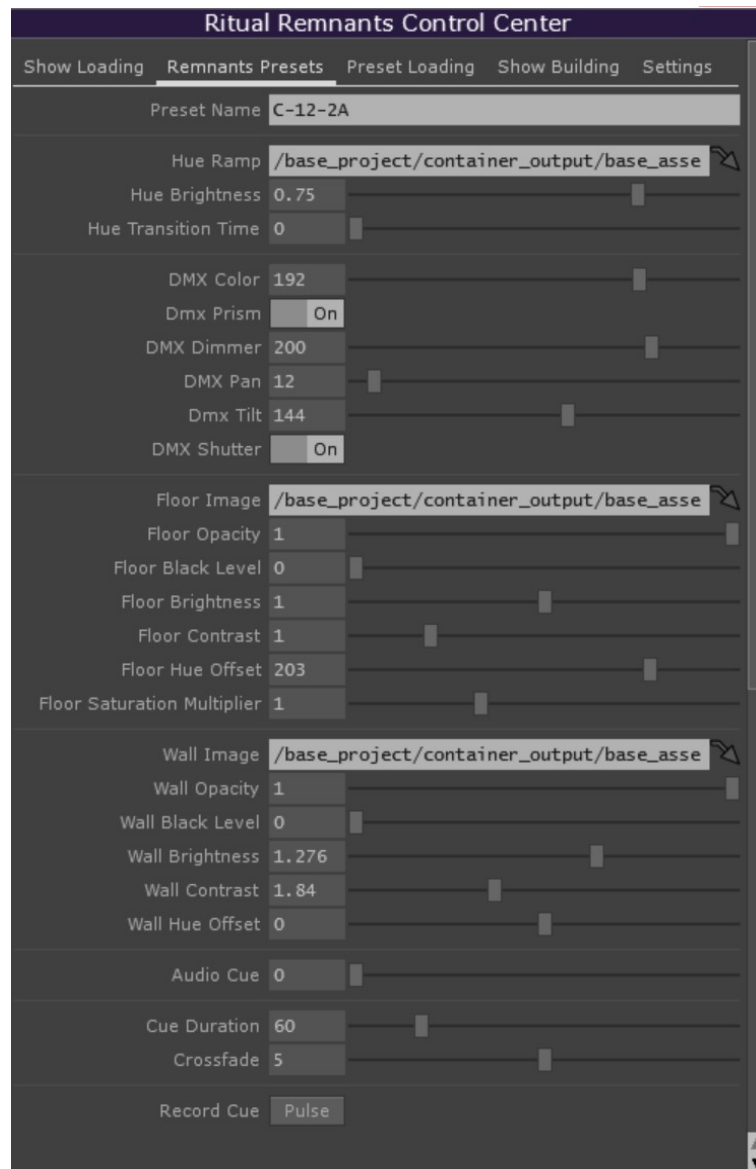
I) Preset Looks for Show

Preset	Photo	Description	Style	Lighting	Sound
BW-1-1	02-25-12	Mountains	-	White	Rainforest
C-1-2			Citrus Pickers	White/Yellow	
C-1-1			Umbrellas	White/Yellow	
BW-2-1	02-14-01	Huts	-	Green/Blue	Cicadas
C-2-1			Main Garden	Green/Blue	
C-2-2			Udnie	Green/Blue	
BW-3-1	13-71-03	Palm Trees	-	Cyan	Wind
C-3-1			Watercolor	Red/Blue	
C-3-2			Rug	Red/Blue	
BW-4-1	04-38-21	Chairs	-	Orange/Cobalt	People talking
C-4-1			Bacon & Eggs	White	
C-4-2			MR Abstract Print	White	
BW-1-1A	02-26-10	Desert	-	White	Wind
C-1-2A			Zoe Mexico	Orange	
C-1-1A			Donati Plus	Orange	
BW-2-1A	02-17-10	Plains	-	Blue/White	Cicadas
C-2-1A			MR Flowers 2	Blue/Red	
C-2-2A				White	
BW-3-1A	05-50-04	Sky	-	Cobalt	Rain stick
C-3-1A			20 Soberano	Colbalt / Red	
C-3-2A			Zoe Umbrellas	White	
BW-4-1A	13-20-05	Castle	-	Red	People talking
C-4-1A			Leger Mechanical	Red	
C4-2A			Rug	White/Blue	
BW-5-1A	11-11-14	Bird Cages	-	White	Rainforest
C-5-1A			20 Soberano	White	

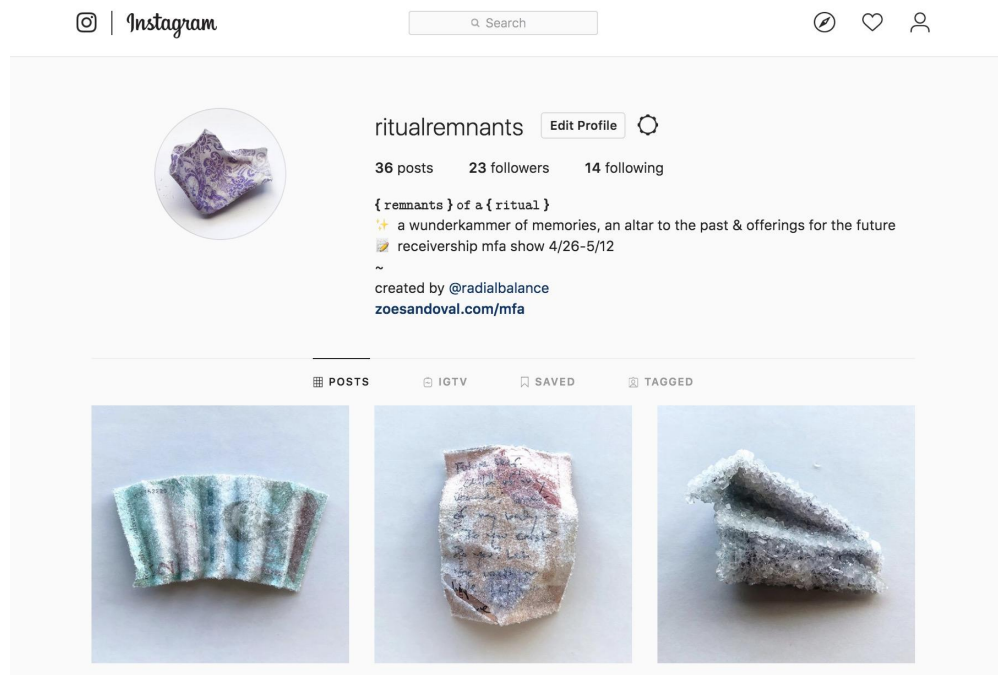
C-5-2A			Zoe Mexico	White	
BW-6-1A	13-03-111	Tall Flowers	-	Color Cycle	Wind
C-6-1A			Delauney Paris	Yellow/Magenta	
C-6-2A			Donati Plus	Yellow/Magenta	
BW-7-1A	13-21-04	Buildings	-	White/Blue	People talking
C-7-1A			Bacon Eggs	White/Blue	
C-7-2A			Zoe Umbrellas	White/Blue	
BW-8-1A	05-51-02	Caracas	-	White	Wind
C-8-1A			Christy Main	White	
C-8-2A			Bacon & Eggs	White	
BW-9-1A	008-13-11	Simon	-	Cyan	Outdoor talking
C-9-1A			Udnie	Blue/White	
C-9-2A			Leger Mechanical	Blue/White	
BW-10-1A	13-18-07	Beach boats	-	White	Wind
C-10-1A			Watercolor	White/Yellow	
C-10-2A			MR Print Abstract	White/Yellow	
BW-11-1A	12-03-07	Sunflower field	-	White/Yellow	Cicades
C-11-1A			Delauney Paris	White/Yellow	
C-11-2A			Zoe Umbrellas	White	
BW-12-1A	12-03-05	Sunflower	-	White	Rain stick
C-12-1A			Donati Plus	White	
C-12-2A			Rug	Color Cycle	

J) Preset Builder

“{ remnants } of a { ritual } is an immersive installation comprised of projection, lighting, sound, and tangible media. Built largely with TouchDesigner, the installation required a coordinated approach for holistically transforming the space with discrete looks.”



K) [{ remnants } of a { ritual } Instagram](#)



L) Previous Work

[\[divinación en migración \]](#)

[{ alchemy } of { memory }](#)

[wunderkammer paper prototype](#)

M) Studio Review Critique Topics

- UX (Instruction & Spatial Design)
- Autobiography / Autotopography
- Representation of Venezuela (Media & Objects)
- Tensions between the Intimate v. the Social
- Is this piece a *Wunderkammer*?

BIBLIOGRAPHY

- Baudrillard, Sean. "The Systems of Collecting." In *The Cultures of Collecting*, edited by Roger Cardinal, 7-24. London: Reaktion Books, 1994.
- Bell, Catherine M. *Ritual Theory, Ritual Practice*. New York: Oxford University Press, 2009.
- Bishop, Claire. "Introduction//Viewers as Producers." In *Participation*, 10-17. Documents of Contemporary Art. London: Cambridge, Mass: Whitechapel; MIT Press, 2006.
- Brice, Mattie. "Speculative Play." *New York University, Tandon School of Engineering*, 2017.
- CNN, Joe Sterling. n.d. "Venezuela Issues New Currency, amid Hyperinflation and Social Turmoil." CNN. Accessed May 10, 2019. <https://www.cnn.com/2018/08/20/americas/venezuela-currency/index.html>.
- Eco, Umberto. "The Poetics of Open Work." In *Participation*, edited by Claire Bishop, 20-40. Documents of Contemporary Art. London: Cambridge, Mass: Whitechapel; MIT Press, 2006.
- Gatys, Leon A., Alexander S. Ecker, and Matthias Bethge. "A Neural Algorithm of Artistic Style." *ArXiv:1508.06576 [Cs, q-Bio]*, August 26, 2015. <http://arxiv.org/abs/1508.06576>.
- Gomoll, Lucian. "The performative spirit of Amalia Mesa-Bains' New World Wunderkammer." *Cultural Dynamics* 27, no. 3 (2015): 357-377.
- González, Jennifer A. "Autotopographies." In *Prosthetic Territories: Politics and Hypertechnologies*, by Gabriel Brahm and Mark Driscoll, 133-149. Westview Press, 1995.
- González, Jennifer A. "Amalia Mesa-Bains: Divine Allegories." In *Subject to Display: Reframing Race in Contemporary Installation Art*, 120-162. Cambridge, MA, MIT, 2008.
- Huizinga, Johan. *Homo Ludens: A Study of Play-Element in Culture*. Routledge & Kegan Paul Ltd, 1949.
- Jaakko, Stenros. "In Defense of a Magic Circle: The Social and Mental Boundaries of Play," 2012. <http://www.digra.org/wp-content/uploads/digital-library/12168.43543.pdf>.

- Kaufmann, Thomas Dakota. "From the Treasury to the Museum: The Culture of the Austrian Habsburgs." In *The Cultures of Collecting*, edited by Roger Cardinal and John Elsner, 137-154. London: Reaktion Books, 1994.
- Kester, Grant H. *Conversation Pieces: Community and Communication in Modern Art*. Berkeley Los Angeles London: University of California Press, 2013.
- Lippman, Stanley B., Josée Lajoie, and Barbara E. Moo. *C++ Primer*. 5th ed. Upper Saddle River, NJ: Addison-Wesley, 2013.
- Lotz, Christian. "Art=Capital? Reflections on Joseph Beuys' *Das Kapital Raum 1970-1977*." In *Against Value in the Arts and Education*, edited by Sam Ladkin, Robert McKay, and Emile Bojesen, 195-213. London ; New York: Rowman & Littlefield International, 2016.
- McCarthy, Anne Marie. "Artist Are Making Beautiful Crafts from Venezuela's Devalued Currency." Lonely Planet News. May 20, 2019. Accessed May 25, 2019. <https://www.lonelyplanet.com/news/2019/05/21/venezuela-currency-art-crafts/>.
- Millard, Peter, Cindy Hoffman, Marisa Gertz, and Jeremy C. F. Lin. "A Timeline of Venezuela's Economic Rise and Fall." February 16, 2019. Accessed May 23, 2019. <https://www.bloomberg.com/graphics/2019-venezuela-key-events/>.
- Ono, Yoko. "WISH TREES." IMAGINE PEACE TOWER (blog). Accessed May 23, 2019. <http://imaginepeacetower.com/yoko-onos-wish-trees/>.
- Pratt, Mary Louise. *Imperial Eyes: Travel Writing and Transculturation*. London: Routledge, 1993.
- Preserve Knowledge. *NIPS 2017 Test of Time Award "Machine Learning Has Become Alchemy."* | Ali Rahimi, Google. Accessed May 10, 2019. <https://www.youtube.com/watch?v=x7psGHgatGM>.
- Read, John. "Alchemy and Alchemists." *Nature* no. 4279, 759-762. Nature Publishing Group. November 3, 1951. Accessed May 22, 2019.
- Romero, Luiz. "With 1,000,000% Inflation, Venezuela Slashes Five Zeroes from Its Bills." *Quartz*. July 26, 2018. Accessed May 25, 2019. <https://qz.com/1341092/venezuela-is-slashing-five-zeroes-from-the-bolivar/>.
- Russel, Ian Alden. "'Creativity = Capital' by Joseph Beuys." David Winton Bell Gallery (blog), November 15, 2011. Accessed May 23, 2019.

<https://bellgallery.wordpress.com/2011/11/15/creativity-capital-by-joseph-beuys/>.

Throssell, Liz. "Majority Fleeing Venezuela in Need of Refugee Protection." UNHCR: The UN Refugee Agency. United Nations High Commissioner for Refugees. May 21, 2019. Accessed May 23, 2019. <https://www.unhcr.org/news/briefing/2019/5/5ce3bb734/majority-fleeing-venezuela-need-refugee-protection-unhcr.html>.

Schechner, Richard, and Sara Brady. "Ritual." *Performance Studies: An Introduction*. 3rd ed, 52-88. London ; New York: Routledge, 2013.

Shelton, Anthony Alan. "Cabinets of Transgression: Renaissance Collections and the Incorporation of the New World." In *The Cultures of Collecting*, edited by Roger Cardinal and John Elsner, 177-203. London: Reaktion Books, 1994.

Zell-Ravenheart, Oberon, and Morning Glory Zell-Ravenheart. "Book 1: The Magick Circle." *Creating Circles & Ceremonies: Rituals for All Seasons & Reasons*. Franklin Lakes, NJ: New Page Books, 2006.

Zuñiga, Mariana, and Nick Miroff. "Venezuela's Crazy Currency Swap Looks like Alchemy, Not Economics." Washington Post, December 17, 2016, sec. WorldViews. <https://www.washingtonpost.com/news/worldviews/wp/2016/12/17/venezuelas-crazy-currency-swap-looks-like-alchemy-not-economics/>.