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# Altered States: Creative Arts, Virtual Reality, and the Human Condition

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*Altered States: Creative Arts, Virtual Reality, and the Human Condition*

By

Sophia Gebara

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Submitted in partial fulfillment

of the requirements for

Honors in the Department of Visual Arts

UNION COLLEGE June, 2019

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## ABSTRACT

GEBARA, SOPHIA *Altered States- Virtual Reality Art and the Human Condition.*

Department of Visual Arts- Art History concentration, March 2019.

ADVISOR: Lorraine Morales Cox

Virtual reality (VR) is a medium that is cutting-edge and novel, creating fully immersive experiences for diverse audiences. Able to fabricate endless opportunities of hyper-realistic scenes, virtual reality provides a specific kind of space for self-reflection and empathy that no other medium can match. VR can take the viewer to the night of the shooting of Trayvon Martin, or next to families trying to survive the genocide in the Nuba mountains of Sudan, or even alongside a NASA scientists atop a sheet of ice in Greenland measuring the rising sea levels. This thesis explores the discourse and critical commentary surrounding various artists and investigative journalists working with virtual reality. The works grapple with our notion of the human condition from life and death, to violence and suffering; whether critiquing international and political conflicts, human rights, gender and sexuality, or humanity's impact on the environment. The considered artists and groups engage the participant to see and question their own relationship to these issues surrounding the self, the other, and a range of challenges facing the world today. Virtual reality is as much immersive as it is interactive, allowing for your consciousness to not just interpret the medium, but to be the medium.

## *Introduction*

Since the 1960's, the digital medium has evolved at unparalleled speeds shifting between advancing technologies and the social media age. This interface with the world has both positive and negative aspects in society. For example, the computer and internet have changed the way we treat intimacy, and how we form and maintain relationships with one another. The internet has connected the world, from country to country, or city to village. However, the luxury of technology and its instantaneous responsiveness, has created a demand for constant self-documentation, crowd sourced approval, and vast bodies of flawed information. It has created a disconnect of face-to-face communication, whether it be people or experiences.<sup>1</sup> Many of the mechanisms of technology have existed for quite some time, however, in the past twenty years they have become commonplace and essential components of everyday life. With social media possessing modern day mundanity, so does it possess contemporary digital art. As technology encompasses our notions of society and its functions; digital art and art theory have become interwoven with contemporary issues.

An umbrella term in itself, digital art has been known and recognized as 'computer art', 'multimedia art', 'cyberarts', and is most commonly exchanged with the title 'new media art'. Many artistic practices lie within the overarching term of digital art. Artists are using 3D printing, drone technology, robotics, multimedia, as well as

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<sup>1</sup> Hendricks, Drew. "3 Ways the Internet Has Changed the World – And Created New Opportunities?" Small Business Trends. July 07, 2017. Accessed October 19, 2018. <https://smallbiztrends.com/2017/07/impact-the-internet-has-on-society.html>.

virtual reality (VR) amongst other technological artistic platforms.<sup>2</sup> Museums and various institutions are beginning to incorporate digital arts into their viewing spaces, which may have been traditionally used to exhibit more classical, hand-crafted works. Integrating digital mediums into traditional art spaces, attracts and engages with larger and more diverse audiences, many of whom are youths raised with technology. With the demands of technology and its advancements, art forms transpiring digitally are beginning to establish themselves not only as well founded art forms, but also in the temporal trajectory of art history. Many questions arise with this newfangled digital art technology however. Some of these questions include: How do we plan to categorize digital art? What should contemporary critics be analyzing? Is this art accessible and approachable to people of all generations? What does this mean for the study of contemporary art? ... amongst many other questions. Although alluring to attempt to answer all of these questions, this thesis will specifically aim to investigate the technologies of virtual reality, artists working in this medium, and what their work expresses about the human condition.

Each chapter will deliberate various works of virtual reality art which are critiquing society, it's relationship to violence, as well as the human condition. The first chapter explores works that critique international and political conflict, the second chapter examines works in dialogue with race, culture, and religion, the third chapter continues with specific attention to artists discussing gender politics and sexuality, and the fourth chapter looks at environmental issues and humanities relationship to it. Each

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<sup>2</sup>Kwastek, Katja. *Aesthetics of Interaction in Digital Art*. Cambridge, MA: MIT Press, 2015.

chapter will also provide a closer look on it's topic in relationship to violence and the human condition. I have organized them in such a way so that each chapter can focus specifically on a theme creating discourse with the viewer, as well as with society at large.

To temporally place virtual reality art in an art historical timeline, we begin with Art Happenings. Catching popularity and artistic acclaim in the late 1950s, Happenings differed from many other art forms, in that it asked more from the viewer than just detached visual analysis. The works necessitated active participation, elevating the viewer's role from a spectator to a vital element of the art. Viewers *became* the art essentially, fully engrossing themselves in immersive and artistic spaces.<sup>3</sup> Allan Kaprow, a pioneer of the Happenings movement, functioned on the notion that art presented itself in everyday life. In his work *18 Happenings in 6 Parts* (Figure 1), 1959, Kaprow invited the public and assigned various tasks to individuals, outlined in a score. Combined with the utilization of various developments in music, music theory, and participatory collaboration, he created a structure of art through public involvement. This work has often been recognized as one of the most acclaimed and avant-garde works of the Art Happenings movement.<sup>4</sup>

In the 1960's, art and technology began to find interesting intersects. *Sketchpad*, a program used for interactive computer graphics was developed in 1963, allowing users to create artistic images through technology.<sup>5</sup> In 1971, Paris held the world's first

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<sup>3</sup> Tate. "Happening – Art Term." Tate. Accessed March 19, 2019. <https://www.tate.org.uk/art/art-terms/h/happening>.

<sup>4</sup> Ibid.

<sup>5</sup> Cadazz. "CAD Software - History of CAD CAM." CAD Software History Sketchpad Ivan Sutherland. Accessed October 19, 2018. <http://www.cadazz.com/cad-software-Sketchpad.htm>.

museum solo exhibitions of computer generated art in Musee d'Art Modern.<sup>6</sup> Referential literature began to be developed around this time, continuing to be produced as art and technology advanced concurrently. Concepts of full immersion in artworks began to take off with Art Happenings and are still prevalent and growing in contemporary art practices. According to the Los Angeles Times the 2016 buzzword in the art world was "immersive".<sup>7</sup> Installation art asks participants to walk through spaces that displace one's familiarity with a scene or environment that is entirely unconventional and unfamiliar. Immersive experiences have stronger impressions on the viewer as they are not looking at a work on a two dimensional space, but inviting the viewer to *enter* the art in a three dimensional space, activating more senses than just sight. To build upon the concept of immersive works of art, interaction between the work and the viewer is extremely impressionable. Installation and site-specific art create a unique environment for viewers to enter a physical space of art. Similarly to the Art Happenings movement, works like Judy Chicago's *The Dinner Party* (1974–1979) (Figure 2), or Christo and Jean-Claude's *The Floating Piers* (2016) (Figure 3); the viewer walks around and within the scene. To walk along Chicago's dinner table and look at the plates organized in a non-hierarchical way; is a multisensory, collective, and immersive experience. Similarly with Christo and Jean-Claude's work, the participant walks along the ocean towards an island with other people, taking in the atmosphere of the day, the people around, and walking on the piers. Immersive installation art creates an experience for viewers that no other art form was able to achieve until virtual reality

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<sup>6</sup>"History." Digital Art Museum - Technology Timeline. Accessed September 19, 2018. <https://digitalartmuseum.org/history/>.

<sup>7</sup>Vankin, Deborah. "The Arts Buzzword of 2016: 'immersive'." Los Angeles Times. December 22, 2016. Accessed October 19, 2018. <https://www.latimes.com/entertainment/arts/la-ca-cm-immersive-arts-20161225-story.html>.

technology. Interactive media works of art communicate an aesthetic experience, broadening our understandings of art, media, and current societal contexts. Virtual reality is both as immersive as it is interactive, establishing a sense of genuine encounters and memorable involvement.

The technology that created virtual reality as we understand it today, originates from ideas dating back to the 1800s alongside the development of photography. A device dating to the 1830s, known as a stereoscope (Figure 4) was employed as an object to fool the human eye into believing that it was seeing a three dimensional image, when in reality, it used two twin mirrors to project a single image.<sup>8</sup> The stereoscope went on to evolve into the View-Master (Figure 5) and eventually into the goggles and gloves used in virtual reality today. Current virtual reality headsets can range in cost from \$7 to upwards of \$800.<sup>9</sup> Less expensive goggles provide a good standard virtual reality experience, more expensive gear provides added sound effects, high definition images, and comfort among other accessories (Figure 6). Ranging drastically in price, it can attract a variety of audiences which all share interest in experiencing virtual reality that is user-friendly and immersive.

Virtual reality as a medium also tends to fall into two general categories: one, being gaming, where players feel as if they are in the video game representing an avatar that they can manipulate through a controller or in some instances with technology that senses the participants movements, replicating their gestures in the game. The second

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<sup>8</sup> "Stereoscope." Wikipedia. March 01, 2019. Accessed March 19, 2019. <https://en.wikipedia.org/wiki/Stereoscope>.

<sup>9</sup> "Online Shopping for Electronics, Apparel, Computers, Books, DVDs & More." Amazon. Accessed December 19, 2018. <https://www.amazon.com/>.

category is what this thesis will investigate; virtual reality works which tend to critically comment on a subject or that attempt to socially engage with the viewer.

Virtual reality provides the spectator with experiences that appear as real as life, heightening our sentiments of empathy. In an interesting TED talk by entrepreneur, director, immersive artist, and founder of *Within* (virtual reality); Chris Milk claims that VR is the “Ultimate empathy machine.”<sup>10</sup> He begins his talk discussing his journey into virtual reality as a film producer. Seeming to crave something more, he wanted to create works where the individuals were not only in the frame or the window, but *through* the window “... on the other side, in the world, inhabiting the world” and that is what VR can serve audiences.<sup>11</sup> Virtual reality is a difficult medium to explain, it is experiential and individually specific to past experiences, current, and future ones. It is a medium that is special and distinct, every person will encounter a work differently, and that feeling may never be able to be mimicked, similarly in real life experiences. VR is a machine, but when the viewer is inside the headset, it feels like the truth, “ you feel present in the world that you're inside and you feel present with the people that you're inside of it with.”<sup>12</sup> Milk also claims in another TED talk that virtual reality allows for your consciousness to *be* the medium versus your consciousness interpreting the medium.<sup>13</sup>

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<sup>10</sup>Milk, Chris. "How Virtual Reality Can Create the Ultimate Empathy Machine." TED. Accessed November 19, 2018. [https://www.ted.com/talks/chris\\_milk\\_how\\_virtual\\_reality\\_can\\_create\\_the\\_ultimate\\_empat\\_hy\\_machine](https://www.ted.com/talks/chris_milk_how_virtual_reality_can_create_the_ultimate_empat_hy_machine).

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

<sup>13</sup> Milk, Chris. "The Birth of Virtual Reality as an Art Form." TED. Accessed November 17, 2018. [https://www.ted.com/talks/chris\\_milk\\_the\\_birth\\_of\\_virtual\\_reality\\_as\\_an\\_art\\_form](https://www.ted.com/talks/chris_milk_the_birth_of_virtual_reality_as_an_art_form)

Artists working with VR are taking a risk as it is extremely technically driven, and it also has not permanently grounded itself in museums and art institutions. VR is cutting edge, novel, and with anything new; it is risky. These artists are creating new roads for artists in the future to follow, experimenting with technology and the human consciousness. Pushing the boundaries of traditional art and art making, artists designing virtual reality works are not only creating a visual experience that is impressionable, but are creating an experience that feels like the viewer has lived in the art.

Another leading and prominent advocate for virtual reality is Nonny de la Peña. She discusses the future of news and the most striking ways to inform the public. Founding collective group Emblematic in 2007, de la Peña worked with creating immersive journalism with virtual reality.<sup>14</sup> Emblematic is composed of acclaimed journalists, filmmakers, and developers who create immersive news, entertainment and virtual reality.<sup>15</sup> The VR works stand out amongst other works in that they specifically exist to tell a story that is often not told, or to allow participants to grapple with issues, and to think critically. Emblematic wants for the users to remember not just with their minds, but with their bodies.<sup>16</sup> De la Peña coins the term “duality of presence” when discussing virtual reality. This describes the occurrence of when a spectator’s presence is split: one part being in the physical space where the user concretely exists, and the other

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<sup>14</sup> "Emblematic Group." Emblematic. Accessed September 25, 2018. <http://emblematicgroup.com/>.

<sup>15</sup> Ibid.

<sup>16</sup> "Emblematic Group." Emblematic. Accessed September 25, 2019. <http://emblematicgroup.com/>.



part believing that they are in the virtually created space.<sup>17</sup> Emblematic uses advanced technology to create convincing works of virtual reality. Using photogrammetry, the developers can recreate a living person three-dimensionally. To recreate a real three dimensional space in VR is referred to as volumetric capturing.<sup>18</sup> Virtual reality allows for viewers to not just tell their stories again and again, but to relive them. Many of the stories covered by Emblematic push viewers into the shoes of someone else, to live in their world and see what life is like through their eyes. VR makes it possible to understand what it is like to be helpless, to be discriminated against, to be assaulted; whether verbally, physically, or even sexually. There is a span of emotions that all of these artists are engaging with, ranging from situations such as being followed down the street, to situations that expose explicit brutality or violence such as participating in or being a bystander of a violent act.

I discovered virtual reality during an internship researching art, science, and technology; specifically in forms of art that incorporate technology and vice versa. Searching for this intersection, I became fascinated with the artist group and community Dream Logic. Consisting of “artists, technologists, designers, experimenters, and entrepreneurs,” Dream Logic holds exhibitions showcasing their work, employing virtual and augmented reality art. Their first show, *The Art of Dying* (Figure 7), invited over 500 participants and artists to contemplate notions of mortality, death, and how society understands and handles death. Their work reflects on the human condition, what it means to be living and how we deal with difficulties encountered in our

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<sup>17</sup> Peña, Nonny De La. "The Future of News in Virtual Reality." TED Talks. Accessed October 5, 2018. [https://www.ted.com/talks/nonny\\_de\\_la\\_pena\\_the\\_future\\_of\\_news\\_virtual\\_reality](https://www.ted.com/talks/nonny_de_la_pena_the_future_of_news_virtual_reality).

<sup>18</sup> Ibid.

everyday.<sup>19</sup> Inspired by the work of Dream Logic, I began to research other artists and groups using virtual reality to critically analyze various topics, leading me to this synthesis of virtual reality.

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<sup>19</sup> "Dream Logic." Dream Logic. Accessed March 19, 2019. <https://www.dreamlogicart.com/>.

## ***Chapter I- The Human Condition and Violence: International and Political Conflict***

With an inconsistent and fragile political climate, international relations and executive administration are an important part of our society. The virtual reality works discussed in this chapter break down mankind's conceptions of the human condition; specifically addressing governmental and political violence, war policy, law enforcement, and police brutality. War is a part of our everyday, be it from watching the news, or reading articles in the paper; and yet, for the majority of the public, we are distanced from the reality of this brutality. We see imagery on the news but are rarely face to face in conflict zones. Virtual reality holds a special place in that it can alter the way we see things, creating experiences as if we had lived them ourselves. It forces the viewer out of their comfortable environments, to “step” into another place, scene, or body; that one may truly never be able to experience in real life. In “Virtual Reality and Empathy”, a column written by Luis Granados, director of Humanist Press and published author of *Damned Good Company: Twenty Rebels Who Bucked the God Experts* and the upcoming novel, *The Church of Exemptions: A Farce with Footnotes*; he states that “the intensity of VR immersion seems like a natural tool for sparking empathy. It lets you see, hear, and to a limited extent, even feel the same things as its central subject, in some cases allowing users to wander through a world at their own pace.”<sup>1</sup> Virtual reality is displacing and provocative, creating new experiences for every

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<sup>1</sup> Granados, Luis. "Virtual Reality and Empathy." *The Humanist*. February 28, 2018. Accessed December 10, 2018. <https://thehumanist.com/magazine/march-april-2018/philosophically-speaking/ahead-curve-virtual-reality-empathy>.

person who walks the earth, and by way, how we relate to one another, understand one another, and how we raise future generations.

Highly acclaimed early American psychologist William James, attempted to decipher humanity's demand for violent engagement. In an article "The Moral Equivalent of War," James looks at heroism as the "antidote to boredom, doubt, passivity, depression, pessimism, and neurasthenia, possibly in an attempt to resolve his own ambivalence."<sup>2</sup> He analyzes the glorification of the military and becomes aware of a direct correlation between violence and positive cognitive reward.<sup>3</sup> In an article in *The Guardian*, Steve Taylor, senior lecturer in psychology at Leeds Metropolitan University and published author, discusses humanities continued participation in war. He explains concepts of unification during times of crisis and how people bond together when they share similar aspirations or values. People are also more likely to employ themselves to a greater effort, encouraging courageous and selfless acts, especially prevalent in times of war.<sup>4</sup> Violence exists in not only war, but also in our government systems- many of which are entities controlling warzones, as well as state sanctioned and government sanctioned places. There are areas where individuals live underneath strict, and merciless laws enforced by governing powers, creating a sense of helplessness as to what humanity can do to stand up against corrupt and brutal systems. Virtual reality allows the viewer to be able to see the brutality targeted to groups of people, much of the time

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<sup>2</sup>"William James: The First Peace Psychologist. Peace and Conflict: Journal of Peace Psychology." American Psychological Association. Accessed November 7, 2018. <https://psycnet.apa.org/record/1997-02945-004>.

<sup>3</sup> Ibid.

<sup>4</sup>Taylor, Steve. "Why Do Human Beings Keep Fighting Wars? | Steven Taylor." *The Guardian*. August 05, 2014. Accessed February 5, 2019. <https://www.theguardian.com/commentisfree/2014/aug/05/why-human-beings-keep-fighting-wars-warfare>.

due to their religion, the color of their skin, or perhaps their national identity. In an article from the United States Holocaust Memorial Museum website, the author describes how racism often times can develop into war:

Racism, including racial antisemitism, was always an integral part of German National Socialism. The Nazis perceived all of human history as the history of a biologically determined struggle between races. They postulated that political movements such as Marxism, communism, pacifism, and internationalism were anti-nationalist and reflected a dangerous, racially based Jewish intellectualism.<sup>5</sup>

Many of the political and governmental conflicts that exist can be broken down to motives of racism, xenophobia, classism, and religious discrimination amongst others.

Jayson Scott Munson (b.1977), sometimes referred to as Hennessy Youngman, is an African American contemporary artist who works in varying mediums including drawing, painting, textile, sculpture, video art, as well as virtual reality.<sup>6</sup> He addresses notions of race, sexuality, constructs of education, discussions surrounding pecuniary affluence, and violence in his works; providing contemplative analytical discourse. His virtual reality work *An Elegy for Ancestors* (2017), is an astral tribute and remembrance to those who have fallen victim to police violence. First featured in 2017 in The New Museum in New York City, the exhibition continues to be accessible online. This exhibition, "First Look: Artists' VR" has leadership funding provided by the Robert Rauschenberg Foundation. Musson's work was featured in this exhibition along with a few other artist's pioneering virtual reality work. Once the viewer places the goggles on

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<sup>5</sup>"Racism: In Depth." United States Holocaust Memorial Museum. Accessed December 19, 2018. <https://encyclopedia.ushmm.org/content/en/article/racism-in-depth>.

<sup>6</sup>"Jayson Musson." Jaysonmusson.com. Accessed November 6, 2018. <http://www.jaysonmusson.com/>.

and initiates the beginning of the video, the following phrases appear: “Dedicated to the memory of all black women and men who have lost their lives to police violence. Dedicated to all victims of state violence. Dedicated to all those who suffered the tragic misfortune of violence for simply being who they were.”<sup>7</sup> The participant is then opened to the view of a starry night sky, standing on what appears to be the grassy and floral ground of the earth (Figure 7). The sky is saturated with glowing stars, ranging from colors of orange, red, salmon pink, and bright blues. Meditative music fills the scene as the viewer navigates through the astral night sky. By placing chosen stars in a visual frame controlled by the viewer; different constellations form, along with associating descriptions of their significance. In a description written by columnist Claire Voon, she discusses the virtual experience: “Musson’s piece commemorates people from Evon Young to Sandra Bland through constellations that Musson designed based on West African symbols. Initially, you find yourself surrounded by the cosmos, but when you focus your gaze on a certain star, Musson transports you directly to it, where you may read a description of the symbol’s significance.”<sup>8</sup> Musson’s lamentable requiem is an interactive and reflective work. The active spectator is placed under the nightfallen celestial sky, maneuvering the green terrain, conveying the viewer with an illusion of a reality. It asks the viewer to consider the time given of life on earth, and to question a life cut short from violence and brutality. Voon further describes Musson’s work as

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<sup>7</sup> "Emblematic Group." Emblematic. Accessed September 25, 2018. <http://emblematicgroup.com/>.

<sup>8</sup>Voon, Claire, and Claire Voon. "A Death Labyrinth, a Steampunk Space Club, and More in the New Museum's First VR Exhibition." Hyperallergic. March 02, 2017. Accessed January 12, 2019. <https://hyperallergic.com/359297/a-death-labyrinth-a-steampunk-space-club-and-more-in-the-new-museums-first-vr-exhibition/>.

“monumental but not grandiose; he’s carved out a special world where those attacked for their identity now shine large and bright, their legacies etched out in new, meaningful forms that envelop our vision.”<sup>9</sup> The participant is encouraged to reexamine their notions of the human condition; their existence, aspirations, emotionality, discord and mortality in life.

Virtual reality tends to be a collaborative medium. There are often directors of various VR works, artists, developers, and models. In collaboration with Frontline, Emblematic, and the Knight Foundation; the virtual reality work titled *After Solitary* (2017) takes the user into the Maine state prison cell of a man named Kenny Moore while in solitary confinement. Moore sits on the bed, photogrammetrically recreated in the exact volumetrically captured room in which he was confined. He was convicted of aggravated assault, burglary and theft, sentenced to serve 18 months. After various disruptive and violent behavioral events, Kenny at the age of 18, was sent to solitary confinement where he was imprisoned for over 5 years. Moore sits and has an intimate conversation with the viewer, feeling as though they are both sitting in Kenny’s cell. The viewer sees Kenny as he describes his nearing insanity having been in solitary confinement, and feels the isolation as they sit next to him (Figure 9). With virtual reality technology, graphic details can be visually manipulated. In the case of *After Solitary*, Kenny talks about his family and children, and as the viewer looks at the wall, images appear of his family. These technological liberties allow for Kenny’s thoughts to be illustrated (Figure 10). He struggles to adjust to normal life and stated that he has

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<sup>9</sup> Ibid.

created his “own personal prison” in his bedroom, rarely leaving or communicating with family. As the user sits with Kenny in his cell room and listens to his story, they truly feel the pain he feels, and are empathetic for him. One part of the viewer feels as though they are in the physical space where their body stands as they participate in this VR work, however the other part of the viewer feels as though they are truly present in the cell with Kenny. The spectators presence is split: and is in a duality of presence. To speak to the human condition, from the perspective of Kenny and others who have been in his situation, solitary confinement isolates the detainee and reprimands them in a way that only worsens the situation. Writer for *The Guardian*, Cindy Lamothe describes the general importance of both social and physical human contact, “Humans aren’t meant to live in isolation – loneliness has been proven to cause serious repercussions, leading to illness and a 50% increased risk of early death.”<sup>10</sup> By disconnecting social companionship, it leads people into insanity after a point of time. The Emblematic group allows for thoughtful introspection of inhumane methods of correction facilities, critiquing society at large and how we deal with defiant and rebellious behaviors. Thankfully, the Maine State prison where Kenny was detained is beginning to employ rehabilitation classes, therapy, and communicative synergy between inmates.<sup>11</sup>

However, across the United States solitary confinement is still prevalent. Concealed with

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<sup>10</sup>Lamothe, Cindy. "Let's Touch: Why Physical Connection between Human Beings Matters." *The Guardian*. January 03, 2018. Accessed March 19, 2019. <https://www.theguardian.com/society/2018/jan/03/lets-touch-why-physical-connection-between-human-beings-matters>.

<sup>11</sup>"Emblematic Group." Emblematic. Accessed September 25, 2018. <http://emblematicgroup.com/>.



names such as “restricted housing”, “segregation”, or “isolation”, prisoners are held in cells for 22 to 24 hours a day in isolation.<sup>12</sup> Policymakers, criminal justice experts and correction officers are beginning to see the horrible effects of solitary confinement and are reaching a consensus to lessen the prevalence of it. However, thousands of prisoners are held in isolation, specifically in the United States, around 80,000 people are in solitary confinement as of 2018.<sup>13</sup>

Another virtual reality work created by Emblematic group titled, *We Who Remain* (2017), tells the story of a region in the Nuba Mountains of Sudan that has been cut off from the world and forgotten at large. This virtual reality work was the first work filmed in an active conflict zone, providing audiences with true immersive journalism. Focusing on the stories of students, mothers, journalists and rebels; *We Who Remain*, invites the viewer to enter the world of those living in the midst of a war that shows no sign of ending.<sup>14</sup> The VR work opens to the viewer as though they are standing in the middle of a celebratory crowd of various Sudanese people. The video takes a bleak transition as the viewer finds themselves hunched in a ditch in the ground, taking cover from air strikes. Women hold their infants and children close, and a silence fills the shallow ditch, allowing for a quiet kind of contemplation. The virtual reality film moves scenery again following a woman as she climbs into a cave. As the participant’s frame opens to the interior of the cave, families crowding together to shelter from air strikes

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<sup>12</sup>“Solitary by the Numbers.” Solitary by the Numbers. Accessed October 8, 2018. <http://apps.frontline.org/solitary-by-the-numbers/>.

<sup>13</sup>Ibid.

<sup>14</sup>“Emblematic Group.” Emblematic. Accessed September 25, 2018.

become visible (Figure 11). A woman begins to talk about food scarcity and how huddles of people will hide in these caves for days to stay alive. She continues talking about families separated from fathers and husbands as they go to fight as soldiers in this war. In different parts of the work, statistics appear dispensing information surrounding the topic. The short provides information at the start of the work discussing the racism that exists between the Sudanese people. The text in the virtual reality work discusses the president and his ordering for the annihilation of thousands of people in the Nuban mountain region.<sup>15</sup> The spectator sees Nubian people's homes burned, leaving them with nowhere to go. After watching the VR work, the viewer has a great sense of despair, the same kind of despair than the Nubian people share. The slow and steady destruction leaves these people hopeless, hopeless to ever live to witness a world where their offspring grow up. The Nuba mountains were not included in South Sudan as they gained their independence in 2011, this region has been cut off from the rest of the world and its people are being slowly murdered until there is no one left.<sup>16</sup> One of the interviewed people stated, "If people were educated we would not fight with guns but would communicate and rationalize." Those living in the Nuba mountains seek resolution, yet Sudan sees no need to reconcile this contention.<sup>17</sup> As the participant walks alongside the Nubian people, they are immersed to such an extent that it forces the viewer to reconsider their own life, and perhaps the luxuries they did not know as being luxury. Life is short for everyone on this earth, but much more for others at times.

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<sup>15</sup> "Emblematic Group." Emblematic. Accessed September 25, 2018.

<sup>16</sup> Ibid.

<sup>17</sup> Ibid.

Governmental entities and international conflict control the lives of hundreds across the world and in Sudan, the question to ask is: at what cost is a human life?

As war rips apart families and communities, so does weaponry and the violence associated with it. A topic surrounded with heated debate is gun control, and what political figures plan to do about it. We have seen events such as Sandy Hook, where 20 children from the age of six to seven were fatally shot by 20 year-old Adam Lanza not including the shooting of six adult staff members.<sup>18</sup> People believed that an event this devastating would never happen again, and yet 1,954 mass shootings have occurred since then.<sup>19</sup> In a virtual reality work created by Emblematic titled *Kiya*, Emblematic critiques gun laws in the United States and questions the human condition in relation to violence. Examining correlations between lax gun laws and homicide rates in South Carolina, *Kiya* (2017) provides a private and personal perspective of gun violence (Figure 12). This work was commissioned by Al Jazeera America as a companion episode with the Fault Lines documentary *Death in Plain Sight*. This VR work brings the viewer into the moments of an account (based from real events) when two young, African American sisters try to prevent their other sister from being shot by her ex-boyfriend. Accurate in nature, the 911 calls recorded from the scene, are played in the work while the viewer visually navigates the environment that was recreated from crime scene photographs.

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<sup>18</sup>"Sandy Hook Elementary School Shooting." Wikipedia. February 18, 2019. Accessed March 2, 2019. [https://en.wikipedia.org/wiki/Sandy\\_Hook\\_Elementary\\_School\\_shooting](https://en.wikipedia.org/wiki/Sandy_Hook_Elementary_School_shooting).

<sup>19</sup>Lopez. "Mass Shootings since Sandy Hook, in One Map." Vox.com. July 09, 2018. Accessed January 19, 2019. <https://www.vox.com/a/mass-shootings-america-sandy-hook-gun-violence>.

Actors wore motion capture suits and acted out the scene as it was recorded.<sup>20</sup> The viewer feels helpless watching Kiya swing the gun around and threaten the women in the room. He forcefully grabs his ex-girlfriend, threatening to kill her, refusing her plea to leave. Following the story of the sister, the viewer paces behind as she runs out of the house desperately flagging down help. Hearing shots firing from outside, the police arrive at the scene to discover that not only did Kiya shoot his ex-girlfriend but he then turned the gun on himself after hearing the sirens pull up in the background. The VR short ends as the viewer reads shocking data surrounding domestic violence and lax gun laws on the screen. One of which reads “three women a day are murdered from domestic violence.”<sup>21</sup> By placing statistics at the end of the virtual reality work, the actuality of the situation is taken a step further. It creates a more provoking mental response for the viewer, when relating data to the VR work. The audience members which experience *Kiya* are given a different perspective on domestic violence and gun control, displacing themselves in situations when life and death is sudden and ephemeral. The sisters represented in this work continue to actively campaign against domestic violence. The spotlight is refocused on political leaders and policymakers, and how they plan to control gun violence in a country where guns are the least bit controlled.

*The New York Times* has recently begun immersive journalism, creating beautiful, high definition, and emotional works. *The Displaced* (2015), tells the stories of three children Oleg, Chuol, and Hanna after being displaced from various wars around

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<sup>20</sup> "Emblematic Group." Emblematic. Accessed September 25, 2018.

<sup>21</sup> Ibid.

the world. As the virtual reality work begins, various statistics slowly fill the screen, reading, “Nearly 60 million people around the world have been driven from their homes by war and persecution- more than at any time since World War II. Half are children. This is the story of three of them.”<sup>22</sup>As the viewer wears the VR headset, Oleg Teryokhin begins to tell his story of displacement (Figure 13). Oleg lived with his parents in the town of Nikishino, of eastern Ukraine. In April of 2014, war broke out: “Hastily formed separatist militias, goaded and armed by Moscow, rose up in a rebellion against a new, pro-Western government in Kiev.”<sup>23</sup> Oleg and his family left their village seeking refuge elsewhere. Finding refuge in the Kharkiv region of Ukraine, Oleg and his family are part of more than 130,000 internally displaced people. When Oleg returned to the town he was raised in, now left in ruins, he said “I already got used to it... I don't think about it.” Oleg’s father’s body was found in the garden of their family home, Oleg having once visited his father everyday, tells the viewer how he now visits his grave everyday. “Before the war, I visited him every day,” Oleg, now 11, said. “Now I visit his grave.”<sup>24</sup> The viewer hears and watches the tragic story of Oleg and experiences his post-war life. Now at only the age of eleven, Oleg confesses that he will stay in his home even if bombs fall throughout the city, willing to sacrifice himself to hold on to the memory of his life as a child with his family.<sup>25</sup>

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<sup>22</sup> Kramer, Andrew E. "The Displaced: Oleg." *The New York Times*. November 05, 2015. Accessed February 5, 2019. <https://www.nytimes.com/2015/11/08/magazine/the-displaced-oleg.html>.

<sup>23</sup> Ibid.

<sup>24</sup> Ibid.

<sup>25</sup> Ibid.

The virtual reality work continues to the story of 9 year- old Chuol who was separated from his family, fleeing to the swamps (Figure 14). Chuol talks to the viewer, face to face, telling his story beginning with his hometown in South Sudan, near the City of Leer. He talks of his close relationship with his parents and grandparents, and how they were all ripped apart from one another as war came. In 2013, President Salva Kiir and the former vice president Riek Machar created a conflict that sparked a civil war. South Sudan split with the Nuer people following the vice president and the Dinka people following with the president. The conflict was a battle for control of the country and its oil reserves. This civil war still continues in South Sudan leaving 4.6 million people without sufficient food and around 2.2 million people displaced from their homes, Chuol is one of those 2.2 million.<sup>26</sup> The viewer in this virtual reality short sits in Chuol's rowboat, watching him row, and listening to his story. Water fills the peripheral view and the viewer looks up at Chuol from below in close range. In this rather intimate moment, he discloses his thoughts on death to the participant, recounting the fear he had of crocodiles eating him while living in the swamp. And yet, he says he believes that the slow death by crocodile would be better than that of being killed by enemy militia. As the participant nudges their way into the youthful mind of nine year old Chuol; that by large has been stripped of him, he says the following to the viewer: "If I could, I would turn into a lion, finish off my enemies and turn back into a child."<sup>27</sup> His juvenescence is taken from him and he is forced into a life of war and running.

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<sup>26</sup> Ibid.

<sup>27</sup> Ibid.

The third part of this virtual reality work is the story of 12-year-old Hana. Hana and her family left Syria as refugees. Living in a refugee settlement in the Bekaa Valley of Lebanon, she starts her day at 4am each morning, helping her family pick various produce for money. She talks with the viewer about the discrimination she feels living in Lebanon, and that she is not accepted (Figure 15). Hana grew up in a town in northeast Syria, Mabrouka, and has not been there since she was nine years old. Working and living in Lebanon, Hana can see the mountains dividing Syria from Lebanon.<sup>28</sup> In the *New York Times* article of this virtual reality work, the author, Susan Dominus dives into Hana's story. She describes one of Hana's memories:

Hana was picking plums and staring at a branch, she suddenly remembered that a tree on her family's property back home in Syria had a swing. We could have one here, she thought — we could take one of these big buckets for carrying plums and attach it to a rope! We could take turns, maybe during a break — and then she jolted out of her daydream. "Idiot," she told herself, "who's going to let you have a swing here?" She went back to work, picking plums, counting the hours until she could return to a home that was really no home at all.

Nearing the end of the VR work, Hana shares her hopes with the viewer looking to the future. She wishes for the war to end and that she can go back to living life as a young child. The participant looks at Hana close in the face, hearing her story as she holds strong eye contact with the viewer. Seeing the conditions that Hana experiences, hearing her tragic story, and witnessing this post-traumatic, war ridden story, is devastating.

War rips apart the lives of Oleg, Chuol, and Hana. Through this virtual reality experience the audience sees what war is really like, gaining this detailed understanding

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<sup>28</sup> Dominus, Susan. "The Displaced: Hana." *The New York Times*. November 05, 2015. Accessed February 5, 2019. <https://www.nytimes.com/2015/11/08/magazine/the-displaced-hana.html>.

of the effects of war, behind the scenes of what is presented on news networks. Their notions of life as youths and their early mental development are shattered by the devastation of war. Their innocence is drowned with violence and brutality, they contemplate the meaning of life and death and the human condition at such early ages. The stories of Oleg, Chuol, and Hana are a select few of the many stories of refugee children around the world. Currently, more than 30 million children displaced from war.<sup>29</sup> The *NYT* VR work allows for the viewer to have an up close and personal relationship with the three children: whether walking alongside them in ruins, sitting in the personal and intimate space of a rowboat, or on the back of a open truck on the way to harvest crops at 4am.<sup>30</sup>

Immersive journalism uses virtual reality as a way to communicate news and information. *The New York Times* has been a pioneering newspaper company for many years, and has chosen to create a division of immersive journalism in virtual reality. By combining a virtual reality experience with text, present in *The Displaced*, among other works; the viewer is able to read data and backstories as they would traditionally do so in a newspaper, but with VR they can also feel immersed in the space where the discussion is happening. The text and visual support one another, creating educational and impressive works.

The human condition is composed of characteristics, monumental events, and situations which make up the essentials of human existence, such as “birth, growth,

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<sup>29</sup> Dominus, Susan. "The Displaced: Hana." *The New York Times*. November 05, 2015. Accessed February 5, 2019. <https://www.nytimes.com/2015/11/08/magazine/the-displaced-hana.html>.

<sup>30</sup> *Ibid.*



emotionality, aspiration, conflict, and mortality”.<sup>31</sup> Munson’s virtual reality astral tribute was dedicated to those who have lost their lives from police violence, those fallen victim to state violence, and for falling victim to corrupt systems for being who they were. He critiques police brutality and systems that were enacted to incite safety, but in many instances have caused tragic and violent endings. Emblematic’s work *Solitary Confinement, We Who Remain*, and *Kiya*; speak to the human condition in relation to violence whether it be in law enforcement and prison systems, international and political conflicts, or policy concerning gun control and domestic violence. Similarly, does the *New York Times* virtual reality work *The Displaced*. The human condition grapples with our notions of life and death, and how violence can magnify our grasps on time and life.

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<sup>31</sup> Human Condition. Accessed March 08, 2019.  
[http://www.piglix.com/?qa=piglix/Human\\_condition](http://www.piglix.com/?qa=piglix/Human_condition).

## **Chapter II: *The Human Condition and Violence: Race, Culture, and Religion***

This chapter explores the human condition and its relationship to violence, however the works will be specifically in dialogue with race, culture, and religious beliefs on personal and intimate levels. Virtual reality holds a special place for the themes discussed in this chapter. Each and every one of us are different, a different race, a different background, different religion, or different gender. VR can shift the way we see things, alter the way we interpret the world, and change our perspectives. Things that some take for granted can be a daily challenge for someone else. People with privilege often times never have to face hardships of society, blinding them to the reality of the discriminatory world that many people live in. What would it be like to walk in the shoes of a woman alone at night? Or perhaps a black teenager being followed by a shop owner while picking up merchandise to purchase in a convenience store? Virtual reality can provide these types of experiences, that one may never encounter due to their privilege in a society constructed by gender, race, and other markers of identity and oppression, pushing people to think beyond their frame of reference. The possibilities for VR are endless, and so, we find ourselves at the beginning of a medium with enormous potential. VR is a tool for artists to express their creativity, but an even greater tool for education and creating spaces for empathy and self-reflection. An important part of the

human condition is acceptance, both of yourself and from society. These works grapple with our notions of self-acceptance, acceptance from others, and empathy.

As discussed in Chapter 1, correction officers and police forces are also prevalent in this chapter. Many of the victims targeted in these works are by police officers, and are specifically targeted or abused due to the color of their skin, their heritage, or for the religion they practice. Emblematic group's work *One Dark Night*, traces the chronology of events leading up to the shooting of Trayvon Martin by George Zimmerman. This case hit international news receiving a following from people all around the world as this major court battle pushed the Black Lives Matter movement into full swing. On the night of February 26th, 2016, 17-year-old Trayvon Martin was followed by a neighborhood watchman, George Zimmerman, and was shot for no apparent reason.<sup>32</sup> This virtual reality work opens with the viewer seeing the scene from an aerial perspective. The cop car is to the left of the frame, parked outside of the apartment complex (Figure 16). Listening to the discussion of the officers inside the car, the participant hears one of the men say, "these assholes, they always get away" under his breath. The officer alludes to assumptions of people of color and crime, creating a situation less about justice, and more about race. The viewer sees young Martin pace in front of his home on the lawn and then run around the house to the backyard. One of the men gets out of the car and runs after him, despite multiple times being told by his fellow officer that it was not necessary to follow or chase him. The perspective shifts and

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<sup>32</sup> "Emblematic Group." Emblematic. Accessed September 25, 2018.

the viewer stands in the homes of various bystanders who heard gunshots and screaming. Standing in the homes of the bystanders, watching the night of Trayvon Martin's death unravel, is unsettling and traumatic. The participant can't help but feel anxious reliving this heated crime. The screaming stops in the background and Martin is confirmed deceased. Text appears reading the following:

Trayvon Benjamin Martin a 17 year old African American from Miami Gardens Florida was fatally shot by George Zimmerman a neighborhood watch volunteer in Sanford, Florida While no one witnessed what actually transpired, Zimmerman was cleared of all charges based on his claim of self defense under the controversial Florida law, "Stand Your Ground."<sup>33</sup>

Emblematics work, *One Dark Night*, creates a space for different audience members to consider racial discrimination and the autonomy that some people believe they are entitled to, especially when considering another human's life. After Zimmerman suggested generalized racial comments, did he begin to chase the adolescent and fatally shoot him, despite having been repeatedly told that it was unnecessary. Being cleared of all charges only speaks further to our criminal justice systems in the United States and how some incidents and perpetrators are swept under the rug, especially echoing gun control laws and those qualified versus those who are unqualified to be armed. The lumping and essentializing of people as "us" versus "them", creates division of people and therefore, hierarchical thought.

The psychological impact of *One Dark Night* might have been more striking had the participant been sitting in the cop car, face to face with the officers, opening up the perspective of Zimmerman to the viewers. It may have also been interesting to see from

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<sup>33</sup> Ibid.

the perspective of Martin. The work takes an interesting position to this night, though with clearer animations, and varying perspective shifts it may have created a more impressionable impact for the audience. Trayvon Martin's life was taken away from him at the young age of seventeen and he was treated as less of a person due to the color of his skin. He was targeted and murdered for simply, his existence.

Humans have been conditioned to violence, whether through watching the news and forgetting about the tragic events five minutes later, playing extremely brutal and gory video games, or even buying guns without thorough background checks. People in the United States and other countries which have lax gun laws, become conditioned to a kind of violence that only bites back. In the case of Trayvon Martin, George Zimmerman killed a young teenager of color, firing multiple shots without truly thinking of the consequences. Zimmerman first of all had the option to not go after Martin, but he also had the option to tackle him or restrain him (though not needed in the situation), and yet, he fired his gun *multiple* times. The story of Trayvon Martin did gain lots of international attention, however it did not change gun control laws in the United States. Our conditioning to violence and lack of acceptance of others, creates life-threatening situations.

Similar to the virtual reality work discussed above, *One Dark Night*; Emblematic created another virtual reality work that looks at racial dynamics in relation to violence. *Use of Force*, explores police brutality and mob ethic in relation to the story Anastasio Hernández Rojas. Born in 1968, Hernandez was the father of five children and husband

to lifelong partner Marí Puga. Living in San Diego for over 25 years, Rojas, a Mexican national, was discovered as an illegal immigrant in the United States and deported to Mexico. Separated from his family, Hernandez began to cross the border back to the United States but was caught by U.S. Border Patrol Officers. After being detained, Hernandez was brutally beaten and tasered multiple times, stopping his heart.<sup>34</sup> This virtual reality work recreates the scene when Hernandez was beaten, extracted from cell phone footage captured by two witnesses (Figure 17). The virtual reality work animates the same scenery, even inserting one of the witnesses into the piece using body and facial scans to reconstruct her virtually. Bystanders attempt to get the attention of the Patrol Officers screaming , “Why are you guys using excessive force?... he is not resisting!”<sup>35</sup> Standing among the U.S. patrol officers, the participant feels helpless as they watch the merciless beating of Rojas. One of the officers picks up a metal tool and begins to violently strike the man, as he lays on the ground, hands in cuffs behind his back, motionless. Experiencing this work and standing in the scene is devastating and traumatizing.

The criminalization of immigrants and aggressive attitudes of political authorities, have been two parallel problems in contemporary contexts. Governing through the criminalization of undocumented immigrants, has created a situation that targets people due to their race or nationality. This way of governing is visibly harsher than standard corrective measures, there is “the extensive utilization of imprisonment,

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<sup>34</sup> "Emblematic Group." Emblematic. Accessed September 25, 2018.

<sup>35</sup> Ibid

three strikes and compulsory minimum sentencing policies, redress in juvenile court and the incarceration of minors, immigrant detention centers, and more extensive parole restrictions” on immigrants.<sup>36</sup> As migration becomes an issue around the world, people like Hana from *The New York Times* virtual reality work, *The Displaced*, are treated as inferior and live as outsiders. The United States, specifically in conservative and Republican groups, has witnessed anti-immigration views magnified by the events following 9/11. Creating a divide of opinions in the US on this issue, better immigration laws and quicker paths to legal statuses are necessary. Virtual reality provides an interesting and personal perspective on immigration that seeks to humanize it more. Immigrants have been clumped as being a threat to the United States, specifically targeting Mexican immigrants, who are imagined as the most common unauthorized migrant. Documentation is a sensitive and opinionated subject: undocumented on the one hand is factually illegal; the immigrant is a law breaker. On the other hand however, being an illegal immigrant is synonymous to being a criminal. The situation only intensifies as cultural, social, and economic associations begin to form. Assumptions of national discord, sub-par academic opportunities, overpopulation, and crime are linked together. Migrants are accused of taking American jobs, bringing drugs, diseases, and encumbering public services, all of which lead to the criminalization of

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<sup>36</sup> "Trauma on the Body: The Border Killing of Anastasio Hernández Rojas (US)." *Deathscapes*. October 15, 2018. Accessed March 10, 2019. <https://www.deathscapes.org/case-studies/trauma-on-the-body/>.

immigrants.<sup>37</sup> Various political figures have discussed how they plan to ‘deal’ with fluxes of immigration by simply creating physical barriers to force people away. Xenophobic and racist remarks have essentialized immigrants in national debates. As politicians represent the general consensus of public thought, so does the public represent the words of politicians.

Another large part of cultural intolerance is religious discrimination. Historically, religion has been a large part of the start of international conflicts. Religious intolerance is important to distinguish from racism, but it is also important to recognize the commonalities. To be intolerant of a religion is to consider people who practice a certain religion as different or inferior. This can also apply to those who do not identify with a religion. Racism contains the same kind of bigotry, however it is centered around the specific race, or physical attributes that a person has. Religion can oftentimes be associated with immigration and therefore the criminalization or demonization of people coming from a certain culture. Premiered in the 2017 Whitney Biennial, virtual reality work *Real Violence*, created by Jordan Wolfson received a wide range of reviews and reactions. His work confronts religious discrimination and violence. The viewer enters this VR work setting foot on a seemingly calm scene of a Manhattan street on a clear day, feeling commonplace and routine. The scene shifts and a man kneeling on a stretch of the sidewalk becomes visible. Wearing a red hoodie and blue jeans the subject’s facial expression appears grief-stricken. A man stands over him wearing gray t-

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<sup>37</sup> "Trauma on the Body: The Border Killing of Anastasio Hernández Rojas (US)." *Deathscapes*. October 15, 2018. Accessed March 10, 2019. <https://www.deathscapes.org/case-studies/trauma-on-the-body/>.



shirt, this is Jordan Wolfson recreated and playing the part of the perpetrator in the VR (Figure 18). Wolfson's character takes a baseball bat and begins to beat the victim's head, breaking in his skull. He drops the bat and drags the man by his legs, continuing to beat him in the face and kick him in the body, stomping on him. Blood runs through the sidewalk and the victim is silent. Traffic continues at its regular pace, no one stops, as if unphased by the violent situation. Throughout the work, the viewer hears a man's voice singing a Hebrew blessing the Jewish people traditionally recite during Hanukkah. The audio cuts abruptly and so does the scene. In this work Wolfson critiques anti-Semitism, violence, but most importantly the role of society surrounding violence. The viewer watches as a helpless bystander, while people on the street watch the brutality unfold without taking preventative action. Wolfson creates interesting discourse around religion, religious discrimination, and the violence imparted on those who may have different beliefs. Occurring in October of this year, Robert Bowers, 46, opened fire on a synagogue in Pittsburgh, Pennsylvania. Killing eleven people and wounding six, Bowers pleaded not guilty to 44 charges of murder.<sup>38</sup> Religious discrimination is a problem that has not decreased in the past years, but that has been heightened, especially due to political figures who preach similar beliefs of anti-immigration and cultural racism.

Through virtual reality, viewers are forced to step out of their comfort zone, and to experience something different or uncomfortable. They may have to witness an act of

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<sup>38</sup>Cox Media Group National Content Desk. "Pittsburgh Synagogue Shooting: Robert Bowers Pleads Not Guilty, Requests Jury Trial." *Aj.c.* November 04, 2018. Accessed January 23, 2019. <https://www.ajc.com/news/national/reports-active-shooter-tree-life-congregation-synagogue-pittsburgh/pzK9cNBeyiX8IjuNIzJc9N/>.

brutality being done to someone due to their race or cultural heritage. Virtual reality creates an experience for the viewer that fools our consciousness into believing that what we are seeing, hearing, and experiencing; is real. What is it like to be present on the night of the shooting of Trayvon Martin by George Zimmerman? What is it like to watch Rojas, an illegal immigrant beaten to death? To watch a Jewish man walking on the street have his head smashed in due to his religious beliefs? Virtual reality allows users to live the life of someone else, to experience the discrimination first hand, and to watch violence unfold on people for just being who they are.

### ***Chapter III- The Human Condition and Violence: Gender and Sexuality***

Discussions surrounding gender politics and sexual orientations, have become mainstream in current society. Younger generations have become more liberated to express their gender and sexual identities, institutions have become more accepting, and social media more inclusive to LGBTQ communities, women, and transgendered people. The following works of virtual reality will place the spectator in a unique position, encouraging the viewer to think about gender and sexuality differently. People that identify as homosexual or bisexual have long been stigmatized. In the 1960s as the gay political movement began to take rise, so did a wave of homophobia and heterosexism.<sup>39</sup> In 1973, the American Psychiatric Association removed homosexuality as a mental illness which also uncovered an influx of negative comments and remarks about homosexuals.<sup>40</sup> Much of the anger and animosity imparted on communities that identify as homosexual, still exists. Social media gave access to perpetrators to cyber-bully and attack minorities. Similarly with sexual orientation politics, the third wave feminist movement has been a continual fight to eliminate gender stereotypes and to gain political, economic, personal, educational, and social gender equality.<sup>41</sup> A part of both homophobia and sexism is hyper-masculinity, where stereotypical features of a

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<sup>39</sup> "Homophobia, Heterosexism, and Sexual Prejudice." Psychology. UC Davis. Accessed March 19, 2019. [https://psychology.ucdavis.edu/rainbow/html/prej\\_defn.html](https://psychology.ucdavis.edu/rainbow/html/prej_defn.html).

<sup>40</sup> Ibid.

<sup>41</sup> "Feminism." Wikipedia. March 15, 2019. Accessed February 4, 2019. <https://en.wikipedia.org/wiki/Feminism>.

male are exaggerated; such as strength, sexuality, or aggression.<sup>42</sup> Our society is comprised of a certain type of toxic machismo that damages productive social systems functioning with non-partisan attitudes.

Virtual reality becomes incredibly personal and private when it grapples with identity. The sentiments of empathy formed in these virtual experiences make the viewer witness and/or receive the violence. It looks at gender politics and sexual orientations in such an intimate and personal way, that no other medium can match. Directed by artist and influencer, Nonny de la Peña, also in collaboration with Emblematic Group, *Out of Exile* (2017), describes the story of Daniel Ashley Pierce after confronting his family about his sexual orientation (Figure 19). The scene is based from real footage that Pierce recorded, incorporating accurate audio recordings from the event. The figures recreated in this virtual reality work are rendered in holograms using videogrammetry, a computational method where 2D images of an object, captured at different angles, are virtually recreated in 3D. Entering this work, the viewer sits in their home living room with Daniel and his family. First confronted about his sexual preferences during a family “religious intervention” the scene becomes violent and out of control. Family members yell homophobic slurs and begin to physically attack and reprimand Daniel. This story, as disturbing as it is, tells the story that many people just like Daniel have lived. Forty percent of homeless youths come from LGBTQ

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<sup>42</sup>"Hypermasculinity." Wikipedia. March 16, 2019. Accessed February 4, 2019. <https://en.wikipedia.org/wiki/Hypermasculinity>.

communities (majority coming from communities of color), having been disowned and kicked out of their homes.<sup>43</sup> Not only is opening up to one's family a life-changing challenge for homosexual people, but it is also important for their personal identity and growth. Society pushes back against LGBTQ communities in many cases, stereotypically labeling people for the way they sexually identify, rather than the person at their essence. Discrimination based on one's sexual preference has historically been prevalent and this hostility towards LGBTQ communities continues to exist today.

Women often times face this kind of discrimination, and oftentimes it is imparted by similar perpetrators. Misogyny, objectification, and sexual harassment are built into the social constructs of society; many of which lie unrecognized to us, in our subconscious. A long time debated issue relating to women is their reproductive rights and access to abortion clinics. Discussions surrounding reproductive healthcare have been mentioned in political areas as well. Current President of the United States of America, Donald Trump, fixed his political power on Planned Parenthood of America. *Washington Post* columnist Ariana Eunjung Cha stated the following in relation to the steps President Trump has decided to take:

The Trump administration took aim at Planned Parenthood Friday, issuing a rule barring groups that provide abortions or abortion referrals from participating in the \$286 million federal family planning program — a move expected to redirect tens of millions of dollars from the

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<sup>43</sup>"Emblematic Group." Emblematic. Accessed September 25, 2018. <http://emblematicgroup.com/>.

women's health provider to faith-based groups. The change means federally funded family planning clinics can no longer refer a patient for abortion and must maintain a "clear physical and financial separation" between services funded by the government and any organization that provides abortions or abortion referrals. Groups receiving money under the Title X program, which serves an estimated 4 million low-income women, were already prohibited from performing abortions with those funds.<sup>44</sup>

Stripping the rights a woman has to her own body is unethical and dangerous. If a woman seeks reproductive services, rarely is it a rash decision. Emblematic partnered with Planned Parenthood to create a virtual reality work that recreates the experience of accompanying a woman to an abortion clinic. *Across the Line* uncovers the difficulties in accessing abortion services from the perspective of a woman (Figure 20). The viewer begins the work with the participant sitting in the car with the woman driving to the clinic. Mobs of people appear protesting abortion in offensive and macabre ways. The signs show gruesome images of post-aborted fetuses and read derogatory and insulting claims. A man stands in front of the car and tells the woman to roll down her window. He offers her ambiguous alternatives, encouraging her to come to his 'office' and that he could diminish her worries. Refusing to back down, the man forcefully continues to verbally attack her until she drives away. The viewer is paralyzed sitting in the car with the man's face just feet away. The virtual technology convincingly creates the intensity of this moment. Feeling attacked by this man who has no personal relationship to the woman, or the viewer for that instance, is infuriating and sad.

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<sup>44</sup> Boorstein, Michelle, Julie Zauzmer, and Marisa Iati. "Trump and Pence Give Surprise Addresses at Antiabortion March for Life." *The Washington Post*. January 18, 2019. Accessed March 19, 2019. [https://www.washingtonpost.com/religion/2019/01/18/march-life-says-its-pro-science-despite-medical-consensus-favoring-abortion-access/?utm\\_term=.b770d90f0946](https://www.washingtonpost.com/religion/2019/01/18/march-life-says-its-pro-science-despite-medical-consensus-favoring-abortion-access/?utm_term=.b770d90f0946).

Women are already in an extremely fraught and vulnerable space, many of whom are probably reconsidering their decisions. Their private and personal space becomes something political as society argues and debates their personal decisions. VR can recreate emotion but it may not recount a series of psychological moments that have impacted that emotional situation. Nearing the end of the work the scene darkens and the following text appears, “Dedicated to those who lost their lives in Colorado Springs, CO on November 27, 2015.”<sup>45</sup>

This specific event on this day was a mass shooting outside of a Planned Parenthood clinic in Colorado Springs, Colorado. Three people were killed and nine were injured. Of those who lost their lives, two were civilians and another a police officer. SWAT teams arrived on the scene and surrounded the attacker, Robert Lewis Dear Jr. In trial, Dear defended himself by calling himself “a warrior for the babies” and expressed his anti-abortion and anti-Planned Parenthood views. Charged with first degree murder, and prescribed as being mentally unfit, the judge determined that Dear was incompetent to stand trial, in other words, that his prosecution will be on hold for an indeterminate amount of time.<sup>46</sup> Many referred to this as an act of domestic terrorism. On November 28, 2015, President Barack Obama released a statement

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<sup>45</sup> "Emblematic Group." Emblematic. Accessed September 25, 2018.

<sup>46</sup> Benzel, Lance, and Lance Benzel. "Judge Rules Admitted Colorado Springs Planned Parenthood Shooter Still Incompetent." The Denver Post. February 13, 2018. Accessed March 19, 2019. <https://www.denverpost.com/2018/02/13/colorado-springs-planned-parenthood-shooter-still-incompetent/>.

stressing stricter gun control legislation.<sup>47</sup> Women are targeted for making decisions that affect their *own* bodies all across the country and around the world. President Trump and Vice President Pence surprised thousands of anti-abortion protestors in Washington, making unannounced speeches at the event, which occurred only in January of this year.<sup>48</sup> When women are stripped of their right to control their own bodies, much of the time they will resort to dangerous methods of abortion which can result in not only the loss of life of the fetus, but the life of the mother. By allowing women a safe space to control their futures and *their* bodies, it will encourage prepared mothers, ready to raise and educate new generations.

The virtual reality work *Across the Line* pushes and pulls at the heavily debated subject of abortion. It displaces viewers into a scenario that they may never be able to experience, and understand. Being able to identify and see through the eyes of a woman who struggles to gain rights to abort a child due to the harassment of strangers, changes the viewers perspectives in ways no other medium can offer.

Hyper-masculinity, features of aggression, and violence are common parts of societal gender norms associated with men and the repression of their emotionality, specifically in relation to affectionate or caring behaviors. An interesting contemporary artist, Rachel Rossin, looks at gender politics and corresponding gender constructs.

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<sup>47</sup> Martin, Jonathan. "Obama Says 'Enough Is Enough' After Colorado Shooting." *The New York Times*. December 21, 2017. Accessed September 19, 2018. <https://www.nytimes.com/2015/11/29/us/colorado-springs-planned-parenthood-obama-responds-to-gun-violence.html?smid=pl-share>.

<sup>48</sup> Boorstein, Michelle, Julie Zauzmer, and Marisa Iati. "Trump and Pence Give Surprise Addresses at Antiabortion March for Life." *The Washington Post*. January 18, 2019. Accessed March 19, 2019. [https://www.washingtonpost.com/religion/2019/01/18/march-life-says-its-pro-science-despite-medical-consensus-favoring-abortion-access/?utm\\_term=.b770d90f0946](https://www.washingtonpost.com/religion/2019/01/18/march-life-says-its-pro-science-despite-medical-consensus-favoring-abortion-access/?utm_term=.b770d90f0946).



Working as a multimedia artist, and based out of New York City, Rossin was first attracted to art and art-making after visiting a show at the Whitney Museum of American Art, featuring some of Kiki Smith's wax figures (Figure 21). Rossin stated that she both hated them and loved them "because they were both repulsive and tender."<sup>49</sup> Rachel Rossin invented a male pseudonym and identity upon her move to New York City.<sup>50</sup> She applied to work for a freelance computer programming company and found that the job market was more opportunistic in this field. Portraying herself in a masculine way allowed for her to be able to join the workforce with more ease, and to receive a substantial income as people did not notice that she was a woman.<sup>51</sup> This specific time in her life sparked inspiration in creating virtual reality work *Man Mask* (2017). This work looks at gender and stereotypes associated with gender norms, in a meditative and surreal way. The viewer immerses themselves into a dreamlike landscape, adopted from the game *Call of Duty: Black Ops*, but with a catch: violence does not exist in this virtual dream world (Figure 22). The New Museum and Rhizome commissioned this work for their exhibit "First Look: Artists' VR," which was released free in the app store and is still available. An *Elegy for Ancestors* exists in the exhibit as discussed in chapter 1. Rossin has had formal artistic training and is an experienced painter, sculptor, as well as a successful programmer. Due to her cross-collaborational

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<sup>49</sup> Herriman, Kat. "30 under 30: Rachel Rossin". *CULTURED MAG*. Retrieved 17 March 2019.

<sup>50</sup> Pechman, Alexandra. "Rachel Rossin Turned a Fake Identity Into Virtual Reality." *V Magazine*. April 10, 2018. Accessed February 08, 2019. <https://vmagazine.com/article/rachel-rossin-turned-a-fake-identity-into-virtual-reality/>.

<sup>51</sup> "Rachel Rossin." *Forbes*. Accessed October 19, 2018. <https://www.forbes.com/profile/rachel-rossin/>.

skillset, Rossin thrives in the interdisciplinary field of virtual reality.<sup>52</sup> *Man Mask* grapples with the role of violence in our society, and our conditioning to violence. The viewer immerses themselves in a virtually imagined and created world, fabricated from the mind of Rossin. The world is void of violence and cruelty, containing instead peaceful and prosperous imagery, colors, and sounds. Rossin's work is disorienting because our associations with war oftentimes come from TV stations and news outlets which extract footage from violent, active war zones. Rossin recites a poetic mantra for the viewers audible experience. Traditionally represented as soldiers in *Call of Duty*, the soldiers are instead represented as mercenaries, visually appearing as translucent, with shiny and holographic silhouettes surrounding their bodies. Rossin's work is in dialogue with human's conditioning to violence in video games. Computer and console games are a large part of many young children's lives, especially advertised to target male audiences. High exposure to violence in video games, alters the way in which young men treat and think about violence and aggression. Often referred to as "The young male syndrome" psychologists have explored the high rates of violence existing in young men. Much of this is due to innate biological and evolutionary roots, but violence in video games only heightens this craving for competition and machismo.<sup>53</sup> Rossin's work deconstructs brutality, uncovering a world that is as harmonious as it is tranquil.

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<sup>52</sup> Pechman, Alexandra. "Rachel Rossin Turned a Fake Identity Into Virtual Reality." *V Magazine*. April 10, 2018. Accessed February 15, 2019. <https://vmagazine.com/article/rachel-rossin-turned-a-fake-identity-into-virtual-reality/>.

<sup>53</sup> "Competitiveness, Risk Taking, and Violence: The Young Male Syndrome." *Ethology and Sociobiology*. July 10, 2002. Accessed September 19, 2018. <https://www.sciencedirect.com/science/article/pii/016230958590041X>.

Commenting on gender norms, the violence in video games, and their exposure to young children, Rossin creates a world which reveals the unimaginable and materializes a utopian reality. Rachel Rossin is “concerned with the line between the virtual world and our own, and the ephemerality of both.”<sup>54</sup>

Artists using virtual reality are able to create important discourse around works that are critically analyzing violence in relation to gender and sexuality. Whether it is the story of Daniel confronting his family about his sexual orientation, walking alongside a woman in the moments before an abortion, or navigating a surreal and peaceful landscape stripped of violence and cruelty, virtual reality provides the most personal way of experiencing digital arts, especially when the works grasp personal and political situations such as themes of gender and sexuality. The artists are materializing situations that provide space for intense self-reflection, especially with how we find ourselves in the human condition. They also look at the human condition and violence; how life and death are both temporally sensitive, guided by our experiences and exposure to violence.

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<sup>54</sup> Pechman, Alexandra. "Rachel Rossin Turned a Fake Identity Into Virtual Reality." *V Magazine*. April 10, 2018. Accessed February 15, 2019. <https://vmagazine.com/article/rachel-rossin-turned-a-fake-identity-into-virtual-reality/>.

## **Chapter IV- The Human Condition and Violence: Environmentalism**

Global warming, environmental degradation and change, are undeniable. Humanity faces many unpredictable environmental problems that need urgent attention from people all around the world and especially active participation in the slowing and termination of environmental problems. Some of these current environmental problems are: pollution, loss of biodiversity, global warming, natural resource depletion, overpopulation, waste disposal, ocean acidification, and ozone layer depletion; among numerous other problems.<sup>55</sup> Reversal of many of these dilemmas is possible, but it requires contribution and involvement. Many artists have communicated the emergent situation and crisis the world faces with the environment, creating beautiful and moving works of art. Some artists work with waste, sculpting pieces entirely composed of materials unfit for recycling. Others bring light to spaces that can be utilized for growing plants or produce rather than their traditional use. One artist for example, John Sabraw, creates interesting paintings that utilize pigments sourced from oxidized sludge of abandoned coal mines (Figure 23).<sup>56</sup> The more convenient option would be to use pigments that are imported from China, but by tapping into the water's heavy metals from discontinued coal mines, Sabraw brings attention to pollution problems and water contamination. In an interview with *Huffington Post* Sabraw stated that "the artist, like the scientist, has a crucial role to perform in our society... [that artists] see things

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<sup>55</sup> "Rinkesh." Conserve Energy Future. December 25, 2016. Accessed March 19, 2019. <https://www.conserve-energy-future.com/15-current-environmental-problems.php>.

<sup>56</sup> Brooks, Katherine. "18 Green Artists Who Are Making Climate Change A Priority." HuffPost Australia. December 06, 2017. Accessed February 08, 2019. [https://www.huffingtonpost.com.au/entry/environmental-art\\_n\\_5585288](https://www.huffingtonpost.com.au/entry/environmental-art_n_5585288).

differently, act on this vision, report the failures and successes.”<sup>57</sup> All art forms and art practices have value and purpose, the difference is that each caters to different experiences. VR transports the viewer to the discussion, not to just look at a painting of mounds of garbage that they can walk away from, but it brings the viewer in the middle of the seemingly endless landscape of waste. Virtual reality makes environmental problems that are not visible to most people, visible. It can deliver an experience that is as real as life as we live it, and memories that are as meaningful as lived experiences.

Starting in the year 2020, The Paris Agreement was created within the United Nations Framework Convention of Climate Change along with 195 states.<sup>58</sup> This agreement aims to mitigate greenhouse-gas emissions and help sustainability of the earth and its resources. In June of 2017, U.S. President Donald Trump declared that the United States will withdraw from the agreement, effective in November 2020.<sup>59</sup> With the Paris Climate Agreement in the minds of people from all around the world, Emblematic partnered with FRONTLINE and NOVA to create a virtual reality work that exhibits a unique perspective on the arctic scenery that is melting faster than anticipated. The virtual work *Greenland Melting*, was created using 360 degree footage and incorporates data directly drawn from NASA (Figure 24). As the viewer looks at the Greenland glaciers from an aerial view, the narrator gives data concerning global warming and associated rising sea levels. Through graphic designing, the imagery can be

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<sup>57</sup> Ibid.

<sup>58</sup> "The Paris Agreement." UNFCCC. Accessed February 1, 2019. <https://unfccc.int/process/the-paris-agreement/what-is-the-paris-agreement>.

<sup>59</sup> Lipton, Eric. "As Trump Dismantles Clean Air Rules, an Industry Lawyer Delivers for Ex-Clients." The New York Times. August 19, 2018. Accessed January 6, 2019. <https://www.nytimes.com/2018/08/19/us/politics/epa-coal-emissions-standards-william-wehrum.html>.

manipulated to reflect the data he is discussing such as with virtual animations on top of the views. The glaciers in Greenland are melting 10 feet per day when 15 years ago, 3 feet were melting per day. NASA scientists think that this rapid melting is not just due to increasing air temperature, but also warming waters.<sup>60</sup> If the glacier in Greenland breaks apart it will raise sea levels by 20 feet, submerging coastal cities such as Manhattan, Boston, or Charleston. The oceans across the world are absorbing over 90 percent of the atmospheric heat due to human activity.<sup>61</sup> This virtual reality work provides the opportunity for the viewer to go on the scene of the melting ice caps and see the amount of melting. With the headset on, the audience can visually navigate this scene as if they are on the ice or standing next to scientists recording data. This all-immersive experience makes climate change more tangible than hearing reports, reading the paper, or watching the news. It takes you on the scene, standing atop the thinning ice. As the viewers look down to the thin ice virtually beneath them, the magnitude of the melting becomes incredibly tangible and visceral. This compelling scene allows the audience to have a better awareness of global climate change, understanding how their role affects the earth and bringing their awareness into action.

Humans have depleted the earth of its natural resources, led species into extinction, littered the oceans, and have polluted the atmosphere among other harmful acts. The debate of whether global warming and climate change exists is a debate that no longer needs to be deliberated. All efforts need to be focused on what humans can do now to help save the planet and its organisms. An interesting virtual reality work

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<sup>60</sup>US Department of Commerce, and National Oceanic and Atmospheric Administration. "Is Sea Level Rising?" NOAA's National Ocean Service. October 27, 2008. Accessed November 19, 2018. <https://oceanservice.noaa.gov/facts/sealevel.html>.

<sup>61</sup>Ibid.

produced by Jonathan Corum and Graham Roberts of *New York Times Virtual Reality* (NYTVR), and created with support from the National Science Foundation and the United States Antarctic Program, a four part series, *The Antarctica Series*, discusses climate change and melting ice caps in Antarctica<sup>62</sup>. *Under a Cracked Sky* allows viewers to virtually dive under eight feet of sea ice, exploring ice caves and swimming with sea life. *Three Six Juliet* is part two which allows for the viewers to fly in a helicopter through one of the world's most harsh environments, the McMurdo Dry Valleys. Part three of this series *McMurdo Station*, walks the viewer along the research stations in McMurdo, studying life thousands of miles away from civilization. The final and fourth part of the virtual reality series *A Shifting Continent*, was produced with support from the Rosetta project as well as the Lamont-Doherty Earth Observatory, of Columbia University, exploring the structure of the Ross Ice Shelf from a military cargo plane and discussing Antarctica's fate with climate change pressing against its continuance<sup>63</sup>. *A Shifting Continent*, begins by placing the viewer on the terrain of Antarctica watching the penguins navigate this dry and rough surface, deprived of ice (Figure 25). The viewer then is in the aircraft with scientists studying the rate of melting from the glaciers. They are trying to predict how fast and what geographic regions will be affected by this melt-off. Similar to Emblematics work, *Greenland Melting*, both virtual reality works are discussing global warming, rising sea levels, and humanity's impact on this devastating and time-sensitive situation.<sup>64</sup>

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<sup>62</sup> "The New York Times VR." The New York Times. Accessed March 20, 2019.  
<http://www.nytimes.com/marketing/nytvr>.

<sup>63</sup> *ibid.*

<sup>64</sup> *ibid.*

Virtual reality that looks at humanity's violence and degradation of the earth presents an interesting discussion around climate change. It looks at the human condition, our carelessness and egotistical perspective of owning the earth. With the current emergent state the planet is in, virtual reality gives people memories that are moving and lasting. An inherently empathetic and self-reflective medium as it is, virtual reality changes how people treat the world post virtual experience.



## *Conclusion*

An unsolved philosophical debate dating to the theories of Aristotle, negotiates notions of mimesis: a theoretical principle that investigates the point of *creation* of art. Plato and Aristotle first saw mimesis as artistic creation that imitates life, or more simply stated, that art imitates life.<sup>65</sup> In more recent theories, this has been challenged to instead claim that *life* imitates art. Seemingly doubtful to come across a solution in the near future of this dispute, what can be concluded is that there is a mutual dependency. When shifting focus to virtual reality and creative arts, many of the works artists are creating comment on daily life and social constructs. While technology becomes synonymous with popular culture, so does technology become synonymous with art. The human condition comprises itself of our memories, emotions, and experiences; all that makes up our life. Artists who look to express and challenge life experiences, often create powerful and thought-provoking works; and those who do so in unexpected ways, even more so. The hybridity of interdisciplinary ideation, such as art and technology, yields great opportunity for collaborative creation. Virtual reality artist, Android Jones, has become internationally recognized and acclaimed for his work in VR, exhibiting his work from The Smithsonian to The White House. Discussing virtual reality in the future he states, "I see a whole new type of VR artist emerging in the next five years... We're going to see less limitations and more cross-pollination of

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<sup>65</sup>Britannica, The Editors of Encyclopaedia. "Mimesis." Encyclopædia Britannica. November 22, 2011. Accessed December 19, 2018. <https://www.britannica.com/art/mimesis>.

mediums — new tools taking us to even more immersive worlds.”<sup>66</sup> Artists working in virtual reality have uncovered a medium that can be so incredibly personal, as it can be surreal or imaginative, exposing perspectives never assumed accessible.

The works discussed in this thesis grappled with our notion of the human condition, life, death, and violence; whether they critiqued international and political conflict, racial dynamics, gender and sexuality, or humanity’s violence on the environment. The considered artists and groups investigated humanity’s treatment of the surrounding world, whether it was the way we treat one another or how we treat our planet.

Looking to some of the earliest virtual reality works discussed, artists were bringing interesting conversations and critiques to violence in international and political governing systems, uncovering unjust behavior and corrupt correctional facilities. *We Who Remain*, provides an experience that invites the viewer to live the life of the people in the Nuba mountains that have been cut off from Sudan and the rest of the world, due to racism and international conflict. *The Displaced*, created by *The New York Times Virtual Reality*, follows the stories of Oleg, Chuol, and Hanna and what their lives are like after being displaced by war, commenting on the criminalization of immigrants, political systems, and international war. Artists also sought to confront violence that was centered from racial, cultural, or religious, discriminatory beliefs. Witnessing the night of Trayvon Martin’s murder by George Zimmerman, standing on the street in front of the crime, or from the perspective of bystanders; virtual reality artists aim to

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<sup>66</sup>Insider, WIRED. "Creating Art in Virtual Reality - And Then Entering It." Wired. April 24, 2018. Accessed January 19, 2019. <https://www.wired.com/brandlab/2018/04/creating-art-virtual-reality-entering/>.

displace viewers from their comfort zones and put them on the scene, witnessing the racism and bigotry that exists in society. Also analyzing artists that aimed to create works surrounding discussion of gender or sexuality, the story of Daniel Ashley Pierce coming out to his family as gay, was traumatic to watch, but at the same time encouraging for the viewer to take measures against homophobic behaviors and perpetrators. Ending with artists expressing virtual reality works about humanity's impact on the environment, *Greenland Melting*, focused on emergent problems in Greenland such as climate change, rising sea levels, glacier melt-off, and global warming. Throughout the examination of virtual reality works, the human condition has also been an overarching theme, pushing viewers to contemplate the effects that virtual reality has on how they choose to live their lives, focus their energies on others, and how they see and understand life and death.

This thesis has aimed to provide the reader with a better understanding of the digital arts, knowledge of the importance and value in virtual reality, contemporary artists working in this field, as well as to encourage the reader to find the space for self-reflection upon the discussion of various works, and their critical statements. The works grappled with our notion of life; what it means to be living, and what it means to die. They reflected on the human condition, and society's conditioning to violence. The artists have created such an incredible angle and space for human retrospection in VR, that it challenges all other mediums to compare with its unique, personal, and intimate stance.

## FIGURES



Figure 1: Allan Kaprow, *18 Happenings in 6 Parts*, 1959. Accessed March 2, 2019.  
<https://www.x-traonline.org/article/allan-kaprow-art-as-life>

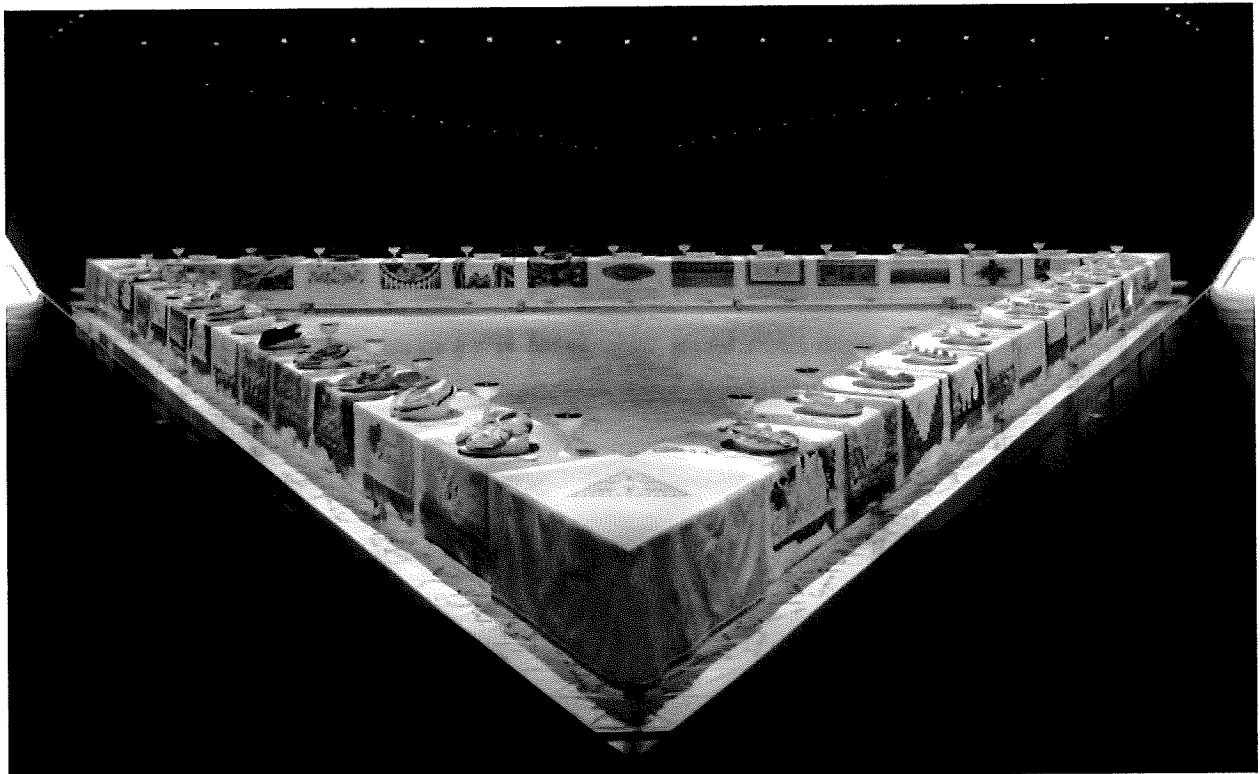


Figure 2: Judy Chicago, *The Dinner Party*, 1974-1979. Accessed March 2, 2019.  
<https://hyperallergic.com/455572/judy-chicago-responds-to-criticisms-about-the-dinner-party/>.

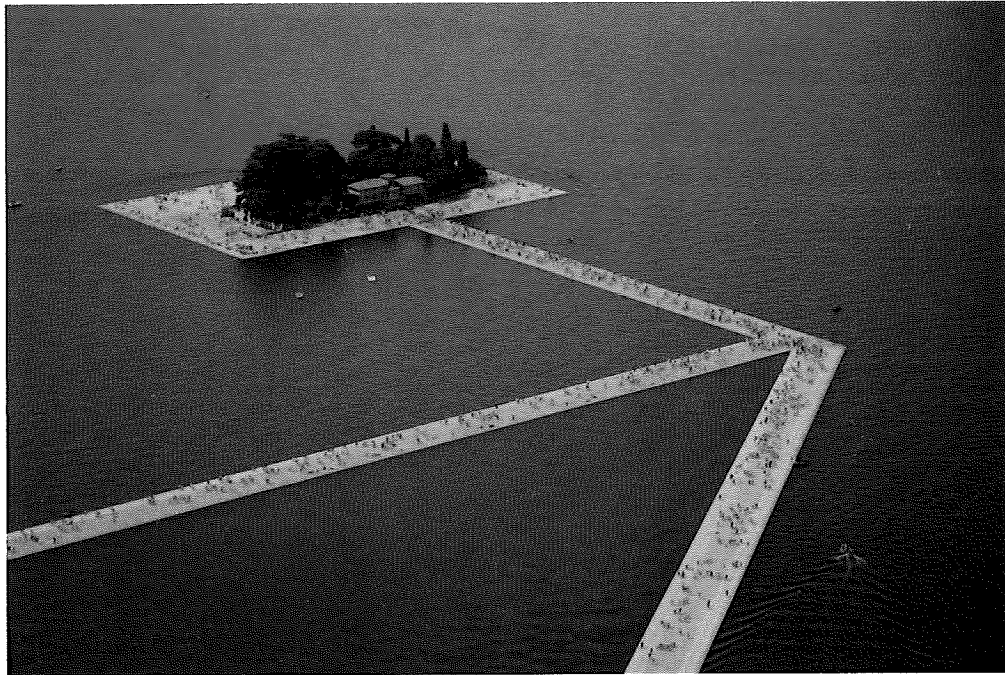


Figure 3: Christo and Jeanne-Claude, *The Floating Piers*, 2016. Accessed March 2, 2019.  
<https://christojeanneclaude.net/projects/the-floating-piers>



Figure 4: *Stereoscope*, c. 1861. Accessed March 2, 2019.  
<https://blogs.lib.unc.edu/ncm/index.php/2013/10/21/artifact-of-the-month-holmes-stereoscope/>

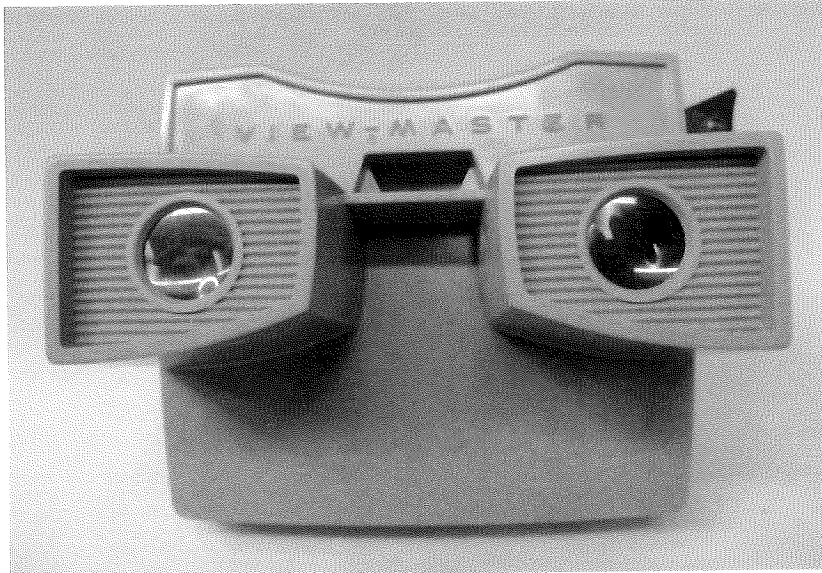


Figure 5: *Viewmaster Model G*, 1962. Accessed March 2, 2019.  
<http://www.gasolinealleyantiques.com/optical.htm>



Figure 6: *Virtual Reality Headset*, 2017. Accessed March 2, 2019.  
<https://techcrunch.com/tag/virtual-reality-headset/>



Figure 7: Dream Logic, *The Art of Dying*, 2016. Accessed March 2, 2019.  
[www.dreamlogicart.com](http://www.dreamlogicart.com)

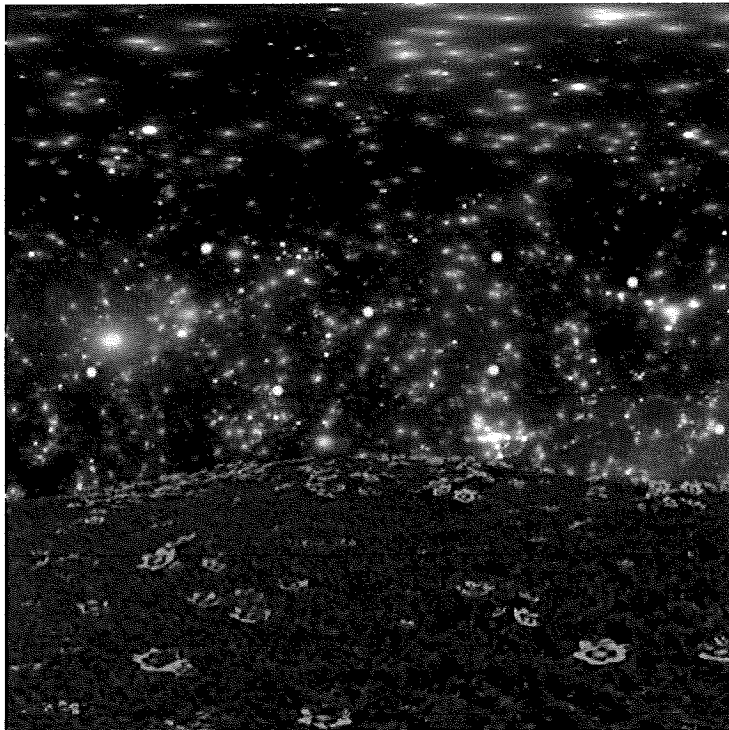


Figure 8: Jayson Munson, *An Elegy for Ancestors*, 2017. Accessed March 2, 2019.  
<https://twitter.com/salon94bowery/status/819254604084969475>



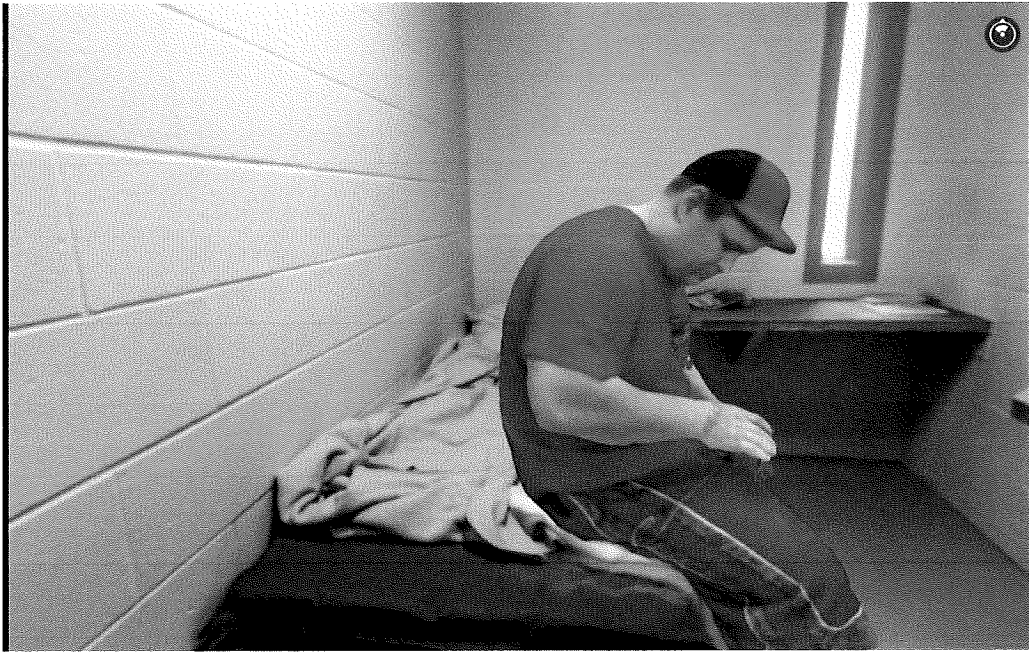


Figure 9: Emblematic Group, *After Solitary*, 2017. Accessed March 2, 2019.  
<https://vrroom.buzz/vr-news/products/volumetric-capture-kick-butt-vr-needs>



Figure 10: Emblematic Group, *After Solitary*, 2017. Accessed March 2, 2019.  
<http://www.sourcesoundvr.com/2017/12/28/after-solitary/>





Figure 11: Emblematic Group, *We Who Remain*, 2017. Accessed March 2, 2019.  
<http://emblematicgroup.com/experiences/we-who-remain/>



Figure 12: Emblematic Group, *Kiya*, 2017. Accessed March 2, 2019.  
<https://uploadvr.com/kiya-is-an-intense-vr-recreation-of-a-domestic-murder-suicide/>

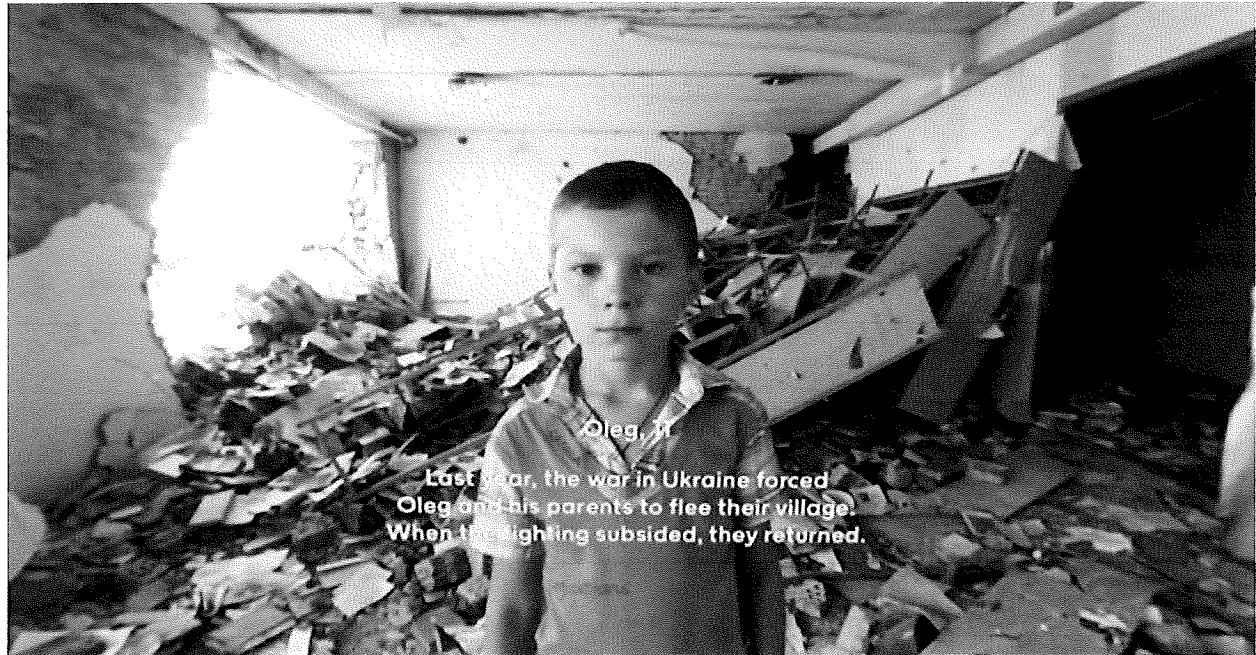


Figure 13: New York Times Virtual Reality, *The Displaced*, 2015. Accessed March 2, 2019. <https://vrscout.com/news/the-new-york-times-launches-vr-app-and-debuts-the-displaced/>

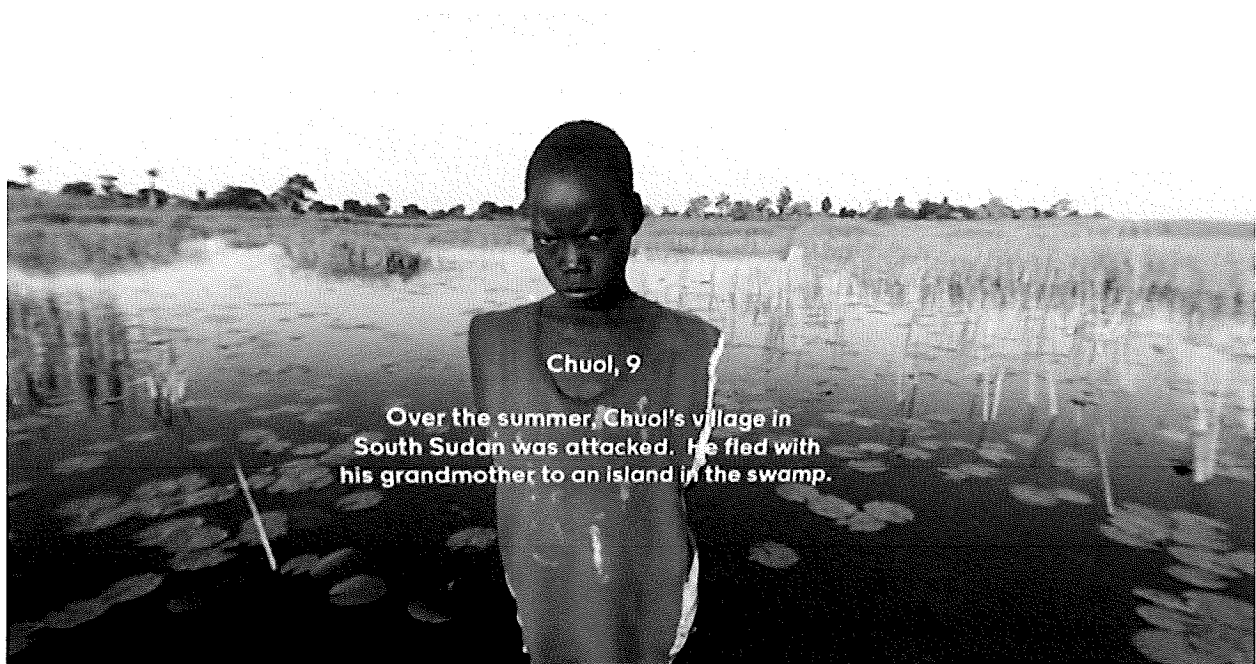


Figure 14: New York Times Virtual Reality, *The Displaced*, 2015. Accessed March 2, 2019. <https://vrscout.com/news/the-new-york-times-launches-vr-app-and-debuts-the-displaced/>



Figure 15: New York Times Virtual Reality, *The Displaced*, 2015. Accessed March 2, 2019. <https://www.adweek.com/brand-marketing/new-york-times-vr-film-displaced-wins-lions-entertainment-grand-prix-172225/>



Figure 16: Emblematic Group, *One Dark Night*, 2017. Accessed March 2, 2019. <https://mashable.com/2015/04/22/trayvon-martin-vr/#fvY3OL7zxGqA>



Figure 17: Emblematic Group, *Use of Force*, 2017. Accessed March 2, 2019.  
<https://mashable.com/2014/06/26/virtual-reality-memory/>



Figure 18: Jordan Wolfson, *Real Violence*, 2017. Accessed March 2, 2019.  
<https://www.spikeartmagazine.com/en/articles/downward-spiral-4>





Figure 19: Emblematic Group, *Out of Exile*, 2017. Accessed March 2, 2019.  
<https://www.youtube.com/watch?v=TiSKz2Wa9w8>



Figure 20: Emblematic Group, *Across the Line*, 2017. Accessed March 2, 2019.  
<https://uploadvr.com/vr-power-make-care/>

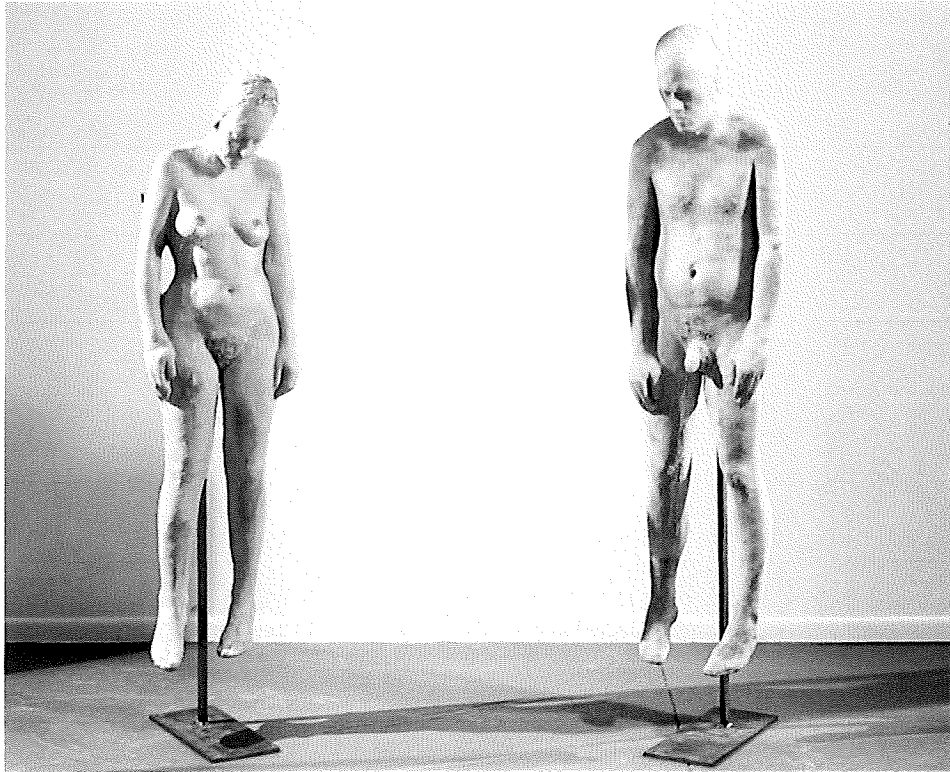


Figure 21: Kiki Smith, *Untitled*, 1990. Accessed March 2, 2019.  
<https://whitney.org/collection/works/7646>



Figure 22: Rachel Rossin, *Man Mask*, 2017. Personal photograph by author.



Figure 23: John Sabraw, *Chroma S4 Nebula*, 2017. Accessed March 2, 2019.  
<http://www.johnsabraw.com/studio>



Figure 24: Emblematic Group, *Greenland Melting*, 2017. Personal photograph by author.



Figure 25: New York Times Virtual Reality, *The Antarctica Series*, 2017. Accessed March 2, 2019. <https://www.nytimes.com/interactive/2017/climate/antarctica-virtual-reality.html>



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