

Art Movement: Light, Space and Time

by

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in partial fulfillment of the requirements for the degree of Masters of Fine Arts in Digital

Futures

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Abstract

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Art Movement is the result of three years of theoretical and studio-based research on the status of contemporary digital art and its relation to the older minimalist sculpture Light and Space Movement, an older period in minimalist sculpture. This project brought to life the notion that these two movements are related; my studio practice bridged the theoretical underpinnings that connected the two. Through theory, animation, video projection and sculpture, my research was able to discern major themes throughout a number of artists' works and their intentions. My studio practice enabled me to understand the history and applications of light art, both in the analog and digital- or physical virtual realms.

Keywords: *Light, space, movement, contemporary, sculpture, digital artist, self-reflexive, perspectival, gallery, minimalist*

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Dedication

To my father, Haim Kotler, who passed away on November 5, 2013.

Table of Contents

List of Figures.....	vii
Preface.....	1
Chapter 1: Introduction, or Once Upon a Time	
I. Background and Overview.....	2
II. Research Questions.....	5
III. Hypothesis.....	6
IV. Literature Review.....	7
V. Why It's Worthwhile to Answer Such a Question.....	9
Chapter 2: Light and Space Artists.....10	
Simple Fantasy, or Art Without Artifice: Background Information on the Light and Space Movement.....	10
Chapter 3: Contemporary Digital Artists.....24	
I. Self Reflexive Process: Art Narrative and Immersion.....	25
II. Simulated Perspectival Space: Aiming for Spiritual Transcendence.....	30
III. Virtual versus Physical Gallery Space.....	36
Chapter 4: Art Theory and Me.....40	
I. Methodology.....	40
II. Animations and Installation: Reflections on Studio Practice in Relation To Reviewed Artists.....	44
a) 'Animation Tests: Experiments'.....	45
b) 'Bevel'.....	52
c) 'Spatial Reasoning'.....	56
d) 'Fantasy'.....	61
III. Process of Discovery and Where I'm At Now.....	64
Chapter 5: Conclusion.....66	
I. Summary.....	66
II. Recommendations for Future Research.....	70
Chapter 6: Works Cited.....72	

List of Figures

- Figure 1. '*Pyre (Element Series)*,' Carl Andre, 1960 (Example of New York Minimalist art movement) p. 13
- Figure 2. '*Glass Box with Ellipses*,' Larry Bell, 1964 p. 15
- Figure 3. '*Untitled*,' Robert Irwin, 1970 p. 18
- Figure 4. Robert Irwin and James Turrell in the anechoic chamber at UCLA p. 19
- Figure 5. '*Afrum Pale Blue*,' James Turrell, 1968 p. 21
- Figure 6. '*Primary Atmospheres*,' Robert Irwin, 1965 p. 22
- Figure 7. '*Photoshop CS: 84 by 66 inches, 300 DPI, RGB, square pixels, default gradient, "Blue, Red, Yellow" mousedown y=22100 x=14050, mouseup y=19700 x=1800*,' Corey Arcangel, 2010 p. 26
- Figure 8. '*Electrolyte*,' Takeshi Murata, 2012 p. 28
- Figure 9. '*Visites Possibles*,' Sabrina Ratte, 2014 p. 29
- Figure 10. '*Parallelograms*,' Nicolas Sassoon, 2012 p. 40
- Figure 11. '*Japanese Driving Game*,' Corey Arcangel, 2004 p. 31
- Figure 12. '*Super Mario Clouds*,' Corey Arcangel, 2002 p. 32
- Figure 13. '*Melter 3-D*,' Takeshi Murata, 2014 p. 38
- Figure 14. '*Favourites*,' Nicolas Sassoon, 2012 p. 40
- Figure 15. Poster for '*Animation Tests: Experiments*,' 2014 p. 45
- Figure 16. '*Oceans Away*,' as seen through a purple sheet of chiffon, 2014 p. 46
- Figure 17. '*Oceans Away*,' 2014 p. 47
- Figure 18. '*Swimface*,' projected onto sheets of chiffon and the wall, 2014 p. 47
- Figure 19. '*Dance Madness*,' 2013 p. 47

Figure 20. <i>'Delta of Sin'</i> still and <i>'Audio to Keyframes'</i> still, 2014	p. 48
Figure 21. <i>'Delta of Sin'</i> still and <i>'Audio to Keyframes'</i> still, 2014	p. 48
Figure 22. <i>Delta of Sin'</i> still, 2014	p. 48
Figure 23. Television with the Atari Video Synthesizer, 2014	p. 48
Figure 24-27. Stills from <i>'Bevel'</i> , 2014	p. 52
Figure 28-30. Stills from <i>'Spatial Reasoning'</i> , 2015	p. 56
Figure 31-34. Stills from <i>'Fantasy'</i> , 2015	p. 61-62
Figure 35. <i>'Cheveux Statique'</i> , <i>'Sunset'</i> , <i>'Nicolas'</i> , <i>'Reve/Cauchemar'</i> , <i>'Body Jazz'</i> , 2016	p. 64
Figure 36. <i>'Slimed'</i> projection, 2016	p. 65
Figure 37. <i>'Slimed'</i> , triangles, 2016	p. 70

Preface

My time at OCAD has been marked as a period where I have produced studio work and consequently attempted to crystallize where my aesthetic preferences come from. My practice uses contemporary language, tools and technique. I thought it necessary to question why certain tropes felt like an extension of such language. Digital art, because of the ease of its tools, relies on presets. Using a set of tools, a history of language is conveyed. My work examines the history of a language. I seek to understand how artists achieved to establish a specific language in the past. How does my use of animation and digital projection work to either perpetuate or establish a new language?

Chapter 1: Introduction, or

Once Upon a Time...

Background and Research Question:

In California, during the 1960s, there existed a group of artists whose work was a combination of Op art, minimalism, and geometric abstraction. These men (Larry Bell, Robert Irwin and James Turrell) were known as being part of the Light and Space Movement. My research proposes that artists from this group share some similar concerns with contemporary digital artists, such as Cory Arcangel, Takeshi Murata, Sabrina Ratte and Nicolas Sassoon, who work in the fields of video, installation, sculpture, animation and print. At first glance, they have formal properties in common. Upon further examination, there are conceptual connections to be made as well. They create work that is self-reflexive, experiments with the illusion and perception of perspectival and virtual space and questions implicit assumptions about the gallery setting. My research and studio practice aims to discern how and why this specific aesthetic moved from the physical sculpture of the 1960s into the digital video and print of the 2010s. This aesthetic of neon colours and abstract geometric shapes originally had to do with perception and spirituality. Today it has to do with self-awareness, but within a digital realm. While it once referenced Suprematism, it is now evoking the digital sub-

lime (the term ‘digital sublime’ refers to an aesthetic, philosophical, intellectual and/or spiritual greatness or transcendence that relies on technology). By researching art history and key players' motives, a new generation of artists' concerns can be contextualized. Despite the different times, technologies and contexts each group of artists is situated in, coinciding intentions can perhaps be ascertained. A digital artist using light and installation, I seek to understand how the Light and Space movement's use of installation is reflected in contemporary digital art's depiction and use of space. How do the different cultural and historical contexts these artists were operating within change how installation's potential as an art form can be understood? While I acknowledge that nostalgia is a possible means of interpreting contemporary digital work's relation to the Light & Space Movement, this line of inquiry falls beyond the scope of this research. As I embarked on this research project, I intentionally wanted to push my studio practice beyond the repetition of retro visual tropes and explore deeper meaning lying beneath.

The first chapter deals with my reasons for undertaking this research; my hypothesis and justification for my work. The second chapter looks at potential similarities between artists from the Light and Space Movement and contemporary digital artists. In this chapter, I outline what I believe to be shared traits between the Light and Space Movement and contemporary digital artists: their pro-

cess is self-reflexive, it engages perspectival space and experiments with different forms of immersion. The third chapter analyzes how my research and methodology affects my studio and my artistic process; how do I create something that bridges these two movements, as well as answering the more personal question of, ‘why do I make what I make, and how has it been influenced by my research?’ The fourth chapter discusses my conclusion; a summary of my work, its implications, recommendation for future research and conclusions.

Each of the artists that I cover in this thesis paper attempts to efface boundaries between art and the viewer, thereby playing with the viewer’s sense of perception. Akin to installation artist James Turrell's work from the 1960s, each contemporary digital artist’s work is about creating 3D space and generating allusions to the space beyond that; conceptual 3D voids. Like the other Light and Space artists, Murata draws on influences from Suprematism and Abstract Expressionism. Corresponding to James Turrell’s use of self-reflexivity, Sabrina Ratte’s art appropriates illusion as a means of cultivating self-awareness. Nicolas Sassoon and Murata share Larry Bell’s preoccupation with the illusion of constantly being in flux. Sassoon is also preoccupied with creating an ambient atmosphere, rather than focus on a literal sense of beauty. Similar to Turrell, Sassoon adopts light as a technique in creating spiritual experiences. These qualities are important to my own research because they point to artistic grasps that are deeper than technologi-

cal trends du jour, such as projection mapping and digital animation. By researching what artists from half a century were attempting to achieve, I can more thoroughly comprehend the intentions behind what I am trying to achieve in my studio practice.

One of my objectives with this thesis is to produce studio work that bridges these two movements. Through this investigation, I will be able to do this. I aspire to create work that is self-reflexive, in the sense that it both acknowledges and discusses my process and its end goals. By projecting digital animations onto physical objects such as light sources, I will be taking a material's intended use, turning it on its head and demystifying a sense of illusion. My aim is to create a simulated perspectival space that is as engrossing and immersive to the audience as possible, while at the same time, proposing avenues for reflection on the process at play in the work itself.

Research Questions:

To better understand aspects of my digital art practice, such as my interest in the digital tools themselves, their historical lineage and the language they deploy, my research attempts to demonstrate how aesthetics, self-reflexivity, illusionistic perspectival space and the questioning of the physical space of the gal-

lery are prevalent in contemporary digital art. How do these concerns echo those of the Light and Space Movement, a period in American sculpture that followed minimalism? How can digital art practice deal with the same complex issues as the Light and Space artists did by using a language that, while similar on the surface, functions very differently in its modes of address: virtual versus physical?

Hypothesis:

Investigating the aesthetic and conceptual connections between the Light and Space artists and contemporary digital artists is crucial in my understanding of how certain aesthetics can communicate different meanings, depending on historical context. Ultimately, developing a greater awareness of this connection can move my studio work forward by solidly grounding my visual experimentation in an art historical lineage. Informed use of this visual language will enable me to contribute more significantly to a preexisting artistic dialogue. I myself am interested in creating work that is self-reflexive and able to elevate viewers' spiritual state. And, through this, an awareness of the self can be created.

Literature Review:

To reiterate, my research examines the similarities between artists from the Light and Space Movement and contemporary digital artists. I ask, 'How do the different cultural and historical contexts these artists operate within change how installation's potential as an art form can be understood?' Connecting these two movements, interesting questions regarding gallery space, both physical and virtual, arise. By creating charts and doing some chin-stroking at the library, I found theoretical commonalities between the movements, which included: self-reflexivity, perspectival space and a virtual gallery space.

The majority of the literature I have read can be categorized into two divisions: older books about the Light and Space Movement and online interviews with contemporary digital artists. What is exciting for me is that because this literature spans from the late seventies until today, the time between when the work was produced and how it has and will be interpreted continues to change. With the research on the Light and Space Movement, the textual documentation and art criticism begins with Larry Bell's art critic Melinda Wortz interviewing Bell on his latest art show, focusing on the process of his light boxes. Jan Butterfield's 1993, "The Art of Light and Space," meanwhile, has served as a main resource for gathering a complete survey of where these artists came from and how they

worked amongst each other. In the past decade, there have been some retrospective shows of the Light and Space artists' work, which have been covered by journalists who have looked at the movement briefly. Their distance has donned important evaluation as well. Reading these books and articles has allowed me to define the main threads in the Light and Space movement that relate to my research.

Research on contemporary digital artists, meanwhile, takes place mainly as interviews in art and culture magazines, or digital art websites. This is interesting because it indicates that the research is not fully formed; these ideas are new and open to interpretation and contextualization. I conducted a personal interview with Nicolas Sassoon, through email. I asked him one question: "What is your process like?" The answer is in the 'Process of Discovery and Where I'm at Now' section. Other interviews with artists such as Cory Arcangel revolve around his use of technology as a means for self-reflexivity, while interviews with Sabrina Ratte discuss how daily life is envisioned as perspectival space in her visual work.

Claire Bishop's 'Installation Art: A Critical History' (2005) has been one of the most influential sources that initially formed my research questions. As the title suggests, the book goes through a history of installation art and asks questions that problematize assumptions about the medium. I fell in love with her chapter on the Light and Space Movement. In it, Bishop discusses how a gorgeous

sculptural and light aesthetic was employed to discuss specific conceptual ideas.

Throughout this paper, I use the term ‘digital sublime.’ My understanding of the phrase has been informed by French philosopher Jean-Francois Lyotard via Yi-Hui Huang’s paper, ‘The Digital Sublime: Lessons from Kelli Connell’s Double Life’ reframing his philosophy in the context of digital photography. In Huang’s view, the digital sublime refers to “the existence of something unrepresentable” (2012, 70) I also use terms such as ‘hyperreal, self-reflexive and perspectival space.’ ‘Hyperreal’ refers to Jean Baudrillard’s theory that in the post-modern world certain things contain a “real without origin or reality.” ‘Self-reflexive’ means “marked by or making reference to its own artificiality or contrivance”. (Merriam Webster, 2015) Perspectival space corresponds to ‘a technique of depicting volumes and spatial relationships on a flat surface. (Dictionary, 2016)

Why it is Worthwhile to Answer These Questions:

I have noticed current trends in digital art tend to reflect earlier movements. I will attempt to explore some of those connections. By recognizing how digital art draws on artists from the Light and Space era, for example, we can examine which values persist, which values fade and what dictates such changes. An art movement is defined by a conceptual framework as well as formal properties. How does this show up in 2016, in the context of digital art? While the philo-

sophical grounding of the Light & Space Movement is well documented, because it is a historical movement, analyzing the philosophy behind contemporary digital artists' practices will be limited by the very fact they are currently producing work, there hasn't been as much of an opportunity to take a step back, also the movement is still in flux.

The art that captures my attention tends to be brightly coloured and clever, displaying a high level of self-reflexivity. I have a sardonic streak and am deeply analytical person, sometimes to the point of finding it difficult to stomach too much earnestness, preferring awareness. I think self-reflexivity is dependent on a level of intellectualism that I am attracted to. Humour is often embedded within self-reflexivity. At a deeper level, as a casual Tibetan Buddhist, within Buddhist philosophy, the act of “seeing yourself seeing” is a self-reflexive act, one which appeals to me.

Chapter 2:

Light and Space Movement: Simple Fantasy, or Art without Artifice

The term “Light and Space” refers to a Los Angeles-based art movement throughout the 1960s and 1970s that focused on atmospheric installations that played with the nature of perception. Its key players include Larry Bell, Robert

Irwin and James Turrell. (Butterfield, 1993. 9) These artists, mostly painters and sculptors, were responding to the preceding movement of Abstract Expressionism by creating something that was neither painting nor sculpture. Moving beyond the boundaries of the canvas, this group was interested in how science and spirituality could be represented by producing 'objectless' art. While they did not maintain a manifesto, nor consider themselves to be a cohesive collective, they learned from one another, worked with each other and ultimately competed against one another.

The Light and Space Movement has been described as experiential, situational, phenomenal, phenomenological, site-specific and ambient, although each of the main players of the movement has avoided such terms. (Butterfield, 1993. 9) Suprematism (the Russian abstract art movement developed by Kazimir Malevich circa 1915, characterized by simple geometric shapes and associated with ideas of spiritual purity) is the most relevant precursor to the Light and Space Movement. The Light and Space Movement belongs to the tradition of literal light in art, which scholar Willoughby Sharp referred to as Luminism. Prior to the movement's work, light works featured a machine-centered, spectacle-oriented aesthetic, with an element of kineticism in that each artwork at the very least, flickered.

In the sixties, Southern California artists began using materials such as fiberglass, cast acrylic, polyester resin and glass, as part of an informal movement

called “L.A. Glass and Plastic”. Concerned with light, space and colour, they attempted to dissolve the boundaries between painting and sculpture with glass and plastic. Art critic Melinda Wortz describes: “The illusions found in these Southern California works of solid forms dissolving through reflected or projected light...all result from an interaction between the ambient light and objects themselves. In other words, these works incorporate the light and space of the place they are in rather than painting the illusion of colored light on a canvas.” (Butterfield, 1993, 14)

While the group shared some ideas with the Minimalist movement of the East Coast, New York-based artists aimed to construe the material and object as inseparable (“art with an art object,” such as Carl Andre’s “Pyre (Element Series)”), while those on the West Coast preferred to make the statement separate from the object. Furthermore, artists such as Bell rejected the “primary structures” and “nonhierarchical structure” of Minimalism, regarding it as too colored, romantic, metaphysical and narcissistic. (Butterfield, 1993. 180) The environment of Southern California also had its effect on the artists, who drew on the sunny skies, sparkling water and soft sand as inspiration, as opposed to the subways, skyscrapers and gridded streets of Manhattan for inspiration.



Figure 1. 'Pyre (Element Series),' Carl Andre, 1960 (Example of New York Minimalist art)

Robert Irwin, a self-identified “third-generation Abstract Expressionist painter”, was a professor at the Chouinard Art School from 1957 through ‘59 and taught Larry Bell, who would eventually go on to be considered “The Godfather” of the Light and Space Movement. (Bell, 1980. 11) As these artists were mostly painters who initially experimented with Abstract Expressionism, their influences were Philip Guston, William de Kooning, Mark Rothko and Ad Reinhardt. At the outset, these artists imitated their forerunners, but soon began to focus on innovation and then eventually attempted to answer the questions that the original Abstract Expressionist artists asked, such as how to capture the essence of some-

thing, rather than its factual beauty. (Irwin and Davies, 2008. 54)

Interest in perception and spirituality were a widespread cultural phenomenon in the mid-sixties. (Bell, 1980. 11) The late sixties was a cusp period for these artists, who would spur each other on and rip each other off. (Finkel, 2011.) These artists desired to create art without artifice, something to enable a sense of illusion and a suspension of disbelief. The movement eschewed logic, rational and structured reality, preferring to slip into another perceptual state. (Butterfield, 1993. 9) For artists such as Bell, an art piece is never really solved, but rather the transitory nature of any project is the most crucial. (Butterfield, 1993. 185)

The Light and Space artists drew on these ideas of spirituality. Bell's work is similar to Zen Buddhism, in that the glass walls of his installations amounted to a lack of boundary between viewer and art, or a lack of duality between the subject and object. Bell says his work is about nothing, in that it illustrates emptiness and can be seen in the transparent properties of his choice of glass, color range and the scale of his pieces. This is similar to the Japanese Buddhism term satori, "a world of non-discrimination and awareness of interdependence of two-ness becoming one-ness and yet equally seen as two." (Bell, 1972.) The importance Bell places on direct experience rather than intellectual understanding recalls a similar emphasis in Zen on intuitive experience stripped of the mediating factors of thought, emotion and presuppositions.



Figure 2. 'Glass Box with Ellipses,' Larry Bell, 1964

Illusion is inherent to Bell's perceptual process. Bell's perception of hue can be stimulated by natural light trapped on the surface of his vapor drawings, allowing him to experiment and create optical pictorial space. For Bell, colour exists only in the eye of the viewer, not on the paper. (Bell and Calif. Beach, 1987. 6) As a result, the viewer directly visually experiences a dissolution of boundaries between solid substance and empty space. Bell's work asks the viewer to draw

their awareness to the visual process by making sure they don't walk into the glass. When the viewer gets used to looking at what appears to be "nothing," we realize that emptiness is full of movement, light and color (see "Glass Box with Ellipses"). This is a revelation, a profound aesthetic experience, altogether meditative. (Bell, 1980. 17) Additionally, the work as an object cannot be separated from its environment. Unfixed and ever-moving, Bell's work seeks to integrate our minds and bodies, so that our intellects can become more efficient processors of the messages inherent in our physical actions.

Bell's shaped canvas paintings give the illusion of constantly being in flux, thereby evoking a sense of movement. Meanwhile, Bell's early glass construction paintings imply the form of a 3D box. His cubes' transparency lend themselves to having a sense of weightlessness. (Bell, 1972.) Bell manipulates our perception of light by controlling what wavelengths will be reflected from the surfaces of varying hues. (Bell, 1980. 10) Various transparent, reflective and opaque surfaces undermine the viewer's ability to distinguish between what is physically present and what is illusion. (Bell, 1980. 17)

Bell admits that his art-making process lies in childhood fantasy:

Art is not tied to usefulness. That's important... Everything begins in subjectivity, why does it have to end in objectivity? What about the dreamers? ...If you set up a society that's involved only with objective considerations in building itself, you end up with a society of mad people. You have to have subjective input, and the society has to stimulate subjective input, to give

the objective input some kind of credible tension. (Bell, 1980. 74)

In this “double depth of the dreamer and the world,” the presence of light, the sense of color, and the feel of space merge, becoming far more real than any literal representation of them could be. (Butterfield, 1993. 10) The Light and Space Movement was unconcerned with colour itself, focusing instead on the perception of colour. Colour was not used for its sake alone, but on the belief that it can be not only visual information, or metaphor, we well as also physical presence.

In Robert Irwin’s work, the viewer’s task was to perceive the piece and distinguish its properties, such as in his 1974 piece, ‘Untitled.’ (Butterfield, 1993. 23) Irwin had previously been interested in creating beauty with art, but as his work developed, his preoccupation began to lie in distinguishing the vibe of a space, such as its bad lighting. Similarly, James Turrell noted, “If we define art as part of the realm of experience, we can assume that after a viewer looks at a piece, he “leaves” with the art, because the “art” has been experienced.” (Butterfield, 1993. 27)



Figure 3. 'Untitled', Robert Irwin, 1971

In 1967, The Los Angeles Contemporary Museum of Art (LACMA) organized the Art and Technology program, which matched more than seventy-six major artists with an even large number of scientists, mathematicians, technicians and engineers from major corporations and industries, mostly based in L.A. (Butterfield, 1993. 25) Turrell and Irwin partnered with experimental psychologist Edward Wortz, who had been working on developing life-support systems for manned lunar flights. Wortz' research had examined the problems of walking on the moon and how this was affected by the astronaut's perception of space and perspective. Together they studied an anechoic chamber in which sound and light were manipulated. From this, they produced 'Ganzfelds', monochromatic 360 de-

gree visual fields in which there are no objects, and therefore no perspectives, which the eye can grasp. This effect produces an infinite expanse of light which appears to have substance, thickened like mist or fog.

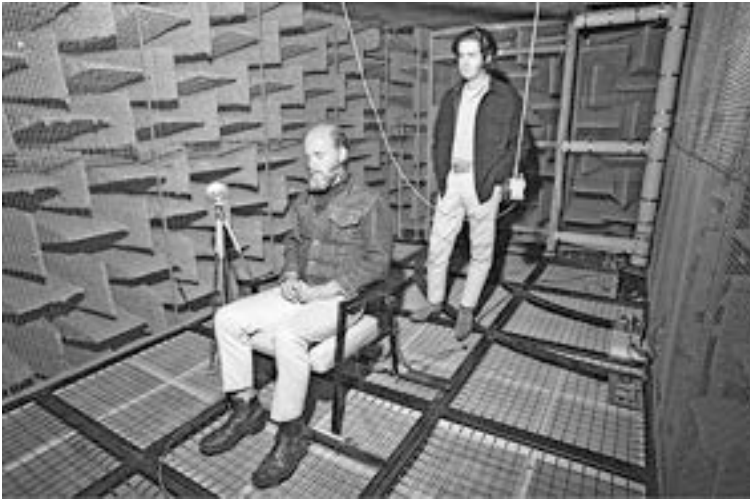


Figure 4. Robert Irwin and James Turrell in the anechoic chamber at UCLA

Different Ganzfelds have become themes in Turrell's work, making them as large-scale walk-in environments. "I want you to sense yourself sensing. To see yourself seeing. To be aware of how you are forming the reality you see." (Lauson, 2013. 160) For Irwin and Wortz, these scientific endeavors confirmed the Buddhist notion that intention and reason (encompassing both logic and intuition) shape our experience. (Irwin and Ferguson, 1993. 60) As a result, in his artwork, Irwin began to strive for pure perception of the transformation of the environment through the actions of light and space, without the intrusion of the identity of the "artist." (Butterfield, 1993. 31) Regarding boundaries and frame of reference and

the refusal of logic, what “we see is what we seek to see. There is little place in our frame of reference for ‘not seeing.’”

Interested in the plumbing of hypothetical space and the idea of the presence or quality of light, Turrell’s work was about making three-dimensional space and making the same kind of allusions to the space beyond that. Turrell thought it did not need to be considered the fourth dimension but just one that does not solve up in three. Light, used as a material, had a physical presence, while space was solid, filled and never empty, such as in his piece, ‘Afrum Pale Blue.’ Turrell referred to his paintings as containing a conceptual three-dimensional space, or “little holes of reality.” “I want to create an atmosphere...one that can be consciously plumbed with seeing, like the wordless thought that comes from looking into the fire.”

(Butterfield, 1993. 77) The artist asked questions such as, “What does the mind do with the information it receives from the senses? To what extent do we create the external world by the order we give it?” For Turrell, these questions become both disorienting metaphysical enigmas and wordlessly ecstatic experiences. What Turrell strove for is an art that, emancipated from the non-immediacy of factual objectivity or narrative content, is answerable to nothing but itself. (Butterfield, 1993. 81)



Figure 5. 'Afrum Pale Blue,' James Turrell, 1968

Preoccupied with space and not form, Turrell's work contains the Japanese term, *ma*, where time and space merge into a single entity, a calm and spiritual state halfway between drowsiness and dream. (Butterfield, 1993. 82) His desire to create an environment rather than an object has led him to experiment with an environment where Euclidean geometry is not imposed on either the work or the percipient. "I want a direct experience, to speak about it in a direct language without any hidden meaning." Perceiving himself as more shaman than magician,

similarly for Turrell, light is not so much as something that reveals as it is itself the revelation. (Butterfield, 1993. 87)



Figure 6. 'Primary Atmospheres', Robert Irwin, 1965

Irwin asked, “What kind of ‘reality’ was this that allowed itself such abstraction as to demand that the world end at the edge of my canvas? Yet what kind of a world would it be if there was no such limits? And is not the idea of a non-object art a contradiction in terms? What would this art be made of? How would we come to know it, to judge it?” (Butterfield, 1993. 22) His first light paintings, done in the mid-1960s, were called “encasements” and were made out of clear

plastic that stood out from the wall. (Butterfield, 1993. 118) During his early work, Irwin developed a canvas that was a convex square, set out slightly from the wall. At first, his work appears to have no image, but then soon thousands of small green and red dots emerge onto the eye, producing a field of energy surrounded by a halation of either one color or the other. (Butterfield, 1993. 20) With this work, the red dots provide an afterimage from the green dots and vice versa. The intention is to point out not what the viewer sees, but how it is seen. The viewer is then left with the sense of presence rather than the image. Irwin explains that, “Here, two plus two actually make five, and what I did was to minimize the objective means, i.e., ‘two plus two’, and focus on the energy of the addition (five).”

As can be seen, the Light and Space Movement used disparate ideas, from science to space, absence to perception and environment to fantasy, to create something that they, at the time, did not have a language to describe. These West Coast artists were interested in innovation and art as inquiry, posing questions that they, at the time, preferred not to answer. Drawing on previous art movements such as Abstract Expressionism and Suprematism, their work was not immediately understood and often preferred in Europe as opposed to America. Some fifty years later, contemporary artists are creating environments that are aesthetically similar and somewhat spatially and spiritually analogous. Bell, Turrell and Irwin’s

use of space, lack of boundary between viewer and art, artless object and self-reflexivity are ideas that would later be taken up by digital artists and in turn, myself.

Chapter 3:

Contemporary Digital Artists

For this chapter, I have chosen to focus on a group of contemporary digital artists, who I believe share similar aesthetic and conceptual similarities with the Light and Space Movement. Amongst these artists are Cory Arcangel, Takeshi Murata, Sabrina Ratte and Nicolas Sassoon. These artists, born in the seventies and eighties, work in installation, video, animation, sculpture, painting, design and projection. Each artist, in their own way, has three traits in common with each other and arguably, the Light and Space artists: their process is self-reflexive, problematize tacit presumptions about how art is most effectively shown within the gallery setting and they focus on immersion as a vehicle to connect with the viewer. Similarly, the Light and Space artists also showed comparable attributes: their work and its process was self-reflexive, they created a world of illusion and demonstrated novel ways of presenting their art in manners that immersed their audience. Furthermore, each set of artists was invested in creating art that engages

multiple senses. This section will explore each artist's intentions, how the older artists' work compares, moreover how it differs.

Self-Reflexive Process:

Art Narrative and Immersion

As mentioned above, each of the artists' work is self-reflexive in a variety of ways, whether it through their process of art-making, art exhibition, the materiality of art objects or lack thereof. According to the dictionary, self-reflexivity in this context refers to a "marked by or making reference to its own artificiality or contrivance". (Merriam Webster, 2015) In this sense, the work is implicating itself with something else, perhaps a historical allegory that it might embrace or rejects, but at the very least, acknowledges. Arcangel, for example, in his series, "Photo Gradient Demonstrations, 2009-2013", poses questions of authenticity and authorship. The works' titles, such as "Photoshop CS: 40 by 30 inches, 300 DPI, RGB, square pixels, default gradient "Spectrum", mousedown y=6000 x=8000, mouseup y=6000 x=1000; tool "Wand", select y=3650, x=1250, tolerance=60, contiguous= off, default gradient "Spectrum", mousedown y=1000 x=1000, mouseup y=1100 x=1000", refer to precise formulas visitors can use to recreate them with Photoshop . While seemingly trite, Arcangel's work is intri-

going because he is doing what pop artists such as Warhol and Lichtenstein have done in the past; voicing the mundane in an artistic context. The viewer wrestles with deciphering high and low culture; the gradients, while tacky and cliché for their overuse, are still beautiful. His work also addresses the hand of the artist, the idea of craft, the notion that art is a specialized activity. It is gradient as ready-made and ties in with Sol Le Witt's instruction drawings, which also highlight awareness of process as a central aspect of the work's idea.



Figure 7. 'Photoshop CS: 84 by 66 inches, 300 DPI, RGB, square pixels, default gradient "Blue, Red, Yellow", mousedown y=22100 x=14050, mouseup y=19700 x=1800', Cory Arcangel, 2010

In “Synthesizers,” an exhibition of seven large-scale pigment prints and a film, Murata evokes lucid dreams and self-reflexivity. Printing out representational scenes of shapes in enclosed spaces, Murata’s images are glossy and hyper-rendered, the artist marks the fallout of digitally producing something that cannot fully be represented in real-life, especially through the older technology of print. By having the viewer be unclear about what they are seeing, Murata hopes to show the human behaviour behind technology. (Holmes, 2015.) In this sense, he is working self-reflexively because he is marking the art’s own contrivance and showing the artifice that the art rests upon. Respectively, in *Electrolyte* (2012), a sheet of paper with a large red circle hangs on a wall, conjuring Suprematism. Another print has a copy of Youngblood’s, *Expanded Cinema*, referencing 1970s video art. Ultimately, Murata’s work relays a narrative that probes both art history and technology.



Figure 8. 'Electrolyte', Takeshi Murata, 2012

For Ratte, it is her method of art production in achieving her outdated aesthetic that is self-reflexive. Using multiple video synthesizers and post-production editing programs, she translates her work back and forth between analogue and digital, thereby recognizing the irony in employing new technology to generate visuals that look old. In this way, she is both creating something that yearns for the past but is only able to be done in the present because of its reliance on specific tools. Ratte explains, “All those mediums [the technology I use] have inspired the interfaces, filters and tools included in Softwares like FCP.” Named “One of the most promising names in Canadian experimental film today” by the blog, *The Sound of Eye*, it can be argued that Ratte’s work represents the future of retro. (Enns, 2013)

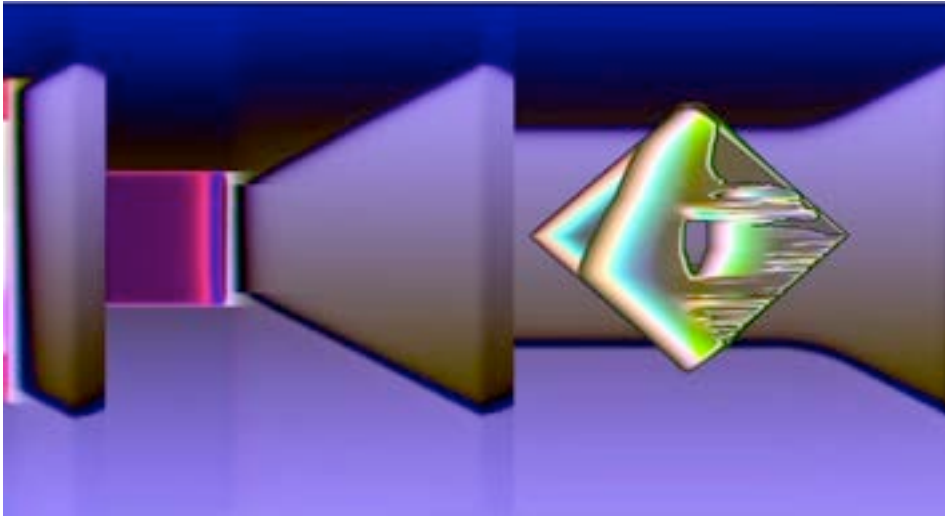


Figure 9. 'Visites Possibles', Sabrina Ratte, 2014

Sassoon's work is densely abstract, moving and still. Sassoon discloses: "A lot of Internet Art can be perceived as a shape shifting reflection of Western civilization, and this has been widely covered by many talented artists, curators and writers. My personal interests tend to be directed at the edge of this perception, where unusual practices can be appreciated individually." (Filippo, 2015) With *Parallelograms*, a web project that focuses on perspective, Sassoon uses animation to create something that references an older period of seventies and eighties computer art, such as the work of Jane Wright, but does so in a new context, one that both points to the beauty of this aesthetic, while bringing it into the present, where it can be played with in different formats, such as being viewed online, or as wallpaper projected onto a gallery space. In this way, Sassoon's sense of self-reflexiveness lies in both his tools and what he demands of the viewer, which is, an understanding of the art historical narrative that he is playing with, particularly within the realms of how he is combining animation, graphic design

and sculpture.

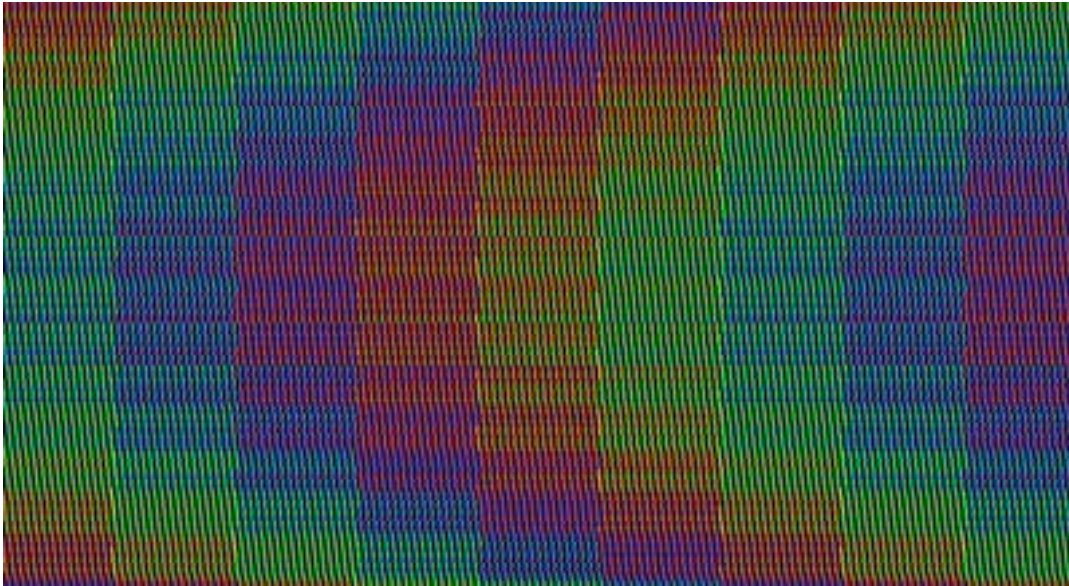


Figure 10. 'Parallelograms', Nicolas Sassoon, 2011

Simulated Perspectival Space:

Aiming for Spiritual Transcendence

Often, a goal of new media art is to fully immerse the viewer. Immersion, in this sense, is defined in the dictionary as, “Noting or pertaining to digital technology or images that deeply involve one's senses and may create an altered mental state.” Each artist I am concerned with in my research, in their own way, creates work that simulates perspectival space as an attempt to immerse the viewer as

much, in ways that at times, have previously been unavailable because of technology. Sometimes this is done in a space that references a nostalgia that may have never existed, presenting images that the viewer might recognize but cannot place. Perhaps the artist uses the device of nostalgia to familiarize the viewer with this space, making them comfortable as means of fully engrossing them.



Figure 11. 'F1 Racer Mod (Japanese Driving Game)', Cory Arcangel, 2004

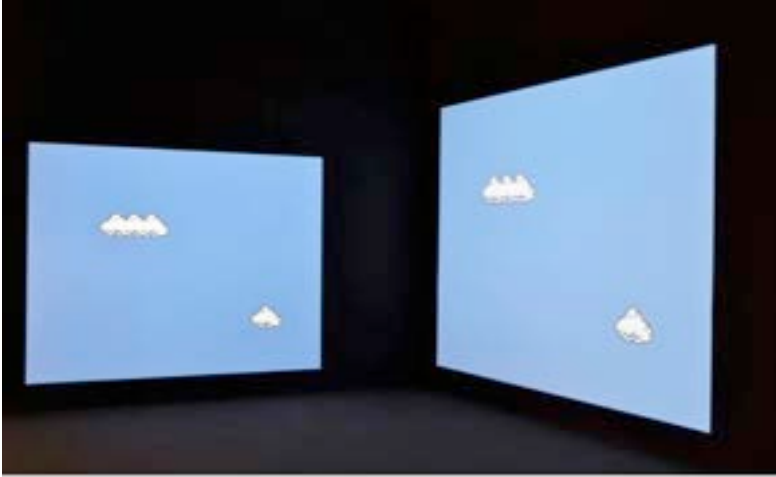


Figure 12. 'Super Mario Clouds,' Cory Arcangel, 2002.

In Arcangel's pieces, 'Japanese Driving Game' (2004) and 'Super Mario Clouds' (2002), the artist reconfigures iconic video games to create an experience that is immersive and cinematic. Ultimately, these works are about how video games convey space, revealing the structural concerns of the medium, which is a video game that was meant for television. (Arcangel and Birnbaum, 2009. 193)

Super Mario Clouds brings to mind the history of landscape and video installation. Dara Birnbaum, in an interview with Arcangel, explains the need for creating works like this: "Iconography starts to emerge through a formalist device; repetition allows certain things to surface, making hidden agendas visible." She compares Arcangel's work to a quote by Beaudrillard: "As if society had swallowed its own double that it vomits it back again. Arcangel does it with Photoshop, pasting image onto sound, like MTV, but to the nth degree. The loading of images

beyond the point of total saturation. This leads to critical dialogue, away from the alienating screen.” (Arcangel and Birnbaum, 2009. 196.) In this way, Arcangel’s work is hyperreal. (Hyperreal refers to Jean Baudrillard’s theory that in the post-modern world certain things contain a “real without origin or reality.”)

In Murata’s show *Synthesizers*, as well as with his animated sculpture, *Melter 3-D*, the artist creates spaces that are uncanny and eerie, sometimes mildly and sometimes overtly confusing to the viewer with whether they could exist. Perhaps his work, with its ethereal sense of transcendence and space points to the ‘technological or digital’ sublime (defined once again as a sense of perfection dependent on technology), or immersion. With *Synthesizers*, lighting effects, such as shadows cast from unseen window blinds, enhance the illusionistic quality of these scenes, which have an uncanniness to them. They are like sets from a movie you saw but only vaguely remember, or images from a dream. As with the prints, one wants to identify a reference point in the space, but is increasingly frustrated and haunted by the feeling of having been unmoored from reality. (Filippo) Abstract Expressionists, such as Rothko in his 1966 painting, “Untitled,” used painting to create a feeling of contemplation and transcendence (MoMA Learning, 2016). Conceivably, therefore, if the Light and Space artists were drawing on Abstract Expressionist influences, they were trying to culminate an aesthetic of greatness as well, through their focus on perception and space (see Rothko’s “Un-

titled”). Therefore, when contemporary artists such as Murata reach for mysterious ideas, he is also trying to get the viewer to gain a sense of infinity through a conceptual perception, one that is based on nostalgia and imagination. Through the act of recalling the elusive, the viewer engages with a sense of spirituality and higher being, potentially aiming to achieve some sort of sublimation, not necessarily through beauty, but through illusion.

Ratte’s images are the easiest to identify as immersing the viewer into another sort of reality. Influenced by Philip K. Dick’s questioning of the basic structure of reality, Ratte asks, ‘Are the objects around us really concrete or can they melt in another dimension?’

I see « reality » as raw material for my videos. When I look at sunsets, fluorescent lights, windows, trees mixed with architecture, empty spaces, landscapes, etc. I see so many ways of interpreting them, it’s almost infinite. Video is a way for me to create different meanings by transforming and juxtaposing these elements of reality into my own confined world. With time, I seem to have developed the reflex to translate almost instantaneously those elements of « reality » into video images. But making videos is also a way for me to dematerialize the world, making it abstract and even more disorienting. It’s fascinating to see that light can become tangible, that the objects can melt, and that I have the possibility to create unpredictable landscapes that could only exist in this kind of space. With *Activated Memory*, I also see this video as a kind of a fairy tale, protected by a fragile glass. Or some sort of hologram of an idealized memory. I’m very interested in translating the fantastic elements that I see in my surroundings into video images. It is almost the same process as when we idealize a moment, we create some sort of visual representation of it in our mind and we forget the details that don’t make sense with our interpretation. In that sense, I like to believe that we all live in a simulated reality. (Salditch, 2011)

This simulated reality is also reminiscent of Baudrillard's notions of hyper-reality, that is, a representation without an origin. If there is no origin, the viewer must rely on their mind to decipher reality from illusion. On another level, this notion of the hyperreal relates to spirituality in the sense that by forcing the viewer to reassess their perception of the world, perhaps they engage in the act of 'seeing themselves see,' which was one of the aims of Larry Bell's art, reaching a sort of transcendental state.

Out of all the artists, Sassoon is the one who overtly focuses on the spiritual and not the technological aspect of his work. Identity and mysticism are themes that play out in his installations, despite the seemingly glib kitschiness of his aesthetic. By practicing on the fringes of technology, Sassoon's work establishes a sense of wonder and magic in its ability to saturate the viewer's senses. Sassoon's work employs a simplistic aesthetic to create a complex perspectival space. In this way, his art is both complex and simple, perhaps achieving the goal of creating the ultimate magic trick.

Virtual versus Physical Gallery Space

The final trait that each contemporary digital artist has in common is that they each, in their own way, challenge the authority of both the gallery as art exhibition space and the value of the physical art object by equally showing their work in virtual spaces as they do in physical locations. While most artists today have some sort of representation online, these digital artists use this space as a way to complement, or point out the disparity between the virtual and physical. Each artist uses both places to complement their work, giving the viewer a complete experience of their art. With how this relates to the Light and Space Movement, these artists do not privilege physical experience of their work over its virtual equivalent. In this way, they challenge the necessity that art exists as an object, echoing the work of Larry Bell.

Considered the Dada artist of the digital age, Arcangel's website contains a section called, 'Things I Made.' Arcangel has set up the rest of his website so that his art appears to be tacky and hyper commodified, like sale items on eBay. This disjunction could represent the artist's discomfort; Arcangel admits that earlier in his career, he was conflicted about the context in which his work was shown. Upon releasing his video work online, galleries were initially uninterested in his efforts because they did not perceive it to be art. (Ar-

cangel and Birnbaum, 2009. 192.) As his young audience aged, his work was increasingly accepted by the art world. By pointing out the arbitrary division between high and low culture, Arcangel uses humour to deal with the tension of featuring art from an online to a physical space. It is his timely ability to articulate this comedy that has ultimately set him apart for accessibility and success.

Murata states that representing his animation, photography and sculptural work in a gallery space is a challenge for him. In *Melter 3-D*, Murata evokes a three dimensional surrealism by adding a strobe light to his shiny mercury ball, creating the illusion that the ball is melting in midair. *Melter 3-D* alludes to an animation that could only be produced using a 3D animation program, such as Cinema 4D. Here, Murata attempts to demonstrate the magic that computer art can create in a physical space; an insistence that digital wizardry has a place in a gallery space. The artist explains that his work is “not meant to be seen on YouTube or a small monitor.” (Holmes, 2015) *Melter 3-D*, in this sense, can be seen as a solution to incorporating the digital into the physical gallery space, a move away from the screen.



Figure 13. 'Melter 3-D'. Takeshi Murata, 2014

Sassoon, with his elusive workspace, formulates an idiosyncratic practice that is both analog and digital. He treats video projection mapping as wallpaper, or interpreting architecture models as something that is more than simply utilitarian. His website contains a portfolio of his work that is intriguing and mesmerizing, with its bright colours, minimal patterns and fluid motion. His physical works, meanwhile, function in similar ways; their formalist characteristics immerse the audience in a way that makes them feel as though they are inside a computer. Sassoon's 2012 series of prints, for example, entitled, 'Favourites', are of a pixelated image of a house. These images address the materiality of the digital because they are pixelated, they fail as an illusion, thereby heightening the gap

between the virtual and the real. Like Arcangel's work, it is recognizing this gap that makes the work so enticing.

Issues of self-reflexivity, spirituality, physical versus virtual space (whether imaginary, pictorial or represented) as well as the hyperreal are all topics that are connected by the Light and Space artists, contemporary digital artists and myself. Despite working in various mediums, eras and having access to different technologies, there are commonalities to each artists' work. Recognizing these parallels, allows a narrative of intentionality to emerge. From this, I can begin to consider why, underneath some formalist aesthetics, I am captivated by these artists and their work. How this has inspired my studio work will be identified in the following chapter.



Figure 14. 'Favourites', Nicolas Sassoon, 2012

Chapter 4: Art Theory and Me

Methodology

A combination of intuitive studio-based research and systematic historical research, my methodology has been a mixture of researching art history and theory, surveying artists' methods, writing, animating, projection mapping, collaborating with Toronto's art community and maintaining a blog¹ that documents all of these efforts. The following is a list of some experiments that I have done, either

¹ A major way that I documented my work was by creating a Tumblr: katiekthesis.tumblr.com. In it, I have documented my areas of research, experiments, notes, reflections and inspirations.

independently or within Toronto's art community, of which some I will later discuss in greater detail:

- "Animation Experiments" installation in the Experimental Media Space, November 2014. Curated by Peter Rahul, director of Analogue Preservation Network.
- Volunteered at Art Metropole's annual fundraiser, November 2014.
- "Spatial Reasoning" installation in the Experimental Media Space, January 2015.
- "TV Tricks" video art workshop at Xpace Cultural Centre, January 2015. Led by Paul Moleiro, artist of Analogue Preservation Network.
- "Bevel" animation as part of DPXA year-end screening at Handlebar, May 2015. Organized by Philippe Blanchard.
- "Fleet Sheets" stills from "Bevel" animation, reproduced as digital prints. Sold at Xpace Cultural Centre's annual fundraiser.
- "Despondence" animation, shown at Xpace Cultural Centre. Exhibition essay by Adrienne Crossman, Program Coordinator at Xpace Cultural Centre, August-September 2015.
- "Bevel" animation, screened as part of Pale Blue Zine launch at Milk Glass Gallery, September 2015. Curated by Lindsay Cahill.
- "Bevel" animation, screened as part of Pleasure Dome's New Works festival at

Geary Lane, September 2015. Curated by Jesse Cumming and Amber Christensen.

- “Spatial Reasoning” installation in the Experimental Media Space, November 2015. Documented for Thesis Tumblr.

- “Spatial Reasoning” animation, screened as part of an open screening at Trinity Square Video, November 2015.

I consciously tried to work within Toronto’s art community and learned a lot from observing and participating within the Analog Preservation Network art collective and Xspace Cultural Centre. I saw how each operates within the rest of the Toronto arts community, how artists work collaboratively and within an institutionalized structure. I DJed for one of the Analog Preservation Network’s video program launch and spoke to members Peter Rahul, Paul Moleiro and Damian Lebiezinski about their artistic process, technique and philosophy. Peter fixed my Atari Video Synthesizer and Paul led a video art workshop at Xspace Cultural Centre. Overall, my engagement within the community has cemented my interest in expanded animation by suggesting that there are others like me who can take this art form seriously and not just as something to stare at on YouTube and Vimeo late at night, talking about with friends.

My initial interest lay in examining the roots of an aesthetic choice that I saw happening in contemporary digital art. Researching Claire Bishop's work on installation art, I observed that forty years earlier, artists from the Light and Space Movement had demonstrated use of similar tropes, which were a result of self-reflexivity, an exploration of perceptual space and questioning of the art object. I initially thought that by explicitly bridging the two seemingly disparate groups (employing similar devices of additive grids, geometric shapes and sunset-hued gradients), something new and telling about the artists' intentions would emerge. Based off of these ideas, I could produce studio work that demonstrates all of these connections, which I envisioned to be combining digital animations with sculpture and light. I anticipated that by layering moire patterns, as digital artists do with pixels, I could disrupt the surface of a screen, thereby creating a sense of sudden self-awareness for the viewer, as well as problematizing the art object and playing with virtual (represented, immersive) versus physical space.

Animations and Installations:

Reflections on Studio Practice in Relation to Reviewed Artists

In terms of my own studio research, I have learned a tremendous amount throughout my time at OCAD under the advice of Philippe Blanchard and within the Integrated Media department. Being introduced to the software program After Effects and the idea that what I make is not merely ‘video art’, but is instead ‘expanded animation’ hybrid practices like animation combined with installation or live performance as alternatives to single-channel works. (Blanchard, 15, 2010) This has completely changed my perspective on what my artistic intentions are; I am freed up to make animations that are non-narrative and abstract, incorporating light and sculpture into installation.

During this time, I have produced many pieces that have supported this trajectory. Noteworthy works include: ‘Animation Tests: Experiments,’ ‘Bevel,’ ‘Spatial Reasoning’ and ‘Fantasy.’

‘Animation Tests: Experiments’

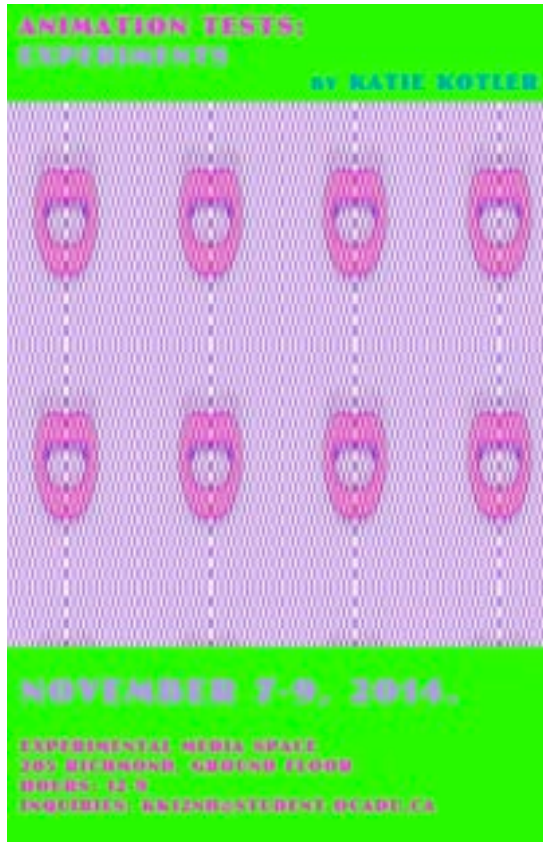


Figure 15. Poster for ‘Animation Tests: Experiments’, 2014

Held at OCAD’s Experimental Media Space, in the Graduate Gallery, between November 7-9, 2014, that weekend was the first time I used projectors, media players, fabric, televisions and Atari Video Music Synthesizer altogether to create an installation. I had the show as part of the DFI thesis colloquium. I exhibited the following animations: ‘Oceans Away,’ ‘Delta of Sin,’ ‘Audio to

Keyframes' and 'Swimface.' I projected 'Oceans Away' onto the wall, I showed 'Delta of Sin' on one television, 'Audio to Keyframes' on another, let the television with the Atari Video Synthesizer play its own shapes, and projected 'Swimface' onto two hanging chiffon sheets of fabric. On top of that, I played music from an album that I made in 2013, Dance Madness. The installation was curated by Peter Rahul, of the Analog Preservation Network. Rahul provided me with televisions, helped me place the projectors across the gallery space and selected which animations to use.



Figure 16. 'Oceans Away' as seen through a purple sheet of chiffon, 2014



Figure 17. 'Oceans Away,' 2014, left. Figure 18. 'Swimface', 2014, projected on-
to sheets of chiffon and the wall, right



Figure 19. 'Dance Mad-
ness', 2013

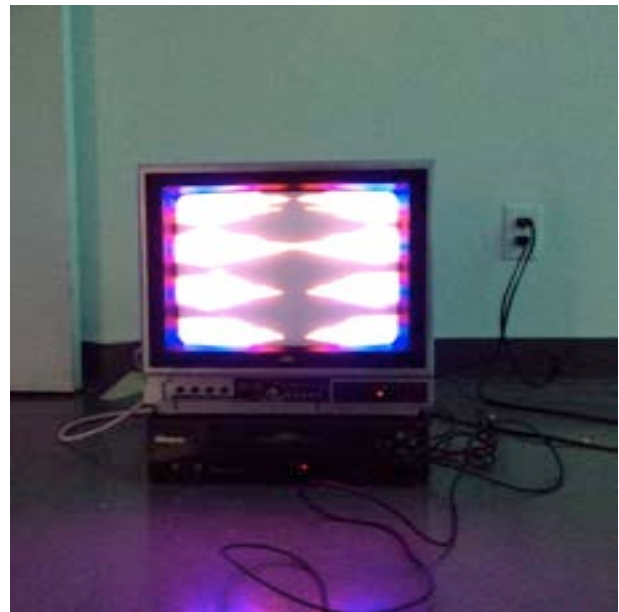


Figure 20. *Top left.* 'Delta of Sin', 2012, on top television, 'Audio to Keyframes', 2014, on the bottom television. Figure 21. *Top Right.* 'Delta of Sin', 2012, on top television, 'Audio to Keyframes', 2014, on the bottom television. Photographing 'Audio to Keyframes' changed the pattern on the television. Figure 22. *Bottom left.* 'Delta of Sin', 2012. Figure 23. *Bottom right.* Television with the Atari Video Synthesizer.

‘Animation Tests: Experiments’ has threads in common with the work and theory of Bell, who, as mentioned previously, conceived of art as something that should constantly be in flux, mandating endless movement. Similarly, ‘Animation Tests: Experiments’ requires the viewer to move around the space to achieve the full effects of the installation; walk in between the fabric, lean against the wall, sit down on the ground. By physically relaxing into the environment, the viewer can discern what each looped animation aesthetically and conceptually means to them.

The work shares commonalities with Murata and Ratte, in the sense that it is relaying a historical narrative of art and moving image: ‘Delta of Sin’ contains reinterpreted clips from the late eighties sitcom *Designing Women* and the 1979 film *The Jerk*. The 1976 Atari Video Synthesizer was one of the first consumer video synthesizer of its kind, ‘Swimface’ is an ode to Sesame Street animator Jane Aaron and the 3D animation in ‘Oceans Away’ has a nineties YTV aesthetic. As previously mentioned, contemporary digital artists such as Ratte sometimes construct a perspectival space by referencing a nostalgia that may have never existed, presenting images that the viewer might recognize but cannot place. ‘Oceans Away’ combines video footage and photographs in a 3D animation program. By inserting photos on the program’s preset shapes, I was attempting to play with perspectival space and create an illusion. I see the collection of “Animation Tests: Experiments” as my attempt to do this.

As written earlier, perhaps contemporary digital artists use the device of nostalgia to familiarize the viewer with this space, making them comfortable as means of fully engrossing them. The first reaction viewers had to my installation was to play around with the fabric, walk around and laugh, saying that they felt like they were about to get a seizure. They marveled at my obvious love for purple and bright green. Girlfriends, meanwhile, liked sitting down next to the Atari Video Synthesizer and universally suggested that I create some feminist porn with the work. I had some very intimate conversations with friends in the space.

“Animation Tests: Experiments” also has much in common with the work of Nicolas Sassoon, who asks, how can computer-generated space be inscribed within the physical realm? The patterns in “Swimface,” when shaken on the fabric, creates a moire that plays with the viewer’s perspective. There is a visceral sense of experimentation that is possible in a gallery setting that a computer does not allow for. The gallery space that one sets up in determines how the artwork will be displayed and there are many variables with that that were unanticipated. Through these different materials that I projected onto, whether they were projectors, televisions, video synthesizers, fabric or audio, I was trying to create some sort of unsentimental and playful alternate reality. This was felt by viewers, who particularly liked walking in between the two sheets of fabric and tugging on them

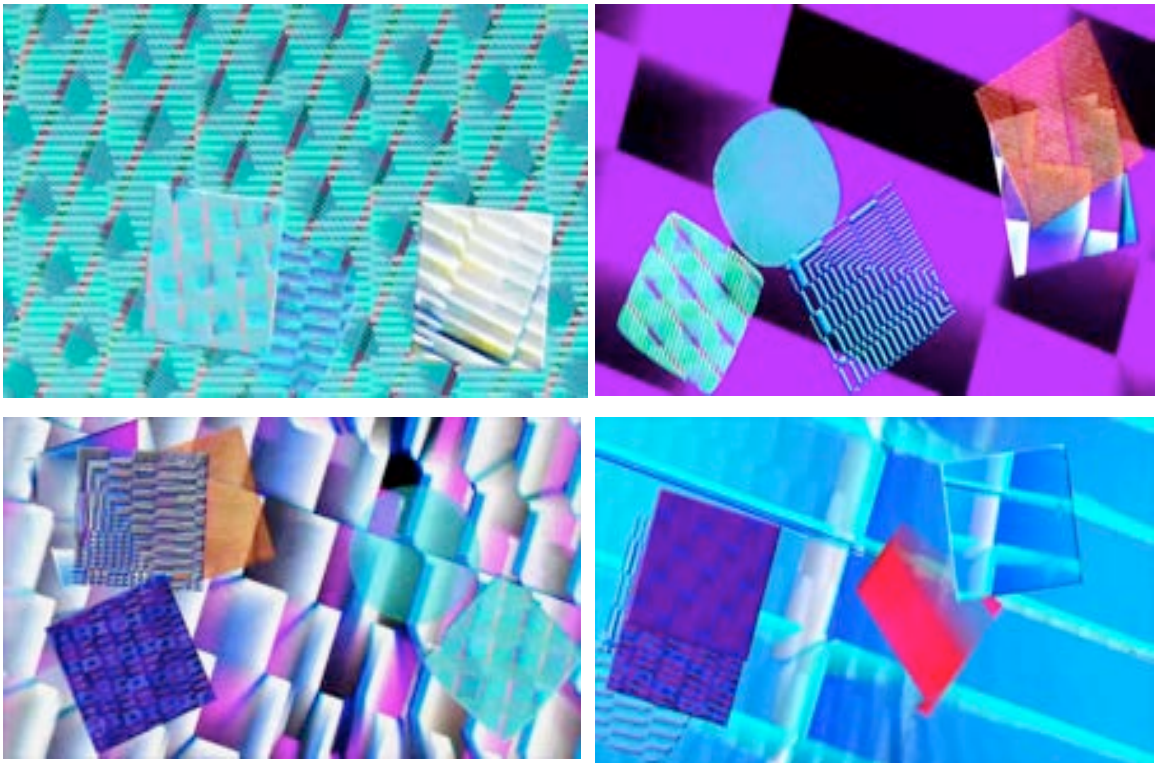
to create different patterns of “Swim Face.” Like moire, or the unanticipated pattern on the photograph of the television, these disruptions or distortions produce an extension of the pattern that the viewer can participate in. Coincidentally, grids, by their nature, have an infinite quality to them. Therefore, by having the viewer participate in the artwork, potentially infinitely, the physical and virtual are somehow merged.

By filling a physical space with numerous visuals, I was trying to create a space that was problematizing perspectival space and playing with illusion. By projecting bright colours and abstract shapes onto different kinds of surfaces that the viewer could manipulate, my intention was to create an alternative space that would simulate being in a computer. As a result, the viewer directly visually experiences a dissolution of boundaries between solid substance and empty space. Because the viewer needs to move around in the space to fully experience all the pieces, they follow in the tradition of the Light and Space artists, whose “works incorporate the light and space of the place they are in rather than painting the illusion of colored light on a canvas.” (Butterfield, 1993, 14)

Unexpectedly, taking photos and video with a Smartphone changed the pattern of ‘Swimface’ and ‘Audio to Keyframe.’ This is a technique that I later used in ‘Fantasy.’ Because of the current impulse to document every experience, that I learned from this is that not only is it easy for viewers to participate and contrib-

ute, and therefore more fully immerse themselves in an art exhibition, it is in fact potentially instinctual (at this point), for the viewer to do so. From this documentation there is a quick jump to sharing the work through social media outlets, such as Tumblr and Instagram. This doubles as a not only the artist, but the viewer negotiating the gallery and virtual art space.

'Bevel'



Figures 24-27. Stills from 'Bevel', 2014

I made 'Bevel' as the final assignment for Philippe Blanchard's Advanced Animation Studio class. Philippe had shown me how to use the grid effect in After Effects and I had a field day playing with it. This work was immensely satisfying to create, due to how detailed I was with the increments of animation I used and how careful I had to be as I timed the animation to the music I used (Jihacid's Untitled). I loved experimenting with all the possibilities available to me with this technique. At the time, I even posted on the DPXA Facebook page, "I love grids!" I have shown this piece in a number of places: as part of DPXA's final show at Handlebar, at Xspace Cultural Centre's Summer Screening and as part of Pleasure Dome's New Toronto Work 2015 screening. Additionally, I made digital prints of stills from the animation, entitled, "Fleet Sheets," which were used as part of the Xspace annual fundraiser.

As discussed earlier, Turrell referred to his paintings as containing a conceptual three-dimensional space, or "little holes of reality." (Butterfield, 1993. 77) Irwin asked, "What kind of 'reality' was this that allowed itself such abstraction as to demand that the world end at the edge of my canvas? Yet what kind of a world would it be if there was no such limits?" (Butterfield, 1993. 22) 'Bevel' was an experiment that recognizes these artists' efforts. By creating brightly coloured, bevelled shapes that move in precise keyframes in a non-narrative space, I tried to create a three-dimensional space, or "little hole of reality." The animation is inti-

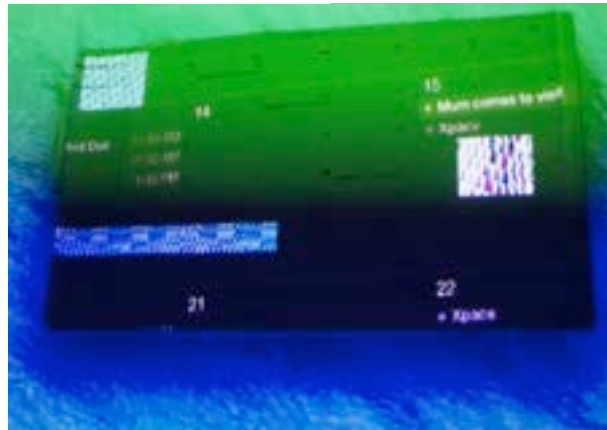
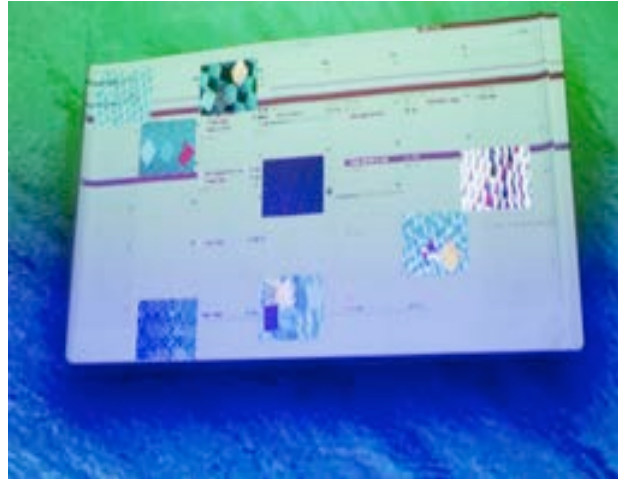
mate in the sense that it plays with scale; patterns are magnified and shrunken. Because the animation only contains shapes and rhythmic music, it creates an abstracted reality that does not necessarily have a beginning or an end. It functions in an edgeless canvas; the shapes could be coming from the inside of a computer, or they could be a documentation of some sort of dystopian technological bacteria growing and mutating. The viewer merely observes and maybe shakes their head if they like the music.

This simulated reality is also reminiscent of Baudrillard's notions of hyper-reality; a representation without an origin. Assuming the viewer has been immersed in media over the past thirty years or so, they will intangibly recall the aesthetic of 'Bevel.' For Ratte, who says that, "Making videos 'is...a' way for me to dematerialize the world, making it abstract and even more disorienting." 'Bevel' plays these ideas out; shapes are open to many interpretations-they can relate to natural forms, such as the sun, or childhood playing blocks. For me, I like using geometric shapes because they can refer to so many things. 'Bevel' serves as an abstracted reality that is, hopefully, formally pleasing to the viewer. Ratte's early computer graphics and throbbing neon pulses of colour are present throughout the animation and Sassoon's use of minute patterns that create moire is the basis of 'Bevel.' Through the repetition of shapes in depth, I attempted to create a perspectival space. There was also definitely a change to screen my animation in different

places, from Vimeo and Facebook to various public screenings. Different audiences had different reactions. Most people wanted to know if I had made the song as well, how I had made the animation. One person asked me if I was influenced by the composer Jean-Michel Jarre (I am).

‘Bevel’ relates to the work of Arcangel, Ratte and Sassoon. Arcangel’s work highlights the ease that technology affords when creating art. This notion is apparent in “Bevel”’s use of gradients and grids; they are simply presets in After Effects! By multiplying and layering preset on top of preset, I was able to create something complex and stimulating. Despite the potential idleness creating such preset-art could produce, I took this technique and created something that contained complicated minutiae. Also, building on such presets and geometric shapes generates unexpectedly ambiguous array of meanings and interpretations, including anthropomorphism, emotion, etc. This sentimentality and analysis open up to something that is both familiar and new.

“Spatial Reasoning”



Figures 28- 30. Stills from ‘Spatial Reasoning’, shown in the Experimental Media Space, in December 2015

I created this installation in January 2015 as part of my Independent Study for Philippe Blanchard and as part of the first assignment for my Installation class, taught by Simone Jones. I reinstalled it in December 2015 in the Experimental Media Space to document it for my thesis blog and see if I could build on it and as part of the Trinity Square Video Autumn 2015 Screening. The concept behind the animation came from a variety of sources: playing on Cory Arcangel's technique of making the personal public (and thus political), I decided to use an iCal calendar window as a template for grid animation. I wanted to explore the idea that our source for creativity and efficiency stems from the same place: our computers. How can an artist successfully balance creativity and efficiency?

I took stills from 'Bevel' and placed them onto days of the month, signaling the actual creative chaos that happens in life, despite incessant planning. I marked out real-life activities that I had on my iCal. 'Spatial Reasoning' examines the reality that, no matter how much we plot our lives, the unexpected will almost always occur. How does efficacy factor into a practice (art) that is supposedly self-reflexive and cathartic? I added Vangelis' "Sirens Whispering" to poke fun at how non-celestial art, as an activity, can be. For the actual installation, I decided to project the animation onto a giant print of an iCal screenshot as a means of being self-reflexive and additive with my grids.

Rosalind Krauss, in her 1979 seminal essay on grids, writes, “The grid’s mythic power makes us think we are dealing with materialism (or science, logic) while providing us with a release into belief (illusion, fiction).” (55) Playing with Krauss’ ideas, I used the concept of a grid as a preset technique: I contrasted the rigid thinking of the grid with animations that were more natural; gradients and sunsets. By projecting grids onto grids, I repeated my technique of layering a simple preset to create something contradictory. I used the grid as a way to illustrate how logic and illusion (or in this case, spirituality) fit on top of one another. It should be noted that as I animated the masked shapes of ‘Bevel’, I began to interpret narratives based on how these forms interacted with one another. Tales of triangles dancing with cubes in a cordial ballet became interpretations that arose from this hyper-mounting of grids, thereby potentially having an emotional impact on the viewer.

For Bell, installations amounted to a lack of boundary between viewer and art, or a lack of duality between the subject and object. Bell says his work is about nothing, in that it illustrates emptiness and can be seen in the transparent properties of his choice of glass, color range and the scale of his pieces. (Bell, 1972.) Here, Bell, Arcangel and I have something in common; we are all attempting to remove the boundary between the viewer and the art. By focusing on something

as mundane as my actual real-life schedule, I am removing any pretense between my art and the viewer. The art is about the act of creating art; playing with the notion of self-reflexivity. The result is what often happens in Arcangel's work; people think it is a joke. Turrell noted, "If we define art as part of the realm of experience, we can assume that after a viewer looks at a piece, he 'leaves' with the art, because the "art" has been experienced." (Butterfield, 1993. 27) By combining the aesthetic choices of 'Bevel' with the plainness of an iCal, I am creating something for the viewer that is both 'art' and an 'experience.' This dissolution between art and the mundane, coupled with projections onto a large digital print and the 3D shapes of 'Bevel' creates a whole that is more than the sum of its parts.

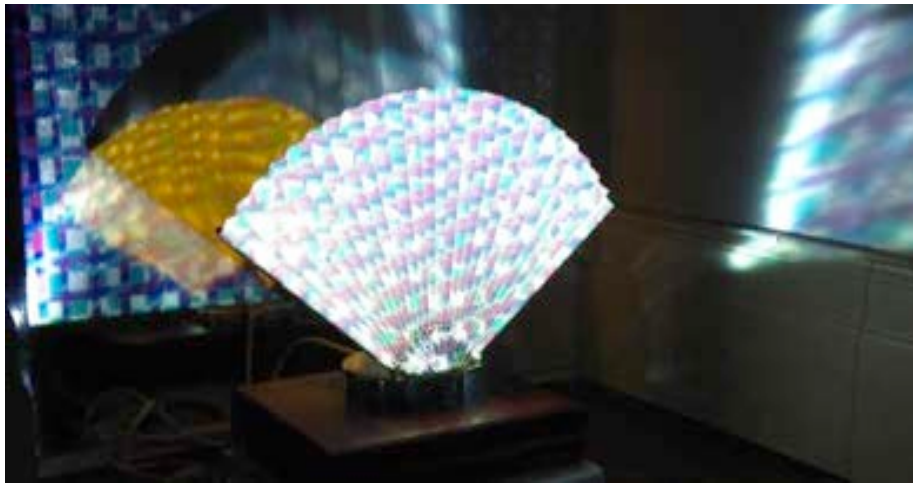
What Turrell strove for is an art that, emancipated from the non-immediacy of factual objectivity or narrative content, is answerable to nothing but itself. (Butterfield, 1993. 81) As a recourse against linear thinking and deadlines, I used sunset gradients and music to demonstrate such a spiritual state. Like Arcangel, I am doing what pop artists such as Warhol and Lichtenstein have done in the past; voicing the everyday in an artistic context. As with Arcangel's work, the viewer, while watching 'Spatial Reasoning,' also wrestles with deciphering how to perceive my formalistic choice; the gradients, while tacky and hackneyed, can be given a new significance by changing the surface that they are projected onto.

Bell's lack of duality between the subject and object is attempted here in

this piece: by making work whose subject is so seemingly banal, I attempt to relax the viewer into relating to the challenges of daily life in a non-threatening way, as how I did when immersing viewers into a perspectival space with ‘Animation Tests: Experiments’ and ‘Bevel.’ My work, furthermore, resonates with Sassoon’s in that I am also pondering the nature of digital art with how meaningful it can be. While digital art making is the most accessible way for me to generate work, I feel that its limits to be in within the flatness of the computer screen. Sometimes I prefer to produce art through more visceral and immediate means. It is one thing to cerebrally mix colours within the simulacrum of a software program, it is another to squeeze a paint tube and see that red and blue make purple.

When relating this work to the three themes outlined in the chapter on contemporary digital artists, “Spatial Reasoning” has all three: it is self-reflexive, in the sense that I am openly exploring ideas of what constitutes the art that I am making, by having the iCal as the main focal point. I am creating a sense of perspectival space for my viewer; a sort of in depth journey into what is currently considered to be an extension of ourselves; our computer by layering a window within a window. By projecting something as private and banal as an iCal into a public gallery setting, I am play with bringing the virtual into the physical. Most people’s reactions to the piece are to laugh; it seems silly to make “serious” work about something that is seemingly so trivial.

“Fantasy”





Figures 31-34. 'Fantasy', 2015. When photographing 'Fantasy', as with 'Audio to Keyframes', different patterns emerge

'Fantasy' was my third assignment for Simone Jones' Installation class. I created an animation, "Augmented" and then used VPT, a projection mapping software program, to map the animation onto a vintage lamp. Behind the lamp, I stuck a sheet of mylar onto the wall. For audio, I used Ray Dark's music, "Calm-truise." Aesthetically speaking, I would say that, 'Fantasy' also resonates with Sassoon and Ratte's work; brightly coloured grids in an abstract space.

As previously noted, the Light and Space Movement was unconcerned with colour itself, focusing instead on the perception of colour. By having the projection spread from the fan onto the surrounding walls and ceiling, 'Fantasy' mimics this; the colours and their reflection constantly change. The Light and Space artists conceived of colour as being more than visual information, or metaphor, but also a physical presence. In this way, the colour in 'Fantasy' functions as a presence of spectacle: 'see the lights and how they change.' With Melter 3-D, Murata attempts to demonstrate the magic that computer art can create in a physical space; an insistence that digital wizardry has a place in a gallery space. 'Fantasy,' meanwhile, recreates a similar idea. I tried to create a magical space that seemed non-digital. Projecting onto an old-fashioned lamp serves as a double entendre; I am projecting onto a light source, thereby taking the Light and Space artist's *modus operandi* and turning it on its head.

As with Bell's art, 'Fantasy' contains the attempted illusion of creating a magical lamp that lights up with colourful patterns. Like with Bell's work, the perception of hue in 'Fantasy' depends on the viewer's physical position. My intention was to not only create a piece that is so aesthetically pleasing, but to also incite a sense of curiosity in how I did it. In this sense, the piece is different from 'Animation Tests: Experiments' and 'Spatial Reasoning,' but is similar to 'Bevel,' which also is hopefully so formally enticing that people are curious as how it was

produced. 'Fantasy' is like a miniature Ganzfeld in the sense that the viewer is immersed in an illusionistic space. While it does not overtake the viewer's perceptual field, 'Fantasy' does create a space that the viewer can walk around in and observe the different shapes and colours on the walls and ceiling. Finally, the work is similar to Sassoon's, in that the ridges of the lamp merge with the grid animation to create moire patterns that are observed in Sassoon's work.

Process of Discovery and Where I'm at Now



Figure 35. A series of paintings I made in January, entitled: "Sunset", "Nicolas", "Sunset", "Reve/Cauchemar" and "Body Jazz". I call the series, "Cheveux Statique".

My process of discovery has been one filled with experimentation; I am more motivated by process than end goal. Honestly, sometimes just accessing bright colours gets me really excited about my work. I love being really precise

and methodical in After Effects. The physical aspect of installation often leaves me intimidated and frustrated, but because I love its potential, I am working on changing this.



Figure 36. *Top.* Playing around with projection mapping onto foamcore, I am adding the same grid animation, ‘Slimed,’ onto each piece. Figure 37. *Bottom.* My next step is to project ‘Slimed’ onto the foamcore, this time with painted triangles, mixing the digital and physical.

Within the past few months, I decided to unofficially take a step sideways in my practice and create a set of paintings that were inspired by my animations. I felt the need to move from the virtual into a traditional physical space in order to gather a more visceral sense of what I am attempting to accomplish. This has been a running theme throughout my work and those of the other artists whom I have profiled. Nicolas Sassoon has similar concerns: “The question becomes, how can I give my work a physical quality that is interesting for the viewer?” I interviewed Sassoon about his process:

...My animated work is done through practice and experimentation. I spend long hours making different versions of the same animation or still image, accidents happen, I record them for future projects.... There are periods of research and documentation in between. I collect images, read, research programs, etc, this helps ground or redirect projects. I also sketch small things, write notes, take a break and come back to my notes. These periods help give me a second breath on a project losing its momentum...Sometimes when it's video projection, after testing, I adjust the work projected, I rework it for the space.

Chapter 5:

Conclusion

Summary

My research suggested that there are formal and conceptual similarities between artists from the Light and Space movement and contemporary digital artists. They create work that is self-reflexive, experiments with perception of perspectival space and questions implicit assumptions about the gallery setting. My

research and studio practice considered how and why this specific aesthetic moved from the physical sculpture of the 1960s into the digital video and print of the 2010s. By creating studio work that links the two movements, I have produced art that is self-reflexive, creates a simulated perspectival space and demands questions about how artwork is represented.

Ultimately, these points relate to each other in that they endeavor to further the artistic avant-garde. In this way, they are kinetic in not only a physical sense, but an intellectual one as well. Each theme demands a level of critical and conceptual thinking that is related to art and the self. Self-reflexivity is akin to the cerebral, wisdom and spirituality. Perspectival space deals with reaching for a sentient acuity. Finally, examining the physical and virtual gallery space is a negotiation with an assumed duality. Each trait is focussed on creating something that is better than the status quo.

One of the limitations of such a comparison is that it does not fully examine the historical conditions surrounding these traits. As contemporary digital art is currently being produced, it can be difficult to ascertain how these theories will ultimately be contextualized. One of my primary research questions was, 'how do certain aesthetics communicate different meanings and values?' I figured that by comprehending this, I could understand how values are either perpetuated or changed. Perhaps, though, discerning value systems is more complicated than

merely looking at conceptual connections between artists and movements.

The digital medium changes how contemporary digital artists relate to these issues in a variety of ways. First, new opportunities regarding technique arise when physical materials merge with digital resources. Second, the Internet enables viewers to have easier access to at least a facet of the artists' work. Finally, because digital art is synthetic (an imitation of what the Light and Space Movement was concerned with), it conceivably lends itself to an increased amount of conceptual layers surrounding how it relates to issues of self-reflexivity, perceptual space gallery space. It is important to not perceive these changes to be superior or inferior to the Light and Space artists; like having a favourite child, each movement can and should be loved in their own way.

At the end of March 2016, Pleasure Dome toured 'Bevel' as part of their New Toronto Works 2015 screening in collaboration with the following festivals: Mono No Aware (New York City), Balagan Films (Boston) and Big Mama's Cinematheque (Philadelphia). In July 2016, I will begin a digital residency with Toronto/New York art collective Studio Beat, where I will continue to experiment with my thesis work. As I am currently a board member of the Toronto Animation Image Society, I will be curating an art show in May 2017 with funding from the

Ontario Arts Council. The show will be an extension of my thesis, entitled, 'Diamonds and Thunderbolts'. In it, select female artists will be projecting digital animations onto sculptural objects.

I have come to see my practice as an attempt to illustrate the culmination of influences I've acquired after years of seeing art, both commercial and avant-garde, in film, television and the gallery setting, mostly in my hometown of Montreal. My thesis has been an opportunity to express my affection for all the art I have ever admired and obsessed over. I have learned an enormous amount throughout my time at OCAD. At the very least, I have become fluent in the world of After Effects, VPT, Cinema 4D and installation. In terms of theory, I have had the luxury to research and analyze different art movements; I love OCAD's library.

In April and May 2016, I showed my final work, "3D IRL," as part of my final thesis work, both as part of Digital Futures and with GradEx. For the piece, I produced three five-minute animations, each focussing on grids, gradients and geometric shapes. I projected these animations on cutout shapes of frosted and reflective mylar, as well as walls. The mylar was cut into triangle and parallelogram shapes and had circles and octagons cut into them. The effect of these projections created reflections, shadows and distortions that ranged in scale, contrast and colour.

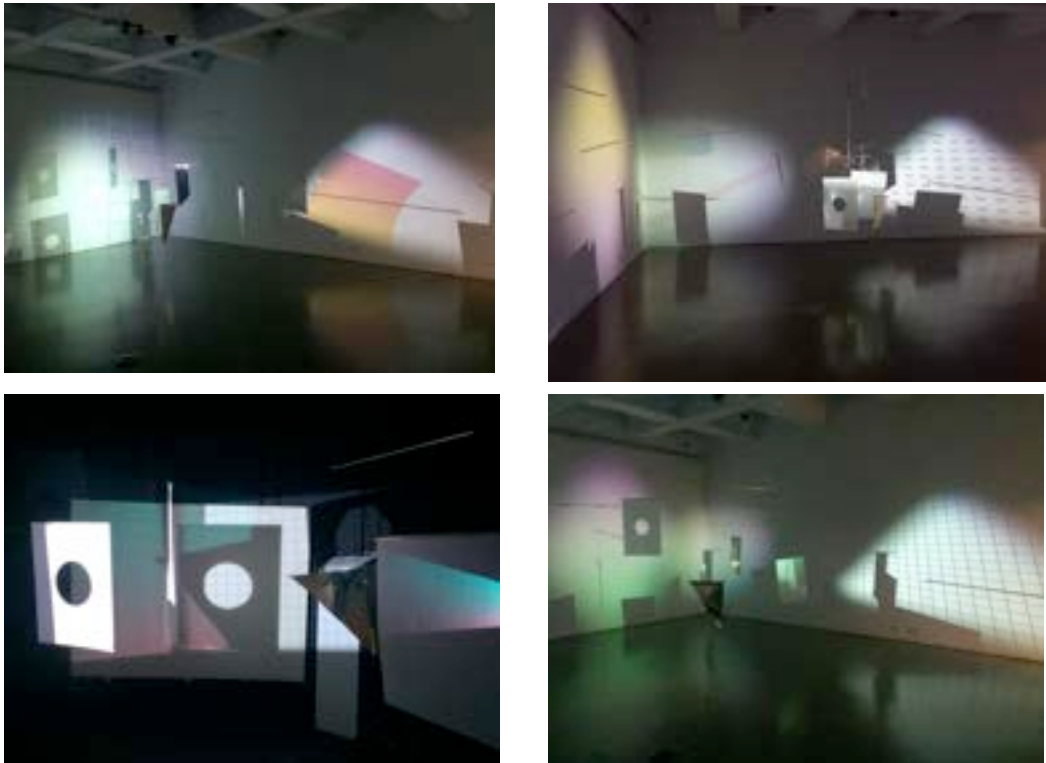


Figure 38-41. Top left: “3D IRL” as presented in the Black Box, the rest as shown in 100 McCaul. The piece is never the same, thus documenting it becomes an interesting challenge.

Conceptually I was successful at joining my movements of interest: “3D IRL” simulates the 3D animation program, Cinema 4D in a physical space using as lo-fi materials as possible. With its looped animations and reflective shapes, the piece is immersive and contains an element of chance. Never repeating itself, the forms distinguish between the planes of 3D and 2 and a half D. The viewer feels as though they are inside a computer, ‘in real life,’ sans the borders of the screen. The response has been excellent; people have been very responsive and enthusiastic. I am thrilled and looking forward to continuing my research, both in the written and studio context.

Recommendations for Future Research

Establishing the connection between the Light and Space movement with contemporary digital art has expanded my art practice. From my studio research, I have learned that I am more interested in pursuing a digital art practice that has a physical and material component with it. When it comes to installation, one of the biggest challenges for me has been working within different spaces. This is something that I would like to experiment. Also, I would like to incorporate Cinema 4D and Max MSP into future work.

I would like to keep on this track and keep making work with animation, projection mapping and installation. Further topics to research include: how do historical art movements become part of a visual style, ie. As we see op art and minimal art incorporated into contemporary Internet and digital art, how are they integrated into a broader framework? The Light and Space movement was preoccupied with how to express their Buddhist spirituality with their art. How does this translate into the work of contemporary digital artists? The scope of this paper has been within North American artists. I would love the chance to examine international work made by similar artists, as well as women. I would also love the chance to turn this research into a book.

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