"The Visible and Not: A Filtered Conversation between Light and Time"

by

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ABSTRACT

In this thesis, I explore material and conceptual conversations between the physical and the mystical, the seen and unseen, the visible and not. I outline personal embodied experiences with religious practices and within sacred spaces as a grounding framework for my practice, which has eventually generated drawing through glass. I am asking: how does the metaphysical manifest materially? This research is explored through studio work and theoretical contexts in relation to the phenomena of light as a spiritual experience as well as physical reality.

First, I outline the methodological origins of my early work in this program in relation to explicit religious practices within the Protestant Christian tradition. This includes the ABSORPTION of the perception of light as a profound spiritual symbol and potent element of sacred spaces. Re-imagining and reinterpretation of stained glass windows serves as a catalyzing visual vocabulary for this research. I then explain a REFRACTION in my practice that occurs when material consideration is given to the physical properties of light in relationship to glass. This mindfulness of the interactional behaviors of these materials leads to a bending in my practice to focus on researching more specifically the relationship between light and time. Finally, DURATION emerges as a key component of studio research as the shifting of light through time is evidenced in large scale graphite drawings. Ultimately, this text documents my practice and research as a shifting and expanding exploration of the sublime moment in connection with personal subjective spiritual experiences and the multiplicity of time.

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INTRODUCTION

My practice is anchored in a curiosity around the embodiment of light and time as these phenomena relate to facets of spirituality. I am curious about the relationship between the physical and the mystical, the seen and unseen, the visible and not. In other words, I am asking how the metaphysical can manifest materially.

My narrative is that of a female artist and a person of faith; therein lies the framework for my research interests. Through material connections and interactions with light, my practice takes up notions of traditional religious practices, aspects of sacred space architecture, and the subjective multidimensional experience of time. The foundation of my inquiries lies in the collision and collaboration of these spheres as they relate to my own embodied knowledge. I attempt to revisit, reinterpret, and reimagine my own spiritual experiences in relation to my studio practice and within the broader context of contemporary art.

My research and studio work explore a range of strategies beginning from didactic and explicit, to more recent works that employ increasingly abstract forms and process-led making as thinking. My practice is rooted in drawing: the graphite line, the cut line, the soldered line, the collapsing line, the overlapping line. For me, the act of drawing is simultaneously a controlled act and a space for intuition to enter into the process; a tool that allows for both structure and spontaneity. As my research progressed, the layering of lines and increasing dimensionality of drawing allowed for generative spaces for insights and nuance to occur that propelled my work forward. Material explorations range from project to project and from two dimensional to three dimensional forms yet the gesture of drawing remains consistent in my practice. For example, the flat glass shapes which are drawn and cut for *Filtered Conversations with Light* (Fig. 12) are joined together to create three dimensional sculptures that comprise a larger installation. It is through these

transitions of states and forms that my work becomes a fertile loop and feeds back

into itself.

Throughout this program, my material and theoretical research has evolved and

expanded. My early work utilized explicit religious references and relied on specific

personal experiences. These early interests have grown wider to include a more

expansive vocabulary in relation to the spiritual and the metaphysical.

ABSORPTION: LIGHT AND SPIRITUALITY

Initial Investigations - Rituals and Religious Practices

"Neither art nor religion is merely the product of beliefs and dogma but is constituted

through practices" - Daniel Siedell¹

Using cultural and religious practices as a grounding methodology is where my

practice began in this program. The simplicity of a repeated gesture, not merely as

habit but as an intentional transformational process is foundational to my work. This

is evidenced in Call and Response (2016) which is an example of early work where

the pairing of the residue of ritual collides with an intense belief in materiality.

¹ Daniel Siedell is an art historian, critic and curator who has written and lectured on modern art and theology for over 20 years. See Siedell, Daniel A. God in the gallery: a Christian embrace of modern art. Grand Rapids, MI: Baker

Academic, 2008. Print. P.75.

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Fig. 1. Call and Response / paper pulp, adhesive, and LED lights / 36×54 " / 2016

Thinking about ritual and repetition of form, I arrive at the pew. I turn to the post consumed pulp within my reach: Cards, printed text, liturgical readings, a call and response. These become fodder and form. I soak, I tear, I break down into parts and the text becomes fractured, mostly unreadable. I blend, I mash, I mix, and push into vessels. A bowl, a gap, some openings left to let the light in. I do this again and again and again. My fingers prune up with the moisture. I read the text as I work; half of the time my mind fills in the blanks with phrases now ingrained in my memory.

Call and Response is an installation that consists of multiple bowl forms created with paper pulp made from liturgical cards collected from a church. The bowl forms are created through a repetitive and labor intensive process of using molds. Liturgy is a

public form of worship which is constituted through various communal practices within the context of a religious community. The practice of liturgy is about becoming, about transformation; it is about articulating the rhythms of consolation (presence) and desolation (absence) of the Divine. Drawing upon my experience, this particular liturgy is a spoken call and response between the individual and the community. Liturgy is rooted in the tradition of ancient Christian spiritual disciplines; they are embodied practices where one becomes transformed through the repetition. Through *Call and Response*, I am attempting to reinterpret and reimagine the impact of liturgical rituals on the individual over an extended period of time; I am asking how one is shaped and transformed through these practices.

The relationship between art and ritual is a landscape filled with artists from a range of spiritual beliefs². Wolfgang Laib is one such artist who occupies this space. Laib's work is built on meditative, repetitive actions and his intention to "maximize the symbolic associations" of the materials he uses³. Laib uses nontraditional materials such as bee pollen and milk bone to create immense ephemeral installations that exhibit repetition, meditation, and contemplation both in process and in product. Yet Laib's practice does not emerge out of this development of form, it is "a pursuit of simplicity as a means of order, it relates to cultural practices and religions around the world: Japanese Zen Buddhism, Chinese Buddhism, the teachings of St.Francis of Assisi, American Quakerism"⁴. This simple meditative process can been seen in Laib's *Unlimited Ocean* (Fig.2) installation of rice and pollen at the School of the Art Institute of Chicago.

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² "Ritual" further defined as: a set of prescribed, established or ceremonial acts or features collectively, as in religious services. See "Ritual." *Dictionary.com*, Dictionary.com, 2018, www.dictionary.com/browse/ritual.

³ Gamwell, Lynn. *Exploring the Invisible*: *art, science, and the spiritual*. Princeton, N.J. Princeton University Press, 2002. Print. p. 295

⁴ Ottmann, Klaus, "The Solid and the Fluid: Perceiving Laib," in Wolfgang Laib: a Retrospective. American Federation of Arts, Ostfildern/Ruit, Germany: Hatje, 2000. Print. p. 20

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Fig. 2. *Unlimited Ocean* / 30,000 mounds of rice, 7 mounds of pollen / installation Wolfgang Laib / School of the Art Institute of Chicago / 2011

Unlimited Ocean exhibits Laib's sensorial and symbolic use of everyday materials and is one of the largest installations Laib has created. The repeated gesture of mounding resulted in a grid of 30,000 piles of rice and 7 piles of pollen which evoke a sense of the transformation of ritual over time.

In a parallel manner, *Call and Response* (Fig.1) plays with collected material and a repeated gesture which can be seen in the bowl forms, but it employs a more explicit reference to its source material as words are still somewhat visible in the final installation. This specific iteration of *Call and Response* was part of a series of experiments exploring different installation spaces, including the wooden floor of a place of worship as well as on a stained glass church window. I began to consider how specific kinds of materials and the type of light would alter the interpretation.

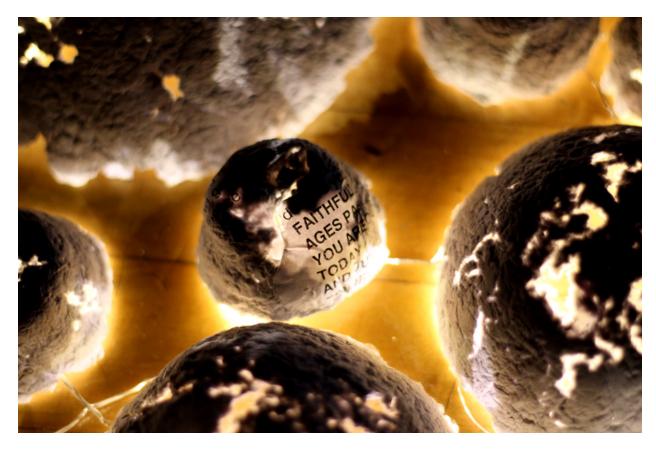


Fig. 3. Call and Response / detail / 2016

After I created several configurations of *Call and Response*, further reflection of these works made me aware that my main medium is not actually paper but rather light. I see now that my gaze is drawn to materials because they perform a relationship to light, as they refract, filter, cast into and alter a space. This was a pivotal point in my research and began to reframe how I approach my practice. I was also struck by the generous spaciousness this insight produced in my work moving forward.

Light and Sacred Space Architecture

"In terms of the spiritual, there are very few religious or spiritual experiences that people don't use the vocabulary of light to describe" - James Turrell⁵

⁵ King, Elaine A. "Into The Light A Conversation with James Turrell." *Sculpture*, vol. 21, no. 9, Nov. 2002,

The visible interwoven with the invisible, the tension and gap between the seen and the unseen is a central concern in my practice. However, how I have approached this concern has shifted over the course of this program from explicit didactic materials and references to a more speculative approach that allows the physical phenomena of light itself to lead the work. This has required a letting go of definitive outcomes and opening up space for a materially responsive process. This change can been seen emerging in the work *Thin Places* (Fig.4) and expanded upon and increasingly embraced in my thesis project work consisting of *Filtered Conversations with Light* (Fig.12) and *Filtered Conversations with Time* (Fig.14).

This shift in my practice instigated a material shift to working with glass. I was drawn towards glass as a material with a rich physical and historical relationship to light. I use 'physical' as a term to describe the relationship of the interactional physics between light and glass. I use 'historical' relationships to allude to past arenas of architectural partnerships between light and glass on an immense scale, specifically within the context of Gothic cathedrals. *Thin Places* (Fig.4) is my first body of work that begins to explore ideas of Gothic architecture and cathedral light through referencing and reworking the process and materials of stained glass windows. The "thin place" is a term from Celtic Spirituality, which refers to locales where the distance between heaven and earth diminishes, and one is able to catch glimpses of the divine, or the transcendent⁶. I see this idea of the thin place as a way to describe the experience or definition of what might be considered a sacred space.

Thin Places is a series of eight sculptures made of clear and coloured glass that have been soldered into three dimensional forms and installed in a row, slightly higher than traditional gallery viewing height. With this work I am exploring the form of stained glass found in church windows, allowing it to collapse, fold, complicate, and reinvent. Through the installation of the work I am attempting to evoke a slight tilt of

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⁶ See Weiner, Eric. "Where Heaven and Earth Come Closer". New York Times. Web. 9 March 2012.

the head of the viewer upward, recalling the experience of scale from my original architectural references.

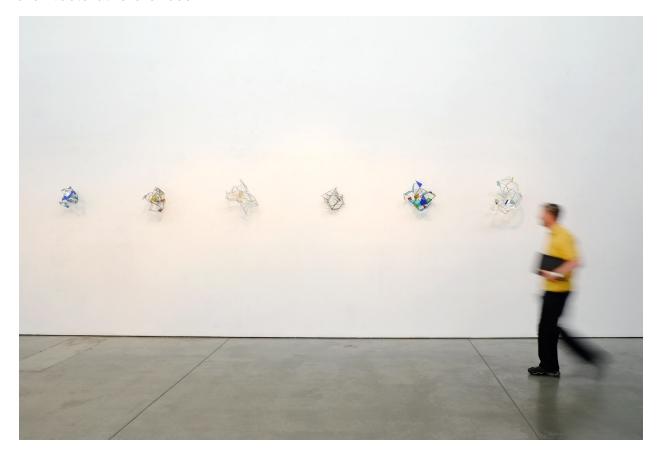


Fig.4. Thin Places / glass, solder / variable dimensions, installation view / 2017

Clear glass,
coloured glass
coming together
and folding in
on themselves.
I begin to
cut and snap,
score and slice,
tape and solder.
A whole new way
of making emerges⁷.

⁷ Previous to this moment, I had no experience creating with stained glass techniques and thus embarked on learning a whole new way of making. In order to avoid the potentially toxic traditional method of using lead came, I employ the comparatively more contemporary technique of copper foiling as a conductive adhesive. Objectively not new, stained glass methods date back to as early as the 7th century AD and gained immense popularity and production during the mid 12th century with Abbot Suger of Saint Denis. See Duby, Georges. *The Age of the Cathedrals: Art and Society, 980-1420*.

Material research takes precedence and I seek out experts and tutorials. Hours spent listening and watching.

Forms
in my mind take shape
and then break. Again and again.
My hands begin to learn new movements,
new grasps, new structural strategies emerge.
Repetition continues to play a key role;
multiple sculptures are created and
a collection forms.

Experiments rely on variations in size, changes in colour, variables of glass. I make as a way to work through understanding⁸. Enough structure to be a catalyst, enough intuition to let the work come into existence freely⁹. A teeter-totter dialectic emerges between inside and out, absence and presence, void and form.

⁸ In these works, I identify with artist, researcher and writer Derek Whitehead's idea of *poiesis*, where creative will and making as thinking are central. In this vein, I acknowledge that my methodology falls under research in the arts, where my artistic practice itself is essential to my research and I am seeking "to articulate some of this embodied knowledge throughout the creative process and in the art object". See Borgdorff, Henk. "The Debate

on Research in the Arts," p 7.

⁹ I choose to define 'intuition' as a space for an attitude of response to the material in the creative process. I derive this definition from artist Ann Hamilton, ""A large part of the process is trying to create a space or attitude of response. I don't try fill it in too fast... The need to know, or the need for a work to be something, has to be suspended..." See Wallach, Amei. "A Conversation with Ann Hamilton in Ohio." *American Art*, Print. Vol. 22, No. 1, Spring 2008, pp. 60.

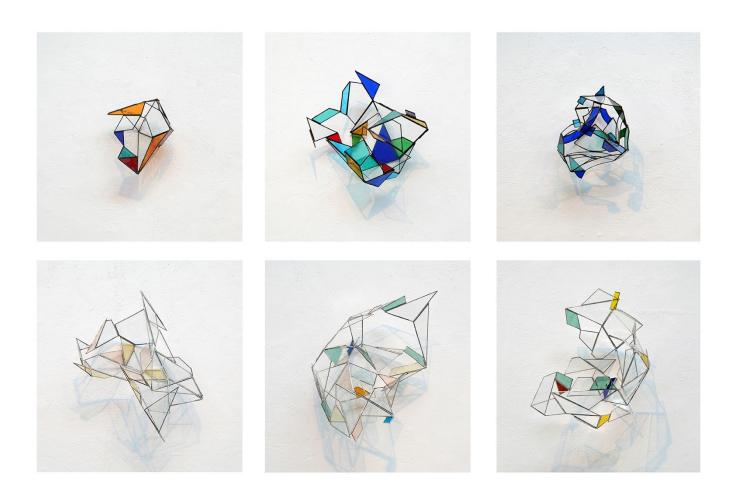


Fig.5. Thin Places / glass, solder / 6 of 8 individual sculptures / 2017

Thin Places was installed in the Concourse gallery for our Interim exhibition in July 2017. During certain windows of time, primarily early evening, the natural light in the exhibition space dramatically illuminated and transformed each piece. The shadows became as visually dominant as the sculptures themselves, creating vibrant fields of colours on the wall. These moments became important considerations for my practice as I began focusing my research more specifically on the relationship between light and time. I began to pay attention both to the types of installation spaces as well as the windows of time that were opportune moments to view the work.

In a career spanning over 50 years, James Turrell is an artist who devotes his life to light travelling through space. Turrell is a master of harnessing, framing, presenting light through his art on a massive scale. Working since the 1960s, he has created an expansive body of work that plays with our perception and experience with light. He says, "My interest in light and space came about the way it does for most artists - Friedrich, Vermeer, Turner, Constable, Rembrandt, Seurat, the Impressionists. Perception and light have always been the basic things." 10

Turrell acknowledges his Quaker childhood being formative in shaping his views on light and space. His experiences in Meeting houses from an early age were framed by his grandmother who told him to "go inside to meet the light" Although meant figuratively, Turrell self-admittedly took this literally as well and has spent the duration of his art practice exploring this notion. The influence of Quaker practices and experiences in Turrell's work is inferred and evoked subtly but is undeniably present. Academic researcher Helen Meads unpacks this explicitly in her presentation, "The Quaker Meaning of Light and James Turrell's work". She points towards the echoes of Quaker practices in the way Turrell's work gathers people in silence and stillness akin to the posture of Friends gathered in Meetings. Meads makes further parallels in the shape of the space and architecture of Turrell's *Skyspaces* which play off of Quaker Meeting rooms which are designed around simplicity and the ability for viewers to sit in a circle and face another¹².

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¹⁰ Kimmelman, Michael. "Inside a Lifelong Dream of Desert Light." *The New York Times*, The New York Times, 8 Apr. 2001

¹¹ Art21. "Live Oak Friends Meeting House." Art21. 2001.

¹² Meads, Helen. "The Quaker Meaning of Light (and James Turrell's Work)." *Go Inside to Meet the Light*, 2015, p.5-6

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Left: Fig.6. Sky-Space / view looking up / James Turrell / Salzburg, Austria / 2006

Right: Fig.7. Sky-Space / view of architectural structure and seating / James Turrell / Salzburg, Austria / 2006

Turrell creates spaces where we can gather, places where we can be together. The effect of dwelling within specific religious architecture over a long period of time influences the way one's body perceives and responds to space and light. In this manner, my own childhood being raised in the Protestant Christian church has shaped the way I understand and perceive light. In my practice, I draw upon similar experiences and employ architectural facets of places of worship as a framework and tool for unpacking my own aesthetic relationship to the church. My research has specifically focused on the historical and contemporary designs of windows in places of worship. This focus on windows primarily is rooted in the visual vocabulary of stained glass windows in sacred spaces.

Stained glass windows, in the Protestant tradition, tend to be simpler and less ornate than in the Catholic church. This contrast is rooted in the division of the Catholic Church with the Protestant Reformation in 1517 led by Martin Luther. Differences of opinions related to theological aesthetics was a contributing element in this schism.

My experiences in church buildings has changed and varied over time. In my adolescent years, I attended a church that looked more like a community center than a Gothic cathedral. Light was filtered through clear glass into the gathering space; mottled coloured glass was absent and light entered the sanctuary unfiltered. Yet, my experience of light in this place of worship still evoked sublime or transcendence moments. The natural light played off the angles of the building itself; the shifting of time and the colour of natural light became more visible. In slight contrast, I presently spend Sundays in a space that contains simple stained glass windows which employ only two different geometric shapes and three muted tones of yellow, green, and frost. It is in the folding of all of these experiences and perceptions where my art practice pulls from.

The effect of light within sacred architecture transforms each space in relation to multiple contributing factors including building design, immense scale, time of day, geographical location, and ritualistic practices such as lighting candles. Architect Paul Goldberger names the role light plays in the inherent paradox of designing and building sacred spaces, "Space is intuitively less rational, and it is obviously less material. No one ever talks of sacred structure. We may study Gothic cathedrals as works of structure, but when we talk of them in sacred terms, we talk about things far less tangible—we talk of space, and light." The element of light in places of worship is present as a symbolic reference but also a physical presence that transforms space, embodies ephemerality and ineffability, and guides postures outward and upward. Goldberger again, "The genius of the Gothic is the way its structure exists to bring us to a place that, for all intents and purposes, defies the very essence of structure. The great cathedrals celebrate God by becoming ephemeral, light, rising toward heaven in a way that makes us feel awe" 14.

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¹³ Goldberger, Paul. *Architecture, Sacred Space and the Challenge of the Modern.* Chautauqua Institution, 12 Aug. 2010, Accessed April 21, 2018

¹⁴ Ibid.

Thin Places is an experiment that plays with these architectural structures through a contemporary and personal reinterpretation. The immense scale employed by artists Laib and Turrell and also experienced in sacred architecture, functions to articulate that which is larger than oneself. My reinterpretation of these architectural structures pulls and translates those scales into my hands, into a process where scale becomes folded in upon itself.

Afruz Amighi is another artist explicitly working with the way light and religion operate together in buildings and she translates these ideas into sculptures. Her architectural forms come together to create installations where lighting and shadow play key roles in activating the work. In Amigi's *Mångata* (Fig.8) installation, her sculptures echo architectural facets found in Islamic mosques and the intentional low lighting evokes the feeling of a shrine. The suspended metal works cast shadows throughout the space, increasing the overall presence of the configuration.

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Fig.8. Mångata /steel, fiberglass mesh, chains, and LED lights / installation / Afruz Amighi / 2016

Amighi draws heavily on her own embodied experience in places of worship and these experiences form the foundation of her practice. She says,

"'The two main influences in my work are Islamic art and architecture and Gothic art and architecture.... I think the Gothic comes from having travelled and seen a lot of cathedrals at a very young age. I remember feeling very drawn to the drama of Catholicism and especially churches. I love the idea of going inside these cathedrals; there's the smell of the incense and there's the robes that the priest wears. It's so theatrical—like a soap opera'. In terms of Islamic architecture, it is the sense of symmetry and beauty in the proportions used that influence her the most. 'There's a sense of verticality," says Amighi. "So my work is very tall and slender for that reason."

From description of her influences, Amighi is responding to multiple facets of her experiences within sacred architecture. The sensory experiences of religious buildings imbeds itself into one's body, shaping and prodding the way one perceives smell, touch, and sight in connection to the spiritual. My own embodied experience lacks the aroma of incense and the hardness of pews for the most part and, as such, my eyes became fixated on the light moving through the space.

This perception of light is the very notion that aforementioned artist James Turrell plays with, toying with what we think we see, how we experience light, and how we make understandings based on subjective perceptions. An early example of this can be seen in his work *Afrum I (White)* (Fig.9) which plays off of projected light in a corner of the gallery which reads akin to a cube shape to the viewer.

Curator Lynn M. Herbert names this, "Turrell's work enables us to see through those doors of perception; light enables him to engage with perception as a medium." ¹⁶. French philosopher Maurice Merleau-Ponty speaks to this in his seminal text *The Phenomenology of Perception*. He emphasizes the body as the site for primary knowledge and theorizes the inseparability of embodied ontology and its

¹⁵ Proctor, Rebecca Anne. "Afruz Amighi: Utopian Towers." *Harper's Bazaar: Arabia*, 22 June 2016

¹⁶ Herbert, Lynn M. "Spirit and Light and the Immensity Within." *The Sublime*, edited by Simon Morley, Whitechapel Gallery, 2010, pp. 96–101. Documents of Contemporary Art. p. 97

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Fig.9. Afrum I (White) / projected light / dimensions variable / installation / James Turrell / 1967

relationship with one's perception of the world. He writes, "... I am conscious of the world through the medium of my body."17 Contrary to Cartesian dualism of mind and body, personal situated perspective, a view from the body, shapes our perceptions and relationships with our consciousness of the world. My body has absorbed and filtered light primarily as a physical manifestation of spiritual experiences. Ponty calls out this specific vista, "Is not to see always to see from somewhere?" 18 In this manner, I acknowledge my perception of light shifts between both a spiritual concept embedded with transcendent metaphors but also a phenomenological physical experience.

¹⁷ Ponty, Maurice. *Phenomenology of Perception*. London New York: Routledge, 2002. Print. (p.95). 18 lbid. p.77

REFRACTION: LIGHT AND (IM)MATERIALITY

On Shape and Form - The Abstract and the Spiritual

"Art is the path to being spiritual" - Piet Mondrian

My methodological shift to the more speculative coincided with a change in visual language in my practice from somewhat representational to the more abstract. Simplified geometric shapes which reference stained glass windows as a typology became a generative vehicle in my work, specifically in *Filtered Conversations with Light* (2018).





Left: Fig.10. *studio view* / repeated shape from rose window, cut and copper foiled Right: Fig.11. *work in process* / three sculptures installed as one form / Grunewald Guild Residency

The architectural facets of
the rose window and it's repeated sharded
shape draws me in. I begin to work with the one shape.
I now prepare glass with half-conscious thoughts
And fully (gloved) aware hands.

Score, cut, snap, tape, repeat.
A generative system continues
to build and strengthen¹⁹.
Solder steam and molten metal
create connections that shift
with each piece.

Fach work resembling the former and the future, yet maintaining its own particular insides and out. Pieces flatten. fold, collapse, intertwine as the network multiplies. Sculptures become interchangeable and moveable modules and merae into one installation.

Filtered Conversations with Light is comprised of an expanding collection of glass sculptures. Individual sculptures vary in size and overall form. Each soldered sculpture is made from glass shapes that are different scales of the same simplified shard shape found in the circular rose window. In Filtered Conversations with Light, coloured glass is left behind in an attempt to create space for other conversions beyond stained glass such as the sublime experience in the natural landscape, ephemerality, the phenomena of light, the passing of time. Slippage between white and clear and background began to emerge as an element of the work. Formal

a Context for Art Theory."

¹⁹ My creative process is developing as a generative system with specific constraints in which there is a balance of rules and structure (i.e. particular rose window shape used in glass forms) and intuition-led making (i.e. the way the pieces come together to form a sculpture). Artist, researcher, and writer Philip Galanter classifies this "use of systems... as a key element in generative art." He goes on to define generative art as a method of making "where potentially multiple results can be produced by using some kind of generating system... where the artist cedes partial or total control to that system". In this light, I see my making as a hands-on practice in which "complex systems exhibit a mix of order and disorder." See "Galanter, Philip. "What is Generative Art? Complexity Theory as

qualities of shape and line came to the forefront in the advent of 'colourlessness' and I began to see the work as three dimensional drawing. The overall installation of the work connected sculptures together to evoke a sense of both macroscopic and microscopic forms such as atomic structures, crystals, ice fractals, waterfalls, mountain tops, once again folding together multiple notions of scale. In relation to these forms, the work attempts to expand the idea of the sacred space outside the specificity of a religious building to include and explore subtle references to the natural landscape of the Pacific Northwest.

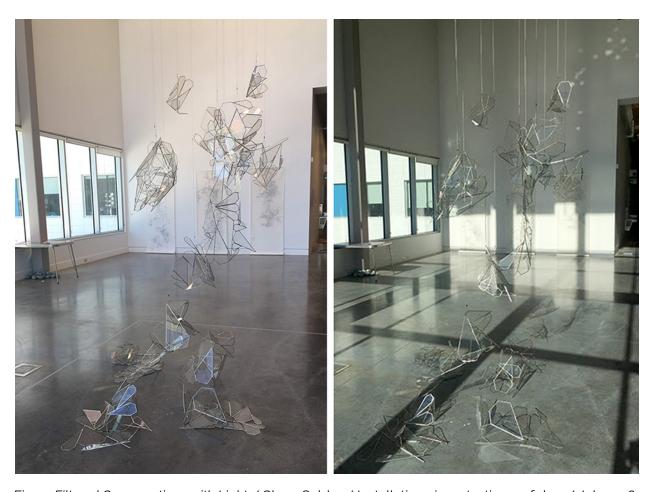


Fig.12. Filtered Conversations with Light / Glass, Solder / Installation view at 2 times of day / July 2018

Filtered Conversations with Light came together as a fluid installation for the graduation thesis exhibition in July 2018. The modules were suspended, grounded,

and connected with one another. The pieces were installed for the maximum interaction with available natural light and the architecture of the exhibition space.

Filtered Conversations with Light led my research into geometric abstraction and to modernist painter Piet Mondrian. I discovered a kinship with Mondrian's practice. Like my own history, his upbringing in a Dutch Reformed Protestant home, shaped by ideas the theologian Abraham Kuyper, likely influenced his life long pursuit of the relationship between art and the spiritual²⁰. Beginning as a highly representational landscape painter, Mondrian's work began to shift into abstraction and geometric forms as he sought after an extreme formal purity that embodied his spiritual belief in a harmonious cosmos²¹. Like other artists of his time, these later spiritual views were shaped by the popular occultist and syncretic doctrine of Theosophy which held (among other beliefs) that humankind evolved from physical to spiritual states in a series of stages that could be evoked by geometric forms²².

Mixed into this pursuit of formal purity, Mondrian held onto his motto, "each element is determined by its contrary" which manifested itself in his work not as a translation of the visible world into a geometric pattern but rather a transcoding which enacted in his work the laws of the dialectics that govern the world, visible or not²³. Aside from some similar formal aesthetic qualities, it is this dialectic of the visible and not that parallels my own practice and continues forward in my work. Light as a medium lends itself as a physical manifestation of the visible while also imbuing its own natural material properties which are invisible to the human eye.

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²⁰ Further: "Rooted in a strict puritan tradition of Dutch Calvinism and inspired by his theosophical beliefs, he continually strove for purity during his long career, a purity best explained by the double meaning of the Dutch word *schoon*, which means both 'clean' and 'beautiful.'" See Jaffé, Hans L.C. "Piet Mondrian." *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., 28 Feb. 2018

²¹ Ibid. Further: the concept of a harmonious cosmos is contextual to Mondrian's time in the modernist era and is a term used by the author to articulate Mondrian's exploration of his ideas.

Foster, Hal, et al. *Art since 1900 : modernism, antimodernism, postmodernism.* New York, N.Y. Thames & Hudson, 2007. Print. p 119)

²³ lbid. pg. 149

Working with Light as Material

"Light has an evident, functional and aesthetic impact on our lives". - Olafur Eliasson

Light is the essential material for the existence of life; without light, nothing is visible or lives. We soak in light as nourishment for our bodies as vitamin D, we rely on light to make all of life viable. The investigation of the properties of light through a subjective spiritual and historical lens has become the main focus of my graduate thesis project: light as a substance that occupies two states as both a wave and particle; light as a fleeting yet vital life giving substance; light and its relationship to glass. In essence, my practice has refracted to a more intensely physical consideration of light in regards to the natural science and interactional physics between light and glass.

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Fig.13. *The New Planet* / stainless steel, aluminium, coloured glass, paint (black, yellow), halogen bulb / 95 x 95 x 200 cm / Olafur Eliasson / 2014

Olafur Eliasson is an artist who approaches light in this manner, with a lens of optical theory paired with the sensory effects of light. His works utilize spherical forms that

play with behaviours of light such a refraction and radiation. The basis of these interactions is founded in the geometrical properties of these aforementioned behaviours. Eliasson claims that both "the physical object in the space and... the way the light and the shadows and the colors claim and create space together. They perform architecture, you might say"24. As seen in his work *The New Planet* (Fig.13), Eliasson's works hinge on interaction of a solid sculpture with the ephemerality of light and resulting shadows. The materials in *The New Planet* interact with the light of the halogen bulb and this interaction allows the work to expand and refract as projections of coloured pattern and shadow onto the walls and floor of the exhibition space.

Glass as a material in relationship with light works as a filter that highlights physical evidence of light. Glass is neither a liquid nor a solid. It is an amorphous solid—a state somewhere between those two states of matter, or also known as an extremely slow moving liquid but so slow that our typical human perception cannot see this action. The movement of the glass molecules slows as temperature cools, but they never lock into crystal patterns. Instead, they jumble up and gradually become glassier, or more viscous..."25 This space in flux between these two states of solid and liquid is a place of interest for my practice both materially and conceptually.

Further, the relationship of glass bending and refracting light is another important consideration in my work. In a vacuum, lights travels at a speed of 299,792.458 km per second, also known as the constant, c. When light passes through glass, the wavelengths are reduced and the glass slows down the speed of light to

²⁴ Azzarello, Nina. "Interview with Artist Olafur Eliasson." *Designboom | Architecture & Design Magazine*, 19 Oct.

²⁵ Weeks, Eric. "Is Glass A Solid Or An Extremely Slow Moving Liquid?" *ScienceDaily*, Emory University, 13 Aug. 2007

approximately 200,000 kilometers per second²⁶. In *Filtered Conversations with Light*, light passes through each glass form causing it to slow down ever so slightly and then refracts it as evidenced by the shadows in the installation space. This slowing of light, these interactions between light and glass occur at a time scale beyond comprehension of the pace of the human body. As my research progressed into the physical properties of my materials, it led me to a deeper consideration of the perception of time. The relationships between the fragility of glass, the ephemerality of light, and the fleeting subjective experience of time is further explored in my work *Filtered Conversations with Time* (2018).

Attempting to Articulate the Sublime

""Whereas the beautiful is limited, the sublime is limitless, so that the mind in the presence of the sublime, attempting to imagine what it cannot, has pain in the failure but pleasure in contemplating the immensity of the attempt" — Immanuel Kant²⁷

The sublime is one way to attempt to articulate such moments of mute encounter with all that exceeds our comprehension²⁸. The definition of what the sublime is and can be has changed over time. Simon Morley, editor of the anthology *The Sublime*, loosely defines the sublime experience as "fundamentally transformative, about the relationship between disorder and order, and the disruption of the stable coordinates of time and space. Something rushes in and we are profoundly altered."²⁹ This something has been dissected and debated since the ancient Greek philosopher Longinus to Edmund Burke, Immanuel Kant, and Friedrich Schiller. Many other writers and thinkers have tackled the topic of the sublime

²⁶ Parry-Hill, Matthew, and Michael W. Davidson. "Speed of Light in Transparent Materials." *Molecular Expressions Microscopy Primer: Physics of Light and Color - Speed of Light in Transparent Materials: Interactive Java Tutorial*, Florida State University, 13 Nov. 2015

²⁷ Kant, Immanuel, Werner S. Pluhar, and Patricia Kitcher. *Critique of pure reason*. Indianapolis, Ind. Hackett Pub. Co, 1996. Print.

²⁸ Morley, Simon. *The Sublime*. London Cambridge, Mass: Whitechapel Gallery MIT Press, 2010. Print. p.12
²⁹ Ibid.

contemporaneously yet Morley argues that residual thoughts of these four philosophers' definitions, broadly speaking, can be identified within contemporary art and theory³⁰.

The sublime, for Longinus, was rooted as a literary device, as rhetoric, to describe the great and the awe inspiring, and was meant to describe lofty thought and the feeling of being overwhelmed³¹. Irish theorist Edmund Burke took the sublime into the realm of aesthetics and categorized it as an experience of shock and awe, triggering a destabilizing force³². His definition specifically steered the sublime into relationship with experiences in nature which trigger feelings of vastness in connection with ideas of the beautiful but also terror.³³ For Immanuel Kant, the notion of the sublime was about "revealing a reality that is fundamentally indeterminate, undecidable, and unpresentable³⁴". Lastly, Schiller's interpretation builds on Kant's ideas of the sublime and places it in the realm of an ecstatic experience³⁵.

Etymologically, the word sublime comes from the Latin *sublimis* which is derived from *sub* meaning 'up to' and *limen* as 'the threshold' or 'a boundary'. In the Middle Ages *sublimis* morphed into a verb *sublimare* which meant 'to elevate' and was commonly used by alchemists to describe their purification process of substances³⁶. In relation to my own practice, the definition of sublime continues to evolve. Beginning as a reference to religiosity and transcendent moments, it has shifted to include broader experiences within the natural world specifically with the phenomena of light and, more recently, the experience of the multiplicity of time.

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³⁰ Ibid. p.19

³¹ Claviez, Thomas. "A Short History of the Sublime: From Longinus via Burke, Kant, Levinas and Lyotard to Rancière." *Academia.edu*, University of Bern, p.2

³² Morley, Simon. The Sublime. p.19

³³Burke, Edmund, and Adam Phillips. *A philosophical enquiry into the origin of our ideas of the sublime and beautiful*. Oxford England New York: Oxford University Press, 1990. Print.
³⁴ Ibid.

Moland, Lydia L. "Friedrich Schiller." Stanford Encyclopedia of Philosophy, Stanford University, 21 Apr. 2017, plato.stanford.edu/entries/schiller/. See Sec. 2.4 The Pathetic, The Sublime, and the Tragic.
 Morlev, Simon. The Sublime. p.14

DURATION: LIGHT AND TIME

The Multiplicity of Time

"Is there anything we know more intimately than the fleetingness of time, the transience of each and every moment? -Rebecca Goldstein³⁷

Increasing material mindfulness and observation of my work *Filtered Conversations* with Light instigated studio explorations of mapping, tracing, and recording the path of light and resulting shadows in my studio space. These marks grew into *Filtered Conversations with Time* (Fig.14) which is a series of large scale graphite drawings that record and map the shadows of the sculptures. This experience of working with the movement of light over time became a confrontation with the sublime; I became increasingly aware of the ineffability of recording these moments. The impossibility of this act continued to expand, enlarging these ongoing drawings beyond the scale of my body. Sculptures in *Filtered Conversations with Light* began to function as tools for measuring time; individualized glass clocks that each filter a specific recording of the path of light. I see them interchangeably as tools and as works of art. These two bodies of work feed into one another in a generative loop, propelling each other forward. In its fleeting and flux, light led me to time and to considering the conversations shared between the two.

Over time,
light passes through
the glass forms and
casts shadows onto my paper.
I trace and record and measure.
Time passes and I draw; light draws as I trace.
Intervals become visible and overlap.
Layers of time start to suggest movement,
I move, the drawing moves.

2

³⁷ Goldstein, Rebecca. *Incompleteness: the proof and paradox of Kurt Gödel*. New York: W.W. Norton, 2005. Print. *p.254*



Always one step behind, I attempt to capture just enough but it is never all of it.

My relationship to time becomes strained, estranged³8.

I focus deep attention to the shifting shadows and time shifts.

No longer chasing after consistent chronos intervals,
I surrender to the moment³9.
I record what I can when I see it,
when it seems like the opportune time⁴0.

As I drew, I became deeply aware of this inextricable relationship between light and time. As time passed, light moved, and my body was required to adjust, a game of endless chasing. The initial intervals of time blended together as incremental transitions of light became impossible to wholly capture. Time, as a chronological sequence, faded as

Fig.14. Filtered Conversations with Time/ 1 of 3 drawings / graphite on paper / 36 x 100 inches / 2018

³⁸ As an expanding subjective multifaceted relationship to time further defined as "a physical dimension, a dynamic system, a phenomenal feature of experience and a form of measurement." See Brettkelly-Chalmers, Kate. "Beyond the Clock: The Aesthetics of Time in Contemporary Art." p.7

³⁹ Chronos - The ancient greeks had two words for 'time'. Chronos referred to the chronological time, sequential time, time that was objectively measurable and quantitative.

⁴⁰ Kairos - the ancient greek word for time which referred to qualitative time or meaning the right, critical, or opportune moment.

the presentness required in the moment of the creative process became fully demanding. This contemplation of my subjective experience of time became confounded and complicated by continuing to consider other timescales beyond the ticking clock.



Fig.15. Filtered Conversations with Time / series of graphite drawings / 36 x 100 inches each / 2018

Academic Kate Brettkelly-Chalmers researches this conflation of the multiplicity of time in her doctorate text "Beyond the Clock: The Aesthetics of Time in Contemporary Art." She argues for the diversities of time explored and questioned in contemporary art "as a physical dimension, a dynamic system, a phenomenological feature of experience, and a form of measurement." 41. Wrestling with a layered

⁴¹ BrettKelly-Chalmers, Kelly. "Beyond the Clock: The Aesthetics of Time in Contemporary Art." *University of Auckland Research Repository, University of Auckland*, ResearchSpace, 2016. p.7

understanding of time is not a new notion. St. Augustine of Hippo articulated his pondering of time in 398 AD, writing on time and eternity and asking, "What is time? Who can explain this easily and briefly? Who can comprehend this even in thought, so as to articulate the answer in words?"⁴²

Asking these questions of time is artist Paul Chan in his work *The 7 Lights* (Fig.16) which is a series of large scale projections in which paper silhouette forms are animated to depict Chan's interpretation of the Biblical seven days of creation.

This image has been removed due to copyright restrictions

Fig.16. The 7 Lights/video projection, table / dimensions variable / Paul Chan / 2008

Paul Chan, in relation to this work, responded to a request of analysis by saying:

"For me, *The 7 Lights* represents a testing of what this 'new' time might look like and feel like. People have told me how *1st Light* makes them feel suspended in a 'time' that both is and isn't the exhibition... I think that this feeling comes from...making time-based works whose 'time' doesn't draw from the well of *chronos*. Rather *kairos* is its source."

⁴² Hippo, Augustine of. "Time And Eternity // 397-8 AD." *Time*, edited by Amelia Groom, Whitechapel Gallery, 2013, pp. 50–51. Documents of Contemporary Art. p.50

⁴³ Birnbaum, Daniel. "Paul Chan's The 7 Lights //2007" *Time*, edited by Amelia Groom, Whitechapel Gallery, 2013, pp. 50–51. Documents of Contemporary Art. p.50 . P. 56

In drawing attention to *kairos* time, Chan is asking us to consider time outside of a linear horizontal *chronos* time orientation. In this same referenced text, author Daniel Birnbaum expands on this notion of *chronos* versus *kairos*. He suggests that taking kairological time as a beginning point radically shifts the idea of understanding time as epistemological to understanding time based on a consideration of ethical time.⁴⁴ Another way to name *kairos* time is extrapolated by philosopher Giorgio Agamben when he connects *kairos* time with messianic time in his essay *The Time that Remains*. Agamben labels *chronos* time as secular time which spans from the creation of the world to the end of time whereas he places *kairos* time as time which 'contracts itself and begins to end'⁴⁵. In this light, *kairos* time constricts and collapses into itself, shattering its horizontal path and creating the possibility of an upwards vertical movement and inwards to a subjective potentially ethical reorientation.

A more poetic definition of *chronos* and *kairos* is offered by critically acclaimed writer and poet Madeleine L'Engle when she puts it this way:

"Chronology, the time which changes things, makes them grow older, wears them out, and manages to dispose of them, chronologically, forever. Thank God there is kairos too: again the Greeks were wiser than we are. They had two words for time: *chronos* and *kairos*. Kairos is not measurable. Kairos is ontological. In kairos we *are*, we are fully in isness, not negatively, as Sartre saw the isness of the oak tree, but fully, wholly, positively. Kairos can sometimes enter, penetrate, break through chronos: the child at play, the painter at his easel, Serkin playing the *Appassionata* are in kairos. The saint in prayer, friends around the dinner table, the mother reaching out her arms for her newborn baby are in kairos."

The poetic experience of time is what I attempt to capture in *Filtered Conversations* with *Time*. The process of creation is evidenced through the tracing of the passing shadows in chronos time but these marks are complicated by their incompleteness and gaps as well as the necessity of my own relationship and presentness in the process. I was not able to fully capture the whole shadow in each moment and

⁴⁴ Ibid. p.58

⁴⁵ Ibid. p.59

⁴⁶ See L'Engle, Madeleine. *A Circle of Quiet*. New York, NY: Open Road Integrated Media, Inc, 2016. Print.

intuitively chose which marks to record in relation to previous tracings, previous time records. Thus, as I continued to draw, a system of rhythmic notation developed and began to become my main framework for making.



Fig.17. Filtered Conversations with Time / details / graphite on paper / 2018

CONCLUSION and FUTURE PROJECTIONS

"Time, unfortunately, though it makes animals and vegetables bloom and fade with amazing punctuality, has no such simple effect upon the mind of man. The mind of man, moreover, works with equal strangeness upon the body of time. An hour, once it lodges in the queer element of the human spirit, may be stretched to fifty or a hundred times its clock length; on the other hand, an hour may be accurately represented on the timepiece of the mind by one second." Virginia Woolf⁴⁷

This most recent interest in poetic notations of time has further potential to explore more intentional systematic methods of mark making. The drawings that make up *Filtered Conversations with Time* map and layer multiple ways of time notation, relying on both a heavily structured system of rules but also allows for spontaneous marks to emerge and respond in process. This generative system of drawing echoes the process of making I utilized for *Filtered Conversations with Light* but employs it in a manner that is more accessible and fertile for future research.

Another possible avenue for further exploration and expansion in these works is the addition of a participatory element or community engagement. Future iterations of drawings could include an invitation for a viewer or gatherings of viewers to draw and trace the shadows, working together with me. In this manner, the scale of the mapping would allow for potentially immense drawings that could expand the project beyond the pace and scale of my own body and into the realm of the massive. The open endedness of this kind of process allows for me to work in a way that encourages a loosening of control over materials and definitive outcomes. The end result, or infinitely ongoing result if it continues, is beyond calculation and out of my reach. I also anticipate this would create a stronger physical response and interaction for the viewer with my work and with their experience of the notion of time as a multidimensional, subjective, and expansive phenomena.

⁴⁷ Woolf, Virginia. *Orlando; a biography*. New York: Harcourt Brace Jovanovich, 1973. Print.

A parallel idea and strategy for creating more space and less control over my process is to open up my drawing practice to include 'failed moments', times where the natural light disappears. It would be fruitful to investigate how might I record these 'cloudy' periods: would there be growing space or lapses of line? Would my pencil begin to wander in boredom or tap in frustration? Would I respect these regions or draw overtop at a later time?

I am drawn to continue these time and light based graphite drawings as a continued methodological interest in the sublime moment through exploring diverse and dynamic perceptions of time. This is the path forward I am most interested as a potentially rich framing for my studio practice and research beyond this program. I am curious about expanding these conversations beyond drawing my own sculptures and installations into possible collaborations with other people, objects, and phenomena that exist outside my studio walls. In doing this, I am still asking about the material translations and interpretations of the metaphysical, yet continuing to search for avenues and poetic gestures to attempt to articulate that which is larger than myself.

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