Illuminativa

The Resonance of the Unseen

F. Derek Ventling
The soul is not in the body; 
the body is in the soul.

HILDEGARD VON BINGEN (1098–1179)
Illuminativa
The Resonance of the Unseen

This thesis is submitted to Auckland University of Technology in partial fulfillment of the degree of Doctor of Philosophy.

FRIEDRICH DEREK VENTLING

M.Sc.,
University of Zürich, Switzerland. 1985

Dip. Graphic Design,
Canton Zürich, Switzerland. 1990

Dip. Teach. (Sec),
University of Auckland. 2012

M.Phil. (First Class Honours),
Auckland University of Technology. 2014

November 2016
© Friedrich Derek Ventling
This practice-led creative arts thesis investigates the metaphysical notion of light as an activating principle and how this is subjectively experienced. Light is phenomenologically explored as a catalytic agent that is interactive yet ephemeral, influencing perception and consciousness. Light is also the research tool used to capture, develop and articulate personal discoveries through designed environments.

Philosophically, the research is founded upon the medieval spiritual concept that illumination is a key transformational aspect of our cognitive journey (Bonaventure, 1996; Hayes, 1996; McAdams, 1991; Miccoli, 2001; Schumacher, 2009). This process begins with a sensory experience from making, and leads through philosophical thought to wisdom. In metaphysical terms, light may be understood as a connective agent and a force that provides stimulus and developmental capability. Of particular interest within this context is lumen, described as a state where archetypal light activates beings and radiates through them. This threshold between metaphorical and visible light is explored from the personal perspective of the contemporary artistic researcher.

By conceiving material arrangements as sedulous yet unstable conjunctions of texture and light, I seek to creatively apprehend the vestiges of the unseen. As the observer and the observed, I am physically immersed in these experimental arrangements, actively probing and apprehending the deliquescent relationship between making, an embodiment in light and the conscious self. As resonant moments surface, these are captured as photographic documents. Selected images are then reorchestrated as a filmic narrative of sensory expression. Light then carries this projection within a designed installation, engaging viewers through an embodied experience of their own. The aim of this research is to invite a discourse on the potential of light, its generative manifestation and its tangible influence on our creative consciousness within contemporary artistic practice.
I am indebted to my two supervisors, Professor Welby Ings (AUT University, Auckland) and Dr. Ralph Bathurst (Massey University, Auckland). Both, in their distinct ways, helped me navigate this journey with philosophical and spiritual scholarship, academic rigour and unwavering encouragement. I consider myself extraordinarily fortunate to have enjoyed the companionship of these inspiring and kind-hearted fathers.

My gratitude is extended to AUT University’s School of Art and Design. This thesis would not have seen the light without the support of the faculty in many aspects: the fee scholarship and the research stipend associated with this doctorate, and the infrastructure and facilities made available for several exhibitions and tests. During its development, a number of AUT staff contributed to this project in various ways: Robyn Ramage always provided answers, as did many others, including Suzie Gorodi, Elaine Human, Tom Levesque, Maria O’Connor, Janine Randerson, Stefania Patrone, Lourdes D’Souza and Jessica Yamamoto.

I would like to extend special thanks to Pinehurst School, especially the executive managers Sherida Penman-Walters and Chris Wiggin, for their sympathetic support when I needed it most, and for offering the facilities to exhibit my final installation.

Countless local and international practitioners, colleagues and friends generously provided suggestions, feedback and nourishment along my way. Special thanks go to Glen Williamson for his expertise and efforts with the installation design.

Finally, heartfelt gratitude goes to my family; Stephanie Ventling for her spiritual encouragement, Christa Ventling for her exemplary perseverance, and Alex Ventling for his sensitive sound composition and technical support. Most of all I thank my wife Andrea Ventling not only for her practical finesse with gilding and installation, but for wholeheartedly embracing my pilgrimage with ceaseless motivation and essential emotional succor.
Abstract 3  
Acknowledgements 5  
Table of Contents 6  
Table of Images 8  
Attestation of Authorship 12  
Intellectual Property Declaration 13  
1. Introduction 16  
1.1 Genesis 17  
1.2 Light 18  
1.3 Reality 19  
1.4 Questions 20  
2. Positioning the Researcher 22  
2.1 Spiritual Consciousness 23  
2.2 Art and Design Experience 24  
2.3 New Practice 25  
2.4 The Former Scientist 27  
2.5 The Emerging Artistic Researcher 28  
2.5.1 The Role of the Self 28  
2.5.2 A Tolerance for Uncertainty 29  
3. The Design and Ethos of the Thesis 32  
3.1 Components and Approach 33  
3.2 Challenges 34  
3.3 Presentation 36  
4. Review of Contextual Knowledge 38  
4.1 Saint Bonaventure and Light 39  
4.2 Divine Light 40  
4.3 Leading the Arts back to the Divine 41  
4.4 Activating Potential 42  
4.5 Illumination 42  
5. Research Design 54  
5.1 Framework 55  
5.2 Artistic Research 56  
5.3. Approach 57  
5.4. Challenges of Heuristic Enquiry 58  
5.5. Research Methods 60  
5.5.1 Materials 60  
5.5.2 Photography as a Tool 63  
5.5.3 Documentation 63  
5.5.4 Literature and Artistic Practice Review 64  
5.5.5 Discussion 64  
5.5.6 Exhibitions and Review 68  
5.6 Summary 73  
6. Critical Ideas and Commentary 76  
6.1 Divine light 77  
6.2 The State of Lumen 84  
6.3 Embodiment 88  
6.4 Summary 94  
7. Development of Artefacts and Knowledge 96  
7.1 Artefacts 97  
7.1.1 Exploration 97  
7.1.2 Photographs 99  
7.1.3 Animation 100  
7.1.4 Installations 101  
7.2 Perception and Co-Creation 103  
7.2.1 Re-experiencing 104  
7.2.2 Co-Creation 104  
7.3 Knowledge and Contribution 105  
74 Summary 106  
8. Summary and Conclusion 108  
8.1 Summary 109  
8.2 Contributions to Knowledge and Experience 110  
8.2.1 Knowledge Production 110  
8.2.2 Contributions to Knowledge 110  
8.2.3 Contribution to Human Experience 111  
8.3 Further Research 112  
8.3.1 Journal Articles 112  
8.3.2 Presentations 112  
8.3.3 Emerging Conceptual Concerns of the Research 113  
8.3.4 Virtues 114  
8.4 Conclusion 114  
9. References 116  
10. Appendices 126  
Appendix 1 Phase Summaries 128  
Appendix 2 Concepts and Design of the Third and Final Installation 180
All images are the copyrighted property of the author, unless otherwise noted.

2. Positioning the Researcher

**FIGURE 2.1.** Painted wall patterns behind the altar of Saint Matthew Church, Basel, Switzerland. Copyright 2016 by Alex Ventling. Reproduced with permission.

**FIGURE 2.2.** Chairs in Basel Münster, Basel, Switzerland. Copyright 2015 by Stephanie Ventling. Reproduced with permission.

**FIGURE 2.3.** Illustration design using wire for a local council publication (2000).

**FIGURE 2.4.** Poster design for Marlboro Rock-in (1992).

**FIGURE 2.5.** Logo design for Commercio Bar (1986).

4. Review of Contextual Knowledge

**FIGURE 4.1.** Saint Bonaventure of Bagnoregio. Statue in the basilica of the Mafra National Palace, Portugal.


**FIGURE 4.4.** A composition with light traces following movement, in the style of Gjon Mili.

**FIGURE 4.5.** Julien Breton. Poésie. Copyright 2007 by Julien Breton. Reproduced with permission.


**FIGURE 4.8.** Experiencing a McCall installation, Auckland Art Gallery (2014).


**FIGURE 4.11.** Experiencing my second installation, AUT City Campus, Room WG210 (October, 2015).

5. Research Design

**FIGURE 5.1.** Initial testing of bent aluminium sheeting, lit with a series of light emitting diodes (2014).

**FIGURE 5.2.** Initial testing of rhythmically moving water as material mediator (self-portrait, 2015).

**FIGURE 5.3.** Light without substance or form. Early exploratory image (2012).

**FIGURE 5.4.** Photographic collage, working with shapes found in the symbol of Shamash (2013).

**FIGURE 5.5.** These two Momentaufnahmen, captured seconds apart, show the protean nature of any immersive experiments (January, 2015).

**FIGURE 5.6.** Example of journal entries, showing sketches and notes (February, 2015).

**FIGURE 5.7.** Lux Per Se Pulchra Est (Light is in itself beauty). A1 poster presentation at AUT’s Postgraduate Symposium (July, 2013).


**FIGURE 5.10.** Assembly and experience of first installation, AUT City Campus, Room WM201c, February 2014.

**FIGURE 5.11.** Experience and assembly of second installation, AUT City Campus, Room WG210 (October 2015).

**FIGURE 5.12.** Model of second installation.

**FIGURE 5.13.** Peer critique immediately following the second exhibition (October, 2015).

**FIGURE 5.14.** Diagram of entire research timeline, showing the important occurrences of inside-outside exchange.

6. Critical Ideas and Commentary

**FIGURE 6.1.** Applying silver leaf to a prepared MDF sheet.

**FIGURE 6.2.** Silver leaf creates the illusion of another dimension, a space beyond the tangible.


**FIGURE 6.4.** Silver leaf wall, part of the second installation, AUT City Campus, Room WM210 (October, 2015).
The images preceding each chapter are taken from the body of work, and are representative of the animated sequence featured in the final installation. They are considered experiential supplements to the exegesis. As such, their elucidation emerges from the installation, therefore no text is given.
ATTESTATION OF AUTHORSHIP

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly mentioned), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

F. Derek Ventling
November, 2016

INTELLECTUAL PROPERTY RIGHTS

I retain copyright in all images and creative work produced and presented as part of this thesis, apart from the following images that are the intellectual property of others listed in the order they appear in this exegesis.

F. Derek Ventling
November, 2016

FIGURE 2.1
Copyright 2016 by Alex Ventling.

FIGURE 2.2
Copyright 2015 by Stephanie Ventling.

FIGURE 4.2
Copyright 2016 by Tate, London.
Reproduced under License 302851.

FIGURE 4.3
Copyright 2016 by The Man Ray Trust.

FIGURE 4.5
Copyright 2007 by Julien Breton.

FIGURE 4.6
Copyright 2010 by Jorma Puranen.

FIGURE 4.7
Copyright 2006 by Hugo Glendinning.

FIGURE 4.9
Copyright 2014 by David Zwirner Gallery.

FIGURE 4.10
Copyright 2016 by Mabry Campbell.

FIGURE 5.9
Copyright 2015 by Nanami Nakamura.
1.1 Genesis

The genesis of this thesis lies in an account written nearly 800 years ago by the Franciscan monk Bonaventure. A scholastic philosopher as much as a theologian, Bonaventure was known for his ability to merge the religious with the secular. His treatise *De Reductione Artium ad Theologiam* (Leading the Arts back to the Divine) synthesises an idea that I find intriguing as a creative artist both metaphysically and cognitively.

Bonaventure draws a connecting path from the basis of manual craft, through sense perception and philosophical thought to the Divine. In doing so, he elegantly links four distinct realms of human essence that we might commonly term making, sensing, thinking and wisdom. For Bonaventure, these realms are in a clear hierarchical order, each one inspired by the one above. They form phases along a path of human fulfillment. This path begins with making, and ascends purposefully through each successive realm. In practice, we might describe this in the following manner:

As we work within materiality, a sensate and embodied dialogue ensues (Miccoli, 2001). We then reflect and think through our insights, thus acquiring and compiling various forms of knowledge (Hayes, 1996). Combining experience and knowledge, we ultimately advance towards wisdom, a state of assertive and clarified insight. This progression, as it is described by Bonaventure, represents a cognitive journey that is directional (leading to a deliberate goal), forthright (in its sincere and sensitive approach) and aspirational (seeking successively greater understanding, and a proximity to the Divine).

Within the context of art and design, certain contemporary scholars draw a remarkably similar connection from making to wisdom (for example: Arnold, 2012; Crawford, 2009; Ings, 2013a; Sennett, 2008). Despite Bonaventure’s theological telos, many parallels can be seen to exist between his and present-day concepts. Manual craft, or making, or experimenting with materials, is interpreted as an opportunity for higher levels of discovery in creative thinking (Mäkelä & Löytönen, 2015; Marzotto, 2009). The practice of hand making constitutes a reflective conversation with processes and materials (Schön, 1983), and this articulation is a means for working through the senses (Nimkulrat, 2010). This exploratory and experiential activity thus becomes the dialogical basis

---

1. Metaphysics denotes the branch of philosophy that deals with the underlying principles of notions such as spirituality. These abstract concepts include being, knowing, substance, cause, identity, time, and space.

2 Bonaventure defines these as:
   1. artis mechanicae (mechanical arts)
   2. cognitionis sensitivae (sense apprehension)
   3. cognitionis philosophicae (philosophical understanding)
   4. sacrae scripturae (consecrated writings)

3 The mechanical arts are defined by Bonaventure as the basic arts and crafts by which human beings produce objects external to themselves. These are the things that serve man’s fundamental needs or enjoyment, and comprise: agriculture, hunting, weaving and armour-making, navigation, medicine and dramatic arts (Hayes, 1996). In essence, Hayes suggests, these creative endeavours “offer a description of the basic structures of medieval life, beginning with the peasants working in the fields and moving to the major guilds in which the craftsmen of the age were organised. From there Bonaventure takes us into the world of scholars in the newly developed universities” (ibid., p. 15).
for questioning and learning, opening up novel possibilities, and enriching a creative artist with new knowledge and ultimately an insightful understanding or expression or skill (Arnold, 2012; Crawford, 2009; Cross, 1982; Gray & Burnett, 2009; Ings, 2013a; Mäkelä, 2007, Rosenberg, 2008; Sennett, 2008). Regardless of the complexity and individuality of this process, these scholars acknowledge the same distinct realms as Bonaventure, in similar order. Wisdom invariably depends on a dynamic process through making, sensing and thinking.

Fundamentally similar in their rationale, these contemporary scholars seemingly concur with Bonaventure’s medieval thinking: the path constitutes a dedicated endeavour by the reflective practitioner. Yet there is one differentiating factor: Bonaventure adds a spiritual dimension, reasoning that the entire process of thinking through making and sensing is illuminated by light. He asserts that light shines forth from the Divine fountain, disclosing to us this ascending light through making and sensing. It appears to me that technology has assisted us in our search/research, because it enables us to reach out to the not-yet-known, the indistinct potentiality, the latent and the unrealised. On our journey of discovery, light may be the catalyst that we require to bridge the real and the imaginary, the material and the immaterial, the seen and the unseen.

Although light may potentially be instrumental to creative enterprise, nowadays we appear to have largely dismissed this consideration. Yet the metaphysical mystery of light still might bear relevance to our everyday lives. Perhaps our reverence for light’s spiritual association has been eclipsed by our ability to produce electrical light ourselves. The modern application of light has become a commodity that seemingly holds no existential concerns. In today’s “era of audio-visual dominance” (Groth, Mäkelä & Seitamaa-Hakkarainen, 2013, p. 2), we have largely relegated the notion of light to a utilitarian application and apprehension. Light might be considered helpful or necessary, but only as far as its use within the technical domain. For example, within many design environments the origination and dissemination of artefacts now necessitate large and small computer monitors or smartphone screens, and these perpetually require light to function. It appears to me that technology has determined the nature of light and its service within practice, thereby narrowing how we may experience it, think of it, or draw benefit from it.

A gap exists between scientific and experiential interpretation of light. Physics defines light in terms of wavelength, photons and speed, yet these conceptual values seem to be at odds with our sensate perception. Indeed, our everyday body-based experiences are unable to confirm scientific truths (Tin, 2011). Although science cannot present us with a complete picture of the world, it has attracted us with its constructs, and this has disassociated us from our senses. Merleau-Ponty (1948/2004) argues that our trust in technology has allowed us to “forget what our senses tell us when we ask them naively” (p. 40). Similarly, Serres claims that our relationship with the empirical and the authenticity of the experiential have been marginalised by the cataloguing nature of science and information technology (2009). Because science objectsifies, it may be able to tell us about connections between phenomena, but not about the qualitative content of phenomena (Bitbol, 2014). We must look beyond science, says Rorty (1989), “for the world, as it is described by the physical sciences, teaches no moral lessons and offers no spiritual comfort” (p. 3). Thus, I suggest we might begin anew to appreciate light by turning away from intellectual theory and towards sensate perception and narrative.

It is not the intent of this thesis to hold science accountable for demoting our esteem of light. Instead, the thesis strives to suspend this rationality, and revisit the qualities of light with the same sense of wonderment as Bonaventure. This extraordinary force that, according to his metaphysical thinking, would hold generative capacity, deserves to be considered in other ways. I propose that if I am able to liberate myself from assumptions about light within the confines of electrical or diurnal practicality, I might find relevance in other dimensions. A starting point may be to perceive light as a material that I interact with. Indeed, there is a need to study the experiential side of material, beyond the functional (Karana, Pedgley & Rognoli, 2013). In this thesis I follow this approach, and suggest that light is experience; one that has the power to reach into my own cognitive capacity.

1.3 Reality

A significant aspect of light is that it assists us in defining ourselves physically and spatially. We rely heavily on our visual perception to shape our notion of the world in which we live. Our reality is commonly validated by what we can or cannot see. Vision relies on light; through light we are engaged in a continuous negotiation with our surroundings. The sum of this experience sediments as knowledge, and becomes the foundation by which we function. Light therefore has a formative influence on how we interpret our world and situate ourselves within it.

Historically, Plato has influenced the association we give to light. He retains his authority over our thinking with his epistemological assertion that knowledge and reality are both fundamentally aligned with light (Muccolo, 2001). What we generally consider to be real is often defined primarily by our visual perception. Additionally, we tend to believe in a reality that is constant and common rather than variable and subjective. Yet the notion of reality is created by, and moves with, the changing beliefs

4 For Bonaventure, wisdom is Divine: an all-encompassing mystical prevalence, an understanding that is pure, merciful and loving. However, in my current thinking within the realm of creative practice, I define wisdom as a state of enablment, an agency with which to foray into the unknown and sense what may become. This wisdom is cultivated through trust (in oneself), which in turn develops from experience in making-sensing-thinking.

5 The double meaning of the term ‘realise’ is intentional, because both meanings are relevant to this discourse. One implies thinking (i.e. having insights), while the other implies making (i.e. crafting artefactual outcomes).

6 Merleau-Ponty contends that precisely because science has a limited scope, it has facilitated the rediscovery of perception and phenomenology as means of negotiating our world (1948/2004).
of the viewer” (Duncan, 2004, p. 4). Polanyi and Prosch define perception as an “act of tacit inference, aiming to correctly interpret the traces made in our body by external objects” (1975, p. 108). Arguably then, our reality and our perception are interpretive and subjective, and light is a notably influential and accountable factor in this construct. Yet as much as we would like it to be, light is not constant. Light surrounds us – dispersing, reflecting, shimmering, blinding, it fluctuates and changes with our movements. Active yet transient and unpredictable, light can illuminate or obscure. Its expression is capricious, yet we trust it.

1.4 Questions
Consequently, I reason that the agency of light is an integral but largely underestimated element of my world as a creative practitioner and a human being. The ephemeral force of light intrigues me because it may hold the potential to facilitate, influence and govern my perception, my practice, and my very being. If light is so capable; if I am destined to live and work by this energy that is fundamental to my endeavours, then I believe it is worthy of closer inspection. I am reminded of Duncan, who in concord with this thinking argues, “As researchers willing to confess that reality is based on perception, why should we not examine what constitutes our perceptions?” (2004, p. 13). Within the paradigm of creative practice, light holds connective potential, and may have the ontological capacity to inspire and assist me in transcending the conventional. Bonaventure’s ideas on the manifestation of light, as well as on the value of making as a process, reach into my everyday existence as a creative artist, raising questions that might suggest an alternative epistemology of creative practice. His illuminative exposition challenges me to explore a new relationship with light, in metaphorical and practical dimensions. Therefore, the aim of this thesis has been to draw Bonaventure’s medieval theory of metaphysical light into the discipline of contemporary creative practice. Through experiments and observations I wanted to ponder Bonaventure’s notions in practice, and contemplate my apprehension of the sensate resonance and quality of light. I asked myself: How might light be subjectively perceived within my endeavours as a creative practitioner? What is my experiential relationship with light? In considering this, I have asked if it is possible to take up the challenge voiced by Klee who stated, “Art does not render the visible, art makes visible” (Read, 1974, p. 182). Given that art “plays a role in identifying our relationship to the illusions and the actualities that surround us” (White, 2011, p. 61), I have sought to find the scope and the means within creative practice to interpret and express this contemplation. These issues form the central concern of this thesis.

In presenting this thesis, I have sought to make contributions to human knowledge and experience. The concerns of the enquiry have formed the reflective basis for designing artefacts and installations. These acted as vehicles that were employed to refine and share my experiential insights, making my thoughts visible and tangible for the viewer. My hope has been that this experiential form of communication will allow the viewer to develop new insights and understandings – about the metaphysical quality of light, and about its potential influence on the consciousness of the creative practitioner.

7 This thesis marks a transition from my former design domain into artistic practice (see Chapter 2.5). Although my past defines me as a ‘designer’, the practice and processes of this thesis portray me as an ‘artist’. These terms may imply differences in approaches, rules, contexts and outcomes, yet I do not see these as binary. Within the framework of this thesis and my bearing, these domains overlap. In scholarly discourse, the term ‘makers’ has been employed to include both artists and designers (Makela, Nimkulrat, Das & Nsenga, 2011). Although using this term throughout this thesis would bridge both domains, I prefer to use the terms ‘creative practitioner’ or ‘creative artist’ as encompassing descriptors. By using these terms, I imply that they convey the same foundation of thinking, consciousness and rigour that the terms ‘artist’ and ‘designer’ express. However, wherever I have referenced other authors within this exegesis I have used their terminology.
My personal knowledge base contributes irrevocably to the framing of the thesis. As Scrivener (2000) notes, the researcher’s background constitutes his repertoire of personal ideas, beliefs, and appreciation, etc., derived from actual experience and shared theory and knowledge acquired during education and from books, journals and the like (para. 40).

Therefore, the subject matter, the perception of it, and the way of considering this, are shaped by the facets of who I am. This chapter discusses a few of the facets of my background that are most relevant to this thesis. However, as much as I have brought to this research, it has also given shape to some new facets. These are mentioned at the end of this chapter.

2.1 Spiritual Consciousness

My thinking related to beauty, virtue and spirituality has grown from impressions, experiences and relationships that have subtly woven themselves into my life. They make up the substance from which I am molded, particularly during my formative years in Europe. As an example, churchgoing was an irregular activity in my family – although not for sermons but for evening choral performances and other concerts. I remember an early fascination with churches as buildings of wonderment, beyond religious concepts or intellectual reasoning. As I sat and listened to the music, I would spend time gazing around and contemplating the layers of art and craftsmanship I could find on such a variety of surfaces: walls, floors, windows, even doors and chair backs (Figures 2.1 and 2.2). It seemed to me that every aspect was considered and refined in aesthetics, purpose, and experience.

In this thesis I define spirituality as the enigmatic intangible realm relating to the human spirit or soul. Its definition is not tied to a religion, and its expression or interpretation is distinctly subjective and personal.
The expressive qualities of these building interiors fascinated me with their atmospheric interweaving of narrative, light, material, and spatiality. Subtly these encounters initiated my ongoing reverence for artistic expression as an experiential phenomenon.

Although I have limited theological expertise, to this day I remain spiritually inquisitive. Such curiosity underlies this thesis. In essence, this research constitutes an existential and reflective exploration (Pallasmaa, 2009) of an originally religious concept from my viewpoint as a contemporary creative practitioner. Religion contains emotionally resonant themes that I find as inspiring as they are mysterious. It is of interest to me as “a repository of a myriad of ingenious concepts” (De Botton, 2012, p. 13). Yet this thesis is not a religious quest; it seeks to be understood outside the confines of religious doctrine. It represents a personal search for a greater meaning and awareness within my self and my culture of making and being. Finally, as a researcher, I was challenged to cultivate a productive discourse between these two that would drive thinking forward and ultimately communicate its processes and outcomes.

2.2 Art and Design Experience

I embarked on a graphic design career thirty years ago, at a time before computers were employed. The general process then was one of material exploration. In this environment I manually worked with a variety of materials and media to craft a unique solution. The Swiss company (in which I completed my apprenticeship) integrated the disciplines of graphic design, model making and exhibition design, all areas requiring manual expertise and processes refined through tacit knowledge. Staff were respected as artisans and valued for their skills. Experimental and exploratory activity was considered essential, and it was generally accepted that this path could be neither linear nor efficient. In practice, we enjoyed rigorous exchanges with challenging materials, gaining an understanding of their particular forces through risk, luck and chance (Bennett, 2010; Griffiths, 2010; Ingold, 2010; Schón, 1983).

We were deeply involved in experiences similar to what Crow describes as “…play, experiment, adjustment, individual judgment and the love of a material – any material” (2008, para. 22). Doing equalled thinking. In this physical, sensate world we worked, learned and thought with our hands (Crow, 2008; Heidegger, 1968; Rosenberg, 2008). In this regard I am reminded of Pallasmaa who says, “We are bound to admit that the hand is everywhere in our body, as well as in our actions and thoughts” (2009, p. 92). Our tactile, manual explorations progressed our thinking and our work.

Much has changed in the design domain since those days. Digital tools and new forms of media have grown to dominate the industry. My practice has integrated computers and design software, and adapted creative processes to these. As commercial culture has seen continuous transformation, design and communication have found new ways and means to contribute. Hardware and software have become increasingly powerful and more financially accessible, opening new avenues of digital exploration. In my observations, the visualisation of ideas has become progressively more rapid and detailed, and this has raised expectations of clients and consumers. Furthermore, the processes of creating and accessing still and moving images have fundamentally changed, allowing me to digitally integrate photography, video and design. Digitised ideas and outputs can be shared and copied around the world with increasing immediacy, creating heightened levels of discourse.

Although these aspects have changed the culture of graphic design practice, they have not changed how I think. I may have more tools available, but for me good design still begins with my hands: as a deep physical engagement with materials to develop unconscious thinking (Crawford, 2009; Pallasmaa, 2009). Even though my outputs may be digital, a manual component is generally visible. Whenever possible, I begin a process of exploration with manual making, playing and improvising, pencil sketching and hand drawing, allowing ideas the time and space to serendipitously manifest. As a persistent crafts person, this has been my way of sustaining a continued sense of novelty, wonder and authenticity (Figures 2.3, 2.4 and 2.5).

2.3 New Practice

This thesis constituted a rehabilitation of my thinking about design, in terms of its approach and its theme. Craft thinking is not necessarily about a skillset or even the physicality of working, but rather “an attitude and a habit of action” (Adamson, 2007, p. 4) – and this notion of determination underpinned my entire investigation. The practice provided an opportunity to return to my craft roots, not only manually engaging with materials, but also making artefacts that resonated beyond the compromises of commercial service. However, this was more than an exploration of practice; the thesis was predominantly an exploration of a theory through practice. Practical material making formed the basis of my quest, and this was my way of probing the influence of metaphysical light on the conscious, artistic self.

Furthermore, the practice constituted an intentional liberation, a departure from an established (and exhausted) modus operandi. I knew that working in commercial design and advertising environments for over 20 years had narrowed my thinking and outputs to a linearity of strategy, championing the functional and the ornamental. This thesis represented an effort to disrupt these parameters, and also move beyond a conventional didactic disposition of communication. It was important for me to eschew the habitual and try to find a new sensibility of expression beyond my current competencies.

9 By this I mean western Christian tradition and practices, although this might arguably apply to other religions.
10 In this thesis I define religious doctrine as a set of prescribed beliefs, governing the pursuit of single-minded purpose in all human activities and events.
11 De Botton (2012) suggests that this represents an interesting reversal of early Christianity’s appropriation of diverse pagan customs and practices.
12 The company was called FAW Fabrik Atelier am Wasser, located in Zürich. I worked there in the late 1980s.
Delving into ambiguous, even irrational realms of metaphysics, and traversing the Cartesian dualism of mind and body, I wanted to probe new perspectives on artistic practice and on my own experiences. Because of the personal nature of this research, I knew I needed to challenge myself to conceive an authentic manner of visual articulation that fit with my emerging emotive and tacit understandings. Striving for this distinctive approach and expression, I collated, manipulated and arranged a diversity of hard and soft materials, working with and through their physicality as I added my own. Drawing upon my aesthetic experience and professional proficiency in graphic, exhibition and production design, typography and photography, I sought to take my exploration beyond the familiar vocabulary or purpose of collective commercial culture. The topic of this quest tested my perceptions and assumptions, and had me return to being the deliberate amateur. Lewis (2014) explains:

An amateur is unlike the novice bound by lack of experience and the expert trapped by having too much. Driven by impulse and desire, the amateur stays in the place of a constant now, seeing possibilities to which the expert is blind, and which the apprentice may not yet discern… This keeps us in the spirit of discovery (p. 151).

I gave myself over to experiencing and addressing my world in ways that were novel, more immediate, atmospheric and more personal than before. My affinity to materials and artistic sensibility offered tangential support, but light was an altogether new material for me, evasive and unpredictable. This unfamiliarity heightened my senses, as I set forth on an exploration that was as challenging as it was captivating. I hammered metal sheets, knotted strings of sequins, feathered sheets of silver leaf, cut and draped fabric, and combined these materials with light in paradoxical ways. I created large quills and feathered clusters, large quills and feathered clusters, and assemblages, moving and observing, initiating a slow dance within light, its reflections and shadows, attentive of the intertwining of the emotional and the perceptible. Cloistered in this embodied experience, entranced with design’s sensate capacity, I sought resonance within the evanescent possibilities that unfolded.

2.4 The Former Scientist

Prior to my career as a graphic designer, I obtained a natural science degree. I became familiar with the implementation of certain scientific research methods, systemic modes of enquiry, reasoning and gathering of demonstrable evidence. My Master’s degree research, represented the culmination of a desire to explore an aspect of the natural world. It gave me a valuable grounding in structured questioning and analytical thinking, but it also established a defined perspective. Science offered itself as a standard frame of thinking, with a systematic, objective view of the world.

At the time I finished my studies, it appeared to me that the cultural attitude of society and education discredited the contextual, emotional, and personal (Pallasmaa, 2009, Pink, 2005). However, as I moved through life, and from science into art school and then design, I embraced those other perspectives. My practice required an engagement with additional approaches – from reductive to inclusive, and from rational to emotive. Design exploration was intuitive and contingent; an inherently personal, self-reflective and self-critical process. While I grew as a designer, I developed a disdain for the scientist within me, because I could not see how his defined systems could support my enquiries.

Contextualising my creative practice as artistic research has thus been a homecoming of sorts.

Lewis (2014) posits that term ‘amateur’ should be used without disparagement, in its original sense: “a lover, devotee, a person who adores a particular endeavour” (p. 152).

14 Through dye injection and sectioning, I explored the innervation of the ocelli with the compound eyes in the desert ant, to assist understanding of its ability to navigate by polarised light. The exocyes, entitled Neuronatomische Untersuchungen am Ocellensystem von Cataglyphis Bicolor [Formicidae, Hymenoptera] Investigation on the Ocelli of Cataglyphis Bicolor), was completed in 1985 at the Zoological Department of the University of Zürich, Switzerland.
material choices to enhance the overall commu-
need to bring my self into design processes was
subjugated by service and employment. The
a clear distinction exists. In my experience as
from my history as a commercial designer to
a respected internal place. This place is one
2.5 The Emerging Artistic Researcher
practice. Now, after half a lifetime, the scientist
and cultivating an inclusive, synergetic form of
I was able to combine these supposed binaries
had been systematic and divisive, defining my
processes and principles. My habitual repertoire
to establish a new way of thinking, with fresh
content and terminology become more defined
of this thesis allowed me
to maintain a new way of thinking, with fresh
participatory performances, artefacts and practices is
and working on, developing or evaluating
Griffiths insists that the self is inescapable,
involved and deeply invested in my research.
My ardent self becomes central to the investiga-
tion of arts practices and through these my artistic expression has
developed. Exploring and reflecting upon my
experiential consciousness, considering forms of
meaning that mattered foremost to me, and
investing this into my practice, has been a
demanding process – at times distressing and
arduous, yet ultimately transformational.

There are two interrelated aspects that I
consider significant and influential to my
research into artistic practice: the role of
the self, and a tolerance for uncertainty.
Particularly because of my scientific research
history, understanding these aspects from
the point of view of an artistic researcher/ practitioner became the key to appreciating
and developing artistic research.

2.5.1 The Role of the Self
In artistic practice it is generally not possible
for the researcher to keep himself distant.
My ardent self becomes central to the investiga-tive
effort, because the discoveries are as much
internal as they are external. As an artistic
researcher, I cannot be anything but personally
involved and deeply invested in my research.
Griffiths insists that the self is inescapable,
“because the person creating, responding to,
and working on, developing or evaluating
performances, artefacts and practices is
central to those activities” (2010, p. 185).

In the process of discovering subjective
knowledge, I was required to become a
participant in my own research, because this
represented the best way for me to gain insights.
Thus, the research into my practice came to
be a reflective discourse between the actions
I initiated and my reactions to these. This led
to a softening of my existential boundaries,
and through these my artistic expression has
developed. Exploring and reflecting upon my
experiential consciousness, considering forms of
meaning that mattered foremost to me, and
investing this into my practice, has been a
demanding process – at times distressing and
arduous, yet ultimately transformational.

2.5.2 A Tolerance for Uncertainty
Another aspect of artistic research that has
affected me is its embrace of the ambiguous
and the obscure. As such, it counters the
academic tradition of scientific analysis,
which often upholds the mandate to classify
and compartmentalise. Yet there is another
implication, and this has transformed my way
of thinking. Polanyi and Prosch assert that
“scientific rationalism has indeed been the main
guide to intellectual, moral and social progress,
since the idea of progress first gained popular
acceptance about one hundred and fifty years
ago” (1975, p. 25). Dewey claimed in 1934 that
an uncertain and ambiguous situation creates
tension, which in turn precipitates thinking,
allowing us to arrive at new knowledge (Dewey,
1934/2005). Yet the objective of relieving
tension by creating order, certainty, and
universal truths that are demonstrable, does
not apply to artistic research. With the redefi-
nition of “knowledge” under the postpositivist
paradigm\(^\text{16}\), I can still find personal meaning

\text{\(^\text{15}\) See Chapter 3.1, Footnote 20, for an elucidation of the term “practice-led”.}

\text{\(^\text{16}\) Once determined as factual, objective and universally
established, the term “knowledge” has been epistemologically
redefined (Polanyi, 1967; Gray, 1996). As such, it has
freed itself from the traditional scientific boundaries and
broadened its scope throughout culture and society. The
classic dichotomy between episteme (abstrat knowledge)
and technē (knowledge through and of practice) appears to
be dissolving, accepting a more associative connection. This
tenet is the foundation of humanist research in sociology,
psychology and the arts, which produce alternative modes of
knowledge, such as corporeal and tacit.}
through practice without the need for reductivist generalisation. I can draw on and contemplate resonant aspects of the unknown without an obligation to decipher and understand everything. ‘Not-knowing’ is no longer a state of anxiety or pressure, because leaving things in the unknown may be perceived as an aspect of their very existence. It may also afford them a more appealing mysterious quality.

It was satisfying to work through my artistic enquiry free from traditional prerogatives. As an observant aesthetician, my attitude was able to resemble one of ‘disinterested delight’ (Kant, 1951) – savouring enjoyment by itself without constant enquiring after purpose. Not having an answer was actually liberating; opening up distinct opportunities for tacit engagement and awe, and being present to the moment. Moreover, Bitbol (2014) argues that meaning displaces attention, as I engage with the abstract realms of thinking, they draw me away from the immediacy of sensing. Therefore, contemplating meaning during an artistic experience may distance me from the experience itself. The unfolding experience must be appreciated with respectful sensate concentration, fully in the moment. This realisation changed my bearing. Instead of adopting the disposition of a troubled artist facing the chaos and wondering how to deal with it all, my attitude became that of the mindful researcher accepting mystery.

Through acceptance, André (2014) suggests:

we open up an infinite inner space, because we have given up the idea of filtering, controlling, validating and judging everything. In this light, acceptance means enriching ourselves and allowing the world to come into us, instead of trying to make it in our own image and take from it only what suits and resembles us (p. 177).

Acceptance, therefore, represents a higher degree of letting go. To a greater extent, my research and my resulting exhibitions subscribe to Keats’ (1817) notion of ‘negative capability’. This term designates an approach that allows mystery to remain unresolved, without grasping for rational context.

For me, the appeal of this thesis is that I could permit myself to enjoy the captivating and inspiring sense of mystery. Working conscientiously within ambiguity, not giving in to judgment or forcing answers, I was enabled to experience unconditional wonderment. Sitting attentively in my light installations, absorbed and accepting, I experienced visceral moments that were not dissimilar to those beautiful adolescent evenings in church. Liberated from the necessity of finding a formal intellectual answer, I was invited into a different mode of apprehension. I was able to momentarily relax my focused consciousness (Pallasmaa, 2009), coalesce with sensations of spiritual belonging and beauty, and find an authentic understanding through this embodiment.

17 Keats’ original passage is from a letter to his brothers, written in 1817: “Negative capability – that is when man is capable of being in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason” (Keats, 1958).
The structural and communicative aspects of an artistic research thesis are concerns that warrant consideration. Although these aspects sit outside the questions of the thesis, I suggest that they cannot be separated. They contain a number of issues that have a determining influence on the researcher/practitioner, on the final thesis, and on its capacity to reach the reader. These issues are discussed below.

3.1 Components and Approach

This doctoral thesis is presented in two parts: a physical installation of created artefacts, and this written exegesis. Together they form a whole and therefore should be considered as two parts that speak in conjunction with each other. Each part concerns itself with a different aspect of my artistic research.

The trajectory of research experiments culminates in the artefactual installation. This presents the thoughts and outcomes of my research in non-verbal, tangible form, as an embodied experience. In contrast, the exegesis serves as a document that discursively contextualises the research and unpacks aspects of the enquiry. Although the context of the artefactual outcomes is described with words and imagery within the exegesis, a richer understanding can be obtained through experiencing the physical installation (Candy, 2009; Mäkelä, Nimkulrat, Dash & Nsenga, 2011).

The thesis is practice-led. It follows a model where the researcher investigates his creative processes, creates artefacts through these, and then interprets and explicates both the processes and the artefacts. Thus, artistic practice is the tool of performing the research and also presenting the outcomes (Arnold, 2012; Frayling, 1993; Nimkulrat, 2012; Scrivener, 2000). In this particular form of exploration, active practice and research are intertwined. The practice (or in my case: the material experiences through making) drives the reflective thinking and generates new insights (Mäkelä & Routarinne, 2006).

19 The word ‘artefact’ is used here in the broadest sense. It does not necessarily define a physical and finished object, but rather any outcome that has been produced through practice. Contemporary scholars refer to artefacts as transitional objects of experience (Scrivener, 2000), or methods of intervention (Griffiths, 2010).
21 Considerable discourse exists around comparisons between practice-led and practice-based approaches. Candy (2009) bases her comparison on whether the research demonstrates knowledge through created artefacts or not. In her evaluation then, this thesis would be practice-led. Artefacts and artworks are admittedly important elements, particularly as legitimisation of the practice or as part of a submission for a higher degree (Gray, 1996). European scholars (for example Mäkelä & Routarinne, 2006; Mäkelä, Nimkulrat, Dash & Nsenga, 2011; Nimkulrat, 2009) seem to embrace a broader reasoning, and have largely adopted the term practice-led as a way of emphasising that practice and processes lead the generation of new knowledge. Moreover, the practitioner is the researcher conducting the enquiry. This reasoning shifts the attention from the artefacts to the practice itself. I follow this definition, thus designating this thesis as practice-led.
These insights lead to further iterations of practice and potentially more or other artefactual outcomes. The cumulative outcomes of the exploration are then presented to viewers in the form of designed installations. These installations constitute a sharing of insights and understanding, and aim to make a valid contribution to human experience.

3.2 Challenges

Writing a practice-led exegesis poses some challenges. In general, a practitioner/researcher needs to be knowledgeable in both practice, and professional and personal philosophy (Imel, 1992). Technical and/or manual capability, an astute reflective awareness, and the ability to structure an approach are some of the important ingredients. Yet verbal articulation is the glue that ties them together. Hamilton (2014) notes:

“As a medium for exploration, planning, reflection and drawing conclusions, writing is integral to the research process. And as a mode of communication, it provides the means to articulate the contexts, methodologies and outcomes of research (p. 1).”

As non-verbal meanings are drawn from qualitative engagement with materials and processes, the reflective practitioner needs to verbalise these meanings through description (for documentary, review or dialogue). This inter-modal articulation and writing that the case for the thesis’ contribution to the wider field is made. Brabazon & Dagli (2010) acknowledge that:

“Language choice is of concern in order to communicate abstractions into a rational and logical argument, and construct a study that weaves the critical and analytical examination with a dynamic, reflexive, creative and interpretive discourse. (p. 38).”

However, the language used in practice-led research discussions eludes a clear definition. It is often described in terms of its challenges rather than its encompassing characteristics (Brabazon & Dagli, 2010; Kroll, 2013). The underlying predication is that the creative practice researcher must strive to embrace the approaches of the researcher as well as the practitioner – although these two are arguably inherently divergent. The practitioner is personally invested in the study, and therefore looks inwards. He seeks to relate subjective accounts of the methodologies, creative processes, interpretation and evaluation. The researcher, however, is methodical, and seeks to describe the context, the methodology and the process of enquiry in an objective manner. He looks outwards, to established research, exemplars and theories. An integration of these two divergent approaches requires a writer to assume a potentially conflicting polyvocality.

While objective claims may be made concerning the research, the personal relationship with the practice still needs to be retained (Hamilton, 2011). This synthesis creates a new type of discourse, in which a writer needs to reconcile the diverse perspectives (Brabazon & Dagli, 2010; Hamilton, 2011; Ings, 2014; Kroll, 2013).

Thus, to compose a written document of conceptual integrity, the practitioner/researcher must consider how he positions himself as narrator, and how he constructs his voice, not least for his diverse audience (Ings, 2016; Kroll, 2013). Ings (2014) asserts that “for the graphic designer, finding the voice(s) for a text that authentically speaks to one’s practice can be as much a design issue as the thesis project itself” (p. 5). In this thesis, my explorations are personal, and embodiment is integral to the outcomes (Griffiths, 2010). Since the creative work is poetic, Nelson (2004) posits that the exegesis must rise to this character.

Therefore, in order to establish an expression that was authentic and that honoured the bearing of the artistic output, I was challenged to develop a distinct form of diction for this exegesis. The careful choice of words, sentence structure and rhythm became relevant as signifiers of my stance and personality as a practitioner. My voice, reflections and opinions have shaped the narrative, sometimes augmented and validated by other authors. Their voices have occasionally been referenced throughout the text, but I re-authored these by way of their interweaving within my writing, in order to retain its character. In general terms, I have aimed to establish a form of writing that Arnold (2012) calls ‘subjective academic narrative’, because this “practices the theory of academic knowledge as personal and draws together the Cartesian binary of personal and intellectual” (ibid., p. 9).

Although this exegesis is understood as an explanatory discourse to the creative artefacts and installations, I believe it is the part of the thesis that has the longer life span. From this point of view, the exegesis must do more than contextualise the creative work and demonstrate the author’s subjective style. I suggest that the exegesis should engender involvement: enticing a reader with text and form that re-imagines the creative practice, or at least the spirit of its genesis. The style of the exegesis can thus be understood as the reflection of a distinct ethos given in the practice (Nelson, 2004). Therefore, I must draw the voice that shapes and presents this ethos from the authenticity of the artistic processes. Although the thinking may be expressed and summarised retrospectively, the personality of the exegesis may help support and substantiate my integrity as a creative practitioner.

Another challenge inherent in writing a practice-led thesis arises from the circuitous nature of the exploration. The heuristic methodology of making, material experiences and reflective practice follows a trajectory that is seldom linear. Pallasmaa notes that “design is always a search for something that is unknown in advance” (2009, p. III). With the exegesis, there is freedom in the style of the narrative that re-imagines the creative practice, and this freedom can be used to demonstrate the author’s voice.
Accordingly, the path of exploration that the practice takes cannot be predetermined. Shifts in focus, evolving questions, and varying success with experiments generally bring about changes of direction. These changes are documented as part of the research process, and could be recounted within the (generally retrospective) exegesis to give readers a deeper understanding of the practice vagaries. The risk, however, is that comprehension may be endangered if the writing attempts to emulate the multi-directional, circular or incoherent sections of the explorative journey. To ensure communicative clarity, I was required to find a certain compromise in describing the research trajectory – even though this may demonstrate a logic that did not unfold as such in real time (Griffiths, 2010). In general, communicating the research through the exegesis becomes a structural challenge. Making reasoned decisions around this structure can ultimately help support my claim of presenting a worthy contribution. This exegesis aims to follow the model of a ‘Connective Thesis’, a term defined by Hamilton and Jaaniste (2010) to denote a composition that is able to connect the research outcomes to the ongoing research trajectory while striking a communicative balance.

In this thesis, the chapters focus on introducing my own position as an artistic practitioner, the philosophical framework, the research system of enquiry, the contextual positioning of the practice, where and how the thinking and the practice intersected, and the knowledge gained. Through this chapter structure I have reduced the temporal emphasis of the unfolding trajectory in favour of other, more pertinent aspects of practice, philosophy and experience. The journey as an iterative discourse is no longer the central focus, which is why this is presented in Appendix 1 as a series of phase summaries.

3.3 Presentation

A final challenge for artistic research theses in general is the issue of visual presentation. Graphic designers in particular have been renegotiating the physical form of their doctoral exegeses (Ings, 2011, 2014, 2016). This effort pursues three ideals: improving the integration of words and imagery; achieving greater expressive congruency between the exegesis and the practice; and emphasising a personal and poetic vision through the document’s communicative capacity. A designerly approach to the page layout and navigation may challenge certain academic traditions and expectations, yet such an approach holds the potential to “communicate meaning where traditional constructs of writing are unable to reach” (Ings, 2011, p. 147). Often the artefacts cannot be directly included in the exegesis or interwoven with the text. Therefore, I believe that a designerly approach can assist with keeping their spirit present within the document pages and in the readers’ imagination.

Beyond these issues of integration and personality, the designerly treatment of the exegesis also represents an effort to widen its appeal beyond academia, particularly among creative practitioners. Yet by making the document more inviting to access, I am in turn engendering a critique of my visual communication capabilities. Notwithstanding its content, the exegesis becomes a public demonstration of my ability to design and present information (Ings, 2016).

Because of my commercial experience in graphic design, I was conscious of these concerns. The many parameters of presentation given through this exegesis harboured implications that I could not ignore. I recognised the need to consider and meticulously control the design aspects, beyond satisfying an aesthetic potential or my feelings of pride. Its presentation was affectionately crafted, and as such underwent the same careful assemblage as the artefacts of my enquiry. Early in the process of writing I already commenced with composition, probing the graphic design of singular unfinished chapters of text. The tone and structure of the exegesis were just as important to me as its written voice, therefore every page needed to be purposefully orchestrated. I tested and decided on each of this document’s visual modes (format, layout structure, font choice, size and style, image/text and spatial relationships) for the manner in which they enhanced its emotion, character, purpose and clarity. Accordingly, I had numerous test pages printed, in order to review the paper tactility, the print colours and the depth and contrast of the photographic imagery. Referencing traditional and formal document styles yet softening this with my own contemporary character, I reflected on and refined all aspects over a number of iterations. Text and imagery were balanced, and these were carefully arranged within the white space26 of the pages.

Through its crafted intent, the exegesis shows a distinct identity; it has become an extension not only of the values of the enquiry but also of myself as a reflective practitioner. My aim was to give the exegesis the respectful sophistication dictated by the contextual circumstances of the Doctor of Philosophy submission, combined with a contemporary ease to foster accessibility. Although I understand that these two parameters can be contradictory, through sensibility and intricate manipulation of visual modes I believe that aim was achieved. Without forsaking the rigour and integrity of scholarship, this document is situated closer to the etymological origin of an exegesis (Ings, 2013a). My hope is also that, through this crafted personality, the exegesis speaks differently to readers, engaging their senses as well as their minds.

In conclusion, it can be said that this exegesis has aimed to establish its own voice and visual identity. These two could connect the reader only more compatible with the field of artistic practice research, but also more assertive in terms of association. Because artistic research is still differentiating itself from traditional notions of research, I believe that this exegesis has an obligation to contribute to this effort by making a clear statement about where it is positioned in the field.

26 In my opinion, the white space is not emptiness; it represents light, extension and surface; these important aspects of the thesis. Therefore, I thought of this white space as a critical design component, and I saw it not as an area to be filled, but one with capacity and purpose. For example, white space mitigates the communicative volume, allowing readers to pause and reflect between words and images, instilling a sense of calm to the experience of reading. White space also frames imagery and text, giving these a measured balance and allowing contextual connections. Most importantly, white space defines the document’s composures, signaling and establishing its authority to the reader.
Although a review of contextual knowledge relating to this thesis reaches back 800 years, the enquiry is positioned within contemporary artistic practice. There are two distinct concepts that have contributed to this practice: Bonaventure’s medieval metaphysical theory, and Merleau-Ponty’s notion of embodiment and experience.

Bonaventure’s theory of light forms the foundation of the research, provoking its core questions. The thesis explores light as a connecting agent, affective in its capability and qualities. Circumstantial background details are provided in this chapter so that his theory may be more effectively contextualised. Merleau-Ponty’s phenomenology provides the ideological approach to considering Bonaventure’s ideas. The notion of embodiment informs a way of thinking about the apprehension of light and its physical, corporeal manifestation.

This chapter also discusses the alignment of Bonaventure’s reasoning on cognitive development with that of contemporary scholars. Craft is illustrated as the tenet that defines this process of exploration, traversing the realms that Bonaventure originally defines as making–sensing–thinking. By manually making and sensing, discoveries and insights surface and new thinking can take form.

The chapter concludes with a positioning of my work within contemporary art. An overview first introduces artists who focus on light as a subject matter, and aspects of their work that are relevant to the context of my enquiry. These aspects are then compared to the artistic practice of the thesis.

4.1 Saint Bonaventure and Light

4.1.1 Saint Bonaventure

Born Giovanni di Fidanza of Tuscany in 1221, Bonaventure became a well-respected scholastic philosopher and theologian (Figure 4.1), leaving a legacy of complex metaphysical thought (Delio, 2001; Miccoli, 2001; Noone & Houser, 2014).

A mystic, leader and arbiter, he attempted to integrate reason and faith, and “keep metaphysical speculation within the bounds of common sense” (Ozment, 1981, p. 77). Although not much is known about his life, Bonaventure
epitomised the spiritual zeitgeist of his time. In 13th Century Europe, growing scholasticism saw universities emerging and challenging the monastic intellectual hegemony (Delio, 2001, Hayes, 1996). The revived concept of Aristotelian demonstrative science and Islamic and Jewish scholarship were testing ecclesiastic authority (Hayes, 1996; Noone & Houser, 2014; Polanyi & Proske, 1975; Schumacher, 2009). New religious orders appeared within Catholicism, such as the Dominicans and the Franciscans, the latter to whom Bonaventure was drawn. He studied at the University of Paris, later becoming a lecturer there himself and holding the Franciscan Chair in that city. At 40 years of age, Bonaventure was appointed Minister General of the Franciscan Order. In reforming the order he developed a theological training programme for students (Schumacher, 2009). He went on to become Cardinal Bishop of Albano before his death in 1274. Regarding as one of the prominent doctors of the Catholic Church for his theological contribution, Bonaventure was canonised in 1484 and awarded the sobriquet ‘Seraphic Doctor’ (Noone & Houser, 2014).

In Bonaventure’s times, two main traditions of thought existed in Europe. One followed the teachings of St Augustine, a 5th Century theologian. Augustine was considered profoundly influential to Western Christianity, advocating the Divine presence centred within humans. In his thinking, knowing or reason was not attainable without revelation (Stewart, 1987). The other tradition, supported by Bonaventure’s contemporary Thomas Aquinas, endorsed the re-emergence of Aristotelian logic, and an approach that emphasised the discovery of God and universal ideas through human experience (Ondrako, 2006). Bonaventure’s theological philosophy represents a mystical synthesis of these two traditions, attempting to balance the intellectual and affective life.

4.1.2 Divine Light

Historically, light has been understood as a force that bridges the visible and the abstract, with properties extending beyond radiance to wisdom and clarity. Light metaphysics was developed from Babylonic culture by Plato and Greek scholars such as Plotinus, and was passed down to Christian philosophers (McAdams, 1991, Miccoli, 2001). In biblical terms, light originates from God and is ontologically different from the light of the sun. As an obscure likeness, the material sun was invoked merely to illustrate the spiritual light source to disciples (Schumacher, 2009). Spiritual light, however, is thought to have a specific quality; it is deemed immutable and timeless: “So we fix our eyes not on what is seen but what is unseen; since what is seen is temporary, but what is unseen is timeless” (2 Cor. 4:18). Bonaventure asserts that although many rays shine forth to illuminate, they all originate from one single source.

In medieval traditions, light was associated with clarity through Divine providence and the illumination of the human mind. This became an essential axiom in spirituality and Catholicism, reflecting the human–Divine nexus (McAdams, 1991). In the 5th Century, Augustine of Hippo described an explicit metaphorical journey as a form of spiritual redemption. Archetypal light, he suggested, radiates from the Divine as a life force and produces a path that can be followed.

This affective movement guides humans from the exterior, sensate world to the interior mind, and delivers them from there to the superior mind, namely God (McAdams, 1991, Noone & Houser, 2014). Divine light is therefore argued as the source and the goal, the beginning and the consummative completion of the spiritual journey (Ondrako, 2006; Schumacher, 2009). Bonaventure expanded this Augustinian concept of enlightenment and integrated his own cognitive theories (Hayes, 1996; Schumacher, 2009, Stewart, 1987). In his 1259 essay Iterum Meritis in Deum he described a directional and progressive journey of the human mind to the Divine as an ascent with the goal of the beatific vision. He elaborated on this idea in his late work De Reductione Artium ad Theologiam (On the Reduction of Arts to Theology) – and it is this thinking that forms the main point of departure for this thesis.

4.1.3 Leading the Arts back to the Divine

In Reductione, Bonaventure detailed a distinct connection between manual craft and Divine truth through light. He established an ascending hierarchy between four realms: mechanical skill, sense perception, philosophical capacity and Divine wisdom. Guiding light successively falls through these realms, disclosing a connecting path from one realm to the next higher one (Hayes, 1996, Miccoli, 2001). In Bonaventure’s words:

The skills of the artisan are gifts given by God for the purpose of disclosing God to mankind, which purpose is achieved through four lights. The light of skill in mechanical arts, which discloses the world of artefacts; which light is guided by the light of sense perception, which discloses the world of natural forms; which light, consequently, is guided by the light of philosophy, which discloses the world of intellectual truth; finally, this light is guided by the light of Divine wisdom, which discloses the world of saving truth (Bonaventure, transi. Hayes, 1996). Thus, according to Bonaventure, as we make and improve our practical understanding of the material world, we are illuminated through a sensory, subjective experience. This sensate apprehension is accompanied by feelings, instinctive and prior to reasoning. As the instinctive pleasure gives way to intellectual reflection, we are led to new thinking, generating fresh ideas and understanding (Noone & Houser, 2014; Schumacher, 2009).

27 Mesopotamian religions revered a solar deity called Shamash, god of justice, who was all-seeing and consequently all-knowing (Black & Green, 1992).
28 According to Genesis 1.3, light was created on the first day, before the sun and the other heavenly bodies (Hayes, 1996).
29 Making a practical comparison, Plotinus proclaimed “We would like to see the operating force, which flows, as it were, from Him, as if it flowed from the sun” (quoted in Miccoli, 2001, p. 70). Bonaventure explains causality by invoking the sun as a comparison to unseen light. He describes the sun as the highest of heavenly bodies, responsible for the development of all material forms. From its place in the heavens it gives light to the moon and stars. By its life-giving heat, it makes the plants, seeds and trees live and blossom. Its power even extends beneath the earth where it produces the metals. In his work Brevisque, Bonaventure explains “by reason of its height, movement and union of elements caused by their power and heat, the heavenly bodies aid in the production of minerals, vegetables, animals and the human body” (Bonaventure, Brevisque, 41 V. 241, quoted in Hayes, 1996, p. 30).
30 The word ‘hierarchy’ has its roots in spirituality, originating from ‘hieros’ (sacred) and ‘arche’ (principle) (Delio, 2011).
31 Ondrako claims that Bonaventure thus incorporates the insights of the Arts into the service of theology (2006). I surmise that this is perhaps a genuine desire because only the Arts are able to tangibly and emotively interpret and communicate spirituality.
4.1.4 Activating Potential

According to the Aristotelian theory of hylomorphism, popular amongst medieval scholars, all beings are composed of matter and form. Matter is the same in all things, but gives independent existence to form, which varies (Hayes, 1996). In other words, matter contains potentiality that is informed or activated by light, the first form according to Bonaventure. Plotinus commends “…the victorious presence of light – incorporated reality, reason, idea – over the obscurity of matter” (Miccoli, 2001, p. 71). Divine light may thus be interpreted as the principle of activity, permeating us as a spiritual life force (Hayes, 1996). It works with the principle of activity, permeating us as a spiritual life force (Hayes, 1996). It works with the human intellectual faciles to a “regulative and moving cause”, ensuring the human mind grasps the immutable truth (Noone & Houser, 2014, chapter 4, para. 6). In other words, we might say that light, in its illuminating role, activates what exists as potential in our minds, giving it operational capability from an understanding of higher principles (McAdams, 1991; Schumacher, 2009; Tin, 2011).

Divine light is generally understood as metaphysical; a conceptual and unseen energy. Yet Bonaventure draws a discernible association between the metaphysical and the physical, and defines light’s sensate manifestation. He establishes three metaphysical terms of aesthetic perspective:

Considered in itself the first form of all bodies, light is called lux. It emanates and thus informs corporeal beings. As it radiates back from these beings, it is called lumen. When this light is viewed as it becomes perceptible, it is called color (Hayes, 1996, p. 5, quoting from Bonaventure’s first Book of Sententiarium).

Perceiving it through our eyes, color is in metaphysical terms the final visible, albeit variable, manifestation of lux. It denotes a quality determined by the sensitivity, reflectivity and matter of a corporeal body (Hayes, 1996; Pleij, 2002). In other words, visible light expresses not just the substance but also the essence of a distinctive material body, radiating in the vanguard of creative revelation.

4.2 Illumination

In spite of its medieval origins, the term illumination is not alien to contemporary creative arts discourse. In this context however, it is disconnected from the spiritual telos. Illumination is commonly understood as inspiration, the part of a creative process where “deep engagement with the act of unconscious thinking through making gives rise to insights and new ideas” (Pallasmaa, 2009, p. 92). Writers such as Mackinnon (1976) and Lawson (1980/2005) distinguish illumination as a discrete phase that follows incubation. They posit that ideas suddenly emerge after a period of withdrawal from conscious attempts at problem solving.

Within creative arts, explanations or descriptions of illumination remain indirect and obscure; often the process is circumscribed by evoking poetic analogies. The focus is normally on the artist, with no reference to a spiritual dimension, to a Divine relationship, or to light. Sel-a-Smith (2002) describes illumination as: “that moment when there is a breakthrough in conscious awareness of wholes and clustered wholes that form into themes inherent in the question. It may bring new experiences, new interpretations, new meanings, or it may correct distorted understandings (p. 67).” Rajchman (2000) depicts it as “the surprise of what is not yet possible in the history of the spaces in which we find ourselves” (p. 163).

Here, according to Serres (1995), “objects and subjects swirl in extravagant juxtapositions, space and time fold and gather in new arrangements and the world is topsy turvy” (p. 34). Pallasmaa (2009), in describing the mental and material flow between the maker and the work, states that “artists report they are merely recording what is revealed to them involuntarily beyond their conscious intellectual control” (p. 82). Although not alluding directly to illumination, this description of revelation is arguably closest to medieval metaphysics and Bonaventure’s assertion that archetypal light reveals “truths which transcend reason” (Hayes, 1996, p. 43).

Illumination is not anachronistic to creative arts. Indeed, it represents a phenomenon that many artists identify: a precipitous apparition, to the practitioner’s astonishment, in the process of creative pursuit. Combining the theories of hylomorphism (discussed under 4.1.4) and Bonaventure’s Reductio, we might say that illumination constitutes a process of giving form to the not-yet-known. However, describing or explaining this phenomenon is not the aim of this study. Instead, I seek to explore illumination as a metaphysical experience through and within practice. The focus in the thesis remains on the bearing of the self within this sensate and fragile phenomenological aggregation.

4.3 Merleau-Ponty and Embodiment

Although Bonaventure’s theory of light constitutes the foundation of this thesis enquiry, Merleau-Ponty’s concept of embodiment informs the framework of how I consider the apprehension of light and its physical manifestation. Underpinning this approach is a corpus of thinking related to phenomenology.

4.3.1 Phenomenology

Phenomenology33 examines the interaction between physical and social environments and our perception, and how this structures our experience and subsequent understanding. It deals with our consciousness in that it seeks to reveal and describe our perceptual, embodied34 experience of the world, and how this may influence cognition (Cerbone, 2006; Flynn, 2011; Nimkulrat, 2012).

Husserl (1989) originally drew attention to the body, claiming it was the collective organ of perception, and also the medium of all perception. Drawing on this notion, he posited that the body is not only a thing, but also dynamic embodied existence (Cerbone, 2006, p. 98). In Merleau-Ponty’s view, perception has an active dimension, an intentional involvement in and an openness to the world. Through this involvement, the perceiver tacitly experiences objects in terms of meaningful relations (Merleau-Ponty, 2012). In practical circumstances the content of perception is not semantic, but an intuitive coherence of things. An experience is thus informed by emotional, aesthetic and action-related parameters. These are situated in the body, and are thus particular to the perceiver (Nimkulrat, 2012). In order for us to have a consciousness of the world, we must experience it bodily (Husserl, 1953).

4.3.2 Apprehension

According to Pallasmaa, the body is “under-valued and neglected in its role as the very

32 In neoplatonist thinking, form represents intangible idea – immutable, perfect and everlasting (Noone & Houser, 2014).

Bonaventure regards light as the first form because he believes it possesses the unique capacity to mediate between corporeal and spiritual realms.

33 A phenomenon is “that which appears” to the beholder, something that comes into being (Tin, 2011, p. 242).

34 Embodiment is a psychological term that denotes the role of our bodies in shaping our minds.
our bodies and environments, because “all we see is seen in our experience and interactions (Merleau-Ponty, 2009, p. 11). Our experience and interactions are shaped by the world around us and our physical environments and various spatial or temporal conditions actively shape our experience and interactions (Merleau-Ponty, 2012, Nimkulrat, 2012, Pleij, 2002). Conversely, we shape the attributes of our physical environments, because “all we see is seen in the perspective of our body and the history it embodies” (Tin, 2011, p. 224). In other words, we apprehend our world subjectively through our bodies 34, and this process is governed by our negotiation with momentary circumstances, and by our life experiences, sensibilities and memories (Heidegger, 1990; Pallasmaa, 2009). An experience is filtered, or “surrounded with references to the past and future, to other places and things, to human possibilities and situations” (Merleau-Ponty, 1948/2004, p. 9). Thus we shape all new knowledge by the way we know it, it becomes inseparable from our perception (Dewey, 1934/2005, Seago & Dunne, 1999). Pallasmaa (2009) suggests that “we live in worlds of the mind, in which the material and the mental as well as the experienced, remembered and imagined, completely fuse into each other” (p. 127). We extend ourselves into that which we find coherent, physically and cognitively, living in the meaning we are able to discern (Polanyi & Prosch, 1975). The result is a unique perspective, personal and visceral.

4.4 Knowledge through Making

Bonaventure's metaphysical theory of light maintains that thought is preceded by making/creating and sensing. Making is the inception of a progression that yields insight, learning and understanding. Our capacity to make is inextricably linked to our sensory faculty, which is in turn linked to our thinking capacity. The relationship of making-sensing-thinking is linear and robust, with light as the catalytic agency that provides connectivity, stimulus and purpose (Hayes, 1996). Arguably this axis represents the foundational process of cognitive development. Interestingly, Bonaventure makes it clear that the process is dynamic and proactive. Although human beings may be assisted by light, their motivation is what drives the development.

The experiential process between making and reflecting has long been an area of interest for scholars in philosophy and pedagogy. Creating understanding is an industrious dialectic process of interacting with materials and objects. These things influence our perception, they do something to us in return (Dewey, 1934/2005). This interaction represents an involvement, whereby the practitioner probes and experiments (Schün, 1983), so that intuitions may surface. Certain contemporary visual design researchers align making and thinking in a similar manner. For example, Ings (2013b), Pallasmaa (2009), Peer (2011), Rosenberg (2008) and Sennett (2008) assert that working with a material may provide insights that help develop a practitioner’s thinking. Schön (1983) claims that doing and thinking are complementary. He suggests, “Doing extends thinking in the tests, moves, and probes of experimental action, and reflection feeds on doing and its results. Each feeds the other, and each sets boundaries for the other” (p. 280). Crow (2008) posits that in craft, or making, hands bring a unity of working and learning. We link knowing and unknowing “in process and disposition” (Rosenberg, 2008, p. 112), applying a “perceptive ability to generate surprises” (Crow, 2008, p. 25). Similarly, Pallasmaa (2009) declares, “We are bound to admit that the hand is everywhere in our body, as well as in all our actions and thoughts… The hand ‘draws’, pulling the invisible stimulus into the world and giving it shape” (p. 92).

Heidegger (1968) states that every motion of the hand in every one of its works carries itself through the element of thinking. In concurrence, Pallasmaa (2009) interprets making as an externalising of complex thoughts. In general terms, craft may be understood as a process of thinking through materials (Crow, 2008, Ings, 2013; Marzotto, 2009; Peer, 2011). This process constitutes an attentive and sensate dialogue between the maker and the material, allowing meaning to surface. Within this coalescence of making and thinking resides the maker’s sensate capacity at the threshold of his own existence and the material existence (Polanyi, 1967). Sensing allows the artist to learn and define associations to and with materials. As parameters change however, so do these associations, disrupting the prior understanding. This instability may generate unexpected discoveries (Ings, 2011) that in turn influence and realign the nexus of making-sensing-thinking. 36

4.5 Artistic Practice with Light

Arguably, all visual art uses light in some form. Artists work with light in a myriad of ways, therefore this review of knowledge represents a concentrated genealogical survey. I will only highlight examples relevant to the context of this thesis, i.e. where light itself is the subject of interest and not a matter or means subservient to expression.

Historically, J. M. W. Turner (1775-1851) was an influential initiator of art that considers light thematically (Figure 4.2). Although Turner lived more than 100 years ago, he is regarded as a modern creative force for his pre-impressionist development (Johns, 2013). Over the course of his life, Turner’s attention moved from narrative clarity to the suggestively amorphous; a representation of vision rich with atmosphere and luminosity (Osborne, 1970; Schama, 2006). Light, to Turner, was the emanation of God’s spirit, and through his engagement with the natural world Turner thus became a self-proclaimed purveyor of Divine truth (Seearle, 2009). A generation later, impressionist painters such as Claude Monet similarly shifted their emphasis away from material substance to appearance itself (Boehm, 1986). Gerds (1984) summarises this perceptive shift as one from solid and substantial to the ephemeral, from landscapes to light and atmosphere, from timelessness to transience.

As technology advanced from the early electric light bulb, artists developed an increasing interest in experimenting with actual light as material and subject (Sheets, 2007). Notable light-art works in the 1920’s and 1930’s were developed through photography

34 An example is given by Pallasmaa (2009), who argues that “touch is the unconsciousness of vision”, and through this hidden tactile experience the sensorius qualities of the perceived object are determined (p. 102).

36 This is the principle of heuristic enquiry (see Chapter 5.3).
and projection by modernist artists such as Man Ray (1890–1976), László Moholy-Nagy (1895–1946) and Thomas Wilfred (1889–1968). Promoting a fusion of art and technology, Man Ray created *Rayographs* (Figure 4.3), establishing a style of photography without the use of a camera. Popularised by Moholy-Nagy under the name *Photograms*, these explorative images were generated by placing objects on light-sensitive paper and exposing them to light (Johnson, 2000). This cameraless technique provided outcomes that were more abstract than representational, adding an element of unpredictability and surprise. These images took photography beyond documentation for the first time, uncovering a new reality by merging the known and the unfamiliar. While Man Ray went on to embrace the Dada and Surrealist movements in France with other art forms such as poetry and sculpture, Moholy-Nagy saw himself primarily as a designer. His vision was to employ photography as a means to create a new way of seeing the world. As a stage designer, Moholy-Nagy pioneered the construction of kinetic sculptures that explored moving light, shadow and reflections on walls. In 1919 Wilfred also worked with lights, projected by an organ when played. This system became the precursor to the Lumia organ, where coloured light projections originated from, and were defined by sound and music.

In photography, Man Ray and Gjon Mili (1904–1984) pioneered the idea of capturing the transience of time embodied in a movement or gesture. According to Boxer (1996, para. 8) this was a choice of "suspension over
motion”. Mili, originally a light research engineer, was also able to capture a sequential movement using stroboscopic photography that combined an electronic flash with prolonged exposure times (Mili, 1980) (Figure 4.4). In the tradition of Ray and Mili, contemporary ‘light painting’ artists such as Sola, Alan Jaras, Sato Tokihiro, Patrick Rochon and Julien Breton create fixed sculptural light forms. Breton (born 1979), for example, uses a range of hand-held lighting to draw carefully practiced, body-based calligraphic movements in selected spatial environments, capturing the results of his performance with long-exposure photography (Figure 4.5). Zehra describes the level of energy and movement in his work as “mesmerising, leaving the viewer pondering in thought” (2011, para. 4).

Another group of contemporary artists use light to create sculptural form. Krichalka calls these “promiscuous hybrids of multiple media, a wild miscegenation of categories” (2012, para. 3). Indicative of such artists is Anthony McCall (born 1946), who creates sculptural moving forms using immaterial beams of light (Figures 4.7 and 4.8). Sooke says “McCall’s paradoxical forms of ‘solid light’ seem to defy physics – and yet there they are, beguiling us with otherworldly beauty” (2011, para. 2).

A distinctly more contemplative photographic approach is that taken by Finnish photographer Jorma Puranen (born 1951). He observes and documents how light interacts with the texture of portrait paintings, recomposing these to add new narrative and meaning (Figure 4.6). Hodgson suggests that “Puranen’s miracle is to use the same glare both to hide and to reveal. He has found a way of paying his tribute to masters of light in their own currency, light itself” (2012).
Johnson mentions how, as he interacts with these veils of light, he ponders the “tricky gap between subjective experience and objective reality” (2013, para. 4). The effect is described as “calm, meditative, otherworldly – as if McCall is expertly manipulating moonbeams, or somehow tethering the Northern Lights within a gallery” (Sooke, 2011, para. 7).

A phenomenological rather than technological interest in light appeared after the 1940s in the United States. Artists such as Mark Rothko (1903–1970) became interested in creating a physical response of the (viewer’s) body to light. Rothko also recognised the importance of immersion, often producing images that were large-scale murals. These aspects were then developed further into spatial installations by artists like Robert Irwin (born 1928), Bruce Nauman (born 1941), Doug Wheeler (born 1939) and James Turrell (born 1943), who in the 1960s began creating projected works.

Here, contemporary light art finds its definition as “art that buttresses and captures light, often for its own sake, in a grandly hypnotising way (Singer, 2013). Turrell and Wheeler now create powerful immersive spaces of light, which require a sense of surrender of the viewer (Hylton, 2013). (Figures 4.9 and 4.10).

Both of these artists are also pilots, and both comment that flying small aircraft through big skies over rural America has given them an otherworldly aspect of light, space and isolation (Kennedy, 2012; Hylton, 2013). Although raised as a Quaker (originally called “the children of light”), Turrell’s work is not spiritual in nature. Instead, he highlights our perception of the world and the value we put on defining light (Govan, 2011) in order “for us to understand with renewed immediacy that all of human life takes place at the bottom of an ocean of ever changing light” (Graham-Dixon, 2006, para. 8).

Immersive installations such as those Wheeler calls ‘infinity environments’ enable an experience of light and space in a much more direct, almost tactile way (Kennedy, 2012). Bell describes a recent Wheeler installation as “a piece that allows you to be present in the moment and experience your own existential place in the world” (quoted in Zara, 2014, para. 3). Reviewing the number of young artists whose work is concerned with light as an element, Momin (2007) says “I hesitate to use the word ‘spirituality’ because that makes it sound too religious. But I think using light now is linked to the desire for transformation. It’s a kind of sorcerer’s craft” (quoted in Sheets, 2007, para. 19).

4.6 Positioning this Thesis

The artefacts of this thesis contain certain parallels to the works of some of the artists mentioned. Sharing an affinity to Turner’s late works, my imagery is atmospheric and seeks to suggest a feeling or tone. This tone is given through light, and its interaction with myself and with the viewer. In my practice however, the ephemeral glimpses of coalescence are captured through photography rather than painting. Similar to Puranen, I make use of the reflectivity of light on surfaces to highlight or obscure details, exploring fortuitous aggregations by constantly shifting my position – and with it the angles between light sources, myself and material objects. Using a similar practice to Moholy-Nagy, I assemble objects for their shapes, texture and reflective qualities, and photograph a combination of these objects, their reflections, and their shadows, to create new meaning. 37 The 2014 installation at David Zwirner gallery in New York, pictured in Figure 4.9.
Unlike Turner’s oil paint, my media is immediate and determinate. Photography arrests the unfolding perception, encapsulating the moment and inhibiting it from dissolving. By making transient objects indissoluble, their existence is authenticated (Barthes, 1981). Light artists such as Moholy-Nagy and Breton utilise the technique of photography as a means to document and share their practice. However, while valuable, photography poses an intrinsic temporal dilemma. A captured image, I believe, creates a false suspension – a timeless state that negates the temporality of the sequence or the moment, and potentially also the associated emotional impact. In the case of Breton, this suspension makes art visible by creating a reality that seemingly defies time. In my work however, I wanted to reintroduce the sense of ephemerality by sequencing images into a deliquescent order. The resulting video employs the element of time in a controlled pace, creating transitions that allow the viewer’s experience to unfold and expand, increasing an emotional resonance (see Chapter 7.1.3).

My installations appeal to consciousness; in this aspect they are positioned with the work of Turrell and Wheeler. These artists’ installations use light to influence the viewer’s perception, sometimes deliberately creating a sense of disorientation. I also strive to dissolve the walls of my installation (by using silver leaf that creates a reflective surface) so the viewer is not immediately aware of the space’s boundaries. The comprehensive immersion is important, and a progression of imagery supports this intent by reflecting across the walls, surrounding the viewer and drawing him in (Figure 4.11). While McCall projects light in his installations, his imagery is created through the rapid movement of the beams. My imagery is pre-conceived before it is projected, but similar to McCall my projections also seek to engulf the viewer through their large scale. Philosophically my exhibitions are perhaps closest to Turrell’s immersive installations and his unfinished lifelong project Roden Crater. This magnum opus, a repurposed extinct volcanic crater, is a vast controlled environment for apprehending and contemplating light, creating a transformational sensory experience. My installations share the same ambition, linking the physical and ephemeral as an embodied experience.

Figure 4.11
Experiencing my second installation, AIT City Campus, Room WG210 (October, 2015).

38 Barthes (1981) claimed that photography “must be described in relation to death” (p. xi). He believed that photographs, immortalised and permanently resurrected, assure the viewer that they are indeed alive in the present, thus raising questions of metaphysical nature (ibid., 1981).

39 For imagery and information, see www.roden crater.com
Research is generally understood as an original investigation undertaken in order to gain additional understanding (Scrivener, 2002b; Hiles, 2011). This chapter deals with the distinct nature of artistic research, and how I considered its framework and approach at the outset of this enquiry. It discusses how I strategically managed the practice as research. It also examines the challenges inherent in the methodology and how these were addressed.

5.1. Framework

The research paradigm underpinning this thesis project may be understood as post-positivist. Following positivism as a reform, postpositivism is recognised as a critique of the rational, empiricist way of studying the social and natural world (Mackenzie & Knipe, 2006; Mertens, 1998). Most importantly for this thesis, postpositivism embraces an intuitive and holistic view. It accepts that the world is ambiguous and variable, arguing that “what might be the truth for one person or cultural group may not be the truth for another” (O’Leary, 2004, p. 6).

Within the postpositivist framework, the research was qualitative and its nature was intuitively exploratory. The interpretation of spiritual concepts through practice related to my personal ontological beliefs and values. I therefore could cultivate this enquiry only through my own self, probing my beliefs, my interpretation of reality and my visual repertoire. The research was distinctly anchored within me. In other words, my self gave rise to the research as much as it remained entangled in it (see Chapter 2.5). Experimenting with materials and light, I drew upon my interpretations of “knowledge, morality, beauty and everyday life” (Borgdorff, 2006, p. 21), and from this perspective I constructed my own meaning (Griffiths, 2010; Ings, 2011; Makela, 2007; Pallasmaa, 2009; Peer, 2011; Schon, 1983).

In terms of its pursuit, this enquiry may be defined as a creative-production project (Scrivener, 2000). This means that the artistic practice is not separated from the research activity; it is “inventive, imaginative, and realised through and in artefacts” (ibid, p. 15). Artefacts might also be described as qualitative data, or data that is “represented through words, pictures, or icons and analysed using thematic exploration” (O’Leary, 2004, p. 99).

As such, this was not a problem-solving project, but one that represented “an effort to know the essence of some aspect of life through the internal pathways of the self” (Douglass & Moustakas, 1985, p. 39). Within this context I was not trying to elicit change to a specific situation, but to consider and express internal issues, concerns and interests (Scrivener, 2000). In this postpositivist paradigm therefore, a metaphysical philosophy formed the point of departure, and then was physically explored in creative practice. I was hoping to lift Bonaventure’s words and thoughts out of their medieval pages, and probe them through...
deliberately orchestrated material experiences. The artefacts that I would generate, although personal, might conceivably relate my perception to viewers, allowing them to experience and interpret the issue as well.

5.2. Artistic Research

Within this qualitative, experiential and interpretive framework, the enquiry may be situated as ‘artistic research’. Contemporary discourse defines this term as “academically-attuned, practice-led research” (Mäkelä, Nimkulrat, Dash & Nsenga, 2011, p. 8), where research and art practices work and develop in partnership. Makela & O’Riley (2012) propose that artistic research is understood as “a simultaneously creative and rationalising process, at the heart of which lies the undeniable curiosity of the artist or designer” (p. 8). As the research is carried out through practice, it is concurrently generative and reflective (Gray, 1996). In Bonaventure’s terms, making, sensing and thinking are in a constant dialogue, engaging my body and mind, connecting the external and internal, and advancing the exploration.

My intention with the thesis was to research the potential manifestation of light as a personal corporeal experience. My perception of this phenomenon would be biased, based on resonances with my repertoire, history and values. Although acknowledging its varied forms, Klein (2010) discusses artistic research as research that is determined by artistic experience. He defines this as the active perception of looking from outside of a frame and simultaneously entering into it (p. 3). This liminal state cannot be delegated nor can it be seen as absolute; it is contingent on the artist’s history and repertoire and therefore maintains an inherently subjective perspective. This, argues Klein, is the “major reason for the conception of the singular nature of artistic knowledge” (ibid, p. 4).

It was paramount that my curiosity could meander uninhibited beyond potential restrictions of modes of work, materials, certain methods or opinions. Curiosity was the desire that drove the explorative journey. I therefore needed a dynamic and adaptive research design, flexible enough to go where a hunch, feeling or concern might take my practice. Changing course, either to pursue or abandon an idea, would heighten the occurrence of serendipitous moments, hopefully leading to novel insights (Ings, 2013a). Fish (1998) notes that “uncovering the complexity of human situations... can only be achieved by keeping open as long as possible the processes to be used and questions to be asked” (p. 123 & 127). I concur with Janson (1967), who suggests:

> The making of a work of art has little in common with what we ordinarily mean by ‘making’. It is a strange and risky business in which the maker never quite knows what he is making until he has actually made it, or to put in another way, it is a game of find-and-seek in which the seeker is not sure what he is looking for until he has found it (p. 11).

In such an artistic practice process the outcome cannot be pre-determined, and therefore “uncertainty is as important as certainty” (Pallasmaa, 2009, p. 143). The not-quite-knowing, although difficult to manage, becomes a valuable aspect in the initial stages of the enquiry (Mäkelä, Nimkulrat, Dash & Nsenga, 2011). In negotiating new territory, a step in any direction can represent an opening towards a new discovery, therefore the researcher’s flexibility and curiosity are essential.

5.3. Approach

Accordingly, I employed the methodology of heuristic enquiry for this form of project. Schön (1983) describes heuristics as a journey guided by metacognitive knowing, self-learning and self-discovery. Hiles acknowledges it as a “research process designed for the exploration and interpretation of experience, which uses the self of the researcher” (2001, para. 4). It is a methodology that does not focus on a pre-determined formula or course of action, but instead allows changes to concepts or the researcher’s position. This adaptability heightens chances of discovery and supports me as the artist/researcher in developing my own meaning (Ings, 2011; Kleinig & Witt, 2000). Persistently questioning the work and the discoveries, the research becomes a disciplined reflective process (Hiles 2001; Kleinig & Witt, 2000). This creates an intricate engagement between the practice and the self, the making and the reflective thinking, with each stimulating the other.

Schön’s (1983) term ‘reflection-in-action’ describes the complementary processes of making and thinking and how they stimulate each other. “Doing extends thinking in the tests, moves and probes of experimental action, and reflection feeds on doing and its results. Each feeds the other, and each sets boundaries for the other” (p. 280). As the practice unfolds, heuristics draws these experiences into the self in an iterative process of immersive, introspective questioning. Schön calls this an engagement with repertoire, where the researcher’s previous experience provides an exemplar for critical judgment of the current practice (ibid.). Through deliberation and intuitive sensing, the artistic researcher attempts to find combinations, resonances and insights that will edge the practice forward. Simultaneously, the researcher “also experiences growing self-awareness and self-knowledge” (Moustakas, 1990, p. 5).

As I operated “from the unknown to the known” (Sullivan, 2009, p. 48), I was working with materials that were previously unfamiliar. Therefore, in order to engage with these, I needed to allow the materials to ‘speak’ about their agencies and lead the creative dialogue (Makela & Løytnen, 2015; Schön, 1983). When unexpected discoveries about materials or their interaction transpired, addressing these destabilised my course. Likewise, changing the approach or direction of thought by disrupting my conventional procedures brought about additional complications and unresolved avenues. Every step I took potentially revealed alternatives that I was challenged to make decisions about. The process became increasingly complex and iterative, and at times multi-directional.

The enquiry spiralled “through stages of appreciation, action, and re-appreciation, whereby the unique and uncertain situation came to be understood through the attempt to change it, and changed through the attempt to understand it” (Scrivenre, 2000, p. 7). Heuristics dealt with this motif of the unexpected, not by pre-determining a path, but by allowing one to unfold progressively.

---

41 Throughout this exegesis, both genders are included when using the terms ‘the practitioner’, ‘the artist’, ‘the viewer’, etc. However, in the interest of flow, I gender my reflective/critical voice as masculine, and often use the singular term to emphasise entity rather than quantity.

42 I use the term ‘methodology’ to describe the overall approach to research linked to the paradigm or theoretical framework (MacKenzie & Knipe, 2006).

43 From the Greek heuriskein, to discover or find. Hiles (2001) posits that heuristic enquiry begins with a question that is of personal importance to the researcher but has universal significance. He advocates heuristic enquiry emerging from spiritual practice, with a focus on human intuition and creative expression, and calls this transpersonal enquiry.

44 Bonaventure’s theory is called to attention again, connecting making, sensing and thinking. With or without the spiritual telos, the similarity of his theory to the probing processes of heuristics is intriguing.
5.4. Challenges of Heuristic Enquiry

The overall approach of heuristic enquiry is adaptable to a subjective research project. Its flexibility allows an artistic researcher to address the nature of a problem or theme by positioning him at its center. (Ings, 2011; Moustakas 1990). However, in terms of this thesis, there are a number of potential challenges posed by the methodology that warrant discussion.

First, as a consequence of heuristics’ flexibility and subjectivity, the research design inevitably differs for each researcher and discipline. Nelson (2004) notes that:

Method in our field is not universally generalisable. The most interesting elements that you might forcefully promote to one researcher, you would never whisper to another, for it would manifestly not apply; it could corrupt the intention or mess up the natural flow that the individual project indicates (para. 9).

Other researcher’s paths are not readily transferable, so the artist needs to assume responsibility for developing and charting his own unique course, and for making all decisions that will affect it. He needs to assemble his own research methods to a system that is customised to the enquiry. This requires the artist to maintain a strong sense of self and firm faith in his competence and tacit and strategic. This is in opposition to the telos of heuristics, where intuitive explorations are by nature unstable, nebulous and messy. An effective heuristic enquiry demands a significant shift in thinking to disturb professionally pre-conceived ways of processing (Ings, 2011).

This issue was possibly the most critical for me. One of the reasons for undertaking this research was to move my practice towards a more intuitive, personal approach. Acutely aware of this, I shifted focus within the experiments a number of times, deliberately taking the path of enquiry that seemed obscure. I adopted a mindset of working away from, rather than towards, set objectives. Over time I was able to foster intuitive feeling as a guide, rather than thinking about where I should be heading. Changing this mindset kept me from jumping towards, set objectives. Over time I was able to foster intuitive feeling as a guide, rather than thinking about where I should be heading. Changing this mindset kept me from jumping to conclusions or trying to apply pre-conceived beliefs. It also allowed the practice to unfold authentically, with greater emotional resonance.

A fourth challenge lies in heuristic enquiry’s need for high levels of self-reflection (Dewey, 1934) to drive the researcher’s questioning deeper. Yet self-reflection may arguably negate critical thinking if it becomes isolated to the artist’s self and his own terms of reference. Lawson (1980/2005) and Ings (2011) suggest that productive thinking can be stimulated by changing the direction of thought, and turning outward to other viewpoints. Judicious exchanges with other researchers, either as critical feedback, questioning or fresh perspectives may lead to increased awareness of relating connections, contextual themes, overarching principles, procedural knowledge and differing approaches.

However, external exchange can bring confusion and be detrimental to the flourishing of nascent research ideas that are still fragile. Sela-Smith (2002) argues that by seeking an exchange with external opinions, the researcher employing heuristic enquiry may lose the integrity of the subjective. As dutiful as it is to seek contrasting opinions, she suggests that these may be irreconcilable, suppressive, or simply too varied. In initial stages of research, hunches and pre-concepts may not be able to be expressed verbally, and because of this, they may deteriorate in the flood of contrasting voices. In such instances, the researcher may be in danger of diluting his thinking and losing focus. Instead of strengthening his own voice, he may become more objective in his analysis (Ings, 2011).

I dealt with this challenge by developing a strict approach towards external exchange. My first poster presentation six months into the thesis elicited an indifferent response from peers. This taught me the value of clarity. I realised I could not verbalise my pre-concepts, therefore clarity was not yet attainable, so neither was a succinct presentation or for that matter a dialogue. From that point onwards, I intentionally managed all discussions about my research, focusing only on a key area or topic that I could articulate. I generally shared my thinking only with very few critical and patient peers whose opinions I respected. As the experiments developed, so did my reflective understanding, and I was able to verbalise and converse more easily.

45 Many designers report the need for a clear problem to exist before they can work creatively (Lawson, 1980/2005).
46 The assumption is, according to Scrivener, that reflective practitioners will produce better results than their unreflective peers (2000).
47 I presented the poster Lux Per Se Pulchra Est at the AUT Postgraduate Symposium in July 2013 (see Figure 5.8).
Subsequent critical exchanges with peers and scholars were most productive after presentations or exhibitions because they gave me the opportunity to explain my research prior to a dialogue (see Chapters 5.5.5 and 5.5.6).

Finally, the personal nature of heuristics draws passionately on the artist’s concepts of meaning and identity (Ings, 2011), thus exposing private issues to scrutiny. The researcher is also the participant, and this position creates a situation of potential vulnerability and emotional instability. A cautious researcher may be disinclined to plumb his intimate thoughts and thus may shy away from deep questioning. This situation may lead to an enquiry that is self-deceptive or superficial, and fails to attain an outcome of convincing authentic value. On the other hand, a greater self-awareness can result from probing the inner beliefs, and this can strengthen the artist’s sense of self and artistic growth.

Because of my background in commercial design I had sufficient experience in dealing with exposure and feelings of diffidence. One emotional challenge that arose was over the personal question whether this thesis was religious or spiritual in nature. I realised in early discussions that I had to carefully explain my position (see Chapter 2.1), or risk being misunderstood. Yet these discussions, as well as my own ensuing reflective questioning, helped define my position better, and through this I became more confident in my stance. The enormity of these topics made me feel anxious, because I was aware of my lack of knowledge in many aspects of spirituality. I did not feel equipped to defend my work from a philosophical or metaphysical position. However, as the enquiry progressed and the imagery was able to speak to viewers, I discovered that their intellectual analysis changed due to their emotional engagement. Through the emotive strength of the imagery viewers were able to allow mystery to become part of their embodiment. Because my imagery was suggestive rather than literal, it opened an interpretive space for viewers to add or create meaning, rather than interrogate mine.

5.5. Research Methods

The thesis required a research design that incorporated a range of methods. The combination of these methods enabled me to mitigate against the potential disadvantages of my heuristic enquiry, while supporting its explorative, self-reflective qualities.

5.5.1 Materials

The first method was an active engagement with material thinking. According to the craft ethos of the enquiry, creative ideas were developed by manually working with a sensuously perceptible medium (Crawford, 2009; Dewey, 1934/2005). Working with material mediators, I sought to negotiate and forge a relationship with light, and find a new visual language to capture this ephemeral interface. Immersing myself within orchestrated assemblages of materials and light, I strove to generate situations where I could dwell in the transformational state between

48 I use the term ‘method’ to refer to a systematic mode, procedure or tool used for the collection and analysis of data (Mackenzie & Knipe, 2006).

49 Materials (such as sheet metal, copper, sheet acrylic, glass, sequins, fabric and water) were initially selected for their textural qualities, and the manner in which they responded to light. In iterative tests I manually manipulated these materials by hammering, cutting, scratching, draping etc, adding my own physical force to redefine their shape or surface. I then arranged these materials and applied varied light sources (such as candlelight, incandescent light bulbs, overhead projectors, strobes and light emitting diodes), sometimes indirectly, sometimes simultaneously. These agents dynamically influenced colour, intensity and reflective angle. In further experiments, I added other materials and manual techniques (silver leaf, projected calligraphy, wax, paint, lacquer and screenprint) and orchestrated increasingly elaborate assemblages to explore how several elements worked together.

FIGURE 5.1
Initial testing of bent aluminium sheeting, lit with a series of light emitting diodes (2014).
making, sensing and thinking, penetrated by light’s catalytic capacity. This approach was playful, primarily driven by a sensate curiosity, in anticipation of what might emerge (Crow, 2008; Ingold, 2010) (Figures 5.1 and 5.2).

This immersive engagement developed into an ongoing conversation with these materials, as I sought to understand their vitality and intrinsic agency (Bennett, 2010, Mäkelä & Löytönen, 2015; Schön, 1983). Through this manual, visual and reflective exploration of the materials’ physical properties, I was able to refine my sensibility for their emotive qualities, and what they might contribute to the theme of the research.

5.5.2 Photography as a Tool

Photography was used in the initial stages of the research as a means to explore light beyond object or substance (Figure 5.3), and obtain a sense of the subject matter. Although I set out to use manual techniques of artistic expression in the practice, these processes were not breaking new ground. The results seemed to be in discord with the investigative question, so photography was brought back into the research. I was familiar with the technical aspects of this artistic form of expression, and this was helpful to the exploration. Working through and with light, photography maintained an intense connection to my research topic. Furthermore, the rapid results of photography allowed me to capture an otherwise fleeting moment or document a situation (see Chapter 7.1). Initially, I experimented with photographic collages (Figure 5.4), digitally assembling multiple photographs into a singular piece, or incorporating ancient graphical symbols, for example of the sun god Shamash (see Appendices 1.3–1.4) However, these collages seemed consciously contrived and too digressive from my enquiry. As I later reflected, I felt their technical fabrication had compromised their emotional substance.

To discover meanings, I set out to “focus on the feeling dimension of personal experience” (Sela-Smith, 2002, p. 63). Over a number of iterations I developed an immersive technique of documenting an experience with and through assembled materials. Wielding the camera as I continuously shifted my position, my intent was to dialogue spontaneously and physically with and within these transitional concepts. As I moved, the light changed, as did my visual perception, and the emotive resonance with it. I sought to negotiate the instability of the moment in order to facilitate a tacit experience (Figures 5.5 and 5.6). Over the course of evolving experiments, a volume of documented Momentaufnahmen (photographs of distinct spatio-temporal moments) developed. These artefacts were later reviewed and evaluated in terms of emotive resonance.

5.5.3 Documentation

I also developed reflections through self-dialogue (Bullough & Pinnegar, 2011). Parallel to the practice I cultivated a process of questioning and analysing, negotiating arising tensions and sifting thoughts and emotions. In order to give these reflections more definition, they were articulated in handwritten form in journals (Figure 5.7). These writings, notes, reflections and thoughts were then collated and rethought, for example of the sun god Shamash (see Appendices 1.3–1.4). However, these notations were not always developed in full and sometimes remained fragmented. Nonetheless, they provided a rich documentation of the research, its development and its impact.

50 These were: scratched mylar and solar plates, screen-printing, pastel, pen and acrylic illustrations.
51 Throughout the thesis, I used a Sony NEX Alpha 6000 camera, with a 30mm f3.5 lens and a 16–50mm f3.5–6.4 zoom lens. I specifically chose this mirrorless camera for its small size and its APS-C sensor’s capability of capturing crisp images as large as 24 megapixels, even in low light.
52 The photographs were produced in a variety of ways: sometimes the camera was fixed to a tripod while I moved in front of it, but more often I held the camera in my hand and aimed it through a mirror, at a silver leaf surface or at myself.
diary entries, sketches and diagrams were as raw as they were conceived, but they facilitated an ongoing aggregation and clarification of thought. Evidencing the creative process along its unpredictable path, an understanding grew that helped the practice evolve and advance (Mäkelä, 2009). Documentation thus became generative, crystallising potential directions through collecting and summarising information and observations on the practice. My data served to persistently focus the future through assimilating the past.

Reviewing my Momentaufnahmen created another form of reflection and refinement. As the research developed through iterative series of photographs, I collated and ordered image groups into a summative thematic files on my computer. At this point I was making a selection from the numerous images; reviewing them and assessing their emotional resonance and narrative depth. Typed comments were then added to the chosen photographs. These comments were generally a first attempt at producing coherently worded thought (ill-defined but useful in summarising the situation at the time). This mode of documentation produced distinctive visual markers along my path of discovery (see Appendices 1.1–1.26). I could then efficiently revisit these summaries when discussing the practice or when writing presentations.

5.5.4 Literature and Artistic Practice Review

Surveying literature formed a continuous resource for my enquiry. Research articles in journals and books provided a deepening of contextual knowledge, and an understanding of the creative research processes and methods in artistic research. I developed a habit of re-reading articles at various stages in the research, because each time they brought forth different resonances, influencing my thinking and subsequently some of the experimentation. As an example, I collected a number of books and articles on Bonaventure and his medieval spirituality, and also certain tangential works. Imagining the life and the cultural and material aspects of a medieval scholar helped me to appreciate and approach Bonaventure’s theory of light from more emotive and sensate positions.

Reviewing artistic practice through experiences and exchanges with other artists also helped to define my thinking. Where possible, I visited performances and show openings at galleries in New Zealand and Europe. Most memorably, Auckland Art Gallery curated the Light Show in November 2014 and provided rare first-hand experiences with light installations by Turrell, Wheeler, McCall, and other international light artists.

On a smaller scale, regular presentation evenings at Gallery Blikfang in Auckland allowed an exchange with a broad range of practitioners from performing arts, literature, media and fine arts. Their presentations gave me valuable insights into the structure and habits of their individual practice, and how their thinking related to their outcomes.

5.5.5 Discussion

Beyond self-dialogue, I externalised thinking through dialogue with other creative practitioners. Griffiths (2010) notes that each self is

53 In artistic endeavours, data can be understood as supportive material, such as created artefacts, peer feedback, and artist’s observations. Documenting observations is generally acknowledged as one of the main factors that differentiates research from practice (Nimkulrat, 2009).

Auditorium of the Design School

The audience sought me out to discuss their own relationship with spirituality or with light. Nakamura. Reproduced with permission

Presenting my thesis at the EKSIG Conference, in the auditorium of the Design School Kolding, Denmark (November, 2015). After presenting at this conference, several members of the audience sought me out to discuss their own relationship with spirituality or with light.

Copyright 2015 Nanami Nakamura. Reproduced with permission.

FIGURE 5.8. Lux Per Se Pulchra Est (Light is in itself beauty). A1 poster presentation at AUT’s Postgraduate Symposium (July, 2013). While I was initially disappointed with the weak feedback at this poster session, I realised that this in itself was valuable feedback. The audience had not understood my poster nor my research because I had not been able to articulate it clearly enough. This gave me the determination to continue searching for the succinct research question by removing unnecessary layers of complexity.

unique and its response to circumstance cannot be pre-determined. Therefore, bringing my thoughts and ideas into a conversation with other creative artists enabled me to consider differing viewpoints and opinions. These opportunities proved useful in correcting oversights, understanding potential readings of the work, and gaining further clarification.

Discussion took three distinct forms. The first was an ongoing dialogue with my two supervisors. These thinkers came from different research realms, and thus viewed aspects of my thinking and practice differently. One was a filmmaker, graphic designer, typographer, author and educator, and the second was a musician, theologian, philosopher, and lecturer in aesthetics. Their experienced pedagogical approach was founded on questioning rather than giving advice. This questioning enabled me to create a multiple variation of perspectives (Kleining & Witt 2000) that served to broaden and challenge iterations of my thinking.

The second form of discussion occurred with scholars external to the university. These discussions over several hours allowed me to test my own thinking within a broader academic realm. Generally I was required to explain my investigation without the aid of imagery. This challenged me to articulate complex thoughts coherently. This process functioned as an additional means of distilling my thinking, verbalising more accurately, and sharpening the thesis’ research questions. These discussions also compelled me to broaden the parameters of my contextual reviews of literature and artistic practice.

The third form of discussion occurred in the context of conference presentations. This form of synthesising my thinking and responding to review and feedback provided an even more exigent strategic method of externalising thought (about practice and outcomes). Delivery took the form of published papers, posters (Figure 5.8), and oral presentations at national and international conferences (Figure 5.9).

The process of presentation and peer review opened my thinking up to broader contexts.

55 My first supervisor was Professor Welby Ings (AUT University, Auckland) and my second supervisor was Dr Ralph Bathurst (Massey University, Auckland).

56 If feedback is framed as questions, there is a higher chance that the reflection may be taken back into and reprocessed within the self (Ings, 2014).

57 For example, I had valuable discussions with Associate Professor Maarit Mäkelä (Aalto University, Finland) who visited in October 2014, and Professor Stephen Scrivener (University of the Arts London, Great Britain) who visited in February 2015.

58 I presented a poster ‘Lux Per Se Pulchra Est’ at the AUT Postgraduate Symposium in July 2013.

I also gave a presentation titled “Working Towards the Light – of Monks, Metaphysics and Materiality” at the biannual ANZAAE (Aotearoa New Zealand Association of Art Educators) Conference in July 2014 in Auckland. The abstract can be accessed in the Conference proceedings at http://researcharchive.wintec.ac.nz/.../ANZAAE%20conference%20proceedings.

Nine months later I submitted an abstract titled “Illumination – Working Towards the Light! to the Conference on the Image held in San Francisco USA in October 2015, and was subsequently accepted to present. However, I decided to forgo this because I was also accepted, upon a full paper submission, to present at the biannual EKSIG (Experiential Knowledge Special Interest Group of the Design Research Society) Conference titled “Tangible Means”, hosted by the Design School Kolding, Denmark, in November 2015. My presentation was a summary of my thesis, and bore the same title: “Illuminativa – The Resonance of the Unseen”. It can be accessed in the Conference proceedings at http://experientialknowledge.org.uk/proceedings_2015.html.

A subsequent review of this conference was published in Craft Research, mentioning my presentation and honoring it with a colour image. The reviewer summarized my thesis as an exploration of “the concept of light as a unique material, understood in the context of experience, rather than as a phenomenon that reveals aspects of materiality” (McLachlan, 2016, p. 140).

In July 2016, I presented key thoughts of my thesis at Gallery Blikfang, Auckland, to an audience of 50 artists.
Beyond distilling and prioritising data into narrative forms and shaping concurrent verbal and non-verbal displays, I was also required to reflect upon a diverse range of cultural and disciplinary approaches to iterations of my thinking. Requests for clarification were valuable signals that areas of my thinking required additional unpacking or strengthening.

5.5.6 Exhibitions and Review

Two iterative exhibitions marked distinct junctures in the development of this thesis. These exhibitions served to communicate my research findings and present the created artefacts to the viewer for critical feedback. They also challenged me to create a space that explored the potentials of spatiality, light and meaning.

Unlike my oral presentations, the exhibitions needed to be understood by viewers without a detailed artist’s commentary. I wanted these iterative exhibitions to represent more than a curated showing of artefacts, so I decided to create spatial installations that would work on an emotional level, as an immersive experience. Once I was faced with designing for a distinct space, processes of construction, composition, projection and installation were considered as parts of a singular idea. I had to externalise this thinking in order to discuss spatio-temporal issues with peers and technical experts. Deliberating my intent with specialists during the preparation and planning (and listening to their views on practicality and impact of my vision) also helped to focus my thinking.

Restrictions on space, timeframes, budget and manpower challenged my idea further, but these also helped to test and clarify my thinking.

Peer feedback and critique after the exhibitions was an important part of the process. Carefully selected for their expertise, integrity and communicative proficiency, experts were invited to express concerns and suggestions. These frank and subjective perspectives served to re-evaluate my thinking and provided me with insightful information to reflect upon. After physically experiencing the installations myself, I was able to review my intentions and compare these to how these peers related their own experiences. Their critiques brought forth variations on some structures of meaning, and I reflected on these with the aim of strengthening and clarifying my idea. The internal and external feedback was worked back into the practice, refoosing its course with fresh resolve.

First Exhibition

The first exhibition (Figures 5.10 and 5.11) was held in February 2014 as the culmination of my Master of Philosophy thesis, in Room WM201c at AUT City Campus. This was conceived as a spatio-temporal installation, in an otherwise stark rectangular room. Nine of my images were projected sequentially onto three large-scale vertical cloth banners, 2.2 meters high. Apart from a black plinth housing the projectors, the space was empty and darkened. A carefully selected musical item was softly looped, which slowed the pace and set a contemplative tone for the experience. Over the course of two hours, I invited a small group of viewers to experience the installation. The projectors were positioned at floor height, so as people moved around the room, they could physically interact with the light beams and project themselves onto the imagery.

After this exhibition, peer feedback was both written, in the form of two external reviewer’s reports, and verbal from viewers after their visit. The reviewer’s reports were thorough, and commented on the probing nature of the work. They also remarked on the aesthetic and affective quality of the presented imagery within the context of the experiential installation. One reviewer commented that although she felt that the music complemented my installation well, the room itself compromised it, particularly the concrete walls. In contrast to these written reports, verbal feedback from viewers was largely vague. While the acknowledgement of the exhibition’s emotive and spiritual quality was encouraging, the critique was not articulate or specific. Accordingly, this gave me the impetus to organise more formal critique sessions for subsequent exhibitions of my work.

In my reflections on the exhibition, I felt that the number of viewers present in the room was a distraction from the potential for experiential immersion. My experience during testing was more intensely emotional than whilst sharing the installation with others. Similarly, having the images distributed over the three screens continuously forced a viewer to shift their attention, or stand back too far. I felt that these parameters diluted the potential overall impact. I also realised that I had still been taking a didactic approach with the imagery, focusing too closely on trying to elucidate Bonaventure’s notion of light rather than on creating an experience of it. These reflections shaped the intent of the second exhibition, and made it more resolute in spatial, temporal and experiential qualities.

Second Exhibition

The second exhibition was held in October 2015. This iteration was conceived as an embodied experience, with an aim to physically immerse a singular viewer in a temporal assemblage of imagery (Figures 5.12 and 5.13). After testing dimensions and proportions on iterations of a small model (Figure 5.1a), I constructed an atmospheric space that was clad entirely in subtly reflective silver leaf (see Chapter 6.1). This space was situated within a large black box performance room that muted all outside light and sound. A new animated sequence of my photographic imagery was projected from the outside onto the entire 1600mm wide x 2400mm high front wall. The surface of this wall was constructed from cloth so it operated as a 'hot spot'.

59 A third exhibition was constructed as the culminating installation and the fulfilment of the PhD thesis requirement, and was presented alongside this exegesis.

60 I use the elemental word ‘viewer’ in this thesis not to imply ‘a person who sees’ but to stand for ‘a person who perceives with all spatial senses’. Although a notion of the thesis is to make visible a metaphysical idea, my installations extend beyond the realm of vision. I believe that the embodied experience calls for a thorough sensorial immersion. Therefore my installations equally consider visual, tactile and aural elements, as well as spatial dynamics of movement (both of the viewer and the projected imagery).

61 At AUT University, formative research from a Master of Philosophy can contribute to the first phases of a Doctor of Philosophy enquiry.

62 The room measured 11.3 meters long and 6.6 meters wide.

63 After a long search, I chose an experimental mix of medieval spiritual chant and modern jazz, which I felt best reflected the nature of my enquiry in its inherent contrast and rhythm. The piece was Parce Mihi Domine (Cristobal de Morales, 1500-1553) sung by the male quartet of The Hilliard Ensemble, with Jan Garbarek adding solo soprano saxophone. This track is from the album Officium (ECM New Series, 1994) and was recorded in the reverberant monastery St. Gerold in Austria. It can be heard here: https://www.youtube.com/watch?v=qks3B8lGlUs

64 These reviews functioned as a transitionary critique from my Master of Philosophy into my PhD thesis study.

65 This installation was created at AUT City Campus, Room WG210. Some elements such as the space size and the projection sequence were initially tested in this room in July 2015.

66 The dimensions of the space were 1.6 meter wide x 3.6 meter deep x 2.4 meter high. The back of the space was deliberately left open, because I didn’t want the viewer to feel enclosed, or the space to resemble a room.

67 I used the same type of poly-cotton cloth that I had used in the first exhibition. This possessed the right density of weave, allowing light to permeate evenly, and showing the projected image without revealing the light source behind it as a ‘hot spot’.

68 The dimensions of the space were 1.6 meter wide x 3.6 meter deep x 2.4 meter high. The back of the space was deliberately left open, because I didn’t want the viewer to feel enclosed, or the space to resemble a room.

69 These reviews functioned as a transitionary critique from my Master of Philosophy into my PhD thesis study.
Assembly and experience of first installation, AUT City Campus, Room WM201c, February 2014 (see also Appendix 1.11).

Experience and assembly of second installation, AUT City Campus, Room WG210 (October 2015). Because all constructed elements needed to be transported in a van and carried to and from the room, I devised a modular system of panels and stands with the help of Glen Williamson at Marton Lee cabinetmakers (see also Appendix 1.23). Over 22 m² of surface area was covered in silver leaf.
semi-translucent screen. The images permeated the cloth, filtering into the space, reflecting from the silver leaf and enveloping the viewer. The restricted space ensured an intimate proximity of the viewer to the oversized imagery. As the viewer moved within the space, the imagery’s tandem reflective extensions seemed to respond to the viewer’s movement, creating a relationship with it. A specifically composed piece of music was looped softly, setting a distinctly meditative tone.

For the ensuing peer critique session, I selected a group of professional peers, comprising visual artists, philosophers and experienced designers (Figure 5.15). These critics viewed the installation individually, and then congregated as a group to discuss my work. Each peer was able to articulate the experience from the perspective of their distinct disciplines, and the feedback was varied and insightful. To eliminate my potential bias or prejudice, an independent note-taker was employed. A candid and intensive unpacking of strengths and weaknesses in the work ensued, with strategic questioning and reflections on potentials within this iteration of my research.

This feedback provided a number of critical readings and observations. The critics acknowledged the immersive and intense emotive quality of the installation, one suggesting it “felt like a sanctuary from the commotion of the city”.

They understood the experience as a means of enabling a viewer to be present in the moment and ponder the nature of light. Some felt that the work needed to be more concentrated, noting “I wasn’t always in the experience” because they believed there were a number of distractions. Being able to see the pipes and gantries on the ceiling of the black box room was mentioned as a distraction, as was the Latin text voiceover.

Later, one critic mentioned that she felt she was being manoeuvred by the style of music and the addition of candles, with most reviewers agreeing that these additions rendered the installation too didactic. One critic summarised: “Please take off the metaphorical handrails – we would enjoy it more without them”. By simply letting the viewer dwell in the radiance of light and the space with wonderment, and allowing them to “fill in the gaps” themselves, the reviewers suggested that the experience could unfold in a more individual, embodied manner. All of them experienced different feelings within the space, depending upon, as one suggested, “what personal experiences we bring with us”.

Reflecting upon the critique, and my own experiences in the designed space, I began to consider the design of the final exhibition. This constituted an evolution of the second installation, with revisions to the architecture and to the projection. I added a ceiling to ensure the viewer was not tempted to look out of the space while inside it. I also changed the sound to a more contemporary piece, redesigned the animated sequence to incorporate fresh photographic imagery and improved transitions. The sequence was deliberately not conceived as a linear narrative, so I could allow for multiple interpretations. The overall impetus was to create an artwork instead of a presentation. The installation needed to be as free as it could be from didactic factors and from overdressing with elements that were employed only to explain content and context.

5.6 Summary

This thesis project is framed as artistic research and accordingly may be understood paradigmatically as a postpositivist enquiry. Concerned with creative production and the high levels of self-reflection on iterations of thinking, it employed heuristic enquiry as its methodological framework. This approach was explicated through the employment of six distinct methods that enabled both inward and outward searching and prompted me to intensify and refine my questioning and expressions of thinking. Discussions, presentations, exhibitions, critical feedback, and written submissions challenged my thinking, my practice and my verbal articulation, and stimulated important milestones of insight or enquiry in my trajectory (Figure 5.16). These opportunities helped to strengthen my ideas, develop my reflexivity and reasoning, and refine my judgment and visual, spatial and literary vocabulary. As I learned through practice, I grew through reflection and exchange, and as a consequence of this dialectic my work advanced.

68 The intent of this piece was to position the visual installation in the context of spirituality and set a slow pace. The composer Alex Venticinque took common chords from choral music and improvised with these, ensuring there was no repetition or distinct melody that would distract. Gaps in the sound allowed some ‘breathing time’. To complete this soundscape, two additional elements were added: sharp high bell notes to suggest glints of light, and my whispered voiceover reciting Bonaventure’s writing in Latin. The 9-minute piece was composed and arranged digitally with Sibelius software on Apple Macintosh.

69 The group consisted of: Ross Lewis, professional artist and craftsman; Rebecca Wallis, fine artist; Angela Clayton, production designer; Alex Bachmann, art curator; Dr. Lisa Williams, author and designer; Dr. Welby Ing, graphic designer, filmmaker and author; and Dr. Ralph Bathurst, theologian, musician and philosopher.

70 I chose a minimalist composition that contained a number of pauses and included sounds that seemed to resemble material noises. The piece was Drifting Cities, from the album Little Windows (Darla Records, 2010) by Harold Budd and Clive Wright. It can be heard here: https://www.youtube.com/watch?v=4VT44DY5wus
First installation, WM201c, AUT City Campus.

January 2014

Research Proposal to AUT Art & Design Faculty.
Dialogue with visiting scholar Associate Professor M. Mäkelä.

January 2015

Second installation and peer critique, WG201, AUT City Campus.
Dialogue with visiting scholar Professor S. Scrivener.
Full paper submission, EKSHI Denmark.

January 2016

Third installation, Pinehurst School.
Writing exegesis, supervisor feedback.

January 2017

Thesis presentation, Gallery Blikfang.
Thesis examination, AUT.

FIGURE 5.16.
Diagram of entire research timeline, showing the important occurrences of inside-outside exchange.
This chapter discusses the critical ideas underpinning the thesis, and how they were addressed in and through the practice. While the trajectory of this exploration (and the detailed research questions) changed due to several factors, three significant ideas continually surfaced and intersected, anchoring and challenging the work in its philosophical bearing. These were: the nature of Divine light, the state of lumen, and embodied experience.

6.1. Divine light

Although a multitude of descriptions exist for the Divine, in this thesis I focused only on Bonaventure’s thinking. He details the theory that St Augustine established, whereby God represents the archetypal light. This metaphorical light, emanating forth from the Divine source, provides a path for humans to pursue through enterprise. Therefore, Bonaventure considers light as the agency connecting aspects of human endeavour with the Divine, along the progressive axis of making–sensing–thinking towards wisdom (Hayes, 1996; Miccoli, 2001).

In this research I considered the notion of light as a mysterious but manifest catalyst, permeating the artistic practitioner with a supportive spirit. I thought of this light as a certain force, a thread, or a quality that might be omnipresent, influencing me and subsequently influencing my creative practice, giving it expanded dimensions. I wanted to capture this enigma experimentally and experientially, without the intent of revealing its mystery or proving its connective existence. Instead, I aimed to explore through practice how light as a delicate and suffusive agency might be perceived emotionally. I manually created material assemblages, adding light, and then interacting with these in order to consider relational aspects of my immersed being. By photographically documenting specific moments, I attempted to find a form of expression beyond literal substance and shape. Striving to achieve this, I began with a primal, intuitive and sensate approach. I was guided by Bonaventure’s notion that all knowledge is derived from twofold sensation: the apprehension of an external form and an emotional experience. Figures 6.1. Applying silver leaf to a prepared MDF (multi-density fibreboard) sheet.

71 Changes to the course of the exploration, or the point of view of the research, or the questions asked of the research, resulted from resonances that surfaced in the discoveries, influences from dialogical exchange, post-exhibition critiques, or contextual reading and reviewing. The experiment phase summaries listed as Appendices 1.1–1.26 give a visual account of the research phases.

72 By this I mean an approach that was visceral, whereby I relied only on an emotive response to surfacing resonances. I wanted the work to feel right, without having to justify why.
accompanying feeling (Miccoli, 2001, Noone & Houser, 2014). In other words, if my perception and my emotional response were operating in tandem and acknowledging each other, I might be able to discover a suitable expression. I needed to feel my way into the notion of light in order to gain an understanding of it.

In practice I initially worked extensively with silver leaf, trialling a variety of textures resulting from different substrates and treatments. The reflective properties of silver leaf are dependent on the underlying surface texture – while some texture adds interest to its tactile quality, too much texture compromises the silver leaf’s reflectivity. In tests I learned how to control this texture through careful preparation of the underlying substrate. For my photographic experiments I endeavoured to achieve a silver leaf surface that exhibited some brushstroked texture but still retained enough of its captivating reflectivity.

The appeal of silver leaf, unlike a glass mirror, is that it displays a surface that is always evident, visible and tactile. In practice, applied to an entire wall, this surface became a glowing skin with wrinkles and other imperfections (Figure 6.1). In contrast to float glass, silver leaf invited a manual exploration of its textured materiality. In addition, this tactile surface became a spatial border that separated the viewer from an indistinct reflected image. This reflection appeared to occupy a space ostensibly existing behind the liminal silver surface, or on the other side of the viewer’s actual space. This mysteriously obscure image inhabited an expanse beyond my immediate environment, its boundaries continuously growing or dissolving as I moved towards or away from the silver leaf wall. Its protean response suggested that I was connected with this immaterial substance, even though it existed in a space seemingly beyond my tangible reality (Figure 6.2). To me, the ambivalence of this space opened up a state of possibility, a realm of imaginative visions. Looking across and into this realm, I seemed no longer confined by the same spatiality or materiality that my body occupied. It seemed as if I was transcending these limitations. This evoked the notion of a further dimension outside or beyond that which I physically inhabited. It conjured implications of a connection between my self and other realms – encompassing and inexplicable, but nonetheless permanently present.

The experience I had with silver leaf was in accordance with Bonaventure’s claim that “light works within us, deepening our sense of understanding, revealing truths that transcend reason” (Hayes, 1996, p. 43). The silver leaf seemed to give Bonaventure’s statement emphasis by suggesting a non-physical presence in a space that transcended my

FIGURE 6.2 Silver leaf creates the illusion of another dimension, a space beyond the tangible.

73 The medieval method of hand gilding with silver leaf appealed to me for its ideological link to an imagined 13th Century Bonaventurian world. However, as I discovered, silver leaf has a distinct agency due to the extreme thinness of the sheets. Traditionally used to decorate frames and ornaments, its competent and consistent application (particularly on a flat surface) requires a steady hand and a calm, almost meditative disposition. Even a breath can disrupt the positioning of the leaf. I came to learn that I could not work with silver leaf if I was feeling rushed or unfocused because the leaves would often crease and tear, manifesting and amplifying my frustrations, and leaving the surface textured with wrinkles and less reflective.

74 Starting with the base, I experimented with heavy card, plywood, acrylic and MDF (multi-density fibreboard) sheets. I settled on MDF because of its rigidity and slightly roughened surface. I then experimented with a variety of paint undercoats, applying these to the sheets either with rollers or brushes to create streaks. These undercoats were then sanded with different levels of intensity to create variants of texture. I also experimented with the addition of multiple top coats of gloss acrylic paint to even out streaks. Oil-based and water-based size (glue) were tested, and I found that oil-based size had a viscosity that could slightly improve uneven surfaces. Finally, the square 150 x 150mm silver leaf sheets were applied with wide flat brushes, and left to adhere over 12 hours before I swept away excess and rubbed down the surface with cotton gloves.
FIGURE 6.3. FIGURE 6.5. FIGURE 6.4. FIGURE 6.6.

Four examples of images using silver leaf (May, 2013–June, 2016). Some of these photographs contain an additional layer of projected calligraphy. The handwritten words were key excerpts from Bonaventure’s treatise On the Reduction of Arts to Theology. I drew these in the 13th Century style to represent an enigmatic medieval connection to the contemporary photography. The calligraphy was transposed to mylar sheets and cast onto the silver leaf using overhead projectors.
immediate actuality (or an area that I could comprehend through reason). This other space appeared to be beyond the tangible, yet connected – where new ideas, revelatory truths, or unexpected insights might come into existence. As Cerbone (2006) asserts, “human existence is always a combination of facticity and transcendence” (p. 98); blending the perceived reality with imaginative, mystical realms outside of this. I investigated this thought over a number of experiments, seeking to capture light as an immersive agency from beyond the boundaries of my immediate or habitual embodied reality (Figures 6.3-6.6). I surmised that light, although originating in a realm beyond, could permeate through the fringes into my space, and from my space into my body.

Silver leaf intrigued me because it displayed an essence that made me forget about its immediate materiality. Although I was looking at it and touching it, while experiencing the silver leaf I was perceiving and feeling ideas that were removed from its physical faculties. This malleable and fragile medium initially seemed insubstantial – yet applied to a large and well-prepared surface area, it was able to act as a powerful mediator. By virtue of its unique radiant agency, and the characteristically blurred reflection created by its textured surface, it responded to light in a way that conjured up evocatively ethereal forms of expression. It gave the notion of Divine light a sense of reality.

These resonant features of silver leaf (and the connections to metaphysical philosophy that I perceived) were compelling reasons to use this material extensively in my second and final installations. Here, I covered all surfaces surrounding the projection with silver leaf. The surface invited a sensate appreciation, intensifying the viewer’s awareness of experiential discovery (Figure 6.7). Merleau-Ponty (1948/2004) acknowledges that since the same body sees and touches, visible and tangible belong to the same world. It is a marvel too little noticed that every movement of my eyes – even more, every displacement of my body – has its place in the same visible universe that I itemise and explore with them, as, conversely, every vision takes place somewhere in the tactile space. (p. 134).

Similarly, Pallasmaa asserts that “touch is the unconsciousness of vision, and this hidden experience determines the sensuous qualities of the perceived object” (2009, p. 102). While the silver leaf surface helped define the tactile space of the viewer, it simultaneously reflected the light, the imagery as well as the viewer. Thus, when observed, the reflective qualities of silver leaf gave an impression of an expansion into a further, intangible dimension. The spatial extension seemingly located beyond the silver leaf border could only be apprehended visually, not by touch. Beholding this physical difference between the inhabited space and the imaginary space beyond the silver leaf created an incongruous atmospheric experience. I was hopeful that this would contribute to the space’s perceived mystical and surreal qualities, and that the viewer would find these qualities equally alluring.

In my interpretation of Bonaventure’s theory, Divine light connects realms and therefore transcends boundaries (from the unseen to the seen, from outside of my body to inside of it). As it permeates into my inner self, it also connects me to outer, intangible realms. The diffusive radiance that I experience is a visible manifestation of light’s fervent permeability and ability to develop my sense of consciousness for things beyond. This resulting feeling of

**FIGURE 6.7.**
Silver leaf wall, part of the second installation, AUT City Campus, Room WM210 (October, 2015). Because I perceive light as existential, I wanted the installations to have an elementary, tactile definition. My aim was to keep the nature of the space and the light simple; neither overdressed nor overly technical. I was averse to too much technical application because I felt it could overwhelm the underlying intent or render the installation inhumane. The integrity of my installations lies within the primordial nature of light and our fundamental, instinctive and corporeal association with it. I therefore strived to create experiences that were intimate and sensate.
transcendence seems fitting with the notion of Divine light. Within the spatial installations, I was anticipating that the extensive silver leaf surfaces might display an otherworldly radiance, especially because they would be covering almost all areas surrounding the viewer. My hope was that a viewer’s thorough immersion in this radiance, together with the illusion of the mirrored spaces beyond, would provide an impression that was suggestive of the sussive and mystical quality of Divine light.

Further features of the mirroring silver leaf became evident in the second and third installation. The mirrored surface changed the way I beheld my body. By returning my view, I was simultaneously the observer and the observed, altering my perceptions of self. The certainty of the shape of my corporeity was renegotiated as I saw myself from different aspects. The reflection in the textured silver leaf changed and dissolved the outer boundaries of my corporeal figure, and this new view challenged my definition of self. Through questioning and liberating my limitations, both of body and of mind, the silver leaf surfaces seemed to induce an attitudinal shift. By observing myself from a fresh perspective, and viewing it as a phenomenon beyond the figurative, I was encouraged to accept light as the activator of embodied potential, the catalytic force that Bonaventure describes.

Gray (2014) acknowledges that mirrors were historically “associated with self aware contemplation, bound up in a sense of Divinity” (p. 33). Similarly, I wanted the viewer to contemplate a sense of spirituality through the reflective silver leaf surfaces. The mirroring effect in general may act as a metaphor for the spiritual aspect of this inquiry. In Watts’ (1973) opinion, every search into the reaches of the universe represents a search into the depths of the self. A search for spirituality might therefore be understood as a search that is both outside the self as it is within. A mirror seemingly unites what Watts (1973) defines as the mystic and the sensualist, allowing exploration of the inward mystery of consciousness and the outward limitations of world and body. These divergent views are inseparable from each other, and glancing into a mirrored surface makes them imminently apparent.

6.2 The State of Lumen

Beyond its catalytic agency, Bonaventure describes Divine light by three distinct perspectives. Importantly, in doing so he defines the association or the transition between metaphysical and physical. For me, this is one of his key statements because it plausibly connects abstract conceptual light with its manifestation in reality. He writes:

Considered in itself the first form of all bodies, uncreated light is called lumen. In as far as it radiates from the being which it informs, it is called lumen. And when it is viewed as it becomes perceptible, it is called color (Hayes, 1996, p. 5, quoting from Bonaventure’s first Book of Sententiarium).

Following this idea, visible light can be understood as the perceptible evidence of an invisibly penetrating force. I reasoned that I am permeated and activated by unseen light; it passes through me in a transformational process of lumen, radiating outward. The agency of light forms a reciprocal connection with me—in the phenomenological notion of Merleau-Ponty (1948/2004), light is invested in me as much as I am invested in light. This relationship seems to imply that light helps define me as much as I entrust myself to it. As I corporeally explore the life force of light, it works back at me, perhaps changing and determining some aspects of my consciousness. Therefore I sought to subjectively consider the relationship between myself and light, and how I could visually interpret this manifestation. I reflected on being in a state of lumen, suffused with light, with my physical body permeable to this stimulant. Perhaps inversely, the radiance of lumen was what gave definition to my self—not just spatially as a contrasting body or shape, but also by activating aspects of my potential. As Bonaventure states, light as form gives my body/matter its characteristic dimension, and is responsible for its beauty, colour and activity (Hayes, 1996; Miccoli, 2001). Therefore, multiple aspects that make up my perceived being could be determined or affected by light.

With these thoughts, my research took a material approach. I adopted an indirect strategy of exploring light by first creating orchestrated environments with a changing array of materials. These materials harboured capacities and vitalities of their own, as bodies they were also influenced by light. Their energy and agency provoked a practical exploration through my physical immersion (Bennett, 2010; Mäkelä & Löytönen, 2015). I was able to cast myself in the midst of these mediators, investing myself in their reflection, radiance, opacity and luminosity; gradually learning from them as I reacted and responded to their particular potential (Figures 6.8 and 6.9). Following Bonaventure’s notion of first working with my hands and becoming physically embodied, I moved through and with the light to gain a sensate experience of its energy as it was manipulated through these assemblages. Frequently changing my position I observed its evanescence, realising that it was not the rigid, intangible and unaccommodating force I had assumed it to be. Between imagination and reality I sensed a connection to light and its dynamic intent to seek me out. Through the combination of material forces, my own physical involvement and the energy of light, I became aware how this transient relationship altered my perception and seemingly my corporeity. I worked without a fixed idea of outcomes, simply exploring and observing atmospheric changes from these cooperative conjunctions, and how these affected the way I saw and experienced my self and my being. Aspects and details of my appearance became more indistinct or prominent, my body constantly transforming as I moved...
All experiments were conducted in a 50m² studio, adjacent to my home in a quiet suburb of Auckland. The studio offered several advantages. These included an open floor plan accommodating large material assemblages and projections, 24 hour access, no time constraints on assemblage set ups and, most importantly, absolute tranquility. I was repeatedly reminded of Bonaventure’s beginnings as a monk, and the meditative atmosphere in the studio was further affirmed when reading Life in the Medieval Cloister (Kerr, 2009) and Mindfulness (André, 2014).

81 Pallasmaa (2009) defines activation as a “breathing of life into beings, a pulse in the darkness of uncertainty” (p. 108). I interpret light’s force in this manner; as an activation.

82 Some theologians assert that Divine light is unseen not because of its obscurity, but because of its magnitude and omnipresence. This renders it too obvious for human beings to see (Wiegley, 2005).
Two self-portraits of Lumen as a state of being (April, 2015–June, 2016). I am potential, activated by the force of light. Comparing my posture to earlier writings of Bonaventure, I found that he discusses the notion of standing upright (with the head as the summit) to show the human intellect in harmony with the Divine, and denoting the powers of spiritual alignment (Hayes, 1996). Rectitude thus becomes a metaphor for straight and for right.

6.3 Embodiment

In this thesis the term embodiment describes a sensate experience through and with the viewer’s entire body, whereby an understanding or emotive expression may manifest itself corporeally.

My reflections on being infused with light’s catalytic presence, or existing within the causality of lumen, invoked phenomenological concepts of consciousness. I realised that my research interest had gradually shifted from the visual to the experiential perception of light, and this aspect became increasingly important as the enquiry progressed. Although I set out to create images that would visually represent Bonaventure’s metaphysical thinking, the sensate, tangible dimension of feeling became the pivotal essence. While my hands and my eyes could apprehend certain sensate aspects of the experiments, I needed to feel resonances emotionally in order to ascertain their value within the context of the research. Bringing my body into the assemblages that I crafted from materials and light created a more intense experience. Probing and experiencing these orchestrations in this embodied manner generated a more engrossing personal engagement.

In contemplating the theory of embodiment, I reflected on the idea of corporeity as an instrument for dealing with experience. Through embodied experience we bring tacit engagement to what is presented. Merleau-Ponty (1948/2004) suggests that we are:

rediscovering our interest in the space in which we are situated. Though we see it only from a limited perspective – our perspective – this space is nevertheless where we reside and we relate to it through our bodies. […] So the way we relate to things of the world is no longer as pure intellect… rather, this relationship is an ambiguous one, between beings who are both embodied and limited, and an enigmatic world of which we catch a glimpse… (p. 53).

Exploring light in practice required “a point of view or state of mind that is experiential rather than intellectual – a kind of sensation rather...
than a set of ideas” (Watts, 1958, p. 51). As light affected and blended the outer and inner environments of my body and I artistically engaged with these, it evoked a “synthesis of perception, memory and desire” (Pallasmaa, 2009, p. 116). My embodiment was a way of heuristic apprehension that drew out an emotive response to the unfolding experiences. As the work progressed, it became more intimate and emotionally involving, awakening irrational recollections and provoking intuitive associations. This process in turn gave rise to precepts and personal non-verbal meanings, anchoring the evolving imagery in an inner space of sensate, existential consciousness rather than intellectual knowing. In other words, the images, or my research outcomes, stored a form of meaning that I had assigned to them based on my past and current embodied experience whilst producing them (Heidegger, 1968; Polanyi, 1967; Scrivener, 2002).

Several aspects of the practice were infused with the notion of embodied meaning, or knowledge derived through sensate corporeal experience (see Chapter 3.4.1). As an example, the understanding of the different materials I used in my assemblages was gained through experiential processes that became embodied. The discovery of the properties inherent to these diverse materials, and how they reacted to the light or to my physical manipulation, was acquired corporeally. By repeatedly working with the materials, using my hands and sometimes the force or pressure of my body’s weight, I learned about their individual propensities; and how and what they could contribute to my work.

This learning formed a balance between the sensing and thinking, building knowledge that became an important factor in the orchestration of the material assemblages and ultimately, the creation of the photographic imagery.

In addition, approaching light with the same thinking of embodiment allowed an arguably more authentic apprehension. Although sensate qualities of light appeared intangible, I was able to grasp these in the context of embodiment, by probing resonances within my corporeity. I recognised that understanding light, particularly in its metaphysical context, could be entwined with a subjective tacit experience. This tacit, affective aspect might be implied by Bonaventure with his assertion that light mediates between the soul and the body, or between spiritual and physical forms (Noone & Houser, 2005). I interpret this as light’s capacity to be felt with my body, but also bring into it a sense of connectivity to another dimension that I cannot access with my usual senses. In the immersive experiments, I sought a resonance between atmosphere, feeling and metaphysical questions (Figure 6.12). Probing my relationship with light, the strength of this embodied experience became a significant factor when assessing the quality of the images.

Ultimately, and perhaps most importantly, the idea of an engaged, embodied experience determined the design of the three installations. In all three I sought to encourage the viewer to undergo an experience that reached beyond the visual or tactile.

In the first installation my intent was to demonstrate light as an ephemeral connection to a metaphysical idea, and to create a sense of experiential discovery for the viewer. By

---

83 There are analogies to spirituality here, whereby feelings and perception unite to an inseparable bond. Furthermore, I am reminded of Bonaventure’s argument that sensation always consists of an external apprehension accompanied by an internal feeling (Miccoli, 2001, p. 77).
projecting my photographs at a large scale and placing the viewer between projectors and imagery. I invited a physical interaction (Figure 6.13). The spatial arrangement in the darkened room, the pace of the projections, and the style of music called on the viewer to engage viscerally and simply dwell in the mysterious resonance. I sought to immerse the viewer corporally in a contemplative and introspective environment that connected emotionally to Bonaventure’s medieval spirituality. My images contained fragments of 13th Century calligraphy, using Bonaventure’s Latin text, as an ideological link to the past. Because the images were abstract (and the texts were in Latin), I thought they might move viewers beyond intellectual analysis into a deeper level of emotive engagement and imagination. A part of the music was also medieval, which helped give a sense of place. Although unfamiliar with Bonaventure himself, most beholders of the installation understood the spiritual notion and my concentration on light, and sensed that this work had an historical background.

In the second installation, I placed greater focus on a personal embodied experience, trying to contain the atmosphere, and the viewer within it. Although I induced a similar contemplative and introspective mood, the general intent was different than in the first installation. I sought to “make visible how the world touches us” (Merleau-Ponty, 1964, p. 19) and to emphasise the viewer’s relationship with the permeating light. I designed an intimate space and, to minimise distraction, allowed only one viewer to enter at a time. By concentrating the animated imagery onto a single large screen, and by covering all surfaces in reflective silver leaf, I hoped for a coalescence between the viewer’s physicality and the light. Within this meditative immersion, I invited the viewer to simply be, perceiving the light existentially. I didn’t want the viewer to analyse the space rationally, but instead feel embraced and embodied through it (Figure 6.14). Some calligraphic text from Bonaventure was projected onto one wall, and the music also contained chords from chorale music. These two ideas were added to draw a connection back to the origins of the illuminative theory. Although they clarified the concept of contextualising a medieval theory, they did not enhance the immersive experience – and this was presumably why reviewers critiqued these elements as superfluous. In spite of the medieval nuances, I believe that the musical dimension remained a valuable and potent addition to the installation. The music set a distinct pace, supporting the slow rhythm of the animation. It also added to the atmospheric mood of the installation, helping transport the viewer to a peaceful attentiveness, and conveying a sense of spatiality and immersion.

The aim of the third and final installation (Figure 6.15) was for the viewer to peacefully embrace the presence of light, without distracting thoughts, and to be given over to an immersive experience, fully embodied, imbued by light and affected by its transcendent virtues. André describes such a state in the following manner:

> The sweetness that rises from within, the calm that has been allowed to emerge... Enstasis.

---

84 In the context of artistic practice, Ings (2013b) defines the term ‘enstasis’ as “an induced interior state of selfhood where one-dwells in the creative potential of what is not yet formed” (p. 121). Enstasis is, according to Friesen (2011), a term that can be traced back to the 18th Century theologian H. Paulus, and is somewhat ambiguous in its use. For some, this has become a term to explain religious experience, an openness or a sense of connection to the Divine (ibid). I prefer to relate the expression enstasis to an unconditioned, pre-intellectual, intuitive experience, with a feeling of mystical dissolving and displacement within.
calm connects us to the world rather than cutting us off from it (2014, p. 265).

In this iteration of my thinking, the sound had become contemporary, and there were no didactic connections to medieval times or Bonaventure. His thinking was interpreted through, and woven into, present day artistic practice, without distracting historical references. This installation (see Appendix 2) was single-minded in its intent on immersing the viewer in the light, and encouraging a contemplation of this relationship. Any elements that tried to clarify philosophical background were now removed from the experience.

Similar to the second installation, I also ensured that any form outside the immersive arrangement was neutralised. The large space that housed the installation was fully blacked out. This darkening had several advantages: visually and corporeally, it attracted the approaching viewer into the light of the immersion, initiating the embodiment. By masking its exterior structure, the installation seemed to float in the realm of darkness, which emphasised its presence in the now, and its quality as an idea rather than a room. Additionally, softening the darkness (with carpets and curtains) changed the sound, further dissolving its spatial dimensions into a sense of timelessness and mystery. Crossing this void to reach the installation, the viewer physically left behind a finite reality to experience an unfamiliar phenomenon.

6.4 Summary

'The nature of Divine light', 'being in a state of lumen', and 'experiencing through embodiment' were the three significant ideas that formed the foundation of this thesis. While the first two ideas represent a way of thinking, the third idea represents a way of experiencing. These three ideas intersected throughout the trajectory of practice, and together they determined the explorative navigation, the percipient approach, as well as the expressive canon. Certain materials and methods synergised with these ideas, as I observed, sensed and considered resonances between the tactile, emotive and the abstract. Conjunctions were recognised, explored and strengthened, and these helped inform and express notions about the relationship between my self and Divine light.

Along the trajectory of the thesis I contemplated aspects of my being, my consciousness and my perception as the artistic practitioner. Through immersive, embodied experiences I developed a tacit apprehension of light’s agency. This understanding ultimately helped shape the installations that were designed to communicate the underpinning ideas to the viewer. By allowing the beholders to consider the ideas in a similarly experiential manner, I hoped that they might also be challenged in their boundaries of consciousness and reality.
While the previous chapter dealt with the philosophical ideas of the thesis, this chapter discusses how these were contextualised in practice. The development of the artefacts is examined, as well as the understanding derived from these processes. Additionally, the chapter reflects on the forms of knowledge generated by this thesis.

7.1 Artefacts

In this artistic research, a progression of artefacts was created. Each of the three distinct forms had its own expressive characteristics and concerns, and was brought into existence through iterative experimental probing or testing. Each artefact helped shape the next, even though this was not an original intent. The progression was a forward movement of amplification, a reflexive development of materials, processes and insights towards a resonant sensate contemplation. Each artefactual form added additional layers of expressive potential to the previous one. Items of the first artefactual form, the photographic images, were utilised to create the second form, the animated sequences. These sequences in turn became central components of my designed installations, the third form of artefact. The installations can also be regarded as experiential objects, because these spaces were created as cohesively orchestrated entities with the intent of engendering an experience. Artistic consideration was given to all aspects of the built and atmospheric environment, designed in order to enrich the viewer’s experience.

7.1.1 Exploration

In this thesis, I set out to develop a personal artistic expression of a thematic territory with which I was unfamiliar. I wanted to generate a visual interpretation that was borne from my beliefs and feelings rather than from rational or perceived realities. Bonaventure’s metaphysical thinking about light was an abstract concept that existed so far only in my imagination. However, through practice, I attempted to draw from my “mirage of reality” (André, 2011, p. 163) in order to create and express this imagined concept. I wanted to visually articulate light as a metaphysical conduit, and I needed to employ ‘seen’ light and other materials to assist with this construct. I challenged myself to bring an idea from beyond reality into my existential reality and give it a tangible, communicable form. Reflecting on this undertaking, I realised that I was attempting to achieve two things. First, I wished to explore new dimensions within my artistic practice, and through this exploration, to precipitate an authentically expressive visual voice. I knew I wanted to manually make and experience material assemblages, but I needed a means to crystallise these for communicative purposes. After initial tests with other artistic forms (see Chapter 4.5.2), I sensed that photography would provide an appropriate and capable means of rendering expressive artefacts. The resulting photographic imagery would be my visual  

85 The artefacts themselves can generally be seen as tests of my ideas around Bonaventure’s theory of metaphysical light. This testing can be understood as assessing whether the artefacts’ expression found congruence with my interpretation of Bonaventure’s thoughts.
agency to stimulate memories, my designerly argumentation to help others understand experientially, and illustrate new ways of thinking (Mäkelä, 2007; Riessmann, 2008). In practice, photography works with light to generate images, so it had a strong association with my research topic. Furthermore, through photography I was able to quickly document situations that were protean and transient. Capturing brief moments instantly allowed me to concentrate on the assemblages and my embodied immersion rather than on this documenting process. Therefore, photography became a valuable medium – not because it contributed to an understanding of spirituality, but because its descriptive mode of visualisation appeared to fit best with my practice of making and experiencing material assemblages.

Another aspect that I came to recognise in practice was the role of the camera. Operating the camera as the researcher, I adopted the point of view of the observer. This instrument allowed me to document the work I produced as the engaged practitioner, occasioning a dialogue between these two frames of reference. Yet the documents generated with the camera also became my artefacts; the camera therefore represented one of the practice tools. Within my practice-led research, the camera was both objective (in its mechanical observations) and subjective (capturing only the scenes I directed it to, in the way I wanted). This helped bridge, and intimately intertwine, the dual perspectives of researcher and practitioner.

Second, in probing the metaphysical notion of light, I aimed to give the unseen, spiritual dimension a tangible form. Yet rendering unseen light visible represents a paradox. Unseen, uncreated, or Divine light is an imagined archetypal concept (Hayes, 1996; McAdams, 1991; Noone & Houser, 2014), human beings arguably harbour subjective views of this concept, and it can be assumed that these interpretations vary. Spiritual concepts have historically been illustrated allegorically, possibly to render them more rationally comprehensible (Figure 7.1). Narratives and notions have generally been visualised through symbolic forms or figures, and their rendering and subsequent interpreting are entrenched in a particular cultural understanding (Osborne, 1970). This would mean that, although my work had no biblical intent, existing religious iconography would have an influential role in how I (and subsequently the viewer) perceived and assessed my artefacts. Arguably, my notion of spirituality was rooted in the cultural context of Christianity, and to some extent it would always reflect this.

7.1.2 Photographs

During the early stages of the enquiry, it was difficult for me to work around photographic and religious imagery that was embedded in my memory from my own life history, cultural attachments and repertoire. Understanding that previous experience generally provides the basis for judging the current practice (Heidegger, 1968; Schön, 1983), I tried to dismiss any consciously surfacing internal imagery. Because of my embodied self and the subjective approach within the practice, I had to acknowledge and be aware that my past would be involved in some subconscious form. Nevertheless, this self-awareness could act as a mechanism of critique, persistently questioning the emerging imagery86, to ensure it remained personally relevant. The heuristic methodology of exploring concepts through drawing reflective questions deep into the self (see Chapter 5.3) also helped give the imagery authenticity and integrity. Thus, the validity of the images I generated was continuously questioned – I needed to feel their resonance emotively, rather than find them appealing for symbolic or aesthetic reasons. Within the search for my voice, not only were internal images of spirituality permanently called into consideration, but also my beliefs and opinions. Through this interrogative process, my internal notions became clearer as the external expressions took on more meaningful forms, with both influencing each other.

In probing my embodied relationship with light, the aspect of lumen as a permeating force (see Chapter 5.1.4) intrigued me visually. I was interested in an expression of light that appeared to be working through my corporeal form. As a consequence, I contemplated light’s engagement with certain physical aspects, or how it seemingly participated in shaping the boundaries of my body (see Chapter 6.2).

If I assumed that my body constituted the substrate upon which this relationship was negotiated, I wanted to try and portray this. As the practice developed, the emerging imagery increasingly focused on showing my body or a part of it, and how this spatial representation was negotiated by light.

In spite of showing some of my body, the ensuing photographs were not literal. Nevertheless, they can be categorised as self-portraits, because, as Spalding (2014) declares, the purpose of a self-portrait is to bring the observer into contact with the artist’s soul. In this tenor, my intent was to move beyond an expression of physicality or likeness and document a felt sensation – a mingling of mood and form that stirred me. The imagery needed to evoke:

86 Because I am not religious, I may not hold existing religious iconography in the same regard as other people. This, I believe, may have provided me with a level of detachment which helped to develop a visual style beyond the conventional.
imperfect in their composition, contrast and proportions, but they are pure in their spirit, without aesthetic manipulation. No digital retouching was applied, because in order to keep these photographs evocative, I sensed that they needed to be left as raw and as close to the experienced situation as possible. For me, these were emotionally tangible personal memories, artefacts that preserved a narrative yearning. This yearning continued to remind me of a deep connectedness, an associative expansion, and a reconciliation with a spiritual dimension.

My artistic exploration of light is emotional, poetic and perhaps irrational, yet the visual agency of photography gives it the notion of physical existence. As viewers observe my photographs, they have a sense that these are born from an actual situation, which has been faithfully reproduced in conditions similar to those of vision. This notion of unquestioned reality appears to be socially entrenched (Bourdieu, 1990). A viewer assumes that the subject matter depicted through photographic imagery cannot be imaginary; because this constitutes a “certificate of presence” (Barthes, 1981, p. 87). Arguably then, my produced photographs take on a form of justification, and may evoke notions of a new-found truth (Roberts, 2011; Rorty, 1989). Barthes (1981) deduces that photographs attest that “what I see has indeed existed” (p. 82). Reflecting on this aspect in hindsight, I wonder why I was compelled to combine an imaginary metaphysical topic with a visualisation tool that implies physical existence. Perhaps I subconsciously needed a form of reassurance that the subject of my imagination could indeed be rendered ‘realistically’. Additionally, I believe this endorsement of reality may actually facilitate a viewer’s experience of my images. By commanding credibility, these photographs allow their emotional subject matter to be appreciated more readily. The spiritual implications of the imagery may be able to bypass a viewer’s sceptical intellect, momentarily satisfied by the supposed veracity.

7.1.3 Animation

To best communicate the photographic images within my installations, I was determined to project them. In my view, these images had been born through light, and therefore needed to be conveyed in this manner. I felt that casting them with light into a space was another way of underscoring light’s radiant potency to the viewers. In doing so, I was giving shape to light, perhaps increasing the sense of metaphysical manifestation. This thinking led me to consider the parameters of the image projection. I was concerned that as captured moments, the photographs depicted situations that appeared suspended and frozen. This seemed unnatural, because I understood light to be a permanent activating force—an energy that defies being arrested. Indeed, when I was immersed in the assemblages, movement and time were important facets of the process. With incremental changes to my posture, the angle of light changed relative to my perspective, modifying and reshaping the experience, as well as my perception and what the camera captured (see Figures 5.5 and 5.6). I wanted to bring back this idea of light’s ephemerality to the installation and give viewers a sense of its delicate respiration. In response to this challenge, I created animated sequences with a selection of the photographs.

In the first installation, the photographs slowly faded in from black and back out again. Gradually gaining in definition, the images seemed to rise from the darkness, the lighter areas slowly swelling and intensifying. The deliberately slow fade in and fade out gave the impression of a liquefied agitation, with areas appearing to pool and shimmer, resolving briefly and then gradually dissolving back to black again. Although the animation was slow, the movement gave the imagery back some sense of transience. The experience came alive for the viewers, and thus arguably felt more real and direct. Emphasising the impermanence of the photographs, the fading effect perhaps heightened the viewers’ attention and longing. The disappearance of each image kept viewers in the present, curious about how light would bring the succeeding imagery into being.

In the second and third installations, the images changed, but the rhythmic animated sequencing remained. Instead of fading in and out of black, the photographs dissolved into each other. As one image gave way to the next, the lighter and darker areas seemed to interact with each other, negotiating their spaces and dimensions in an ever-changing relational dynamic (Figure 7.2). Out of each image the next one grew; taking shape from the light that had rendered its predecessor. I felt that, through this constantly evolving expression, the imagery demonstrated the participation of and in light according to Bonaventure’s philosophy of hylomorphism (see Chapter 4.1.4).

7.1.4 Installations

My first installation could be recognised as an experiment with regards to the connective experience. The nature of such a photographic

87 There is an interesting conundrum here. The notion of timelessness is entrenched in spirituality, and this concept is what arguably sets it apart from our lived reality. Photography appears to remove the element of time through suspension, but I do not interpret this as timeless, but as simply ‘fixed’. Timelessness implies an everlasting quality that is ongoing, and this is how I use the word ‘permanent’: not as an expression for something petrified, but interminable.
exhibition might traditionally suggest framing and exhibiting the artefacts passively on a gallery wall. Yet with the aim of designing an experience for viewers, I took a different approach, and considered the three dimensional space and the mood as a basis for an immersive interaction. I projected my animated sequence of photographs across the darkened room onto full height cloth banners (see Chapter 5.5.6 and Chapter 6.3). In doing so, the photographs were given a presence and concentration that were different from hanging them as prints. The dynamics of their interaction with viewers became more nuanced and more open to bodily immersion and sensory interpretation.

I hoped that displaying these images in such a manner would absorb viewers and provoke an experiential exchange (Figure 7.3). Additionally, the combination of elements within the environment of the installation (the blackened room, the tone and style of the music, the animation, the proportion of the projections, and the soft seeping of light through the banners) contributed to a distinctive atmosphere. Arguably then, although the photographic images were what I had set out to exhibit, these became subservient to the overall communicative canon. It was the atmosphere itself that the viewers commented on foremost, rather than individual photographs. This feedback confirmed that my considerations had been valuable; by transforming the original artefacts into another form, and contextualising the entire experience, the communicative intent had been heightened.

For the second and third installation, I wanted my images to envelop and caress viewers so a greater level of embodiment might be experienced. To achieve this, I concentrated the animated sequence of photographs onto a single large cloth screen that doubled as the front wall of the installation space. The projector was moved outside the installation, casting the photographic images through the cloth wall into the viewing space. Viewers were not able to see a light source (or their shadow), and this further enhanced the ethereal atmosphere. The images were not perceived as projected into the space but became part of the negotiated spatiality itself (Figure 7.4).

I then designed and constructed the space around the cloth front wall. By determining the proportions (and the finishes – see Chapter 6.1) of the space, I obliged the viewer to stand much closer to the screen than in the first installation. This proximity to the large screen gave the imagery more intensity and prominence. The mirroring of the silver leaf walls also seemingly spread the imagery out past the viewer’s peripheral vision. Both of these effects intensified the sense of immersion.

The projected imagery was the only source of light within the installation space. As it flooded through the cloth wall with the imagery, the light was softened to a delicate glow that rose and ebbed with the differing contrast of each sequenced image. Once inside the space, the viewer was corporeally enveloped in these images, perceiving this permeating breathing light within the installation space. As it flooded through the cloth wall with the imagery, the light was embodied in me. These self-portraits were memories of situations where I seemingly had an embodied experience of lumens. In these moments I had felt particularly suffused by metaphysical light, observing its way of defining my corporeity and ostensibly my self. Therefore, the content of these photographs represented a tangible extension of my existence. I thought they were emotionally powerful as representations, and assumed that in the context of an installation, viewers might also be moved in their presence. The installations were designed with the express intent of communicating my thoughts around these images to viewers, so these were embedded in a conducive environment. I suspected that designing this environment helped channel the viewer’s emotive interest in my imagery. With detailed management of room dimensions, lighting, sound, rhythm and projection, the viewer was able to have a richly

88 The screen in the second installation measured 2400mm high x 1600mm wide. The screen in the third installation measured 2800mm high x 1800mm wide. The change in proportions was mainly due to the revised design of the installation (see Appendix 2). I felt that increasing the height of the installation space would render it more immersive, because the viewer would seem smaller in relation to the screen.

89 According to Merleau-Ponty’s phenomenological reciprocity, one might say that I was embodied in the light as much as the light was embodied in me.
immersive experience. Upon reflection however, this experience was based on more than what I brought to the installations. I believe something else happened in the exchange between the viewer and my photographic imagery.

7.2.1 Re-experiencing

I reason that my self-portraits, in their poetic and mystically vague expression, took on a different role, and became self-portraits of the viewer. According to Roberts (2011), as viewers engage with the photographic imagery, a process of recognition, or re-cognition, commences:

> Here are implicated questions of memory and time, identity and self-image, sensual connections, accompanying mood and, possibly, a personal life assessment, that are related to the seen image (ibid., para. 3).

The photographic images, having come into existence as my own artefacts, imbued with my own memories and meaning, were being re-experienced by the viewers. Although indexical traces of my self were likely to be present, the photographic content that they were perceiving differed to my perception, because viewers were extracting what was pertinent to themselves. This re-contextualisation arguably stimulated their own memories and feelings, and generated resonant associations that were particular to them and their own life story or repertoire. This gave the imagery a more direct relationship to each viewer, and more relevance to how much of the metaphysical aspect viewers pondered adding elements because it ran against my sense of clarification. Keeping the idea uncluttered would allow a viewer to have their impression and response not be compromised by my direction. As such, communicating my understanding to viewers in the orchestrated manner that I did, I aspired to make a contribution to human experience and to knowledge.

7.2.2 Co-Creation

The notion of re-experiencing became an important consideration in the third and culminating installation. As much as this artefact represented a considered and tested outcome, I could not be certain how it would be perceived by viewers. Feedback after the second installation had suggested (and I also sensed) that the viewers’ emotional engagement would improve by stripping away prescriptive and didactical elements. Keeping the idea uncluttered would give viewers more impetus for exploration. Yet admittedly, this plan proved difficult at times because it ran against my sense of clarification. During several stages of the planning I pondered adding elements because I wondered how much of the metaphysical aspect viewers would understand. However, the notion of a restrained installation design prevailed, in the hope of provoking a richer, more individualised apprehension. Without being overly directive it was my intention that a viewer’s experience might be more than just a re-experiencing of the self-portrait imagery. The viewer might be encouraged to co-create the entire installation.

Feedback after the second installation reminded me again that perception entails the past being carried into the present to interact with and enrich the momentary experience (Dewey, 1934/2005). Our experience of the world is invariably conditioned. Although we may be open to new apprehension, we see and judge things in the context of what we already know or have experienced (Heidegger, 1968; Polanyi, 1967; Serres, 2009). With this in mind, I had to assume an irrepressible individuality of perception in the viewers. Removing didactic elements might diminish the comprehension of the installation’s symbolic content, but it might also potentially facilitate a greater subjective immersion and emotive affect. By allowing a viewer to be in the experience, and not prescribing how, their impression and response was not compromised by my direction. As the projected images filled the installation space, wrapping themselves around the viewers and radiating between the walls, the viewer might become involved and absorbed, being in the light and experiencing its permeating stimulus. Later, surfacing thoughts and insights might sediment as meaning. I imagined that viewers would carry this knowledge with them as an extension to their existence, including it as part of their future perception and their distinct concept of the world.

7.3 Knowledge and Contribution

According to Scrivener (2002a), artefacts store information, and humans derive knowledge from extracting this information by way of an experience with them. Inversely then, things of the perceived world become manifest to us through experience, and in this experience we make meaning (Merleau-Ponty, 1948/2004). This was the aim of the thesis, I aspired to make meaning by way of experiential understanding. My goal was to share and communicate my own experiences to viewers in a manner that allowed them to have their own experience. This experience would invite viewers to reflect on their beliefs and perhaps consider adding this new understanding to them. One reviewer noted after the second installation: “it showed me what state I am in”. This suggested that the installation’s emotive intent had been understood viscerally and that it had summoned the viewer’s self to reflect. I was reminded of Bonaventure’s claim that “sense perception is, as it were, the vestibule of intellectual knowledge” (Hayes, 1996, p. 16). In other words, sensing stimulates a process of reflection, and this crystallises meaning. As such, communicating my understanding to viewers in the orchestrated manner that I did, I aspired to make a contribution to human experience and to knowledge.

My own definition of the knowledge that has arisen from this enquiry might be expressed as an alternative view of design practice. Outlined in the words of Arnold (2012):

> the opportunities presented by the creativity and research nexus are potentially transformative as they provide us with the ability to look at the world in new ways, to look through different prisms and lenses and through other people’s eyes so as to develop new aesthetics (p. 10).

90 The third installation constituted the exhibition for the thesis examination (as explained in Chapter 3.1). A short video of this installation can be viewed here: https://youtu.be/-10Ox7y6ufo

91 I was reminded of a statement by Close (2013), who, in discussing James Turrell’s work, says: “he’s an orchestrator of experience, not a creator of cheap effects. And every artist knows how cheap an effect is, and how revolutionary an experience” (quoted in Hybón, 2013, para. 22).
Following this ideology, the overarching objective of my thesis was to elicit, through the discipline of artistic research, a general transformation of thinking, where a new arrangement of values or views might be reached (Brabazon & Dagli, 2010). My main concern was to communicate a different way of seeing and of being in relation to how artistic practice is currently interpreted. Of value to academia is, I believe, the suggestion of an alternative conceptual perspective. The thesis ponders the interminable presence and influence of metaphysical light, in its nature as a catalytic force, on the creative practitioner and his bearing.

Invited to consider this notion, creative practitioners might develop new forms of thought from this and view their endeavour of practice differently. They might also review how they perceive light in general, appreciating a connectivity beyond technological commodity, and beyond the visible. My hope is that this re-introduced metaphysical dimension might generate new aspects of practical awareness or artistic consciousness. Throughout its trajectory, the thesis has changed the way I regard myself and my appreciation of creative practice, particularly within the perception of my reality.

The light artist James Turrell proclaims, “we live within this reality we create, and we are quite unaware of how we create the reality” (Govan, 2011, para 6). With the suggestion of a new perspective, perhaps as practitioners we can increase our awareness of our own reality, and expand its self-imposed boundaries.

7.4 Summary

This chapter discusses the production of artefacts along the practice trajectory. In this thesis one form of artefact progressively helped shape the next. Initial photographic imagery was later assembled to animated sequences, and these later became projections within designed installation spaces. The artefacts were created iteratively through practical experimentation, as I perceived and considered their experiential value, or their expressive resonance with my beliefs, emotions and consciousness. Using the insights and meanings derived from these personal experiences, I designed installations that engendered an embodied experience. I hoped that this might stimulate viewers to contemplate their own relationship to metaphysical light. Over the course of the trajectory I recognised that viewers could re-contextualise my experience and co-create their own meanings. These would be more personal and authentic, and thus more valuable. This experiential understanding may be seen as a contribution to the viewers’ consciousness, and a possible way to induce the development of a fresh perspective.
SUMMARY AND CONCLUSION

8.1 Summary

This thesis considered the experiential nature of light and my relationship with it. Reflecting and working through progressive artefacts, it combined medieval theory and spirituality with consciousness and contemporary artistic practice.

The approach to the enquiry drew upon Bonaventure’s axis of cognitive development, where making, sensing and reflecting determined the forward movement that “brings the form into being” (Ingold, 2010, p. 10). Materials were manually manipulated, arranged and lit, creating transient environments that were explored experientially for their sensate significance. These iterative experiments probed, through an immersive observation of the self, questions of the practitioner’s association with, and stance in, light. The practice considered light as a manifestation of an unseen Divine force, acknowledging Bonaventure’s medieval metaphysical theories on illumination and hylomorphism. From an aesthetic and artistic viewpoint, the concept of lumen was subjectively explored, interpreting light’s permeating affect through photographic imagery. From this imagery, further artefacts were developed in order to communicate the research emotively. In the course of the enquiry, two test installations were designed and staged to gather feedback. This data helped shape a culminating installation, which sought to transfer the contemplative substance of the enquiry to the viewer through an embodied engagement. Orchestrated as an immersive experience, composed of time, projected photographs, animation, sound and material textures, the final installation encouraged the viewer to dwell in light and consider its connective influence and the meanings this might suggest.

The thesis did not set out to resolve an issue or penetrate the mystery of metaphorical light. According to Fowles (1981), mystery is energy and this feeds our curiosity. This energy drew me into spheres of imagination and consciousness, probing the potentiality of an invisible catalyst with wonderment. Dunne and Raby propose that “design that asks carefully crafted questions and makes us think, is just as difficult and important as design that solves problems or finds answers” (2001, p. 58). Posing questions about a latent spiritual connection was my way of “philosophising about the world and human existence” (Pallasmaa, 2009, p. 114). As my reflective curiosity led me through practical experiments, I contemplated a different way of perceiving artistic practice. This view considered the existence of metaphysical light, which I interpreted as a permeating life force. This energy, I surmised, might assist with activating our creative potential, or helping us transcend the conventional.

By immersing myself in, and reflecting on, deeper sensate and instinctual resonances, I sought to fathom cognition and consciousness beyond an immediate material reality, and beyond intellectual reason. Exploring light as an aspect of the world that I construct, and my existential place within it, I considered the connection between my artistic endeavours and the metaphysical. Although Bonaventure’s theories explicate the connective permeation...

...
of light in our practical lives, this spiritual dimension remains enigmatic. I suggest therefore that this notion can be explored subjectively, or in relation to a personal artistic interpretation. Accordingly, the emotional context and experiential quality are of primary importance in the thesis.

8.2 Contributions to Knowledge and Experience

8.2.1 Knowledge production

Artistic practice is now recognised by contemporary scholars as a developing dimension of knowledge research (Arnold, 2012; Brahazon & Dagli, 2010; Mäkelä, 2009; Scrivener, 2000). Mäkelä, Nkimukrat, Dash & Nsenga (2011) suggest that:

The artworld appears to have evolved into a field of possibilities, of exchange of ideas and comparisons of outcomes, in which different modes of perception, thinking and making have a chance to be recognised for their unique potential (p. 3).

Similarly, Ambrozic and Vettese (2013) propose that an artwork should be considered, first and foremost, a thinking process – and as a logical extension of this, the arts must be considered a field of knowledge.

Practice-led research (that probes artistic practice) may therefore uncover many forms of observation. Generally, these observations are closely related to the artist’s own practice. Seago and Dunne (1999) posit that “knowledge, which professional artists generate in the research they perform through their practice, is inseparable from their perception, decision and craft” (p. 16). In general, knowledge is transformed in production as well as in perception (Jacob, 2013). This means that forms of knowledge may arguably be derived from working with and recognising aspects of materials and processes, or from subjectively sensing and reflecting on experiences. I suggest that both propositions are valid (94), and both are to some extent transferable. These forms of knowledge can provide “examples, images and understandings that others may adopt for, or adopt to, their own purposes” (Scrivener, 2000, para. 8).

The structure and content of artistic research doctoral projects has varied between countries, cultures and universities. However, the two forms of knowledge, i.e. knowledge derived in production and knowledge derived in perception, seem universally recognised, Thus, scholars (for example: Candy, 2006; Mäkelä, 2009 and Scrivener, 2000) endorse the two outcomes of making a contribution to human knowledge and making a contribution to human experience. These may form the parameters by which artistic research doctoral projects are assessed. Reflecting on the outcomes, I posit that the thesis has made several contributions along these parameters.

8.2.2 Contributions to Knowledge

I believe the thesis made three distinct contributions to knowledge.

First, the project drew together, in a unique and creatively synergetic manner, two generally unrelated disciplines from two different periods: medieval theological philosophy and contemporary artistic practice. Within this interaction, it considered and articulated an alternative epistemology of design practice. The thesis contemplated an aspect of creative consciousness, and the catalytic force of metaphysical light as integral and existential to this awareness. In doing this, a different dimension of sensing and tacit understanding was evoked. By encouraging sensibility towards such a transcendent dimension, the thesis suggests a re-evaluation of the reflective practitioner’s bearing and the ethos of practice itself.

Second, in considering metaphysical light, practical experiments were conducted and documented experimentally. Pondering the notion of lumen (the generation of visible light through an embodied activation of the self), light was explored through its resonance with intuition. Evaluating this experiential quality gave rise to thinking about light as a material with distinct properties, and about the embodied manner in which it becomes tangible. Therefore this thesis suggests a revision of the common perception of light. If light is understood as a material, this reconceptualisation invites fresh discourse about our entangled, interactive relationship with it. As artistic practitioners and as human beings, we might develop a different sense of awareness about light’s physical manifestation.

Third, the thesis has creatively explored the potential of the exegesis, by enhancing the communicative intent with a designed voice that operates beyond the content of written text. It aspired to create a visually engaging document (see Chapter 3.3) by interweaving imagery and text on the pages in carefully considered spatial arrangements. This orchestrated visual experience was aimed outwards, to attract readers both within and beyond academia. The experience was also aimed inwards, to draw the reader into the spirit of the thesis. By giving such attention to the graphic format of the exegesis, this document may feasibly be acknowledged as an object of similar cognitive value to the artefacts and the installations. As a consequence, because of this design negotiation, the two parts of the thesis, exegesis and final installation, are a closely integrated phenomenon.

8.2.3 Contribution to Human Experience

I would align this PhD research with Scrivener’s definition of a creative-production project (2000, p. 2). This is because the research is conducted through art-making, and contributes directly to the ongoing practice. The work is progressed “through the creation of, and interaction with, artefacts, issues and goals” (ibid., p. 3). Because this type of thesis deals with experiential insights rather than problem solving, Scrivener argues that a discussion on knowledge may not be appropriate. Instead, “the criterion to be met is that the work makes a contribution to human experience” (ibid., p. 6). I believe this thesis has made a contribution to human experience through the design of the installations, and specifically how these stimulated viewer engagement and contemplation.

In contemporary assessment, light is either described through its spiritual telos or through its scientific formulae. Yet light might also be transferable. These forms of knowledge can be considered a logical extension of this, the arts must be considered a field of knowledge.

92 Thus, the focus of the thesis is not on the spiritually transformative aspect of Divine light, but on Bonaventure’s consideration of making-sensing-thinking as a “conscious, cognitive movement” (Hayos, 1996, p. 8), and consequently on my development and awareness as creative practitioner and thinker.

93 Due to the general unpredictability of experimental practice, new definitions of propositional knowledge are constantly being produced and brought to the academy by artistic practitioners. This dynamic model represents an ongoing challenge to tradition as well as to scholarship and, in the case of artistic theses, assessment and qualification.

94 Brahazon and Dagli (2010) make a particular distinction when discussing knowledge and how it originates in artistic research theses. They suggest that “a focus on methods is a more basic form of scholarship than theses that are theoretically rich. Spending analytical time on ‘the why’ operates at a lower level than projects probing ‘the why’” (p. 29).
interpretation and valued by an apprehension of its sensate resonance and quality. This notion formed an integral tenet of my thesis. Indeed, considering light and the tangibility of its “fluxes and flows” (Ingold, 2010, p. 3) through the means of my embodiment, precipitated a form of experiential knowledge that became pivotal to the entire enquiry. Along the trajectory of the enquiry I attempted to share my experiences by communicating outcomes through similar experiences. In doing so, I hoped to generate the viewers’ understanding through seeking a tacit resonance. Feedback after conference presentations and installations suggested that viewers had indeed been introduced to a novel way of perceiving light. This impulse led them to contemplate its presence and their awareness of it within their own lives.

Because of light’s unique agency, and the nature of our relationship and negotiation with it, knowledge and experience are intertwined. My corporeity is a permanent condition of experience (Merleau-Ponty, 2012), and through this experience I begin to reflect and appreciate how I am affected by visible and invisible light. In Bonaventure’s thinking “sense perception is, as it were, the vestibule of intellectual knowledge” (Hayes, 1996, p. 16). Understanding is, according to Bonaventure’s axis of illuminative connectivity, contingent on sensing, and I believe this is particularly the case when negotiating light as a material. Through this exegesis and the installations, the thesis can therefore arguably claim to make a contribution to both human knowledge and human experience. Rather than interpret these terms divisively, artistic research on light demands that experience and knowledge should be considered in conjunction.

8.3 Further Research

The research within this thesis will be further developed and disseminated through publications, exhibitions and conference presentations.

8.3.1 Journal articles

Over the next two years I intend to produce a number of articles for peer-reviewed journals. Drawing on my exegetic writing, I plan to produce an article that discusses the metaphysical dimension of artistic practice for the Journal of Art & Society. I also wish to produce an article that considers making light visible through material mediations for Studies in Material Thinking, and an illustrated unpacking of the interplay between light and materiality in the process of artistic enquiry for the Journal of Multimodal Communication Studies. I also envisage contributing to the discourse around the phenomenology of Merleau-Ponty, by producing an article that considers the practitioner’s relationship to light for the Journal of Artistic Research.

This writing will build on my existing work that currently exists in peer reviewed, published conference proceedings (see Footnote 57).

8.3.2 Presentations

Concurrently, I will seek to disseminate the installation ideas to audiences in and outside of academia, in New Zealand and in Europe. Opportunities to present the thinking are for example the 2017 International Conference on The Arts in Society where “Arts products: aura and artefact” are discussed, and the 2017 International Conference of the Image, that “interrogates the nature of the image and functions of image-making”.

The Nordes (Nordic Design Research Network) Conference 2013 originated as a design research exhibition for a designerly exploration into materials and expressions (Jönsson, Mäkelä, Hansen & Ahde-Dahl, 2013). This experimental exhibition conceptually re-examined traditional conferences, by initiating new forms of exhibition and feedback. If another such research exhibition presents itself, I will apply to exhibit.

In 2017 I also intend to establish connections to European Universities, such as the University of Applied Sciences and Art in Basel, Switzerland, where I have been invited to present parts of this thesis.

Ideally, the installation and/or the animated photographic imagery would be exhibited at private and community art galleries (such as the University of Auckland’s Gus Fisher Gallery, the Depot in Devonport, Two Rooms and Artspace in Newton, and NorthArt in Northcote). Further opportunities to share the thinking along with selected photographs would be at collectors’ gatherings or in photographic magazines.

8.3.3 Emerging Conceptual Concerns of the Research

Bonaventure defines light metaphysically as the first form of all bodies (Hayes, 1996), a ‘thing’ that has its unique agency and distinguishing characteristics. Light may be viewed as a material (for its spatial and relational capabilities), a principle (for its catalytic force), and a quality (for its perceived aesthetic, emotive essence), and the coalescence of all three presents an idea as grand as it is enigmatic. This indefinite construct can be seen as fertile ground for further artistic research, opening an area combining phenomenology, consciousness, perception, aesthetics and creativity. Although this thesis has utilised manual techniques, photographic artefacts and projections as its primary modes of expression, the subject matter is transferable to other forms of artistic practice and approaches such as performing arts, sculpture and poetry. Light is primal, we all have an innate relationship with an affinity to light. Therefore I believe deeper artistic exploration into this exchange can only be constructive.

However, Bonaventure’s metaphysical thoughts on light represent only a part of his oeuvre. I believe more of his theories are worth contemplation through artistic practice, for example two that consider attitude and aesthetics:

As we apprehend external objects, Bonaventure suggests that this sensation is always accompanied by a feeling of instinctive pleasure (Miccoli, 2001; Noone & Houser, 2014). This delight is determined by our senses, and invariably

95 Klein (2010) broadly asserts that “knowledge must be acquired through sensory and emotional perception, precisely through artistic experience, from which it cannot be separated” (para 14).

96 http://artsociety.com/journals

97 https://www.materialthinking.org

98 http://jimo.home.aamu.edu.au/?page_id=11

99 http://www.jar-online.net/

100 http://ontheimage.com/journal. The 2016 conference was held in September in Liverpool. The conference is useful because it is cross-disciplinary in nature (architecture, art, cognitive science, communications, computer science, cultural studies, design, education, film studies, history, linguistics, management, marketing, media studies, museum studies, philosophy, photography, psychology, religious studies, and semiotics). It also has a discrete, affiliated quarterly, peer reviewed journal The International Journal of the Image, that may serve as a publication opportunity.

101 I presented this thesis and some of my photographs at a photographic art collectors group meeting in Auckland on August 23, 2016.

102 I have initiated discussions with the editors of the online magazine FF (www.ff1.co.nz).
described as positive and optimistic (Gilson, 1965; Hayes, 1996; McAdams, 1991). Thus, in creative enterprise, light may be responsible for artistic euphoria, or Schaffensfreude (enthusiasm of and in making) similar to the joyous creative potential in craft (Tin, 2011). In addition, Bonaventure discusses this emotive appreciation in relation to the sensitive values of objects. Developed by the medieval Franciscan school, this theory proposes a concept of beauty similarly organised to light (Miccoli, 1991). Accordingly, humans chart an equally hierarchical course toward the beautiful and transcendental. McAdams (1991) surmises that Bonaventure was one of the first aesthetic philosophers in this regard.

8.3.4 Virtues

Finally, I recognise another topic outside the specific concerns of the thesis worth pursuing. As an educator, I am interested in the practical virtues that a research enquiry precipitates. This thesis trajectory has largely been defined by a virtue-based approach (MacFarlane, 2008), calling on virtues such as courage (pursuing beliefs in spite of potential controversy), resoluteness (continuing the exploration despite setbacks and opinions), sincerity (searching for an authentic expression), reflectivity (taking a critical approach) and humility (considering my position as a practitioner and author within academia). These virtues were determined by the thesis concerns, the heuristic methodology, and also by the supervisory climate. My supervisors upheld virtues in their conduct throughout the varying stages of this trajectory. In my own pedagogical capacity, I am now more mindful of the value of such virtues to a research enquiry. With this consideration, I aim to address and cultivate the integrity of my own students and their projects.

8.4 Conclusion

As I assemble my final installation, I reflect back on the journey that this PhD thesis has provided me. In a broad sense, this undertaking has been a pilgrimage; a passage where practice, research and consciousness have merged to a transformational experience. I have found a way outward, bridging and balancing the poetic and the cerebral, finding and establishing my own voice. This articulation will only grow firmer with further artistic research. I have also found a way inward, investigating my inner beliefs and my self to where sentence and consciousness overlap. The process of drawing reflections inwards, and drawing sincerity out, has helped generate a perspective that is more authentic and also more liberating. Finally, I have found a way forward, considering spirituality and artistic practice as interrelated and mutually enriching rather than disconnected. Poetic moments should not be separated but can be intertwined with the everyday (Dunne & Raby, 2001). Perceiving conjunctions along cognitive threads enables these realms to ask intriguing questions of each other.

Merleau-Ponty (1948/2004) suggests that although human beings strive for coherence or order, it is never attained, and unexplained anomalies always remain. He calls the individual to look at himself without indulgence, to rediscover within himself a whole host of fantasies, dreams, patterns of magical behavior, and obscure phenomena which remain all-powerful in shaping both his private and public life and his relationships with other people. Adult thought must not masquerade as Divine law, but rather should measure itself more honestly, against the darkness and difficulty of human life without losing sight of the irrational roots of this life. Finally, reason must acknowledge that its world is also unfinished and should not pretend to have overcome that which it has simply managed to conceal (p. 56).

Similar to Keats’ expression of “living in uncertainty”, Merleau-Ponty addresses the struggle we have in accepting the inexplicable and negotiating this as a part of our lives. Concepts such as the metaphysical and the transcendental make up the fabric of human existence, and we must explore our own individual responses to them, even if these remain riddled with skepticism.

The title of this thesis is taken from one of Bonaventure’s last lines in Reductione: “...ampla sunt via illuminativa...” (Hayes, 1996, p. 60), implying that abundant paths of illumination exist. Thus, as a title, Illuminativa signifies an ongoing personal journey. It acknowledges the many directions of a reflexive, heuristic enquiry, and it encourages further exploration of metaphysical light by other creative practitioners.

Merleau-Ponty asks us to return to the world of phenomena, to reawaken our sensitivity to them, and rediscover the primordial foundation where we are, simply but contentedly, embodied creatures of experience (Cerbone, 2006). Likewise, Bonaventure asks us to return to a realisation that the sensate experience is irrevocably embedded in our cognitive journey, and that we should explore our sensitivity towards the support that unseen forces may offer. Phenomenology is merely descriptive, not speculative or judgmental. As such it calls me to simply be more present in the being and the observing – and if I can refine this capacity with mindfulness, then I have accomplished much.

Trying, as I have in this thesis, to perceive the unseen, represents an admittedly paradoxical undertaking. Yet as Rajchman (2000) reflects: “ideas come after unexpected encounters with things that cannot be recognised in habitual ways” (p. 196). By extending a visual exploration into a spiritual dimension I seek to challenge my limitations of thinking and the definitions I place upon my world. For this is what light does; it actively transcends boundaries relating to space and being.

Light, as I have recognised through this thesis, reaches beyond that which I drink with my eyes, and beyond that which I negotiate corporally. Mediating between internal insights and external connections, light can be a vitality of possibilities; the vanguard of new ideas, or coming-into-being. Light is a treasure that scintillates in atmospheric diffusion; a visible and invisible providence that envelopes me and challenges me to extend my concept of reality into further dimensions. Ultimately, light represents a resplendent promise – and to fathom its allure, I must heed the resonance of the unseen.

103 For Bonaventure, the cognitive development through making-sensing-thinking leads beyond knowledge to blissful affection, therefore the Divine stimulus and the spiritual journey are pleasurable.

104 MacFarlane’s publications have engendered widespread discussion because of their ethical implications to University culture. Service and research achievements and their rewards and intellectual leadership in the context of educational or entrepreneurial culture are some of the aspects of academic citizenship currently debated (Harrison, 2014).

105 Systematic doubt, says Watts (1973), cannot proceed very far without having to embrace instinctual faith.
117

REFERENCES


APPENDICES

Appendix 1: Phase summaries 1–26.

Appendix 2: Concepts and design of the third and final installation.
Light as a Tool

“Light is perhaps a substance, or at least a substantial form, communicating extension and visibility to physical things.”

– Saint Bonaventure

In this experiment, I investigated how light communicates through forms in organic matter. I selected plants and shells, and observed their surfaces, and how light creates these for me to see.

Photographing with three different cameras (due to their varying lens properties), I manually altered my focus, and my depths of field, then (in photoshop) changed the contrast, and composed the images.

In the course of this enquiry, I tried to cease seeing the organic material as a subject, in understanding the plant structure itself, the angle of the stems or the construct of foliage. Rather than a natural forming or supporting role, I tried to see beyond the material, to the substance of light as the source that defines this materiality.

By dismissing the organic shapes and textures as constructs, I tried examine this "substance" light and study its principles in a more abstract form. I found gained more freedom and confidence in my own interpretive photography, yet ultimately it is the material that paradoxically, in photography and in our human perception of our world, it is still the shapes and forms that define the light, rather than the reverse.
In this experiment, I tried to approach Saint Bonaventure’s highest realm of light (‘light of divine wisdom’) by investigating the notion of Sol Invictus, one of many anthropomorphic solar deities. Sol was revered by the Romans and Constantine for shedding light on future events; his birth was celebrated at winter solstice.

I wanted to reflect on how light pours into the darkness, turning the black into white and illuminating objects for humans to see and therefore understand.

I used black toner printouts on transparent foil, selectively scratching away the toner with a scouring pad. Placing an old cutting mat underneath, the pad scratched off the toner unevenly, giving a very coarse and textured appearance to the work. I considered this an advantage for two reasons: first, the technique freed me from getting too particular about any detail. Secondly, I wanted to explore Sol as an idea rather than a being, so I didn’t want to get too literal.

As I moved through the pieces, I tried to introduce more abstract forms of composition, but without straying too far from the human figure. The last piece I produced was scratched onto an output of one of my photographs from Experiment 1, so the toner was not completely black. This gave a more three-dimensional look, a layered effect worth exploring further.

This particular experiment gave me some results that were promising. I realised that working in this simplified manner, with only black or white, gave me a chance to reconnect with an archaic manual approach (marking, shaping and letting my hands explore and learn without always overthinking the outcome) was a refreshing exercise.

During this period, I also spent a great deal of time re-learning screenprinting, and experimenting with semi-glossy inks on acrylic. I found myself reveling in the technique rather than creating substance — not a beneficial digression at this stage.
In this experiment, I again asked: what is the notion of Sol Invictus as a metaphor for the all-knowing divine light which Saint Bonaventure mentions as the highest realm?

Combining the insights gained from the previous two experiments, I tried to express the figure of Sol through photographic means, restricting the images to portrayals of light and movement.

Once again, using light as a tool, I tried to capture the essence of Sol with a camera in a figure that is omnipresent, rather than visible to us in perceived reality. I also used Photoshop to enhance the images, but as minimally as possible. I wanted the look of these images to express a fleeting glimpse of the truth, or something that is burned in our minds as a DNA imprint.

I started with photos of a figure moving across or emanating light, and as I worked through the images, the figure dissolved more and more. I tried to find a balance where the image showed light as the main theme, yet with the figure still present and associated with it.

Investigating solar deities through cultures prior to the Romans, it appears their ‘Sun God’ devotion was appropriated from the Syrians. In Syria, Helios/Abdurahman venerated the supreme sun god with a black conical stone. Even before this, Babylonians revered their sun god ‘Shamash’, who represented Justice (Justice as the antithesis of injustice, the world of darkness). A symbol for Shamash exists in the form of two symbolised eyes, crossed in a centre, with rays emanating from these at four corners.

I tried to capture these symbols and impressions in graphic form, and overlap the photos with these, giving them an additional dimension of thought, or at least mystery.
Appendix 1.4

Phase 4

The Symbolism of Sol

At the beginning of this experiment, I recalled how ancient images of Sol show light rays emitted from his head. I reflected on this symbolism, and tried to approach the notion of Sol/Divine light with more attention to rays.

Once again I commenced with photography, taking the camera underwater. The particles in the water acted as a filter, and allowed the camera to capture the falling light in directional rays. I again chose to keep the photos in black and white, to focus on the contrast more than on any colour issues.

The resulting photos were layered, inverted and assembled in a manner that reflected the symbol for Shamash: two symbolised eyes, crossed in the centre, in a circular shape.

The resulting imagery is arresting and enigmatic, yet I find it too construed. The assemblage to a symbolic piece using geometric shapes becomes the focus of attention, rather than the figure or the rays themselves. While I believe the intent is good, the imagery requires simplification to strengthen its expression.
The Figure of Light

Having the underwater imagery, I constructed a large piece that used light and dark areas to create a figure that appears to be moving through the light. I am getting closer to the notion of omnipresence, and the ephemeral quality of light. In fact, I feel this image, more than any preceding images, now speaks of light rather than of a figure, which was always my concern.

I constructed a large board covered in silver leaf, and attempted to screenprint this image onto it. The idea was that the image becomes mostly reflection, thus the viewer is cast into the frame. Unfortunately this succumbed to difficulties: I could not create a large screen that had satisfactory detail, and printing the image onto a very slippery substrate gave only fainter results.
Appendix 1.6

Light as Potential

In this experiment I took a very different approach: I wanted to emphasise the quality and colour of light, and capture both emanance and reflection; lux and lumen.

I constructed a wall from silver leaf using the medieval method with size glue. In previous tests I learned that the texture of the wall prior to the application of silver leaf determines the reflective quality. In other words: the more uneven the wall surface, the duller the reflection.

I took a large variety of photographs with different parameters: I changed the sources and direction of light; I photographed in daylight as well as night time, which added a different quality to the imagery; I used a light source that moved - which didn’t have the desired effect. I varied the angle of the camera and the distance of it to the silver leaf wall.

I believe the results have the ethereal quality I am searching for. The results are inconsistent, however, so I spent quite a while thinking about how to capture the idea in a far less accidental way. In the end, I felt the experimental nature actually added to the thrill of the discovery process.
I tried to take the previous experiments further by adding typography. Using fonts as a placeholder for handwritten text, I investigated ways to project this onto the silver surface, and capture the reflection together with the enigmatic figure in the background.

I discovered that if the angle of the projection and that of the camera are not aligned, the text is obscured or disappears. Initially, I was frustrated by this because I wanted to capture a wider area of text. However, I realised that this in fact demonstrates the ephemeral nature of light. I will base my exhibition on this principle!
At this stage, I imagined Bonaventure, living in Paris, writing his texts by hand, with quill and parchment. I investigated calligraphic forms of 13th Century Europe, looking closely at letter shapes and ligatures.

I then made large quills using bamboo rods, whittling the ends to a nib, and using bits of tin to retain the ink (this was a craft I learned from a calligrapher in Switzerland in 1986). I proceeded to write passages and words from "De Reductione" that I felt were of significance.

I enjoyed returning to this craft, and contemplating Bonaventure’s thoughts through meditative writing. The sheets of words were another form of expressing and combining Bonaventure’s stages of 'making-sensing-thinking'.

The hand-rendered, imperfect lettering had an aesthetic austerity that I felt gave Bonaventure’s metaphysical philosophy, and my enquiry, another dimension.
Once I had written some of Bonaventure’s passages, I sought to translate this lettering into my projected imagery. I scanned some words, then printed them onto acetate and projected them with an overhead projector. I also recreated negative and positive words in silver leaf on acrylic sheets, which I then used as slides. In a final iteration, I used the acetate as a lens filter, creating multiples of the same word wherever bokeh occurred in the photo.

I felt the lettering added an emotive edge to the images, and a temporal bridge between Bonaventure’s 13th Century thoughts, and my contemporary reimagining. Although I understood the words, having them in original Latin meant that they remained enigmatic to a viewer. The textual content would be removed in favour of the contextual: an interpretation would only be possible through the letter forms themselves. This exemplifies the essence of Bonaventure’s idea that light reveals truths before reason, and that sensation is paramount to understanding. Aviewer would need to sense these calligraphic elements rather than try to intellectually interpret the words and their meaning.
In preparation for the installation, I made a final selection of images to project. The images would appear in the exhibition room at 1.4 x 2.2 m size, and the large scale was a factor in the selection. I felt the images needed to be compelling from a distance and at close range, so they needed an interesting narrative, but also a textural quality. I also wanted some variety, with a range of colours and typographic styles. The determining factor for me, though, was the emotional content of the images. Therefore, some of the final images were created almost a year ago, and some were from more recent experiments.

The images were sequenced into three .mov video files, in order to project them on three separate cloth banners in the installation. I wanted each image to appear out of the darkness on its own, so I created a rotational order over the three videos. I experimented with the pace of these, varying down the speed to create a contemplative atmosphere.
I knew early on that I wanted my MPhil installation to live by light, so all imagery would be projected. Without light, there could be no image, therefore there would be no distractions. The aim was to create a sensory experience for the audience, and to instil a mood of spiritual reflection. I wanted the light of the imagery to permeate the space, therefore there could be no other distractions.

The space was a rectangular room (AUT's Art & Design Postgraduate Test Space 1, WM201C), with concrete and white walls. Three full height banners were hung as projection surfaces at the northern end of the room, far enough apart for the audience to circulate. At the southern end of the room, I installed a custom built housing for three projectors, which I painted black to hide its shape. I added a key statement by Bonaventure: "Light is the principle of perfection, responsible for beauty, colour and activity", and finished this in silver leaf so it was reflective. The projector housing was set low on the ground intentionally, so the circulating audience would be entangled in the light beams, interacting with the projections.

After many hours of listening to music with growing frustration, I finally found what I thought was the ideal sound to add to the installation. Most pieces of music I found to be either too funereal, too meditative, too relaxing, too religious, too 'New Age' or too fast. However, once I heard Parce Mihi Domine*, by Jan Garbarek with the Hilliard Ensemble, I knew this was an ideal fit. The low tones of the male choir created a contemplative, almost church-like atmosphere, while Jan’s soaring saxophone improvisations suggested hope and fascination. This experimental mix of old and new was analogous to my work, creating a contemporary bridge to Bonaventure’s medieval metaphysics.

* The track is from the album Officium. © ECM Music 1994. The music can also be accessed for listening at: http://www.last.fm/music/Jan+Garbarek+&+The+Hilliard+Ensemble/Parce+mihi+domine

MPhil Installation

Phase 11

AUT Art & Design / MPhil / D. Ventling / Feb 2014

Appendix 1.11
Phase 12

After a hiatus of several months following the MPhil installation and the publishing of that exegesis, I commenced an investigation into further materials. Although the silver leaf worked very well as a substrate, I felt it was time to move beyond and consider further reflective surfaces and compositions (especially those which offered more texture).

Additionally, I wanted to go beyond a singular flat surface which the silver leaf might have been. Perhaps a kaleidoscope of surfaces with varying angles, or a ‘landscape’ of hills and valleys? In any case an array of angled surfaces that might catch the light differently to each other.

I bought a 1200 x 1500mm sheet of aluminium and creased this several times. I also purchased a few sheets of copper (one of which I beat over rough pebbles to dimple the surface), a roll of silver foil tape, and a multitude of sequins. I then devised a variety of lighting options to test the reflectivity - a cluster of small lights, a torch with several rows of LEDs, a singular candle, a combined setup with both artificial light and daylight.

The results were interesting, and showed a few potential pathways. However, the search for more and other materials in order to increase the variety of the imagery is ongoing.
I spent some time collecting a variety of materials and testing these under different lighting. Clear and coloured plastic and acrylic sheets with different densities, cotton fabric, styrofoam, more metal sheets, sequins in large and small sizes, glassware such as old platters, vases and bottles, ice blocks and crystals. I manipulated some of these—scratching their surfaces, drawing on them, and forming them into a new shape or creating patterns. I lit and photographed these items, continually evolving how the light source was positioned or where the focus should be. As I worked through these variations, I tried to see and use these materials in many different ways, and I slowly became more familiar with them.

In these preliminary tests, I wanted to learn as much as I could about how the various materials would respond to light, and in turn how I responded to them. As a result, I was able to create a broad range of textural qualities as a repertoire. Hopefully these may be of some use later.
In order to add an enigmatic quality to some materials, I added movement. I found that I could move three different things: the camera (by using a slow shutter speed), or the materials themselves, or the light source (by holding a lamp in my hands and waving my arms about). The movement could be directional or seem random. While I liked the spontaneity and surprise of these images, I didn't feel that these were going in the right direction. Although not manipulated in Photoshop, these still seemed like an effect rather than an idea worth pursuing.
In my search for materials and surface texture, I thought it would be worthwhile exploring a material that wasn't fixed but ephemeral like light. I thought it should play with water, as this material has an equally fluid and impermanent quality and can be highly reflective in certain circumstances.

I built two square containers on sheets of clear acrylic. These were roughly 600 x 600mm with silicon sealed PVC edges. The edges were 100mm high enough to contain the water which I poured in. The water was 20mm deep.

I placed these containers on trestles, over reflective sheets of silver-leafed acrylic, so with scratched surfaces or other deliberate imperfections. The intent was that I would be able to photograph my reflection as I looked into the 'pool' of water. As I photographed, I shook the edges of the acrylic sheets up and down, creating small waves that broke up the imagery.

The results were interesting. The photographs showed momentary situations which I could not perceive by eye - freezing the wave motion into a pattern. I changed my clothing into something more colourful so the pattern would take on multicoloured hues. The imagery showed a dissolving of the threshold of myself, which I was indeed aiming for. However, this seemed nervous and agitated rather than fluid and serene. I felt the environment was rather contrived, and did not particularly invite me to dwell within this arrangement.

Threshold
While exploring various materials is interesting, the images lack an important element—me. This thesis considers illumination as a subjective experience, and how I am in the liminal state of lumen. I am the conduit of unseen light, activated and inspired through Bonaventure’s realms of making, sensing and thinking. Therefore I am perceived within the work, tangible and visible.

In initial experiments, I approached the various materials much like the silver leaf. I tried to capture my reflection and/or shadow, trying a variety of material arrangements and lighting setups, and positioning myself between these. Due to the size constraints and the materials used, I did not always have the flexibility to have a ‘canvas’ that was large enough for full figure self portraits. The inflexibility of having the camera on a tripod further away from me seemed too much of an obstacle as well. I proceeded to crop shots, concentrating on my torso and head in many photographs, holding the camera on one hand and capturing shots more spontaneously and fluidly.

I felt these images showed promising potential to express my relationship with light—a course worth pursuing.

The Light Within
One of the positive experiences at the MPhil exhibition (one year ago, in February 2014) was the slow fade in/fade out of the images that gave them an appearance of fluidity. The lighter and darker areas seemed to have a dialogue with each other as they continuously encroached or retreated from an ephemeral boundary. The state of the images was fluid and fleeting, addressing the notion of a subconscious sensation prior to reason.

To invoke this same impression I experimented with orchestrating a sequence of images. By crossfading subsequent images at a very slow speed, they conversed and blended into each other, creating another form of combined image. I found that the continuous process of merging and impermanence came close to my interpretation of the limnic state of lumen, where light is constantly changing, and with it my perceptions.

I worked in Final Cut Pro, which I have had to learn. As I had purposely not altered any of the images in Photoshop, I also did not wish to change them here (by using filters, overlays or effects). Twenty seconds appeared to be a good length of time for a crossfade, as it slowed any movement down to a meditative pace.

As I produced more images, I arranged and rearranged them into a number of sequences, from two to five minutes. These are merely structural, but help determine where crossfades work best and how a narrative of the subconscious could unfold.
I worked intensely to resolve the expression of feeling, an expression of light that permeated me, and that had me shine in its radiance. I assembled arrangements of materials, set lights (but sometimes only worked with ambient light), moving and observing, always mindful of that special moment of enstasis, where everything felt connected, and I was totally absorbed in the practice.

I enjoyed producing images that were somewhat abstract but still showed a part of me, immersed in this ambience, and coloured by the orchestrations. Aesthetically, the images seemed to form themselves. It was always my conviction not to manipulate these images in Photoshop, so they were as true to the moment as they could be.

Experience and Expression
Appendix 1.19

Phase 19

Over the last eight weeks I tried to elaborate the assemblages by adding even fewer types of diverse or contrasting materials; fabrics were hung or draped, metal strips were positioned, and the light was kept to a singular source (either lamp or even torch). It was important to me that I wasn't loyal to any type of material. I concentrated on portraits, capturing myself in the intimacy of the moment and the intensity of the feeling. I found the more calm and serene the studio was, the better focused I became. I tried to almost dissolve my body/self into the light source, taking the concept beyond the seen/perceived lumen into the lux – the vestiges of the Divine. I imagined that the unseen lux was already within me, helping define the future without my knowing. Perhaps his influence within the self is a way to express the concentrated signal of the divine.

I enjoyed working in this quasi-spontaneous manner. With assemblages set up, I could dive in and find imagery that I hadn’t anticipated, and these moments seemed so surprising as they were otherwise. The pictures didn’t have a deep resonance, of course. Furthermore, upon reviewing the photographs, there were many that I liked during the session, but the next day appeared to have lost their emotional resonance. I made selections of images only by that criterion – does the image sing and capture my feelings, without necessary intellectual analysis.

Upon reflection, I liked the monochromatic images better than those that where I had added some layers of coloured dyes. Although there are not necessarily conclusions, strongly subtle shades appear to distract from the essence. A silver palette that was silver or gold seemed to resonate most.

Portrait
I rediscovered silver leaf, as a radiant, textured substrate to throw light and images across. I fell in love again with its luminous quality, and tried to infuse some into my imagery.

Silver Leaf... rediscovered
In this phase I started bringing my thoughts on the next installation from the journal pages into spatial reality. The idea was that my images would be projected through a cloth wall into a space. I wanted the imagery to be as large as in my previous installation, 1400mm W x 2400mm H. A viewer within the space would be immersed in these images, which would also reflect off the silver leaf side walls. I spent a considerable amount of time making models and photographing these with projected imagery (I used a computer monitor). I also discussed wall systems with a creative cabinetmaker *. Together we devised a modular system that could be transported, erected in pieces, Wimbley (2400mm high) and allowed me to set up freestanding walls without the need to brace or secure these horizontally.

Finishing the 14 MDF wall panels (1200mm x 1200mm) with silver leaf took a very long time, because of the adequate preparation required (undercoating, sanding, applying glue and leaves). The silver leaf was very delicate, the panels were easily scratched and ruined, so I kept these in a separate room of my house.

On June 20 I was able to book the AUT black space and set up a rudimentary version of the installation. This was important for me to get a feel for the spatial qualities and proportions, and whether a viewer felt claustrophobic within the confines of the walls.

* Glen Williamson, Glenfield, Auckland
Appendix 1.22

Phase 22

Sequencing the Imagery

The fluidity and transience of the images was a very important factor, and I wanted to ensure that this became a core part of the installation. The images had to float in and out of each other, bright and dark areas negating with each other, and morphing into something unexpected with every “breath”. I wanted to create a sequence that unfolded as a loose narrative, or at least had a sense of unfolding, leaving the viewer with memories and longing.

I compiled several versions in Final Cut Pro on the Mac Computer, with a selection of images from the previous phases. I realised I could also use images that weren’t amazing in their own right, but could help tell the story when used as transitional shots. I trialed many different images in a variety of sequences, trying to match every single image with another one before and after that created an interesting flow.

I experimented with durations of crossfades, and settled on 11 seconds. This duration felt good – it was taking its time, but not becoming tiring. I liked how the fades appeared almost organically, like deep inhalations and exhalations of breath.
My second full installation was held on October 4 in AUT's large blackout room WG210. It was intended to be a full run-through to test if all elements would work as they should. I could only book the room for a weekend, so time was precious. Pack-in and setup took a day and a half, with a number of on-site adjustments to the walls and floor. Feeling the actual space meant I could experience it fully, and tweak things as deemed necessary. To give the images more impact and size, I changed the proportions of the animated imagery, and then widened the cotton projection screen. I brought in large loudspeakers so the music that had been carefully composed could be heard in full tonal detail.

A selected group of peers was invited to view the installation and asked to remain for a feedback session afterwards. This group comprised of professional visual artists, a theologian philosopher, a performance specialist, an art curator, and experienced designers. The post-viewing discussions provided a candid and intensive unpacking of strengths and weaknesses in the work, and reflections on potential within the research. These viewers acknowledged the immersive and intense emotive quality of the installation. They understood the experience as a means to be present in the moment and ponder the nature of light, yet wished it was altogether more concentrated. Some suggested removing the additional, potentially distracting elements to an antechamber, such as the projected type and the music. By simply letting the images flood the space without any didactic support, they thought the experience could unfold in a more individual, embodied manner. All viewers felt different within the confines of the space, depending upon, as one viewer suggested, “what personal experiences are living with us.”

The feedback provided a number of stimulating thoughts that will have an influence on my final installation design.
At the end of November, I attended the much anticipated EKSIG (Experiential Knowledge Special Interest Group) Conference in Kolding Denmark. The conference was titled “Tangible Means - Experiential knowledge through materials”. I was unsure what to expect in terms of the delegates and the range and quality of presentations - the abstracts were released online whilst I was already on route, flying for 3 hours by train west of Copenhagen, on board the trip from New Zealand would not be straightforward, especially given it was the darkest time of year there.

The two-day conference was segmented into sessions, each under a different header. Presentations of similar direction or context were grouped within these, sometimes in parallel sessions. My presentation was second to last, in the plenary session headed “Oxymorons”. This initially surprised me, until I realised that most presentations were more systemic and less poetic and mystical than mine. Some presentations appeared almost scientific in their data gathering and abstraction.

I had an interesting time in Kolding and got a flavour of what some Europeans are focusing on in Art & Design research. Above all else, I was able to hear some of the issues that other researchers are facing and how they articulate their work - which in turn helped drive my work forward.
Returning to the practice after a hiatus of presenting and writing, things are seemingly flowing quite well. I don’t think I realised how well I had developed a rapport, a language, or a state of being with the experiments. I am able to slip back into this state and work with the materials with more satisfaction and even joy. Moving across a variety of materials and combining these, I try to find avenues I have not yet explored.
In between writing my exegesis I relish returning to the experimental dialogue with the materials, switching from thinking and reflecting to the primary state of sensing is a refreshment. Glass seems to be the material I spend most time with. I have accumulated a number of glass objects (vases, bowls, glasses, etc) in a variety of shapes that I am combining in a somewhat messy cacophony of reflections. Although I try to remain open to the unfolding experience, I am aware of the requirements of the sequenced animation. I am drawn to the temporal orchestration, and catch myself thinking about the number of images that are light or dark, and what might be useful as a transitional element. In other words, I am considering the relationships that each emerging image might form with other, already existing images.
Appendix 2.
Concepts and design of the third and final installation.

Sketches, models and CAD renderings of initial concepts.

Detailed construction model and architectural drawings for developed final concept.
Scoping of Drama Room at Pinshurt School, Albany, Auckland.

Photoshop rendering of installation in the black space, experiential view and floor plan.
Construction and silver leaf application (January 2017).
Final Installation.
# Form PGR15 Deposit of Thesis/Exegesis/Dissertation in the AUT Library

**PLEASE NOTE**
- This form must be typed. Handwritten forms will not be accepted.
- The completed and signed form should be bound into the copy of the thesis/exegesis intended for the AUT University Library.
- If the work is to be treated as confidential or is embargoed for a specified time, form PGR16 must also be completed and bound into the thesis/exegesis.

<table>
<thead>
<tr>
<th>Student ID No</th>
<th>Name</th>
<th>Faculty</th>
<th>School/Dept</th>
<th>Programme</th>
<th>Year of submission (for examination)</th>
<th>Research Output</th>
<th>Points Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1113926</td>
<td>Friedrich Derek Ventling</td>
<td>Design &amp; Creative Technologies</td>
<td>Art &amp; Design</td>
<td>PhD</td>
<td>2017</td>
<td>Thesis ☑</td>
<td>360</td>
</tr>
</tbody>
</table>

**Declaration**
I hereby deposit a print and digital copy of my thesis/exegesis with the Auckland University of Technology Library. I confirm that any changes required by the examiners have been carried out to the satisfaction of my primary supervisor and that the content of the digital copy corresponds exactly to the content of the print copy in its entirety.

This thesis/exegesis is my own work and, to the best of my knowledge and belief, it contains:
- no material previously published or written by another person (except where explicitly defined in the acknowledgements);
- no material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

**Conditions of Use**
From the date of deposit of this thesis/exegesis or the cessation of any approved access restrictions, the conditions of use are as follows:

1. This thesis/exegesis may be consulted for the purposes of private study or research provided that:
   (i) appropriate acknowledgement is made of its use;
   (ii) my permission is obtained before any material contained in it is published.

2. The digital copy may be made available via the Internet by the AUT University Library in downloadable, read-only format with unrestricted access, in the interests of open access to research information.

3. In accordance with Section 56 of the Copyright Act 1994, the AUT University Library may make a copy of this thesis/exegesis for supply to the collection of another prescribed library on request from that library.

**Third Party Copyright Statement**
I have either used no substantial portions of third party copyright material, including charts, diagrams, graphs, photographs or maps, in my thesis/exegesis or I have obtained permission for such material to be made accessible worldwide via the Internet. If permission has not been obtained, I have asked/will ask the Library to remove the third party copyright material from the digital copy.

Student’s Signature: [Signature]
Date: March 5, 2017