

Illuminativa

The coalescence of light and craft thinking

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F R I E D R I C H D E R E K V E N T L I N G

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signed:




dated:

February 5, 2014

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dated:

February 5, 2014

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This project constitutes a practice-led investigation of light as a metaphor for divine wisdom and how it might interact conceptually, physically and creatively with manual craft. The genesis of the project lies in Saint Bonaventure's 13th Century work *On the Reduction of the Arts to Theology*. His treatise proposes a connective relationship between manual skill, sense perception, intellectual capacity and divine wisdom (as the source of all illumination).

In this research, light is explored as *form* – as a connective agent, one that is interactive yet ephemeral, providing disclosure and exchange. Light itself is also the research *tool*. It is used to capture, develop and express a subjective interpretation of Bonaventure's theory of illuminated connectivity. The resulting artefacts (combining analogue and digital techniques) and approaches to research propose a reconsideration of creative consciousness in contemporary graphic design practice.

INTRODUCTION

T

his thesis spans seven centuries to unite theories that are fundamentally similar. In the 13th Century, Saint Bonaventure claimed that knowledge originates from sensation (Miccoli, 2001), or our interaction with the material.

Equally, contemporary design researchers assert that making is thinking (Rosenberg, 2008; Peer, 2011). This essentially suggests a similar reasoning: that working with the material may provide insights that lead to higher thinking.

However, there is an interesting difference. Bonaventure reasons that light, the divine force, illuminates this process. It is this illumination, both metaphorical and literal, that forms the central concern of this thesis. Through design, my investigation explores how illumination might be perceived, and in turn influence and inspire design.

The nature of the exegesis

Arguably, there are three fundamental challenges to the designer writing an exegesis. The first is the necessity to combine two perspectives – that

of the methodical researcher, and that of the reflective artist. While an exegesis explains the scientific approach, objectively describing context and methodology, it also relates the personal accounts of creative process, interpretation and evaluation. Such an integration requires a writer to inhabit multiple subject positions, assuming a complex and inherently perilous polyvocality (Hamilton, 2014). Remaining deeply invested in the study, yet accomplishing a precise scholarly explication, is a delicate balancing act. Griffiths (2010) argues that in such cases, embodiment is integral. Accordingly, a subjective tenor may be expected in exegeses relating to a practice-led inquiry.

The second challenge is that an exegesis is normally retrospective in its account of practice. Its view is from one point in the continuum of the project, looking back on a trajectory. In a number of recent heuristic exegeses, this trajectory is described as relatively linear (Godamunne, 2010; Wilczynka, 2011; Waldner, 2012; Ayr, 2013), demonstrating an analytical logic that may not have unfolded in real time (Griffiths, 2010). Heuristic research can by its very nature be circuitous and multi-tiered (Hamilton, 2014). Furthermore the thesis problem often evolves, with possible changes to focus, rationale, data collection and analysis (Griffiths, 2010). Pallasmaa asserts that “design is always a search for something that is unknown in advance” (2009, p.111). Often the research question cannot be expressed implicitly until it is solved (Hein, 1966), hence full coherence is often not found until the end of the process.

This investigation has been affected by a number of digressions. Occasionally the iterative stages were neither discreet (Griffiths, 2010) nor sequential. Yet recounting these issues endangers the clarity of the exegesis because the multi-tiered nature of the research may compromise focus. Therefore, in the interest of presenting a more concise and readable thesis, some editing to a quasi-linear narrative has been applied.

A third challenge is the issue of presentation. Since the late 1990s, graphic designers have been negotiating the physical form of an exegesis in an effort to improve the integration of words and imagery (El-Noor, 1998; Wilczynka, 2011; Waldner, 2012). This adds personal ‘voice’ to the communication of a subjective study, enhances its authenticity, but concurrently challenges certain research conventions in universities (Ings, 2011). These conventions stem from a tradition of factual academic accounts, in contrast to creative, practice-led design theses which generally demonstrate a critical, personal reflection.

In this exegesis, it is my intention to create a cohesive expression of the reflective-personal and the scholarly, using both discursive and visual modes of communication. My desire is that this thesis might therefore be accessible and of use to both the academy and graphic design practitioners.

Structure

Practice and process speak on multiple levels in this thesis. The wider notion of the study seeks to conceptually elucidate inspiration. Yet inspiration is also physically essential to the manual craft

shaping the research artefacts. In a sense, the making and discovering are both: the essence as well as the philosophical framework of the thesis.

Accordingly, this exegesis is presented in conjunction with created artefacts. Together these bodies of thinking work form the thesis.¹ One cannot be considered ‘positioned’ without the other.

In this exegesis², I first explain my position as a researcher and describe the foundation of contextual knowledge. I then articulate how my research question evolved, and the manual and digital techniques that were used to create the artefacts. Next, the methodological framework is discussed, and I describe how this served the explication of the research. Finally, I outline my findings and conclude with reflections on this thesis’ contribution to knowledge and potentials for future research. The culminating body of work (exhibited at AUT University) is presented in chapter six of this document.

¹ Thesis: ‘placing, a proposition’, from the root of tithenai ‘to place’; a long essay or dissertation involving personal research, written by a candidate for a university degree. (Oxford Dictionaries online)

² Exegesis: a critical explanation of text or work, from Greek words meaning “to interpret, guide and lead” (Oxford English Dictionary, 921)

1. POSITIONING STATEMENT

I began this project as a response to who I had become after more than twenty years of commercial graphic design practice. It was my desire to venture beyond the confines of service and supply, to challenge my own creative process and thinking, and to discover new horizons both inside and out.

1.1 Process

I completed my apprenticeship in a Swiss company that integrated the design disciplines of graphics, model making, construction and exhibition. *Fabrik Atelier am Wasser* fostered a strong sense of craftsmanship and community among the staff; everyone was considered and valued as an artisan. This was in the late 1980s, before computers were commonly used in the design process. Generally, graphic design outputs were the result of reflective, skillful exploration and testing of material boundaries – a process of direct physical engagement with ideas. As designers we shared our discoveries, discussing them at length and analysing the insights gained while building our own distinct visual vocabularies.



Figure 1: F. Derek Ventling (1987). *Logo for Commercio Bar, Zurich*. This is an example of hand cut and positioned lettering from my pre-digital days of graphic design practice.



Figure 2: F. Derek Ventling (2006). *Gang Design business card*. This example demonstrates a deliberate integration of analogue and digital techniques.

1.2 Integration

Digital technology has now fundamentally changed my design practice. Although the computer has challenged my notions of creative enterprise, it has proven to be an invaluable tool. With production cycles and budgets ever

tightening, the digital domain offers to solve problems more quickly and in a tidier fashion, but the creative process is now different. Although I still integrate analogue components into my designs where possible, commercial constraints allow little time for manual exploration, making mistakes and discovering new thinking.

A number of authors have criticised technological fidelity and its impact on the design thinking (Rand 1996; Mau, 1998; Heller & Ilic 2004; Marzotto, 2009), some commentators even arguing that computers are intrinsically harmful to the design process (Cross, 1977, quoted in Lawson, 1990). However, I would argue that we are entering a new era in design. As the euphoria surrounding digital environments subsides, manual craft (particularly letterpress and printing) is experiencing a resurgence (Odling-Smee, 2002; Perry, 2007; Rivers, 2010; Smythe, 2011; Ings, 2013). Early prejudices towards craft are being rethought, allowing analogue making and thinking to reach into digital design and reshape it.

Marzotto (2009) notes that designers are now using manual techniques in non-traditional ways, exploring new avenues of potential. With the increasing interface between handmade discoveries and digital environments, I can see enormous scope for renewed expression and originality. Accordingly, this project is an attempt to rediscover experimentation in craft and re-invigorate my design practice so it might become more articulate, authentic, and communicatively distinctive.

1.3 Perception

As a designer I constantly and consciously attempt to view things differently. Thus, I am interested in how we see and form our notion of the world. Through light we are engaged in a continuous exchange with our surroundings. Light is the fundamental connection; we rely heavily on sight as our primary sense. A distinct and common measure of reality is what we can see. Interestingly, light can illuminate or obscure, and is ephemeral by its very nature. It is capricious – yet we trust it.

In metaphysical terms, light is wisdom from the divine source (Hayes, 1996). Light (and truth) radiate outward in the direction of the creation and to the finite mind. As Saint Bonaventure reasons, emanating light is the agent responsible for beauty, colour and activity in corporeal things (ibid). Therefore light may be argued as embodying potential. This is the underlying axiom of my thesis, and forms the basis for my investigation into illumination.

I ask myself: if light can be an enabler, and flows into our human intellect (Hayes, 1996), how does it assist and influence our designing and thinking?

Thus, this thesis constitutes an endeavour to navigate the mysterious territory where creative process, wisdom through making, and divine inspiration are in a state of active and invigorating exchange.

2. CONTEXTUAL KNOWLEDGE

This chapter provides an overview of contextual knowledge relating to the thesis. It presents a theoretical scoping of knowledge that has influenced both my practice and understanding of it. The chapter is divided into two broad considerations: discourse surrounding wisdom and making, and ideas related to Bonaventure's theories of light.

2.1 *Wisdom through making*

2.1.1 Craft

The making of artefacts is a fundamental human imperative and is anchored in the root of our anthropological evolution. This ethos is found in craft, understood here as the *skillful making of things by hand* (Ings, 2013). Hand-rendered processes have always been at the heart of Art and Design practice. Crow (2008) categorises these as "...play, experiment, adjustment, individual judgement and the love of a material – any material." (para. 22)

While craft was arguably marginalised with the assimilation of digital technologies in the 1980s, it is currently experiencing a resurgence in both design practice and education (Frayling, 2011;

Ings 2013). In contrast to the predictability of digital processes, hand craft techniques are inherently heuristic. Marzotto (2009) describes how old-tech equipment is being reclaimed because it invites experimentation beyond the traditional use. He applauds the tension that craft-based techniques create between opposites (chance vs. control, tradition vs. our time) and their capability to encourage imagination and creativity.

Craft techniques such as letterpress and printmaking become appealing because of their capability to bring back the complexity of the process: "The process requires constant reappraisal, suggesting improvisations, deviations, even irregularities, and continually offering fresh and unexpected alternatives to form and pattern, colour and texture." (Jury, 2004; quoted in Marzotto, 2009, p.4117)

A number of contemporary researchers are thus re-considering analogue processes and their potential for imperfection (Marzotto, 2009) as valuable creative contributions to graphic design, both through practice and written discourse (Perry, 2007, 2011; Heller, 2006; Klanten and Hellige, 2008; Odling-Smee, 2002, Rivers, 2010; Peer, 2011).

2.1.2 Hand making

When designers make, Schön (1983) suggests they are in a state of reflective conversation, constantly deliberating and re-evaluating their processes. This, Crow (2008) believes, is the perceptive ability to generate surprises. Mau (1998) describes this process as a delicate dialogue, fuelled by desire and innocence.

Here the designer searches both within and without for resonance and authenticity. In Crow's words, craft is "synonymous with individualism and integrity" (2008, para. 8).

Serres (1995, p.34) says that the hand is a faculty, a capacity for doing, paired with an asceticism of thinking (cited in Rosenberg, 2008, p.111). Heidegger (1999) posits that the hand is different from all other grasping organs, because every motion of the hand carries itself through thinking.

2.1.3 Thinking while making

Rosenberg (2008), in discussing ideational drawing, observes that physical and mental processes are linked. He says, "As much as the hand enters thinking, thinking can be of the hand" (p.111). In accordance, Pallasmaa (2009, p.17) states "In the ecstasy of work, the draftsman forgets both his hand and the pencil, and the image emerges as if it were an automatic projection of the imagining mind." If the crafting hand provokes thought (Ings, 2013), then making is thinking (Sennett, 2008). Rosenberg (2008) sees this as critical and creative questioning that produces an agitation in what is given. He suggests that the known and the unknown are drawn to and through each other.

Manual craft may therefore be argued as providing opportunities for higher levels of discovery in creative thinking. Marzotto (2009) suggests that insights thus gained may enrich the designer with abstract knowledge. Thus, craft-based design becomes a dialogical practice that ultimately holds the potential to question the boundaries of design disciplines (Peer, 2011).

2.2 Saint Bonaventure and light

2.2.1 Saint Bonaventure

Saint Bonaventure of Bagnoregio (1217–1274) was a scholastic philosopher and a theologian who attempted to integrate faith and reason. He lived in an age where universities were emerging and challenging the centuries-long monastic tradition of study (Hayes, 1996). Epitomising his time, Bonaventure's metaphysics merge the religious with the secular. He studied at the University of Paris, and held the Franciscan Chair in that city. In 1257 he was appointed Minister General in charge of the Franciscan Order, and was later ordained as a Cardinal (Noone & Houser, 2005).

This thesis does not seek to detail Bonaventure's life and extensive corpus of work, rather it is concerned with his theory of light, specifically as described in his work *De Reductione Artium ad Theologiam* (On the Reduction of the Arts to Theology).

2.2.2 Bonaventure's *Reductione*

Reductione is a short but robust treatise, synthesising various philosophies into an idea of both metaphysical and cognitive significance. It has not been dated precisely, yet scholars describe it as a work of maturity, possibly written towards the end of Saint Bonaventure's life in 1274 (Hayes, 1996).

In *Reductione*, (literally – leading back) Bonaventure draws a connection between manual craft and the divine truth through light. He establishes a hierarchy between the four realms of *mechanical skill*, *sense perception*, *philosophical capacity* and *divine wisdom*, and

proposes that guiding light falls through these realms, disclosing each one to the next higher realm. He claims, “The first light illumines with respect to the forms of artefacts; the second, with respect to natural forms; the third, with respect to intellectual truth; the fourth and last, with respect to saving truth.” (translation: Hayes, 1996, p.37)

2.2.3 Light and illumination

In biblical terms, light originates in God (Genesis 1:3) and is ontologically different to the sun, which is our source of light energy on earth. In the neo-Platonic concept of emanation, light’s capacity to spread and multiply allows it to call finite reality into existence (Hayes, 1996) and to produce all other existing things (Miccoli, 2001). Hence, light is spiritual life-force. Plotinus (204–270 AD) proclaims: “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). Saint Augustine (354–430 AD) maintains this theory of illumination and declares that God is the archetypal light, and all other lights are derivations of this (ibid).

Saint Bonaventure expands the Augustinian theory of archetypal light into the aesthetic. He adds three metaphysical terms of perspective: considered in itself the first form of all bodies, light is called *lux*. It emanates and informs 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, paraphrasing Bonaventure). Thus, in summary, “light, in itself, is the principle of beauty” (Miccoli, 2001, p.78). Hayes concludes: “Light then, is the principle of perfection in all

corporeal things, and is responsible for their colour, beauty, and activity” (1996, p.5).

In the theory of hylomorphism, common amongst scholars in the 13th Century, all beings are composed of matter and form. While the form varies, matter is the same in all things. The theory proposes that matter contains potentiality, which is informed, or *activated* by light. Divine light works with the human intellectual facilities as a “regulative and moving cause”, ensuring the human mind grasps the immutable truth (Noone & Hauser 2005, chapter 4, para. 6). In other words, we might say light, in its illuminating role, activates what exists as potential in our minds and gives it operational capability (McAdams, 1991).

2.2.4 Wisdom through light

Bonaventure’s wider metaphysical ideas were largely influenced by three philosophers: Aristotle (for his views on nature, natural order and natural philosophy), Thomas Aquinas (for his reconciliation of faith and reason) and Saint Augustine. It was Saint Augustine who advocated a spiritual journey from the exterior world to the interior mind, and from there to the superior mind, namely, to God (Noone & Houser, 2005). In *Reductione* Bonaventure charts this journey from the material to the spiritual; from the physical, through our senses and thought, to enlightenment and wisdom. He argues that archetypal light is the agent that reaches out and guides us through these transitions.

Saint Augustine also perpetrated the Platonic idea that human knowing or reasoning was not attainable without revelation (Stewart, 1987).

Bonaventure emulates this theory and proposes that knowledge originates from sensation, something he believes is instinctive and prior to reasoning (Miccoli, 2001, p.77). He suggests that once a sensation is experienced, we then reflect and try to understand the cause; we are thereby effectively tracing a path of consummation upwards through Bonaventure's realms, back to the divine.

Thus these writers suggest that through doing and sensing, our minds are illuminated to higher thinking. Irrespective of the metaphysical context, this process may be aligned with more contemporary writing in design that suggests we gain wisdom through the process of making (Sennett, 2008; Marzotto, 2009; and Ings, 2013). In her discussion of heuristics, Sela-Smith 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 experience, new interpretations, new meanings, or it may correct distorted understandings" (2002, p.67). Making, sensing, and thinking are inextricably connected; and illumination becomes a catalyst within this agency.

3. SYSTEM OF ENQUIRY

This research may be described as autobiographical.³ It documents the discovery of an aspect within my lifeworld, and how as a researcher I made sense of it.

The context is my own, as I am “the insider” (Duncan, 2004, p.3). Accordingly, this account bears the signature and voice of my personal interpretation (Clandinin and Connelly, 1994).

At the outset of this thesis, I did not have a clearly defined question or a pre-determined problem (see Chapter 4). I knew I did not wish to conduct this research in the conventional manner I had employed in an earlier zoology thesis.⁴ It was important to me that this enquiry was not focused on solving a problem, but rather that it might generate new perspectives and ways of thinking.

Fowles (1982) argues that while science is constricting, art is a liberating activity. Scrivener (2000) says creative practice theses can be described as a response to a set of ongoing issues, concerns, and interests expressed through artefacts. They represent “an effort to know the essence of some aspect of life through the internal pathways of the self” (Douglass and Moustakas,

1985, p.39). Accordingly, the work is “influenced by relationships, circumstances, perspectives and reactions” (Griffiths, 2010, p.184). Pallasmaa summarises that such an existential exploration merges “professional knowledge, life experiences, ethical and aesthetic sensibilities, mind and body, eye and hand, as well as the designer’s entire persona and embodied wisdom” (2009, p.109).

As such, my enquiry was designed to be creative, reflective and practice-led. In such a thesis, the direction and focus might change throughout the course of the research. Accordingly, I required an empirical method that would give me the flexibility to drive exploration and discovery along a non-linear trajectory. It was therefore appropriate to implement a largely heuristic system of enquiry.

Heuristics⁵ is concerned with the search for meaning via the processing and strategic questioning of created experiences. Utilising sophisticated levels of informed subjectivity and tacit knowledge (Ings, 2011), heuristic research is described as a form of metacognitive knowing and reflecting in action (Schön, 1983), with experiment and play as catalysts for learning (Crow, 2008). As the designer ‘self-consciously’ creates and reflects, he or she is able to move thinking forward intuitively and embark on further creations. Sela-Smith

3 Autobiographical theses are defined as employing reflection upon personal experience as a means of understanding and expression (Ings, 2010).

4 My thesis *Das Ocellensystem der Wuestenameise Cataglyphis Bicolor* (University of Zürich, 1985) constituted a neuroanatomical investigation to understand how the desert ant’s ocelli are innervated. The approach through dye-injection and microsection reconstruction was preconceived and objective, and sought to “eliminate the mystery”. In contrast, Art & Design approaches seek to “provoke the mystery”. (Fowles, 1982)

5 From the Greek word *heuriskein*, meaning to discover or find (Moustakas, 1990).

says, “This method requires that the participant-as-researcher focus on the feeling dimension of personal experience to discover meanings embedded therein” (2002, p.63).

Given the often unpredictable trajectory (Douglas and Moustakas, 1985) of an heuristic inquiry, the research focus may change continually (Griffiths, 2010) as the study evolves. The advantage of this is that it can produce serendipitous discoveries (Ings, 2013) and unanticipated results (Combrink and Marley, 2009).

Borgdorff, in describing such research, says “it is about broadening and shifting our perspectives, our horizons. It is about constituting and accessing uncharted territories. It is about organised curiosity, about reflexivity and engagement. It is about connecting knowledge, morality, beauty and everyday life in making and playing, creating and performing. It is about disposing the spirit to ideas through artistic practices and products” (2009, p.21).

A heuristic approach to research facilitates adaptation and flexibility on the part of the practitioner. It is neither rigidly formulaic, clearly preconceived, nor objective. In fact Douglass and Moustakas (1985) describe it as an *attitude* to research. Yet as a framework it offers a rewarding system to connect an investigation to the researcher’s personal experience (Ings, 2011).

3.1. Context

According to Bullough and Pinnegar (2001), self-study becomes significant when the issue confronted by the self is shown to have

relationship to and bearing on the context and ethos of a time. Ideally then, the research provides insight to a topical issue of public interest.

My research question deals with inspiration and hand making in a time where digital graphic design processes have changed approaches to creative exploration. Nostalgic or not, many sagacious designers acknowledge the constraints inherent to the digital environment and the necessity to search beyond these. Inspirational and beneficial knowledge is derived from new connections formed between creative areas, technologies and philosophies. This context is one that many graphic design practitioners understand, irrespective of their background or age. Thus I would argue that *Illuminativa* is a relevant enquiry, and pertinent to this time.

One topical issue in this work is the interface of digital and manual technologies. In my opinion, it is the inherent contradiction between digital and hand-wrought realms that make their integration so attractive. In terms of design generation the computer represents something the hand is not – therefore they can complement each other in interesting ways. Bringing analogue and digital making together is risky: the expression of one technique is vulnerable to being compromised by its opposite. Yet together, they harbour a potential for expression beyond what each realm alone can achieve.

3.2. Experience

Another important qualitative aspect underpinning heuristics is the experience of the

researcher. Schön (1983) describes this as the researcher's *engagement with repertoire*. He explains that previous experience functions as exemplar for a new and unfamiliar situation. As the tacit interacts with the reasoned, the researcher is required to draw on previous experience to provide critical judgement.

In my research, I have drawn upon extensive professional engagement with graphic design, and an understanding of the related areas of photography and typography. The sensibility I have developed in these areas is further influenced by living and working in different cultures, and my "selective reverence for religious concepts" (De Botton, 2012). The aesthetics of the Swiss Style, photographic darkroom techniques, and hand-drawn lettering are a few of the facets that have shaped me. Additionally, the cultural influence of iconography and imagery, impressions and emotions, and traces of memories from travels, literature, relationships – are all embedded in my persona and have subliminally shaped this body of work.

The term 'illumination' conjured up an assortment of images in my mind, mainly references to mythical and/or anthropomorphic deities. Throughout this research I had to continually question my perceptions and assumptions around what illumination could or should look like. Although drawing on my repertoire when making tacit decisions, I was vigilant not to be presumptuous. In my opinion, genuine exploration often requires abandoning

experienced and established conclusions. Analysis can be constructive and stimulate deeper thinking only when it is able to balance the weight of experience with an open-minded 'innocence'.⁶

3.3. Observation and reflection

Duncan (2004) states that an investigative account requires the support of collected data⁷ that can confirm or triangulate a researcher's opinions. She also believes that there are a variety of valid methods of data collection. In autobiographical research the core practice through which reflections are developed is self-dialogue (Bullough & Pinnegar, 2011).

In the early stages of my enquiry, my self-dialogue was ceaseless. I would constantly be critiquing past experiments and trying to understand the parameters that could change in order to improve the work. Even when removed from my studio I would continue to reflect on hand making and devise further experiments. I would catch myself constructing something hypothetically, rather than letting the practice develop and asking questions of the material itself. I would imagine the end result and contemplate its appeal. It took several months to adjust my creative thinking from outcome- to process-driven. This shift is discussed in Sinfield's 2009 thesis, and it is a significant one. As professional designers we are normally focused on design realisation rather than process. Ings (2011)

6 By this I mean: regarding all perceptions as novel and fresh, without judgment, prejudice or associations.

7 Data is understood as supportive material, including the researcher's observations, created artefacts in any form, and peer feedback.

acknowledges that it requires a significant paradigm shift when graphic designers engage with practice-led inquiries in higher research degrees. Indeed, I realised I had to overcome the notion of process as a means to an end before I was able to perceive it as a joyful experience per se. Mau suggests that when the outcome drives the process we will only ever go to where we've already been (1998, para 3).

The quality of my reflections also changed, from simplistically binary to multi-faceted and sensitive. Self-dialogue, I came to learn, is a continued negotiation around increasing tensions. It is a conversation and ongoing exploration that leads deeper into the self. This process involves assiduous navigation through a tangle of sensory and emotional outcrops, while seeking to maintain Keats' (1817) *negative capability* – allowing mystery to remain unresolved and working within ambiguity.

Naturally, doubt and self-doubt raised their heads during the enquiry. The journey became as much an emotional experience as an intellectual one (Ings, 2011), and I was challenged to navigate both. Dunnink (2012) points out that when we are annoyed that we do not have the answer yet, it is a sign that we are treading new ground and learning. Admittedly however, sometimes trust in the heuristic process waned and I doubted my own capability. I was unsure what I was working towards, so I questioned how I could reliably gauge progress? I wondered if I would be able to rely on my tacit knowledge to recognise progress? My self-dialogue shifted again, conceding frustration but drawing the attention away from emotions and on to reflections. I knew further

developments would only arise if I focused on preserving a high level of tacit engagement with the work. Bonaventure's thinking helped me here, particularly his theory that the sensory experience must precede all reasoning, thinking and emoting.

3.4 Inspiration and progress

Because my enquiry constitutes a consideration of illumination, I was attentive to what caused my work to progress. Indeed, if as Bonaventure states, illumination comes with sensation and prior to reason (Hayes, 1996), then inspiration must be connected to the tactile experience or the perception of it. Upon reflection, I realised that as we make and observe, the physical nature of the work guides us and resonates with our tacit preconscious knowledge (Polyani, 1967). Realisations emerge as hunches, feelings and pre-concepts that are then processed consciously – generating ideas, questions and insights, and ultimately creating new knowledge (Adamson, 2007).

This flow from the physical/material to the abstract/philosophical is indeed the same sequence as the metaphorical illumination which Bonaventure proposes. This process of inspiration occurred regularly throughout my investigation. Although the leaps in added thought varied (from an incremental "ok" to an epiphanic "aha!"), each step moved the project further along its trajectory. I concluded that craft is indeed a thinking process (Crow, 1998; Marzotto, 2009; Peer, 2011, Ings 2013), and illumination is a neglected but integral part of this.

3.5. Articulation

During my research, I collated a selection of material after each experiment and added comments in writing. These were the first attempts in articulating my vague thoughts and in developing written self-dialogue to give these thoughts definition. Griffiths (2010) notes that even articulating who we are seems to change us: as we grasp at the self, it dissolves in our hand. Despite the inherent challenge, these comments stood as memorable markers along my paths of discovery.⁸ Re-reading these words and reviewing experiments as collated bodies of inquiry helped shape additional thoughts and decisions about the further direction. Waldner (2012) defines this as a process of clarification through articulation.⁹

In addition, I kept a journal, in which I would add passages from author's publications, images that had somehow resonated with me, scraps of material from my experiments, notes of meetings with my supervisors, as well as charts and drawings I made while thinking. This journal became my mobile 'pinwall', filled with gathered data that was left unquestioned with regards to its immediate usefulness. Although some material was at best tangential, immersion in this journal generally facilitated reflection and through it articulation.

In August 2013 I made the following entry: *Interestingly, as my research question becomes more defined, each journal visit reveals better, more pertinent and helpful details. Improving the clarity of my question has given me a more refined perception, enabling me to grasp only*

and exactly what I require. I was undergoing what Moustakas (1990) calls transformation; experiencing my world differently.¹⁰

3.6. Sharing

A critical issue in autobiographical research relates to how the data of the self-study is brought into conversation with the public. Ings (2011) suggests that without external feedback, self-referenced processes can result in designs that fall short of their communicative potential.

Griffiths (2010) argues that each self is unique and its response to circumstance is not pre-determined. Therefore, we know that no two researchers will conduct an enquiry in the same manner. Throughout my investigation I was often asked by my design peers what I was working on. Although their questions forced me to externalise my internal dialogue and articulate my findings, the ensuing conversation was often disruptive and counterproductive. I learned to see beyond the defensive arguments and take their critical questions as a help to clarify the vague.

Accordingly, both of my (pedagogically trained) supervisors engaged with me and my work through processes of questioning. Although challenging and often difficult to address on the spot, these questions helped me to untangle my complex and often convoluted thoughts. Ings (2014) notes that if feedback is framed as questions, there is a higher

⁸ See Chapter 9, Appendices, for these comments.


⁹ Thus both the written word and the corpus of experimentation functioned as articulations of ideas as well as the processes that drove them.

¹⁰ "An important assumption held by auto-ethnographers is that reality is neither fixed nor entirely external but is created by, and moves with, the changing perceptions and beliefs of the viewer." (Duncan, 2004, p.4).

chance that reflection may be taken back into and reprocessed inside the self.

However, not all peer review was useful. When I exhibited a research poster at the AUT Postgraduate Symposium (in July 2013), discussions during the session were polite but weak. I also submitted images and a brief article to the student magazine *Debate*, which were never published. The disappointment with both brought about the realisation that this was in itself valuable feedback. It showed me that I was still not able to articulate my enquiry plainly. This gave me the impetus I needed to continue searching for the pure core of the research question and to work insightfully with the research so as to remove unnecessary layers of complexity.

In summary, this destabilising process of enquiry posed a genuine challenge to me. However, the heuristic methodology was the most suitable way to chart the evolving exploration. While the research question developed and changed, so did the research itself. The philosophical underpinnings grew and influenced the course charted, and so did the external feedback. Reason and emotion often clashed over the uncertainty and vagueness. In the midst of it, my self-dialogue carried the project, vulnerable yet determined, unable to see beyond the next experiment, yet increasingly fascinated with what I was discovering.



4. FINDING THE LIGHT

This chapter relates the process of making and thinking, and describes how my investigation unfolded.

4.1 Re-evaluating an assumption

At the outset of this research, I had a different project in mind. My goal was to explore Bonaventure's path of light, and creatively investigate the four hierarchical realms along it: artefact creation, sense perception, philosophical discourse and divine wisdom. The idea was that the production of the work would itself be guided by illumination, so I would discover inspiration during the process of creative investigation.

My first experiments were attempts to investigate light independent of objects. I sought to explore and interpret light in general. Confident that I would work in an entirely analogue environment, I sought to make artefacts as I believed they should be made: by hand.¹¹ Nostalgic or naïve, I imagined finished physical products that invited tactile inspection. Thus, I experimented with an array of manual techniques.¹² Most of these techniques were not new to me, and I took a

certain comfort in revisiting these old 'friends'. I let the work unfold and guide me in this process of discovery. However, the results were not promising – I sensed I wasn't breaking new ground, and I felt the artefacts were insignificant, unemotional and in discord with the investigative question. None of the experiments resonated because the connection to Bonaventure's light was tenuous.

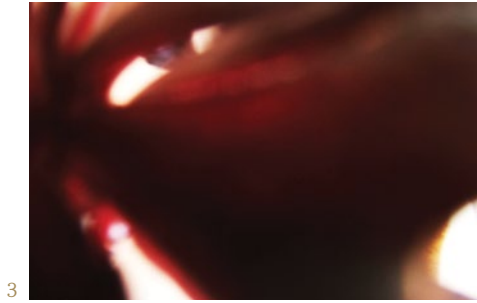
Re-evaluating my assumptions, I realised I needed to disrupt my (conventional and under-critiqued) notion of the craft and design construct. It wasn't until I learned I could re-conceptualise artefacts as *methods of intervention* (Griffiths, 2010) and craft as an *approach* or an *attitude* (Adamson, 2007) that I was able to negotiate an entirely different approach. These broad scholarly definitions gave me the affirmation to *hybridize my own tools* (Mau, 1998) and start down my own path. I was set free to develop my own craft thinking.

4.2 Imagery beyond photography

Equipped with a digital camera, I interpreted light in a series of images that concentrated on my internal perception of it. These were exercises to focus on substance other than matter, moving away from a fixation on form. I required this process to begin to 'unlearn' the conventional photographic practice of capturing the literal as a form of documentation.

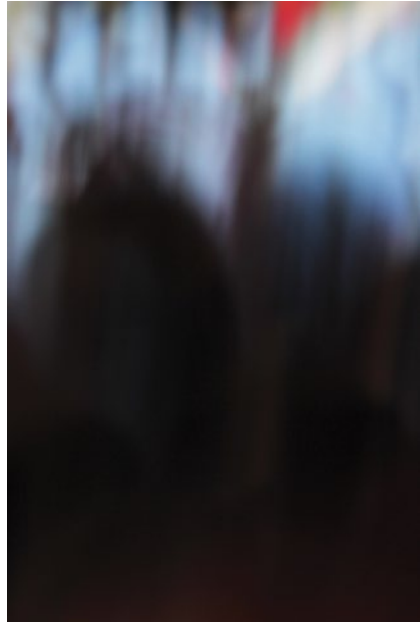
¹¹ Frayling (2013, p.26) notes that the word craft is derived from the old English *craft*, meaning strength or skill and says that it came to denote "an activity that involves skill in making things by hand." By extension, the term *manual* (from Latin *manualis*) means of, or belonging to the hand).

¹² Initially solar plate and pen illustrations were trialed, as well as experimental constructs such as scraping of acetate film and screen printing pastel illustrations.

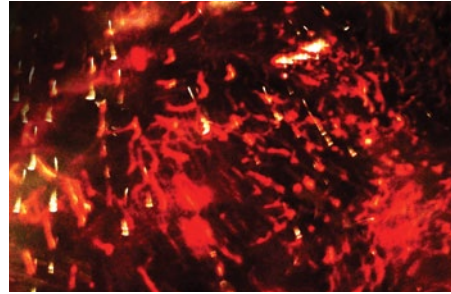


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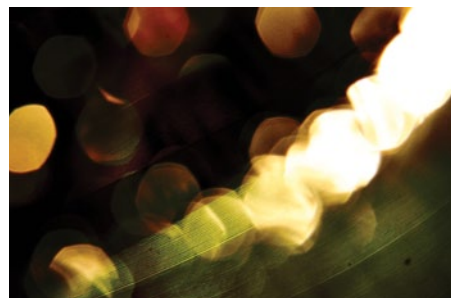
Figures 3–6: F. Derek Ventling (2013). *Light Without Form*. Early photographs exploring light as a substance detached from form.



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During the process I tried consciously to let my intuition and tacit knowledge guide me. I sought to follow Bonaventure's theory that illumination of knowledge is internal (Hayes, 2001) and occurs prior to reasoning (Miccoli, 2001).

As my confidence in this process grew, I became more attracted to exploring *the source* of all light. Bonaventure describes this archetypal light as *lux superior*, the Primal Light from which the truth radiates (Hayes, 1996). I learned that many cultures revered a solar deity, who was generally represented as an anthropomorphic figure.

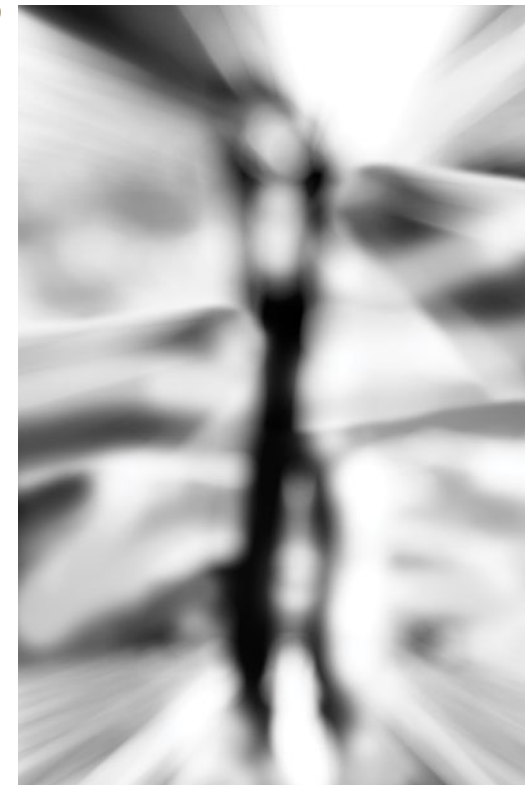
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Figures 7–9: F. Derek Ventling (2013). *Sol*. Photographs as interpretive imagery of Sol Invictus (the Roman sun god) and Samas, his Babylonian equivalent.

I wanted explore this figure of light as something omnipresent yet ephemeral. Again using the camera, and directing a model, I experimented with creating situations and forms that appeared indistinct and fleeting. I wanted a figure to be visible, yet ostensibly at the edge of our imagination.

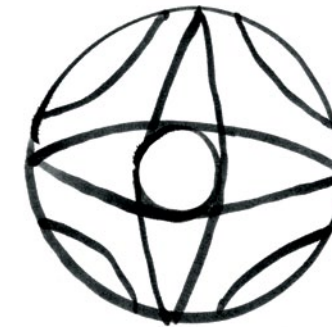


Figure 10: F. Derek Ventling (2013). *Symbol of Samas*. Illustration based on the tablet of Shamash, depicting his emblem with two crossed eyes and rays emanating outwards.

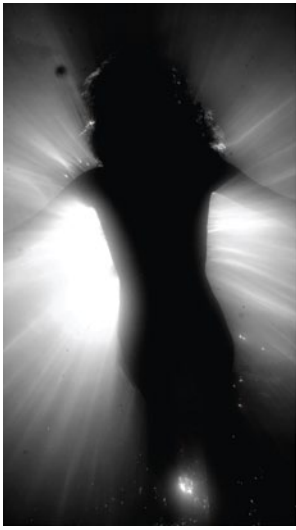
Figure 11 (left page): F. Derek Ventling (2013). *Sophia Divina*. An attempt to integrate photographic images, symbolism and typography to form a contemporary narrative.

My habit of action began to include Photoshop (see 4.7). I layered some of the images, and experimented with introducing graphic elements.¹³ As the set changed and the images became more expressive, I tried to show light emanating from the figure, not simply wrapping around it. Photoshop helped to shape imagery that was beyond what I could generate with the camera. However, I was consciously not using Photoshop for effects, but to extend the idea contained in the original photographs and to heighten its expression.

¹³ These were either type or reinterpretations of symbols I had found when researching ancient solar deities.

ζορλια δινηα

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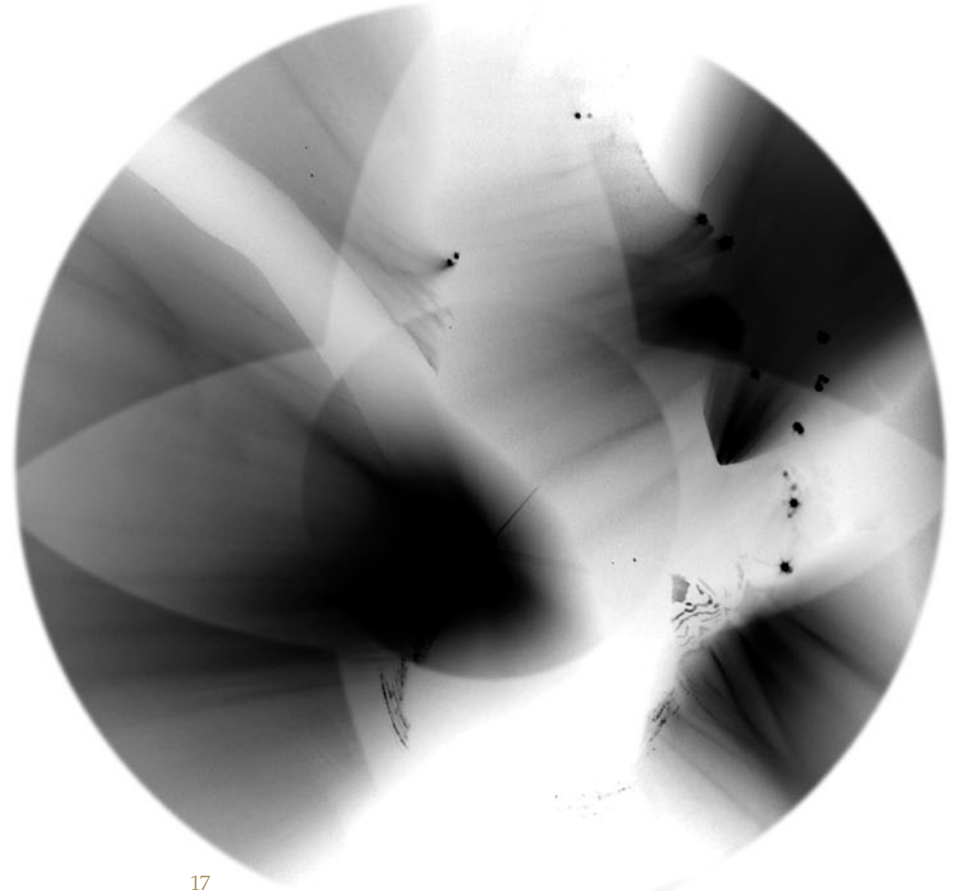


Figures 12–16: F. Derek Ventling (2013). *Figures of Light*. Five samples from a further series of photographs interpreting Sol Invictus as a figure of light.



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Figures 17–18: F. Derek Ventling (2013). *All-seeing, all-knowing*. Working with photographs through the graphical symbolism of Shamash.

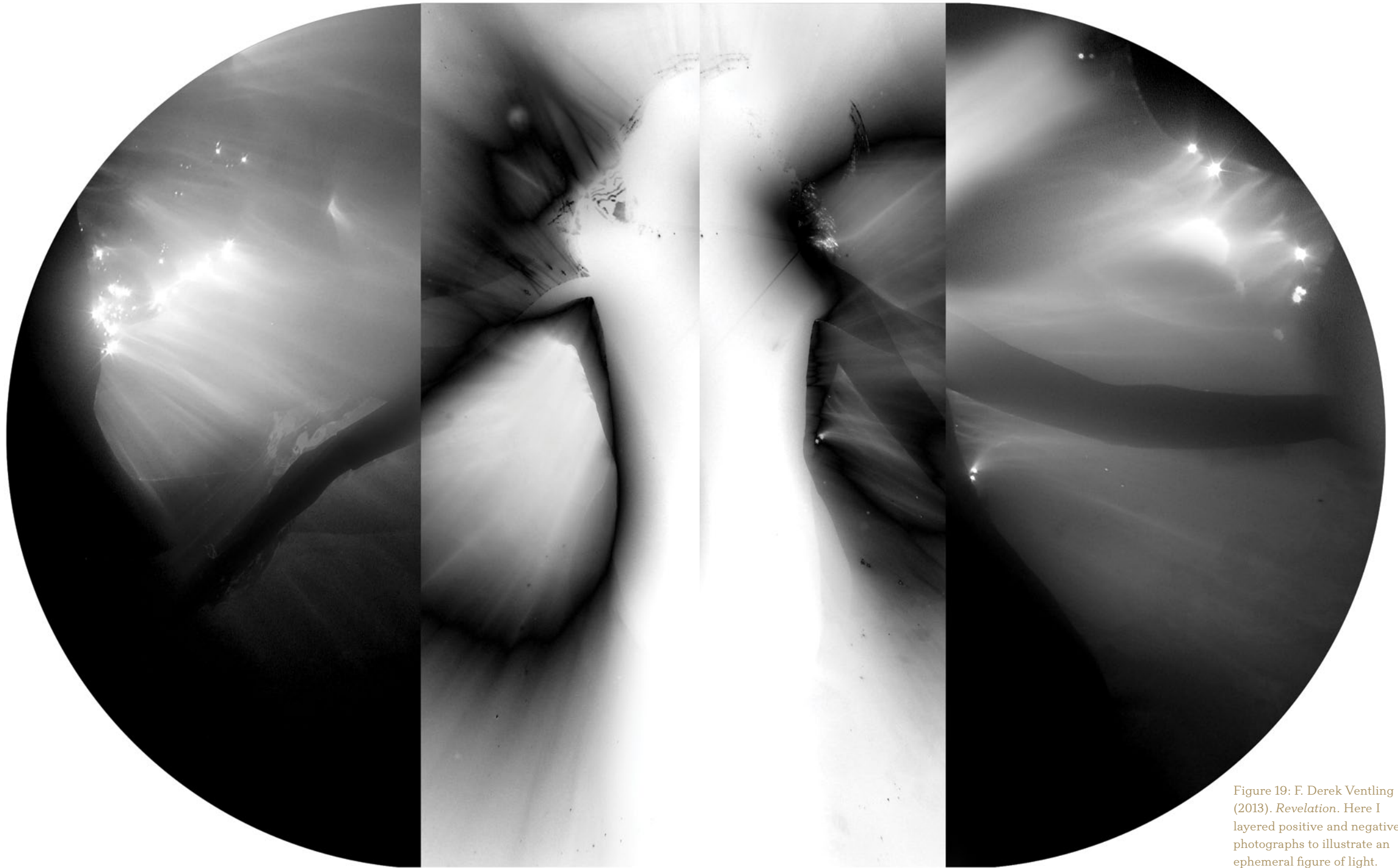


Figure 19: F. Derek Ventling (2013). *Revelation*. Here I layered positive and negative photographs to illustrate an ephemeral figure of light.

Thus the creative process consisted of conceiving images through photographing a model in a setting, importing these images into the computer, assessing and then intuitively re-imaging them in the digital environment. Each step allowed the collaboration of reflection and experimental play (Crow, 1998) to provide new insights (Marzotto, 2009).

4.3 Silver light

Reflecting on these images, I felt they showed emotive quality, but the light itself did not demonstrate enough intensity to represent divine light. Without consciously pondering this dilemma, I unexpectedly experienced an epiphany.

Intuitively, the idea of a silver surface came to me. Illumination had possibly connected with my subconscious to yield indistinct imagery of religious icons and mirrors. Without trying to reason with this potentially superficial expression, I let my emotions guide me. I imagined a glowing radiance and, as this quality of expression felt much more appropriate, I became excited.

After some investigation I discovered the ancient method of hand gilding with silver leaf, and found the ideological link to an imagined 13th century Bonaventuran Europe intriguing. The inherent technical impurity (Marzotto, 2009) and the anachronistic application method anchored the silver leaf within an appropriate medieval context.

Thus I gilded a sheet of plywood and set out to screen print my figurative image onto this. The results were disappointing, primarily because the

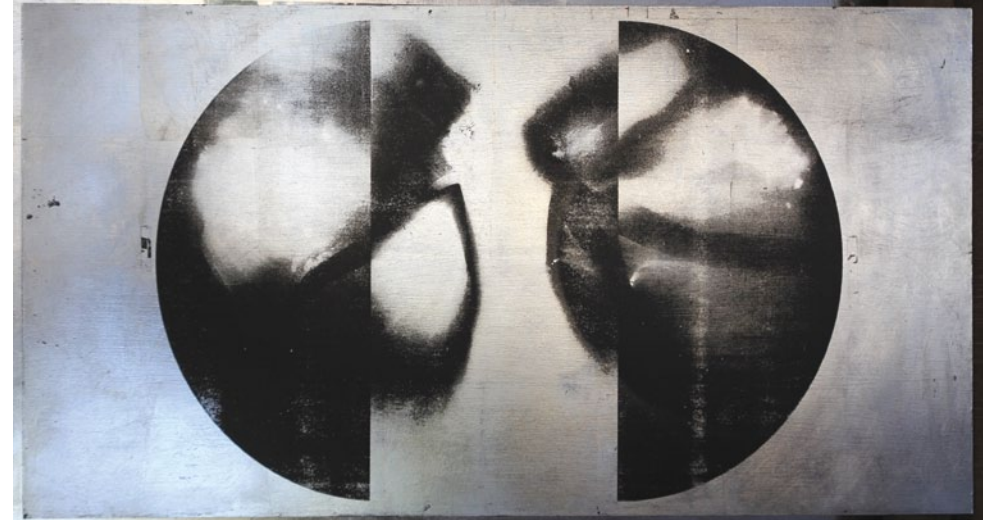


Figure 20: F. Derek Ventling (2013). *Silver Revelation* (60 x 120 cm). Imagery from Figure 19 screen printed onto silver leaf.

screen resolution could not generate the detail I required. The printed black was flat, lacking tonal modulation. However, the silver leaf was beautifully lustrous, and opened the door to the next stage of experiments.

Contemplating the conceptual imagery, I felt the focus had digressed. This approach seemed to have shifted too far from the original idea of Bonaventure's illuminative connectivity, and confused the sun with God unnecessarily. I was after all interested in exploring light itself. I continually asked myself: what is the connection that light is making, and what is the nature of this agent that discloses meaning and knowledge?

Reading further into Bonaventure, I learned that he gives light various definitions according to its metaphysical state: *lux* as emanation, *lumen* as reflection, and *colour* as perception (See 2.2.3). In my interpretation, this suggests that light is best captured as it *reflects back* off an object or figure, once this has been 'activated'.

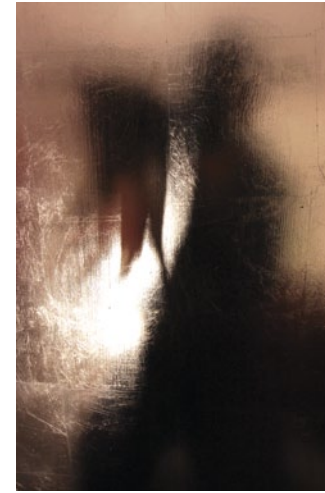
4.4 Artefact as assembly

At this point, the process took on a very different dynamic. I realised I had again been caught in the notion of working towards a finished artefact. I was also influenced by Sela-Smith (2002), who criticised Moustakas for shifting his focus from the actual experience to the *idea of the experience*. Had I not done the same? Was I not forgoing the chance of authentic expression by concentrating on aesthetic style? I needed to steer clear of simply creating arresting imagery – I wanted to generate an assortment of *personal emotive suggestions* that reflected my inner state and portrayed this illuminative sensation.

Thus I began a phase of staging and assembling. Silver leaf appeared to be worth investigating for its medieval nuances, so I initially trialled its properties¹⁴ until I had the appropriate qualities to craft a large wall.¹⁵ This silver leaf wall was lit using diverse light sources in different positions, at different times of day and night, in different rooms. I photographed the effects of this *lumen*



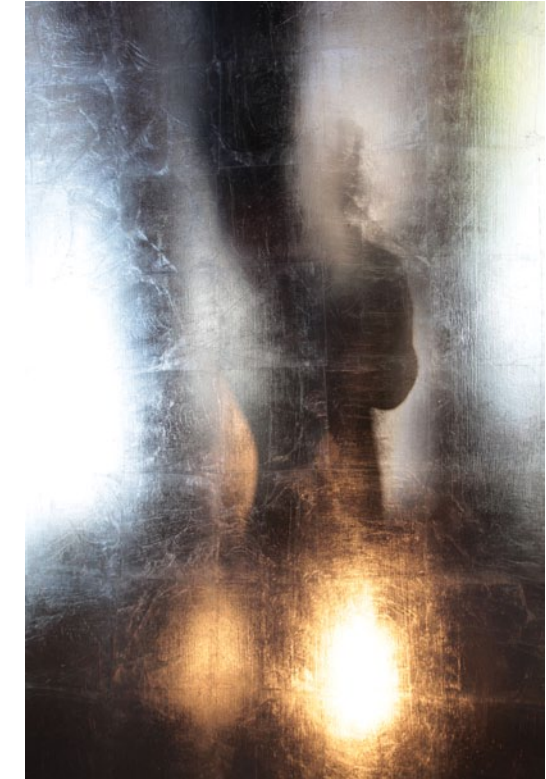
Figure 21: F. Derek Ventling (2013). *Silver leaf wall detail*. This closeup shows the irregular creases and overlaps in the silver leaf. These are testament to the imperfect nature of the manual application because each fine leaf sheet settles onto the sticky glue differently.



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Figures 22 and 23: F. Derek Ventling (2013). *Staged effects at silver leaf wall*. These photographs show a selection of initial staged experiments with a variety of light sources and camera angles.

23



influenced by parameters such as glow, mirroring, distortion and allure. As I progressed, I found transient shapes, textures and colours that I explored further.

I revisited this wall repeatedly with the camera, questioning, probing and trying to creatively articulate *lumen* as a state of inspiration. These photographic interactions were intentionally done in a spontaneous and accidental manner, because I wanted to ensure unanticipated or serendipitous moments could reveal themselves.

¹⁴ I discovered that the leaf's reflective capability changes with the underlying texture of the substrate – the flatter, the more shine and vice versa. I experimented to find the ideal texture that gave the leaf a slight matt look yet enough reflectivity. Acrylic sheets, heavy card, timber and medium density fibreboard (MDF) were evaluated, until I settled on MDF, primed with a rolled coat of paint.

¹⁵ 150mm x 150mm sheets of silver leaf were applied to a 2.4m x 1.2m MDF board by the medieval method of using size glue and a flat brush.

Also, as light itself is contingent and mutable, I wanted these images to be of the same essence. I found that, because of the physics of reflection, incremental changes in camera angle or perspective would lead to very different photographs. As I changed my position in relation to the light, some elements disappeared, while others appeared. The situation was risky because any replication would be difficult, but it heightened my joy of discovery and the sense of valuing the ephemeral moment. Illumination was guiding my senses, allowing the work to become a process of continuous exploration.

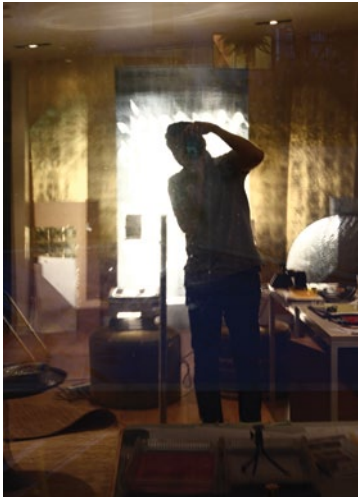


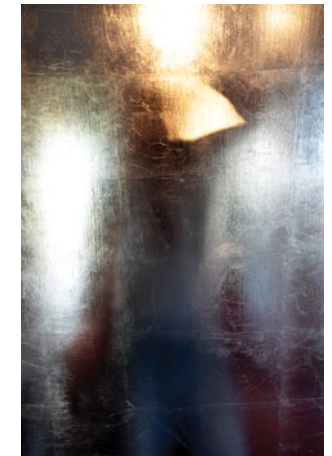
Figure 24:
F. Derek Ventling,
(2013). *Self portrait*.
This is a snapshot I
took while working
in the studio.

Contorting my body to position the camera and find the ideal angle, I physically mingled with this construct, capturing shadows and reflections of myself, deliberately marking my presence as the practitioner within the process. While these fragments give a sense of corporeality in the resulting images, they do not draw the essence away from the light. Rather than concrete materiality, this work emphasises experienced

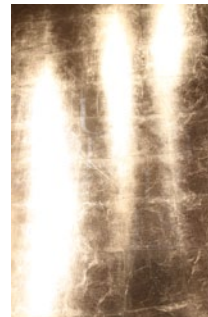
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Figures 25–29:
F. Derek Ventling,
(2013). *Reflective studies*. These
photographs show a
selection of further
staged experiments
with the silver leaf wall,
various light sources,
and other elements
intersecting the light
or casting shadows.



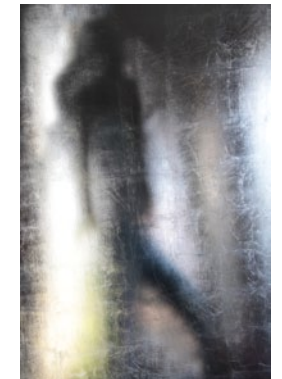
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sensation – the preconscious state that I was in myself during the photography. This connects to Bonaventure’s proposition that the divine light reveals knowledge originating from sensation, which occurs prior to reasoning. Therefore, *illumination is an intuitive revelation* which may activate the creative potential within us. Noone and Houser (2005) summarise that light mediates between soul and body. In my artefacts the light is both within and without – metaphorical as well as physical.

4.5 Type as positioning narrative

Incrementally the staged experiments became more complex.¹⁶ Yet upon reflection, I sensed the imagery required an element of “clarification” – a layer that would give the viewer a connection to Bonaventure’s written word. I therefore turned to typographic experimentation.

Letters and sentences from Bonaventure’s writing were typeset on the computer, output as film and projected onto the silver leaf wall using acquired overhead projectors, then photographed.



Figure 30:
F. Derek Ventling,
(2013). *OHP setup*.
This photograph shows
one of many staged
setups involving two
overhead projectors,
projecting typographic
imagery from acetate
film onto the silver
leaf wall.

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Figures 31–33:
F. Derek Ventling, (2013).
Typographic studies. A
selection of photographs
from the staged experiments
with projected type. Figure 29
shows additional projections
of illustrations and
coloured dye on acrylic.

While the additional narrative was potent, digitally generated typefaces seemed too perfect and lacking in authenticity. I realized that I needed to write these words myself. As discussed previously (see 2.2.4), illumination emerges from doing and sensing – and this represented another avenue to test Bonaventure’s theory. Heller and Ilic (2004, p.6) state: “The hand has long been the tool of choice and, while not always the fastest or most precise, it is the most emotive.”

¹⁶ Acrylic sheets were held into the projected light; some had been manipulated through cutting, colouring and scratching away the colour in areas, or cracking. These clear sheets ensured that the projections were only of the effect, and not the acrylic material.

I researched calligraphic letterforms¹⁷ to understand the stylistic traits of 13th Century European writing, indicative of Bonaventure's times.

I then shaped thick pens and proceeded to write, adding my own idiosyncrasies to the letter shapes¹⁸. Once written, these words and sentences were scanned, edited, printed onto acetate and projected. The acetate was further manipulated with markings and colours. In a further series of experiments I also replicated these letter shapes on acrylic.

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Figures 34 and 35:
F. Derek Ventling, (2013).
Calligraphy. Sticks of dried bamboo were cut to lengths of approximately 20cm, a nib was shaped on the end with a carving knife, and a rectangular piece of bent tin was inserted in the centre to act as an ink reservoir. I used coloured die as ink, and wrote on large sheets of manila and white paper.



Figure 36:
F. Derek Ventling, (2013). *Type on Film*. Some handwritten words shown above were scanned and output onto acetate film for projection.

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Figure 37 and 38:
F. Derek Ventling, (2013). *Type on Acrylic*. I created calligraphic letter shapes in silver leaf on acrylic sheets, both positive and negative. These acrylic sheets were later held so that light could shine through them to project the letters.

The resulting typographic layer represents more than a temporal bridge to draw Bonaventure's philosophy into a contemporary environment. Written in Latin, the textual content is removed in favour of the contextual. Because of the arcane meaning of the words, an interpretation of the text must be sought in the connotations of the medieval letter shapes. I believe this emotional narrative positions the work contextually while still maintaining its enigmatic quality. This exemplifies the essence of Bonaventure's idea that light reveals truths before reason, and that sensation is paramount to understanding.

In its final stage, the enquiry turned back onto itself again. I set out to create a series of images that expressed my own journey of investigation, a creative pilgrimage from the darkness to the light. Rather than a documentary of my explorative enquiry, it might represent an emotional narrative of the process of acquiring wisdom. This process

17 The following books were my main source: Alexander, J. (1978) *The Decorated Letter*. Braziller, NY; Drogin, M. (1980), *Medieval Calligraphy – Its History and Technique*. Dover Publications, NY; Gaur, A. (1994) *A History of Calligraphy*. The British Library.

18 For example: Being left-handed, I was taught in Art School by a calligrapher to form each letter by reversing the strokes. This technique still enables the pen to be pulled rather than pushed, but without the hand smudging the wet ink. This technique, however, creates challenges with letter spacing. It can be recognized by dried pools of ink forming at the tops rather than the bottom of letters.



Figure 39: F. Derek Ventling, (2013). *Descendit*.

was always at the core of my research – seeking and understanding the *catalytic quality* of Bonaventure’s light through making and sensing. It is these images that are displayed at the thesis exhibition (see Chapter 6). Light as a tool is used to project the imagery, retaining its intangible quality and reminding us that it is, in itself, the principle of beauty (see 2.2.3).

4.6 *Light as a tool*

Arguably, the digital age has changed photography incontrovertibly. Nevertheless, in its basic functionality a camera remains a camera, and is a tool to capture light and the objects this defines. The digital camera was my intimate companion through this enquiry. The device was a recorder of data; its role was simply to contain a moment of sensory experience. Photographs were viewed and edited in Photoshop to enhance¹⁹ what was unfolding before the camera: a combination of projected light, cast shadows and mirrored imagery.

4.7 *Contemporary craft thinking*

Craft and craft thinking have been defined by various authors (see 2.1.1–2.1.3) as manual processes and the ensuing perceptive capability. Yet in this enquiry, digital processes have been as important as their manual counterparts. Consequently, the question arises whether the use of computers is also justifiable as craft thinking. Furthermore, one might ask, if the design process is situated within a fully digital environment and has no tactile component, how does illumination find its way to a sensory experience?

¹⁹ It needs to be mentioned explicitly that no effects were added. All imagery in this corpus of work retains the analogue quality it was captured in.

Adamson (2007) offers a conciliatory route to explanation by broadening the definition of craft. He interprets craft as “...an approach, attitude or habit of action” (p.4). Sennett (2008) describes craftsmanship as quality-driven – engaged in the work in and for itself, and aspiring to achieve high standards. Craft thinking can therefore be seen as *a continuous urge to improve and clarify*. The emphasis here is on *the propensity of the producer*, no longer on what is produced and how. This tenet is certainly applicable to contemporary digital domains. Consequently, it may be posited that wisdom can be gained through digital craft thinking, so long as the designer establishes the proper inclination and reflection process, and establishes “parameters to allow the unexpected to surface” (Crow, 2008, para. 11).

Several authors (Crow, 2008; Marzotto, 2009) have discussed the computer as a form of craft in itself. Marzotto (2009) notes that “analogous and digital define two complementary approaches that have been unfairly split for a long time” (2009, p.73). Crow (2008) argues that craft may, for example, be seen in the process of designing bespoke software solutions.²⁰

I believe my body of work has been enriched by both the digital and the malleable. As Marzotto states, manual processes forced me to confront myself (2009). Thinking through my hands allowed tacit knowledge and sensation to articulate ideas beyond reason. Thus, illumination would have been different if the enquiry had been strictly digital. While this exegesis does not wish to qualify the illumination that analogue

techniques may solicit, this issue is worthy of consideration by any designer, both on a personal and general level.

Graphic design in particular, as I have experienced it, can thrive solely in the digital realm. Yet at the frontier where analogue experimentation and sensation expand the digital norm, authentic voices are found and contemporary sentiments are expressed. I believe it is these forces that advance graphic design practice.

4.8 Imagery

In all good work, White (2011) suggests, the image and the medium are inseparable. Although the media in my research are both analogue and digital, craft thinking pervades the entire assembly. It is through this thinking that experimentation and discovery have been able to develop a sensorial quality, and illumination has contributed its mysterious energy.

The resulting corpus of work consists of multi-layered images. These are orchestrated and assembled from idiosyncratic conjunctions of diverse techniques. The immutable (the silver leaf), the evanescent (photography) and the corrupted (projections of calligraphy) are intertwined to form a metaphorical narrative that exists with and through light.

²⁰ An early example of this may be seen in LettError's (1991) typeface *Beowulf*. Crow (2008) notes that *Beowulf* resulted from the first use of code to randomize typography by “art-directing multiple possibilities programmed into bespoke software machines” (para. 13). He says “digital media [...] support generative structures based on natural processes but can also evolve their own” (para. 18).

5. CONCLUSION

I embarked on this thesis to explore how wisdom is gained through making. To do this I interpreted Bonaventure's concept of illumination and its relation to contemporary graphic design. As a largely autobiographical exploration I was positioned centrally within the enquiry, articulating reflections on my own experience. I contemplated light in its conceptual and physical form, seeking an acute understanding as well as an authentic mode of expression. The resulting imagery considers both historical and contemporary perspectives, and in so doing develops a corpus of work that addresses the question: what is the notion of illumination and how does it contribute to my creative thinking?

5.1 Contribution to knowledge

5.1.1 Illumination

Illumination, as expressed by Bonaventure, combines the philosophical, spiritual and physical realms. I suggest that this relationship might be an intrinsic yet ephemeral component of a designer's manual and scholarly endeavour, certainly worthy of consideration.

Bonaventure's theory details an implicit hierarchy. Light, he argues, illuminates each realm from the manual arts to divine wisdom in established and sequential stages (Stewart, 1987). Therefore, his path of consummation (Hayes, 1996) requires a distinct beginning, where the designer thinks through working. As this thesis demonstrates, this agency is critical. This is where we have suspended reason, are intuitively interacting with materiality and allowing our hands and hearts to experience sensation. It is here that illumination engages with potentiality to germinate ideas.

A key argument underlying this thesis is that although I cannot actively provoke illumination, I can foster a propitious environment for it, both within (by suspending reason) and without (by letting my senses explore). Developing trust in the creative process therefore necessitates a conscious and conscientious approach towards illumination. We invite it to connect our sensing and thinking, enabling us to behold what we previously could not.

When I view light as an agent that informs and enlightens domains of making and thinking, it raises broader questions concerning a possible interaction between the material and the abstract. If illumination is indeed a stimulus that can contribute to new thinking, then this suggests connectivity to greater metaphysical concepts. As I learn through sensation and affirm through thinking, I am guided by light to wisdom and the divine.

As a graphic designer, I can articulate these notions in a body of work impossible to produce in the commercial domain. As such, I might offer a humble contribution to a number of discourses within academia. These include discourse around reflection on practice in research and reconceptualisations of craft thinking in graphic design.

5.1.2 Sensation

I do not see the idea of illumination as an anachronism. Instead I consider it a way of understanding the nature and mystery of creative ideation and development in graphic design. If our design practice involves our sensations and emotions, my hope is that this treatise may invite designers to extend their definition of design and perceive the parameters of its process with fresh eyes.

This thesis asserts that illumination requires a sensory experience, and this experience is gained through a variety of processes. As discussed in 2.1.3 and 3.4, craft thinking constitutes an interaction between our preconscious knowledge and our hands' physical work. Yet I do not exclude certain digital processes, however divergent, from this dynamic.

5.2 *Following the light*

Countless metaphors exist around the topics of light, illumination, and finding one's way. Adamson (2007) offers this: "...craft might be conceived not only as a horizon but as a constellation of stars – useful for the purposes of navigation, but impossible to inhabit" (p.6).

As in this exploration, light provides visibility and allows us a sense of direction, albeit vague at times. Having seen a glimpse of enlightenment, it is my intent to pursue the theme of this thesis into a practice-led Doctorate. I remain intrigued by the concept of illumination, and the relationship between lux and lumen within the framework of design.

The ensuing doctoral research will provide opportunities for deeper investigation into thinking through making, the illuminative influence, and the creative affinity between wisdom and illumination. With this objective, I chart an indistinct course. There is not a substantial body of contemporary discourse bridging illumination and design, but I am reminded of Bonaventure's words: *Ampla sit via illuminativa* – there are ample paths of enlightenment.

In concluding, it is worth mentioning that this thesis posed an inherent challenge I am only able to recognise at this final stage of reflection. The subject of illumination is essentially a mystery, and so is its metaphysical context. Therefore (as described in Chapter 3) my investigative approach relied on intuition and tacit knowledge – fact and intellect had little bearing. Griffiths muses: "art-based, practice-based research upholds the personal, the creative, the imaginative, the human" (2010, p.185). As such, this thesis has been a vindication: within me, the poet has finally achieved his emancipation from the scientist and has rightfully claimed his own realm, expression and credence.

6 . EXHIBITION

The artworks for the thesis exhibition were installed in Test Space 1 (WM201C) on February 27, 2014.

This exhibition was designed to elucidate the ephemeral nature of light and convey the process of discovery. The aim of the installation was to create a sensory experience for the audience, and to instil a sense of spiritual reflection. It was thus necessary to control the atmosphere by developing a restrained approach to the design.

Figure 40:
F. Derek Ventling, (2014).
Test Space 1 (WM201C)
before the exhibition.



6.1 Space

AUT's Art & Design Postgraduate Test Space 1 is a stark rectangular room measuring 6.6m x 11.3m, with raw concrete and white walls.

By darkening the single window I was able to eliminate any external light. The walls needed to be bare to emphasise the space itself. In order to demonstrate the significance of light in my research, I projected all images. (Conversely expressed, without light there would be no imagery.)



Figure 41:
F. Derek Ventling, (2014).
Setting up the exhibition.
Note the three banners in
the background hung from
the ceiling.

After calculating the ideal image size and the projected distance required, three white fabric banners²¹ were hung as projection surfaces on the northern side of the room. These were arranged far enough apart to create space for the audience to circulate. To demonstrate the capricious nature of light,

I wanted successive images to appear on different banners seemingly at random. This would keep the audience wondering where the next image would appear.

As the images speak of an emotional context, I wanted the viewers to

²¹ I chose fabric because I desired a degree of transparency. This was important for two reasons. I wanted light to reflect as well as penetrate these surfaces, so that a projected image would create a luminous atmosphere in the otherwise dark room. I also wanted the images to be viewed from behind, inviting the audience to consider their sense of perception.

From a range of fabrics available at a curtain maker, four were hung to trial until I settled for a cotton sateen lining fabric. This gave the right balance of lightness and opacity.

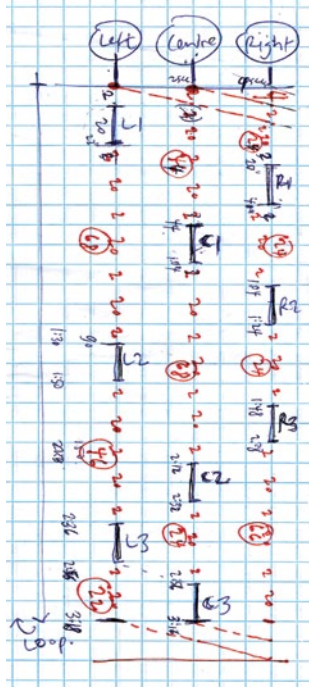


Figure 42:

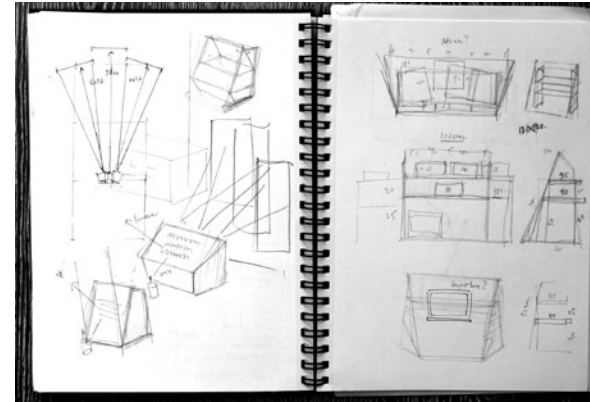
F. Derek Ventling, (2014).
Journal entry detailing the
sequencing of the final nine
images into three video files.

be in the proper frame of mind to contemplate these. I created three video files from the nine images I was exhibiting, one for each projector. The pace was critical, so I experimented with the speed of the sequence and the amount of darkness between each image. Creating (.mov) video files allowed me to control the slow fade in and fade out. Indeed, I discovered that my static images almost seemed to move during fade in. As the intensity of the lighter tones increased, these appeared to encroach on and consume the edges of the darker tones. This was yet another discovery of light's mutable nature.

Three projectors were housed in the centre of the southern end of the room, in a black box²² that I designed and built. They were set at a low height so a passing person would be caught in the beam, physically interacting with the projected image by casting their shadow across it. I wanted the viewers to be a physical part of the imagery, almost as if placed inside and experiencing them as I did upon capturing them (see Figures 47 and 48).

6.2 Bonaventure's statement

The black box was designed with its back wall angled at 15 degrees so it could be viewed easier from standing height. On this wall I applied in silver leaf Bonaventure's core statement "*Light is the principle of perfection, responsible for beauty, colour and activity*". A single large black candle



43



44



45

Figures 43–45:

F. Derek Ventling, (2014).
The black box. Journal
sketches, silver leaf treatment
of positioning statement, and
final appearance of the front
wall of the black box in the
candle light.

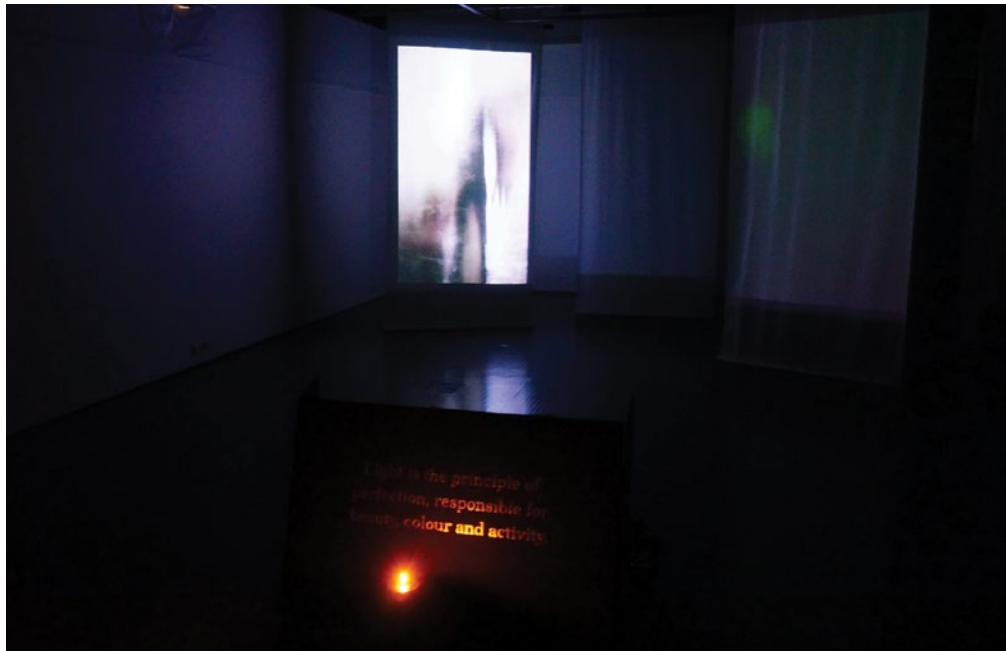
was positioned to cast light on the silver lettering. Given the physics of reflection from this light source, only a small portion of the text appeared lit from any point of view. Physical navigation around the candle was required in order to read the entire quote. Through this interaction I was hoping to share my own physical experience when researching reflections from my silver leaf wall. The presence of the candle originated from the idea of creating a metaphoric link to Bonaventure's medieval times. More powerful though, it positioned the exhibition firmly as a spiritual experience, and seemingly silenced the entering audience into a hush.

²² The box dimensions were 120cm wide x 55cm high x 35cm in depth. This was constructed from MDF and painted matt black.

6.3 Sound

As a final addition, I chose to play a piece of subtle background music. In spite of its low volume, the music needed to frame the experience correctly, so the choice was critical. I spent many hours listening to a variety of pieces with increasing frustration, rejecting them all because they were too melodic (therefore distracting) or too meditative, too religious or too 'New Age', too fast or too funereal. A day before the exhibit I finally found what I thought was ideal: Jan Garbarek playing jazz saxophone over The Hilliard Ensemble's male choir singing *Parce Mihi Domine*.²³ The low tones of the choir created a contemplative, introspective atmosphere, while the soaring saxophone suggested hope and fascination. Furthermore, this music was an experimental mix of old and new – analogous to my own work.

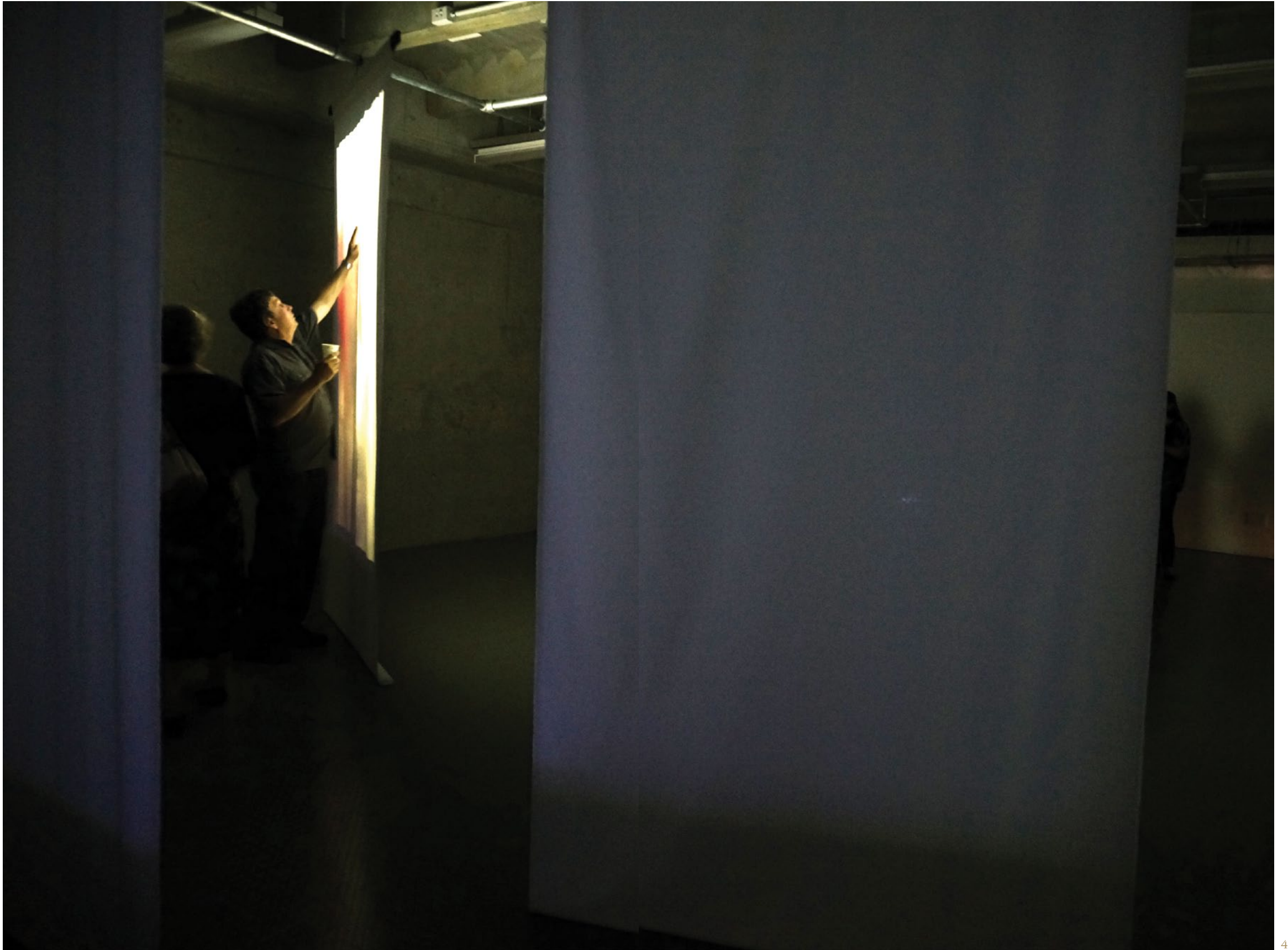
Figure 46:
F. Derek Ventling,
(2014). The exhibition
as it appeared to the
entering viewer.



Figures 47 and 48
(p90/91):
F. Derek Ventling,
(2014). The audience
interacting with the
projections.

The darkened room, the flickering candle, the slow pace of the projections, the glow of the large banners when lit, the sensory and enigmatic quality of the images, underscored by the introspective music - all elements combined created an arresting installation. Peers invited to the exhibition described a strong emotional resonance (as did the examiners). Verbal feedback was unequivocally positive. All the more convincing for me, however, was the fact that the audience understood the work on an emotional level, without having read this exegesis. As one examiner reported: "Derek's work poses pertinent questions that on the one hand are worthy of asking, yet on the other hand want to defy being answered. This leaves the viewer in a position of wanting to simply dwell in the work, asking the questions, but not wanting to rush the answer."
(Gibbs, 2014, Examiners' Report p.1)

²³ The track is from the album *Officium*, © ECM Music 1994. The music can be accessed at: http://www.last.fm/music/Jan+Garbarek+&+The+Hilliard+Ensemble/_/Parce+mihi+domine





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50



Figures 49 and 50:
F. Derek Ventling,
(2014). Display of
reference material
in ancillary Room
WM201b.

6.4 Display of contributing research

In a small room adjacent to the exhibition a selection of key pieces was displayed as tangible evidence of my process. This space was lit discreetly to ensure the pieces were understood only as references to the actual exhibition. It was here that the Viva was held.

6.5 Final artworks

From over 200 experiments I selected nine final pieces for the exhibition. At projection distances of 4.3m–5.0m, the images appeared at a size of 1.4m x 2.2m. The large scale was an important factor in selection – the images needed to be compelling both from a distance and at close range. Variety was also a key consideration: I wanted to show compositions featuring a range of colours and typographic sizes. The determining factor however, was the emotional content of the images and their communicative capability.

These final images are featured on the following pages, in the order in which they were projected at the exhibition, as figures 51 to 59.

Figure 51:
F. Derek Ventling, (2013).
Lux.



Figure 52:
F. Derek Ventling, (2013).
Pulchra.

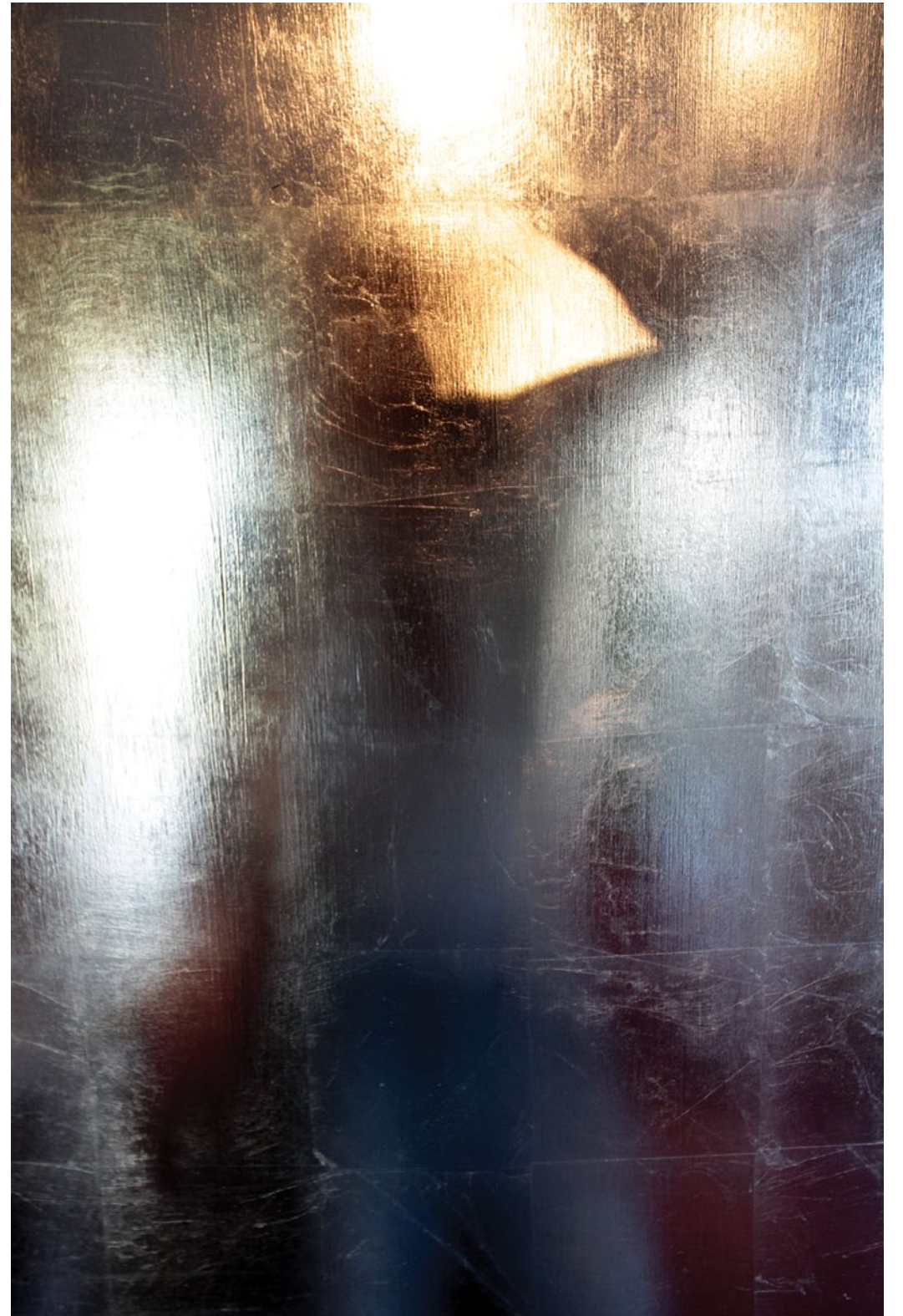


Figure 53:
F. Derek Ventling, (2013).
Cognitionis sensitivae.

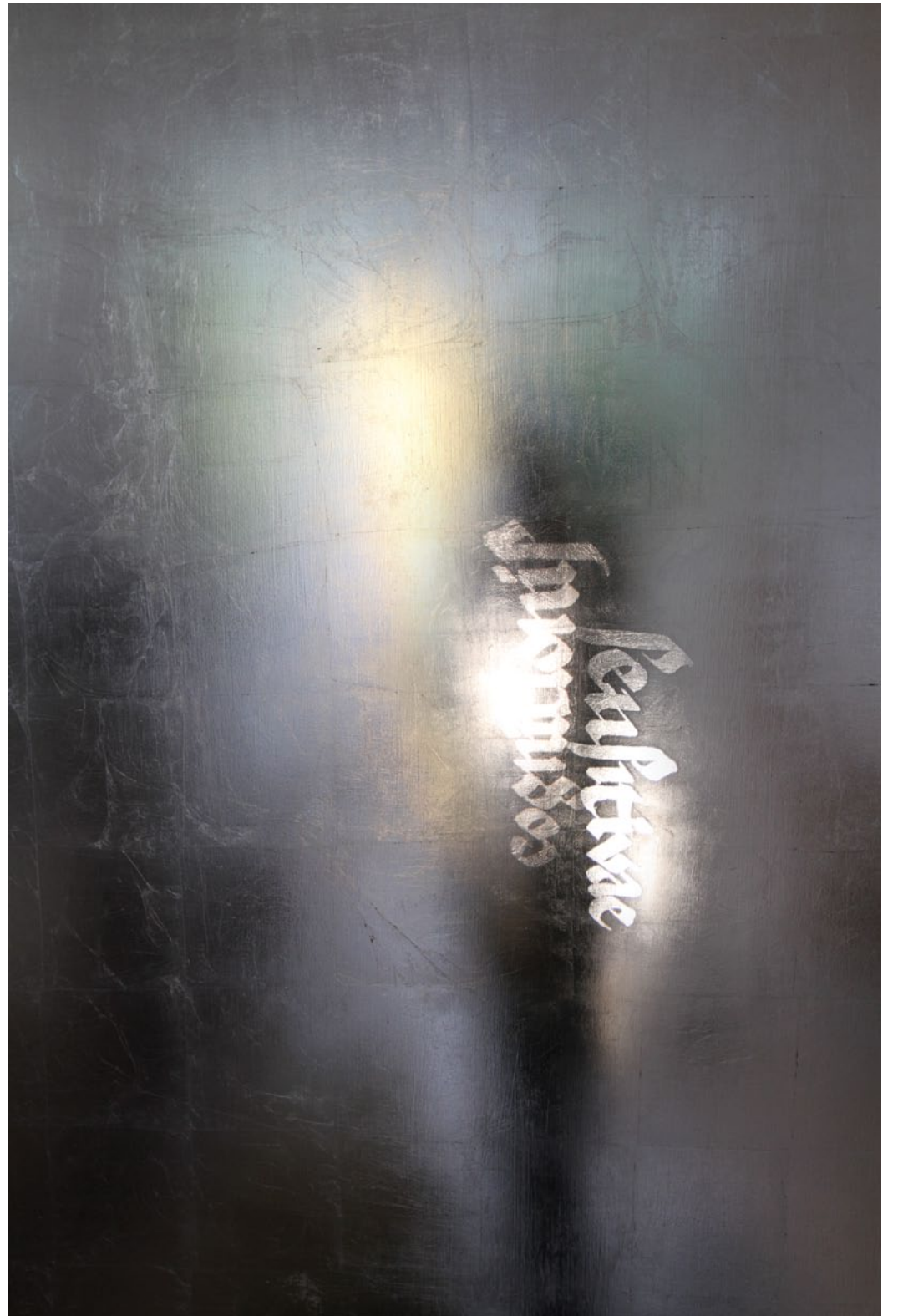


Figure 54:
F. Derek Ventling, (2013).
Sanctissimus.

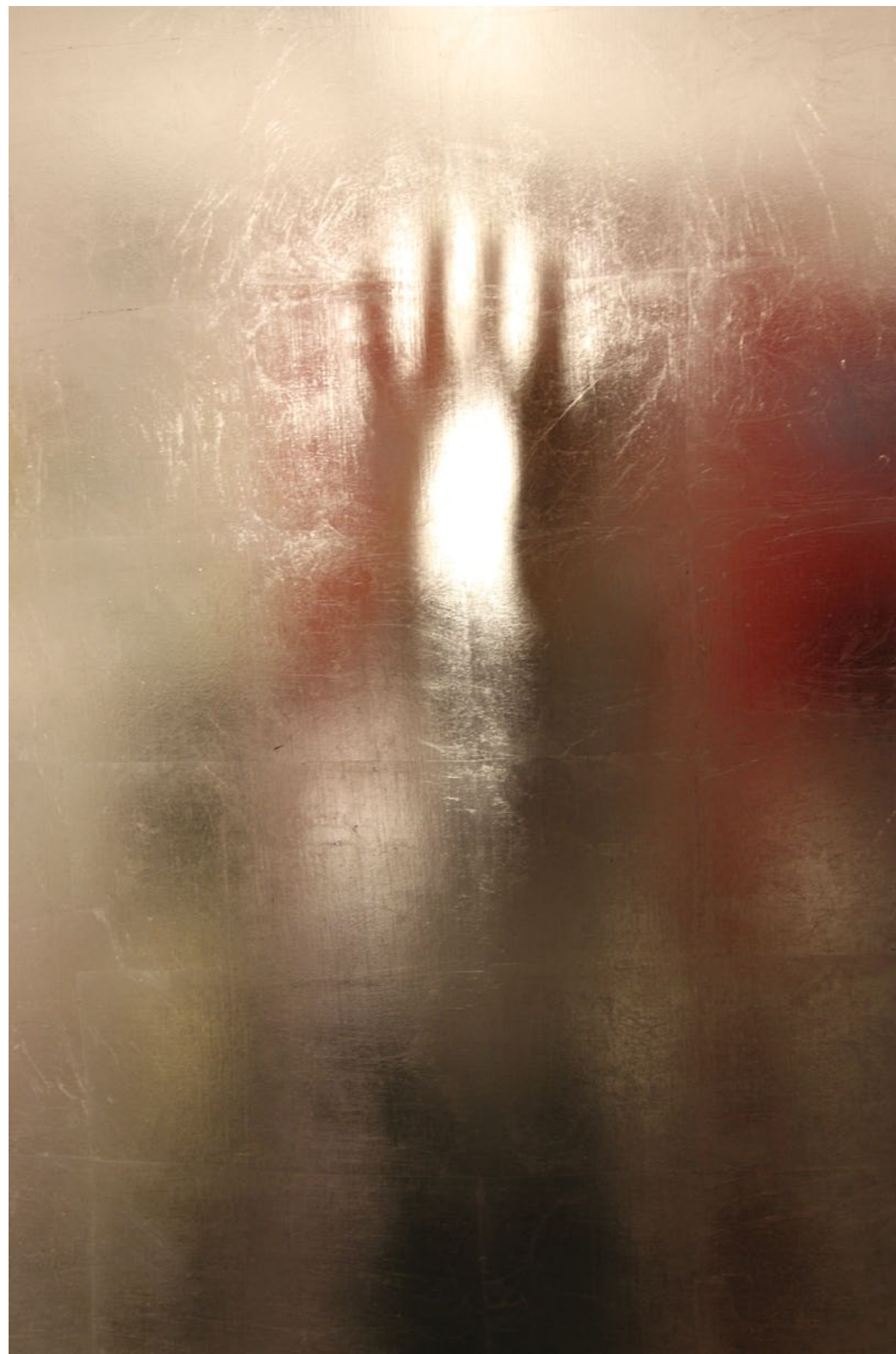


Figure 55:
F. Derek Ventling, (2013).
Veritatis.



Figure 56:
F. Derek Ventling, (2013).
Illuminativa_8.



Figure 57:
F. Derek Ventling, (2013).
Supra rationem.



Figure 58:
F. Derek Ventling, (2013).
Ducit.



Figure 59:
F. Derek Ventling, (2013).
Via Illuminativa.



Calligraphic words in the images are excerpted from Bonaventure passages. The full passages are given here.

Figure 51, *Lux*:

“Lux per se pulchra est.”

Light is in essence beauty.

(Bonaventure, translation: Miccoli, 2001)

Figure 53, *Cognitionis sensitivae*:

“Secundum lumen, quod illuminat nos ad formas naturales apprehendendas, est lumen cognitionis sensitivae.”

The second light, which provides light for the apprehension of natural forms, is the light of sense perception.

(Bonaventure, translation: Hayes, 1996)

Figure 55, *Veritatis salutaris*:

“Quartum et ultimum lumen illuminat respectu veritatis salutaris.”

The fourth and last light illumines with respect to the saving truth.

(Bonaventure, translation: Hayes, 1996)

Figure 57, *Supra rationem*:

“Lumen sacra scripturae, quod idea dicitur superius, quia ad superiora ducit, manifestando quae sunt supra rationem, et etiam quia non per inventionem, sed per inspirationem a Patre luminum descendit.”

The light of sacred scripture, is called superior light, because it leads to higher things by revealing truths which transcend reason, and also because it is not acquired by research, but descends from the God of Light through inspiration.

(Bonaventure, translation: Hayes, 1996)

Figure 59, *Illuminativa*:

“Ampla sit via illuminativa.”

There are ample paths of enlightenment.

(Bonaventure, translation: Hayes, 1996)

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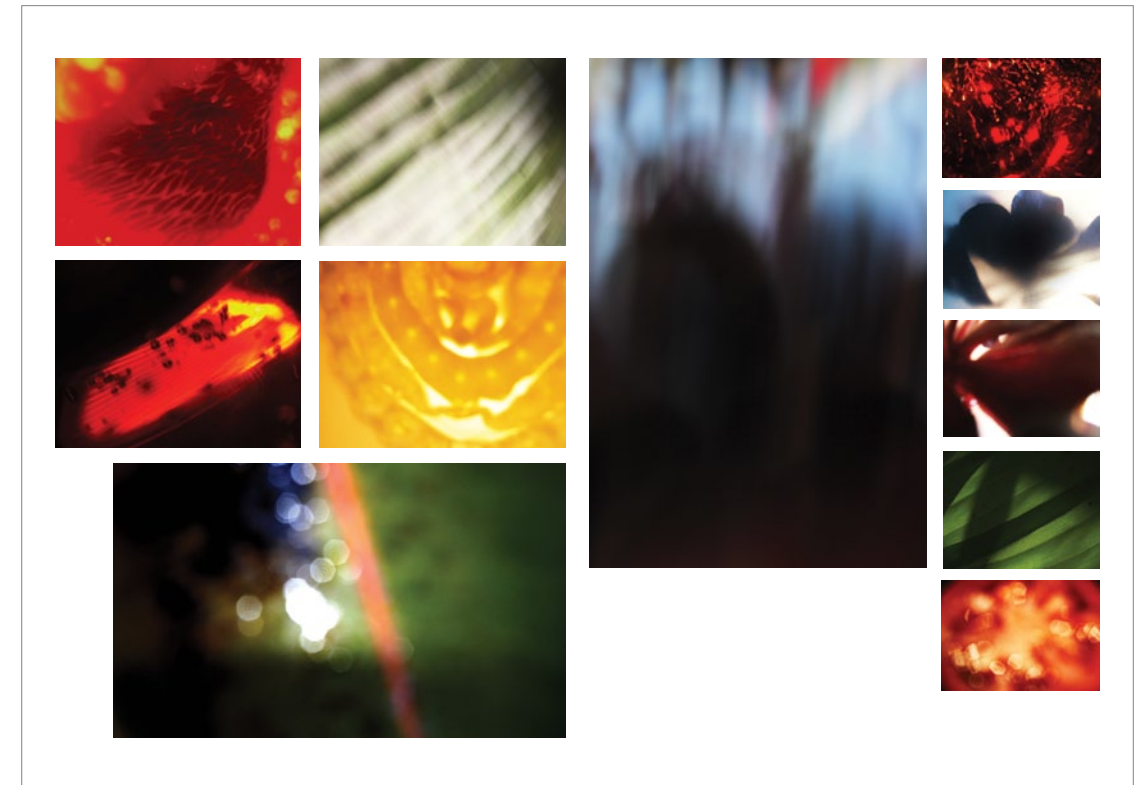
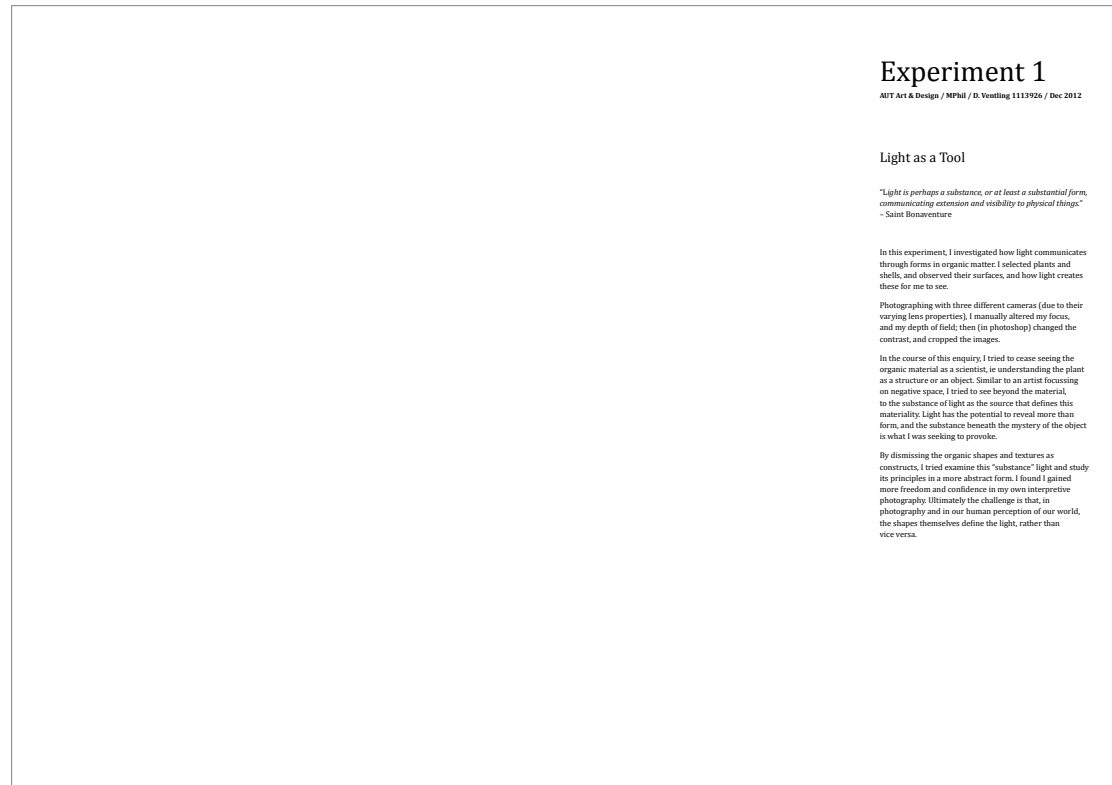
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8 . APPENDICES

APPENDIX 1:
EXPERIMENT
DOCUMENTATION

These images show the documentation sheets of my experiments, with reflective notes and selected images.



Experiment 2

AIT Art & Design / MPhil / D. Vestling 1113926 / Jan 2013

Light in the Darkness

Sol Invictus = Indefatigable Sun God, all-seeing and therefore all-knowing.

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.

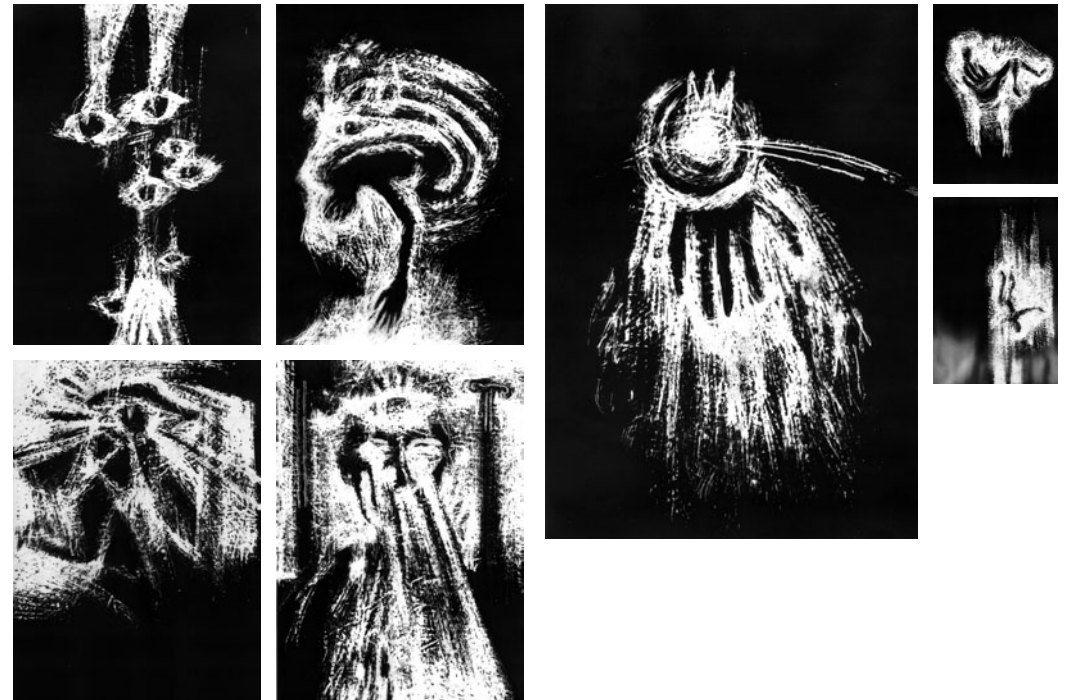
I wanted to reflect on how light pours into the darkness, turning the black into white and illuminating objects for humans to see and therefore understand.

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 basis to reconnect with an archaic manual approach. Simply 'doing' 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.



Experiment 3

AUT Art & Design / MPhil / D. Vestling 1113926 / Feb 2013

Sol Invictus, revisited

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 greyscale.

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

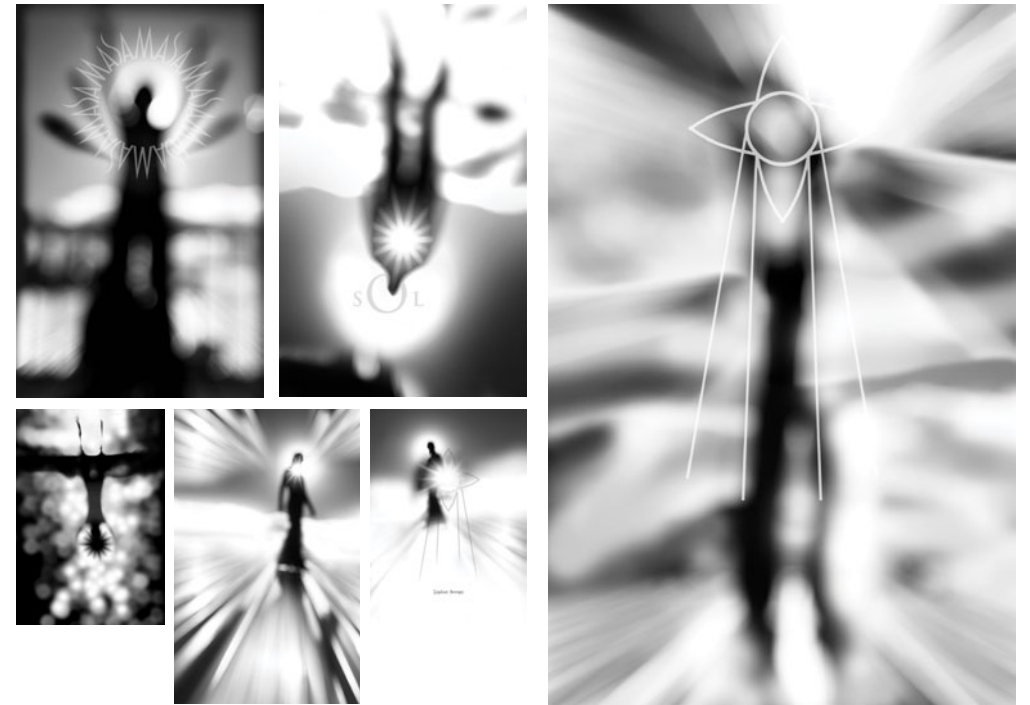
I tried to capture these symbols and expressions in graphic form, and overlay the photos with these; giving them an additional dimension in thought, or at least in mystery.

I noted two assumptions that occur when revering Sol:

a) seeing = knowing.

b) knowing = power.

A third assumption would be that light is required to see things; or that the two are dependent - an essentially biological trait. This of course should not be the case for deity, yet humans need to imbue deity with human concepts.



Experiment 4

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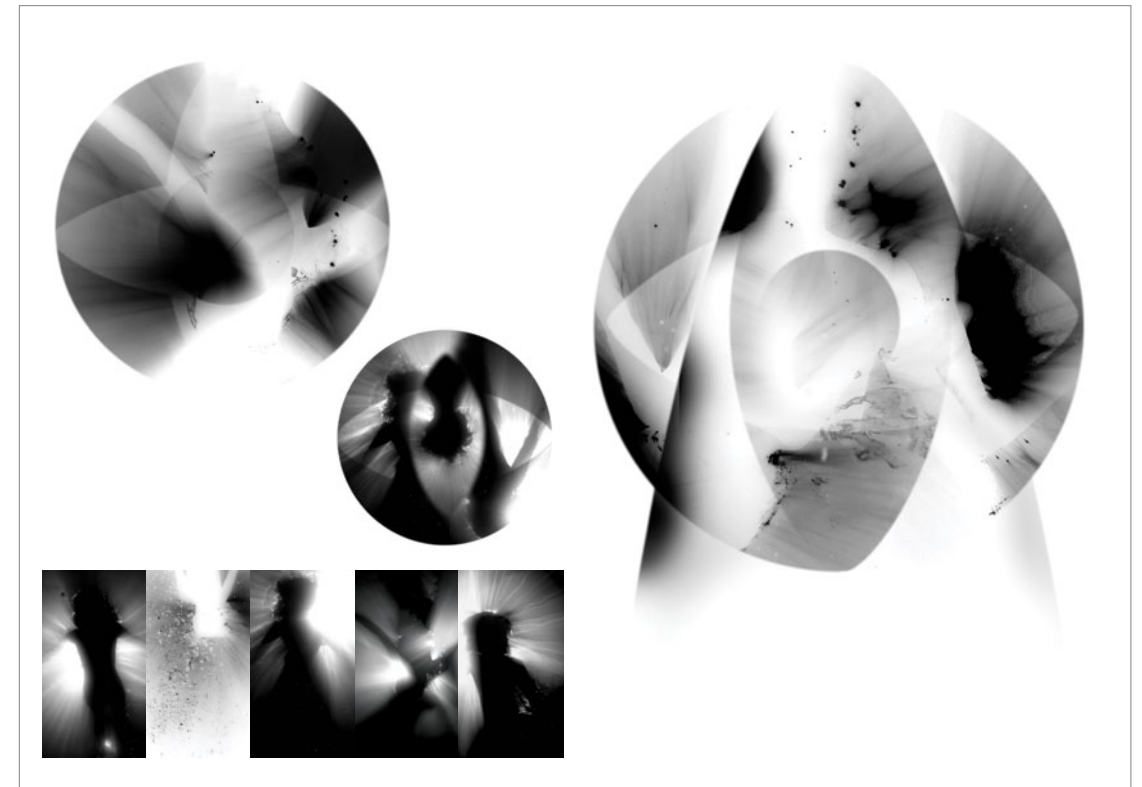
The Symbolism of Sol

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 & 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.



Experiment 5

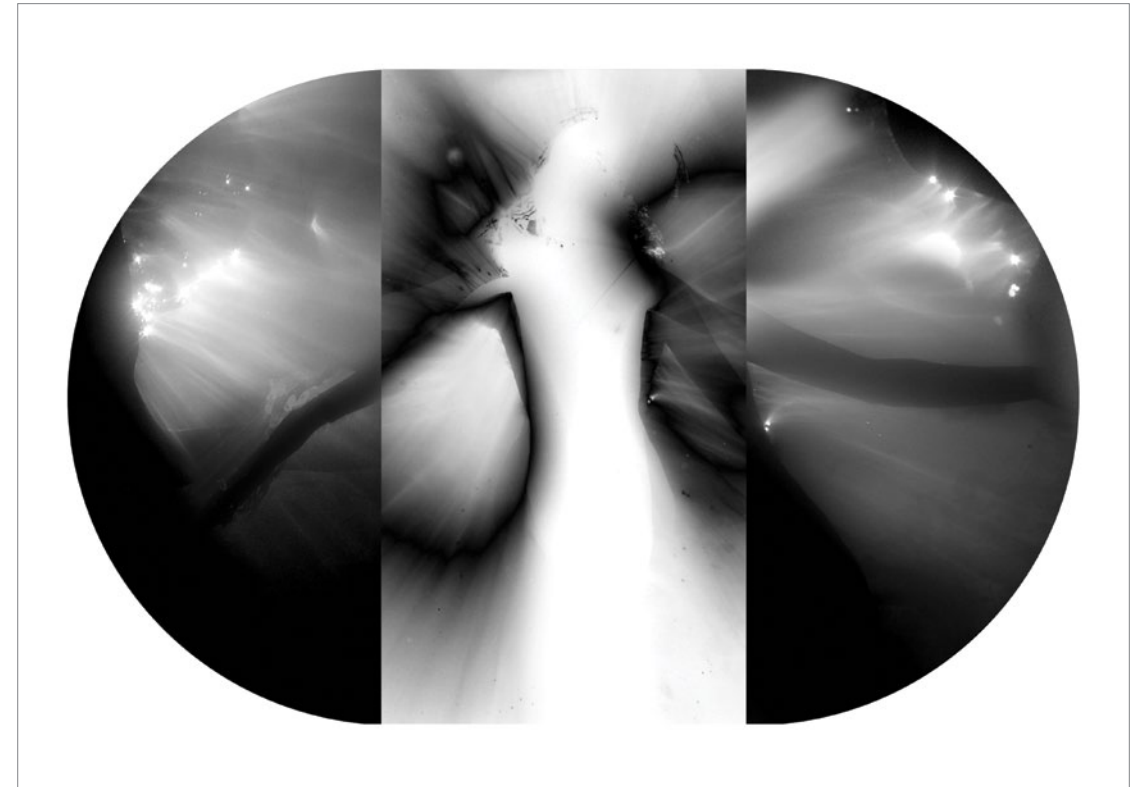
AUT Art & Design / MFAH / D. Vestling 1113926 / Apr 2013

The Figure of Light

Reversing 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 inaccurate results.



Experiment 6

AUT Art & Design / MFAH / D. Vondling 1113926 / Jul 2013

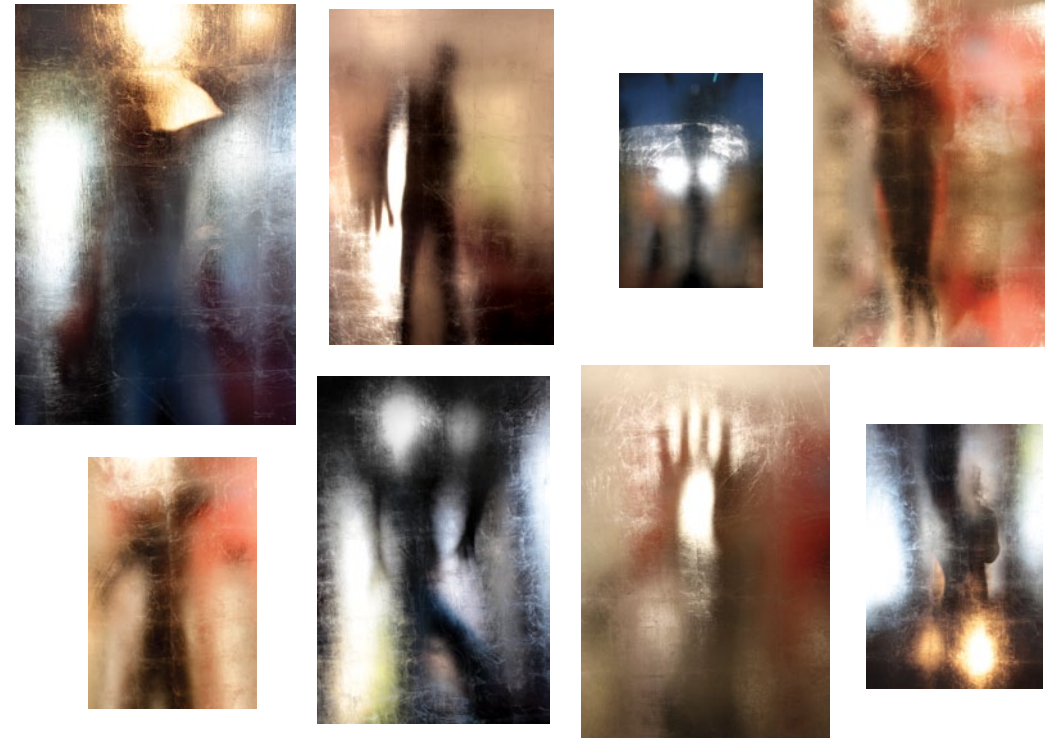
Light as Potential

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.



Experiment 7

AUT Art & Design / MPhil / D. Vestling 1113926 / Sep 2013

Illuminating the Craft

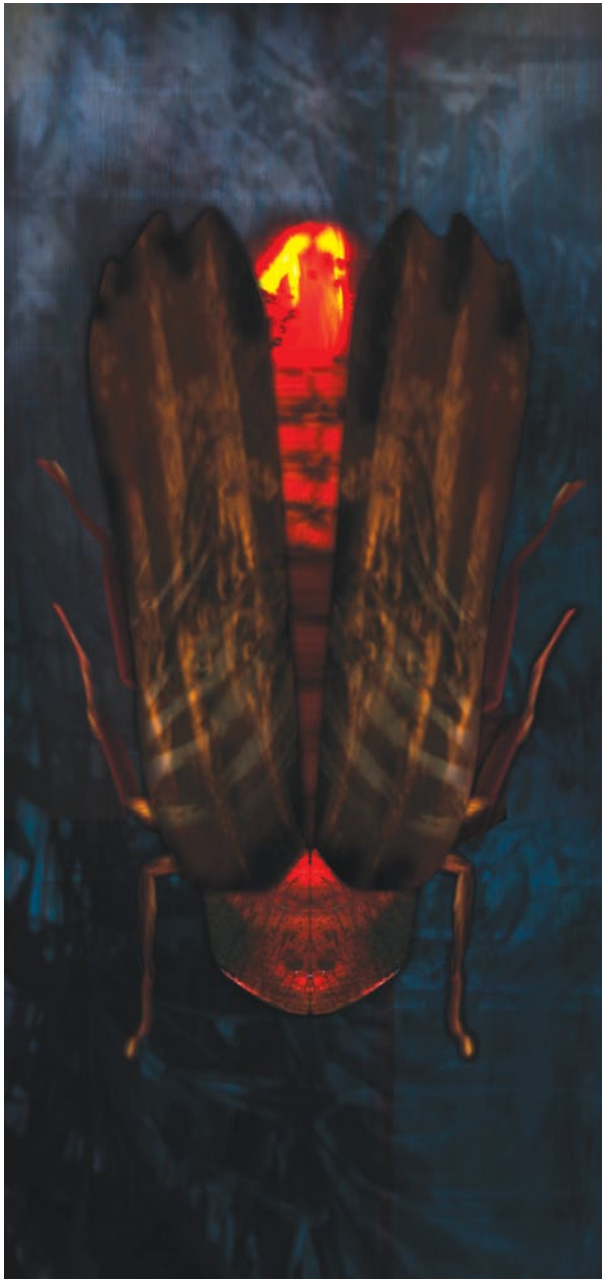
I tried to take the previous experiments further by adding typography. Using fonts as a placeholder for handwritten texts, I investigated ways to project this onto the silver surface, and capture the reflection together with the enigmatic figure in the background.

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!



APPENDIX 2 :
DIGRESSIONS

This conceptual digital illustration of a firefly (*Lampyridae*) utilised fragments from the 'Light without Form' series of photographs produced in Experiment 1.



This was an unfinished concept for a contemporary stained glass window, based on the photography in Experiment 4.

APPENDIX 3 :
POSTER

This image is a reproduction of the A1 poster I exhibited at the AUT Postgraduate Conference in August 2013.



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