

Distilled Stop-Frame Animation

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A Phenomenology of Stop-Frame Animation
Practice and Stop-Frame Animation Practice as
Phenomenology

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Abstract

This practice-led thesis proposes that the stop-frame animation process can be used as a practical means to perform Husserl's theoretical method of phenomenological investigation, including transcendental epoché, variation and description. It details two studies using this approach, firstly, into the practice of stop-frame animation and, secondly, into observations of stillness in my studio space.

Firstly, using the practical, ritual epoché proposed by Anthony J. Blasi (1985) and Mario Perniola (2011) I suggest that the ritual nature of creating stop-frame animation enacts a reflexive epoché on the process itself. This allows a series of practical variations, enacted during the set building stage, in which I question the presence of a puppet, the three-dimensional nature of the set, its level of detail and the amount of control it allows the animator. Following this, variations are performed on frame-capture, which examine the requirement of separate frames, change between frames, what can be manipulated between frames and how many frames are actually required. These two stages of variation allow me to arrive at the essence of the stop-frame process: a set space must have three dimensions; allow the animator a level of control over what happens within it and provide enough detail to register on camera, no puppet figure is required; frame-capture must consist of sixteen separately captured frames using a six-second exposure time with thirty-second gaps between the capture of each frame, it is not necessary to depict overt movement. This new, simplified approach is termed

distilled stop-frame, expressing the pared down nature of the process and the stilling of the usually kinetic medium.

Secondly, the resulting *distilled*; puppet-less stop-frame process is then employed to perform a phenomenological examination of my visual perceptions of stillness in the studio space. Following Steve Odin (2001) I contend that these observations enact a lived, aesthetic epoché in which I directly experience the world in its phenomenological essence from a bracketed, unreal viewpoint. Subsequently, during the set building stage, I perform visual, eidetic variations on my perceptions in which I investigate their detail, form and structure. Variations are then performed during frame-capture in which I examine the temporal nature of the observations. These two stages allow me to create sequences of animation that visually and temporally describe the essence of my experiences.

These two strands of research aim to widen the scope of Husserl's phenomenological inquiry, relocating the theoretical methods of investigation and description into the practical realm of the stop-frame animation process. Further to this, by getting to the essence of the stop-frame animation process it expands the boundaries of the medium from a means to express narrative and movement into philosophical contemplation of any phenomena in the world.

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Introduction

The subject of this practice-led thesis is stop-frame animation. Animation, in general, is a difficult medium to define comprehensively. Philip Kelly Denslow suggests that:

We scholars, teachers and filmmakers would probably not be able to agree on a precise definition ... definitions of animation vary from one another for many reasons, including historical development, production and marketing requirements, and aesthetic preferences. (1997, p.1)

The medium has numerous different variations, ranging from computer-generated imagery to painting on glass, which complicates a simple, all encompassing classification. Stop-frame (or stop-motion) animation is one of these variations and is, in itself, difficult to clearly define, due to its own numerous permutations, which include amongst others: puppet animation, object animation, claymation and cutout animation. Maureen Furniss offers two observations that neatly sum up the common elements of these different versions, firstly, '[stop-frame] animators move inanimateⁱ objects incrementally before a camera and shoot them frame by frame' (2007, p.155) and secondly, these objects must 'have height, width and depth – that is, three dimensions' (2007, p.151). In summary, for a sequence of animation to be considered stop-frame it is required to involve the frame-by-frame capture of incremental adjustments made to an inanimate, three-dimensional object. This basic, and certainly not exhaustive, definition offers a starting point for my practice-led thesis, which consists of two threads; the first is a phenomenological examination *of* the

practical process of stop-frame animation and the second is how the stop-frame process can be used to *perform* the phenomenological process.

Phenomenology is a philosophy concerned with revealing the true nature of our conscious experiences of phenomena in the world. Its founder, Edmund Husserl, developed a method called the phenomenological epoché in order to examine specific phenomena. It involves three stages: the transcendental epoché, in which prior assumptions about a phenomenon are carefully bracketed; eidetic variation, where unnecessary elements of the phenomenon are imaginatively removed, revealing an ideal, essential version of it; and description, involving a written account of the previous process and its results. The first thread of my research, the examination of the practical process of stop-frame animation, has an example of eidetic variation at its origin.

As described, stop-frame animation is used to create sequences of on-screen movement using an object that would usually be inanimate in everyday life. Occasionally, such sequences require pauses or moments of stillness within the overall passage of movement. For example, a puppet figure might be required to stop and look at something. If the puppet is completely motionless for too long then this stillness becomes very noticeable and distracting in relation to the preceding and succeeding movements. Maureen Furniss suggests that:

In real life, living beings are never completely still because bodily functions such as breathing and heartbeats cause at least minute amounts of movement at all times. Seeing an animated figure that is completely still – that is, to see a single image that is photographed for more than, say, half a second – might strike the viewer as being unrealistic. Most animation contains constant motion, even if only on

the level of blinking eyes and moving lips, or camera movement across a still background. In some works, 'still' poses are indicated by photographing two or three slight variations on the same drawing in a sequence, or cycle. The result is a slightly shaky, or kinetic, pose that keeps the image alive. Absolute stillness can work against one of the central attractions of animation, the illusion that inanimate objects have been 'endowed with life'; it could be said that, when an image within an animated production becomes still, its lifelessness is readily apparent. (2007, p.79)

She concludes that an unmoved puppet figure photographed twelve times for half a second of still footage would be too static and this lack of noticeable movement removes the medium's central attraction: inanimate objects being endowed with life. In terms of solving this problem, she suggests that when a puppet is briefly paused, blinks, lip movements, camera movement or a two or three-frame cycle of slightly different poses might be used to animate the stillness. My previous stop-frame works have involved moving puppet figures that occasionally engage in extended moments of reflective stillness.ⁱⁱ Initially, to depict this, I would duplicate a single frame for the required amount of screen time (essentially a freeze-frame), but this approach looked jarringly still in context with the rest of the sequence. So, I attempted numerous variations of Furniss' solutions, but in the end I found the results too exaggerated and lacking the subtle sense of contemplation I required. As I worked through the problem, I tried simply capturing separate frames of the still puppet – the technique dismissed by Furniss as too static – and found that the resulting sequences did in fact create a subtle sense of change on-screen. Even if nothing overtly moves, such sequences are not completely still; each successive frame has incredibly slight variations that mark it out from the last, and when projected it is possible to discern the flickering, uncanny and slightly discontinuous passing time created by the stop-frame process. Certainly in the context of overtly animated figures, a sequence of

separate frames of a static puppet might *seem* still, but when viewed next to more refined movement (as is the case in my work), on its own or next to a freeze-frame, a sense of temporality is clearly perceptible. The realisation that stillness could be subtly animated in this manner opened up a new avenue of subject matter: if I could animate the stillness of a puppet figure, I reasoned that I could also completely remove the puppet from my work and animate the stillness of a room. Subsequently, I began to create sequences of interior spaces using the flickering stillness of stop-frame capture. Though I had not initially approached it using Husserl's phenomenological method, the exclusion of the puppet figure might be thought of as an eidetic variation of the stop-frame process; in that its removal did not affect the resulting sequences' status as stop-frame animation.

This initial distillation of the set and puppet stage of stop-frame was the starting point for the more comprehensive phenomenological investigation into the stop-frame process I performed during this research, which is founded on Anthony J. Blasi (1985) and Mario Perniola's (2011) notion of the ritual epoché. In this theory an epoché is carried out by the performance of ritual action. The authors argue that a ritually performed action is stripped of its normal utilitarian aims and the practitioner's viewpoint of it is altered in a way that mimics Husserl's epoché. Using this theory, I propose that when a practitioner performs the ritualised stop-frame animation process, a reflexive epoché is enacted *on* the stop-frame process itself. So, by carrying out the ritual actions involved I bracket the medium and change my viewpoint towards it. I am then in a position to carry out eidetic variations on the set construction and frame-capture stages and

eventually arrive at their essential elements. The resulting animated sequences act as visual, phenomenological description.

The second thread of this research, into how the stop-frame process can be used to perform the phenomenological process, also has what might be considered an eidetic variation at its origin. The realisation that stop-frame could be used to depict sequences of stillness within rooms and environments coincided with a developing artistic interest in the observation of atmosphere. These observations were often simple perceptions of form and light within various interior spaces, but they would involve a detachment from my usual engagement with the world. This change in viewpoint would give them a detached, uncanny atmosphere. I came to believe that the strangeness of these contemplative moments might be perfectly captured using the flickering temporality of the puppet-less, stop-frame process I was concurrently exploring. I chose some observations of my studio space as subject matter and began constructing a set. My initial approach involved measuring the rooms and trying to make exact recreations of what was objectively present in the observations; I hoped this would, when on camera, offer a similar feel to the original experience. I used meticulous measurement with a 16 cm to 1 inch scale to construct a precise miniature studio that might pass for reality through the lens of the camera.



Figure 1. Test photograph of the set with exact recreation of detail

Figure 1 shows two painstakingly recreated boxes on the left hand side of the picture, which highlight the level of detail I was aiming for. The shoebox has a scale copy of some intricate patterning; whilst the cardboard box features reconstructed lengths of masking and parcel tape sealing it shut. The further I progressed with the set in this vein the more it became apparent to me that the resulting test photographs were missing something. Using solely objective measurement in order to create a facsimile of the real space did not, when seen on-screen, give me the same uncanny feeling I had originally experienced in the observations. In light of this, I then experimented with removing elements of detail from the set, for example, the patterned shoebox in Figure 1 was remade as a simple, blank rectangular box. Subsequently, the resulting test photographs began to feel closer to my original perceptions. It was at this stage that I considered a phenomenological approach to my observations. Dermot Moran

states that ‘the whole point of phenomenology is that we cannot split off the subjective domain from the domain of the natural world ... Subjectivity must be understood as inextricably involved in the process of constituting objectivity’ (2000, p.15). When we experience the objective world it is always given to us *through* the subjectivity of consciousness. The initial attempt to animate my observations was unsuccessful because I assumed that using solely objective data to make an exact scale copy of the studio would offer an equivalent image to my original experiences. What I did not take into account was how my consciousness had subjectively engaged with that objective data. When I properly considered the observations I realised that, though nothing was exaggerated in terms of the structure of the interiors, the detached viewpoint lessened my perception of detail, whilst elements of form and structure became more prominent. Again, although I was not thinking phenomenologically as I carried it out, the partial removal of detail in the set might be thought of as a form of eidetic variation in that it brought me closer to the essence of my original experiences.

This initial experimentation opened up the possibility of using stop-frame animation as a means of performing Husserl’s phenomenological method. Steve Odin (2001) contends that artistic detachment is a form of aesthetic epoché. Similarly to Blasi and Perniola’s ritual version, this epoché is enacted by a detached mindset and the removal of utilitarian aims when *aesthetically* engaged with the world. Following this approach, it is my argument that the previously mentioned observations of my studio are moments of aesthetic epoché. They are experiences in which I am removed from my usual engagement with the world

and my visual perception is altered very subtly. This takes the form of a decentring of focus, detail recedes and the studio is experienced as simple, almost flat, form and colour. I propose that the stop-frame process can be used to perform Husserl's method and create animated descriptions of these observations. The key to this argument is how stop-frame allows the animator complete control of a combination of both spatial and temporal elements. Spatially, I am able to construct a set specific to my own subjective experience of perception. Temporally, I can then use the reductive apparatus of the camera to separately control and create a series of frames of the set. This results in a final animated sequence that describes the essence of my visual perceptions of the studio space.

Phenomenological research into animation is relatively under-served. In the current field, Joanna Bouldin (2000, 2004) proposes a phenomenological reading of two-dimensional animation in which the medium's anthropomorphism and lack of detail encourages the viewer's bodily engagement with the image, and Suzanne Buchan (2006, 2011) offers phenomenological analysis of viewer engagement with the stop-frame animation. Although these works are valid phenomenological studies of animation, they are limited to the viewer's perceptual experience of the medium. Animation theory does not currently offer either a phenomenology of stop-frame animation practice or an interpretation of stop-frame animation as a means to perform Husserl's method of phenomenology. In order to pursue these two threads of investigation I follow Noel Carroll (1996) and employ a piecemeal approach in this thesis, examining specific areas of stop-frame animation practice and drawing together numerous

different fields and intellectual disciplines including: Animation Theory, Phenomenology, Aesthetics, Film Theory, Ritual Theory and Performance Theory, rather than offering an overarching theory of the medium. My research establishes the essential elements of the stop-frame animation process, which then lets me carry out the phenomenological stop-frame investigations of my studio observations. In doing so this research aims to broaden the scope of stop-frame practice, allowing it to be used as a phenomenological tool with which a practitioner might examine the nature of reality and visual perception, without the constraints of depicting narrative and movement. The descriptive sequences I create using stop-frame this way are contemplative and still, and can be considered within the wider contexts of contemporary fine art and experimental film.ⁱⁱⁱ This research also potentially opens up the theoretical field of phenomenology to a process of practical investigation. Phenomenological investigations are usually carried out abstractly on the philosopher's experiences, using stop-frame as a means to perform phenomenology allows them the chance to physically interrogate the essential elements of their experiences, and describe the results using iconic, temporal sequences of stop-frame animation rather than words.

The first part of Chapter 1 outlines Edmund Husserl's original conception of phenomenology as an investigative descriptive philosophy. The founding principle of phenomenology is that the true nature of our engagement with the world is hidden by our natural, lived attitude, which assumes the presence of an objective world. We assume an objective world when in fact our experiences are, at their foundation, a meeting between consciousness and the world. We are

given access to the world *through* consciousness and this is the true nature of how we engage with it. Husserl believes that although the assumption of sciences of an objective world is not incorrect, we should attempt to access and describe the true nature of our experiences. To get to this foundation he proposes the phenomenological epoché, an act in which we take an experience (a phenomenon) and the assumptions of the everyday attitude, leaving us with the original mode of engagement (noema) and the object engaged with (noesis). The process of eidetic variation is then used to get to the essence of this noematic structure before the philosopher describes what is seen, which should in theory be the very essence of the phenomenon.

The second part of Chapter 1 examines the current field of phenomenological enquiry in animation and live-action film. At its origin is the existential phenomenology of Maurice Merleau-Ponty (2002). I trace a line from Merleau-Ponty's research, through Vivian Sobchack's (2004) interpretation of film spectatorship as a full corporeal experience involving all five senses, towards Joanna Bouldin's phenomenology of animation spectatorship (2000, 2004) which argues that the medium's anthropomorphism and lack of detail encourage our own bodily engagement with the image, before ending at Suzanne Buchan's (2006, 2011) phenomenological interpretation of the Quay Brother's stop-frame works and the different perceptual levels the viewer engages with them. Brough (2011) Sobchack (1997), Bazin (1967) and Baudry (1985) take the position that the mechanical nature of the camera carries out the reduction for the viewer by bracketing off certain elements of everyday experience. However, though it can be argued that this might be the case, the theory is still interpreted from the

viewer's perspective. This chapter highlights the heavily viewer-centred approach to phenomenological theory in live-action film and animation, which leaves space for a phenomenological investigation into the practice and new research into stop-frame as a tool for performing phenomenology.

Chapter 2 details my phenomenological investigation into the process of stop-frame animation. Anthony J. Blasi (1985) and Mario Perniola (2011) suggest that the change in mindset created by the performance of actions in a ritualised manner, brackets out our everyday engagement with these actions and creates a change in mindset that acts as a form of practical epoché. Interpreting Catherine Bell's (1997) classification system of ritual-like activities, I propose that my use of the stop-frame process further ritualises the already repetitive medium, through its intensified, invariant nature and its performative qualities.

Chapter 3 details the next stage of the practical phenomenological investigation into the stop-frame process. Part I describes the practical eidetic variations I performed on the set construction stage of stop-frame animation. Part II explains the variations that were carried out on the frame-capture part of the process. The results of these experiments are drawn together as the essence of the stop-frame process, which I term *distilled* stop-frame.

Having established the essence of the stop-frame process in the previous chapter, Chapter 4 moves on to explore using it as a means to perform phenomenological investigation. Part I details the observations of my studio space, which are the subject of my investigation, in relation to Edward Bullough's (1912) theory of

aesthetic detachment. Both Steve Odin (2001) and Mario Perniola (2011) propose this type of detachment as a form of the transcendental epoché. The perceptual nature of these observations is explored in relation to Don Ihde's (1974) phenomenological reading of the essence of the visual field, and the uncanny element they contain is discussed in relation to Husserl's (1931) notion of the unreal, essence world. Part II examines the eidetic variations performed on these observations using the stop-frame process. Set construction enabled eidetic variations on how the studio was perceived across my visual field. Details were pared down as the observations were concerned mainly with forms and colours. I also describe how, during construction, parts of the set began to appear in my ongoing observations of the studio. This necessitated the creation of a smaller set within the first set that functioned as the essence of a stop-frame set as discussed in Chapter 3. Following Gaston Bachelard (1994) I then examine the composition stage of the process, comparing the camera to a magnifying glass trained on the miniature set, which is proposed as performing a further epoché.

Chapter 5 focuses on frame-capture and how the nature of stop-frame temporality reflects the aesthetic epoché I experience during the observations of the studio. It explores the unreal nature of the aesthetic epoché and the uncanny sensation created by this change in viewpoint. From here, I offer a new reading of the uncanny in stop-frame animation, which rather than being linked to seeing an inanimate puppet made animate, is based on three factors at play in *distilled* stop-frame sequences. Firstly, their static, photographic nature references Roland Barthes (1993) punctum, giving the sequences a sense of death and absence. Secondly, the 'never-has-been' temporality they depict, suggested by Eric S.

Jenkins (2013) has no real world equivalent and gives the sequences a strange quality. Thirdly, Nicholas Royle (2003) proposes that an awareness of something coming out from the darkness can create an uncanny feeling. The flickering and discontinuity of the sequences is a sign of the animator's presence in the dark interval between frames. This subtle emergence from the dark unsettles the viewer. The chapter draws together each stage of the process and the final animation is discussed as a combined description of both strands of the investigation.

ⁱ The difficulty in providing an exhaustive definition of stop-frame is highlighted by a method called Pixilation, which might also be considered stop-frame but involves the animation of living humans, who are obviously not inanimate.

ⁱⁱ My previous stop-frame works include *Scenes of Intimate Life* (2008) and *the ten mark* (2010), which can be viewed at <http://www.joesheehan.co.uk>

ⁱⁱⁱ Specifically within these broad areas of practice my research places stop-frame animation in the field of 'slow cinema'. Matthew Flanagan defines slow cinema as a type of cinema that:

privileges a number of distinct and recognisable tropes: the application of the long take, an undramatic narrative or non-narrative structure, a tendency toward realist or hyperrealist representation, and a pronounced stillness of composition and visual content. (2012, p.2)

Slow Cinema is a broad ranging field that includes artists working with lens-based temporal media. Examples of practitioners who have made work that can be classified as Slow Cinema include: Andrey Tarkovsky, Yasujiro Ozu, Michael Snow, Andy Warhol, David Claerbout and Douglas Gordon.

Chapter 1

The Phenomenological Process

Part I of this chapter reviews Husserl's phenomenological process in order to orientate the reader for the following chapters in which stop-frame is discussed as a potential means of epoché and description. Part II is an examination of the application of phenomenology in film and animation theory. It highlights the existing theoretical thought regarding phenomenology as a means to examine the viewing experience of live-action film and animation. Furthermore, it establishes that there is a gap in current research concerning the two main areas of this thesis: firstly, the phenomenological investigation of the creative process of stop-frame animation; and secondly, the use of stop-frame animation as a tool to perform Husserl's method.

Part I: Husserl's Phenomenology

Phenomenology is a method of philosophy aimed at examining and clarifying the true nature of our conscious experiences of the world. Its founder Edmund Husserl believed that most scientific and philosophical thought incorrectly takes up a naturalist stance, in which the presence of an objective world, separate from our consciousness, is assumed.ⁱ Further to this, naturalism also interprets consciousness as an element *of* the objective world. Husserl states that:

The naturalist ... sees only nature, and primarily physical nature. Whatever is is either itself physical, belonging to the unified totality of physical nature, or it is in fact psychical, but then merely as a

variable dependent on the physical, at best a secondary “parallel accompaniment” (1965, p.79).

Husserl argued against this viewpoint, believing that consciousness could not be considered as part of the world because it is the fundamental foundation of all our experiences.ⁱⁱ He proposed that in fact all experiences of the world are, at their origin, given to us *through* consciousness. This does not mean that the world is a *creation* of consciousness; rather that consciousness is a window through which the world is experienced. In summary then, naturalism assumes that there is an objective world that can be studied as a separate entity from consciousness, but Husserl suggests that in fact, the seemingly separate and objective world is actually always, at its origin, given to us *through* our consciousness. He contends that humans automatically assume a naturalist stance and our foundational engagement with the world through consciousness is forgotten. The process of phenomenology is an attempt to overcome the presuppositions of the natural attitude and return to the essence of our original conscious experiences. To do this Husserl proposes an act called the *phenomenological reduction* or *transcendental epoché*.ⁱⁱⁱ He developed the epoché over a period of years but it was first fully realised in a lecture series entitled *The Idea of Phenomenology* in 1907. Subsequent books, including *Ideas. General Introduction to Pure Phenomenology* first published in 1913 (in German) and *Cartesian Meditations* (another lecture series delivered in 1929 and published [in German] as a book in 1931) offer complete but slightly varied accounts of the process.^{iv} Husserl argues that the epoché allows the philosopher access to the ‘things themselves’ (1970, p.252), the experiences as they were originally given. The technique is split into three stages: the transcendental

epoché, which removes any assumptions or theories regarding the empirical world that transcend the original experience; the eidetic reduction, which is concerned with establishing the essential shape of the experience; and description which aims to describe the above process and crucially the essence that remains afterwards.

The Transcendental Epoché

Husserl proposed that phenomenology was a completely open field of study in terms of subject matter, as even the simplest phenomenon can provide insight into our conscious engagement with the world. If we begin with something straightforward such as a perception of a cup,^v in the natural attitude we would automatically make certain assumptions about the cup, perhaps about its function as a means to a drink or what it is made of. We take the cup as a thing that can be assessed and measured as an objective entity in the world. However, Husserl would argue that the cup was given to us originally *through* consciousness and the objective assumptions were not actually part of the initial conscious perception. Examining what was originally given to us though is a difficult task because our everyday viewpoint assumes a naturalist position by default. We therefore need to modify our approach by practising an epoché, in which we work through the experience retrospectively, and deliberately bracket, or disconnect, our natural attitude and all assumptions of an objective world. Husserl states that the epoché specifically involves the bracketing of:

the natural world, physical and psychological, all individual objectivities which are constituted through the functional activities of

consciousness in valuation and in practice are suspended ... Natural in the same sense are also realities of such kinds as state, moral custom, law, religion. Therewith *all the sciences natural and mental*, with the entire knowledge they have accumulated, *undergo disconnexion* as sciences which require for their development the natural standpoint. [emphasis in original] (1931, p.171)

So, we would theoretically work through the perception of the cup and carefully bracket (put to one side rather than completely discount) these assumptions. Anything that transcended what was given in the original experience of the cup is removed and, according to Husserl, what we are left with is the true basis of all consciousness: a *meeting* between a mode of consciousness and an object in the world. We see the chosen phenomenon in its true form as a co-dependent structure: the object as constituted by consciousness; the cup as constituted by perception.^{vi} Further to this, Husserl proposes that both the mode of consciousness: perception, and the object in the world: the cup, would be valid subject matter for investigation. Husserl introduces new terminology to reflect this change in mindset. In the phenomenologically considered experience, a constituted object is referred to as the noema and its constituting mode of consciousness as the noesis; together they make up the overall noematic structure of the experience.

Performing the epoché is difficult and the process is the subject of much debate within phenomenology. Husserl's contemporary Maurice Merleau-Ponty states that:

The most important lesson which the reduction teaches us is the impossibility of a complete reduction. This is why Husserl is constantly re-examining the possibility of the reduction. If we were

[of] absolute mind, the reduction would present no problem.’ (2002, p.xv)

Merleau-Ponty suggests then that Husserl’s indecision regarding his own process is a clear sign that the reduction is a difficult method to perform. Dermot Moran states that: ‘Both Heidegger and Merleau-Ponty denied the possibility of carrying out a *complete* reduction’ [emphasis in original] (2000, p.160) and Moran further suggests that Jean-Paul Sartre also rejected ‘much of Husserl’s methodological apparatus, including the epoché’ [emphasis in original] (2000, p.358). These fellow phenomenologists did not abandon Husserl’s overall examination of consciousness; rather they doubted the epoché and the possibility of *completely* removing all the assumptions of the natural attitude. The achievement of a full epoché is perhaps unrealistic but the value of attempting that epoché is still important. Guarding against naturalist assumptions, even without a full epoché, can still allow a much clearer view of our original conscious experiences.

Philip Pettit (1973) and David Bell (1990) both found difficulty in performing the transcendental epoché and go further in their criticism of it. Pettit states: ‘Personally I have sought in vain to withdraw my natural act of faith in the objectivity of things and experience first hand the intentional operations of my consciousness’ (1973, p.18). Pettit appears to agree with phenomenology’s overall claim that our conscious engagement with the world is the foundation of all experiences, but his troubles with the epoché lead him to contend that any observations regarding consciousness and intentionality made by someone from the phenomenological standpoint can actually just as easily be observed and debated from the natural standpoint. He argues, in effect, that we do not need to

bracket empirical assumptions about consciousness in order to get to its essence. As explored above, Husserl believes that our experiences of the world are, at their basis, constituted by consciousness. If we intend to explore the essence of our experiences we need to examine solely this constitutive consciousness and not include thoughts of the empirical world in our considerations. Our natural standpoint in the world assumes the existence of an objective world, so we practise the epoché in order to guard against these thoughts obscuring our investigation. Pettit's observations about consciousness from the natural standpoint would therefore include assumptions about consciousness being part of the natural world. Therefore, in suggesting the epoché is unnecessary he is actually in opposition with Husserl's founding notion of consciousness as solely constituting the world for us. Pettit's problem then is not with the method of accessing consciousness and intentionality; it comes down to whether Husserl's arguments against assumed naturalism are valid and whether phenomenology is necessary at all. It is my position that Husserl's viewpoint is valid and the performance of the epoché is necessary to reveal the essence of our originary consciousness engagements with the world.

David Bell (1990) criticises the esoteric nature of the transcendental epoché. He argues that instructions leading toward a specific goal need to be demonstrable so 'one can recognize whether the directions have been followed; and so one can in principle ascertain the extent to which it was the following of those instructions that brought about that state of affairs' (1990, p.162). He suggests that the transcendental epoché as a set of instructions are not verifiable and as such its results are of no use to anyone else but the person that performed the

epoché. His overall contention is that the epoché is an unrepeatable process that leads to a situation in which an individual (the phenomenologist) is making personal claims about pure consciousness that cannot be proven or disproven. In response to this, I would argue that the transcendental epoché requires that we bracket a series of judgements and assumptions, allowing us to see phenomena in a new mindset. If we take the process in this manner, it is not a personal, esoteric experience and in fact presents a repeatable set of instructions, bringing about a specific state of affairs that can be verified in subsequent descriptions. These descriptions can be challenged or accepted by other philosophers performing the epoché on the same phenomena. Subsequently, commonalities could be found between descriptions and a consensus might then be settled upon.

I believe that Husserl's explanations of the epoché are clear; however what they ask of the practising phenomenologist is easier said than done. To remove, as quoted previously, all assumptions about 'the natural world, physical and psychological, all individual objectivities ... realities of such kinds as state, moral custom, law, religion ... [and] *all the sciences natural and mental*, with the entire knowledge they have accumulated' [emphasis in original] in relation to a specific phenomenon is an enormous task. Furthermore, Husserl refers to the reduction as being 'a complete personal transformation ... which ... bears within itself the significance of the greatest transformation which is assigned as a task to mankind' (1970, p.137). This seems a very daunting prospect. However, Dermot Moran suggests that in reality Husserl was not quite as radical and ambitious in terms of personal transformation as he sometimes claimed:

Husserl thought of the reduction rather as a change of standpoint, which led from our everyday immersion in the natural attitude to the uniquely philosophical viewpoint, one which puts behind all reliance on empirical data and focused purely on what is given a priori in intuition. (2000, p.161)

So, if we think of the epoché solely as a change in viewpoint towards a specific phenomenon rather than an overarching alteration to our state of mind, the task lightens. Further to this, if we accept that a complete withdrawal of all objective assumptions is unrealistic and that a full epoché is impossible, then bracketing can be approached as a less intimidating period of initial consideration of the phenomenon and a subsequent maintained mindfulness against falling into naturalist assumptions during the rest of the phenomenological process.

Eidetic Variation

After the epoché has been performed on a phenomenon, Husserl argues that we enter the transcendental realm where, free from previous assumptions and theories, we are left with the essences of that phenomenon. Dermot Moran states that:

Husserl claims that the universal is *seen* in the individual. The move from the individual intuition to the grasp of the universal is a move to grasp the essence ... Husserl believed that the route from the individual to the universal is actually installed in our conscious act itself. [emphasis in original] (2000, p. 134)

In this realm we are no longer bound to the original phenomenon and can move on from here to investigate the wider essences of the noematic structure using eidetic variation.^{vii} This involves working through the noesis and noema of an

experience and attempting to replace different elements of it until, ultimately, we arrive at what cannot be altered. He uses the perception of a table as an example, with perception (the noesis) as his focus:

we vary the perceptual object, table, with a completely free optionalness, yet in such a manner that we keep perception fixed as perception of something, no matter what. Perhaps we begin by fictively changing the shape or the color of the object quite arbitrarily, keeping identical only its perceptual appearing. In other words: abstaining from acceptance of its being, we change the fact of this perception into pure possibility ... We, so to speak, shift the actual perception into the realm of non-actualities, the realm of the as-if, which supplies us with pure possibilities. (1950, p.70)

Dermot Moran sums up this process:

we take aspects of our original intuition and substitute parts in a manner which allows the essence to come into view and anything merely contingent to drop away. The whole point of free variation is to open up new aspects of the experience and especially those invariant aspects – aspects which belong to the essence of the experience. (2000, p.154)

So, removed from any link to actuality and the empirical world, the table can be varied and we move from perception specific to the table to perception as a wider archetype, in its ideal form. Husserl argues that any subsequent description and analysis of perception are therefore of its essence. We can also focus on the table (the noema) in the same way, keeping in mind only the table and working through the various modes of consciousness such as perception, imagination or memory that it might appear to us in. The table remains consistent throughout the variations and we can then examine the ideal form of a table.

Description

Phenomenology is ultimately a descriptive science; the transcendental epoché and the eidetic reduction alter the mindset and allow the philosopher to see a phenomenon without assumption or theory, and the results of this process must then be described in writing. Description must be made of the epoché and the series of variations performed before detailing the essence of the phenomenon. This is no easy task. Dermot Moran suggests that ‘it is one thing to intuit an essence and quite another to express that intuition in words’ (2000, p.155). Though a phenomenological investigation is a highly personal process in which the practising philosopher examines the essences of their own experiences it must also have value for the reader and offer insight into their own experiences of the world.

In summary, the phenomenological process consists of: firstly, the transcendental epoché, which removes us from our everyday attitude, allowing the phenomenologist to examine specific phenomena as they originally experienced them; secondly, the eidetic reduction, which involves moving from the specific phenomenon to its ideal form and performing variations until its essences are arrived at; and finally, written description which details the resulting essences.

Part II: A Phenomenology of Animation and Live-Action Film

Husserl's phenomenological method has never been used to examine the full process of creating either live-action film or animation and has also never been interpreted as an artistic, creative process in itself. Phenomenology is used mainly as a framework to explore the viewing experience of these mediums. Beginning with film theory, Dudley Andrew (1985) argues that structuralist and semiotic criticism dominate film theory and laments the neglected development of an opposing phenomenological theory of film. He draws together a history of this seemingly overlooked tradition, believing that a coherent phenomenological approach might allow better description of the 'peculiar way meaning is experienced in cinema and the unique quality of the experience of major films' (1985, p.628). Andrew's history details three areas of study beginning in 1945 with Gilbert Cohen-Seat's *Essai sur les principes d'une philosophie de cinema*, a phenomenological 'loud bugle in the name of a new science' (1985, p.628) which, for the first time, examined the personal and cultural experience of the cinema and led to several investigations into the phenomena of film by Edgar Morin, Stanley Cavell, David Thomson, Amedee Ayfre and Roger Munier. Secondly, Maurice Merleau-Ponty's *Phenomenology of Perception* greatly influenced the *Revue internationale de filmologie* between 1947-1960 which published 'a steady stream of essays on cinema's relation to memory, cognition, time and space, psycho-physiology, daydreaming, illusion and so on' (1985, p.629). The third strand is a phenomenology of film initiated by Jean Mitry that explores how techniques such as montage, rhythm and viewpoint create specific filmic worlds perceived by the viewer. Christian Metz, Albert Laffay and Jean-

Pierre Meunier developed this area further in relation to how we identify with different genres based on the organisation of their images. Andrew states that these three areas deal directly with the film image and the ‘consciousness the spectator assumes in apprehending movies’ (1985, p. 629). He goes on to propose a film phenomenology inspired by the hermeneutics of Paul Ricoeur, who argues that an artist is never fully in control of his/her work and an ‘interaction of massive systems far greater than personal consciousness’ (1985, p.631) contributes to the creative process and subsequent image. Whilst retaining the importance of direct experience of the film image, Andrew believes, in light of Ricoeur, that criticism must go beyond just perception and into semiotics, psychoanalysis and ideology in order to fully interpret the hidden meanings within the text. However, though Andrew does acknowledge the process of filmmaking and briefly explores further than the direct experience and apprehension of the film image, his is still ultimately a phenomenology of film *spectatorship*, examining only the *viewer’s* experience of a live-action film.

The second, Merleau-Pontyan thread Andrew’s proposes has been developed further by Vivian Sobchack and is key in the development of the current phenomenology of animation. Sobchack (2004) interprets film spectatorship using an existential phenomenology that ‘focuses on the phenomena of experience and their meaning as spatially and temporally embodied, lived and valued by an objective subject’ (2004, p.2). She outlines three main ways we bodily engage with film. Firstly, how the viewer responds to the film image with all five senses, arguing that our body ‘makes meaning before it makes conscious reflective thought’ (2004, p.59). She cites an example of this from the opening

scene of *The Piano* (1993). The initial shot is of vertical red shapes shifting subtly across the screen. It is only made clear when we cut to the second shot that it depicts a character looking through her fingers. Viewing this sequence, Sobchack experienced:

a relatively rare instance of narrative cinema in which my eyes did not “see” anything meaningful and experienced an almost blindness at the same time that my tactile sense of being in the world *through my fingers* grasped the image’s sense in a way that my forestalled or baffled vision could not. [emphasis in original] (2004, p.64)

She felt during the abstract first shot a corresponding physical sensation in her fingers, which shows that the body can respond reflexively to film before it visually recognises the subject. Secondly, at a point in the film when a character’s skin is visibly touched through a woollen stocking she felt a ‘carnal identification with material subjectivity’ (2004, p.65), experiencing a clear connection between her flesh and the on-screen flesh of the character. A corporeal response triggered by visual recognition of the body touched on-screen.

Thus, even confronted with an “objective shot”, my fingers know and understand the subjective meanings of this “seen” and this viewing situation, and they grasp textural and textual meaning everywhere - not only in the touching but also in the touched. (2004, p.66)

Thirdly, Sobchack identifies possible sensory exchange in which vision can stimulate and affect other senses. For example, images on-screen of food being chopped might arouse olfactory sensations in the viewer. In summary of the bodily experience of film she posits the notion of a ‘cinesthetic’ subject who is:

able to commute seeing to touching and back again *without a thought* and, through sensual and cross-modal activity, able to experience the movie as both here and there rather than clearly locating the site of cinematic experience as onscreen or offscreen. [emphasis in original] (2004, p.71)

As with Andrew, Sobchack's exploration is limited to the phenomenological experience of live-action film for the viewer.

Phenomenology is further under-represented in animation theory. Joanna Bouldin follows Sobchack in her work on two-dimensional animation (2000) and the rotoscope process (2004), citing the embodied filmic experience as her theoretical basis for a similar approach to animation. Verisimilitude and indexicality are outlined as the key differences between animated and filmic imagery that might prevent the viewer from identifying with the animated body in the way Sobchack proposes. Bouldin proceeds to discuss three ways in which animation might bridge this gap. Firstly, animation is less visually detailed than film and as a result the viewer refers to his or her own body in order to make sense of the animated body on-screen. Secondly, certain instances of anthropomorphism in animation allow us to identify with animated bodies on-screen. Thirdly, the correlation of voice and animated body in certain animated characters references an off-screen human physicality that gives the body a sense of presence. She states that 'Once the animated body is made legible to the viewer, a physical engagement like that experienced by the film viewer may be enacted' (2000, p.62). Bouldin goes on to acknowledge that a viewer's experience of the animated body will never be as complete as in film because of a residual degree of detachment caused by the strangeness of the medium. It is my opinion that this detachment is never fully overcome. I can physically engage

with an animated body in the sense that I feel happy or sad when watching animation, but in my own experience the inhuman animated body does not provoke a reflexive, embodied response. In line with Sobchack's proposal that seeing flesh being touched causes her own flesh to respond/be touched, Bouldin gives an example of a cartoon in which the male Bugs Bunny's body is altered to that of a female and 'the viewer's embodied experience of the cartoon allows her/him access to the almost auto-erotic pleasure Bugs takes in his corporeal transformation' (2000, p.65). Upon viewing this sequence, I found any pleasure experienced to be non-immediate and emotional rather than reflexive and sensual. Seeing Bugs revel in his transformation gave me a sense of enjoyment but this was a purely mental response rather than a bodily one. Further to this, Bouldin's proposal is limited in its scope compared to Sobchack's. She suggests we only identify with an animated character when it has a recognisable degree of humanness, and then only after a further bodily transformation can the viewer experience a somatic sensation. This limits any identification to just a few specific cartoons, whereas Sobchack's bodily identification with live-action film can occur at any moment in which a human is present on-screen. Bouldin's scope in terms of phenomenology is again limited only to the viewer's experience of animation images.

Donald Crafton (2013) offers further phenomenological discussion of embodied film theory and the various bodies that are involved when viewing cel animation sequences containing characters. He suggests four separate entities, firstly, the body of the viewer watching the screen, secondly, the body of the animated character on-screen, thirdly, the body of the viewer imagined by the animator

when creating the animation, and finally, the body of the animator themselves. The first two bodies are overtly present to the viewer but Crafton suggests the final two are ‘present as a material explanation of how the film came to be ... [the viewer is] prompted sometimes by the reflexive clues to their existence (2013, p.53). So, when viewing animation we are implicitly aware that it was created *by* someone and specifically *for* someone (a notion that will be explored in more detail in Chapter 2).

Bouldin and Crafton offer phenomenologies of two-dimensional cel animation, Suzanne Buchan (2006; 2011) follows Merleau-Ponty and Sobchack in using an existential phenomenology to examine stop-frame animation spectatorship in relation to the work of the Quay Brothers. She argues that when viewing stop-frame there are different levels of perceptual awareness and identification at play (2006, pp22-23). An informed spectator might identify with, and derive pleasure from, the character’s point of view, whilst also being aware that the puppet is in fact inanimate in the real world and is given its impression of humanness by the animator. In this way they also experience and identify with the animator’s point of view. Buchan further discusses the viewer’s connection to animated characters and worlds in relation to psychoanalytic theory, in particular the id (pleasure) and the superego (reality) (2006, pp.29-30). She suggests that watching cel animation usually relates only to the id and the pleasure side of the viewer’s mind, due to the created world’s lack of connection with reality. When viewing cel animation the spectator is aware that the space they experience on-screen, drawn using spatial cues and perspective in order to mimic three-dimensional space, does not exist as three-dimensional in the real world. However, when watching stop-frame

animation the viewer is aware that the environments they experience on-screen also have three-dimensional real world equivalents, which relates to the superego. So, in its created nature and its connection with reality, stop-frame animation allows both pleasure *and* reality when viewing its images. Buchan states that:

The sets and puppets exist, and although they may appear to have anthropomorphic proportions on screen, they are constructed on a smaller scale. Yet although the events we see on screen *did not* occur, the objects *do* exist. Puppet animation thus represents a different 'world' for the spectator, something between '*a* world', created with the animation technique, and '*the* world', in its use of real objects and not representational drawings. [emphasis in original] (2006, p.21)

She suggests a further key element of difference that distinguishes the experience of viewing stop-frame from that of cel animation exists in our level of investment in the 'life' of the animated objects on-screen:

one issue that is of central importance to understanding the experience of viewing animation is the clarification of the *status* of the animated object and how we relate to it. We see a moving image, but we know that the objects we see appear 'alive' through pure artifice ... We also know that in contrast to live-action figures they do not 'exist' except as inanimate objects beyond their animation on screen. Is the spectator aware of this fact, or is there a process of denial, wish fulfilment or sublimation that allows us to perceive animated objects as living? [emphasis in original] (2006, p.31)

Buchan highlights the different modes of spectatorship involved in the viewing experience of stop-frame animation and the viewer's level of investment in the human-like qualities of the mediums moving objects. Ultimately, the viewing experience of stop-frame animation is unique in its existence between '*a* world' and '*the* world'. She cites three reasons for using a phenomenological framework

in order to examine the viewing experience of stop-frame animation (2011, pp. xxi-xxvi). Firstly, phenomenology focuses on the description of personal experience rather than empirical explanation, which is vital because the imaginative element of puppet animation spectatorship is outside of normal experience. Secondly, the potential of the Quay's puppet animation to destabilise cinematic language functions in a similar manner to phenomenology's potential to destabilise language. Thirdly, phenomenology allows a freedom to explore the relationship between different real and animated worlds without an empirical approach that proposes psychological explanations for the experience.

As with Andrew, Sobchack, Bouldin and Crafton, Buchan's work is valid primarily as a phenomenology of animation spectatorship. All of these approaches have the existential phenomenology of Maurice Merleau-Ponty's *Phenomenology of Perception* (2002) at their basis, which as the title suggests is not primarily about the phenomenological process, rather it uses the phenomenological process as a framework to investigate perception. Sobchack, Bouldin, Crafton and Buchan apply Merleau-Ponty's investigations into perception and bodily awareness to animation and live-action film, creating phenomenologies *of* the perception of animation and live-action film. It is my argument that there are two significant gaps in animation theory, firstly regarding the use of the medium *as* a phenomenological process and secondly in using the phenomenological process to examine stop-frame animation practice itself.

Live-action Film *as* Phenomenology

There is currently no research exploring animation *as* phenomenology so I will examine similar arguments in film theory. I consider this filmic line of research relevant because it centres on the role of the camera as a phenomenological tool, an apparatus also used in animation. John B. Brough (2011) proposes that live-action film has parallels with the Husserlian epoché. He suggests that the experience of viewing live-action film is equivalent to the epoché in two ways. Firstly, there is the actual, physical reduction of the viewing experience, when we sit in a darkened theatre away from the real world and engage with live-action film. Secondly, there is the way in which the live-action film image itself suspends the natural attitude by ‘represent[ing] the real to us in a way that does not call for action and participation. To see a film, then, is to enter into a cinematic epoché’ (2011, p.195). He argues that the film image allows us to see reduced phenomena, but does ‘not fundamentally alter it’ (2011, p.194), providing the viewer with ‘new eyes with which to see what was there all along, [what] our quotidian absorption in the natural attitude had hidden’ (2011, p.194). So, the implication of Brough’s argument is that the process of transferring the world into a film image performs the first stage of transcendental epoché for the viewer, leaving them able to then contemplate the bracketed phenomenon and perform the next stage of epoché – the eidetic variations – if they wished. Brough often seems to be arguing that the filmic process is autonomous, e.g. ‘*Film* [emphasis added] has unique ways of detaching us from the natural attitude’ (2011, p.194) and ‘*Films* [emphasis added] that work phenomenologically refine, concentrate, and manipulate our experience’ (2011, p.194), though he does

acknowledge a controlling force at one point, stating that the medium has a 'powerful arsenal at its disposal - moving images, sound, color, narrative, all shaped by directors, editors, cinematographers, and a host of other technicians and artists' (2011, p.193) I believe that Brough takes for granted live-action film's direct indexical link with the real world, and for the most part ignores the influence of the practitioner in control of the medium. He follows the line of Andre Bazin, essentially implying that the mechanical nature of the camera is performing the epoché rather than the human in control of the camera. Vivian Sobchack suggests that:

Bazin sees the cinema as a privileged apparatus capable of phenomenological epoché and reduction, description, and interpretation of worldly phenomena. Mechanical in nature, the camera brackets or puts out of play the habituated vision of human being, lets the world speak and impress itself upon the film and our perception, and leads us to a fresh awareness of the contingent and ambiguous nature of existence. (1997, p.228)

Bazin argues for the autonomy of the photographic (and by implication also the cinematic) process stating that photography allowed 'a mechanical reproduction in the making of which no man plays a part' (1967, p.12). The only human influence he acknowledges in the process is the photographer's 'selection of object to be photographed and by way of the purpose he has in mind' (1967, p.13), allowing photography the power to reproduce the object itself: 'we are forced to accept as real the existence of the object reproduced, actually *re-presented*, set before us' [emphasis in original] (1967, pp.13-14). He suggests that this mechanicity and lack of human input means that the process of photography works in a similar manner to the epoché. Speaking of the 'objective world', Bazin notes: 'Only the impassive lens, stripping its object of all those ways of

seeing it, those piled-up preconceptions, that spiritual dust and grime with which my eyes had covered it, is able to present it in all its virginal purity to my attention' (1967, p.15). According to Bazin, therefore, the process of photography removes any assumptions and theories about the world, leaving an image showing only the true essence of the phenomenon.

In line with Bazin, Jean-Louis Baudry (1985) claims that the transfer of the world, through the camera into a live-action film image offers an epoché for the viewer. He suggests that:

Limited by the framing, lined up, put at the proper distance, the world offers up an object endowed with meaning ... implied by and implying the action of the "subject" [viewer] which sights it ... the world's transfer as image seems to accomplish this phenomenological reduction, this putting into parentheses of its real existence. (1982, p.537)

However, rather than the camera acting in an automatic, objective way, Baudry suggests that there is an inherent viewer-centred ideology at work. The camera positions the viewer as the centre of the universe and the images on-screen mimic our subjective, personal viewpoint of the world. For Baudry then, the camera does not bracket the world with its mechanical, impassive nature; rather it assumes and presents things from a subjective, viewer-centred position. However, although Bazin and Baudry occupy seemingly contradictory positions, in Sobchack's words they both still adhere to 'the topographical apparatus of the cinema as resembling the process of phenomenological method' (1997, p.230).

Allan Casebier (1991) criticises both Bazin and Baudry's phenomenological reading of live-action film as the epoché:

at one end of a continuum of representation theory, a hyper-realist such as Bazin wants to assimilate depiction, portrayal, and symbolism to the pattern of everyday life perception of an independently existing object with the motion picture a transparent entity through which we see the things themselves. At the other end of the continuum, we find the transactional view of contemporary film theory wherein representation is a by-product of an interaction between subject and object in which representations are constructions out of the contents of mental acts divorced from an externally existing object. (1991, p.63)

Regarding Baudry, Casebier's contention is that Husserl's epoché does not involve alteration or constitution of the phenomenon by the subject:

The connection that Baudry seeks to make between the cinematic apparatus transforming the world into image and the phenomenological reduction will not hold up. As we have seen, to perform the reduction has nothing to do with changing the nature of [the] object of perception. (1991, p.76)

Only the subject's mindset towards the phenomenon, rather than the phenomenon itself, is altered. Overall, Casebier argues that live-action film does not mimic the epoché in either its unadulterated or adulterated forms as Bazin and Baudry might respectively suggest.

Brough, Bazin and Baudry propose that the mechanics and equipment of live-action film perform the epoché for the viewer. However, I believe that this approach is flawed. I think they are correct in saying that the camera can in certain ways perform an act akin to bracketing. Where I would offer an alternative reading is that the camera, when used for a phenomenological

purpose, is not performing an epoché on a phenomenon for the *viewer*, it is actually offering a means of epoché for the *filmmaker*. In phenomenology, a philosopher experiences a phenomenon and performs the transcendental epoché on that phenomenon, before performing eidetic variations and then description. We as readers then study and understand what has been described. It is the philosopher's transcendental epoché and variation of *their* experience expressed in writing. We do not as readers believe that we are experiencing the described phenomenon in an unadulterated form or that the reduction has been done for us. So, the camera does not perform the transcendental epoché for the viewer of live-action film, rather it might be used towards a transcendental epoché of the filmmaker's experiences.

In relation to this argument, John B. Brough suggests that the process of filmmaking might act as an equivalent of the next stage of the epoché: eidetic variation. Stating that:

The best films ... hone the phenomena and pare away the incidental to let essence shine through. The essence is universal, but not abstract. It reveals itself only in the film's concrete images, which reflect the essential because they have been shaped and distilled by the filmmaker's imagination, always with a view to seeing. (2011, p.198)

So, with an eye towards what will appear on camera, the filmmaker can if phenomenologically minded use the process of creating an image on camera to work towards the essence of a phenomenon. Although Brough does not clarify the practicality of this process, I take the filmmaker's distillation of the image to be in the construction of a set, lighting and cinematography. Working through

these processes gradually removes the unnecessary and lets the essence of the image emerge. Following this, it is logical that the film image acts as a visual rather than written phenomenological description. Mark Wrathall contends that the phenomenological process does not have to be expressed solely in writing, stating that phenomenology tries ‘to direct our attention to the constitutive structures of such activities [the experienced phenomenon], whether through an assertoric description or another mode of indication – for instance, the poetic or the *pictorial*’ [emphasis added] (2011, p.10). So, the camera, when used by the phenomenologist filmmaker or indeed an animator, can act as a tool for examining conscious experiences; it has mechanical qualities that perform an equivalent transcendental epoché and bracket our usual assumptions about a phenomenon. The filmmaker or animator who controls this process can perform eidetic variations and the final image presents a visual, temporal description.

As Andrew suggests at the beginning of this part of the chapter, the field of phenomenological film theory is relatively sparse, and what is there is mainly focused on the spectatorship of live-action film. This is reflected in phenomenological animation theory, which is solely concerned with the viewing experience. In terms of a wider approach Bazin, Baudry and Brough are the exception to this rule, examining the camera as a means to perform phenomenology. However, there is no coherent theoretical or practical examination of the creative process of animation, or specifically stop-frame animation, as methods to perform phenomenology. Further to this, there is no phenomenological investigation into the medium itself. It is my proposal that these are two significant gaps in phenomenological animation theory that are yet

to be fully explored. Led by experimentation within my own stop-frame practice, this thesis will examine both propositions.

ⁱ Husserl describes naturalism as ‘a phenomenon consequent upon the discovery of nature, which is to say, nature considered as a unity of spatio-temporal being subject to exact laws of nature’ (1965, p.79). This is in keeping with *The Oxford Dictionary of Philosophy* (2008), which defines it as:

Most generally, a sympathy with the view that ultimately nothing resists explanation by the methods characteristic of the natural sciences. A naturalist will be opposed, for example, to mind-body dualism, since it leaves the mental side of things outside the explanatory grasp of biology or physics; opposed to acceptance of numbers or concepts as real but non-physical denizens of the world; and opposed to accepting real moral duties and rights as absolute and self-standing facets of the natural order.

ⁱⁱ Husserl’s thought developed from Descartes’ notion of *cogito ergo sum*, he stated: ‘The mediator keeps only himself, qua pure ego of his *cogitationes*, [consciousness] as having an absolutely indubitable existence, as something that cannot be done away with, something that would exist even though this world were non-existent’ [emphasis in original] (1950, p.3).

ⁱⁱⁱ It is argued that Husserl did not give a fully definitive account of the reduction and was inconsistent in his terminology regarding the reduction, referring to both reduction and epoché interchangeably (see Perniola (2011), Spiegelberg (1973), Moran (2000)). However, Philip J. Bossert (1974) contends that he was actually clear and consistent in his usage of the terms:

Such is the nature, in my opinion, of the relationship between *epoché* and reduction; in order to carry out a reduction (to change one’s attitude toward something), one practices an *epoché* (withholding of judgement) with respect to that something. Reduction is carried out by means of *epoché*. “Reducing” is “practicing *epoché*”. In the very act of withholding judgement with regard to something, I change my attitude toward or standpoint in relation to that something. [emphasis in original] (1974, p.244).

^{iv} I have based my own reading of the transcendental epoché mainly on English translations of Husserl’s *Ideas: General Introduction to Pure Phenomenology* (1931) and *Cartesian Meditations* (1950).

^v The phenomenon must be considered as a generic whole rather than detailing each shifting, singular perception we have. Husserl states that phenomenon should be thought of in ‘stable distinction, unbroken self-identity, and strict conceptual apprehension ... and accordingly they may very properly be made subject to the conditions of a comprehensive scientific description’ (1931, p210).

^{vi} The epoché brings us to the field of study but it must also be maintained throughout the subsequent examinations. Philip J. Bossert argues we must continue ‘to practice [the epoché] in order to remain in the phenomenological attitude while carrying out the investigations’ (1974, p.249).

^{vii} The word eidetic comes from Eidos, which is Greek for form.

Chapter 2

A Phenomenology of Stop-Frame Practice

This chapter details the performance of ritual as a version of the practical transcendental epoché. It threads through existing phenomenological, ritual, animation and performance theory towards a new reading of the ritual nature of the stop-frame process and how its practise can enact an epoché. This interpretation subsequently allows me to propose the set construction and frame capture stages of the stop-frame process as means to practically carry out eidetic variation and visual description on the medium itself.

A Phenomenological Examination of Stop-Frame Practice

It is my contention that the ritualistic nature of the stop-frame process allows me to carry out a reflexive, practical phenomenological examination of the medium itself. Anthony J. Blasi (1985) suggests that religious ritual can enact a bracketing of assumptions similar to the transcendental epoché (though it may have different aims and is not performed in a philosophically considered way). Similarly, Mario Perniola also proposes ritual as a practical, transcendental epoché. In accordance with Blasi he states that performing a ritual:

relieve[s] us of the burden of prejudice, believes [sic], ideologies, functional orientations, and over-familiar and routine sensations. They involve a sort of exoneration from the onus of a naïve approach to the world that is erroneously regarded as self-evident. (2011, pp.166-167)

We might carry out familiar actions within the ritual but they are removed from our usual, everyday engagement. The key to this difference, for both philosophers, lies in ritual's lack of utilitarian aims. Blasi, using a religious ritual as an example, contends that ritual 'is markedly discontinuous with the practical, so that candles do not really provide needed light and ablutions do not really cleanse. It simply sets aside functional concerns' (1985, p. 69). Perniola (2011) makes a comparable case, taking his definition of ritual from:

the Indologist Frits Staal, according to whom ritual is a form of pure activity, without any meaning, goal or aim. It does not follow that such activity has no value: it has an intrinsic value that is in contrast with the applied activities of our ordinary everyday life. In fact, in ritual activity, it is the rules that count not the result. (2011, p.165)

So, ritual allows an equivalent of Husserl's transcendental epoché in that, an action, when performed within a ritual, is removed from its usual utilitarian aim and our everyday viewpoint towards it is changed.

However, despite raising the prospect of ritual as a practical form of the transcendental epoché, Blasi and Perniola do not discuss using it as part of a wider phenomenological process. It is my proposition that it can be used in this way and in order to do this I will clarify two initial areas. Firstly, it is important that the phenomenologist carries out the ritual action him or herself rather than watch someone else perform it. Husserl argues that we experience phenomena through consciousness and though observing ritual might allow us to see other people's actions removed from their everyday utility, phenomenology is ultimately aimed at exploring the nature of *our* personal conscious engagement with the world. So, the phenomenologist must examine his or her own ritual

actions. Secondly, conventional ritual provides a very limited field of investigation. Blasi and Perniola only discuss the practical epoché in relation to established ritual activities, such as religious ceremonies or rites of passage which, if adhered to, would severely restrict what phenomena could be explored and preclude stop-frame animation actions as ritualistic. If we are to use this method for anything other than examining religious rituals we need to explore what can be defined as ritual.

Catherine Bell argues that identifying and classifying the features of ritual is a complex process and there is a general preconception of ritual as being solely concerned with religious customs, which are ‘communal, traditional (that is, understood as carrying on ways of acting established in the past), and rooted in beliefs in divine beings of some sort’ (1997, p.94). However, she contends that ritual is in fact a lot more flexible than this and can include activities that ‘span various continuums of action from the religious to the secular, the public to the private, the routine to the improvised, the formal to the casual, and the periodic to the irregular’ (1997, p.138). Bell proposes a classification system of ritual-like activity, that accommodates this wider spectrum and also contains non-utilitarian, ritualised acts (as the practical epoché requires) that do however have overall purpose. There are six categories: Formalism, Traditionalism, Invariance, Rule Governance, Sacral Symbolism and Performance (1997, p.138). It is within this broader definition of ritual, specifically the Invariance and Performance categories, that I can place the stop-frame process and specifically my practice. Before examining exactly how my stop-frame practice fits within Bell’s classifications I will describe the stop-frame process in general.

The Stop-Frame Process

There are four fundamental, sequential (though occasionally overlapping) stages involved in the production of stop-frame animation.¹ Firstly, pre-production: there must be a subject that is considered before the other stages can begin. This might range from something as simple as a mental note to developing narrative, storyboards, characters and set design. Secondly, puppet and set construction: there must be a controlled environment or we are essentially seeing time-lapse. This stage might range from constructing a very basic blank wall to the creation of elaborate miniature sets, lighting and moveable puppets. Thirdly, frame-capture: there must be a camera focused on this controlled environment taking individually captured frames or what we see may as well be live-action film. This might range from depicting still space to elaborate movement created by incremental adjustments made to the puppet or set in between frames. Finally, post-production: at some point these frames must be assembled as a viewable sequence. This might range from editing two frames together to the creation of extended animated sequences depicting narrative with sound. So, stop-frame is a process that at its basis follows a set of four stages, which must be completed in sequence. Each stage has the potential for repetitive actions but, depending on the complexity of the production, it is likely that the frame-by-frame movement captured during the animation stage in particular might demand high levels of controlled, ritualised behaviour from the practitioner.

During this research my own practice followed the four essential stages detailed above but the actions I used to carry out my aims further increased the already

intense levels of control and repetition involved in stop-frame creation. Firstly, the pre-production stage involved repeated aesthetic observations of atmosphere within my studio space, which was then documented. A single observation consisted of the close contemplation of a particular phenomenon that had interested me in that moment; it might have been a subtle shifting light, or simply a form within the space. These observations were spontaneous but they had certain actions that were consistently performed: entering the studio space, the maintenance of a fixed body position and subtle shifts of the head and eyes as I traced the form of the phenomenon. The observation would usually be ended by an external distraction or thought. It was then immediately documented which in each instance involved collecting a pen, paper and camera, returning to the exact spot of the observation, noting precise details and then, if it was available, positioning the camera along my viewpoint and capturing a photograph. Secondly, the set construction stage involved the reconstruction of the studio space and the objects within it in miniature form, allowing me a controlled environment where I could recreate the documented observations. An overall plan was worked out on how the set structure could be divided into separate, removable walls, allowing unrestricted camera positioning. I then worked systematically on each area of the studio in turn. This involved: selecting a particular area of the studio to work on; exactly measuring the wall or fixture under consideration; returning to my desk and converting these measurements down using a scale of sixteen cm to one inch; planning what sections of card would be required to create the miniature form; choosing some card, marking out the scaled down dimensions of the various sections on the card; carefully cutting the sections to size using a craft knife and metal ruler; gluing the sections

together in the correct form; and painting the resulting recreation in the corresponding colour to its actual size original. This process was repeated until the whole studio structure and its fixtures were complete. Thirdly, the frame-capture stage involved the recreation of each of my original observations, positioning the camera, carefully composing an image, and then individually capturing frames to depict sequences of passing time within the miniature space. The consistently performed actions involved in this stage were: unpacking and setting up my camera and the computer; opening my frame-capture programme and creating a desktop file for the images; selecting a specific observation to work on and then examining the relevant documentation from the first stage; assembling the equivalent space using the miniature set; arranging the lighting system to match the original, observed light; positioning the camera along my original viewpoint, making subtle adjustments to the camera position and the lighting in order to compose the image; considering and then capturing each individual frame (twenty-four frames were required for every second of the original observation); and, if necessary, making incremental adjustments to the set or object in the spaces between frame-capture. This process was repeated for each observation. Finally, post-production involved the creation of animated sequences and editing them into an order. The repetitively performed actions in this stage were: dating, filing and importing each frame sequence into an editing programme; testing different sequence orders and combinations; and repeated viewings and alterations were then carried out until a final arrangement was settled upon.

Invariance

My process has ritualistic elements that fit within the categories of Invariance and Performance proposed in Catherine Bell's previously mentioned wider interpretation of ritual actions. Firstly, she proposes that ritual-like activities often have the quality of Invariance, which can be identified in:

a disciplined set of actions marked by precise repetition and physical control ... The emphasis may be on the careful choreography of actions, the self-control required by the actor, or the rhythm of repetition in which the orchestrated activity is the most recent in an exact series that unites past and future. (1997, p.150)

Parallels can be drawn here with the actions involved in the frame-capture stage of the stop-frame process, which require a similar level of control and repetition. Alice Gambrell highlights the 'ability of the stop-motion artist to tolerate and even to take pleasure in a lengthy production process that might seem to an outside observer to be interminable' (2011, p.117). James Gurney states that animators are:

comfortable with working long hours alone. They are capable of dissecting and compressing time, and they're possessed of a rare mixture of patience and concentration. It took over four months of continuous effort for Ray Harryhausen to complete the sword fight sequence from the 1963 film *Jason and the Argonauts*. There was no room for correction or reconsideration. It was a work of inspiration and perspiration. (2008, p.8)

The frame-capture stage of my own practice is a difficult, repetitious, time consuming process, particularly when involving subtle shifts of lights or delicate

movements. The exertion it requires is as much mental as it is physical. Following on from the previous general description of my process I will use the frame-capture of an observation of a slightly shifting set of blinds as a specific example. Firstly, the movement I intend to capture must be mentally dissected into separate parts, animating at twenty-four frames per second, a sequence lasting ten seconds must be split into 240 incremental adjustments. Then the confined, darkened studio space must be negotiated before I balance and position my body, place my hand within the set and make the first subtle adjustment to the blind (as I do this I am bearing in mind the adjustment and its importance to the pacing and movement of the larger overall sequence) before carefully removing my hand and renegotiating the studio space in order to return, operate the camera and capture the frame. This process is repeated for each adjustment. The pressure on each movement increases after every frame, the further I progress, the more previous work on the sequence can be lost by nudging the set or making too drastic a movement. Therefore, each action has to be precise and carefully considered. Precision and consideration are present in most stop-frame practices at the frame-capture stage, however my practice extends a similar controlled repetition of actions throughout each stage of the process (as explained on pp. 55-56). The physical control, discipline and repetition of stop-frame's carefully choreographed actions clearly fit Bell's category of invariant ritual.

Although stop-frame actions are clearly repetitious and carried out with great control, the vital aspect of Blasi and Perniola's practical epoché is that ritually performing an action must remove it from its utilitarian purpose, which would

seem to rule out stop-frame actions as they are performed with the aim of creating an animated sequence. The key to their argument is that ritualisation removes the practical use of the act and we can see it from an altered viewpoint.

However, Bell's notion of invariant ritual allows for this:

close attention to detail, discipline, and self-control. Indeed, traditional monastic life specifically encouraged the ritualization of all daily activities - dressing, eating, walking, working ... all of life is made as consistently ritual-like as possible in the service of a religious goal. (1997, p.151)

Carrying out these basic everyday actions in a controlled manner, numerous times each day changes the monk's perspective on them, but crucially during this ritualisation the actions maintain their functional value. So, the invariant performance of an action can in fact offer us the altered viewpoint that Blasi and Perniola require for the ritual transcendental epoché, without actually removing the utilitarian aim of the action itself. Reading my practice as ritually invariant means that I can argue that the actions involved in the medium are ritualised, even though they retain the functional purpose of creating an animated sequence. As such, I propose that by carrying out the actions of stop-frame, a ritual transcendental epoché is carried out on them.

Performance

Secondly, Bell proposes Performance as a ritual-like activity, defining it as the 'self-conscious "doing" of highly symbolic actions' (1997, p.160) specifically for an audience. She suggests that two factors of performance combine towards its ritual nature: framing and heightening of an audience's senses. Firstly,

performances are framed as something out of the ordinary; so for example an actor in a play is framed by ‘the conventions of a theater production - stage, curtains, tickets, audience, familiar script’ (1997, p.160). Secondly, they also use ‘highly visual imagery, dramatic sounds, and sometimes even tactile, olfactory, and gustatory stimulation’ (1997, p.160) in order to amplify sensations and pull the audience into intricate sensory experiences. Viewers are not just shown something; they fully experience it and become effectively involved in the performance. Both factors allow a performance to be set away from everyday reality, condensing and simplifying the world and enabling it to convey wider truths about human experience. I am proposing that the ritual epoché can be used as part of an overall phenomenological investigation, which means that ritually carrying out an action alters the perspective of the *practitioner* towards that action. However, Bell’s explanation details how performance as a ritual alters the *audience’s* perspective rather than the practitioner. If performance as a ritual is going to be argued as part of a ritual epoché, then the factors mentioned above, that mark out an action in a performance from an everyday action for the audience, must also apply to the performer of the action. For example, the audience experiences a dramatic, heightened, performance framed within the darkness of the theatre, which lets them see the actions as something out of the ordinary, but the darkness of the theatre and heightening drama would also allow the performer to experience the actions they were performing from an altered viewpoint and therefore could be argued as enacting a ritual epoché. In order to argue for stop-frame practise as a ritual performance I will explore how its actions are framed and heightened for the animator.

In terms of ritual performance the animator's studio can be read as a liminal space. Richard Schechner (2006) argues that rite of passage rituals involve three stages: preliminal, liminal and postliminal. He contends that in the liminal stage two things occur to those carrying out the ritual: 'Persons are stripped of their former identities and positions in the social world; they enter a time-place where they are not-this-not-that, neither here nor there' (2006, p.66) and then they carry out an act or initiation in which they attain a new identity or new power. Actions such as an exchange of rings at a wedding are removed from 'their practical use or value' (2006, p.66) and are undertaken to symbolise the person's change. An acting performance can be said to be a liminal process in which an actor is temporarily stripped of their identity and undertakes symbolic actions, becoming something else on the stage. The key aspect for stop-frame as a ritual epoché is the space in which these liminal actions, stripped of their practical usage, occur. Schechner argues that performance and ritual take place within a limen, defining it as 'a threshold or sill, a thin strip neither inside nor outside a building or room linking one space to another, a passageway between places rather than a place in itself' (2006, p.66). He proposes that during ritual performance this space becomes physically and conceptually expanded: 'It is enlarged in time and space yet retains its peculiar quality of passageway and temporariness' (2006, p.67). When a performer enters the liminal space their viewpoint is altered and actions are changed 'the very act of entering the "sacred space" has an impact on participants. In such spaces, special behavior is required' (2006, p.71). In my practice the studio is the limen within which the performance takes place. There are two reasons for this: firstly, there is the immediate physical impact of entering a different space; my stop-frame studio might at any one time include

items from the set, creative tools within the space and blacked-out windows. The dark rooms often cramped and enclosed, with dramatic spot lighting on the set. Secondly, there is the psychological awareness of this being a specific place for creation and animation, which has developed over time as I repeatedly entered and worked within it over the years. In line with Bell's definition of ritual performance, it is clear that when I enter the liminal studio space and am surrounded by the conventions of stop-frame practice my attitude and actions are heightened and framed as something out of the ordinary.

A key element of performance that distinguishes the performance as something out of the ordinary for the performer is an audience, which might seem problematic, as stop-frame is often a solitary process. So, in what sense can we say that an animator performs the creative process of stop-frame for an audience? Paul Ward notes that in stop-frame: 'The acting, the performing, the motions are all done by, communicated by, the animator rather than the figure itself as an actor with its own agency' (2011, p.298). Though the animator's presence is not always overt he goes on to argue that:

Clearly, one of the pleasures of watching (and, indeed, *making*) animation is that we know that what we are watching (or creating) is a *completely constructed* world: everything is built, rendered, and fashioned (or, to use another term - performed) by the unseen hands of the animator. [emphasis in original] (2011, pp. 298-299)

Laura Ivins-Hulley goes further, arguing that the viewer actually becomes involved in the animator's performance, contending that there is a shifting tension between the knowledge of the controlling animator's performance and the acceptance of the illusion of on-screen movement; for the performance to

work, the audience must suspend their disbelief and accept the animated world: ‘We as viewers of animated films, actively participate in the construction of onscreen events, accepting the illusion of movement and life’ (Ivins-Hulley, 2008). What the viewer experiences in the final animated images are a co-constituted performance made up of both what is seen on-screen *and* the creative actions of the animator. Donald Crafton argues that the animator is clearly aware of this future audience, stating that animators are taught to ‘imagine the reception of their target audiences ... [previewing] the flow of movement and imagery as it will appear on the screen and how I, the future consumer, will view and perhaps understand it’ (2013, p.53). So, the actions carried out in creating each frame are carefully considered in light of the future audience. It is clear then that the creative process of animation is a performance, which does have an audience and the animator is aware of this when performing.

In summary, it can be argued then that the animation process is a ritual performance in that it is framed and heightened as something out of the ordinary for the animator. An example of this can be seen in my own practice. I enter the studio and have a sense of the rooms as something out of the ordinary that stems from previous experiences and the knowledge of it as a specifically creative space. Combined with this are the artefacts and conventions of the stop-frame process, materials and parts of the set are laid on desks and against walls, the studio is enclosed and dark with blacked out doors and windows but with dramatic spot lighting on the set. Not only is the performance framed and heightened by the studio as something different, it is also altered by the potential presence of an audience. I perform my actions, when constructing each

individual frame, in a careful, deliberate way knowing that this control and repetition is going to be experienced by the viewer in the final image.

So, using existing phenomenological, ritual, animation and performance theory I have detailed how carrying out the stop-frame process can enact a ritual transcendental epoché. Each stage of my stop-frame practice is an indirect performance of repetitive and invariant actions for an implied future audience within the liminal, ritualistic space of the studio. This interpretation of stop-frame process allows it to be placed within Bell's Invariance and Performance categories and argued as ritualistic. In line with my interpretation of Blasi and Perniola's theses, carrying out the ritual actions of stop-frame enacts an epoché *on* those actions. This allowed me to carry out practical phenomenological research into the essence of stop-frame process. By performing the two main stages of stop-frame animation – set construction and frame-capture – I enacted an epoché on them, altering my viewpoint and allowing me to consider those stages without prior assumption. This initial reduction was followed by eidetic variation in which I performed experiments and practically distilled these stages of the medium to their essence.

ⁱ The notion of a standard approach to stop-frame is difficult. What I refer to here includes: storyboarding, set and puppet construction, frame-capture and post-production. This standard process has been surveyed in animation creative handbooks: Gasek, T. (2012). *Frame-by-Frame Stop Motion. The Guide to Non-Traditional Animation Techniques*; Priebe, K. A. (2007). *The Art of Stop-Motion Animation*; Purves, B. (2010). *Basics Animation 04. stop-motion* and Shaw, S. (2004). *Stop Motion. Craft Skills for Model Animation*. Each book contains these stages in various guises.

Chapter 3

Practical Eidetic Variation

The next stage of the phenomenological process after the transcendental epoché is eidetic variation. Prior assumptions have been bracketed and the phenomenologist must now imaginatively vary the subject matter in order to determine its essential elements. With the previously described ritual epoché enacted I was able to then carry out a practical equivalent of eidetic variation on the set construction and frame-capture processes and work towards the essence of the stop-frame process.ⁱ Part I of this chapter examines the eidetic variations I performed on the set construction process, detailing experiments on the dimensions of the space, the level of detail required, how much control the animator needs and the composition of the set on camera. Part II examines the eidetic variation of the frame-capture stage of stop-frame animation; describing the tests I carried out into the requirement of separate frames, change between frames, what can be manipulated between frames and how many frames are actually required.

Part I: Eidetic Variation of the Set

The first variation of the stop-frame set construction process was technically the removal of the puppet figure and with it came the elimination of overt movement (see Introduction). It is my contention that such still sequences retain the status of stop-frame animationⁱⁱ. The following variations, in which I further experiment with what is actually required in terms of a stop-frame set space, all

stem from this initial distillation. I initially considered the three-dimensional nature of the set. If an animator does not have to physically intervene and move a puppet, is building a three-dimensional set actually vital? Does using a three-dimensional space make any difference? Or could I use a photograph of an interior instead? I made three variation sequences in relation to these questions. The first sequence (Appendix 1.31) used frame-by-frame capture to create twenty seconds of animation depicting a three-dimensional set (Figure 2).



Figure 2. A frame from Sequence 31 (Appendix 1.31) directly depicting the set

The second sequence (Appendix 1.32) used frame-by-frame capture to create six seconds of animation depicting a photograph of a single frame from the first sequence composed to mimic the three-dimensionality of first sequence (Figure 3).



Figure 3. A frame from Sequence 32 (Appendix 1.32) depicting a photograph of the set



Figure 4. A frame from Sequence 33 (Appendix 1.33) depicting a photograph of the set on a wall

The third sequence (Appendix 1.33) used frame-by-frame capture to create six seconds of animation depicting the same photograph of a single frame from the first sequence used in the second sequence but this time composed to reveal the two-dimensional nature of the photograph (Figure 4).

None of the sequences look completely frozen; using frame-by-frame capture ensures that there are small differences between frames and a sense of passing temporality occurs. However, there are subtle but noticeable differences between the first sequence of the three-dimensional set and the next two sequences of the photograph of that set. Firstly, a level of degradation occurs when printing and then re-photographing a photograph. There is a loss of colour and sharpness to the image, though it might be argued that this is noticeable only in context with the original clear and un-degraded sequence. Secondly, and most crucially, a difference lies in the level of change that occurs between frame-capture. The three-dimensional sequence presents a more overt sense of passing time. This occurs due to the set space existing in the real world. This allows very subtle, natural alterations such as dust movement in the air and light levels dimming *within* the space, which cannot happen in the photograph. Dust and light levels can also move *in front* of the photograph but the crucial aspect is that they do not alter *within* the photograph, which creates a level of stasis in these sequences. So, a set and a photograph of a set present different sequences. If I remove the three-dimensionality of the set and continue to use frame-by-frame capture the subsequent sequence is not stop-frame animation. In light of this, even without the animator having to physically intervene in the set to move a puppet, a three-dimensional set space is essential for a sequence of stop-frame animation.

Detail

Further consideration of the three-dimensional set space led to an examination of how that depth registers in the final image on-screen. Maureen Furniss' live-action – animation continuum (2007, pp. 5-6) places mimesis at one end of the spectrum, with realistic animation at the midpoint, followed by stylised animation, before finishing with abstraction at the other. A stop-frame set can be realistic or abstract but how much can we take away from it and still consider the subsequent sequence to be stop-frame? Though the removal of detail during set construction was initially carried out as a variation on my observations (see Introduction) it also functioned as a variation on the medium itself. During this stage I simplified the main set to a certain extent before moving towards almost the complete removal of detail and some structural elements in a second smaller set (explored further in Chapter 5). Taking this variation to its conclusion I arrived at what initially seemed to be the minimum a set could be: a single blank wall (Figure 5).



Figure 5. A photograph of a single blank smaller set wall with the real studio space in the background



Figure 6. A frame from Sequence 20 (Appendix 1.20) of a single blank wall

I used frame-by-frame capture to depict this single blank wall (Figure 6) and the subsequent sequences cannot be considered stop-frame (Appendices 1.19 and 1.20). As previously quoted, Suzanne Buchan suggests that the key difference between two-dimensional and three-dimensional animation for the viewer is that:

although the events we see on screen *did not* occur, the objects *do* exist. Puppet [or stop-frame] animation thus represents a different ‘world’ for the spectator, something between ‘*a* world’, created with the animation technique, and ‘*the* world’, in its use of real objects and not representational drawings. [emphasis in original] (2006, p.21)

So, the key distinction for the viewer is the realisation that the depicted space itself exists in reality (though probably on a smaller scale). In order to understand this, the viewer needs enough visual information on-screen. Although the single blank wall exists in the world as a three-dimensional object (which as established earlier is vital for the animator) any depth it has in the real world is lost on-screen (as seen in Figure 6) because the image has to be composed so that the edges of the set that are not seen, in order to maintain the scale and consistency of the image.

A stop-frame viewer needs to be able to recognise the space on-screen as three-dimensional and existent in the real world or the sequence becomes merely an indeterminate form of temporal media. The single blank wall, though three-dimensional, does not have enough information on it for the viewer to realise a frame-captured sequence of it is specifically stop-frame animation. Consequently, I performed variations on the amount of detail a set requires in order to register as three-dimensional on-screen. Firstly, I added some depth with

a second wall and captured a six-second sequence (Appendix 1.21). The results (Figure 7) proved similar to the blank wall sequence. The three-dimensional nature of the set was lost on camera.

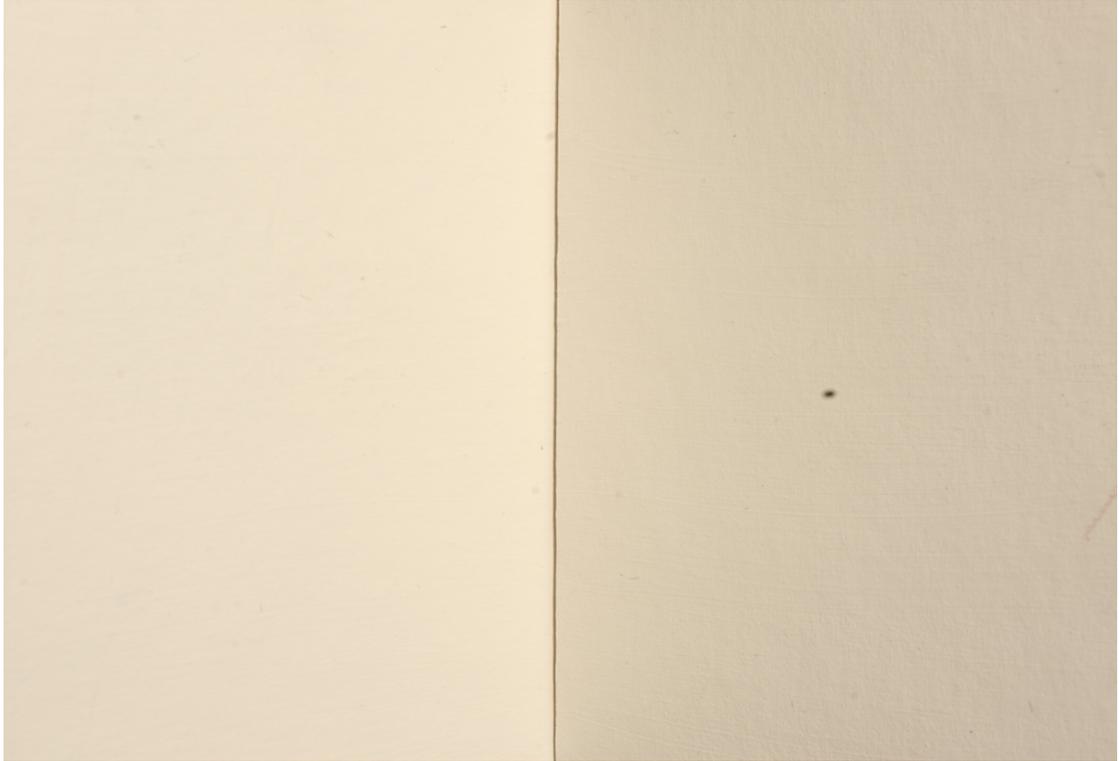


Figure 7. A frame from Sequence 21 (Appendix 1.21) of two walls placed together

Next, I created further depth in the set by adding a floor space and captured a further six-second sequence (Appendix 1.22). The results again did not register as a three-dimensional space on camera (Figure 8).

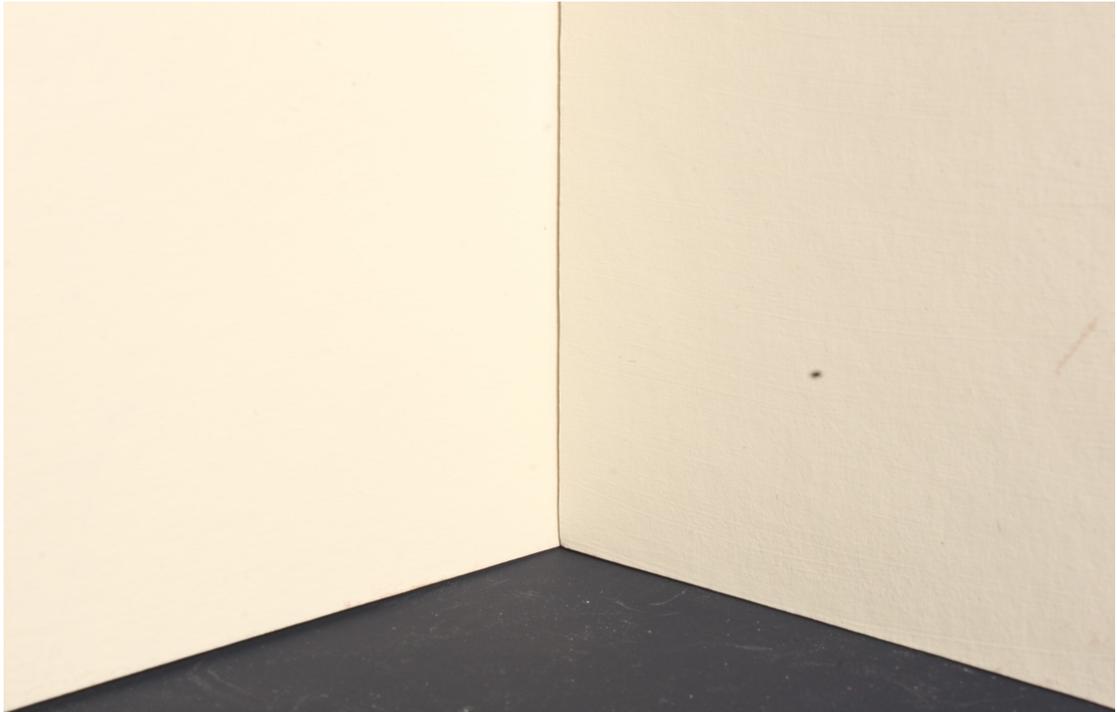


Figure 8. A frame from Sequence 22 (Appendix 1.22) of two walls with a floor

In light of this, it is my argument that a stop-frame set requires some form of detail or point of reference in the set that reveals depth, or the frame-captured sequence merely registers with the viewer as some generic form of animation. However, this detail must also register on camera. Figure 9 shows a detailed three-dimensional recreation of the studio corridor but the image appears abstract because the camera is too close to allow any detail to register. If I had pulled the camera slightly further out the skirting board would be visible, the set would be recognisably three-dimensional and it could be said that the resulting sequence was stop-frame.

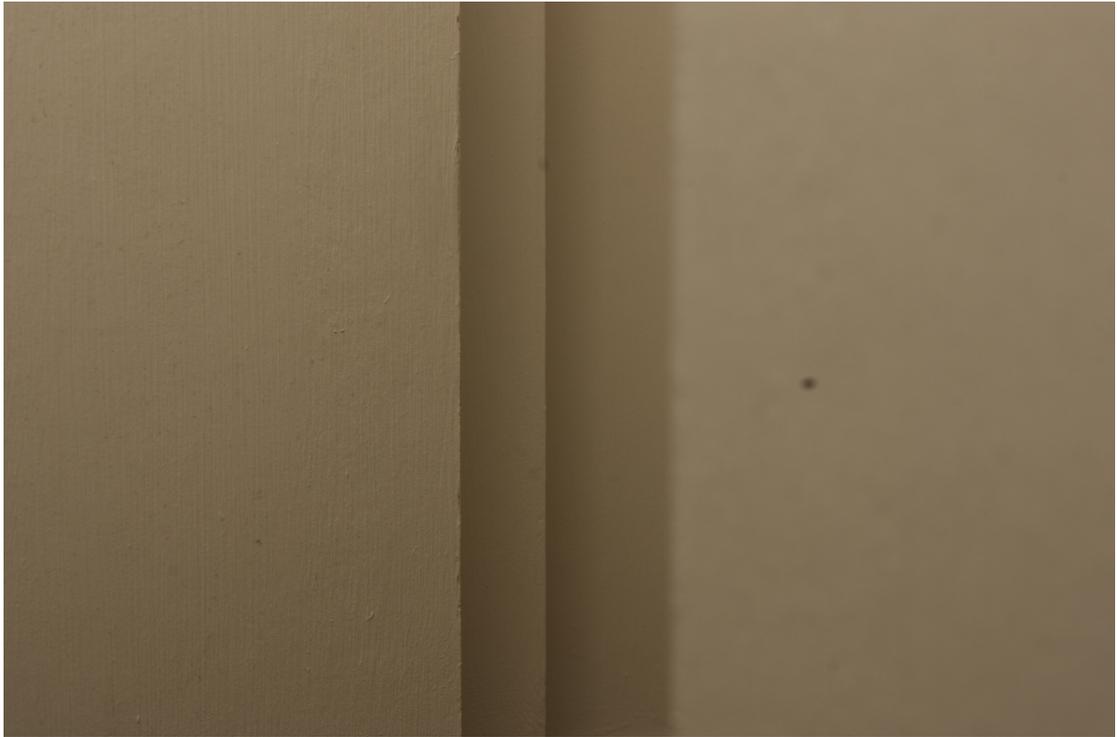


Figure 9. A test photograph of the studio corridor set in close up

Figure 10 shows a still from a sequence of light through a doorway using the smaller set (Appendix 1.39). The doorway is a simple but important detail that allows the set to register as a three-dimensional space. From here, the viewer can identify the frame-captured sequence specifically as stop-frame animation rather than two-dimensional animation.ⁱⁱⁱ

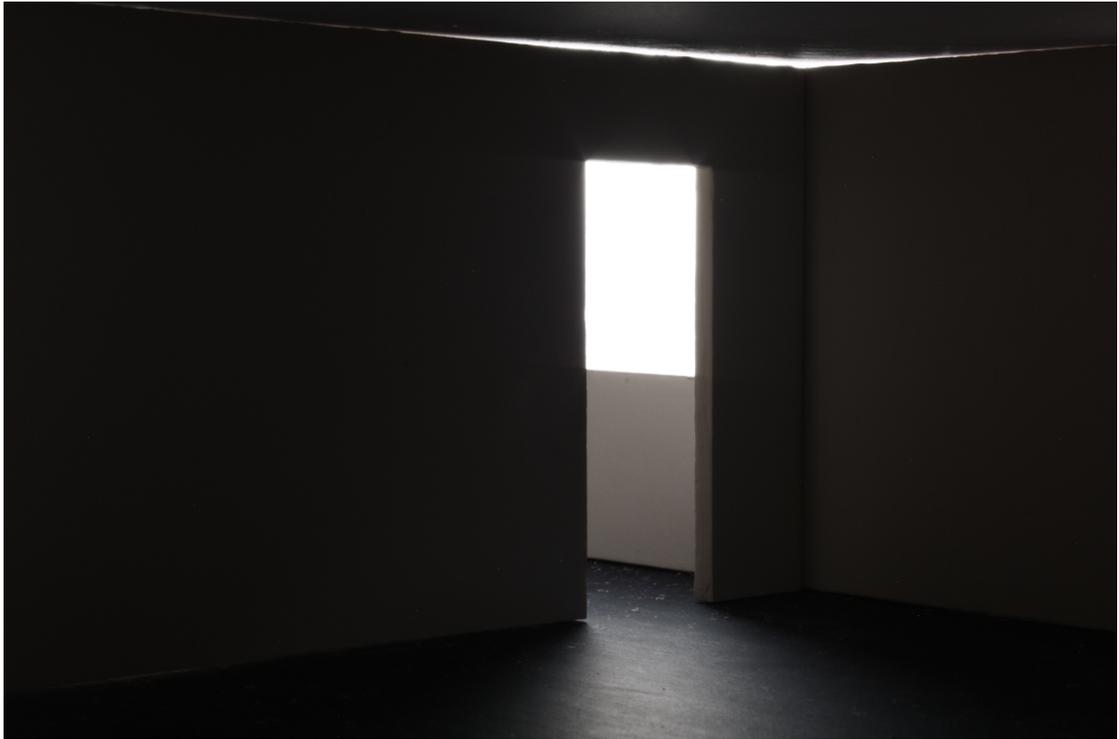


Figure 10. A frame from Sequence 39 (Appendix 1.39) of a basic set with depth that registers

Control

A stop-frame animator must control any movement, subtle or overt, that takes place between frames, within a stop-frame set. External elements that can affect continuity within the space must be kept to a minimum. Figure 11 shows a still from a sequence (Appendix 1.11) in which I carried out a variation aimed at establishing the level of control required in a stop-frame set. The main set of my room was arranged so the open door on the left hand side of the room revealed a controlled space with a light-source that I could adjust. On the right of the room the blind that would normally cover the window in order for the whole space to be under my control was removed. The set was then arranged so this ‘open’ window lined up with the corresponding uncontrolled view from the window of the real room. I then carried out frame-by frame-capture and adjusted the light

between frames in order to create a convincing flickering strip-light when the sequence is played back. Upon viewing, as the animated light flickers on the left with continuity in a way that matches reality, the uncontrolled, external view from the window on the right shows discontinuous time-lapsed frames of cars appearing and disappearing and rapidly dimming light.



Figure 11. A frame from Sequence 11 (Appendix 1.11) of the set but with a view of the real world from the window

This variation establishes that a stop-frame set must allow no external elements to be seen. The animator, to retain control or frame-by-frame capture, will create a time-lapse sequence.^{iv} This control also extends to within the enclosed set. Continuity must be maintained between frames; however, it should be noted that some elements of change between frames cannot be completely controlled and are actually vital to the viewer's recognition of a sequence as stop-frame animation. During the animation process lights can dim, dust in the air changes,

the camera can shift and sets can be slightly moved. These jumps are unavoidable and as long as they are not too excessive we do not slip into discontinuity. So, a set used for stop-frame animation must be a controlled space that allows for slight imperfections in order for the created sequence to register as stop-frame animation.

Continuity

The set is created to give the animator control over a space and to ensure that they can maintain continuity between separate frames. A lack of control leads to discontinuity, but is stability between frames actually essential for stop-frame? I created a sequence (Appendix 1.38) in which separate frames had no continuity whatsoever, different sets were used for each frame, and upon consideration, these sequences could still be argued as stop-frame because they use individually captured and considered frames in which change occurs between frames. Barnaby Dicker discusses the dominance of continuity between frames in animation theory arguing that there is a ‘perception of cinematography as a *depiction of seamless movement/continuity*’ [emphasis in original] (2010, p.3), and that the presumption of continuity actually narrows the possible scope of frame-based cinematography. Robert Breer argues that ‘in animation, particularly, the search for the reproduction of natural movements plays far too big a role. Whether stylized or not, I don’t think one *needs* to conceive of movements as related directly to those in reality’ [emphasis in original] (1976, p.133). Dicker distinguishes between what he calls shot-based cinematography – encompassing live-action film and all forms of animation that depict continuous

movement – and visibly frame-based cinematography, which depicts non-continuous, separate frames. In light of this I performed variations that question whether continuity is actually essential for stop-frame animation and if so what levels of continuity are actually required. I considered that the ultimate level of seamless continuity might be a repeated single frame of a set space (Appendices 1.1 and 1.49), but these sequences were essentially freeze-frames and therefore without a sense of passing time. Next, I used a fast shutter speed and carried out no changes to the set between frames, whilst also allowing as little time as possible between frame-capture for any alterations to occur naturally. The resulting sequence (Appendix 1.40) indicated that too little change between frames makes the resulting sequence indistinguishable from live-action film, thus rendering the use of individual frame-by-frame capture pointless. So, clearly some level of discontinuity (as discussed on pp. 76-77) needs to occur between frames in order for a sequence to be distinguishable as stop-frame animation, but controlling this change is vital as too much change results in firstly time-lapse (Appendix 1.11) and then full discontinuity (Appendix 1.38). It is my contention that stop-frame must exist somewhere between Dicker's shot-based and frame-based categories. Though continuity is an aim implied by the controlled sets and careful control of the animator, a level of visible discontinuity is actually vital for the medium. There is a small window between discontinuity and continuity in which stop-frame must exist.

Framing

The next variation explored how the camera frames the set. Figure 12 shows a still from a sequence that includes three spaces of different size (Appendix 1.15). The small set is included within the main set, which is set up within the blacked out studio space.



Figure 12. A frame from Sequence 15 (Appendix 1.15) depicting three levels of set space

Although this composition depicts three different scales of space it can still be argued that the overall sequence is stop-frame animation. This is due to the fact that the whole space is controlled. The inconsistency of size in the set is irrelevant to stop-frame as long as the animator retains control; if the space is of reasonable size and can be manipulated then its dimensions are irrelevant.^v However, if I am aiming to depict the essence of stop-frame and create animated

sequences at their most elemental, then it makes sense to create sets on a miniature scale and compose the image so there is only one consistent interior space in the sequence.

After the performance of these variations, there are certain elements of the set construction process that do not fall away and can be said to be essential. A stop-frame set has to be constructed as a miniature, three-dimensional environment, can be affected and controlled by the animator, allowing them to maintain a careful balance between continuity and discontinuity. The set must have three-dimensions and contain a detail or element of depth that is clearly visible on camera.

Part II: Eidetic Variation of the Frame-Capture Process

Separate Frames

Once the set was constructed I carried out variations on the frame-capture stage. My first variation tested if it was vital to capture separate frames for stop-frame animation. It seems obvious that it is vital to do so, but in animating still sequences I needed to verify if separate frames actually made a difference. In order to do this I created sequences using a repeated single frame (Appendices 1.1 and 1.49), and upon viewing they gave no sense of passing time. To test if this stillness was due to the single frame I used the same sets but this time captured numerous individual frames in order to create sequences (Appendices 1.2 and 1.48). When these two different sets of sequences are viewed consecutively, the stillness immediately comes alive as soon as the sequence of individual frames begins. So, sequences captured using separate frames of the same unmoved subject are clearly different. Various elements alter the frames such as pixel noise on camera, dust in the atmosphere of the set, inconsistent lighting, shifts in the set and, in long exposures, variations in focus. Further to this, I captured numerous frames of a single, printed-out frame of the set (Figure 3 and Appendix 1.32). Although due to its two-dimensionality there was little change in terms of atmosphere, the separate frames, when projected, manifested a subtle change between frames that did create some sense of duration. Robert Campany quotes Jean Cocteau who ‘when asked about the difference between a photograph of a static object and a film of it, ... replied that in the film “time

courses through it” (2008, pp.17-18). The capture of separate frames, then, is vital for a stop-frame sequence and a sense of passing time.

Change Between Frames

Norman McLaren states that animation is ‘the art of manipulating the invisible interstices that lie between the frames’ (2006, p.14) and Mark Hutchinson argues that in animation each frame must be individually ‘considered’ (2006, p.11). The consideration and manipulation the animator performs between frames usually involves the incremental adjustment of a puppet figure or object to give the impression of continuous movement when the frames are played back in sequence. Sequences such as this are clearly identifiable as stop frame. However, if the puppet is removed and the animator is making minimal or no changes to the set space, as is the case in my observations, is it enough that each frame is captured and composed separately in order for a sequence to register as stop-frame? I carried out a variation in which I used a fast shutter speed, performing no changes to the set between frames, whilst also allowing little time between frame-capture for any alterations to occur naturally. The resulting sequence was indistinguishable from live-action film. So, in order for a sequence to register as stop-frame, an interval between frames is required. Usually, this interval would be where an animator makes an alteration to a puppet, which is an overt signal to the viewer of the stop-frame mode of capture being employed. What can be missed alongside this noticeable movement are the inadvertent, subtle, but still slightly discontinuous shifts in lighting and atmosphere that occur in the extended interval between frames. It is my contention that these shifts are equally

as important as a puppet in creating the feel of stop-frame animation. In stop-frame without overt puppet movement, it is the subtle flickering created by these shifts that indicates to the viewer that what they are watching is stop-frame. These elements do not affect the overall continuity and passage of time but they are enough to signal a difference. Therefore, stop-frame capture of puppet-less sequences, must allow enough change to register but not enough to compromise the overall continuity of the passage of time. I performed variations on the interval between frames to establish how much control I could exert over this aspect of the medium. Using a fast shutter speed, my first test involved placing my hand within the set between each frame to test if when the usual alteration of the puppet occurred the animator's hand also inadvertently affects the set. Although not much change was apparent in the final sequence, some shifts in dust and atmosphere did occur between frames. Further to this, I tested various lengths for the interval, ranging from one-second to five minutes, in order to allow for natural change to the set and lights to occur. As might be expected, the five-minute gap sequence had a slightly more prominent sense of discontinuous change, but the timescales for performing frame-capture with this length of interval make it unrealistic to create an extended sequence. A thirty-second gap offered enough subtly noticeable change, whilst remaining within a reasonable production time to capture a large amount of frames. In controlling the timings between frames I retain a level of consideration and influence over the interval and the subsequent frame. So, in essence I propose that stop-frame animation must have a thirty-second gap between the capture of frames.

Shutter Speed

Another element of control that the dark interval offers is manipulation of the mode of capture; specifically I can create long exposure frames that would be impossible in live-action film. Individual frames captured using extended shutter speeds, even of still subjects, are often slightly blurred due to small, natural shifts of the camera and the set. Also, longer shutter speeds create variable light levels between frames, which further accentuates the stop-frame flicker. The resulting sequences offer a subtle level of inconsistency that indicates the unusual nature of their capture. I performed variations on shutter speeds ranging from thirty seconds (the longest possible on my Canon 450 DSLR) and 1/20 of a second. The shorter speeds created consistent lighting and clearly focused images, which did not register any real variations between frames. The longer speeds, though providing a subtle element of discontinuity between each image, proved impractical in terms of the amount of time it took to create a large quantity of frames. A six-second exposure time provided the ideal balance between practicality and flicker between frames.

Sequence Length

Werner Nekes poses the question:

what is the smallest filmic element? I came to the answer that *cinema is the difference between two frames*: the work the brain has to do to produce the fusion of the two frames. This small unit which I call *kine* is the smallest particle of a film one can think of. [emphasis in original] (1977, p.8)

It can be said then that the difference between two frames produces the smallest element of a temporal sequence. However, this does not provide enough time to differentiate between the different types of temporal media. The next stage of variation was performed on the amount of frames it took for me to register that time was passing with the previously settled upon shutter speed and interval space. I began by viewing one frame of a particular sequence (Appendix 1.47) and worked my way up until I first noticed the unique change between frames and temporality of stop-frame. It is my contention that a stop-frame sequence can be reduced to a minimum of sixteen frames before it becomes indistinguishable from other temporal media.

So, by carrying out the ritual process of stop-frame I performed a reflexive epoché, which allowed me to then carry out eidetic variations towards the essence of the medium. The resulting sequences, presented as part of the final animation submitted with this thesis, visually describe the results of this process, but this essence can be written as: a set space must have three dimensions; allow the animator a level of control over what happens within it and provide enough detail to register on camera; frame-capture must consist of sixteen separately captured frames using a six-second exposure time with thirty-second gaps between the capture of each frame. It can be argued then that a stop-frame sequence is not reliant on an overtly moving puppet or object, the control and manipulation of interstices and frames can be very minimal, such as allowing the movement of dust or the using a long exposure time. These criteria are the minimum conditions for a stop-frame sequence to be created. This basic essence of the stop-frame process produces a sequence of passing time with a level of

faint, flickering that indicates stop-frame animation and the presence of the stop-frame animator in the interval between frames. I term the new approach *distilled* stop-frame, which conveys the pared down nature of the process and the stilling of the usually kinetic medium.

ⁱ Elements of the pre and post-production stages are included in the eidetic variations of set construction and frame capture.

ⁱⁱ Included in the removal of the puppet figure is the removal of an animated human figure. Pixilation is a form of frame-by-frame animation in which a human is controlled by the animator in the same sense as the puppet.

ⁱⁱⁱ It is still possible that the set might be mistaken as a ‘real’ space rather than a miniature recreation, however as discussed further on, the size and ‘reality’ of a set space is irrelevant to stop-frame as long as it gives the animator control. A miniature set is often used, as it is the most convenient in terms of manipulation and storage space.

^{iv} Time-lapse photography involves the capture of frames at set intervals. It is generally used to capture change in the real world that might not register to the eye. When the frames are placed in sequence the change is speeded up and becomes perceivable but speeded up. It can also be used to emphasise the passage of time.

^v Daisy Jacobs (2014) animated life-size sets in *The Bigger Picture* (see <<http://www.thebiggerpicturefilm.com/>>).

Chapter 4

Stop-Frame as Phenomenology

Having previously established the ideal essence of the stop-frame process, the next stage of my research is to consider how stop-frame can be used to perform a phenomenological investigation. Part I of this chapter discusses the subject matter for this investigation – my observations of my studio space – before examining how the set construction and composition stages of stop-frame can be used to perform phenomenology. The observations are argued as a lived, aesthetic epoché in that they are moments in which I am detached from my usual viewpoint and I experience the world free from certain assumptions. I then explain how I directly perceive the world in its essence, employing Don Ihde's (1974) theory of the field of vision and Husserl's (1931) description of the unreal to provide explanation of what occurs. Part II examines how set construction is used to perform variations on what I perceive in the field of vision, and how composition can enact a further transcendental epoché.

Part I: Observations

My studio, Unit 119, is one of ten business spaces on the second floor of an office block in Wincolmllee, an industrial area in Kingston upon Hull. The corridors are predominantly painted magnolia, as are the rooms, which contain basic office furniture, ordinary doors, double-glazed windows and fluorescent strip lights. The building bears evidence of the adjustments made by various occupants over the years such as ill-fitting partition walls, wiring alterations,

disused heating vents and fading signage. Unit 119 resides up a set of stairs, at the end of a corridor and comprises of a small entrance chamber, a large main room divided into two studio spaces and a smaller room that I occupy. It is an empty, undisturbed place, which is mainly silent other than the background noise of the adjoining streets and offices. My aim at the outset of this project was to use stop-frame to depict my direct observations of light and form within interior spaces. I chose the studio as subject matter because I was there most days and I had free access within it to observe as I wished. My normal experiences of Unit 119 were mainly in what Husserl would call the natural attitude; I used the rooms to work on the various stages of the stop-frame process and would not generally pay close attention to the space and objects other than for their utilitarian function. However, when I spent time contemplating the studio, I could ‘abstract’ from this everyday experience, my perceptions would alter and the form and beauty of the rooms would become apparent. These moments of detached observation became the subject matter for my stop-frame phenomenological investigations. Mainly they involved still, unmoving objects but occasionally I registered subtle movements such as a flickering light, a blind moving near an open window or shifting daylight due to passing clouds and shifts in light and shadow. I no longer perceived exact detail, as my focus would widen across the entire visual field. The space itself flattened into a two-dimensional image of form, repetition and colour. My experience of time altered and it was difficult to measure exactly how long each observation lasted. Eventually my natural attitude would reassert itself or the moment would be broken by an external factor. These observations, though pleasurable and concerned with aesthetic beauty, were also slightly strange in that I was experiencing the familiar studio

space from a subtly altered, detached viewpoint, which gave them an uncanny feeling.

Aesthetic Beauty

The notion of beauty is a subject of considerable debate in philosophy. Herbert Langfeld states that:

Philosophy must decide whether beauty is subjective, that is merely a creation of the observer – something entirely mental, or whether it is objective, and as such an intrinsic characteristic of the object, and if the latter, whether it is entirely independent of the mind – an attribute of things which would be present even if there had never been a mind to experience it. (1920, p.15)

Steve Odin proposes that the notion of beauty as either inherent to the object or created by the mind is an outdated approach:

The modern approach describes beauty in terms of a correlation between the aesthetically valuable quality of the object and the contemplative attitude of psychic distance adopted by the subject ... Beauty is not to be understood as a quality inherent in the aesthetic object, therefore, since it also depends on the attitude of the beholder. The experience of beauty is constituted not only by the thing that is seen but also *how* it is seen. (2001, p.8) [emphasis in original]

Odin goes on to argue that aesthetic interactions with the world require the adoption of a specific attitude of disinterest or detachment by the observer.ⁱ

Edward Bullough details a form of this attitude, which he names *psychical distance*. He uses the example of experiencing a fog whilst at sea to explain the change in approach to the world that this variety of aesthetic contemplation presents:

Abstract from the experience of the sea fog, for the moment, its danger and practical unpleasantness ... direct the attention to the features 'objectively' constituting the phenomenon - the veil surrounding you with an opaqueness as of transparent milk, blurring the outline of things and distorting their shapes. (1912, p.88)

So, though we might be in imminent danger it is possible to detach from a situation and examine the aesthetic qualities of a phenomenon. Being in a perilous sea fog is obviously a very extreme example of being able to detach from the practicality of a situation and appreciate its beauty, but this distancing or detachment can equally be applied to more mundane situations. Robert Morris Ogden argues that 'There should be ... nothing in all of human experience toward which one can not maintain an esthetic [sic] attitude' (1905, pp. 411-412). So, anything, no matter how plain and ordinary, can be observed with an aesthetic attitude and beauty can be found. It is in this area of mundane beauty that my observations of the studio reside.

Aesthetic Distancing and the Epoché

The detachment involved in aesthetic contemplation is similar to the act of bracketing carried out in the transcendental epoché. Bullough comes close to describing the process in this summing up of aesthetic distancing: 'Thus, in the fog, the transformation by [Psychical] Distance is produced in the first instance by putting the phenomenon, so to speak, out of gear with our practical, actual self; by allowing it to stand outside the context of our personal needs and ends' (1912, p.89). So, we place things out of gear with the practical self during aesthetic contemplation, which closely mirrors the disconnection from natural

everyday assumption in the transcendental epoché. Steve Odin further details a history of aesthetic detachment throughout philosophy before explicitly highlighting the similarity between the transcendental epoché and aesthetic distancing. He argues that the appreciation of aesthetic beauty mirrors the intentional noematic structure in that a noesis (the detached attitude) engages with a noema (object in the world) and as such:

The act of putting the phenomenon “out of gear” by insertion of aesthetic distance is thus parallel to the phenomenological act of *epoché*, which suspends, neutralizes, switches off, brackets, and holds in abeyance all practical, cognitive, and utilitarian concerns towards the aim of providing an objective description of events through an impartial attitude of disinterested observation. [emphasis in original] (2001, p.178)

In summary, Odin contends that the detachment in the aesthetic attitude removes all judgements, allowing the essence of a phenomenon to be viewed, in the same way that bracketing in the transcendental epoché removes all judgements and allows the essence of a phenomenon to be revealed. Effectively, they show us the same thing: the world in its essence. It is my argument that the contemplative, detached observations I carried out in my studio were aesthetic experiences and, following Odin’s theory, a transcendental epoché was enacted during them.

The Field of Vision

Due to the nature of these experiences (the removal of detail and the flattening out of form and colour as previously described) it is my argument that this aesthetic epoché is carried out on my visual perception. Maurice Merleau-Ponty suggests that visual perception in its essence lets us see the world as ‘a mass

without gaps, a system of colours across which the receding perspective, the outlines, angles, and curves are inscribed like lines of force' (1964, p.15). He describes a liminal period when perception begins to organise these forms and colours and provides an 'impression of an emerging order, of an object in the act of appearing, organizing itself before our eyes' (1964, p.14). I propose that in my aesthetic, epochistic observations of the studio (the flattened forms and colours) I experienced visual perception in its essence, before the natural attitude emerged and organised my visual field. Don Ihde (1974) offers a Husserlian phenomenological description of both the noesis and noema of the field of vision. Using the later philosophy of Martin Heidegger he argues for a wider visual field that takes in the whole expanse, the boundary and beyond of the visual field rather than just the centre. He offers (1974, p.24) this diagram to illustrate the four elements of the visual field:

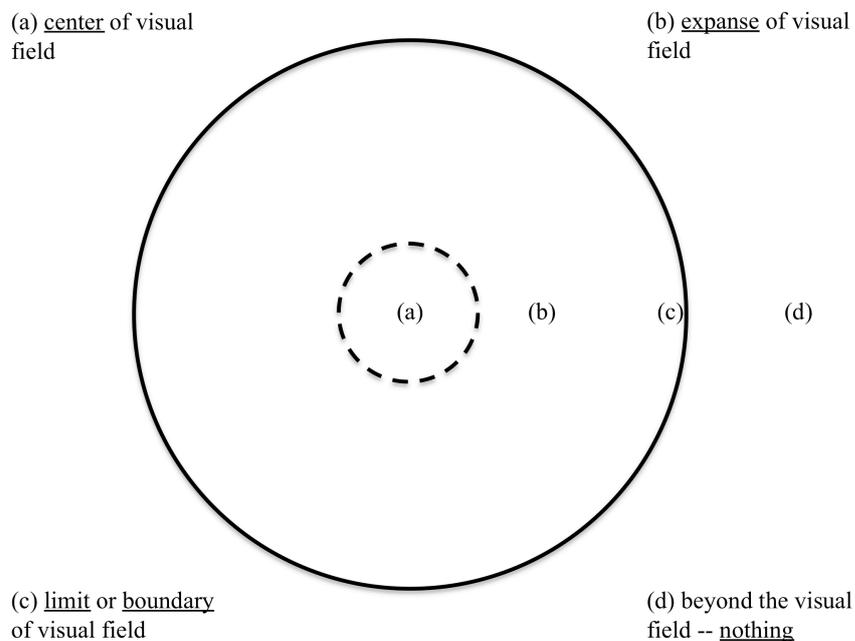


Figure 13. The field of vision from Don Ihde (1974)

Ihde proposes that in everyday life we look out at the world and within the field of vision before us, we naturally focus on something. This is the centre of vision (a) and, in time, we may notice a background (b) that accompanies this central focus. We realise that (a) always exists within (b). Then if close attention is paid we might also become aware that (a) and (b) exist within a boundary (c), outside of which nothing (d) exists. He argues that from here we might offer a phenomenological description of the visual field, which might include detailing the clarity of what appears within the field (noema) and exploring the act of focusing or how we take in a panorama. This would essentially be detailing (a) and (b) and how we engage with it, but this would neglect our full field of vision which also encompasses (c) and (d). We would remain describing merely the natural standpoint without performing variation and getting to the true essence of the field that includes (c) and (d). Discussing Ihde's thesis, Steve Odin proposes that a phenomenological investigation allows both the foreground and background to be examined as equal within our viewpoint:

Through sedimentation we habitually constitute the perceptual field so that objects in the foreground are dominant and the horizon in the background is recessive. With the phenomenological technique of "fantasy [eidetic] variation" in imagination, however, one deconstructs the sedimented focal object and reconstitutes the perceptual field by a gestalt switch from foreground to background. (2001, p.47)

Ihde goes on to offer phenomenological description of the boundaries (c) and beyond (d) as part of the fully inclusive field of vision. Firstly, he examines the noema, stating that the two furthest elements of the visual field exist as a horizon which act 'First as a limit or border, (c) on the diagram, and secondly as the non-

present (d) which also relates in some implicit sense to the field presence' (1974, p.26). Ihde argues that this nothingness, though difficult to describe, is present in the horizon as something that 'surrounds and situates our visual field' (1974, p.27). So, through phenomenological investigation we can access the essence of the visual field: a reconstituted visual perception, which does not automatically mean objects in the foreground are our dominant focus. Interestingly, he describes the noetic part of our intentional engagement with the visual field (the equivalent noesis) as taking an attitude of 'waiting ... [an] openness towards what is eventually given' (1974, p.27) which Odin argues is similar to Heidegger's notion of 'Gelassenheit' or 'letting be', which is proposed as 'a nonfocal exercise whereby one becomes detached from already sedimented focal objects and is released into the openness of being at the outermost periphery of the visual field' (2001, p.47). The notion of 'letting be' is proposed by Odin as a form of artistic detachment akin to Bullough's psychic distance, which I previously explored as a form of the epoché. So, when we approach the visual field with this attitude Odin argues that it allows us 'to apprehend the pre-reflective presence of a thing' (2001, p.49). Like aesthetic distancing then we can say 'letting be' enacts a change, a removal from our usual everyday perception of phenomena and this can work as an equivalent of the epoché, allowing us to access visual perception in its essence, as a complete field of vision.

I propose that in my detached observations of Unit 119 I experienced visual perception, as Ihde proposes, in its essential form across the entire field of vision. As I have described my focus decentred and detail was lost from the centre of my field of vision, whilst the previously ignored background came to the fore. There

was no distortion or exaggeration of what I perceived; the studio manifested itself to me as simple, almost flat, form and colour. These observations were the essence of my visual perception experienced before the natural attitude fully organised and focused my thought.

The Irreal

The aesthetic epoché has a key difference to Husserl's theoretical epoché. In the theoretical approach the practitioner considers a previous experience that took place in the natural attitude and works back through the phenomenon in question, bracketing all the assumptions of the natural standpoint and arriving at the irreal. However, the aesthetic version allows the observer to directly experience the bracketed phenomenon in a *lived* epoché. For a brief moment during contemplation the observer is removed from the assumptions of the natural standpoint and the phenomenon is seen directly in its essence. Edward Bullough describes aesthetic detachment as taking on a 'strange solitude and remoteness from the world' (1912, p.89). This feeling of strangeness when perceiving the world in this familiar yet subtly altered manner became part of my observational experience. The experience of these essential moments of perception during the epoché is uncanny. Husserl describes the world of essences revealed by the epoché as irreal. The transcendental realm of essences is a space or viewpoint in which we can see phenomena without the assumptions and theories of the objective world. He argues that:

the phenomena of transcendental phenomenology will be characterized as non-real (irreal). Other reductions, the specifically

transcendental, “purify” the psychological phenomena from that which lends them reality, and therewith a setting in the real “world”. Our phenomenology should be a theory of essential Being, dealing not with real, but with transcendently reduced phenomena. [emphasis in original] (1931, p.44)

Husserl uses irreal and non-real here as the same. However, Vivian Sobchack offers a more nuanced reading of the irreal in relation to live-action film that further helps to explain the nature of the irreal essence world. She differentiates between not real and irreal, arguing that not real:

Is clearly contrasted to our cultural and historical sense of what constitutes the real (as in a patently “impossible,” “fantastic,” or even “implausible” fiction), the irreal is not contradictory to the real but, rather, contrary to it. Which is to say that the irreal is not judged *against* the real. In our relations to the irreal we do not first posit real existence so as to then make a judgement about the reality of what we see; instead, the real is “bracketed” and out off to the side as a noncriterion of the work’s meaning, coherence, or plausibility. [emphasis in original] (2004, p.258)

In this light, phenomenological investigation begins in the real world (we describe a phenomenon exactly as it was given to us) and we then bracket assumptions of reality, leaving the irreal phenomenon. This is not a contradiction of the original, ‘real’ phenomenon; Sobchack argues the irreal is not fantastical or implausible; it is still the initial phenomenon in question only it is seen without judgement on reality. What phenomenology allows is access to a pared down, essential version of it, the same phenomenon but seen from an altered viewpoint, nothing is changed, made unreal or fantastic yet equally we are not tied to the notions of objective empirical reality of the experience in the natural standpoint. Empirical reality and the assumption of an objective world are bracketed and all that is considered is exactly what was given in the

phenomenon. During my aesthetic, epochistic observations I experienced visual perception in its essence, nothing altered about the world as such, but my viewpoint was altered; it was the familiar world made subtly unfamiliar. Removing the assumptions of reality, this altered, irreal viewpoint of the familiar world can be described as uncanny.

The Uncanny

My observations from the irreal viewpoint have an uncanny quality. Ernst Jentsch describes the word uncanny (or *unheimlich*) as expressing a moment when someone is ‘not quite “at home” or “at ease” in the situation concerned, that the thing is or at least seems to be foreign to him’ (1997, p.8). I propose that the experience of the lived, aesthetic epoché is uncanny in three ways. Firstly, Nicholas Royle echoes Edward Bullough’s previously detailed thoughts on “strange solitude” when he states that the uncanny can arise from ‘something strangely beautiful ... It can involve a feeling of something beautiful but at the same time frightening’ (2003, p.2). During the observations the beauty of the simple form and colour becomes apparent to me, which is simultaneously enjoyable and slightly unsettling. Secondly, in bracketing the natural attitude, the lived epoché reveals the normally hidden essence of our conscious experiences of the world. Sigmund Freud quotes a definition of the uncanny that argues the sensation can be felt in a situation where the ‘secret and hidden has come out into the open’ (2003, p.132). During the lived epoché I experience a disconcerting sensation that can be attributed to the realisation of this usually concealed basis of conscious experience. Thirdly, Royle argues that the uncanny:

is not simply an experience of strangeness or alienation. More specifically, it is a peculiar commingling of the familiar and unfamiliar. It can take the form of something familiar unexpectedly arising in a strange and unfamiliar context, or of something strange and unfamiliar unexpectedly arising in a familiar context. It can consist in a sense of homeliness uprooted, the revelation of something unhomely at the heart of hearth and home. (2003, p.1)

Unless we are asleep, imagining or recalling past events, whilst we are in what Husserl calls the natural attitude, our consciousness is engaged with the world through visual perception and the field of vision. It is almost a default position and is so familiar to our everyday acts that it is taken for granted. The lived epoché removes me from this natural attitude and I experience the world of essences, which is very similar to the visual perception of the real world but crucially there is a slight shift in my viewpoint. Certain elements are bracketed off and the experience becomes what Husserl calls unreal, a pared down version of the real. They are moments in which my usual perception of the world is made strange; unreality commingles the familiar viewpoint with a similar, but ultimately unfamiliar one. It is the subtle, creeping feeling of minimal difference that leads to the uncanny sensation. This combination of elements creates an element of the uncanny that resides alongside the experience of perception in its essence.

Stop-Frame as Phenomenology

As stated previously, the observations I make in the aesthetic epoché are the subject matter for my stop-frame phenomenological description. Mario Perniola

highlights the similarity between artistic distance and the transcendental epoché in the same manner as Steve Odin but also places Bullough's theory within a practical, artistic process:

for Bullough, such "distance" is an essential aspect not only of aesthetic experience but also of artistic activity. He states: "distance is a factor of all art." Thus he accomplishes a very important shift from the attitude of the "disinterested spectator" (according to Husserl's watchword) to the "creative act" involved in artistic production. Artistic distance is already a sort of epoché, which is expanded from the theoretical and speculative field to the active and practical working of the artist. (2011, p.163)

It is my contention that Perniola is wrong to say that the *aesthetic epoché* is an expansion into the practical; like bracketing, an artist's detached perception of a subject is theoretical rather than practical. The practicalities of the artistic process do not begin until an attempt is made to capture that perception using a particular medium. If we consider the whole of Husserl's phenomenological process as an equivalent to artistic production then, *eidetic variation*, the next stage after the transcendental epoché, is comparable with the experimentation and gradual shaping involved in creating an image and would take phenomenology into the practical realm. Dermot Moran explains eidetic variation is 'where we take aspects of our original intuition and substitute parts in a manner which allows the essence to come into view and anything merely contingent to drop away' (2000, p.154). An artist might try numerous different variations until a composition close to their original experience begins to emerge. As previously stated in Chapter 1, John B. Brough argues that the process of making films is akin to variation in that the maker can 'hone the phenomena and pare away the incidental to let essence shine through' (2011, p.198). I contend

that the careful creation and consideration involved in any visual, artistic medium is a form of imaginative variation and is a working towards of the essence of an artist's particular perception. The subsequent final pictorial image of the essence also provides an alternative mode of phenomenological description to the written method proposed by Husserl. Again, as quoted in Chapter 1, Mark Wrathall argues that the phenomenologist's aim is 'to direct our attention to the constitutive structures of such activities [the experienced phenomenon], whether through an assertoric description or another mode of indication – for instance, the poetic or the *pictorial*' [emphasis added] (2011, p.10).

I propose a complete practical artistic phenomenological process in which aesthetic distancing provides a starting transcendental epoché, before the practical, creative stage acts as a form of eidetic variation, resulting in a visual pictorial description. This might be applied to any visual, artistic medium but I will examine how my *distilled* stop-frame animation practice offers an ideal method to carry out practical phenomenological investigation. The process begins with the aesthetic transcendental epoché of my observations. From here, I use set construction to perform visual eidetic variations and pare down my unreal perceptions of the studio.

There are two filmmakers who have influenced this strand of my research: Andrey Tarkovsky and Yasujiro Ozu. Both Tarkovsky and Ozu depict extended, contemplative moments of stillness in their films, which bear resemblance to the *distilled* sequences I have created during these investigations. Though neither

filmmaker specifically intended to work phenomenologically, certain elements can be discerned in their approaches to the medium, which bear out Brough's, Wrathall's and my own interpretations of filmmaking and stop-frame as a means to perform phenomenology. Using language that clearly resembles Husserl's, Gilles Deleuze describes the subject matter in Ozu's contemplative sequences as 'the ordinary [and the] banal' (2005, p.12). He goes on to state that these are moments of 'disconnection ... [that] reach the absolute, as instances of pure contemplation, and immediately bring about the identity of ... the subject and the object, the world and the I' (2005, p.15). So, we can discern hints of a phenomenological investigation here: the disconnection of the epoché, the aim towards the absolute essence of the experience and moments of pure contemplation. Tarkovsky can be interpreted in a similar way. He believed that at its basis 'the image in cinema is based on the ability to present as an observation one's own perception of an object' (1986, p.107). He links art and film as the means to get to a 'truth which is hidden from us in our positivistic, pragmatic activities' (2006, p.37). In order to arrive at this truth Tarkovsky suggests that the filmmaker 'cuts off and discards whatever he does not need, leaving only ... what will prove to be integral to the cinematic image (2006, p.64) and describes the essences that remain in the final image as 'the ideal ... [the] absolute truth ... the infinite' (2006, pp. 36-37). His aims and beliefs mirror the phenomenologist's in that he wants to examine observations of one's own perceptions of objects in the world, that the truths of these perceptions are hidden by our scientific and everyday activities within the world and the essences of these perceptions can be revealed through a process of paring down and variation.

Part II: Set Construction as Eidetic Variation

The investigation into using stop-frame animation as a means to perform phenomenology begins with the aesthetic observation of my studio space. As previously detailed, in my everyday engagements with the studio, I would automatically focus on details in the centre foreground of my visual perception and the clarity of anything in the background was reduced. This is a general attitude in which humans function in the world. When I aesthetically observed phenomena within the studio I entered an altered mindset, becoming detached from my usual perception. I was no longer focused on an object at the centre of my vision and foreground and background were received equally across the visual field. Specifically, this equality was registered as the detail at the centre of vision slightly losing clarity and the background expanse becoming more focused. For the short period of the observations, details were not fully perceived; it is not that they were blurred, rather that they receded into the overall structure. Form and colour were maintained and I perceived the visual field in a gestalt sense, as a whole rather than as specific elements. In these moments my perception would subtly fluctuate between the two states as the usual organisation of perception sought to emerge from the basic structures. When an observation was finished I would document the conditions in the studio. The notes did not detail my specific interaction with the studio; rather they would record only basic conditions so I would have a reference point to each specific observation as I worked through set construction, composition and frame-capture. This was necessary due to the time consuming nature of the stop-frame process, which has an extended period of creation in comparison to written,

theoretical phenomenology (for example, set construction took four years in total and some observations were made very early on). I built up a series of these documented observations over the time I was in the studio to use as the basis for animation. I would refer back to the documents during set construction and then again during stop-frame capture as I came to recreate each specific observation. The following is an example of a documented observation used to create a sequence (Appendix 1.35):ⁱⁱ

Observation: 15:14, March 18, 2012

Place: Building entrance

Subject: Sunlight through the window above the main doors

Viewpoint: Facing the main doors from the foot of the stairs

Light: Sunlight seen through the window. All interior lights are turned off.

Furniture: One of the double doors is open

Movement: None

Sound: General ambience, muffled noises from the other offices in the building and traffic noise

Approximate Length of Observation: 1 minute

Photograph:



The process of creating the sets allowed me to recreate the essence of visual perception I had experienced during the aesthetic epoché. The studio manifested itself to me in these moments as simple, almost flat, form and colour, so during construction I began to perform variations that examined this: removing detail, blocking out colours and allowing what was inessential to the experience to fall away. Figure 14 shows one of my early sets, depicting a ventilation shaft in the corner of the main studio room. As explained in the introduction, during the initial stage of construction, I carefully measured out and tried to recreate every detail, which in this instance included the grate at the bottom of the shaft.



Figure 14. A test photograph of the set with the detailed grate

This image did not visually correspond with my original experience. Figure 15 shows the same set after I had started working back through and simplifying each form. In my initial observation of this shaft I had not in fact registered the detail of the slats completely, the panel was merely a rectangular form in my perception. I removed the slats from the grate and it became an equivalent blank rectangle in the set.



Figure 15. A test photograph of the set with the simplified grate

This process carried on throughout construction, I would reference an observation, precisely measure the forms involved, work out which details did not visually register in the original experience and then proceed to build only basic forms. No intricate detail was included. Basic shapes and colours were not altered because though details did not register overtly, underlying structures were perceived as normal. The resulting set would be test photographed and adjusted until I felt that the image matched the observation. It became clear on viewing the results of this new approach that the minimal structure offered a closer depiction of the detached, simplified, though not exaggerated, shifting visual perceptions I experienced during my observations. Though vastly reduced in detail the sets still maintained the basic elements of *distilled* stop-frame: they

could be controlled, were three-dimensional and would register on camera as such.

Though most elements of detail were taken out, a phenomenological description should include accounts of variations and how the philosopher worked towards the final essence. As such, I have left elements of detail from the first set building stage within certain parts of the set; for example, Figure 21 shows a test photograph of the toilet sink set. Some detail has been removed, such as taps, plugs and paint on the pipe in the centre of the sinks, but the soap holders and some circular tap covers on the sinks themselves have been retained in the final animated sequence. Though most of the early sets have been discarded, leaving small areas of detail in place acts as a visual reference to the process I went through during this stage.



Figure 21. A test photograph showing the toilet sink set with some, but not all, detail removed

The Set Within the Set

Richard Schechner's notion of the limen as a ritual space has previously been discussed in relation to the framing of my actions during the stop-frame process. Further to this, Schechner also proposes the limen as an empty, in-between space in which anything is possible. He says that 'In ritual and aesthetic performances, the thin space of the limen is expanded into a wide space both actually and conceptually' (2006, p.66-67). As previously described my studio is a liminal space and at its basis any artistic studio might be thought of as a limen; they are small spaces that are conceptually expanded into worlds often far beyond their actual borders. During the eidetic variations of set construction, an inverse limen came into effect: the space began to turn in on itself as I performed the ritual actions of stop-frame. Initially, bits of set building material began to fill the space (Figure 16).



Figure 16. A photograph showing the real studio filled with set building materials



Figure 17. A photograph showing how parts of the set began to fill the real studio space

As I worked, the completed pieces of the set started to accumulate (Figure 17) and the studio limen expanded into itself on a miniature scale. I carried out set construction simultaneously with the aesthetic observations of the space and due to this both the set materials and the subsequent finished pieces of set appeared in some of my observations. This meant that even smaller scale versions of the materials and the set elements were required to exist within the first set in order to recreate the conditions of the observations. Figure 18 shows a frame from a sequence (Appendix 1.8) based on an observation of my room, which included some elements of the set under the desk. The smaller set was included in the composition at the bottom right.



Figure 18. A frame from Sequence 8 (Appendix 1.8) that includes the smaller set pieces within the first set at the bottom right

My presence and the results of the ritualistic actions involved had begun to shape the environment, which in turn then re-shaped the stop-frame rituals. Catherine

Bell suggests that the relationship between practitioner, ritual and environment is an interdependent one:

The most subtle and central quality of those actions we tend to call ritual is the primacy of the body moving about within a specially constructed space, simultaneously defining (imposing) and experiencing (receiving) the values ordering the environment. (1997, p.82)

She argues that the practitioner is often unaware of how they shape the actions and environment of the ritual process, in the assumption that they are merely receiving or carrying out prescribed actions. The ritual space and the actions carried out within it are open to possibilities, and through practising ritual the performer can actually begin to influence and define the actions and the environment itself.

The smaller sets were accurately measured and constructed to a 16 cm to 1/16 of an inch scale and actually functioned as sets in their own right. Furthermore, they are perfect examples of the *distilled* stop-frame set I had arrived at during the investigation of the medium, comprising of three-dimensions, they allow the animator an element of control and have just enough detail to register on camera as three-dimensional spaces. When placed together and photographed these smaller pieces allowed me to depict a further simplified version of the studio space. Catherine Bell argues that:

The creation of a miniature garden is a ritual-like action that uses a vast system of correspondences to establish a bounded space that invokes the interrelationship of the microcosm and the macrocosm, enabling one either to ponder their intrinsic identity or to attempt to

affect the balance of one by manipulating the balance of the other.
(1997, p.159)

Constructing and creating a miniature space can be argued as a process that allows the practitioner to think about the intrinsic identity of the world to perform phenomenology. Gaston Bachelard argues that ‘To have experienced miniature sincerely detaches me from the surrounding world ... Miniature is an exercise that has metaphysical freshness; it allows us to be world conscious at slight risk’ (1994, p.161). The detached or fresh view of the world that the miniature offers can be interpreted as an altered viewpoint equivalent to the epoché. Construction of the miniature space is a literal reduction of the world that allows a figurative, phenomenological reduction or detachment from the assumptions of the everyday world.

It is my contention that the smaller set, alongside being the essence of a stop-frame set, also allowed a space where, as Husserl proposes, I could move from the description of the original conscious experience of the studio towards a wider universal essence of visual perception itself. This is illustrated in a sequence (Appendix 1.36) that depicts an observation of corridor light seen through the main studio doorway (Figure 19).



Figure 19. A frame from Sequence 36 (Appendix 1.36) of the smaller set depicting an observation of light and space

A depiction of this observation using the normal set would describe the essence of my original perception with its limited detail across the visual field. Using the smaller set removed most of the aspects of the original observation and offered a more generic description of my perception of light and form. It allowed a shift from a visual description of the specific perception of the studio towards a visual description of the universal essences contained within it. So, in line with Schechner's definition, after the inverse expansion into itself, the studio limen ultimately expanded conceptually into the wider essences of visual perception.

Composition as Epoché

As explained previously, each observation of the studio was a period in which I become aesthetically detached from my usual engagement with the world and

experienced a lived version of the phenomenological epoché. As I observed, my everyday attitude was put to one side and I became solely concerned with what appeared to me in visual perception and the visual field. My normal utilitarian focus on the world receded and I could see the particular aspect of the studio I was observing in its essence, within my entire field of vision. My perception of the studio in its essence revealed underlying structures of form and colour hidden in everyday experience. In each observation I would notice repetition, pattern and balance of form and colour within my field of vision. This provided an element of pleasure to the purely aesthetic, reduced viewpoint. I made numerous observations of the studio space over four years and once the set was complete I began to animate each observation in turn. I would select an observation, study the documentation, put together the relevant set elements, position lighting in order to simulate the original conditions, place the camera along my original eye-line, connect the camera to my computer and open the live view programme in order to see the camera's viewpoint on-screen. Training the camera onto the set, allowed me to see it with fresh eyes and with the everyday world barred. The first stage of documentation was then referred to as I adjusted the image on the computer screen.ⁱⁱⁱ I would carefully refine the camera position and set until I fixed upon a composition that reflected my original observation of repetition, pattern or balance of colour and form. The image was required to create the same sensation of aesthetic pleasure I experienced in the original observation. Figure 20 shows a test photograph based on an observation of the corner of the main room in the studio.



Figure 20. A test photograph of the main room of the studio set

As I experienced the original phenomenon I perceived a repeated long rectangular form that occurs in the white wall on the left, the window, the magnolia wall directly next to it, and then the heating duct near the middle of the picture. The white wall and the heating duct also seemed to frame the light source of the window. The composition was aimed at describing this underlying structure: the simple, repeated forms and the framed light source as it appeared in the essence of my perception. As in the set construction stage, the variations I performed in carefully refining and composing the image remain present in certain sequences. At the beginning of Sequence 4 (Appendix 1.4) I left in the frames I captured as I gradually composed the image. This registers as several slight shifts in the camera position before the image settles on the final composition. In Sequence 36 (Appendix 1.36) similar shifts in composition occur at the beginning and mid points of the sequence. Sequence 26 (Appendix 1.26)

more openly highlights the composition of an image, using the frame-by-frame adjustment of the set to create a camera pan across the room before settling on a final position.

Whilst the phenomenological process is carried out Husserl argues that we must try to maintain the epoché in order to guard against any naturalist assumptions re-emerging. The composition stage offers a means to do this. Although the set is created with my observations in mind, it exists in the real world as a miniature, something far away from my original experience in the world. It is through the camera, when the set fills the frame that I first see the space as being close to my original phenomenological observation. A subtle change takes place, the clear perception of the space as a miniature in its real world context recedes and the possibility of it as a life-size space emerges on the screen.^{iv} Gaston Bachelard suggests that:

The man with the magnifying glass takes the world as though it were quite new to him. If he were to tell us of the discoveries he has made, he would furnish us with documents of pure phenomenology ... The man with the magnifying glass – quite simply – bars the every-day world. He is a fresh eye before a new object. (1994, p.155)

So, the magnifying glass acts in a similar manner to Andre Bazin's interpretation of the camera (see Chapter 1), in that it is an apparatus that can perform an epoché and bracket our usual way of engaging with the world. However, unlike Bazin's camera, Bachelard acknowledges that the practitioner is guiding the magnifying glass and can use it as a tool to perform phenomenology. In the context of stop-frame animation the camera acts as a magnifying glass through which I can begin to see the specifically created set as a visual,

phenomenological description. This viewpoint of the miniature space exists only through the camera lens; it is the world through fresh eyes with the assumptions of the everyday world barred. The detail-less space of the constructed set is seen through the camera in the same manner that the original, detached observation of the studio was perceived through my visual field. It offers a document of pure phenomenology, the world seen anew without everyday assumptions, in its essence.^v

So, in summary of the process so far, an aesthetic epoché has been performed as I observed the studio, set construction allowed me to perform eidetic variations on my observations towards the essence of perception across the visual field. Using the camera for the composition stage has been shown to maintain the epochistic attitude, whilst also allowing the beginnings of frame-capture and animated description.

ⁱ Odin outlines the history of artistic detachment in Western philosophy, stating that:

while ancient and classical theories define beauty as an attribute of the object, like harmony or symmetry, the Copernican Revolution inaugurated by Kant's transcendental idealism underscores the aesthetic attitude of the subject. "Aesthetic attitude" means that *acts* or psychological states of subjects are involved in the perception of beauty, so that a person can do something – like perceiving "disinterestedly" (Kant), exercising "detached contemplation" (Schopenhauer), inserting "psychic distance" (Bullough), "recollecting powerful emotions in tranquillity" (Wordsworth), holding "intransitive attention" (Vivas), or "seeing-as" (Aldrich).⁷ [emphasis in original] (2001, p.174)

ⁱⁱ Each individual documented observation and its corresponding sequence in the final animation is included in the appendix.

ⁱⁱⁱ I am able to carefully refine each image as an unmoving composition because I do not have to consider camera movement during this stage, as my position was static during each observation.

^{iv} Live-action film and photographic images are generally assumed to be life-size. Even though a photograph of a person might be small, we don't see the person as a miniature. So when we see the miniature set through the camera lens, it is assumed to be life-size.

^v The screen itself though can never be an exact recreation of my field of vision, which is constantly shifting at the edges and is of indeterminate shape. I chose the screen size as 4:3 rather than 16:9 because in tests the width of the widescreen image seemed excessive and lacked height. Though it has a defined edge and rectangle shape the 4:3 image is the closest match to my perceptions. However, it clearly has edges and the field of vision is cropped.

Chapter 5

Animated Description

My experiences of the studio are temporal experiences in which my perception of the visual field subtly alters as the underlying structures of form and colour become apparent. These observations are not an appreciation of temporality itself; rather they are perceptions, in their unreal essence, that necessarily occur over time. My aim then is to offer phenomenological description of the temporality of spatial perception as I experienced it. The description has already partially been completed over the previous two stages, the simple form and colour of my spatial perceptions have been recreated during set building and the space has been organised into an image that exactly describes the specific viewpoint in composition. This chapter proposes a new theory of the animated uncanny based on the *distilled* stop-frame capture process, explores how the resulting *distilled* sequences reference the reflexive nature of my practice through *mise en abyme*, before finally examining the nature of the final visual description and how it captures the uncanny nature of my perceptions.

Frame-Capture

As previously explained, to capture an observation I would position the set, light it, compose an image and then I would begin frame-capture. Individual frame-capture is usually used to allow the animator to make incremental adjustments to a puppet or object, in between frames. When these frames are placed in sequence and projected they depict continuous movement of the usually inanimate figure.

Stop-frame is traditionally associated with this form of overt movement. However, my practice mainly depicts passing time within the interior architecture of the studio, rather than overt movement. It is important here to briefly outline how we perceive movement and passing time in relation to stillness in everyday life. Robin Le Poidevin (2011) suggests that ‘we do not perceive *time* as such, but changes or events *in time*’ [emphasis in original]. So, in effect, perceiving change allows us to register the passage of time. This perception might include information from any or all of the five senses. Visually we appreciate temporality through movement. This movement might be overt like a person moving dramatically in front of us, or subtle like a curtain shifting near an open window; further to this, our own head and eye movements can add to the perception of change. Alongside the visual elements, consciousness and the other senses also combine to create an overall sense of change and passing time. In situations such as my observations of stillness within the studio, that are from a mainly fixed viewpoint, and contain no overt visual change in the world or in my own position, I continue to perceive time but logically it must be mainly registered by the other four senses and the temporal nature of my own thought processes. In a predominantly visual medium, utilising only sight and sound, the temporality of a sequence that contains no camera movement or the movement of a subject might be problematic and *should* look superficially like a photograph or freeze-frame. However, it is apparent in sequences of static objects that a sense of passing time remains. David Company states that ‘when asked about the difference between a photograph of a static object and a film of it, Jean Cocteau replied that in the film “time courses through it”’ (2008, pp.17-18). Further to

this, Gilles Deleuze, writing about static sequences in the cinematic work of Yasujiro Ozu argues that:

At the point where the cinematographic image most directly confronts the photo, it also becomes radically distinct from it. Ozu's still lifes endure, have a duration, over ten seconds of the vase: This duration of the vase is precisely the representation of that which endures, through the succession of changing states. (2005, p.16)

The static image allows us to see the photographic basis of live-action film but also highlights the element of change at the heart of cinema that distinguishes the medium from photography. In a static shot of an unmoving subject, we can see time coursing through the image, the temporality of the medium itself, created by the succession of very similar, but changing frames rather than overt change in the world. No projected sequence of a series of frames is ever still, each separate frame of an unmoving subject is slightly different due to noise and dust levels, and when played in succession these subtle differences create a sense of passing time that does not exist in a projected photograph. It might be argued that using stop-frame animation to depict a sequence of stillness is not practical when live-action film can capture this change automatically. However, it is my contention that the individual frame-capture of animation presents a unique sequence of temporality when depicting stillness. It offers a strange flicker, a subtle disjointedness in continuity, and hints of an unseen presence between the frames that sets it apart from live-action film or photography. The key to this lies in the individual capture of each frame. Mark Hutchinson states that:

Animation reverses the usual procedures of filmmaking in one particular way. Animation stills are made rather than 'captured'. That is, with animation each still is, usually, planned and constructed in a

way which is not true for the cine-camera, This is not to say that films are not planned and constructed; but with animation each still is considered, whereas the cine-camera, once constructed and positioned, mechanically produces its stills. (2006, p.11)

Whether I depict movement or not, the temporal sequence is different to live-action film due to the planning, construction and consideration of each frame. In a letter written to Georges Sifianos, Norman McLaren states that: 'What happens between each frame is much more important than what exists on each frame. Animation is therefore the art of manipulating the invisible interstices that lie between the frames' (1995, p.66). The temporal space between frames is where this difference lies with or without the incremental adjustment of a puppet. Firstly, the space between the capture of each frame is enough in itself to create an altered temporal sequence, as stated, dust particles might shift or a light might weaken, creating a slight jump in continuity on-screen. As well as allowing natural change between frames, the space, as suggested provides an opportunity for the animator to manipulate these elements. I can use slow shutter speeds, lengthen the spaces to allow more light inconsistencies or place my hand across the set and displace particles in the air, all of which indicate to the viewer that something different is happening on-screen. However, there is a very careful balance to be maintained, overall continuity must be preserved, so the changes between frames cannot be too large, but there must be enough change to allow for the difference in process to register. It is within this small window of superficial continuity and faintly perceptible discontinuity that the unique temporality of stop-frame exists.

Stop-Frame and the Uncanny

Writing on the uncanny in animation traditionally focuses on the bringing to life of the inanimate. This interpretation of animation has its origins in *On the Psychology of the Uncanny* by Ernst Jentsch who states:

Among all the psychical uncertainties that can become an original cause of the uncanny feeling, there is one in particular that is able to develop a fairly regular, powerful and very general effect: namely, doubt as to whether a lifeless object may not in fact be animate. (1997, p.11)

Jentsch's theory is usually applied to the moving puppet figure or object of stop-frame. Discussing this notion, Maureen Furniss suggests that:

there can be something disturbing or even horrifying in the realisation that inanimate objects could be endowed with life and intelligence ... not all animation creates the sense of the 'uncanny' in the viewer, but it seems as though stop-motion animation is apt to provoke that experience to a greater extent than drawn, painted or most digital 3D animation. The reason is that stop-motion objects – clay, wooden, latex or (pixilated) human – already have a 'real' life status, even before they are set in motion. (2007, p.165)

So, when viewing stop-frame, we know that the object depicted exists in real life and that it is inanimate; the uncanniness occurs because we see the usually still object moving autonomously on-screen. However, this is not the only element that gives a stop-frame sequence its unsettling nature. Interestingly, Furniss includes the pixilation of a human figure as part of her list of real life objects that when animated with stop-frame creates an uncanny sensation, which undermines the theory that it is solely inanimate objects coming to life that creates the effect. It is my proposition that the source of the uncanny actually lies, at least partially,

in the practise of individual frame-capture and not just the object that is animated.

Distilled Stop-Frame and the Uncanny

Individual frame-capture creates an element of the uncanny in stop-frame sequences that do not have a moving puppet or object. Nicholas Royle suggests that 'The uncanny is ghostly ... with a flickering sense (but not conviction) of something supernatural' (2003, p.1). This flickering can be read in the context of *distilled* stop-frame as the literal flickering of the continuous frames in the sequence as well as the ghostly flickering sense of something subtly amiss, something hidden between the frames, that arises during viewing. The shifting dust particles and inconsistent light create the flickering awareness at the back of the viewer's mind of a whole other world and temporality that exists in the spaces, in the shadows of what is seen on-screen. Edwin Carels, paraphrasing Norman McLaren and Jean-Luc Godard, aptly describes animation as 'the dark interval, 25 times a second' (2006, p.15). If we think back to the rituality and repetition of the stop-frame capture process, the dark interval can be read as a liminal space, an in-between space that allows change. Liminality is a recurring theme in *distilled* stop-frame. As described previously, my subject matter, the studio, is a liminal space where empty rooms offer a space for change and creation. Victor Turner defines liminal entities as 'neither here nor there ... betwixt and between ... ambiguous and indeterminate' (1974, p.81). The liminal is a transitional state, which can be applied to my overall process of stop-frame animation in which each stage gradually changed into the next, the final

sequence being deferred as observations, set building, composition and frame-capture slowly came together over four years. Turner goes on to argue that liminality is 'likened to death ... to invisibility, to darkness' (1974, p.81). The animator performs the ritual change as they repeatedly compose and capture each frame within the darkened liminal space. Royle argues that darkness itself is not uncanny:

It is not so much darkness itself (whatever that might be), but the process of ceasing to be dark, the process of revelation or bringing to light, that is uncanny. As several writers have noted, the uncanny seems (at least for Freud) to involve a special emphasis on the visual, on what comes to light, on what is revealed to the eye. The uncanny is what comes out of the darkness. (2003, p.108)

As quoted earlier, Paul Ward states that the viewer is aware that everything perceived on-screen is created 'by the unseen hands of the animator' (2011, pp. 298-299). The viewer does not see the animator, yet they can be conscious of the effect of their actions. The spectator's eye perceives the flickering discontinuity the animator creates within the dark interval. It is in this fleeting notion of the animator that the strange sensation resides; the repetitious moments of emerging, the faint presence glimpsed in the discontinuous movements of dust particles or inconsistent light between frames. Clearly seeing either an actual dark interval or an overtly moving puppet would not offer the same uncomfortable feeling. The dark interval comes to light on the edges of the viewer's consciousness and the animator's presence is fleetingly and repetitively revealed within it, creating an uncanny moment.

Photographic Stillness

As previously discussed, the uncanny in stop-frame is traditionally associated with the animation of an inanimate puppet or object, which means the stop-frame sequences I make, without puppets, do not have this unsettling element. However, animation of the inanimate does actually take place in a different way. Both live-action film and animation involve capturing a series of still frames that when projected in sequence create movement on-screen. This movement and the sense of passing time hide the photographic stillness at the basis of both media. It is in this photographic stillness, and the reanimation of it, that we can find a further element of the uncanny at the heart of my stop-frame sequences.

Andre Bazin argues that the mechanical nature of photographic production provides the viewer of the photograph with a direct, indexical link to the subject that is depicted:

The photographic image is the object itself, the object freed from the conditions of space and time that govern it. No matter how fuzzy, distorted, or discoloured, no matter how lacking in documentary value the image may be, it shares, by virtue of the very process of its becoming, the being of the model of which it is the reproduction; it *is* the model. [emphasis in original] (1967, p.14)

The mechanical transfer of light from the subject, through a lens and on to the negative, allows the subject itself to be frozen in time, the image ‘embalms time, rescuing it simply from its proper corruption’ (1967, p.14). For the viewer, the long-passed subject of the photograph, frozen or embalmed in time, raises the

spectre of death. Roland Barthes discusses the photograph in similar, indexical terms, arguing that:

the *noeme* “That-has-been”¹ was possible only on the day when a scientific circumstance (the discovery that silver halogens were sensitive to light) made it possible to recover and print the luminous rays emitted by a variously lighted object. The photograph is literally an emanation of the referent. [emphasis in original] (1993, p.80)

He proposes that a photograph has a *studium* and a *punctum*. The *studium* is what the viewer is culturally expected to take from the photograph; the photographer intends to represent a specific subject and we as the viewer engage with that subject. The *punctum* is the element of chance in the image; the photographer does not intend everything that appears in front of the lens. As such, Barthes argues that a certain seemingly inconsequential detail can puncture or prick the image and create an emotional response in the viewer unintended by the photographer. The *punctum* also raises the spectre of death in the photograph for the viewer:

In 1865, young Lewis Payne tried to assassinate Secretary of State W. H. Seward. Alexander Gardner photographed him in his cell, where he is waiting to be hanged. The photograph is handsome, as is the boy: that is the *studium*. But the *punctum* is: *he is going to die*. I read at the same time: *This will be* and *this has been*; I observe with horror an anterior future of which death is the stake. By giving me the absolute past of the pose ... the photograph tells me death in the future. What *pricks* me is the discovery of this equivalence. [emphasis in original] (1993, p.96)

Barthes knew that at the point in time of the photograph Payne was still very much present and looking at the photograph he is there in front of Barthes' eyes. Yet, due to the knowledge that he was to be hanged shortly after the photograph

was taken, Barthes was simultaneously aware that Payne was also already dead. Due to the passage of time and the indexical certainty that a subject did once exist in the world, any viewing of a photograph can prick the viewer with the awareness that the subject of the image might now be dead. So, a photograph can create an uncanny sensation because it allows the viewer to see what is dead as present and alive. Laura Mulvey also argues that the awareness of time and mortality when viewing a photograph creates 'intellectual uncertainty' associated with death and the uncanny (2006, p.63). The photograph has the potential to be uncanny because it creates a blurred boundary between what we know to be dead or destroyed and the subject, present before us in the image, reanimated and alive. The punctum of death hovers over the photograph rather than overtly revealing itself, meaning that the viewer fluctuates between the two states of awareness and the uncanny feeling arises from this uncertainty.

For Barthes, the constant movement of live-action film creates a form of engagement that differs from the contemplation of the photograph. Mulvey also suggests that the 'insubstantial and irretrievable passing of the celluloid film image is in direct contrast to the way that the photograph's stillness allows time for the presence of time to emerge within the image' (2006, p.66). So, although the moving image sequence is essentially based on photographs, the overt movement does not allow time to consider what is seen and subsequently the punctum does not occur. In this light the uncanny sensation of viewing the photograph, the dual sensation of death and reanimation that hangs over the photograph would not occur in temporal sequences. However, there are ways in

which temporal sequences can reengage the viewer with their photographic basis and the unsettling nature of the punctum might occur. Mulvey argues that:

new moving image technologies, the electronic and the digital, paradoxically allow an easy return to the hidden stillness of the film frame ... the frozen frame restores to the moving image the heavy presence of passing time and of the mortality that Bazin and Barthes associate with the still photograph. (2006, p.66)

Further to this, Garret Stewart (1999) suggests that within narrative cinema instances such as freeze-frames and the appearance of a photograph within the film space allow the originary photograph at the heart of live-action film to emerge. Mulvey contends that these moments of stillness:

may evoke a 'before' for the moving image as filmstrip, as a reference back to photography ... Although the projector reconciles the opposition and the still frames come to life, this underlying stillness provides cinema with a secret, with a hidden past that might or might not find its way to the surface [but] the hint of stillness within movement, survives, sometimes enhancing, sometimes threatening. (2006, p.67)

David Company argues that an extended sequence of a static subject can give live-action film photographic stillness:

Montage sees the photograph as a partial fragment ... The long take sees the photograph as a unified whole. The shorter a film's shot the more like a photograph it gets, until one ends up with a single frame. The longer the shot the more like a photograph it gets too, the continuous 'stare' of the lens giving us a moving picture. (2008, p.36)

An extended length of shot allows the viewer time with the image in order to engage with the photographic elements of the temporal sequence. Shots such as

these allow us to appreciate the photographic basis of live-action film but can also highlight the essence of live-action film itself. Gilles Deleuze, in writing about sequences of still life in the films of Yasujiro Ozu, suggests that ‘At the point where the cinematographic image most directly confronts the photo, it also becomes radically distinct from it’ (2005, p.16). He argues that in such sequences we can perceive time itself. The stilled sequenceⁱⁱ of changing frames allows the viewer to experience duration but without movement, he states that ‘the still lifes are pure and direct images of time’ (2005, p.17). It might be said then that there is a slippage between the two media in still temporal sequences. The closer the viewer is to photographic stillness during the temporal sequence the easier it is to appreciate pure duration. Stillness and movement become very closely allied. Damian Sutton discusses the close relationship between the photograph and stilled temporal sequences in relation to Deleuze’s interpretation of Ozu. Sutton argues that the photograph creates a feeling of dislocation in time and space for the viewer. This dislocation, the removal of the subject of the photograph from its time and into our own, creates an awareness of death that can be related to the sensation of punctum and death in Barthes’ philosophy. Sutton contends that Ozu’s ‘still lifes’ borrow this sensation from photography and that it is not the movement of cinema that achieves the dislocation it is in fact the presence of the photograph itself:

In mimicking the still image, the stilled image (such as Ozu’s still life shots, but also cinematic landscapes, close-ups, and so on) attempts to find once again the ability to glimpse the unfolding, discomfoting sensations of transience that the photo can achieve. (2009, p.50)

So, the presence of the photograph is central to the sensation of the uncanny in stilled film sequences.

Photographic Stillness in *Distilled* Stop-Frame

In terms of live-action film then, the photograph or frame at the basis of the medium might be referenced in a depiction of a photograph, a freeze-frame or in a rupture in the narrative such as the inserted still life shots of Yasujiro Ozu. These elements are generally used as storytelling devices within an overall narrative and can be interpreted as reflexively revealing the true photographic, static nature of the moving image. My own stop-frame practice references the photographic in its depiction of long sequences of static interiors within the studio set, taken from fixed camera positions. Although the still subject matter is a natural consequence of my observations, I do deliberately foreground the photographic by keeping the camera still and using consistent focus. Further to this, the individual composition and consideration of each frame in stop-frame production further accentuates the photographic nature of the animated sequence in a manner that does not occur in mechanically produced live-action film. The resulting sequences are very close to being freeze-frames but the subtle changes between frames give them a sense of passing time. It is my proposition that the photographic stillness of my work allows the uncanny nature of the punctum to exist within the sequences.

Although Barthes' punctum is discussed in relation to a human figure, Richard Grusin applies it to a sense of loss felt upon viewing William Henry Jackson's

historic photographs of Yellowstone Park, stating that the photograph 'tells the beholder that the photographed object has been and will be no more. From this perspective the archival nature of Jackson's photography already assumes the destruction of the landscape' (1995, p.428). It is my argument that Grusin's sense of punctum at a photograph of a landscape could equally be felt upon viewing frames of the man-made interiors that are my subject matter. A photograph of any environment or object, natural or man-made can inspire a sense of loss. Proposing that *distilled* stop-frame animation can create an uncanny sensation of punctum in a viewer poses a problem: the viewer of a photograph usually has the indexical certainty that the subject existed in the real world, due to the direct, mechanical transfer of light from the subject, through a lens and on to the negative; and an iconic certainty that the photograph resembles the subject, mainly due to the indexical nature of the photographic process. However, the images of my sets are indexical but not in the sense of an ordinary photograph described above. They are images of miniature spaces that are composed on camera in such a way that they create an ambiguous resemblance to a real life-size space. They are indexical but what they iconically resemble in the photograph is not what they are in real life. As described, Barthes' punctum requires the viewer to accept the indexical truth of the photograph and that its subject by virtue of the mechanical process of capture actually existed. In this light, a frame of miniature space presented as life-size might be argued as incapable of creating a moment of punctum in the viewer. However, it is my argument that if the viewer accepts the image at face value as iconically real then the punctum might be felt in the usual way at a potential loss due to the passage of time, and if the viewer is aware that the image is actually of a miniature set

then the punctum would also be felt due to the knowledge that this attenuated, ephemeral space is more likely to be lost. There is one further issue with applying the notion of punctum to *distilled* stop-frame. The punctum has its source in the photograph or frame at the basis of stop-frame, rather than in the perception of passing time. This leads to a question mark about whether I might just project a single frame of the set rather than create duration through successive frames. It is my argument that the temporality, the form of time that stop-frame brings, does add to the uncanny sensation of the *distilled* stop-frame sequence.

The Animated Punctum

In temporal sequences, the viewer perceives duration through movement or change between frames. Christian Metz argues that although movement in live-action film is created by the projection of a series of still frames, the movement it creates is not perceived as indexically linked to past motion:

Because still photography is in a way the *trace* of a past spectacle – as André Bazin has said – one would expect animated photography (that is to say, the cinema) to be experienced similarly as the trace of a past motion. This, in fact, is not so; the spectator always sees movement as being present (even if it duplicates a past movement). Thus, Roland Barthes’s “deliberation of time” – the impression of another time that makes the photograph’s presence seem unreal – no longer functions when there is motion. The objects and the characters we see in a film are apparently only effigies, but their motion is not the effigy of motion – it seems real. [emphasis in original] (1974, p.8)

So, Metz argues that the presence of movement does not allow for the deliberation of time. Perceptually we are in the present so the punctum does not

function. We still know that the objects and characters existed in the past and their motion is a duplicate of a previously carried out action, it is just that the motion is perceived as real because it is experienced in the moment and we therefore do not contemplate its basis in the past. However, as argued previously, in the case of live-action film still life sequences, the photograph and the punctum can resurface in the moment of viewing. It is overt movement of characters and objects that suppresses the punctum. With still life shots there is a form of motion but it is the passage of time, pure duration, as Deleuze suggests, so the viewer experiences this subtle movement as present and real in the moment of viewing, they are still aware of the indexical basis of the images and that what they are viewing has previously occurred, and as such can experience a punctum.

Eric S. Jenkins proposes that the temporality of animation can present another type of punctum. He interprets Barthes' punctum as a sharp effect upon the viewer that transports them into a different frame of mind: 'a detail shoots out and takes us on an adventure, or perhaps ... causes one to consider human mortality ... the punctum alters the perspective, like a hallucination' (2013, p.581). Jenkins highlights that, alongside death, Barthes states that the punctum raises metaphysical questions regarding time and life and it is here that we find animation's punctum. He outlines that the 'this has been' of Barthes' philosophy does not apply to animation. Although the viewer experiences an animated sequence in the moment as real movement, they are aware that the temporality and movement they are perceiving does not have a past existence in the same way it does with live-action film. He argues that:

If photographs portray a “that-has-been” that can lead to the contemplation of time, animation presents a *never-has-been* that seems to live in time ... The photograph embalms the “that-has-been” whereas animation vivifies the *never-has-been*. “Temporal hallucination” fits perfectly. [emphasis in original] (2013, pp.583-584)

The punctum therefore arises from the presence of life, a strange alteration of viewpoint pricked by the sensation of viewing duration and change that never existed. Although Jenkins applies this theory to the overt movement of figures and characters in animation, it can equally be used to explain the punctum that might be felt upon viewing my practice and stop-frame still life sequences. They provoke a dissonance between the ‘never-has-been’ of animated duration and the ‘this has been’ of the photograph, offering a further unsettling sensation of punctum, which combines an awareness of life, death and time. It is my argument that this animated punctum is a key element of the uncanny atmosphere at the heart of *distilled* stop-frame.

Condensed Time

This otherness created by the ‘never-has-been’ of animated time can be heightened during the dark intervals of the frame-capture process. It is my argument that each frame can be thickened and imbued with time in a way that cannot occur in live-action film and does not usually occur in animation. Long shutter speeds make realistic live-action film capture impossible. In live-action film, frames are usually mechanically captured with the shutter open for 1/50 of a second for each frame. In stop-frame, a fast shutter speed might also normally

be used because longer exposures take time and the process is arduous enough anyway without extending it further. However, the dark interval between frames in stop-frame actually allows for any length of shutter speed the animator chooses. If it were practically feasible, we might extend exposure time for each frame to a year and present a one-second animation at the end of a twenty-four year period. At the point of projection, no matter the duration of capture, a frame is reduced to 1/24 of a second. In my practice I used longer exposure times, each frame is not an instant; it is a compression of time into an instant. Speaking of extended exposure photographs Damian Sutton states that: 'We might think of such images as cells of time ... Ultimately, the timed image is a confinement of time and space' (2009, p.58). So, in contrast to the instantaneous snapshot that seems to isolate a single moment in time, the photographic cell confines extended periods of time, several moments within the image. Sutton suggests that 'We see the passage of the photons themselves in these photographs, and it is this passing of time and light, an evanescence from presence to absence, that renders the photograph steadily immobile with the silence of the funerary' (2009, p.58). This passing of photons, the movement of time and light is more pronounced in a long exposure photograph of a live subject, which will show blinking eyes or slight shifts in head movement, but will also show the passage of time in still subjects due to camera movement and natural movement in the world. In my own work, the miniature set is never completely still and slight movements subtle indicate the durative, rather than instantaneous frame. Mary Ann Doane proposes the 'soft focus of the time exposure [that is] a signifier of time's duration, of the time of imprinting that supports the leisure of duration' (2006, p.29) and this duration is 'required to do justice to the peculiar qualities

and textures of light' (2006, p.25). The presence of passing time in the long exposure photograph of a supposedly still subject is at odds with the viewer's usual expectation of photography. Doane states that:

faster shutter speeds enable the division of movement and gesture into their smallest possible increments ... instantaneous photography has been consistently allied with a form of quasi-scientificity, a desire to analyze, dissect and break down movement ... [it has an] uninviting authenticity. (2006, p.26)

We are used to an experience of a single, authentic moment plucked from life and represented in a single, frozen photograph. The long exposure, with its soft focus and blur presents numerous, subtle, translucent moments within a static representation is at odds with our expectation of a photograph as a dissected, single moment. The presence of duration makes the viewing experience strange, the long exposure serves to soften and thaw the photograph and we can sense movement and passing time in a medium associated with the specific instant. Doane argues that it is an image that is 'haunted by the past, by remembrance, by a work of mourning' (2006, p26). In this way the slight blur or softness that indicates the durative photograph is akin to the detail that triggers Barthes' punctum. Using extended exposures for stop-frame animation allows frames that have a temporal depth and intensity. They are not just single moments automatically captured and played in a sequence to create change; they have change and duration within them already. This durative frame when placed within an animated sequence of similarly captured frames accentuates the punctum of Jenkins' 'never-has-been' animated time, not only do we have the movement that has never occurred before in the overall sequence but each frame is also no longer a single authentic moment, rather they are condensations of

time. When contemplating these stop-frame sequences their duration is overtly recognisable as passing time. However, something subtle gradually occurs: the slight blurs and softness of each frame and the inconsistent light and shifting atmosphere that occurs within the extended dark interval become noticeable. The viewer becomes aware that they are experiencing a strange, ‘never-has-been’ temporality that is at once familiar and unsettling. Alongside this, the still subject matter and extended length of the shots allow time to contemplate and the photographic punctum at the basis of the image can re-emerge. Thoughts of passing time and death haunt the sequences. It is in this combination of passing time and stasis that the uncanny atmosphere of my *distilled* animated sequences can be placed.

Irreal Observations Captured Using *Distilled* Stop-Frame

My understanding of the irreal is based on Husserl (1931) and Sobchack’s (2004) explanations in relation to phenomenology (discussed in Chapter 4). Our conception of the real (reality as we experience it) is usually contrasted with the unreal (the fantastical or the exaggerated), the irreal sits somewhere between the real and the unreal. In relation to phenomenology what we experience after we perform the aesthetic, lived epoché is the irreal; any assumptions about the reality of the experience in questions are removed but also we do not distort or exaggerate the experience either. We enter a state of mind in which our usual reality is very subtly altered. My aesthetic experiences of the studio enacted a lived epoché and as such were irreal. Observing the studio from this subtly altered viewpoint was strange; the familiar was made unfamiliar, which meant

that these unreal moments led to an uncanny sensation. My visual perception of space would alter quickly but the uncanny sensation would register slowly as I gradually became immersed in the unreal point of view. The process of stop-frame allowed me to examine both of these elements, firstly, set construction allowed me to investigate and describe the shift in visual perception (discussed in Chapter 4) and secondly, the frame-capture stage, specifically my use of the condensed, never-has-been temporality of *distilled* stop-frame, allowed me to describe the subtle, creeping sense of the uncanny that the original, unreal moments of observation contained.

Reflexivity and *Mise En Abyme*

The final description, which brings together all the sequences of variation and description of both the studio observations and the medium itself, is a purely visual artwork. There are no words on-screen explaining that the stop-frame animation process itself is under scrutiny, however, the reflexive appearance of the smaller set within the set is used to highlight this introspection. Sybil Delgaudio discusses the use of animation sequences within documentary, arguing that they can be placed within Bill Nichols' reflexive mode of documentary. She suggests that the obviously created animated images used in the context of a documentary 'serves as a means by which a filmmaker can question the adequacy of representation in relationship to what it represents' (1997, p.197). So, placing an obviously constructed animated image within a documentary can lead the viewer to question our acceptance within documentaries (or any setting) of photographic and filmic images as fact. The

reflexivity of the animated image can also allow the practitioner to guide the audience towards reflecting upon the medium of animation itself. Paul Wells proposes that:

all animated films can be constituted as acts of deconstruction in the sense that the form self-consciously signifies its artificiality as a medium and, consequently, some of the attendant ironies available through the extended vocabulary, in being heightened or intensified, draw attention to particular kinds of construction and execution. (1998, p.245)

We know when viewing animation that what we see is not an image of the real world. There are degrees of mimesis but in general it is obvious that the images are completely created by the animator. As quoted earlier, Ward states that:

Clearly, one of the pleasures of watching (and, indeed, *making*) animation is that we know that what we are watching (or creating) is a *completely constructed* world: everything is built, rendered, and fashioned (or, to use another term - performed) by the unseen hands of the animator. [emphasis in original] (2011, pp. 298-299)

The artificiality of the image draws the viewer's attention to the process and the person or people that created it. The level of reflexivity and how much the viewer notices might be judged on the live action – animation spectrum proposed by Maureen Furniss. At one end we have live-action film, which though far from reality itself 'represents the desire to reproduce natural reality' (2007, p. 5) and at the other end there is abstraction, which does not attempt to recreate natural reality. Animation usually resides towards the abstraction end of the continuum, depicting stylised characters, environments and movement, allowing the viewer to be overtly conscious of its artificiality, which, as argued, foregrounds its process of creation. When seen as separate sequences my own work sits

relatively close to the mimetic end of the spectrum; though lacking in detail, the environments I create can look like reality and the depiction of movement and passing time is not exaggerated. However, a subtle level of animated reflexivity remains. When closely scrutinised the viewer can see slight inconsistencies in the sets, such as brushstrokes or gaps and subtle differences in light and atmosphere between the passing frames that indicate to the viewer that what they are seeing is constructed. Also, the direct appearance of the set building materials (Appendices 1.1, 1.2, 1.16, 1.17 and 1.24) and the smaller set pieces within the set offers another level of reflexivity (Figure 18 and Appendices 1.8, 1.12, 1.13, 1.48 and 1.49). However a further, more pronounced, reflexive moment occurs during a sequence that recreates an observation that occurred in my room, whilst the set of the same space was in position and lit for animation (Appendix 1.14). To recreate this observation I had to place the smaller set within the first set, producing a recursive image or *mise en abyme* (Figure 22).



Figure 22. A frame from Sequence 14 (Appendix 1.14) depicting the smaller set within the set

The notion of *mise en abyme* is first described by Andre Gide: ‘In a work of art I rather like to find transposed, on the scale of the characters, the very subject of that work. Nothing throws a clearer light upon it or more surely establishes the proportions of the whole’ (1967, p.30). He uses heraldry as an example in which a shield or coat of arms might have within it a recursive, smaller version of that shield. *Mise en abyme* highlights the structure of a medium in a similar manner to reflexivity but rather than achieving this through hints at the construction process, it is achieved through showing us a version of the medium within itself. Craig Owens sums up this neatly in relation to *mise en abyme* in photography: ‘It tells us in a photograph what a photograph is’ (1978, p.75). I decided to create a further sequence (previously discussed on page 79, Figure 12 and Appendix 1.15) with a wider composition that depicts the first set up within the equivalent

real studio space, showing a *mise en abyme* with three levels of space. The sequence overtly shows how my work is created and acts as a direct reference to the viewer that the final animation is an investigation into the stop-frame process.

The Final Animated Sequence

A normal phenomenological description of my visual perceptions of the studio space and the stop-frame process itself would be a written account which conveyed to the reader an account of the variations I performed and the essences that had been subsequently revealed. I used the process of stop-frame animation to create sequences of animation, which I propose act as an iconic, rather than written, form of phenomenological description. There were two simultaneous strands to my investigation which both resulted in descriptions: the examination of my visual perceptions of the studio space and the examination of the stop-frame process itself. Firstly, the iconic descriptions of my perceptions of the studio consist of carefully composed images of the constructed set space, which reflect my original visual perceptions. The compositions of the set were then animated to create temporal sequences that describe the irreality of the original observations. Subtle elements of the variations I performed in working towards the essence of the phenomena during set construction, composition and frame-capture remain within the descriptions. The final iconic, animated sequences of my observations of the studio space encompass the variations I performed and describe to the viewer the essence of my observations of space within the studio. Secondly, the descriptions of my investigation into the process of stop-frame itself consist of separate sequences that convey to the viewer specific variations I

performed during set construction, composition and frame-capture. There is a final description that consists of a sequence created using the essence of the stop-frame process I arrived at after all the variations. The two strands of investigation would influence each other, the pared down elements of the stop-frame process would be used to capture my observations of the studio, and the investigation into the studio would sometimes yield further variations towards the essence of the process. To reflect this, the descriptions from both investigations are included together in an overall description,^{iv} which makes up the final practical element of this research.^v To the viewer this final iconic phenomenological description might initially prove more challenging than a written equivalent. On the surface it is a series of long, contemplative sequences interspersed with quicker moments of shifting light and frames. This might be remedied with an accompanying text explaining the phenomenological motivation behind the work at any subsequent exhibition, but I would hope that perceptive viewers, who were prepared to sit with the work and examine it closely, would not require this.

ⁱ The ‘that-has-been’ is the certainty provided by the chemical process that the subject and operator were present, they existed at some point in the past.

ⁱⁱ As previously explained I use the term *distilled*, with the emphasis on still, in order to reference the phenomenological paring down of the process and the stilling of the usually kinetic, stop-frame medium. The stilled images or still lifes referred to in this passage are similar entities. They are sequences in which the filmmaker has captured static objects and stilled the usually kinetic medium of live-action film. The changing, temporal nature of the medium remains but – apart from the subtle shifts between frames – the subject matter and camera are unmoving.

^{iv} The overall description has been put on a DVD included with this thesis. Each individual description has been separated into chapters so the viewer can either watch them all together or as individual entities. In terms of an exhibition, I have two possible formats for my practical work, depending on circumstances. If space were short I would project the whole sequence of descriptions together in a simple, darkened space. If I had a large enough gallery space I would exhibit each separate description as an entity in its own right. Each description would be

projected separately and played on a loop, so the visitor could view each description at their own discretion, without being forced into the usual linear, beginning and end format of time-based media.

^v The two strands of description both use sound in different ways. The sequences concerned with the observations of the studio employ ambient sound recorded the corresponding areas of studio space. The sequences of the investigation into the process of creating stop-frame animation are silent. This approach stemmed from questioning what sound accompaniment a stop-frame sequence, in its essential form, would actually have. Initially I considered recording the ambient noise that occurred as I animated each sequence, which I thought would offer an equivalent soundscape to the subsequent images. Upon further consideration of stop-frame temporality I realised that a continuous recording of ‘real’ sound would not offer an equivalent to the constructed, frame-by-frame nature of the ‘never-has-been’ stop-frame sequences. From here I contemplated a constructing sound ‘frame-by-frame’ in a similar manner to how an animator recreates movement. I would break sounds down into 24 separate elements and record equivalent recreations for each ‘frame’, which when played in sequence would offer a ‘never-has-been’ temporality for the soundscape that matched the images. However, as I performed variations on the stop-frame process and viewed the sequences that this yielded I realised that at its core there is no sound that offers a direct equivalent to a stop-frame sequence. It is, at its essence a silent, visual medium. Therefore, the description sequences that explore the essence of the medium are silent. In order to contrast and highlight this silence in the overall description, and also to better describe the original observations, the sequences that investigate my experiences of the studio have ambient sound recorded within the actual studio space accompanying them.

Conclusion

This research had two main aims at the outset: firstly, to perform a practical phenomenological examination into the process of creating stop-frame animation and establish the basic essential elements required for a stop-frame animation sequence; and secondly, to establish this pared down form of the medium as a means to carry out phenomenological investigation. This was a practice-led thesis, but both practice and theory influenced each other throughout. I built sets and created animated sequences in order to test possible variations in both strands of research, sometimes the results of these variations when considered and written up would lead to areas of theoretical research and vice versa.

As previously noted, the field of research into animation and phenomenology is limited. Buchan (2006, 2011) and Bouldin (2000, 2004) discuss the experience of animation from a viewer's perspective but no current work exists that examines the practitioner's viewpoint. Certain approaches have been made in film theory, proposing the process of creation as phenomenological (Brough, 2011) and arguing that the apparatus can enact Husserl's method (Bazin, 1967; Baudry, 1985) but there is no coherent theoretical or practice-based research into the examination of filmic process or discussion of the medium as a means to perform phenomenology. The two main strands of my research addressed these gaps in animation and phenomenological theory and practice.

As argued in Chapter 2, the creation of stop-frame animation is a highly ritualistic process. Catherine Bell (1997) suggests that invariance and

performance are attributes of certain ritual activities. Invariant rituals are defined as being disciplined, repetitious actions carried out with precise control. Performance rituals are defined as self-conscious, symbolic actions carried out for an audience. As I have suggested, the set building and frame capture stages of the stop-frame animation process can be characterised as ritualistic in these aspects. Following Anthony J. Blasi (1985) and Mario Perniola's (2011) theses, which argue that ritualisation can remove actions from their everyday utility and enact a practical version of Husserl's epoché, I propose that the invariant and performative actions of stop-frame enact a similar epoché, allowing subsequent eidetic variation and description. The practical testing of this idea yielded the essence of the stop-frame creative process: a set space must be three-dimensional; the animator must have a level of control over what happens within the set and its structures provide enough detail to register on camera; frame-capture must consist of a minimum of sixteen separately captured frames using a six-second exposure time with thirty-second gaps between the capture of each frame. I characterised this essential version of the process as *distilled* stop-frame. Further phenomenological research into the essence of the stop-frame process might be carried out from here. The nature of life-size sets, extended frame exposure times, and gaps between frames are areas I would like to explore in more depth and detail.

Animation in general is an artistic medium primarily concerned with movement, with the necessity of a puppet or object eliminated, *distilled* stop-frame can widen its focus to examine everyday moments of aesthetic observation, periods of stillness and passing time within different environments. This more

contemplative approach led to the second strand of my research, which examined the stop-frame process as a means to perform phenomenological investigation. With this broader field of study now established, I was able to animate observations of the empty, still, interior spaces of my studio space. These observations were considered in relation to Edward Bullough (1912) and Steve Odin's (2001) concept of the aesthetic epoché, which is based on the idea that an aesthetic, contemplative experience can remove an observer from their everyday engagement with the world and enact an epoché. From this position I examined the stop-frame process as a means to perform a phenomenological investigation into the studio observations. Firstly, set construction allows the practitioner to control every single aspect of what is seen on-screen. In this respect, I used it to perform eidetic variation, altering and removing elements of the structure until I arrived at an image that, on-screen, described the essence of my visual perceptions of the studio. Secondly, frame-capture offers the chance to consider and affect each frame of a temporal sequence, which let me control the atmosphere and temporality of the sequences. These two elements combine to create visual phenomenological descriptions. Establishing the stop-frame process as a means to perform phenomenology moves the field of phenomenological inquiry from the theoretical into the practical, broadening its horizons and altering the method of investigation and the language its results are expressed in. Variations can be conceived of and then physically carried out by the phenomenologist. The subsequent essences can be visually experienced in the real world rather than just abstractly reflected upon. Practising phenomenology this way results in an alternative method of description. The outcomes of the stop-frame approach are expressed using iconic visual description rather than the

written word, as is the case in theoretical phenomenology. For the phenomenologist this approach can yield new insight into phenomena that might not be fully realised in text based theoretical research. It allows them, and the viewer, to visually experience the essences of observations rather than just conceptualise them. My research into using stop-frame as a means of performing phenomenology is limited at this stage to an examination of my visual perceptions of the studio. Further investigation into visual perception is possible, whilst also examining exterior spaces and other environments. Husserl saw phenomenology as investigating and giving insight into all possible conscious experiences in the world, which allows huge further scope in terms of stop-frame research.

As discussed in Chapter 5, the two strands of this research also led to a new reading of the uncanny in stop-frame animation. In regards to stop-frame, the uncanny is usually linked to the on-screen movement of the normally lifeless puppet figure and Ernst Jentsch's (1997) theory that seeing the inanimate made animate is unsettling to the viewer. My practical work using *distilled* stop-frame did not use a puppet figure, yet still produced sequences that had a sense of the uncanny. This occurs due to three factors, firstly, the stillness of the sequences references the photographic punctum, which as argued by Roland Barthes (1993) gives photography a sense of death and absence, secondly, the uneasy sensation of viewing 'never-has-been' sequences of condensed time that have no real world equivalent suggested by Eric S. Jenkins (2013) and thirdly, the flickering discontinuity of the sequences subtly references the presence of the animator in the dark interval between frames. Nicholas Royle (2003) proposes that this

awareness of something emerging from the darkness can create an uncanny feeling. In synthesising these three separate theories in relation to distilled stop-frame I hope to have broadened the scope of research into the uncanny nature of stop-frame animation sequences.

It was my intention in this practice-led thesis to get to the essence of the stop-frame process. In following this course, I arrived at a final animation containing a sixteen-frame sequence of a small set depicting an empty doorway in a bare room, captured with the bare minimum of an animator's interference, sitting on the edge of live-action film and also conversely at a moment where, if it loses a few frames, it simply becomes a projected photograph. In discussing the definition of a medium by its limits, David Green suggests that 'the more interesting and productive area (for artists and critics) has been at this limit point: an area of "undecidability"' (2004, p.37). It is my contention that stop-frame reduced to this most basic and ambiguous level is fertile ground for further investigation.

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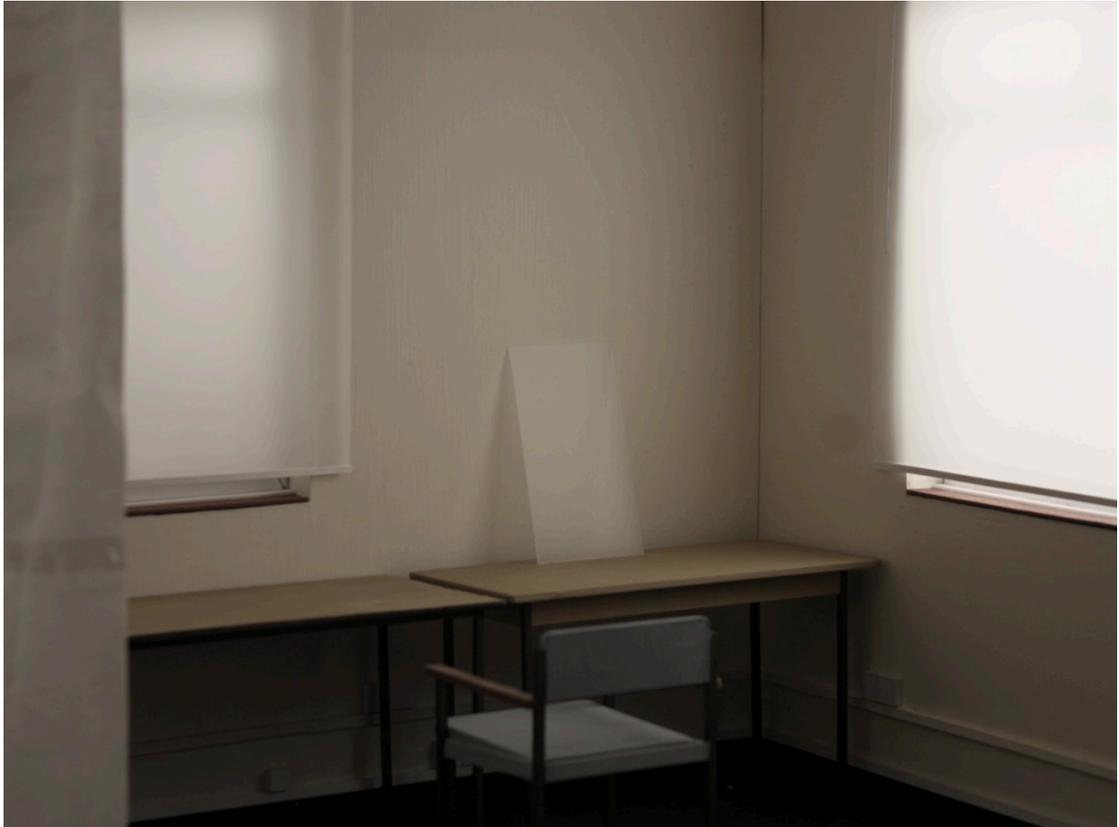
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Appendix

Part I: Observations and their Corresponding Sequences in Order from the Final Animation

1.1



Sequence 1: 00:04 – 00:16

Details: Freeze-frame

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 1 second

Gap Between the Capture of Each Frame: Not applicable

Hand Placed Within the Set Between Frames: Not applicable

Audio: None

Based on Observation: 15.10, March 18, 2012

Place: Main room

Subject: Translucent plastic board on desk

Viewpoint: Facing the larger space from the studio entrance

Light: Grey, muted light of a cloudy day

Furniture: Blinds closed and desks pushed against the far wall

Movement: None

Sound: Room ambience and traffic noise

Approximate Length of Observation: 2 minutes

Photograph:



1.2



Sequence 2: 00:16 – 01:32

Details: Stop-frame animation using the same composition as Sequence 1. There is no gap between the two sequences; the freeze-frame gives way to the stop-frame animation. This is intended to highlight the subtle change between photographic stillness and animated stillness. There are no deliberate alterations made to each frame.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 1 second

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording

Based on Observation: As above

1.3



Sequence 3: 01:35 – 01:55

Details: Stop-frame animation. The blind covering the window is deliberately animated throughout the sequence.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: As required for each adjustment

Hand Placed Within the Set Between Frames: Yes

Audio: Field recording

Based on Observation: 15.13, March 4, 2011

Place: Main room

Subject: The blind and the desk

Viewpoint: Facing the smaller space from my room doorway

Light: Yellow sun beginning to set through the window

Furniture: Desk against the window

Movement: The blind shifts subtly in the wind at intervals and to varying degrees.

Sound: Room ambience, traffic noise and blustery wind

Approximate Length of Observation: 30 seconds

Photograph:



1.4



Sequence 4: 01:55 – 02:04

Details: Stop-frame animation. Connected directly to Sequence 3 due to the proximity of the observations. There are no deliberate alterations made to each frame. The frames detailing the construction of the composition are included at the beginning of the sequence.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 0.3 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording continuing from Sequence 3

Based on Observation: 15.17, March 4, 2011

Place: Main room

Subject: The desk

Viewpoint: Facing the smaller space from my room doorway

Light: Yellow sun beginning to set through the window

Furniture: Desk against the window

Movement: None

Sound: Room ambience, traffic noise and slight blustery wind

Approximate Length of Observation: 30 seconds

Photograph: As above

1.5



Sequence 5: 02:09 – 02:24

Details: Stop-frame animation. There are no deliberate alterations made to each frame. The sequence animates an early version of the set and contains details

such as banding on the hot water heater and paint on the pipe, which were later removed.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 1/60 second

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording

Based on Observation: 18.45, April 1, 2011

Place: Toilet

Subject: Light across the window and sinks

Viewpoint: Facing the sinks from the toilet entrance

Light: Sun beginning to set through the window

Furniture: Not applicable

Movement: None

Sound: Room ambience and light traffic noise

Approximate Length of Observation: 1 minute 30 seconds

Photograph:



1.6



Sequence 6: 02:24 – 02:55

Details: Stop-frame animation. Connected directly to Sequence 5 due to the proximity of the observations. There are no deliberate alterations made to each frame. A piece of dust moves discontinuously across the windowsill. The sequence animates an early version of the set and contains details such as an unfinished sidewall on the windowsill and a rough area where a model of a tap has been removed.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 1/60 second

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording continuing from Sequence 5

Based on Observation: As above

1.7



Sequence 7: 02:59 – 03:29

Details: Stop-frame animation. There are no deliberate alterations made to each frame. Measurement marks from the construction process are left visible on the windowsill.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording

Based on Observation: 16:00, October 12, 2012

Place: Main building entrance hall

Subject: Light across the blocked out window

Viewpoint: Stood in front of the stairs

Light: Grey cloud light

Furniture: Not applicable

Movement: None

Sound: Rain, room ambience and light traffic noise

Approximate Length of Observation: 40 seconds

Photograph: None taken

1.8



Sequence 8: 03:32 – 03:47

Details: Stop-frame animation. There is a gap between Sequence 7 and this sequence but they are indirectly connected as the observation took place at a similar time period on the same day.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 10 seconds

Hand Placed Within the Set Between Frames: Yes

Audio: Field recording continuing from Sequence 7

Based on Observation: 16.10, October 12, 2012

Place: My room

Subject: Light through the open door

Viewpoint: Facing the main room from the desk in my room

Light: Grey cloud light

Furniture: Door is ajar, desk visible through doorway, chest of drawers next to the doorway in my space and pieces of the set space are visible below a desk next to the drawers

Movement: None

Sound: Rain, room ambience and light traffic noise

Approximate Length of Observation: 1 minute

Photograph: None taken

1.9



Sequence 9: 03:50 – 04:09

Details: Stop-frame animation. There are no deliberate alterations made to each frame. There is a gap between Sequence 8 and this sequence but they are indirectly connected as the observation took place at a similar time period on the same day.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 3/10 second

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording continuing from Sequence 7

Based on Observation: 16:14, October 12, 2012

Place: Main room

Subject: Light across and below the desk

Viewpoint: Facing the smaller space from my room doorway

Light: Grey cloud light

Furniture: Larger desk against the window and smaller desk against the wall

Movement: None

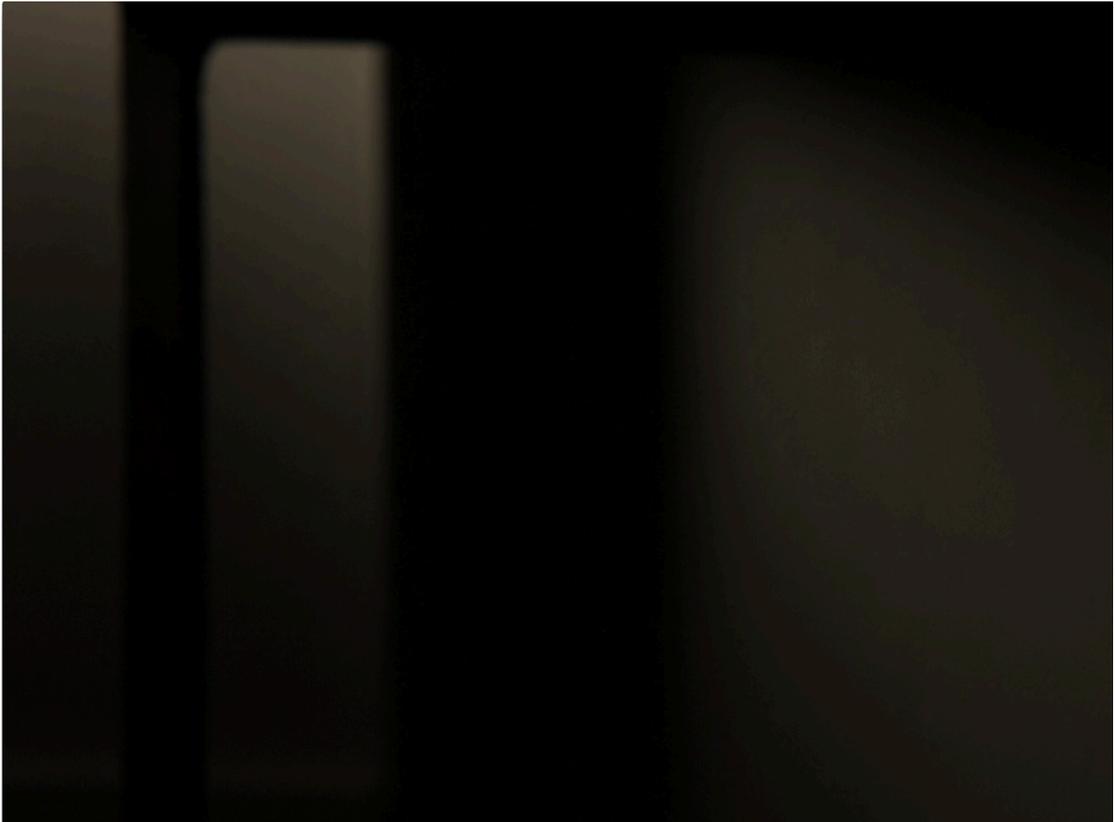
Sound: Rain, room ambience and light traffic noise

Approximate Length of Observation: 1 minute 30 seconds

Photograph:



1.10



Sequence 10: 04:09 – 04:29

Details: Stop-frame animation. Connected directly to Sequence 9 due to the proximity of the observations.

Set: 16 cm to 1 inch

There are no deliberate alterations made to each frame.

Exposure Times of the Frame(s): 6 seconds

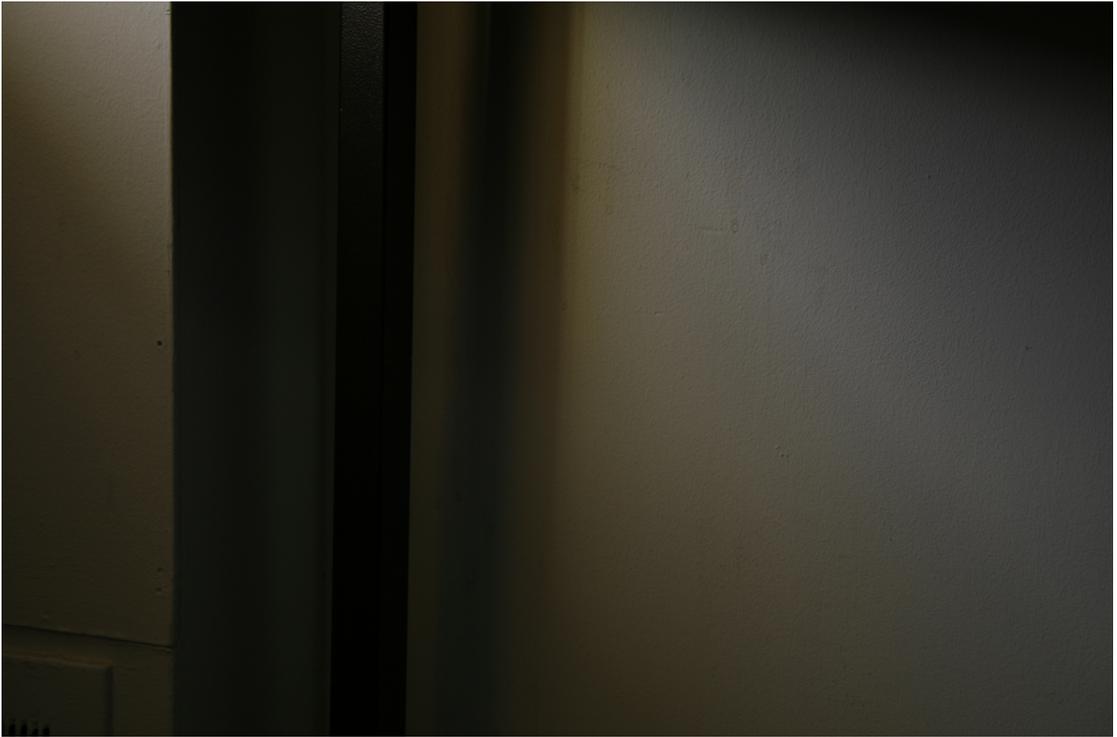
Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording continuing from Sequence 7

Based on Observation: As above

Photograph:



1.11



Sequence 11: 04:31 – 04:27

Details: Stop-frame animation of flickering light within the controlled set space combined with time-lapse capture of the uncontrolled real studio exterior. The set is positioned so its window lines up with of the real studio space. This can be seen in the example below which shows a test sequence for this technique.



Set: 16 cm to 1 inch combined with real studio exterior

Exposure Times of the Frame(s): 2/5 second

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: 15:00, January 7, 2011

Place: My room

Subject: Flickering light from the corridor outside the studio seen through the open entrance hall doorway. Four flickers of light then a gap, two more flickers then the light remains on for a period.

Viewpoint: Facing the entrance hall doorway from the main room doorway

Light: Grey cloud light from the window. Studio lights are off

Furniture: Door to the entrance hall is open and smaller desk against the wall

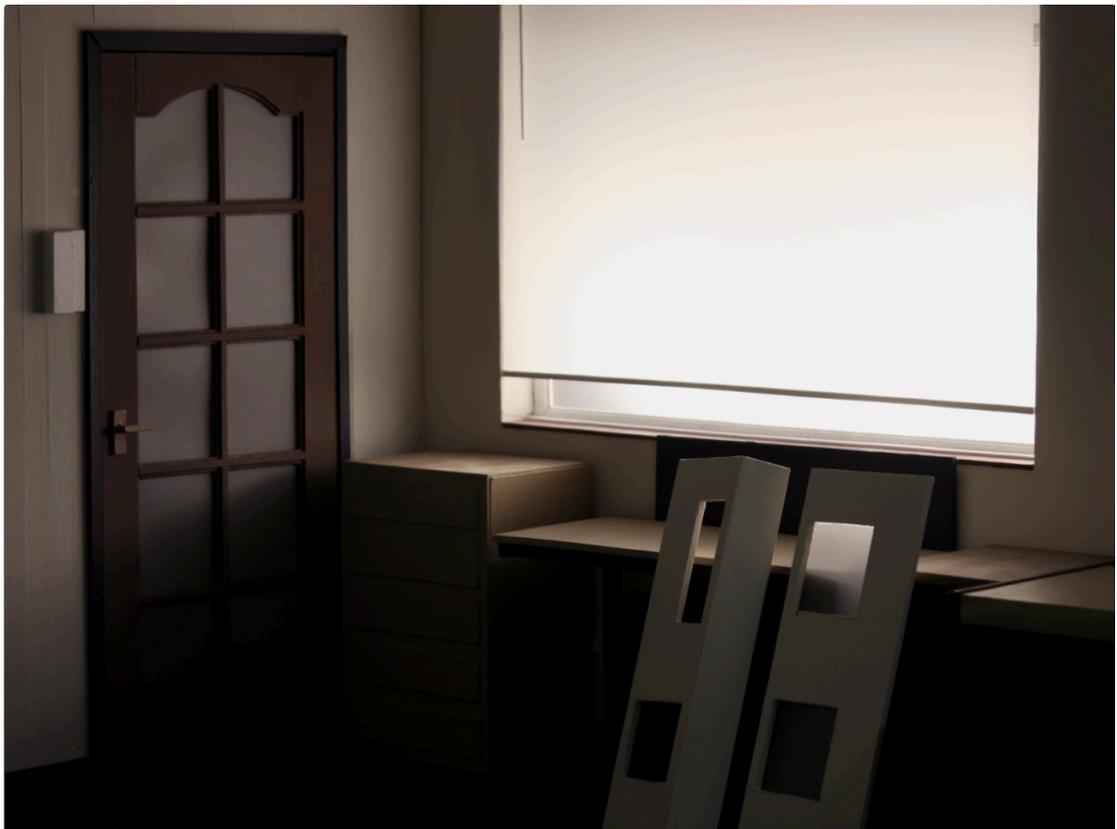
Movement: Flickering light

Sound: Studio ambience

Approximate Length of Observation: 30 seconds

Photograph: None taken

1.12



Sequence 12: 04:51 – 05:21

Details: Stop-frame animation. There are no deliberate alterations made to each frame. Two pieces of the 16cm to 1/16 of an inch smaller set are present within the room.

Set: 16 cm to 1 inch and 16cm to 1/16

Exposure Times of the Frame(s): 1/5 second

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording

Based on Observation: 17:14, August 26, 2012

Place: My room

Subject: Light from the window across the desktop and the two pieces of set

Viewpoint: Facing the entrance hall doorway from the main room doorway

Light: Slightly yellowing evening light

Furniture: Blind slightly open at the bottom, door closed, two desks and cabinet against the wall under the window and two pieces of the set are leant against the desk.

Movement: None

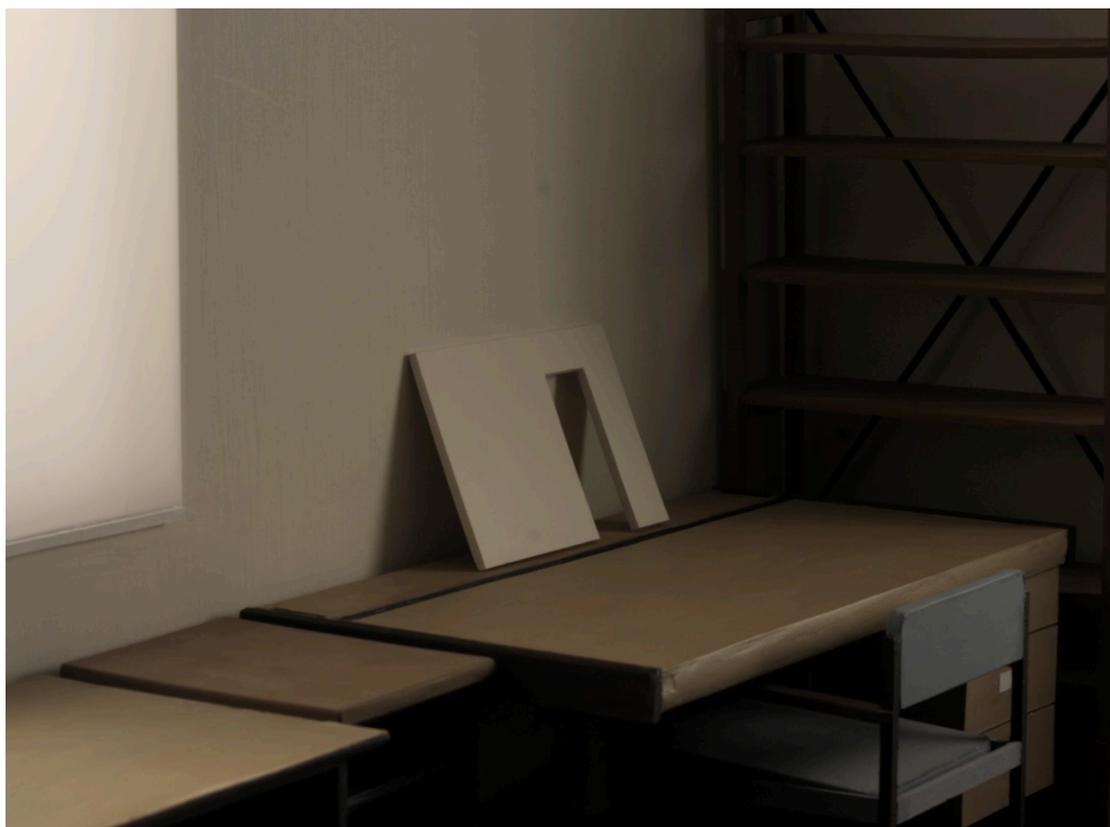
Sound: Room ambience and light traffic noise

Approximate Length of Observation: 1 minute 30 seconds

Photograph:



1.13



Sequence 13: 05:23 – 05:53

Details: Stop-frame animation. There are no deliberate alterations made to each frame. One piece of the 16cm to 1/16 of an inch smaller set is present within the room. There is a gap between Sequence 12 and this sequence but they are indirectly connected as the observation took place at a similar time period on the same day.

Set: 16 cm to 1 inch and 16cm to 1/16

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording continuing from Sequence 12

Based on Observation: 17:20, August 26, 2012

Place: My room

Subject: The piece of smaller set

Viewpoint: Facing my desk from the right hand side of the entrance hall doorway

Light: Slightly yellowing evening light

Furniture: Blind closed, door closed, two desks and cabinet against the wall under the window, the shelves are against the far wall and the piece of set is on the desk leant against the wall.

Movement: None

Sound: Room ambience and light traffic noise

Approximate Length of Observation: As above

Photograph: None taken

1.14



Sequence 14: 05:57 – 05:09

Details: Stop-frame animation. There are no deliberate alterations made to each frame, though the light of my computer screen in the background creates an occasional blue flicker on some frames. The 16 cm to 1/16 of an inch smaller set is positioned and lit within the 16 cm to 1 inch set.

Set: 16 cm to 1 inch set and the 16 cm to 1/16 of an inch set

Exposure Times of the Frame(s): 4 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording

Based on Observation: 19:18, March 14, 2014

Place: My room

Subject: The set, in position and lit for animation

Viewpoint: Facing the entrance hall doorway from the main room doorway

Light: Three bulbs on stands are positioned behind the set and are casting light through the set window

Furniture: The desk is positioned in the centre of the room with the set on top of it and the lighting behind it. The windows are blacked out.

Movement: None

Sound: Room ambience and light traffic noise

Approximate Length of Observation: 30 seconds

Photograph: None taken

1.15



Sequence 15: 05:09 – 06:45

Details: Stop-frame animation. There are no deliberate alterations made to each frame, though the light of my computer screen in the background creates an occasional blue flicker on some frames. The 16 cm to 1/16 of an inch smaller set is positioned and lit within the 16 cm to 1 inch set, which is positioned within the darkness of the real studio space. Connected to Sequence 14, the composition is wider and reveals the real studio.

Set: The real studio space, the 16 cm to 1 inch set and the 16 cm to 1/16 of an inch set

Exposure Times of the Frame(s): 5 seconds

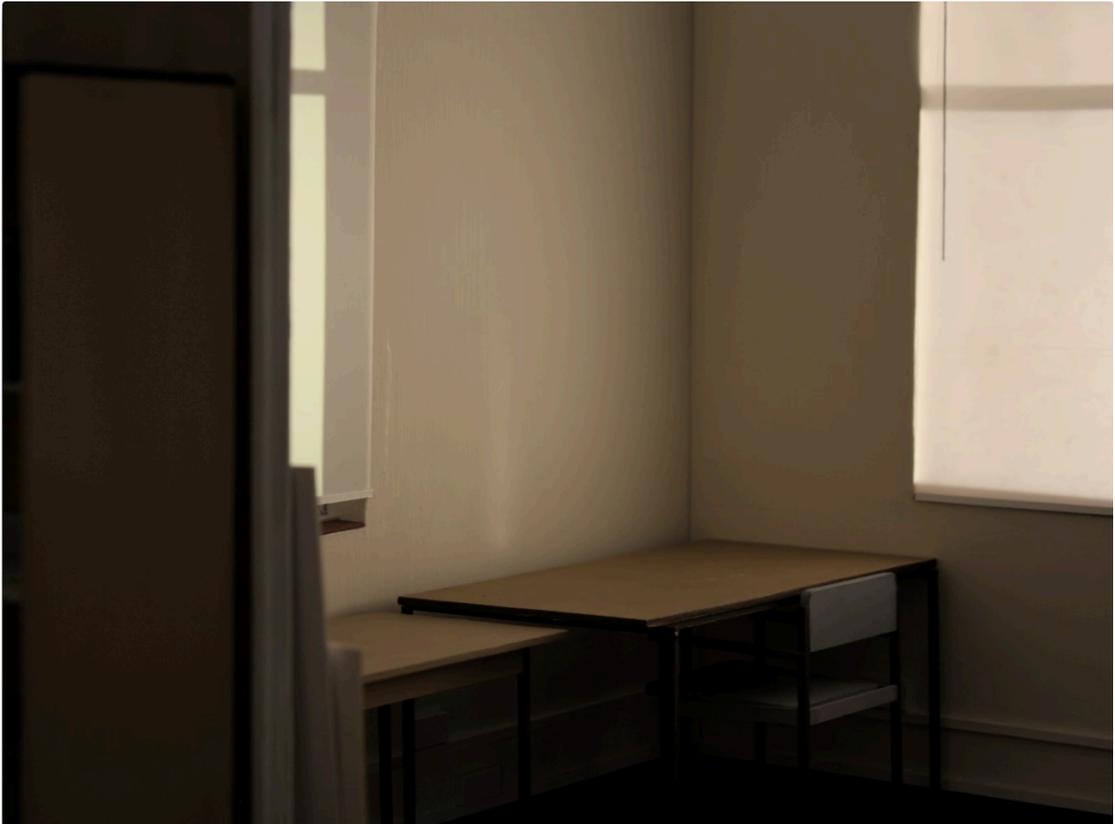
Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: Not applicable

1.16



Sequence 16: 06:51 – 06:58

Details: Stop-frame animation. There are no deliberate alterations made to each frame.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 3/10 second

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording

Based on Observation: 17:40, April 6, 2011

Place: Main room

Subject: The corner of the larger space

Viewpoint: Facing the larger space from the entrance hall doorway

Light: Yellow evening light

Furniture: Two desks against the wall. Shelf unit is against the wall. Canvases are just visible leant against the shelf unit.

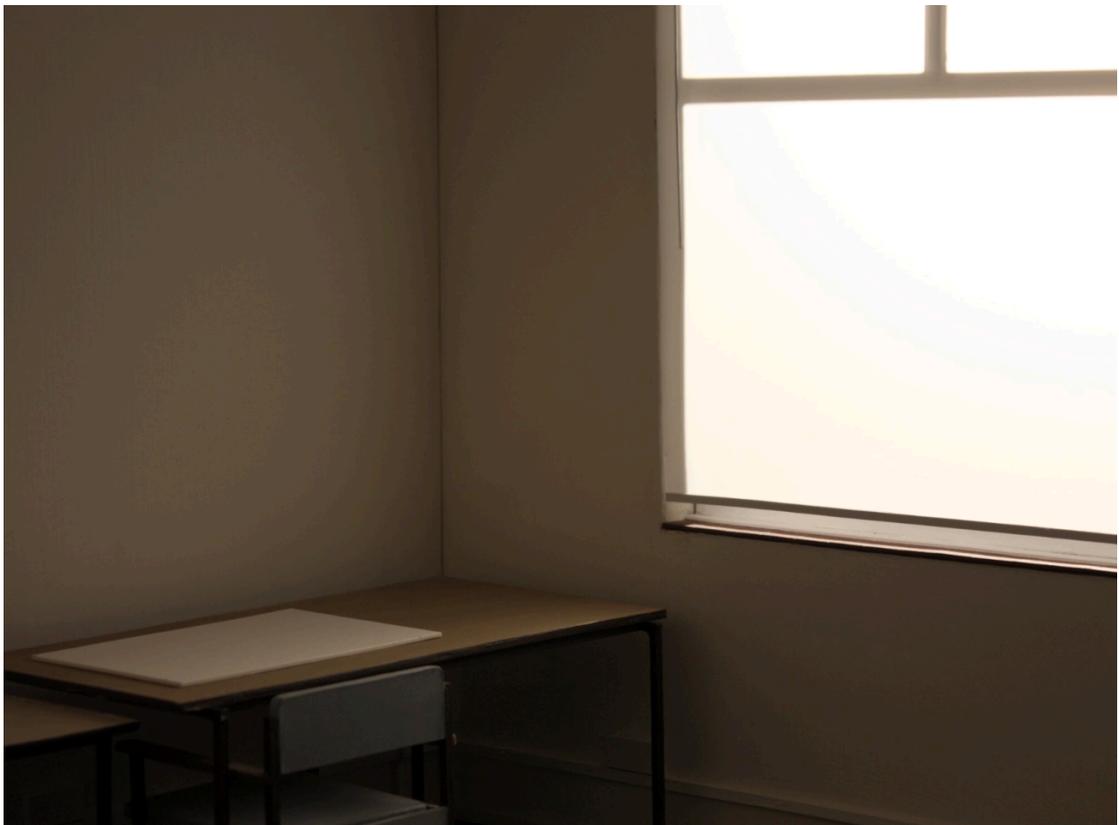
Movement: None

Sound: Blustery wind, room ambience and light traffic noise

Approximate Length of Observation: 30 seconds

Photograph: None taken

1.17



Sequence 17: 07:00 – 07:42

Details: Stop-frame animation. Light levels are deliberately animated using a dimmer throughout the sequence. There is a gap between Sequence 16 and this sequence but they are indirectly connected as the observation took place at a similar time period on the same day.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 3.2 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording continuing from Sequence 16

Based on Observation: 17:45, April 6, 2011

Place: Main room

Subject: The corner of the larger space. Clouds are moving in the wind and the sun is occasionally obscured.

Viewpoint: Facing the larger space from the entrance hall doorway

Light: Yellow evening light

Furniture: Two desks against the wall and the blinds are closed. A canvas lays on the desk.

Movement: Light is strengthening and weakening at intervals

Sound: Blustery wind, room ambience and light traffic noise

Approximate Length of Observation: 1 minute

Photograph: None taken

1.18



Sequence 18: 07:46 – 08:16

Details: Stop-frame animation. There are no deliberate alterations made to each frame.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording

Based on Observation: 15:10, June 17, 2013

Place: Exterior corridor

Subject: Light through doorway

Viewpoint: Facing the exterior studio door from the corridor entrance

Light: Corridor light and sunlight through the door window from my room

Furniture: Door closed

Movement: None

Sound: Room ambience, muffled radio and light traffic noise

Approximate Length of Observation: 30 seconds

Photograph:



1.19

Sequence 19: 08:20 – 08:26

Details: Stop-frame animation. There are no deliberate alterations made to each frame. Composed with the camera fully zoomed in on the set wall. The three-dimensional nature of the set does not register.

Set: 16 cm to 1/16 of an inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: Not applicable

1.20



Sequence 20: 08:26 – 08:32

Details: Stop-frame animation. There are no deliberate alterations made to each frame. Connected to Sequence 19, the composition is slightly wider. The three-dimensional nature of the set does not register.

Set: 16 cm to 1/16 of an inch

Exposure Times of the Frame(s): 5 seconds

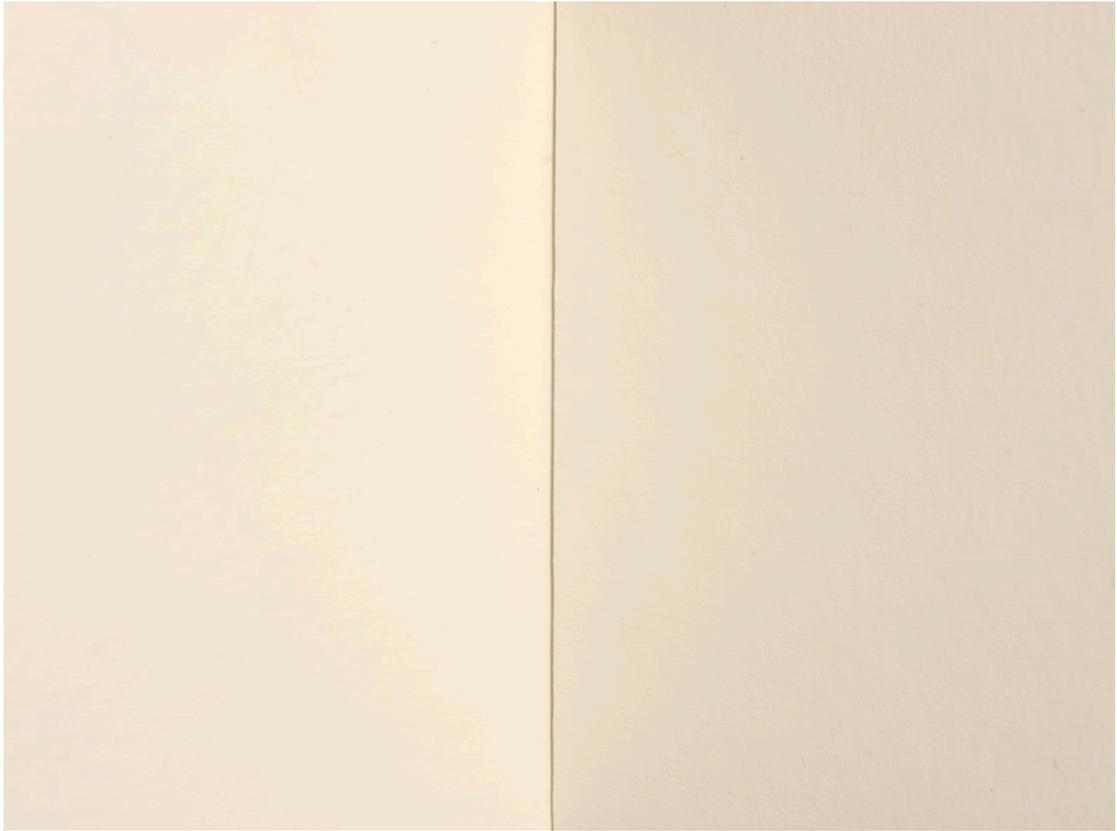
Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: Not applicable

1.21



Sequence 21: 08:32 – 08:38

Details: Stop-frame animation. There are no deliberate alterations made to each frame. Connected to Sequence 20, the composition is of two pieces of the set arranged at a right angle. The three-dimensional nature of the set does not register.

Set: 16 cm to 1/16 of an inch

Exposure Times of the Frame(s): 5 seconds

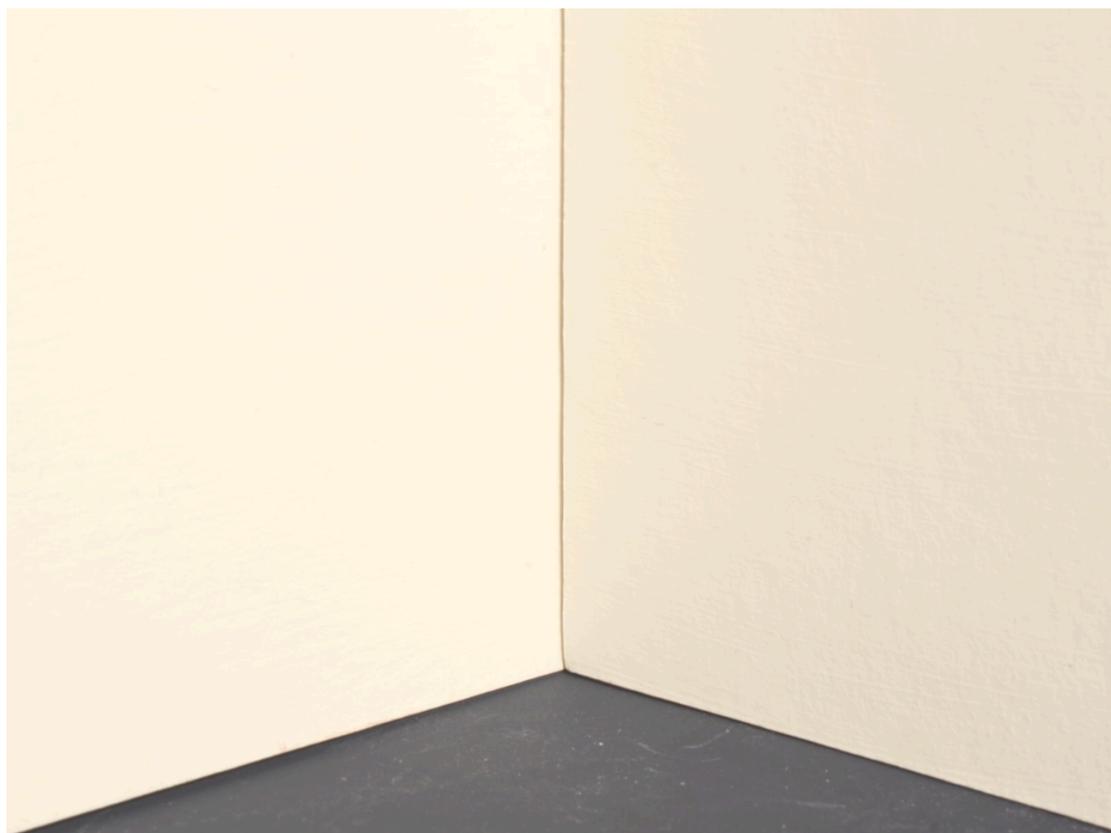
Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: Not applicable

1.22



Sequence 22: 08:38 – 08:44

Details: Stop-frame animation. There are no deliberate alterations made to each frame. Connected to Sequence 21, the composition is of two pieces of the set arranged at a right angle with the floor in view. The three-dimensional nature of the set does not register.

Set: 16 cm to 1/16 of an inch

Exposure Times of the Frame(s): 5 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: Not applicable

1.23



Sequence 23: 08:48 – 09:48

Details: Stop-frame animation. There are no deliberate alterations made to each frame. This second sequence of the toilet space shows the fully finished set with the taps removed and the windowsill now painted.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording. My footsteps walking towards the microphone to turn it off remain at the end of the recording.

Based on Observation: 14:40, June 15, 2014

Place: Toilet

Subject: The window

Viewpoint: Facing the window from the toilet entrance

Light: Yellow evening light

Furniture: Not applicable

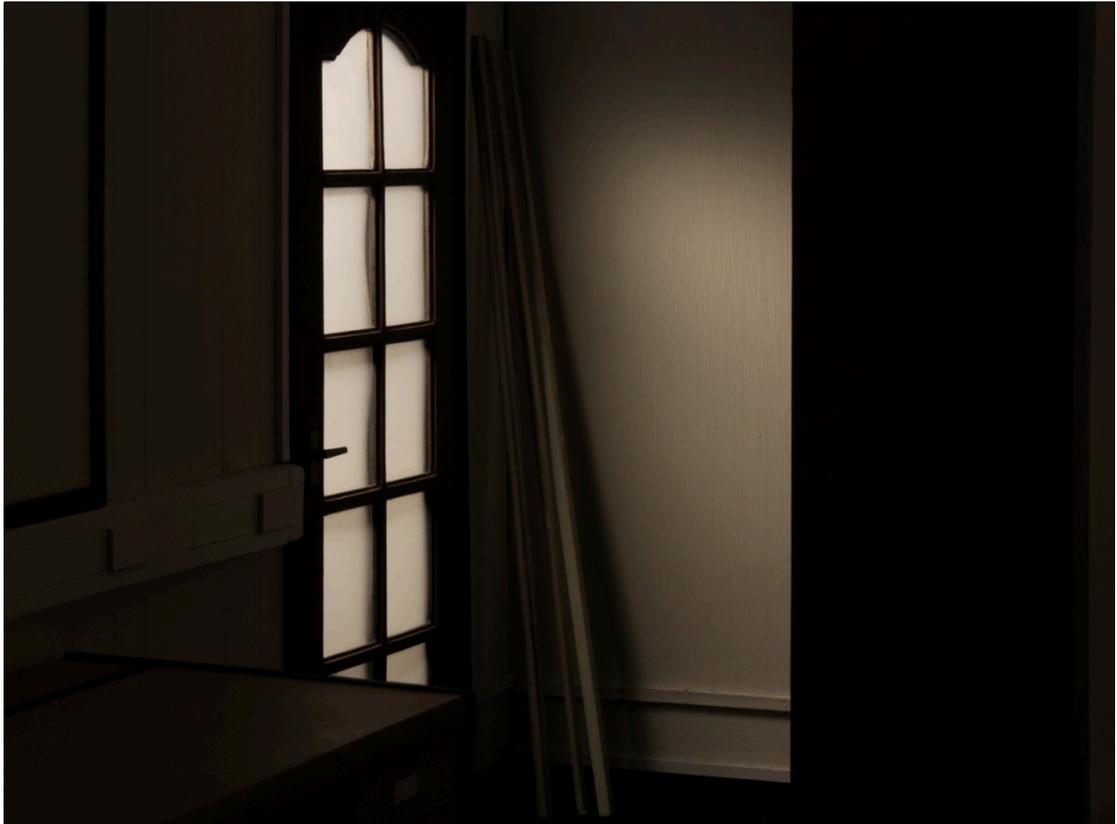
Movement: None

Sound: Room ambience and light traffic noise

Approximate Length of Observation: 1 minute 30 seconds

Photograph: None taken

1.24



Sequence 24: 09:52 – 10:23

Details: Stop-frame animation. The light being switched off is deliberately animated using a dimmer.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording

Based on Observation: 22:10, March 26, 2012

Place: Main room

Subject: Light through the doorway to my room

Viewpoint: Facing the doorway to my room from the smaller space within the main room

Light: Light is switched on in my room and orange streetlights shine through the windows

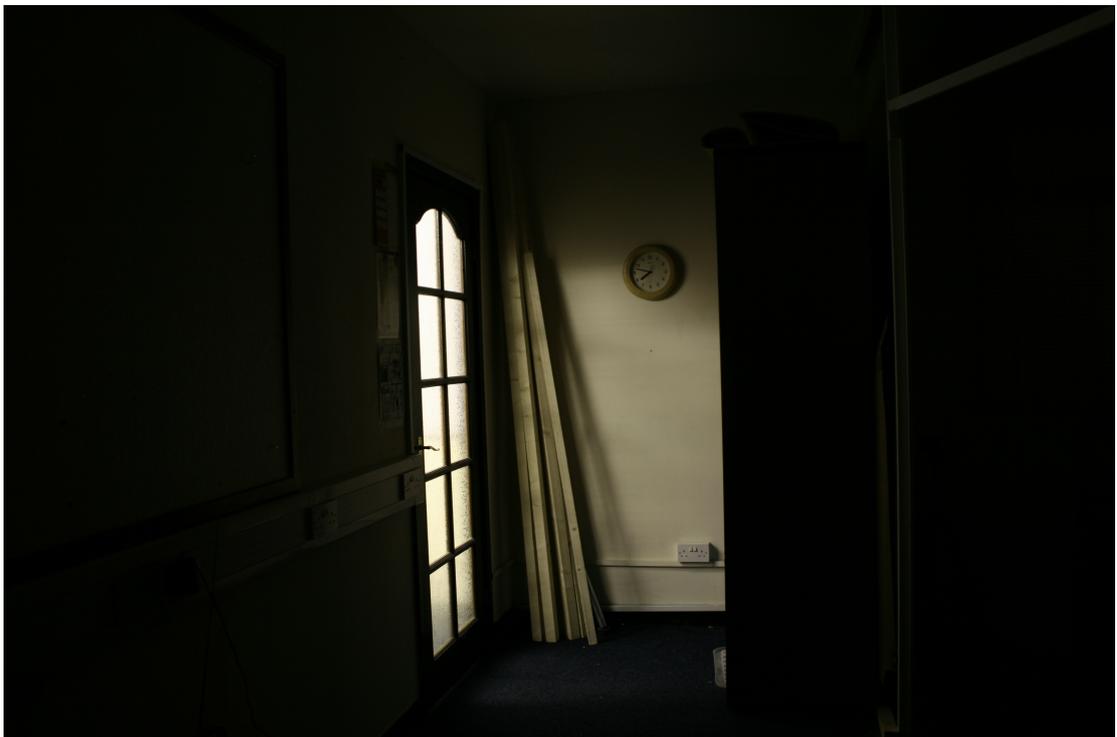
Furniture: The door is closed and some wood leans against the wall

Movement: The light in my room is switched off

Sound: Room ambience and night traffic noise

Approximate Length of Observation: 40 seconds

Photograph:



1.25



Sequence 25: 10:25 – 11:05

Details: Stop-frame animation. There are no deliberate alterations made to each frame. There is a gap between Sequence 24 and this sequence but they are indirectly connected as the observation took place at a similar time period on the same night.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording continued from Sequence 24

Based on Observation: 22:13, March 26, 2012

Place: Main room

Subject: Main room. Orange streetlight on larger space wall

Viewpoint: Facing the larger space window from the smaller space

Light: Orange streetlight

Furniture: Desk against the wall and the side of the storage cabinet is visible

Movement: None

Sound: Room ambience and night traffic noise

Approximate Length of Observation: 1 minute

Photograph:



1.26



Sequence 26: 11:08 – 11:19

Details: Stop-frame animation. The set is animated to create the pan movement across to the window.

Set: 16 cm to 1/16 of an inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: As required

Hand Placed Within the Set Between Frames: Yes

Audio: None

Based on Observation: 15:20, March 4, 2011

Place: Main room

Subject: Sunlight through window in main room

Viewpoint: Facing the larger space window from the right of the doorway to my room

Light: White daylight

Furniture: Blind is closed

Movement: None

Sound: Room ambience and night traffic noise

Approximate Length of Observation: 30 seconds

Photograph:



1.27



Sequence 27: 11:23 – 11:46

Details: Stop-frame animation. There are no deliberate alterations made to each frame.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording

Based on Observation: 14:23, July 14, 2014

Place: Exterior corridor

Subject: Light through the window of the studio entrance doorway

Viewpoint: Facing the studio entrance doorway from the exterior corridor

Light: The corridor lights outside the studio are not working. Sunlight from the studio shines through the doorway window.

Furniture: The door is closed

Movement: None

Sound: Corridor ambience and muffled voices from a distant office

Approximate Length of Observation: 1 minute

Photograph: None

1.28



Sequence 28: 11:48 – 12:12

Details: Stop-frame animation. There are no deliberate alterations made to each frame. There is a gap between Sequence 27 and this sequence but they are indirectly connected as the observation took place at a similar time period on the same day.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording continued from Sequence 27

Based on Observation: 14:24, July 14, 2014

Place: Exterior corridor

Subject: Exterior corridor

Viewpoint: Facing the corridor from studio entrance doorway

Light: The corridor lights outside the studio are not working. Light from the exterior corridor is seen through the doorway.

Furniture: None

Movement: None

Sound: Corridor ambience and muffled voices from a distant office

Approximate Length of Observation: 1 minute

Photograph: None

1.29



Sequence 29: 12:17 – 12:48

Details: Stop-frame animation. There are no deliberate alterations made to each frame.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording

Based on Observation: 22:42, March 26, 2012

Place: Building entrance

Subject: Streetlight through the window above the main doors

Viewpoint: Facing the main doors from the foot of the stairs

Light: Orange streetlight seen through the window. The downstairs lights are off but the upstairs lights are on.

Furniture: None

Movement: None

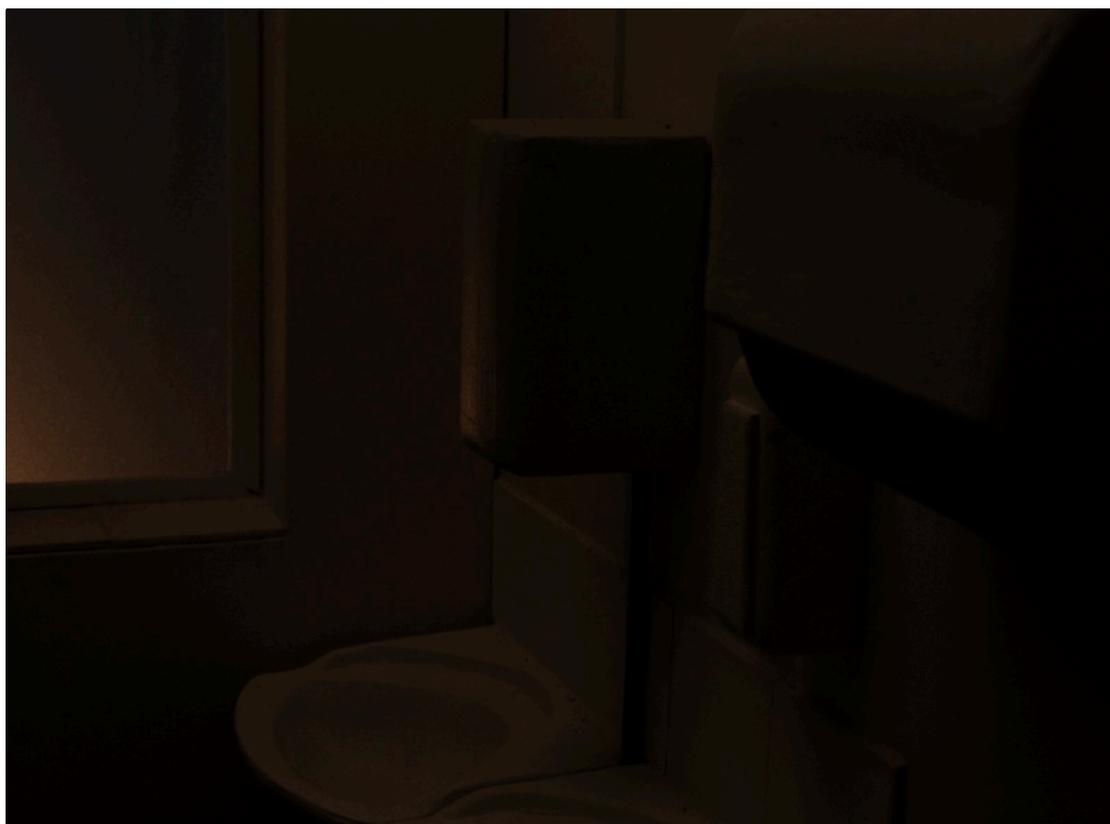
Sound: Room ambience and night traffic noise

Approximate Length of Observation: 40 seconds

Photograph:



1.30



Sequence 30: 12:50 – 13:11

Details: Stop-frame animation. There are no deliberate alterations made to each frame. The blue light of the computer screen can be seen to flicker occasionally through the window. There is a gap between Sequence 29 and this sequence but they are indirectly connected as the observation took place at a similar time period on the same day.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording continued from Sequence 29

Based on Observation: 22:50, March 26, 2012

Place: Toilet

Subject: Streetlight through the window onto the sinks

Viewpoint: Facing the sinks from the entrance door

Light: Orange streetlight seen through the window. The toilet light is switched off.

Furniture: None

Movement: None

Sound: Room ambience and night traffic noise

Approximate Length of Observation: 30 seconds

Photograph: None taken

1.31



Sequence 31: 13:13 – 13:33

Details: Stop-frame animation. There are no deliberate alterations made to each frame. The cupboard door shifts slightly between frames. There is a gap between Sequence 30 and this sequence but they are indirectly connected as the observation took place at a similar time period on the same day.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording continued from Sequence 30

Based on Observation: 22:51, March 26, 2012

Place: Exterior landing

Subject: Cupboard door, slightly ajar

Viewpoint: Facing the cupboard from the toilet door

Light: Landing light

Furniture: None

Movement: None

Sound: Room ambience and night traffic noise

Approximate Length of Observation: 1 minute

Photograph: None taken

1.32



Sequence 32: 13:35 – 13:41

Details: Stop-frame animation. There are no deliberate alterations made to each frame. The sequence is created using a two-dimensional photograph of a single frame from Sequence 31. The sequence seems more static than the equivalent three-dimensional sequence.

Set: Not applicable

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: Not applicable

Audio: None

Based on Observation: As above

1.33



Sequence 33: 13:41 – 13:47

Details: Stop-frame animation. There are no deliberate alterations made to each frame. The sequence is created using a two-dimensional photograph of a single frame from Sequence 31. The sequence is a slightly wider composition of Sequence 32.

Set: Not applicable

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: Not applicable

Audio: None

Based on Observation: As above

1.34



Sequence 34: 13:52 – 17:30

Details: Stop-frame animation. There are no deliberate alterations made to each frame.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording

Based on Observation: 15:07, March 18, 2012

Place: Building entrance

Subject: Sunlight through the window above the main doors

Viewpoint: Facing the main doors from the foot of the stairs

Light: Sunlight seen through the window. All interior lights are turned off

Furniture: The double doors are closed

Movement: None

Sound: General ambience, muffled noises from the other offices in the building and traffic noise

Approximate Length of Observation: 4 minutes

Photograph: None taken

1.35



Sequence 35: 17:34 – 18:04

Details: Stop-frame animation. There are no deliberate alterations made to each frame. There is a gap between Sequence 34 and this sequence but they are indirectly connected as the observation took place at a similar time period on the same day.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording continued from Sequence 34

Based on Observation: 15:14, March 18, 2012

Place: Building entrance

Subject: Sunlight through the window above the main doors

Viewpoint: Facing the main doors from the foot of the stairs

Light: Sunlight seen through the window. All interior lights are turned off

Furniture: One of the double doors is open

Movement: None

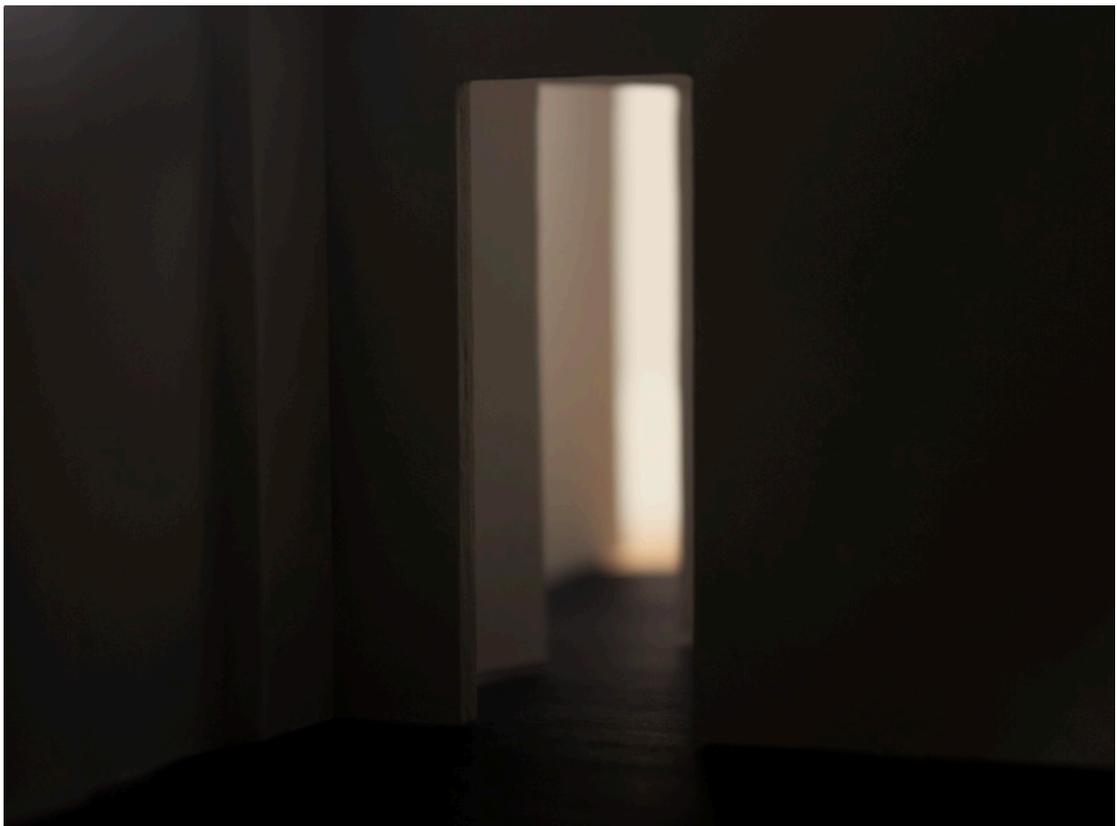
Sound: General ambience, muffled noises from the other offices in the building and traffic noise

Approximate Length of Observation: 1 minute

Photograph:



1.36



Sequence 36: 18:09 – 18:32

Details: Stop-frame animation. The composition of this sequence is altered between frames at the beginning and midway through.

Set: 16 cm to 1/16 of an inch

Exposure Times of the Frame(s): 3/5 second

Gap Between the Capture of Each Frame: As required

Hand Placed Within the Set Between Frames: Yes

Audio: None

Based on Observation: 22:08, May 5, 2013

Place: Main room

Subject: Light through entrance hall and doorway

Viewpoint: Facing the doorway from main room

Light: Light from the corridor through the entrance doorway and the room doorway

Furniture: The entrance door is closed. The room door is open

Movement: None

Sound: General night ambience

Approximate Length of Observation: 30 seconds

Photograph: None taken

1.37



Sequence 37: 18:36 – 19:12

Details: Stop-frame animation. There are no deliberate alterations made to each frame.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording

Based on Observation: 20:35, July 2, 2011

Place: Building entrance

Subject: Light through the glass door

Viewpoint: Facing the glass door from the foot of the stairs

Light: Sunlight through the window above the main doors. The interior lights of the main entrance are off but the lights of the far corridor can be seen through the glass doorway.

Furniture: The glass door is closed

Movement: None

Sound: General ambience, muffled radio and traffic noise

Approximate Length of Observation: 1 minute

Photograph: None taken

1.38

Sequence 38: 19:16 – 19:20

Details: Stop-frame animation. Each frame is deliberately altered to create a discontinuous sequence.

Set: 16 cm to 1 inch, 16 cm to 1/16 of an inch and real studio space

Exposure Times of the Frame(s): Various

Gap Between the Capture of Each Frame: Various

Hand Placed Within the Set Between Frames: Yes

Audio: None

Based on Observation: Not applicable

1.39



Sequence 39: 19:20 – 19:24

Details: Freeze-frame. Composition includes gap between set wall and ceiling. A single frame does not register the passage of time.

Set: 16 cm to 1/16 of an inch

Exposure Times of the Frame(s): 4/5 second

Gap Between the Capture of Each Frame: Not applicable

Hand Placed Within the Set Between Frames: Not applicable

Audio: None

Based on Observation: 16:46, April 20, 2013

Place: Main room

Subject: Sunlight through my room window

Viewpoint: Facing my room from the corner of the main room

Light: Sunlight seen through the window. All interior lights are turned off

Furniture: Door is open and the blind is down

Movement: None

Sound: General ambience, muffled noises from the other offices in the building and traffic noise

Approximate Length of Observation: 1 minute

Photograph: None taken

1.40



Sequence 40: 19:24 – 19:28

Details: Stop-frame animation. No deliberate alterations made between frames.

The short gaps mean that there are no overt changes between frames therefore the sequence is no different to live-action film.

Set: 16 cm to 1/16 of an inch

Exposure Times of the Frame(s): 4/5 second

Gap Between the Capture of Each Frame: Captured with as short a gap as possible

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: As above

1.41



Sequence 41: 19:28 – 19:32

Details: Stop-frame animation. No deliberate alterations made between frames. I placed my hand within the set between each frame though made no deliberate alterations to the space as I did so. This created some slightly discontinuous shifts in dust.

Set: 16 cm to 1/16 of an inch

Exposure Times of the Frame(s): 4/5 second

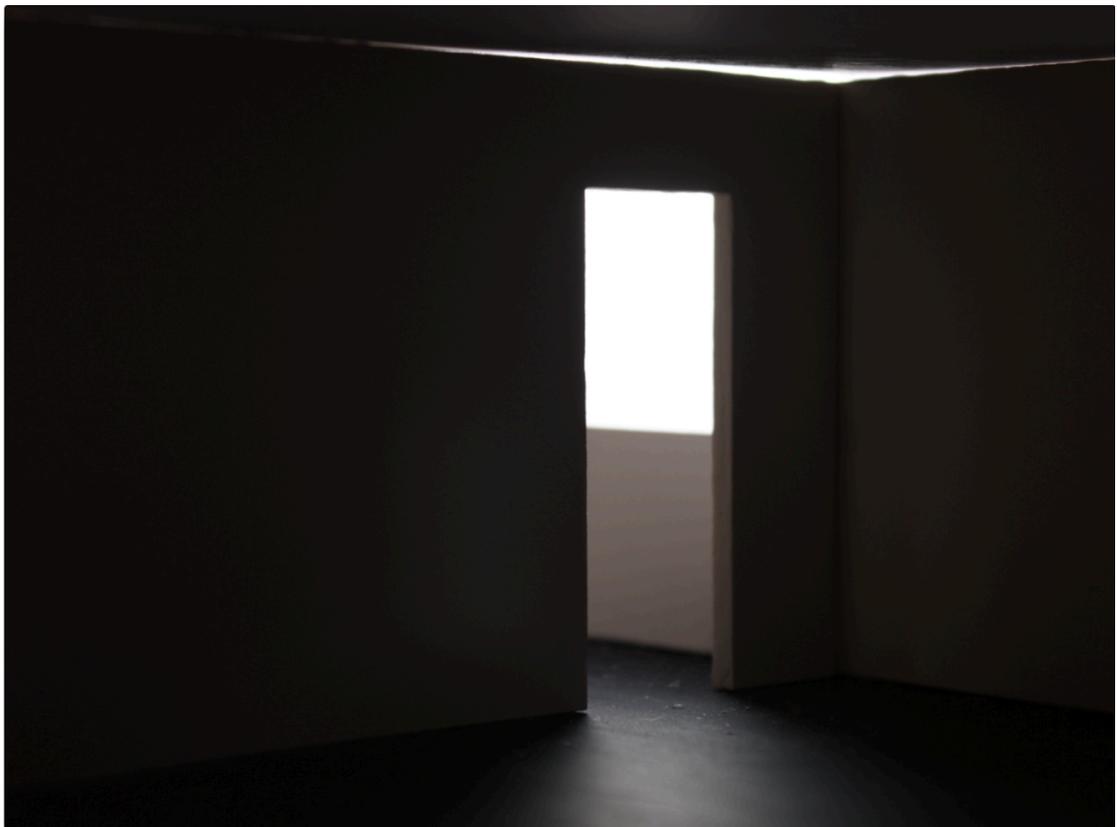
Gap Between the Capture of Each Frame: As required

Hand Placed Within the Set Between Frames: Yes

Audio: None

Based on Observation: As above

1.42



Sequence 42: 19:32 – 19:36

Details: Stop-frame animation. No deliberate alterations made between frames.

The 30-second gaps create slight shifts in the composition between frames

Set: 16 cm to 1/16 of an inch

Exposure Times of the Frame(s): 4/5 second

Gap Between the Capture of Each Frame: 30 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: As above

1.43



Sequence 43: 19:18 – 19:22

Details: Stop-frame animation. No deliberate alterations made between frames.

No change registers with this exposure time.

Set: 16 cm to 1/16 of an inch

Exposure Times of the Frame(s): 1/20 second

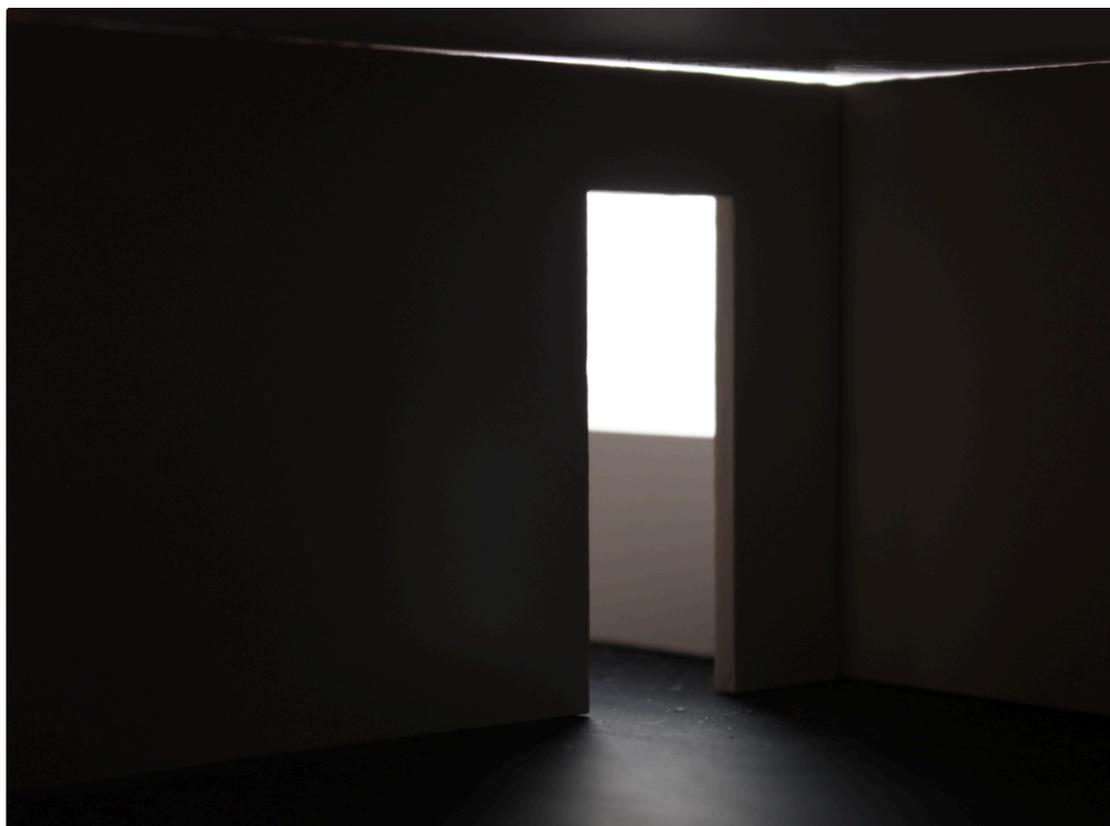
Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: As above

1.44



Sequence 44: 19:22 – 19:26

Details: Stop-frame animation. No deliberate alterations made between frames.

No change registers with this exposure time.

Set: 16 cm to 1/16 of an inch

Exposure Times of the Frame(s): 1/5 second

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: As above

1.45



Sequence 45: 19:26 – 19:30

Details: Stop-frame animation. No deliberate alterations made between frames.

Slight discontinuous changes in light levels register with this exposure time.

Set: 16 cm to 1/16 of an inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: As above

1.46



Sequence 46: 19:30 – 19:34

Details: Stop-frame animation. No deliberate alterations made between frames. Slightly more prominent discontinuous changes occur in light levels between frames using this exposure time.

Set: 16 cm to 1/16 of an inch

Exposure Times of the Frame(s): 30 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: As above

1.47



Sequence 47: 19:34 – 20:32

Details: Stop-frame animation. The frames are captured using 6-second exposures, 30-second gaps between frames and the placement of my hand in the set between frames. The overall section shows brief sequences of frames with 2-second gaps between them. This begins with a single frame and finishes with a 16-frame sequence, which allows the subtle discontinuity of stop-frame to register with the viewer.

Set: 16 cm to 1/16 of an inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 30 seconds

Hand Placed Within the Set Between Frames: Yes

Audio: None

Based on Observation: As above

1.48



Sequence 48: 20:39 – 22:08

Details: Stop-frame animation. There are no deliberate alterations made to each frame. The composition slightly shifts due to my knocking the set. The smaller 16cm to 1/16 of an inch set floor is positioned behind the desk.

Set: 16 cm to 1 inch and 16cm to 1/16 of an inch

Exposure Times of the Frame(s): 3/5 second

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording

Based on Observation: 05:22, March 28, 2012

Place: My room

Subject: The exterior corridor light through the door and the streetlight and dawn light coming through the window

Viewpoint: Facing corridor door and the window from the main room door

Light: Streetlight and slight dawn light seen through the window. All room interior lights are turned off but the exterior corridor light is on.

Furniture: The door is closed. The chest of drawers and a desk are pushed against the window. Behind the desk is the floor of the set.

Movement: None

Sound: Room ambience, night traffic noise and the bridge raising alarm

Approximate Length of Observation: 3 minutes

Photograph: None taken

1.49



Sequence 49: 22:08 – 22:14

Details: Freeze-frame

Set: 16 cm to 1 inch and 16cm to 1/16

Exposure Times of the Frame(s): 3/5 second

Gap Between the Capture of Each Frame: Not applicable

Hand Placed Within the Set Between Frames: Not applicable

Audio: None

Based on Observation: As above

Part II: Unused Observations and their Corresponding Sequences

2.1



Details: Stop-frame animation. The orange light is animated switching off over three frames.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: As required for each adjustment

Hand Placed Within the Set Between Frames: Yes

Audio: Field recording

Based on Observation: 06.56, June 15, 2012

Place: Main room

Subject: Orange streetlight turning off

Viewpoint: Facing the side window from the large partition wall

Light: Grey dawn light and streetlight

Furniture: Blinds closed. One desk pushed against the far wall and one against the small partition. A piece of translucent plastic lies against the wall.

Movement: Light switches off

Sound: Early morning room ambience and traffic noise

Approximate Length of Observation: 3 minutes

Photograph:



2.2



Details: Stop-frame animation. There are no deliberate alterations made to each frame.

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording

Based on Observation: 12.06, October 12, 2013

Place: Main room

Subject: Strip of light on desk

Viewpoint: The left corner of the main room

Light: Grey light

Furniture: Blinds closed and desks pushed against the wall. Paper lies on the desk and a box is below it.

Movement: None

Sound: Room ambience and traffic noise

Approximate Length of Observation: 1 minute

Photograph:



2.3



Details: Stop-frame animation of the flickering light

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 2 seconds

Gap Between the Capture of Each Frame: As required for each adjustment

Hand Placed Within the Set Between Frames: Yes

Audio: Field recording

Based on Observation: 15.28, Jan 8, 2011

Place: My room

Subject: Flickering light from the corridor outside the studio seen through the open entrance hall doorway. Two flickers of light then a gap, three more flickers then the light remains on for a period.

Viewpoint: Facing the entrance hall door from my desk

Light: Normal sunlight. The entrance hall lights are off.

Furniture: Blinds closed. The door is closed. One desk pushed against the far wall.

Movement: Flickering light

Sound: Studio ambience and traffic noise

Approximate Length of Observation: 30 seconds

Photograph: None taken

2.4



Details: Stop-frame animation

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 1 second

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording

Based on Observation: 15.07, March 18, 2012

Place: Main room

Subject: White light through window

Viewpoint: Facing the larger space from the studio entrance

Light: Grey, muted light of a cloudy day

Furniture: Blinds closed and desks pushed against the far wall

Movement: None

Sound: Room ambience and traffic noise

Approximate Length of Observation: 20 seconds

Photograph: None taken

2.5



Details: Stop-frame animation

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 6 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: Field recording

Based on Observation: 11.56, February 11, 2014

Place: Main room

Subject: Light on the wall of the studio

Viewpoint: Facing the right hand side of the main room from the doorway in my room

Light: Grey, muted light

Furniture: A Green board is on the wall. The cloth partition is hung over the rail. The shelf unit is on the left.

Movement: None

Sound: Room ambience and traffic noise

Approximate Length of Observation: 30 seconds

Photograph:



2.6



Details: Time-lapse

Set: 16 cm to 1 inch and a real view through the window

Exposure Times of the Frame(s): 1/60 second

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: 11.54, June 5, 2014

Place: Main room

Subject: White light through window

Viewpoint: Facing the right hand side window in the main room from the entrance hall doorway

Light: Grey, muted light of a cloudy day

Furniture: The blind is open and the desk is pushed against the window. The set of shelves are against the partition

Movement: None

Sound: Room ambience and traffic noise

Approximate Length of Observation: 2 minutes

Photograph: None taken

2.7



Details: Stop-frame

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 2 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: 23.35, September 27, 2013

Place: Corridor

Subject: Darkness below the stairs

Viewpoint: Stood at the top of the stairs looking down

Light: The downstairs light is off but the upstairs light is on

Furniture: None

Movement: None

Sound: Night corridor ambience

Approximate Length of Observation: 1 minute

Photograph:



2.8



Details: Stop-frame

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 2 seconds

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: 23.41, September 27, 2013

Place: Corridor

Subject: Light from the upstairs corridor

Viewpoint: Downstairs from the kitchen door looking towards the stairs

Light: The downstairs light is off but the upstairs light is on

Furniture: None

Movement: None

Sound: Night corridor ambience

Approximate Length of Observation: 1 minute

Photograph:



2.9



Details: Stop-frame

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 1/20 second

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: 10.09, December, 2011

Place: Corridor

Subject: The door at the end of the corridor

Viewpoint: Facing the door from the studio entrance

Light: Interior strip light

Furniture: The door is closed

Movement: None

Sound: Room ambience and traffic noise

Approximate Length of Observation: 30 seconds

Photograph:



2.10



Details: Stop-frame

Set: 16 cm to 1/16 of an inch

Exposure Times of the Frame(s): 1/13 second

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: 15.45, November 5, 2012

Place: Corridor

Subject: Light through doorway

Viewpoint: Facing the studio entrance doorway from the corridor

Light: Daylight

Furniture: None

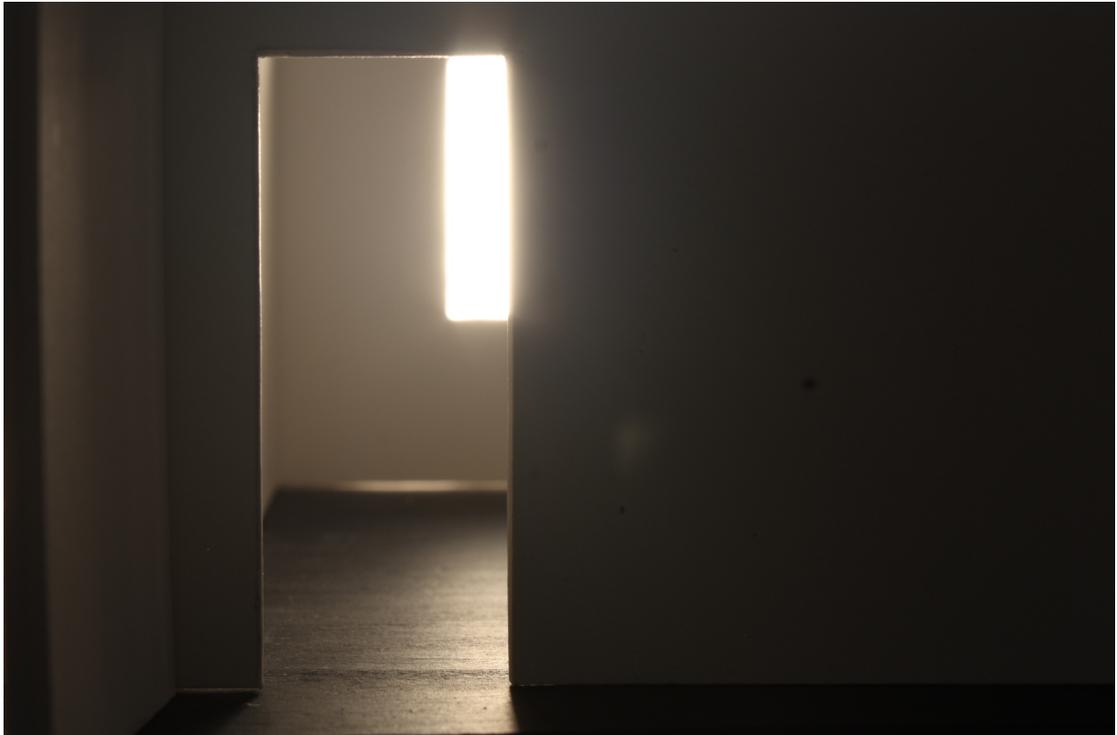
Movement: None

Sound: Room ambience and traffic noise

Approximate Length of Observation: 1 minute

Photograph: None taken

2.11



Details: Stop-frame

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 1/13 second

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: 11.32, May 8, 2012

Place: My room

Subject: Light through window

Viewpoint: Facing the main room doorway from my desk

Light: Daylight

Furniture: None

Movement: None

Sound: Room ambience and traffic noise

Approximate Length of Observation: 2 minutes

Photograph: None taken

2.12



Details: Stop-frame

Set: 16 cm to 1 inch

Exposure Times of the Frame(s): 1/60 second

Gap Between the Capture of Each Frame: 2 seconds

Hand Placed Within the Set Between Frames: No

Audio: None

Based on Observation: 13.36, May 6, 2014

Place: Main room

Subject: White light through window

Viewpoint: Facing the left window of the main room from the doorway in my room

Light: Grey light

Furniture: The blind is closed. An easel stands in the middle of the room.

Movement: None

Sound: Room ambience and traffic noise

Approximate Length of Observation: 20 seconds

Photograph:



Part III: The Set in Separate Parts

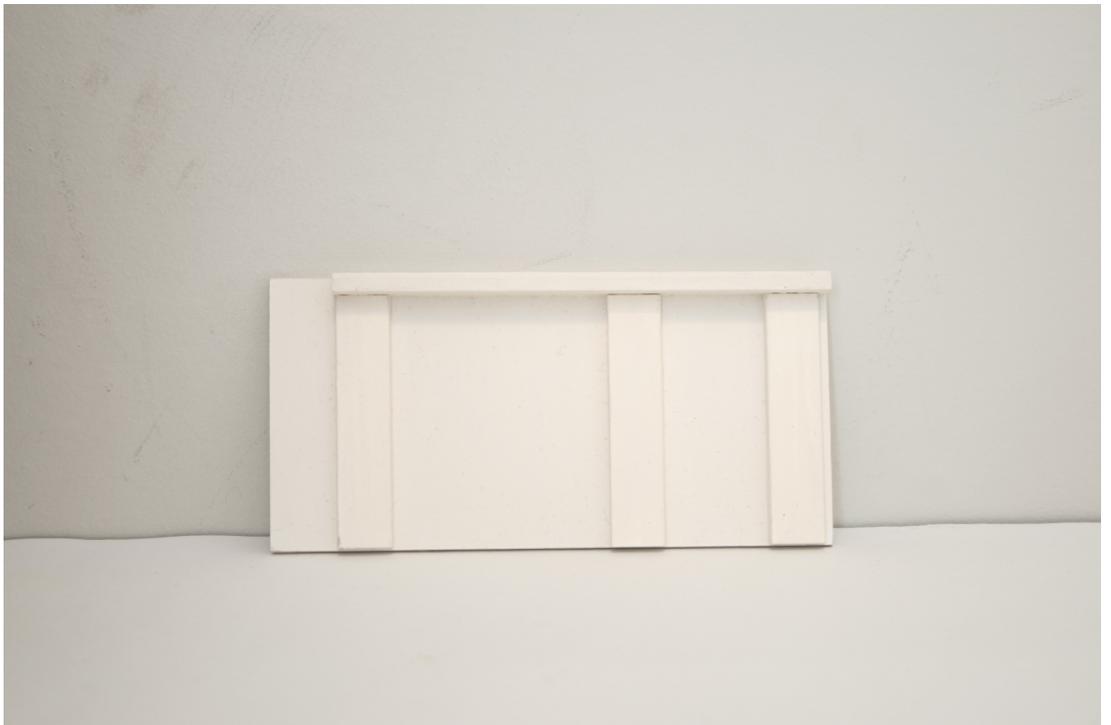
The Main Room

3.1

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch

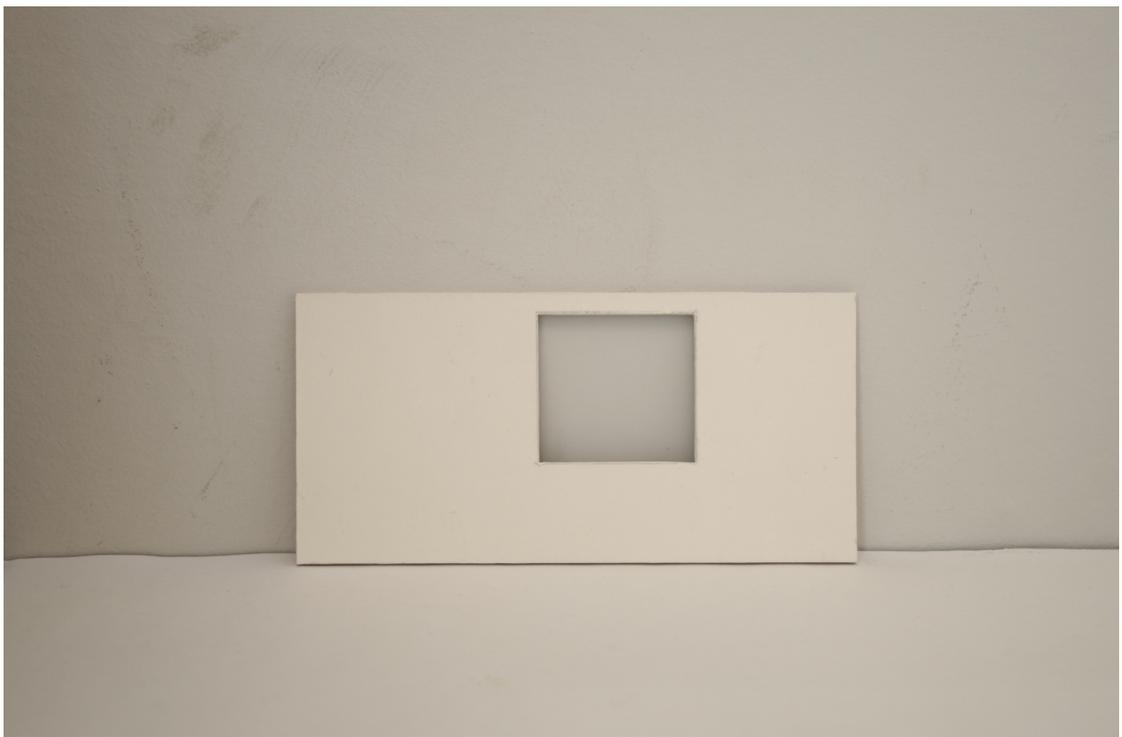


3.2

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch

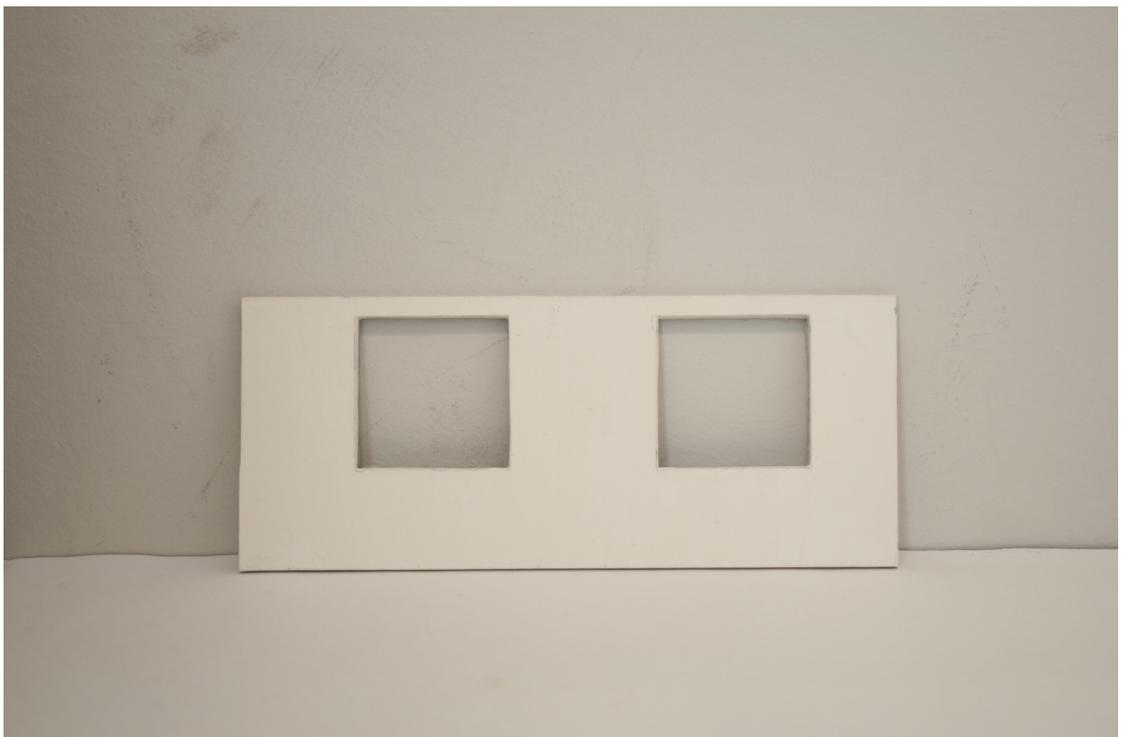


3.3

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch

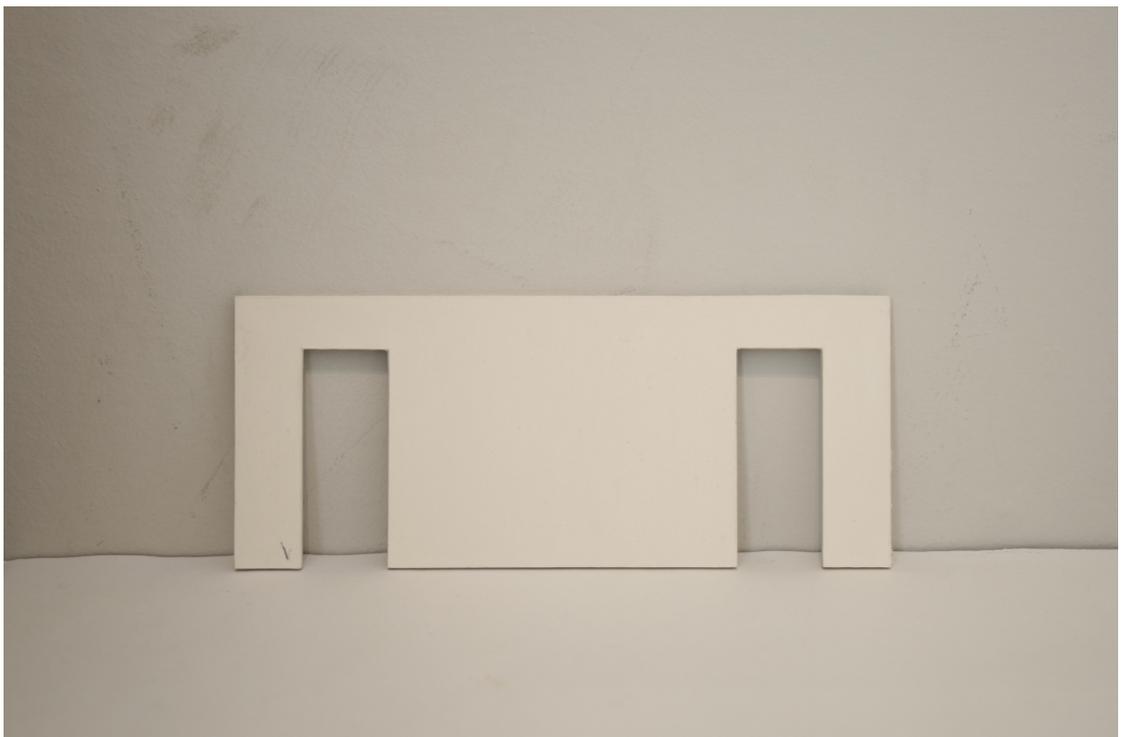


3.4

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch



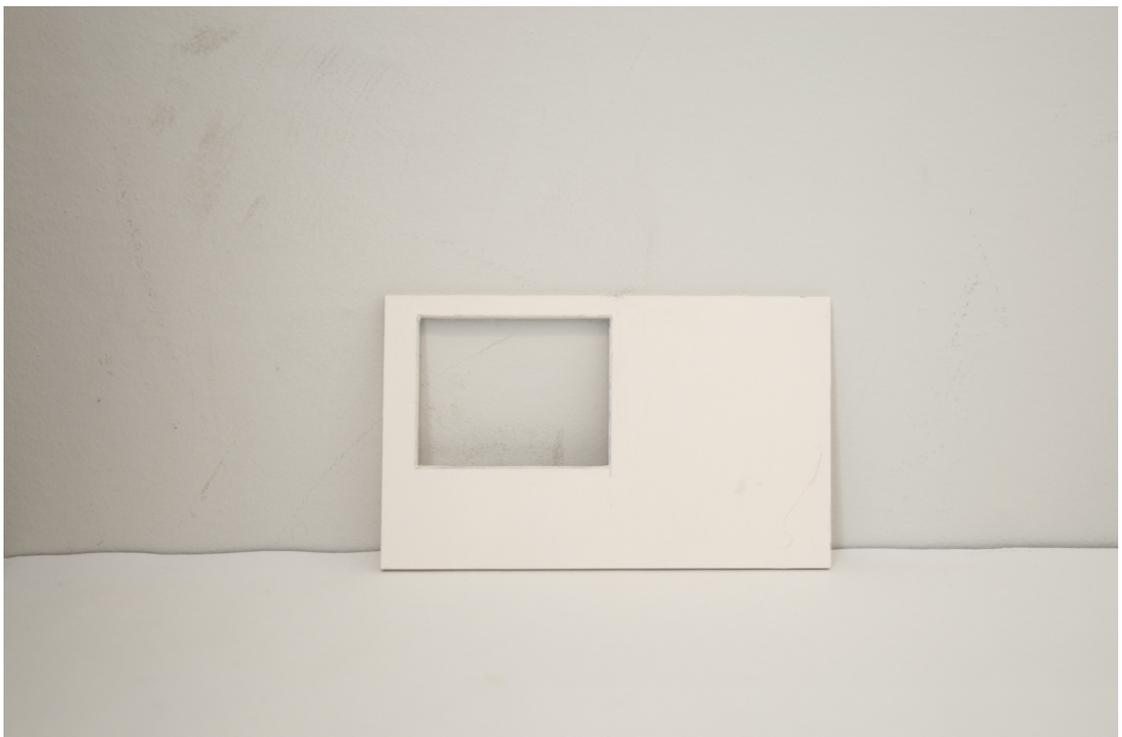
My Room

3.5

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch

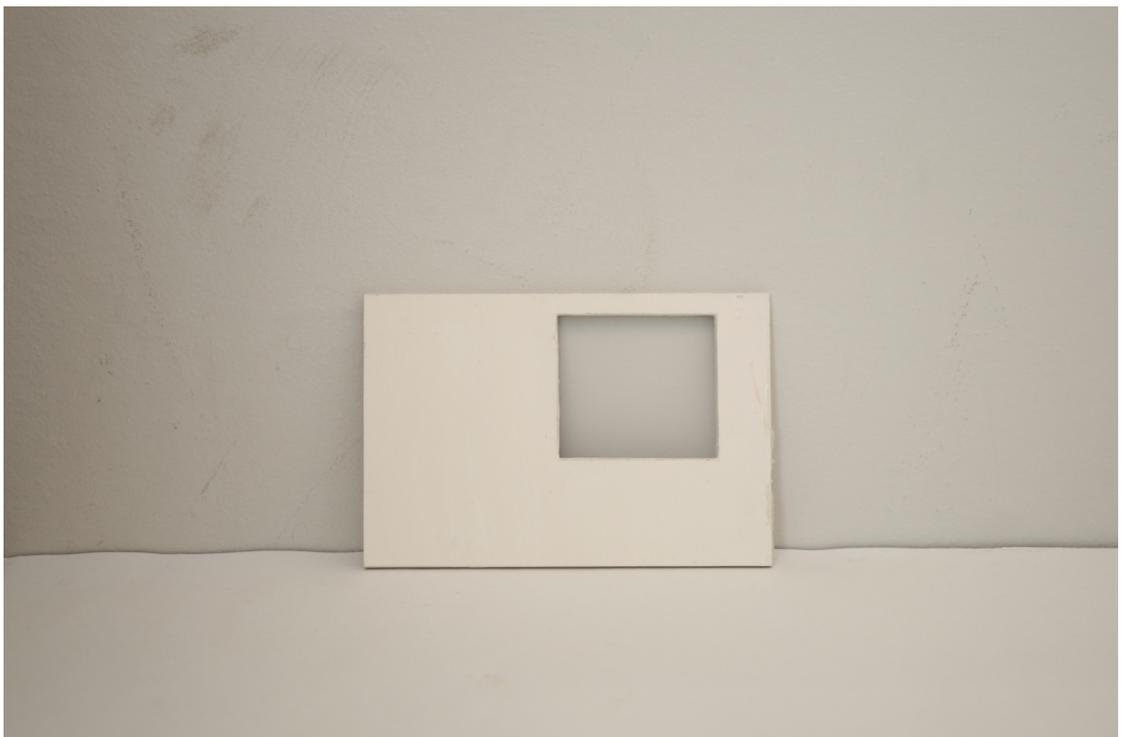


3.6

Scale: 16 cm to 1 inch

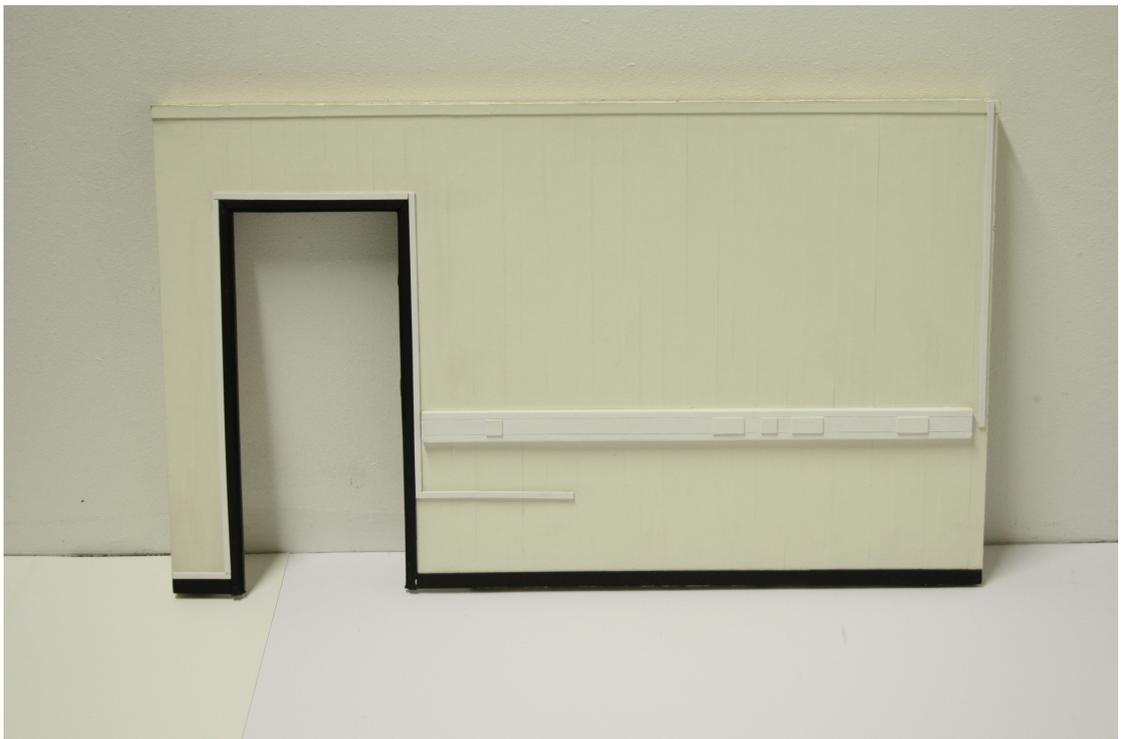


Equivalent Set: 16 cm to 1/16 of an inch

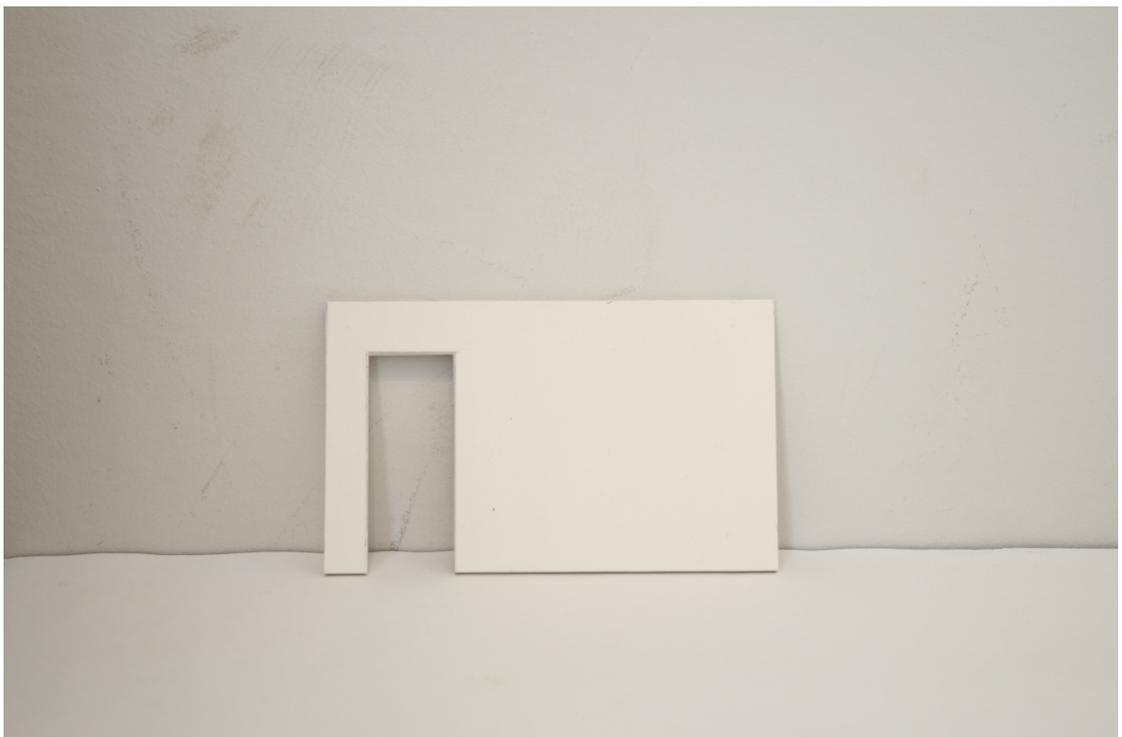


3.7

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch

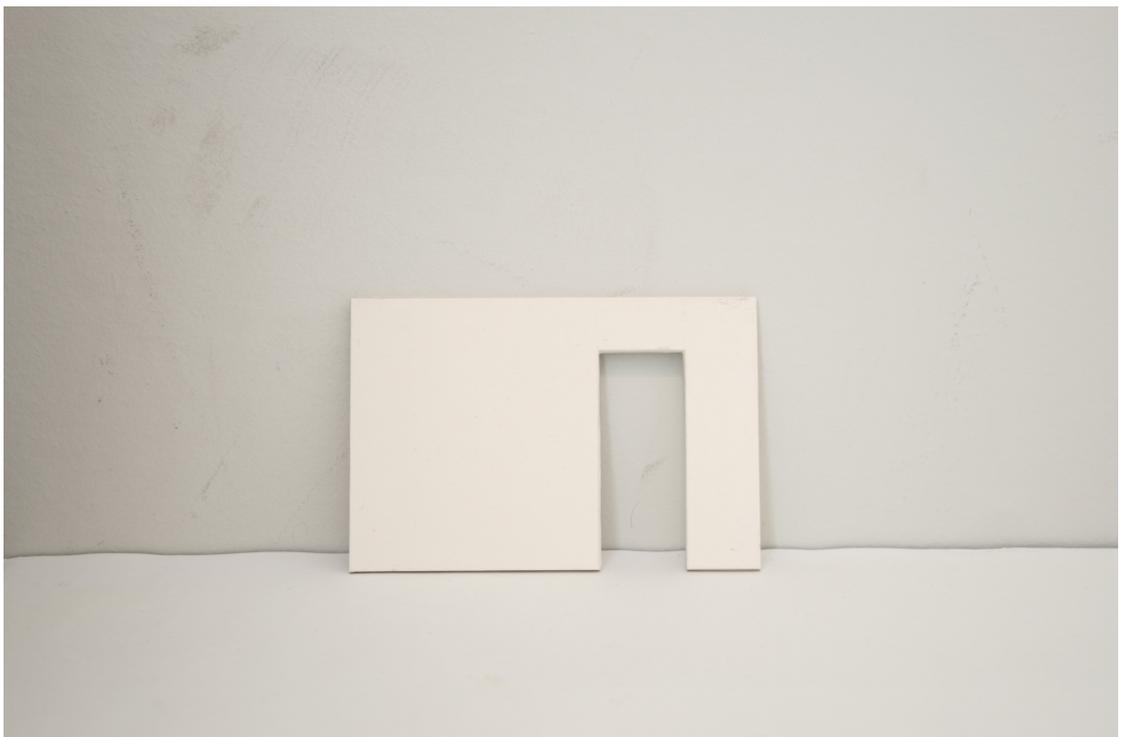


3.8

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch



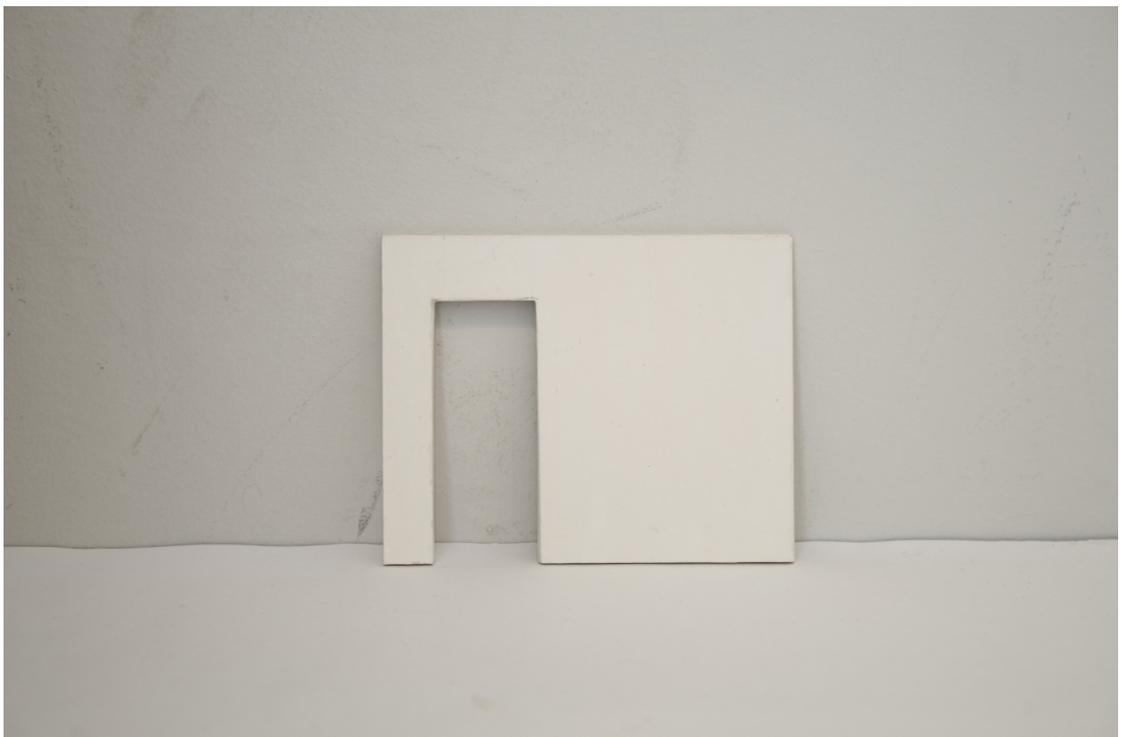
Studio Entrance

3.9

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch

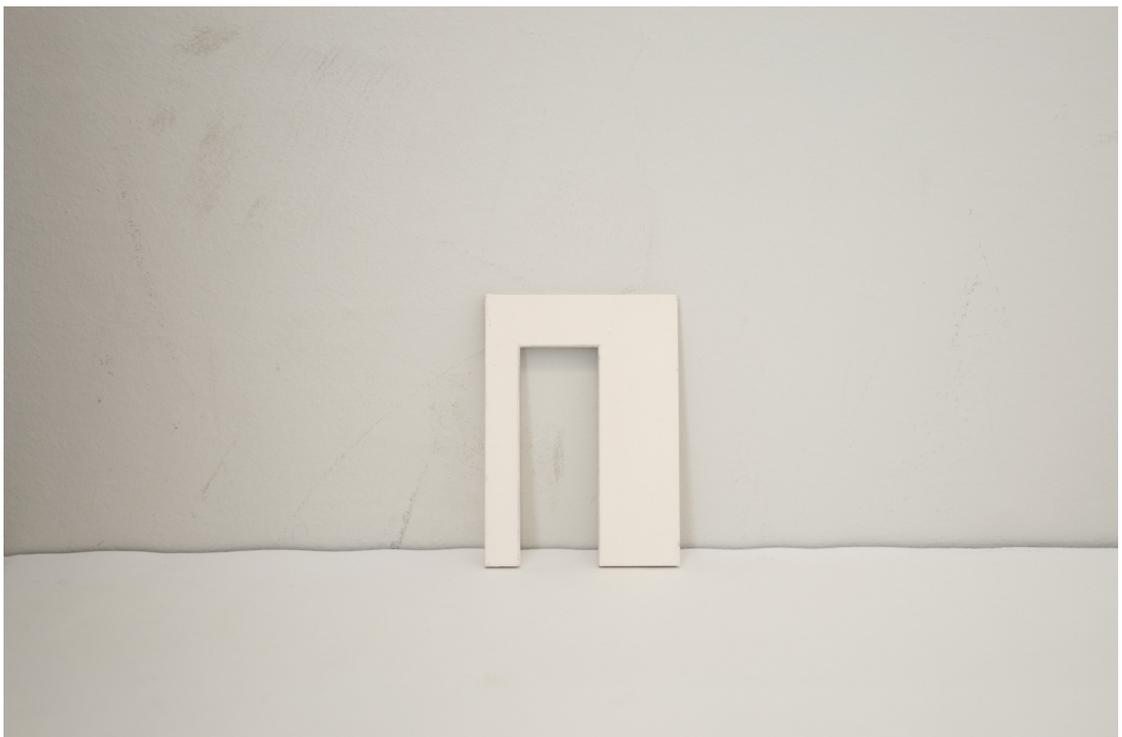


3.10

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch

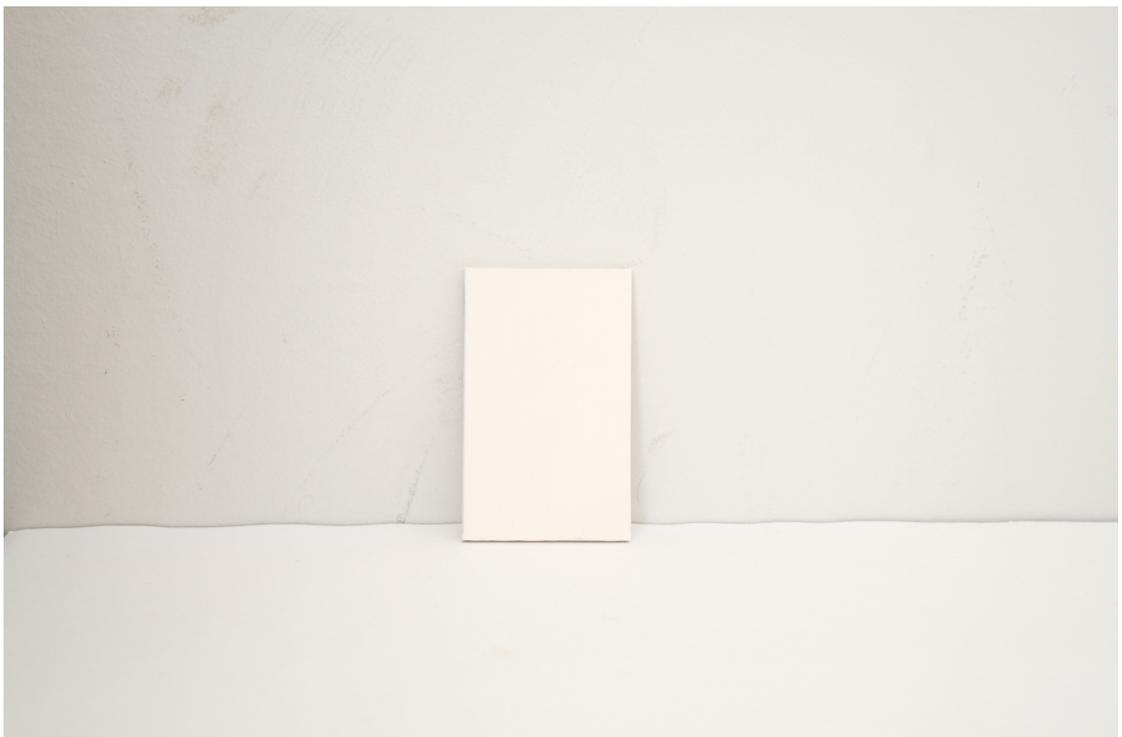


3.11

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch

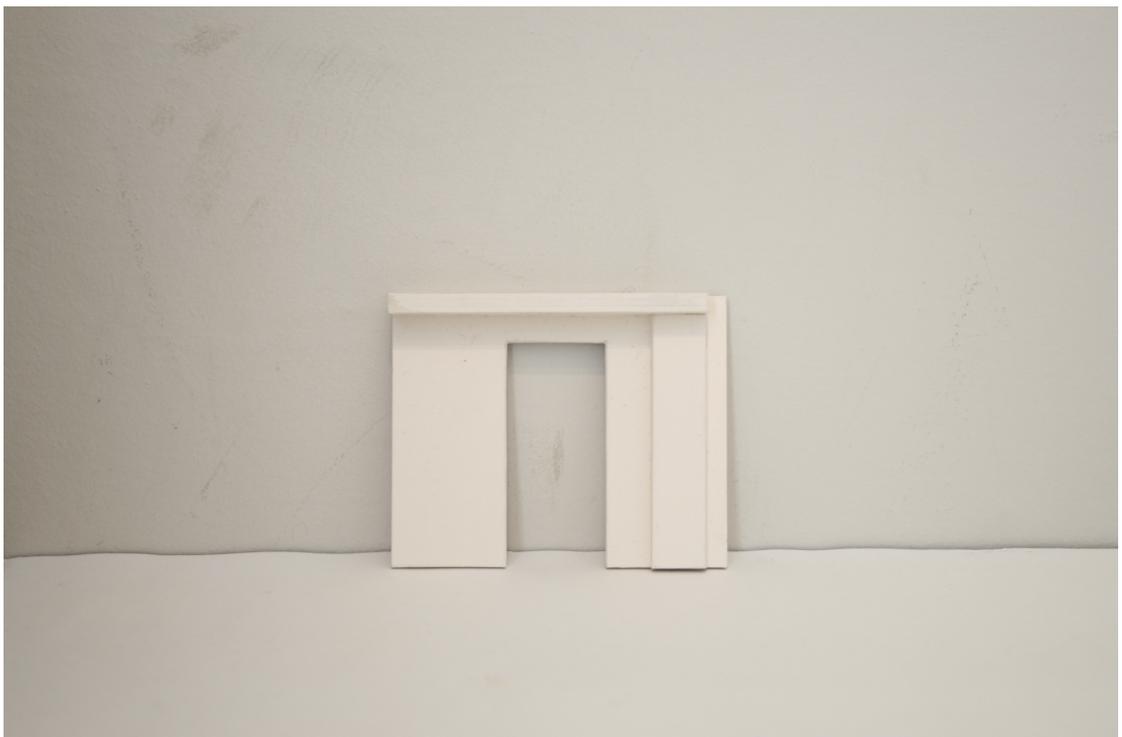


3.12

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch



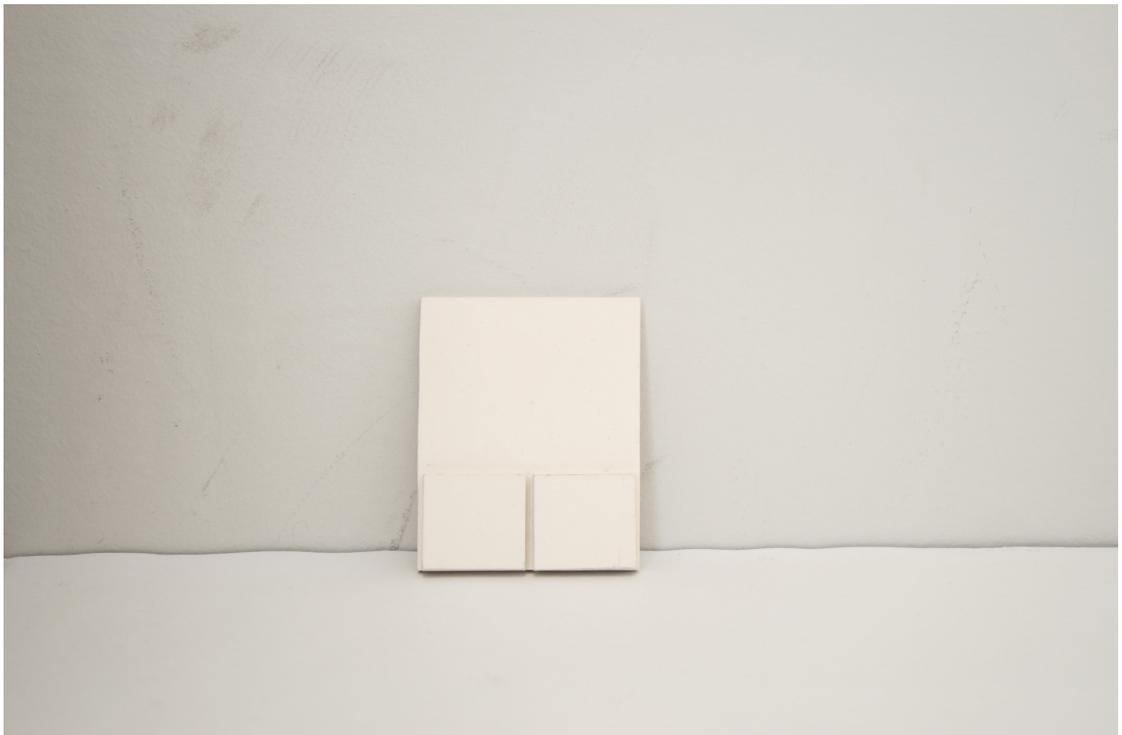
Toilet

3.13

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch

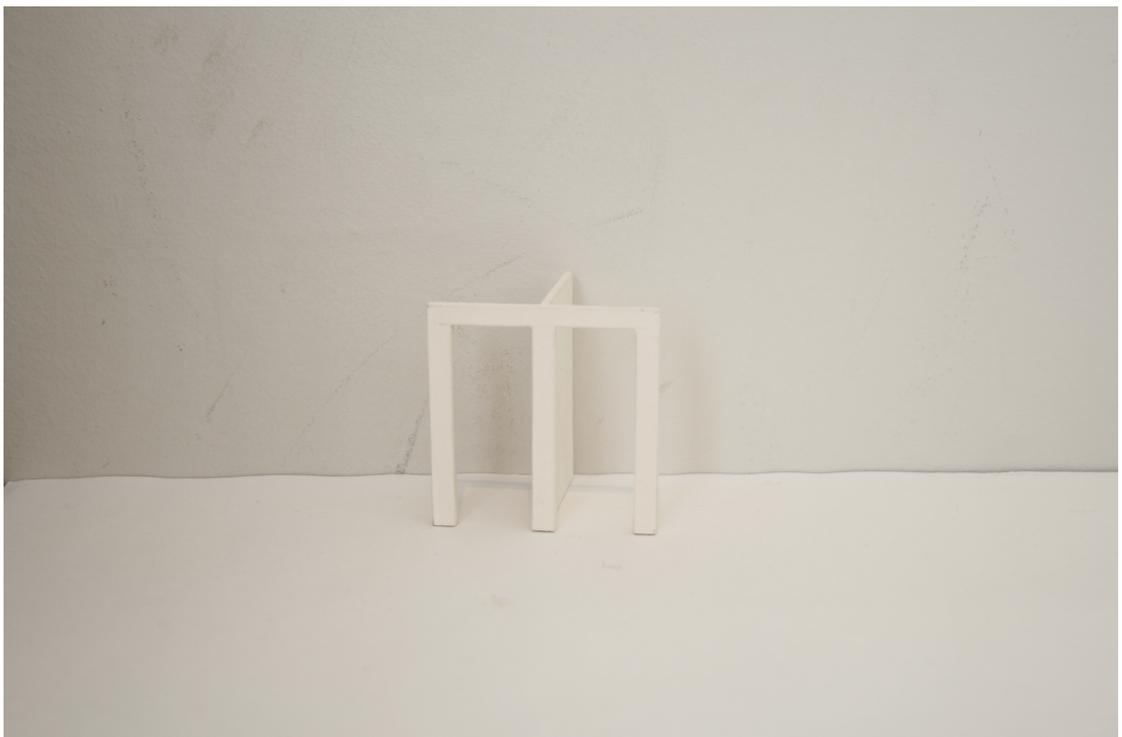


3.14

Scale: 16 cm to 1 inch

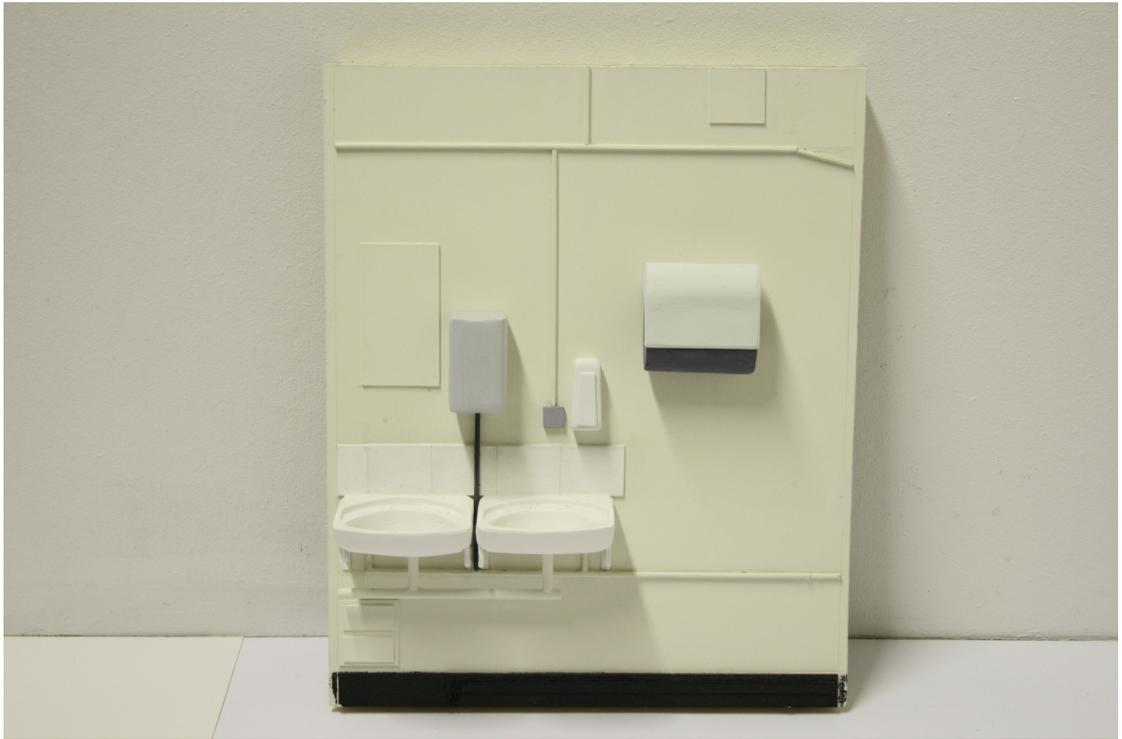


Equivalent Set: 16 cm to 1/16 of an inch

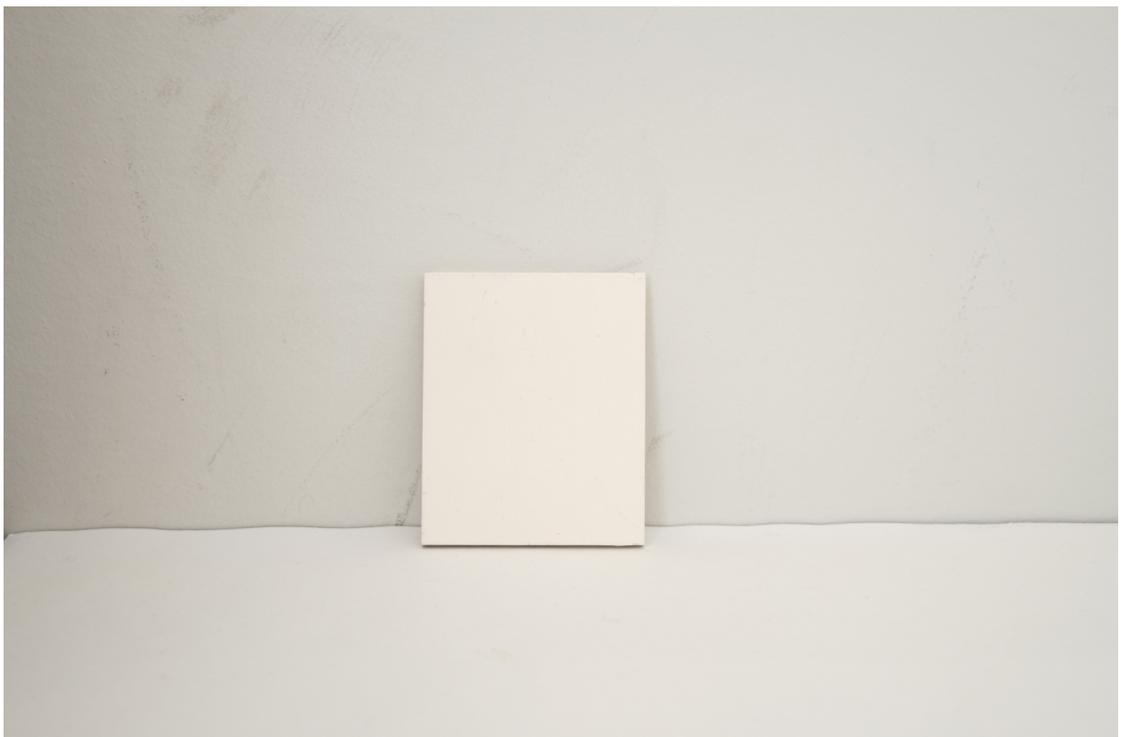


3.15

Scale: 16 cm to 1 inch

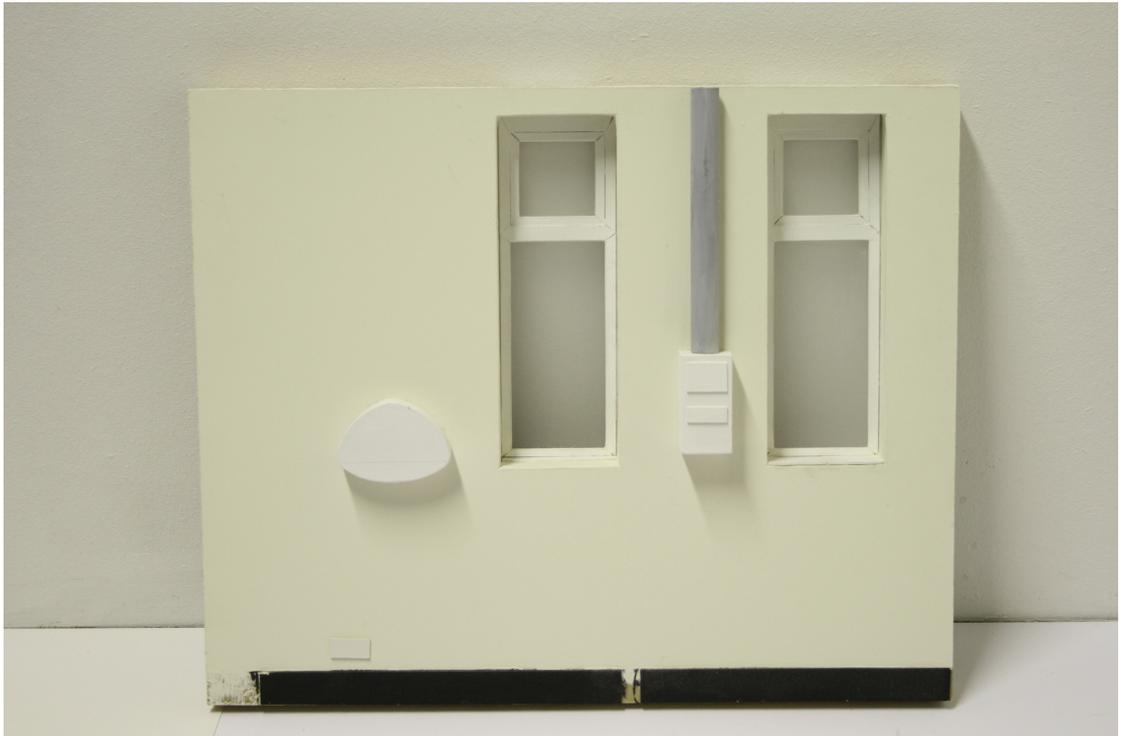


Equivalent Set: 16 cm to 1/16 of an inch

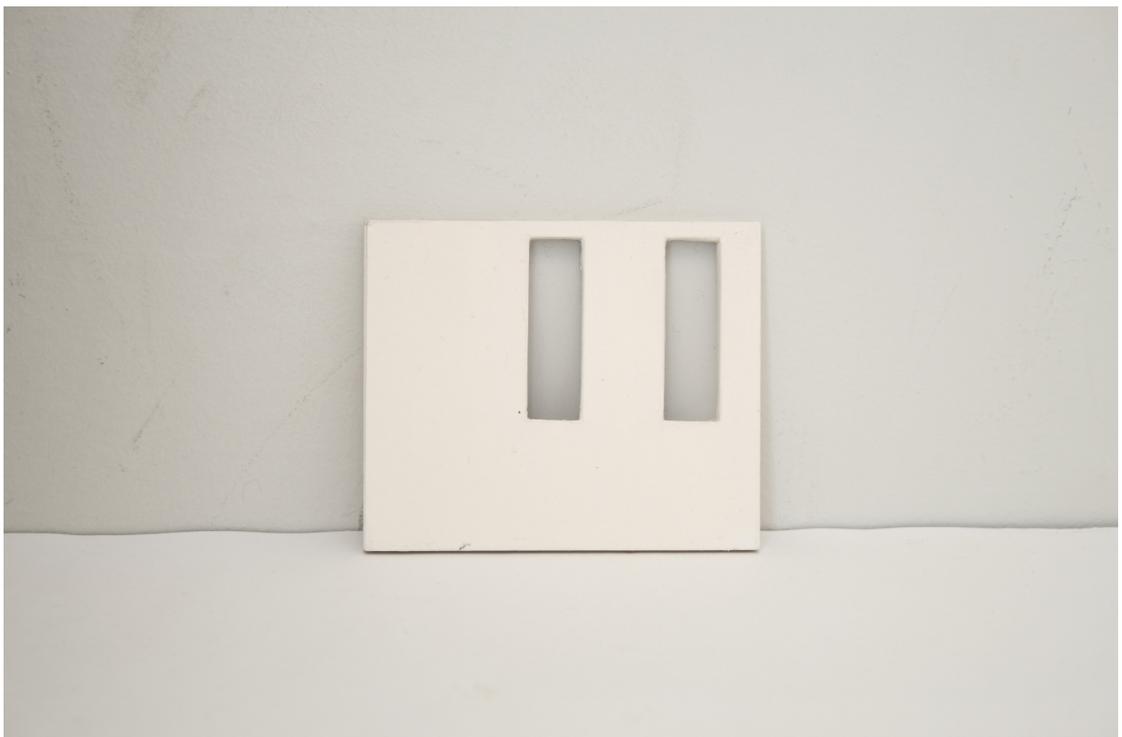


3.16

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch

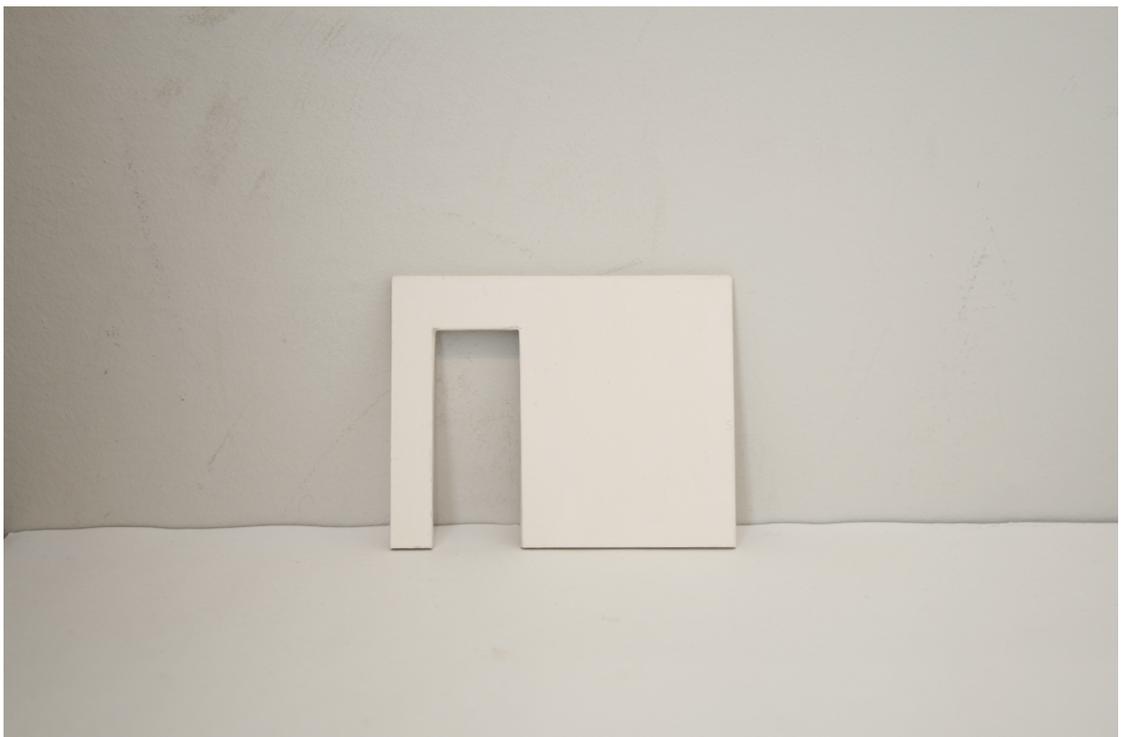


3.17

Scale: 16 cm to 1 inch



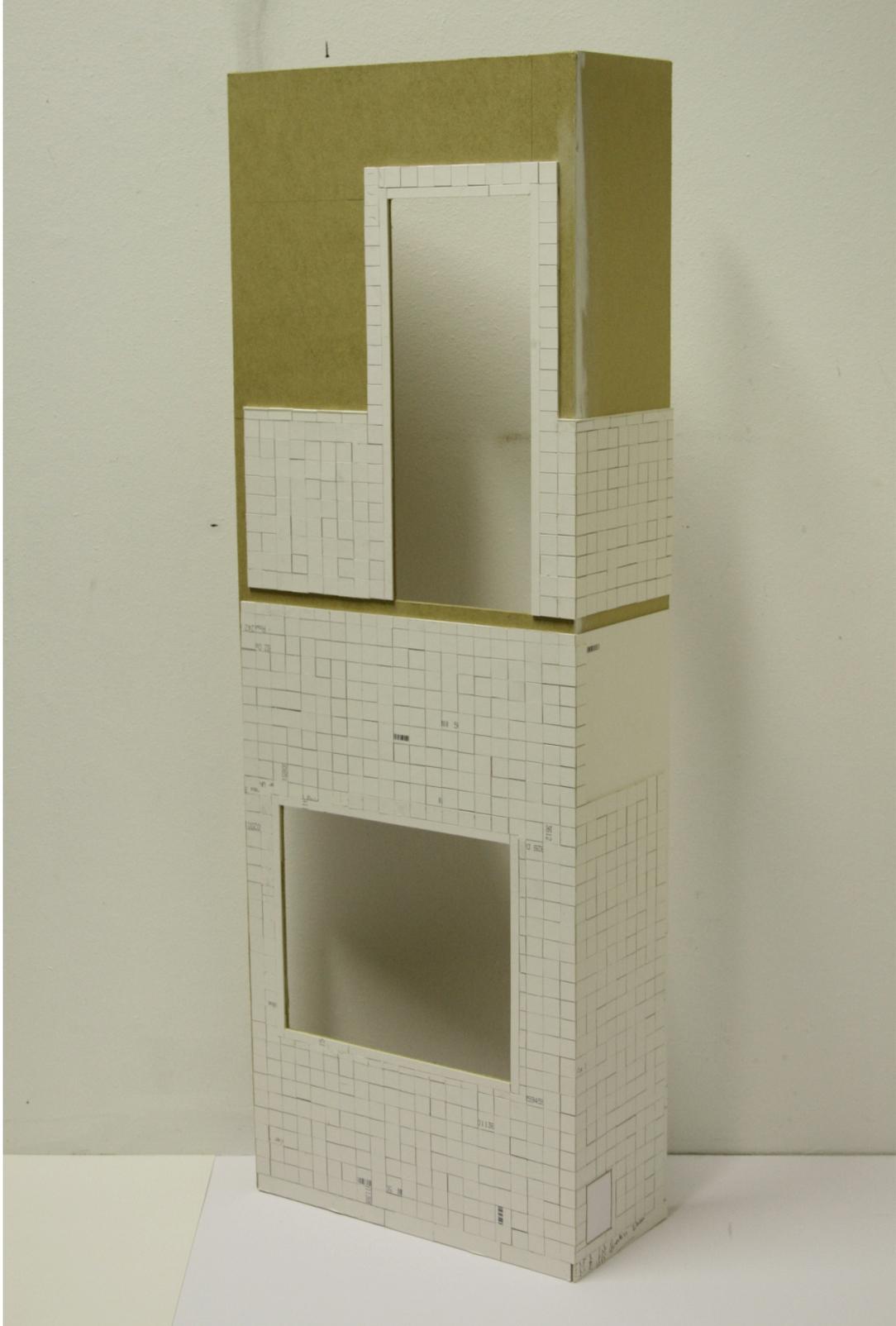
Equivalent Set: 16 cm to 1/16 of an inch



Building Entrance

3.18

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch

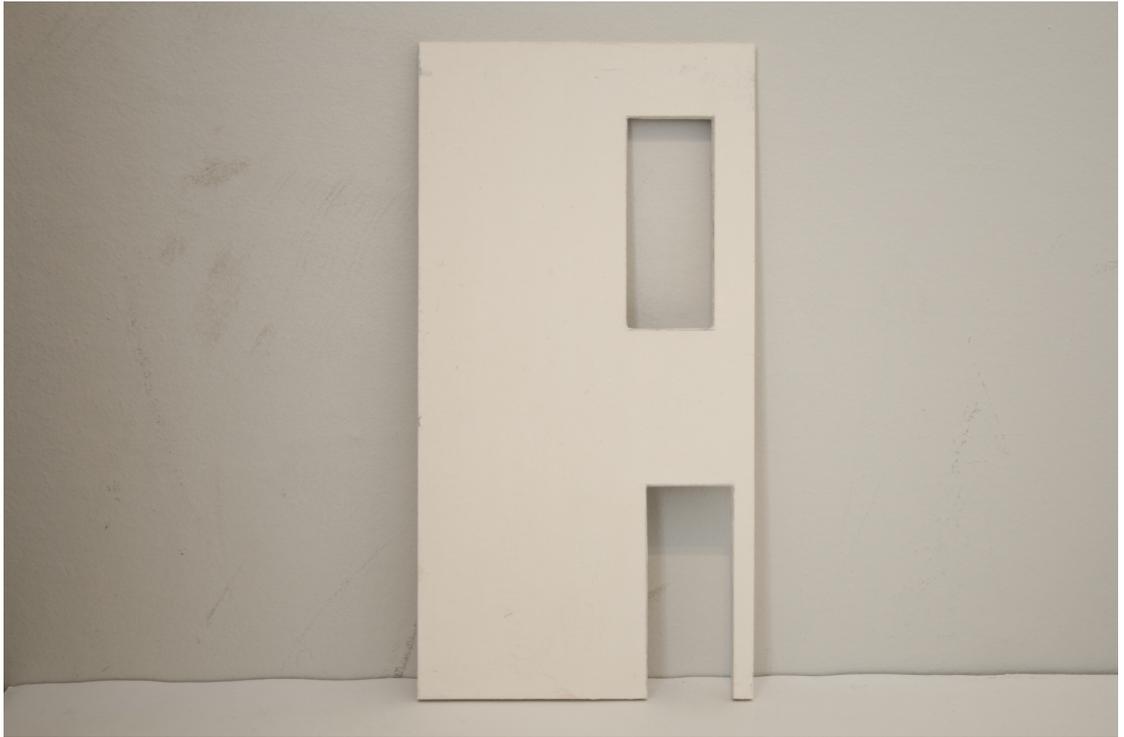


3.19

Scale: 16 cm to 1 inch

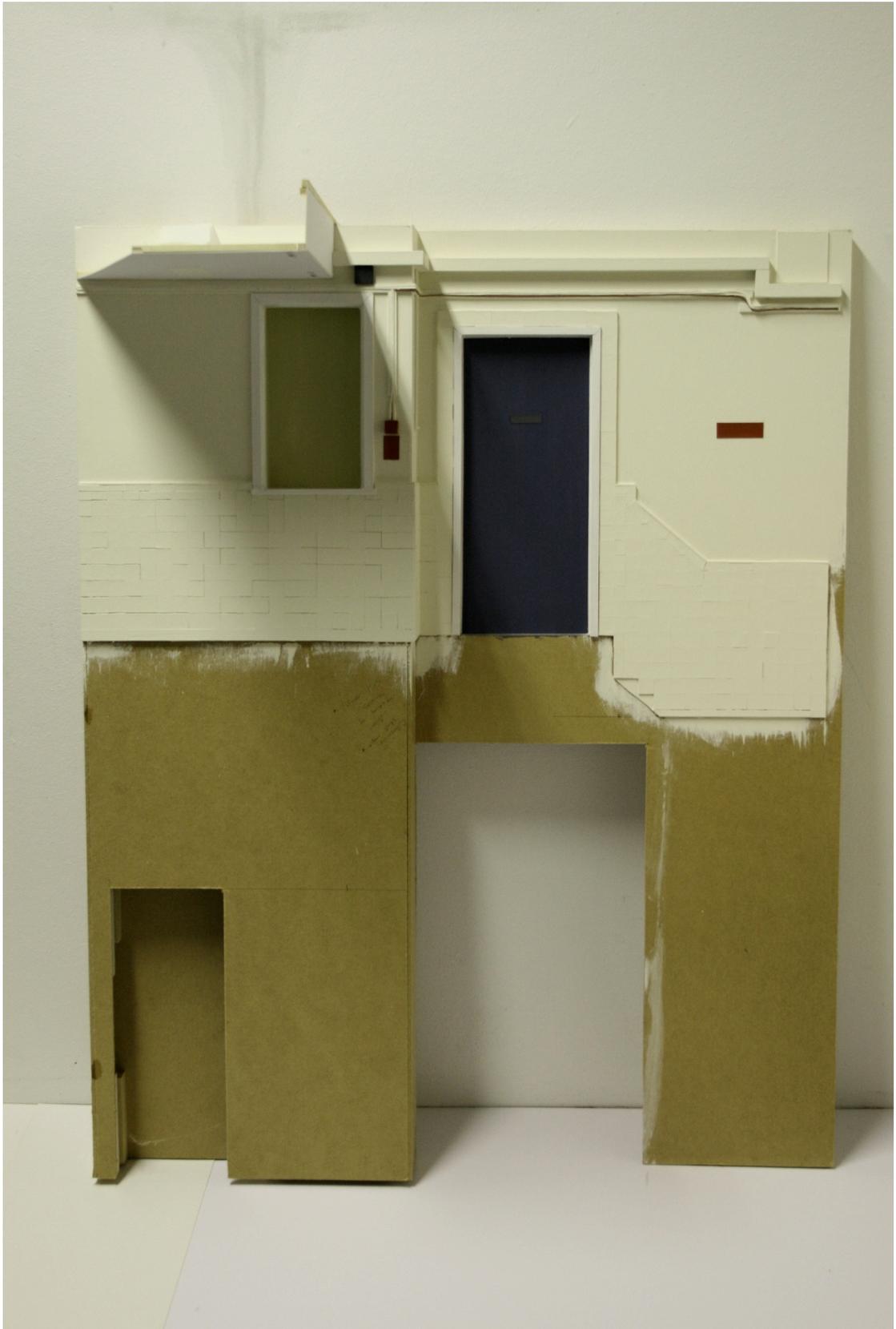


Equivalent Set: 16 cm to 1/16 of an inch

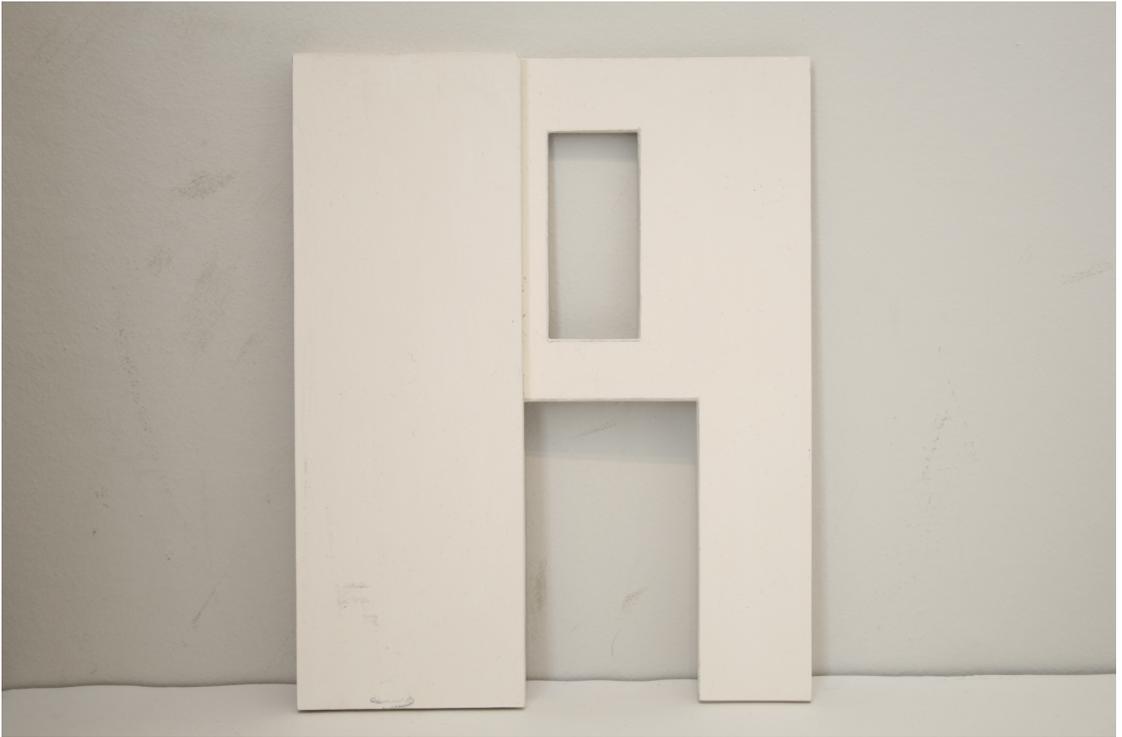


3.20

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch

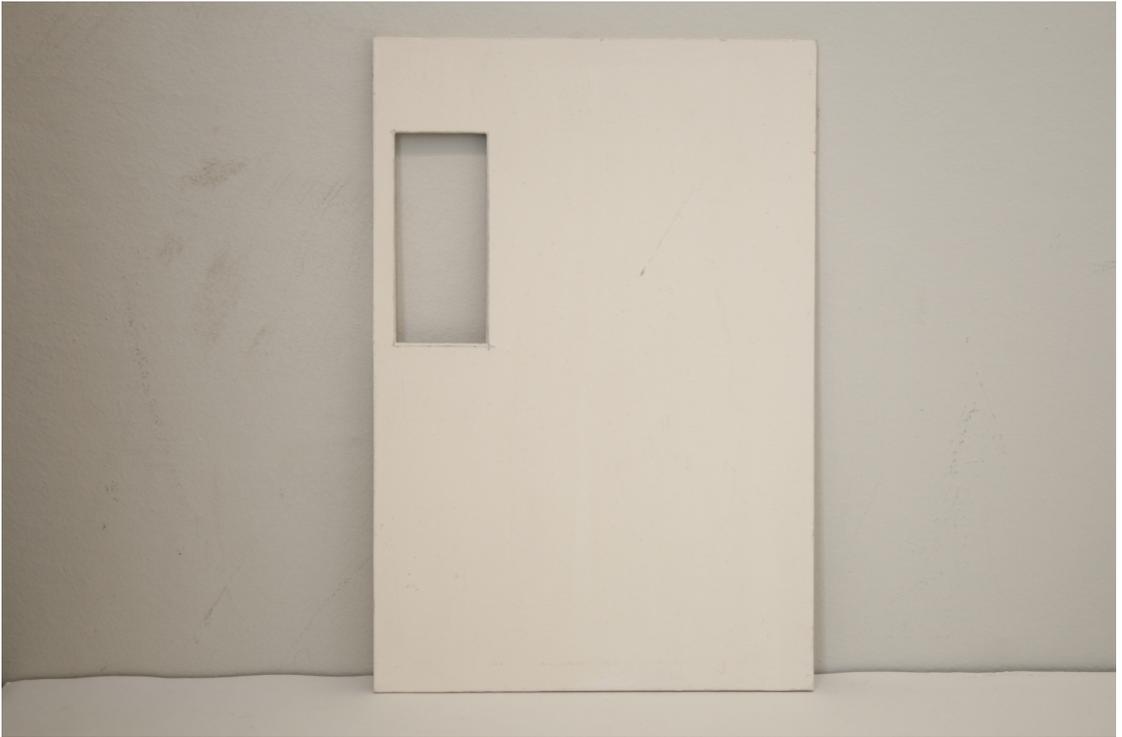


3.21

Scale: 16 cm to 1 inch

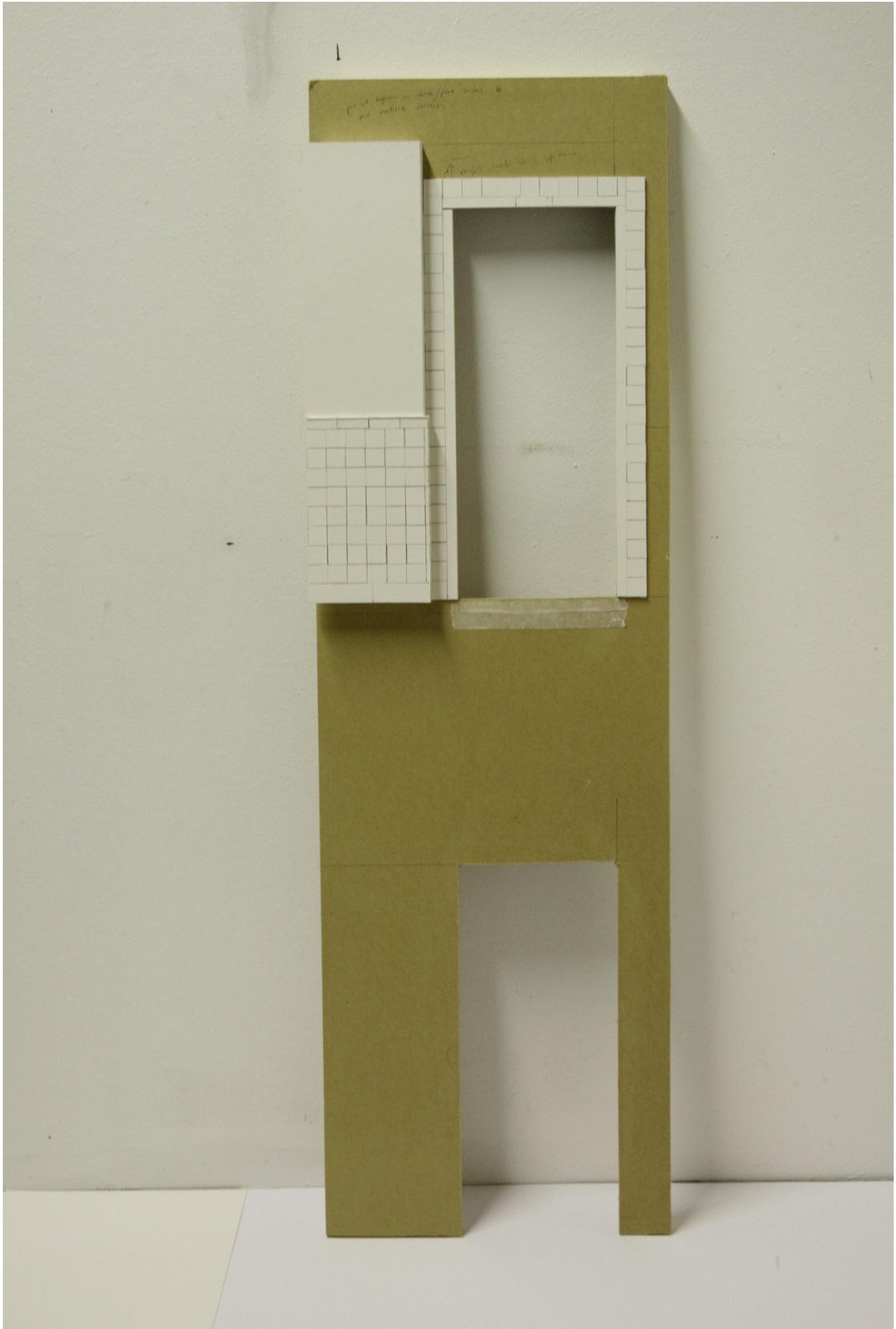


Equivalent Set: 16 cm to 1/16 of an inch

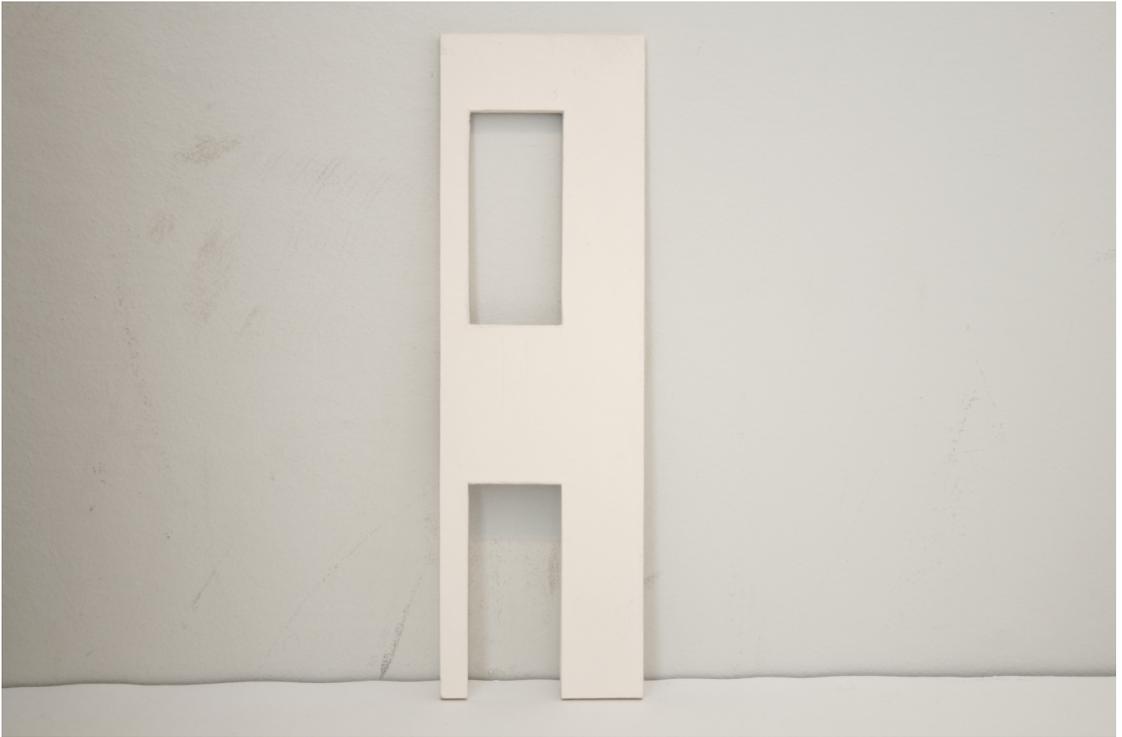


3.22

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch



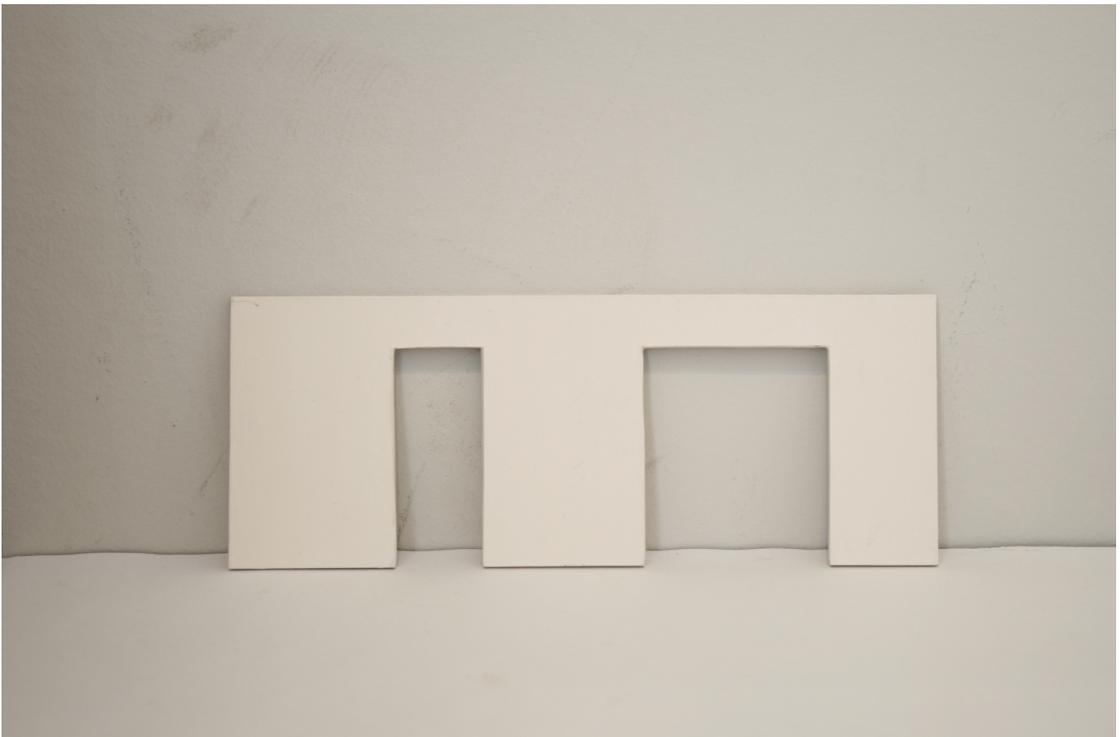
Corridor

3.23

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch

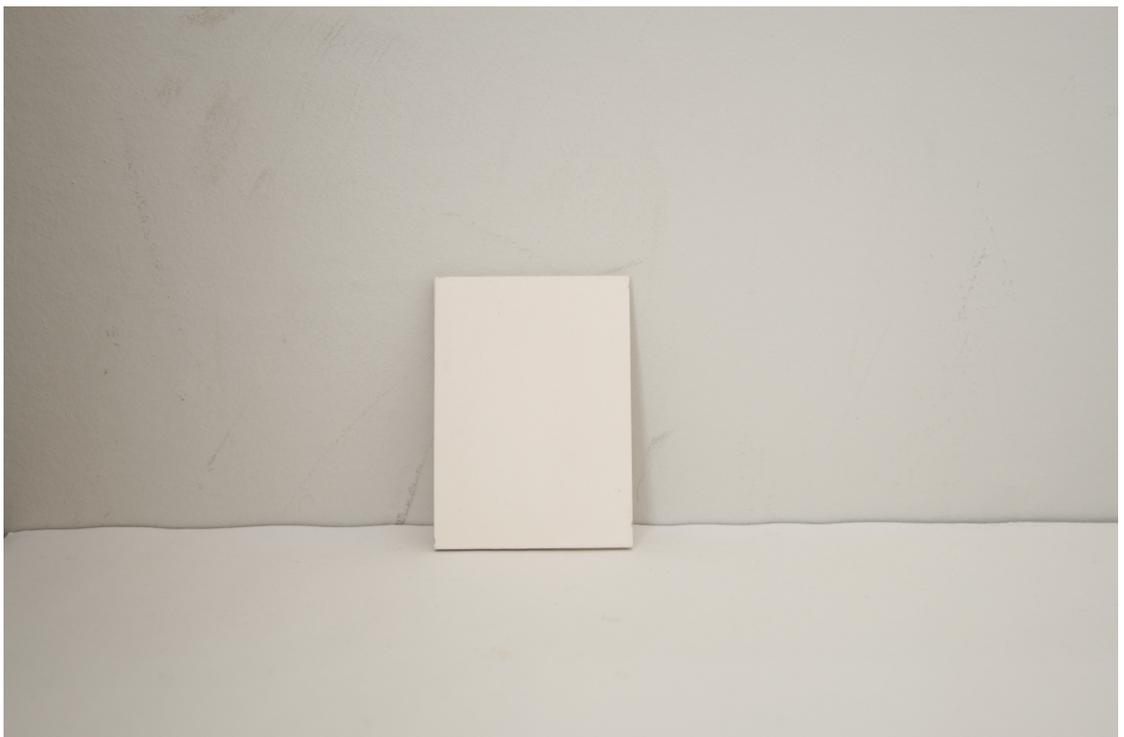


3.24

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch



3.25

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch



3.26

Scale: 16 cm to 1 inch

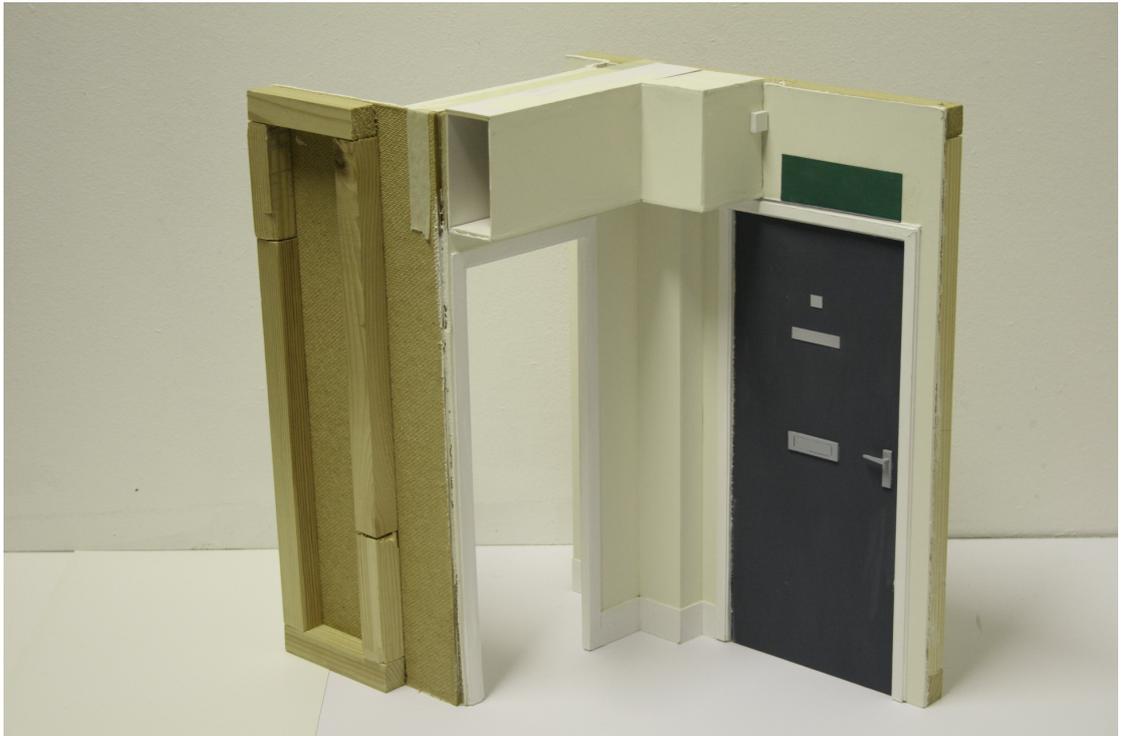


Equivalent Set: 16 cm to 1/16 of an inch



3.27

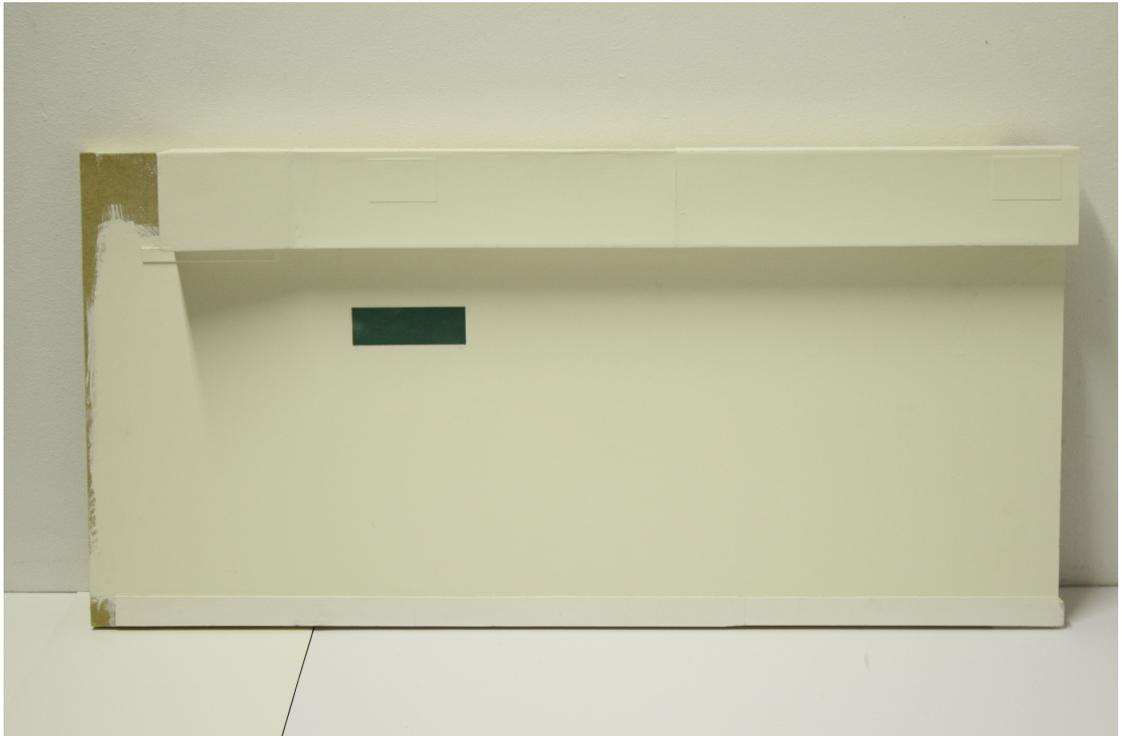
Scale: 16 cm to 1 inch



Equivalent Set: None

3.28

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch



3.29

Scale: 16 cm to 1 inch

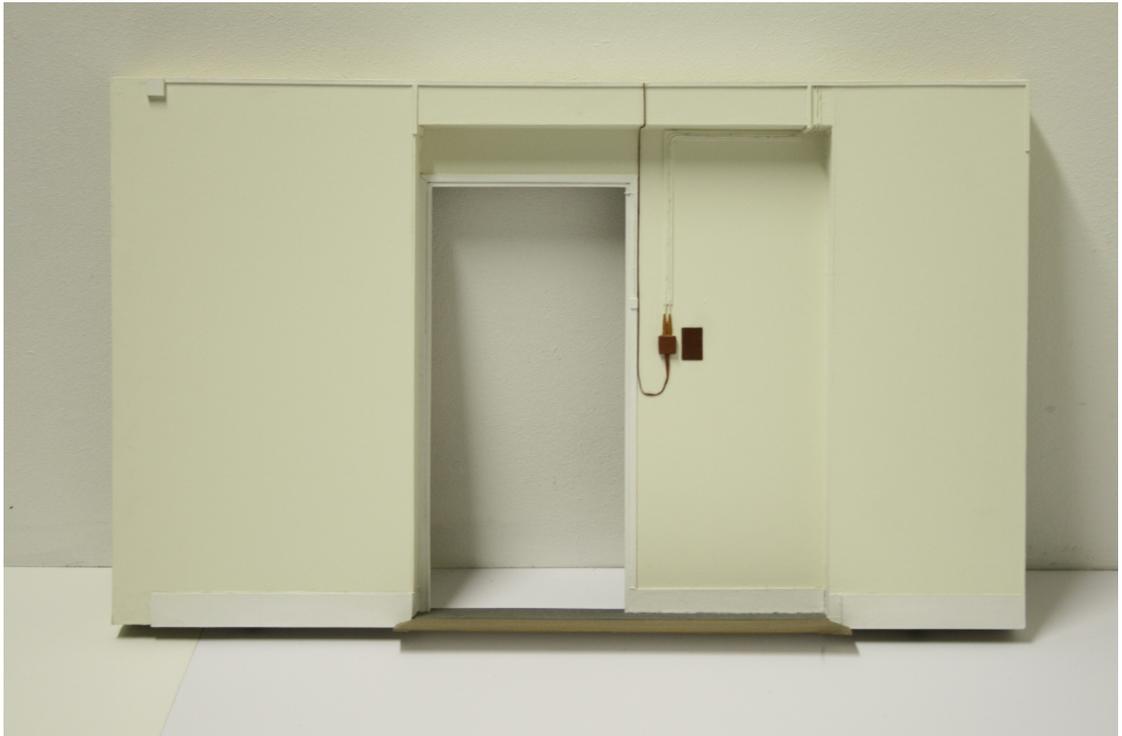


Equivalent Set: 16 cm to 1/16 of an inch

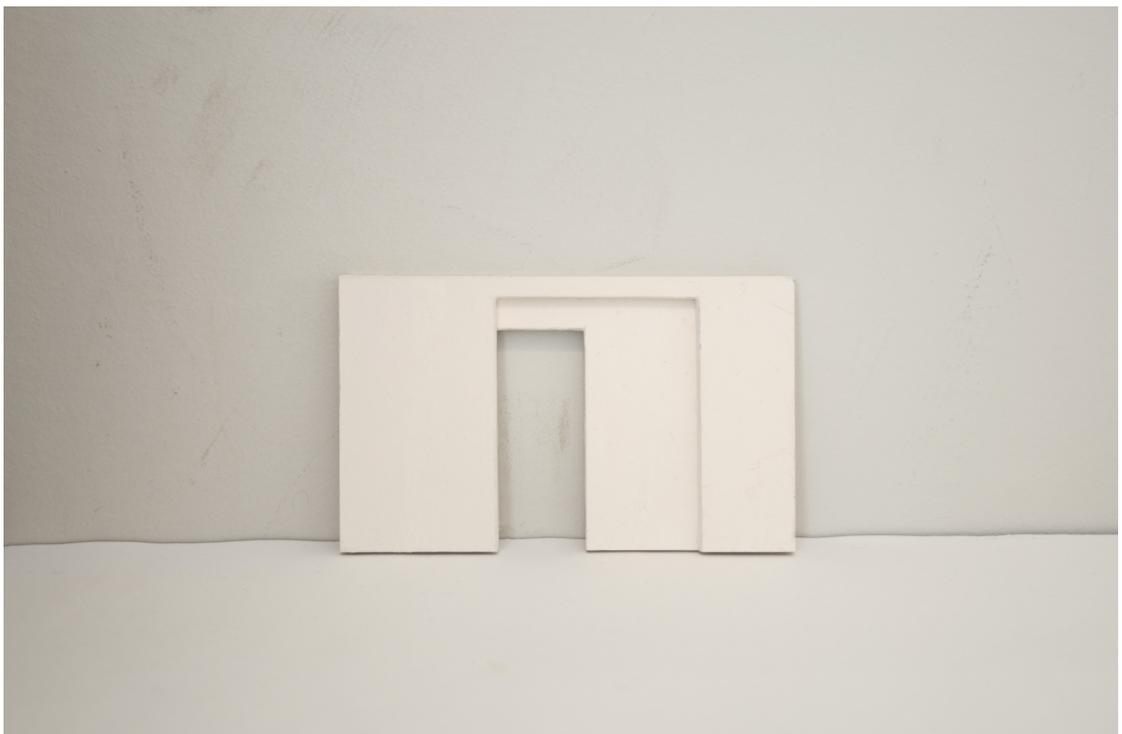


3.30

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch

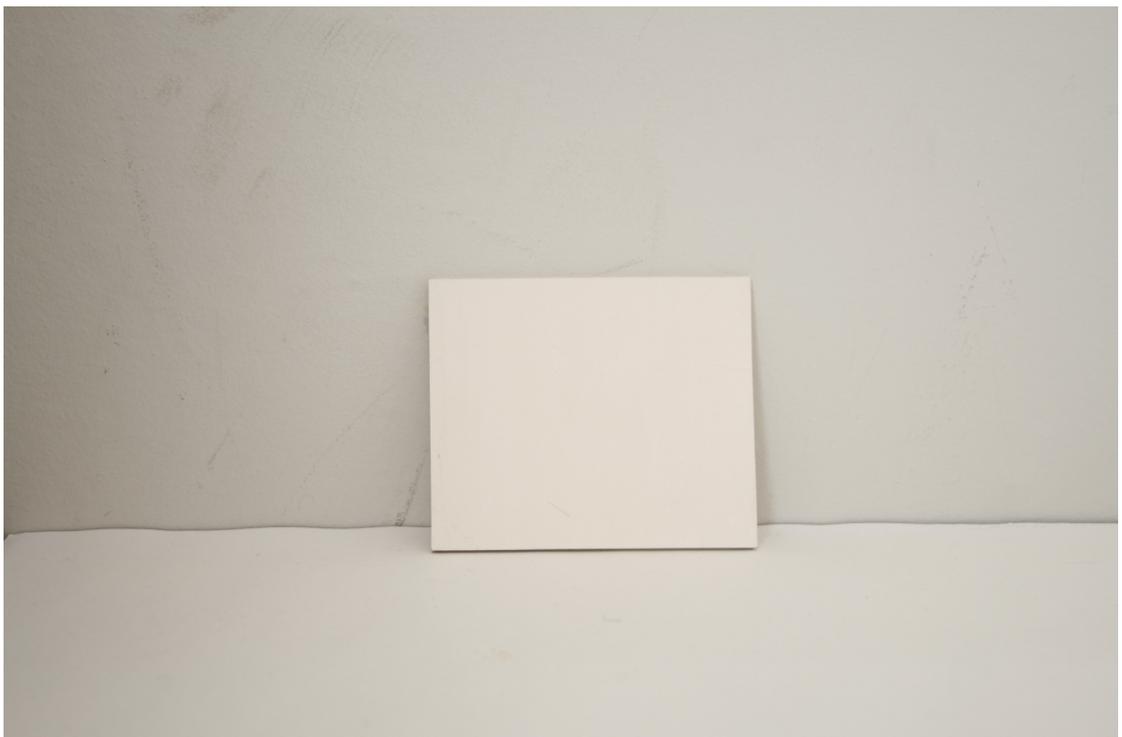


3.31

Scale: 16 cm to 1 inch



Equivalent Set: 16 cm to 1/16 of an inch



Room Furniture

No equivalent 16 cm to 1/16 of an inch furniture was constructed

3.32

Scale: 16 cm to 1 inch



3.33

Scale: 16 cm to 1 inch



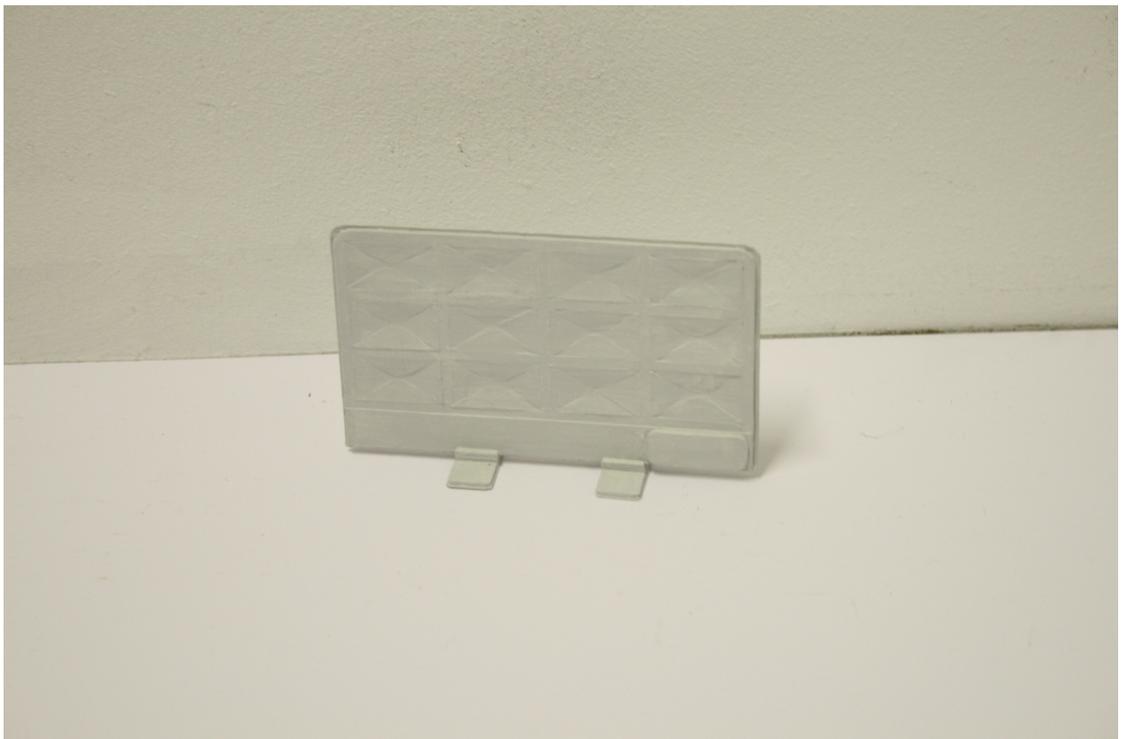
3.34

Scale: 16 cm to 1 inch



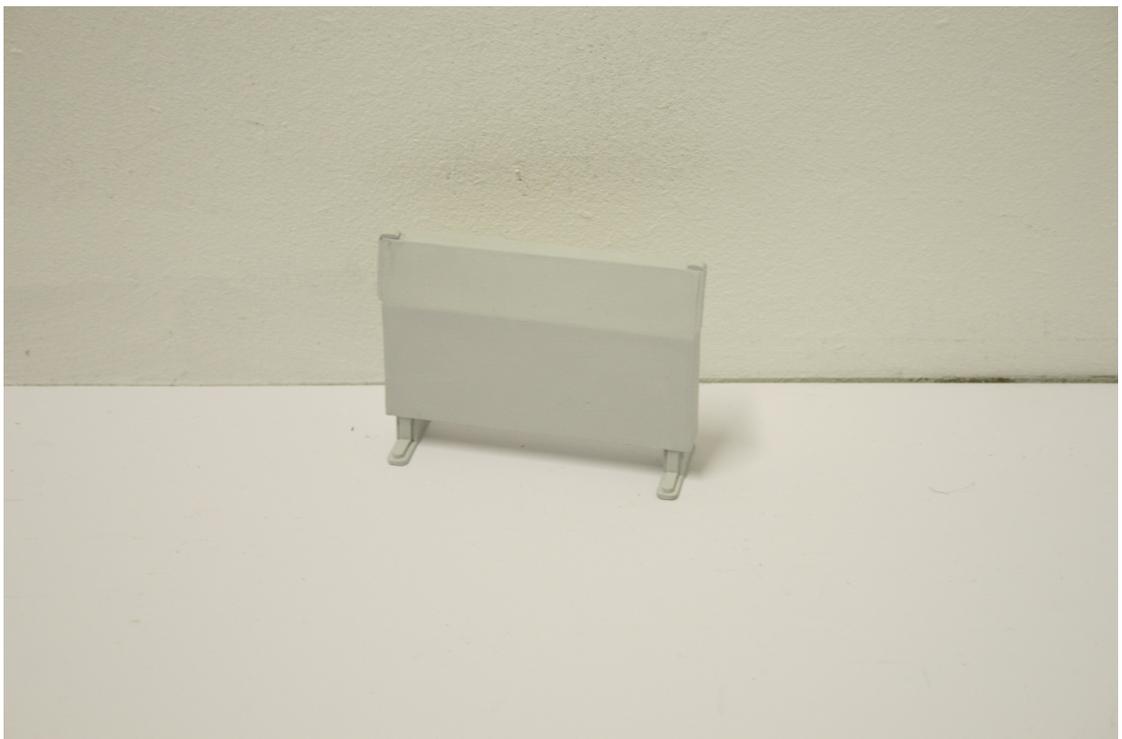
3.35

Scale: 16 cm to 1 inch



3.36

Scale: 16 cm to 1 inch



3.37

Scale: 16 cm to 1 inch



3.38

Scale: 16 cm to 1 inch



3.39

Scale: 16 cm to 1 inch



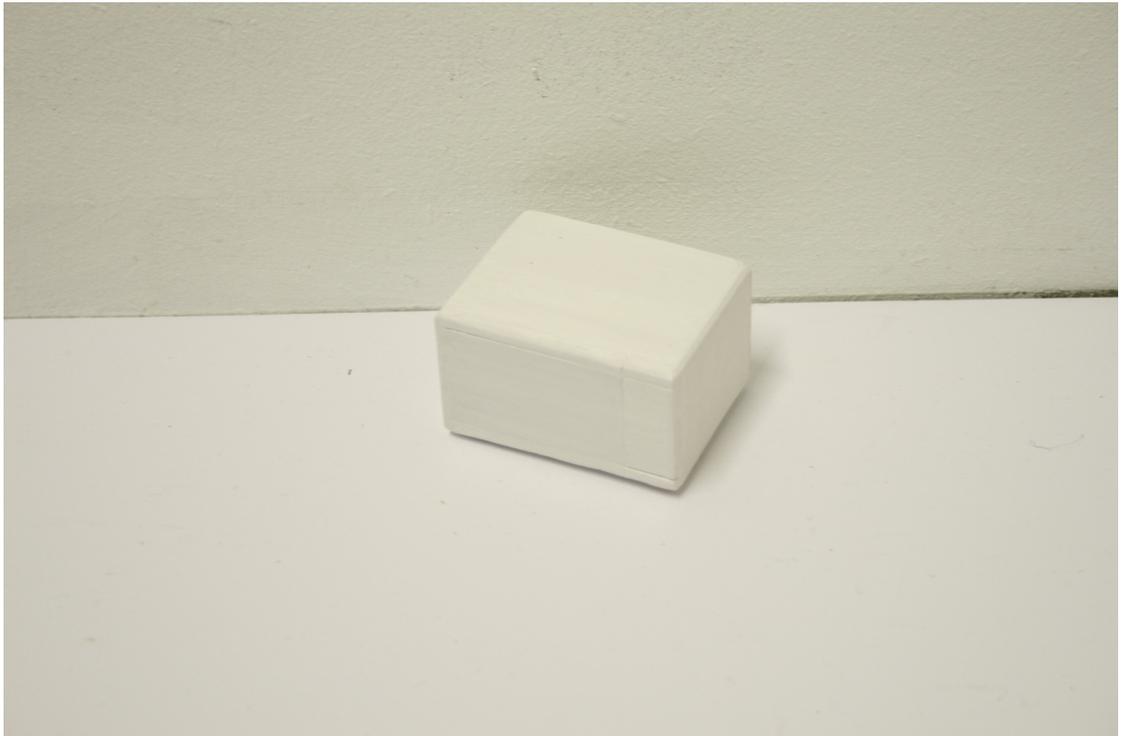
3.40

Scale: 16 cm to 1 inch



3.41

Scale: 16 cm to 1 inch



3.42

Scale: 16 cm to 1 inch



3.43

Scale: 16 cm to 1 inch



3.44

Scale: 16 cm to 1 inch



3.45

Scale: 16 cm to 1 inch



3.46

Scale: 16 cm to 1 inch



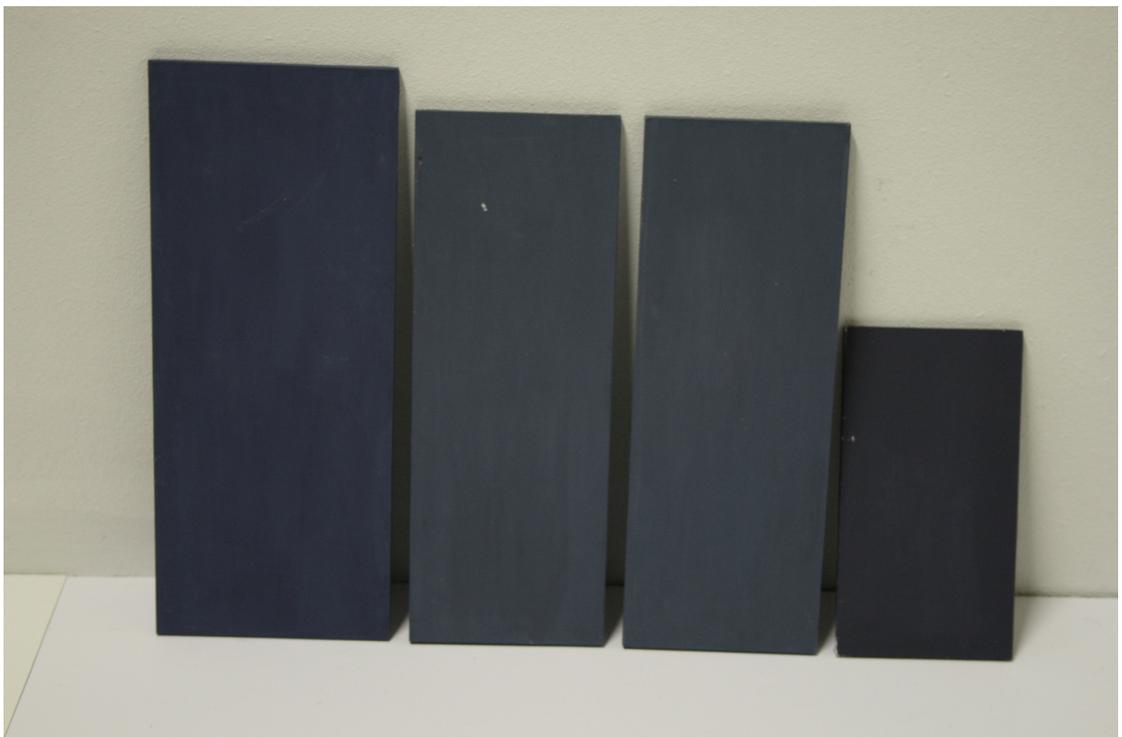
3.47

Scale: 16 cm to 1 inch



3.48

Scale: 16 cm to 1 inch



3.49

Scale: 16 cm to 1 inch



3.50

Scale: 16 cm to 1 inch



3.51

Scale: 16 cm to 1 inch



3.52

Scale: 16 cm to 1 inch



