THE HYPHENATED

ZONE

EXPLORING THE CONNECTION BETWEEN ACTUAL AND VIRTUAL SPACE

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Contents

This research operates at the nexus between actual and virtual space[1]. In interior architecture we can use tools to produce virtual experience, being immersed in a world or space different to your physical location. These tools can include, but are not limited to, actual materials, forms, spaces, and arrangements. Virtual space is described as the non-material spatial experience. This experience disconnects us from the physical actual environment that we live in. The best example of this is that of a cinematic experience. When we watch a film in a cinema, the actual physical environment we usually occupy is re-contextualised through a lack of light; our focus is then given to the light and movement produced by the projected image where we become encapsulated by this sense of virtual that we cannot control. We experience a sense of space different to our own and occupy this space although it remains less tangible than the physical world we live in.

The thesis proposes a redesign to the public areas for the site of Ngā Taonga Sound and Vision in Wellington

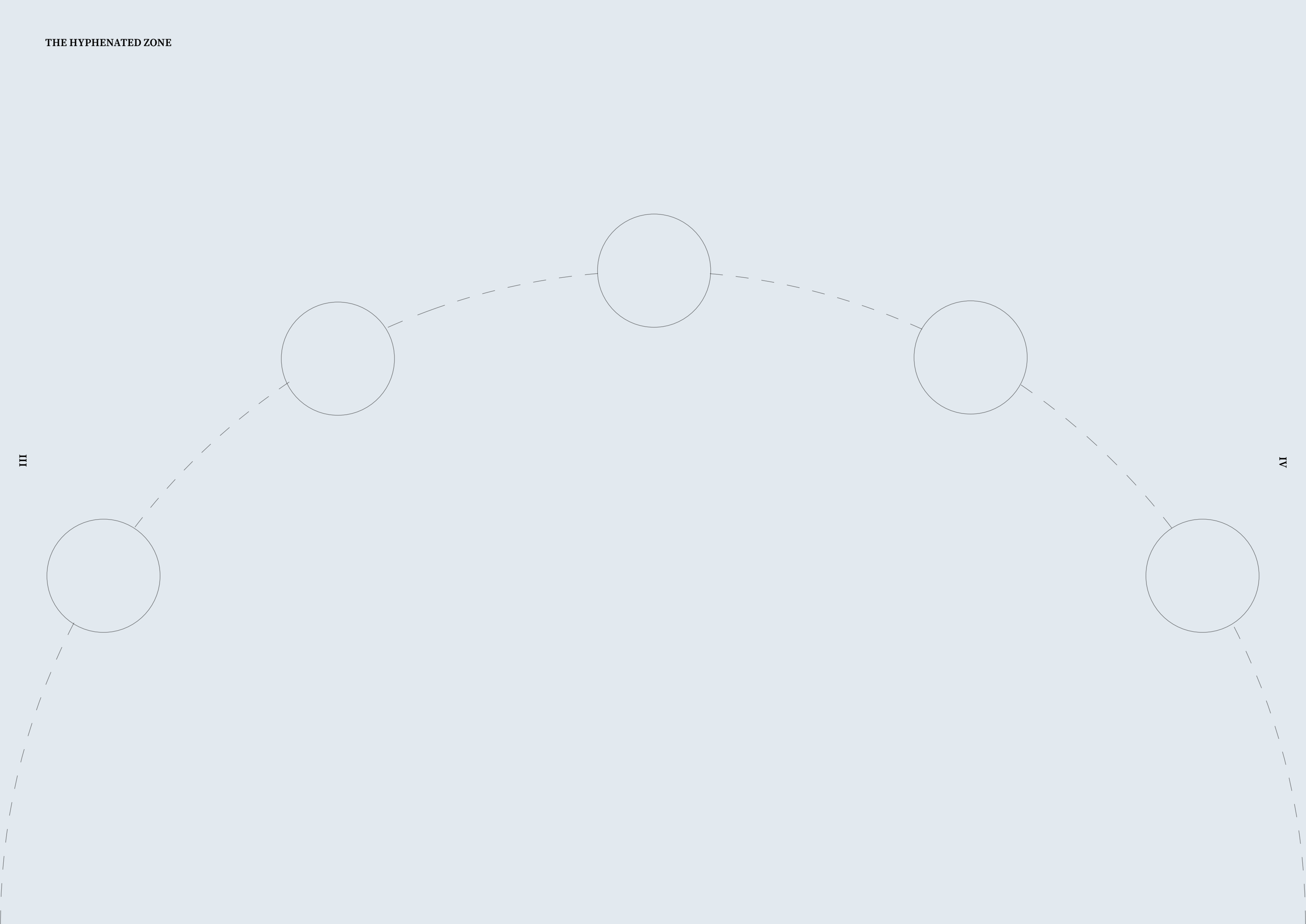This thesis proposes a redesign to the public areas for the site of — Ngā Taonga Sound and Vision in Wellington. Currently, the only access the public has to the collection is through digital means, a small cinema and collection of computers in the media library. This project aims to create engaging, embodied encounters with the digital collection of Ngā Taonga Sound and Vision through a series of interior installations within the site. These installations extend the virtual interior created by the sound and moving images further into the boundaries of the actual, physical interior.

The exhibition spaces of Ngā Taonga Sound and Vision offer a rich testing site, and provokes the question, how can we create more immersive, engaging encounters of the incredible films collected by Ngā Taonga? The purpose of an archive is to preserve the past for future generations. Although the site currently allows some opportunities for the public to access the collection, it lacks a sense of immersion that can be explored through interior architecture interventions.

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1   This definition of virtual is based upon the Deleuzian theory of actual and virtual. This virtual definition being different from the modern definition of virtual (modern definitions being virtual reality or the internet for example). Deleuze distinguishes actual as having extensive borders, while the virtual as having intensive properties. "That which you can grasp, cut, twist and turn, is extensive; that which affects you, but does not yield to your attempt to contain it, is like the wind in your face, intensive" (Buchanan and Lambert 9).

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Introduction

How can the relationship between the actual and virtual interior be explored to create a more engaging experience for Ngā Taonga Sound and Vision?

Archives were once a prominent source of information for those conducting research and to persons with a keen interest in the subject matter. With the rise of technology and the internet, the individual has gained immediate knowledge at the push of a button. We have gained instantaneous information; however, we have lost any sense tangibility that was once provided to us through books, cassettes, and film reels. This thesis does not propose reinstating an analogue, or pushing further into the digital, but rather it proposes that we use interior architecture as a tool to engage one in an archival environment by bringing together the virtual space with the actual.

interior, being something less concrete than the actual in terms of its physicality, is no less real, like an idea or a feeling. The best example of this type of interior is the feeling one experiences when watching a film in a cinema. The cinema removes all context of the exterior, actual world by creating a world of darkness around those at the cinema. Context is then reinstated through the image projected on the screen. This image, in the mind of the viewer, is 'real' though not physical. This thesis examines this area of the virtual interior and how it can be brought further into the actual to create an engaging exhibition experience for the New Zealand audio-visual archives, Ngā Taonga Sound and Vision.

Research

This thesis focuses on the space between virtual and actual space, the hyphenated zone. The virtual

Site and Programme

Ngā Taonga Sound and Vision has had long standing

within New Zealand as the primary archive for audio-visual items and thus has created a substantial collection of these items over a number of years. Currently the archives provide little access to the collection, through a lack of access points and a limited range of items available on the Ngā Taonga website. The only access points within the Taranaki Street building consist of a small cinema that houses public screenings; the media library that primarily uses analogue formats to access the collection; and a library containing periodicals, however, this is only accessible through appointment as it requires monitoring by a staff member. As the future of all archives, let alone audio-visual archives, is becoming increasingly digital, how will this shape the future of archival interior architecture? How will visitors gain the same sense of tangibility from an entirely digital collection?

This thesis does not propose reinstating an analogue, or pushing further into the digital, but rather it proposes that we use interior architecture as a tool to engage one into an archival environment by bringing together the virtual space with the actual.

Methodology

The methodology used for this thesis has been primarily research through design as well as through the analysis and understanding of interior imagery in film and painting. The first phase of the thesis undertakes the analysis of interior images and how this produces a feeling of a virtual interior. This was used as a tool to gain a further understanding of the underlying techniques and elements used by artists and filmmakers to form this feeling. This also began to lay the foundations for the second part of the thesis which explores Deleuzian theory in relation to film and architecture. Deleuze, along with other key theorists, explores cinematic techniques and their influence on design. The second phase of this research examines several authors' writings on Deleuzian virtual space as well as key cinematic techniques, comparing them to techniques found in architectural design. This research is analysed through targeted precedent

analyses and literature reviews to gain a further understanding of the subject to be explored through design.

Physical modelling will be used as a tool throughout the design process. As this thesis operates at the nexus of virtual and actual physical space, physical modelling is useful in the way it generates an easier understanding of space, as opposed to using 3D modelling techniques in the preliminary phase of the design research.

The third phase will focus on the site and context of Ngā Taonga Sound and Vision. Generating a client brief based upon the 2016-2024 strategic plan for Ngā Taonga be used as a tool to help determine the key priorities as well as the areas that have been identified as underperforming in relation to their future plans for the archives. A site visit will be conducted during this phase to help produce a site analysis, in which the physical site of Ngā Taonga on Taranaki Street will be analysed in relation to its connection to this research into the virtual, as well as its connection to visitors. 3D modelling techniques will then be utilised at this point, to generate a current site map and model.

The final design phases analysis further readings and design precedents before producing a final set of physical designs that explore an engaging

interior intervention that displays Ngā Taonga's immense audio-visual collection through a series of exhibitions throughout the Taranaki Street site. Using digital projectors (colour and light) and physically modelled forms creates a design that lingers between the actual and the virtual. 3D modelling programmes will provide a connection to the site, supplying a context the exhibition will occupy.

This thesis proposes a new way to explore a digital audio-visual archive in a more engaging sense that investigates the area between what we conceive as actual and virtual space. It will be using cinematic elements as a basis for the interior design language as it is a discipline that closely resembles interior architecture. Elements such as its representation of human nature, time/temporality, movement, light, and narrative will form the basis for the design language as it is representational of the virtual-actual space as well as the archival medium.◆

phase one

the essence of image
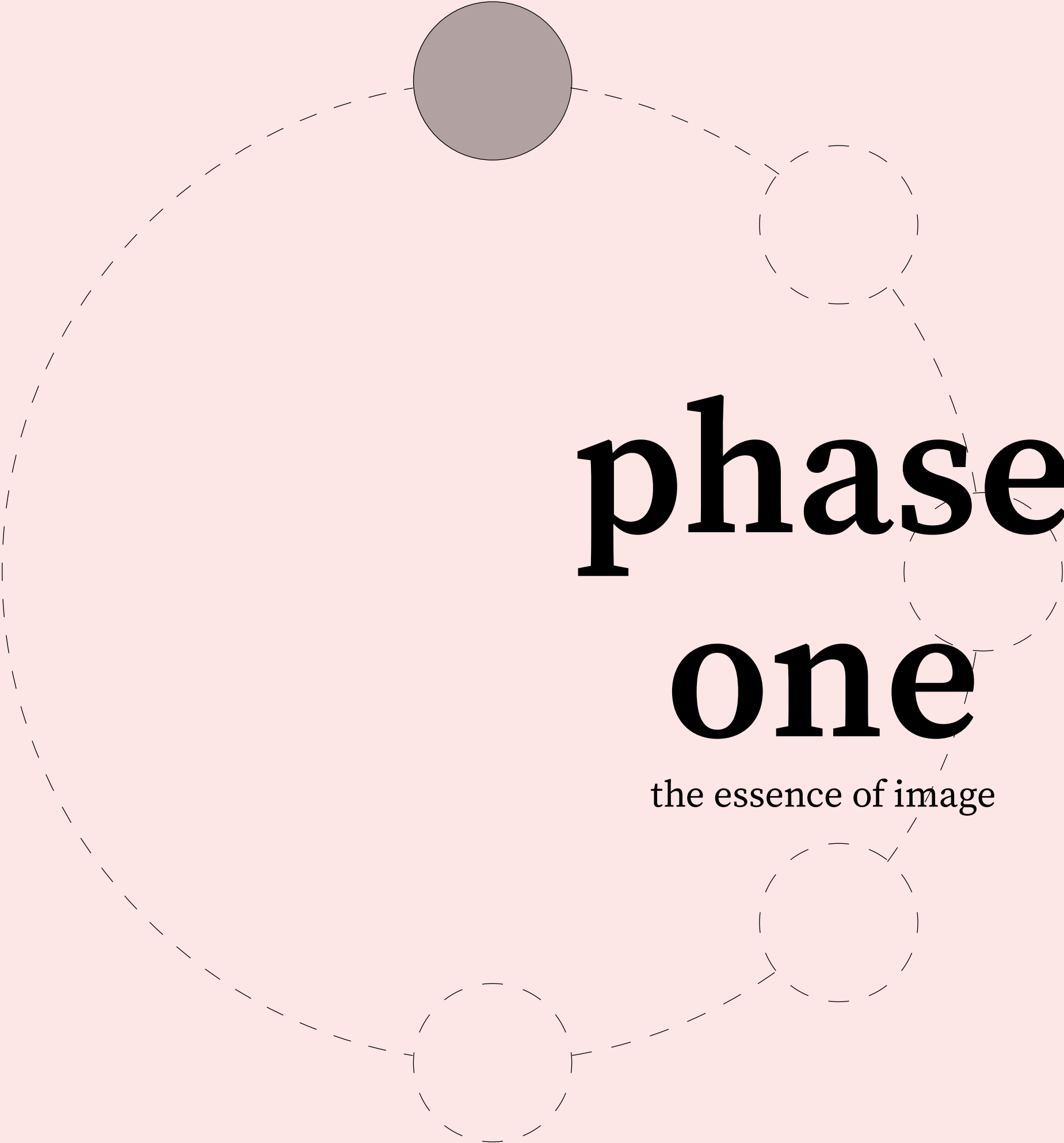
Phase one of the research introduces the preliminary design research that explores the virtual space within cinema and art. It examines the essence of image beginning with the work of Gregory Crewdson, followed by several of his postulated influences from early 19th-century European Romantic painters to the mid 20th-century artist Edward Hopper. The following analyses explore the relationship between the image to cinematic elements such as light, colour, space, and movement and how this forms an overall narrative and understanding of the subject. The final analysis conducted investigates three episodes from the Netflix series *Black Mirror*, a series that forms speculative interior scenes based upon current technological trends. The analysis looks at how virtual interiors (for example, social media and virtual reality) have influenced the world around the central characters. This analysis work is important for establishing examples of virtual mediums and their impact on those viewing the work.

Gregory Crewdson Photography Analysis

Gregory Crewdson's work hovers between the real and the surreal. Within his documentary *Brief Encounters* he describes his artwork as one that captures the beauty and sadness within the photographic medium as it is something he believes people deal with on a daily basis. Three untitled works in Crewdson's 2006 collection "Beneath the Roses" were examined to gain a greater understanding of the essence of image within the virtual medium of photography.

The first untitled photograph (fig. 1.1) reminds one of 19th-century Biedermeier-style painting in the way in which it frames the subject matter through light and form. Biedermeier-style artwork also commonly takes place within an interior setting. Crewdson also captures the American domestic in a way that almost appears surreal. In this untitled work, the photographer has framed multiple sequences within the scene. The first frames the dining room interior where the 'action' is taking place. This first frame establishes the setting as well as providing viewers with the main focus within the image. The second frame formed by the opening to the kitchen highlights the centre of the image through light and colour. Crewdson uses light as a tool to draw the viewers' attention to certain aspects within the artwork, an element borrowed from cinema. The setting is a middle-class family home (an aspect common in the artist's work). In this scene we see a mother and son sitting at the dining table for a roast dinner. There are four places set, two of them are taken by the two who are present, one appears untouched, and the fourth has a glass of beer and the chair is pulled out at an angle implying that someone had just left the scene. The expression on the faces of the two who remain seated at the dinner table is the same dull and emotionless one we have when being witness to a heated argument. Behind the mother we see a window showing the neighbour's home in the background. There is a window on the side of the neighbour's house facing the scene. The light is on, and we can see someone standing in the window, watching the commotion as it unfolds. The artist has left many elements that give us clues as to what we are truly witnessing when we look at one of his photographs, looking beyond the image to form our own understanding of the subject.

Fig. 1.1
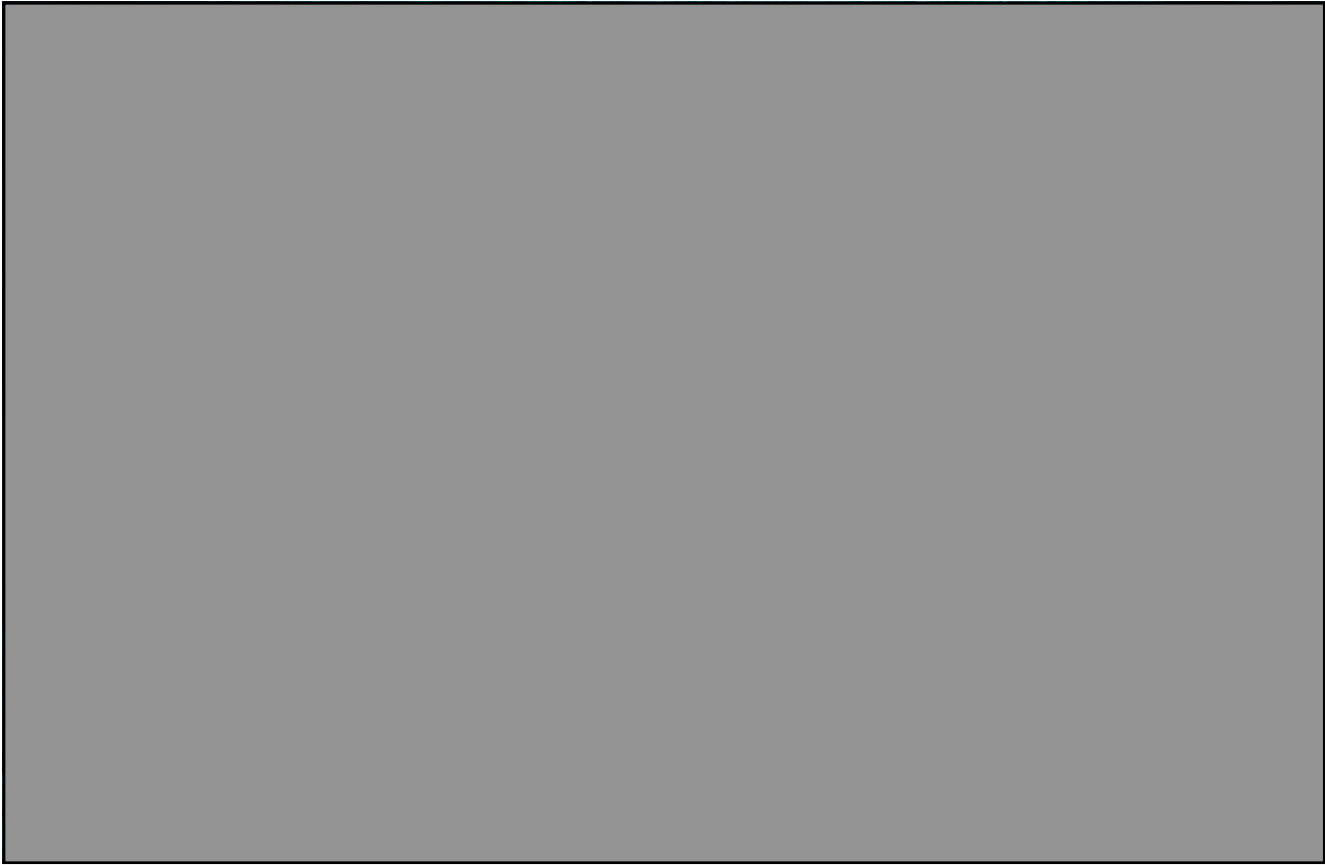
The second untitled photograph (fig. 1.2) also comes from the "Beneath the Roses" collection. It depicts the same type of setting as the last image, a middle-class American suburban interior. The framing for this scene is very different from the last. In this untitled image we are witnessing the setting from a diagonal corner of the room, as if we are standing in the doorway that leads to the bedroom. The colours are cold and dull, apart from the two light sources illuminating the setting, both of which are located directly adjacent to the only two characters in the scene. This not only draws our focus to the key aspects within the image, but it also illuminates the expression on the face of each character present, highlighting the importance of this. What is interesting about this photograph is Crewdson's use of nature. The scene is set within the bedroom of a middle-class American suburban home; therefore, most of the image is comprised of artificial, man-made props and objects. However, the sliding door to the yard is open, and we catch a glimpse of nature. There is also a lot of gravel and bricks present in the yard, as if the couple is redesigning it, possibly covering up the lawn – therefore covering up nature. What leads to this conclusion are two aspects found within the interior scene. First, we can see in the bin in front of the woman that there is a branch that matches the ones found on the shrubs outside. This literal "throwing away" of nature could represent the lack of respect and disregard this couple has for it. The second aspect is the woman's response to the small bird perched on her dresser. She is looking at the bird as if it is a stranger in her home, or something that she has never seen before.

Fig. 1.2

The final untitled photograph (fig. 1.3) from the "Beneath the Roses" collection portrays a run-down motel room with a single figure standing nude in the bathroom. This image is comparable to the work of Edward Hopper, a 20th-century painter, an obvious inspiration for Crewdson's artistic style. The motel interior could symbolise a transitional point, a place of stopping when travelling from one location to another. This motel room, although stark and tidy, upon closer inspection is dirty and decaying. There is a large hole in the ceiling tiles where water has leaked and run down the faded floral wallpaper. Only through a mirror above the motel room bed do we catch a glimpse of the only character in the scene, a woman standing in the bathroom. Nude and pale under the artificial lighting, with a curious expression she is looking towards something in the bathroom that has been obscured by the door. There are no personal effects of hers in the room as it appears to be untouched; the woman herself seems alien to the space, as if she was just teleported into the room. Through the dirty bedroom window, we can see an old car parked outside (something possibly referencing Hopper's "Western Motel") as if to represent an impending journey.◆

Fig. 1.3

Painting Analysis

The following painting analysis examines the work of three unique artists across five different works, chosen for their believed influences on the photographer Gregory Crewdson. The first two artists, Georg Friedrich Kersting and Carl Vilhelm Holsøe, are two 19th to early 20th-century artists from Germany and Denmark whose work often portrayed domestic interior scenes. The third artist, Edward Hopper, is a mid-20th-century American painter, whose work again often consisted of domestic interior. The analysis work explores how these artists convey a sense of personal narrative through artistic elements as well as elements often found in cinema and how these influence our personal understanding of the image forming a virtual interior.
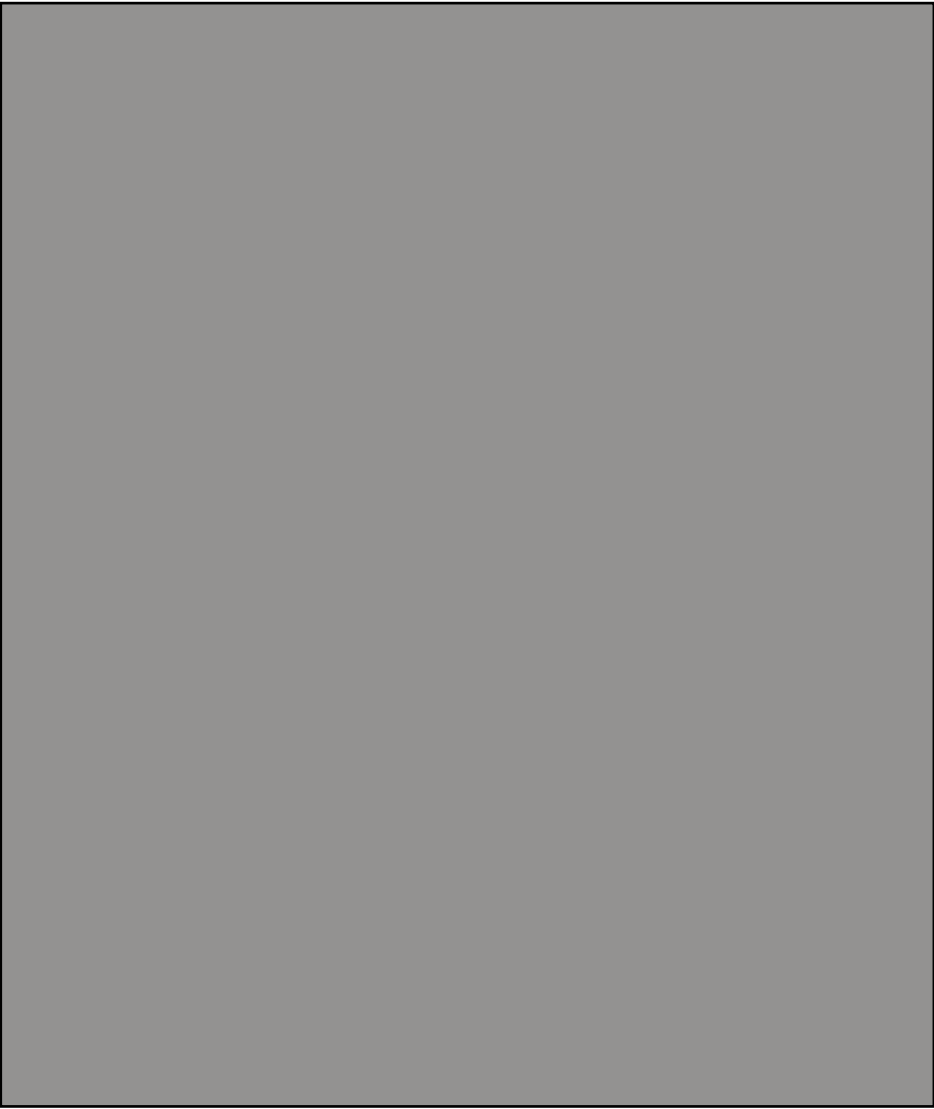
GEORG FRIEDRICH KERSTING,
YOUNG WOMAN SEWING BY LAMPLIGHT
(FIG. 2.1)

Kersting, a 19th-century German painter, was influenced by his friend Caspar David Friedrich, a leading German romantic painter. Kersting was known for often painting interiors, typically lit by an open window or a table lamp much like this painting.

In this "Young Woman Sewing by Lamplight" (1823), the light source (in this case, a singular lamp) casts dramatic shadows across the room. This effect provides a sense of warmth and intimacy to the subject. The lamp, being at the centre of the image as well as being the lightest object in the interior, is the first thing that grabs our attention, only later do we notice the young woman quietly sewing at the table. Her clothing almost mirrors/becomes a part of the pale green walls and cream drapes, as she is a part of the overall interior. Although the image is literally static, by the way Kersting has painted the subject through the use of light and shadow, colour, compositional lines, and form, we gain a sense of movement within the image.

Fig. 2.1

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Fig. 2.2

CARL VILHELM HOLSØE,
READING ON A QUIET AFTERNOON
(FIG. 2.2)

"Spare furnishing, stark interior, and sharp bands of light produce a composition of masterful simplicity, yet one that is layered with psychological ambiguity"

This painting by Carl Vilhelm Holsøe (a renowned 19th-20th-century Danish painter) was chosen as it reminds one of the work from the photographer Gregory Crewdson, someone who creates highly narrative film sets for photographic work. In this work of art entitled "Reading on a Quiet Afternoon," again we are drawn to the light source; however, in this case, the artist has used natural lighting originating from an unknown window in the next room. And again the lighter aspects of the image is what first engages us. Only after our gaze drifts further through the interior do we notice the woman reading behind the door. Her dark clothing blends with the shadows, whilst contrasting with the large white door. As far as the narrative is concerned, we can assume that the woman wishes to remain alone as she is partly hiding in a dark room. Her dark clothes could indicate that she is a woman in mourning, and this could explain her wish to remain alone. The contrast between the two rooms creates a sense of melancholy within the image, whereas lightness is easily accessible and would be more beneficial to the woman, she chooses to remain in the shadows. Or perhaps the use of light and darkness is a metaphor for life, where the woman is in mourning (a dark patch of her life), but there is always light around the corner.

EDWARD HOPPER,
ROOMS BY THE SEA
FIG 2.3

Edward Hopper was a prominent 20th-century American realist painter. Hopper's paintings often use the subject matter of American life within the mid 20th century. In "Rooms by the Sea" the scene is framed in such a way that only a little of the interior space is revealed. The subject of this painting is a cropped image of what appears to be a transitional space between the exterior sea side and the home's hallway and living room. We only catch a glimpse of the living area as most is hidden by interior walls. From what we can see, it is a plainly decorated space. The walls remains the same colour and texture as the adjacent room. The furnishings provide the only break from the somewhat monochromatic image and therefore draw us further into the interior.

The perspective that Hopper has created is an odd and confusing one. Most noticeably, the ocean appears to meet the door opening, as well as how the angle of view is one that looks down, while the horizon remains high. These aspects along with the fact that we cannot see beyond the entry/exit door create an almost fantasy interior. Whether these actions are deliberate or not is debatable, the surreal effect is the same.

The second painting by Edward Hopper, entitled "Morning Sun" is comprised of a similar composition and narrative as "Rooms by the Sea". A large

EDWARD HOPPER,
MORNING SUN
FIG. 2.4

opening on the right side of the image provides the subject with a source of light, highlighting the centre of the painting. This is also where our focus is drawn to. This painting, like many of Hopper's works holds a sense of quiet stillness, giving an overall feeling of loneliness. This effect has possibly been created through the general starkness of the interior. The woman in pink seems lost in her own thoughts as she gazes out of the bedroom window to the urban exterior. She looks as though she is searching for something in the distance.

"Western Motel", much like some of Crewdson's work, uses an anonymous motel room to depict 20th-century American life. The motel becomes a symbol for the constant changing and melancholic longing of modern life. "Spare furnishing, stark interior, and sharp bands of light produce a composition of masterful simplicity, yet one that is layered with psychological ambiguity" (Yale Univeristy "American Paintings and Sculpture"; par. 1). As to the narrative of the image – spatially the interior is one of a quiet calmness; however, the woman appears tense, bags are packed, bed is made, and a green car is waiting just outside the window.◆

Fig. 2.3

Fig. 2.4

Fig. 2.5

EDWARD HOPPER,
WESTERN MOTEL
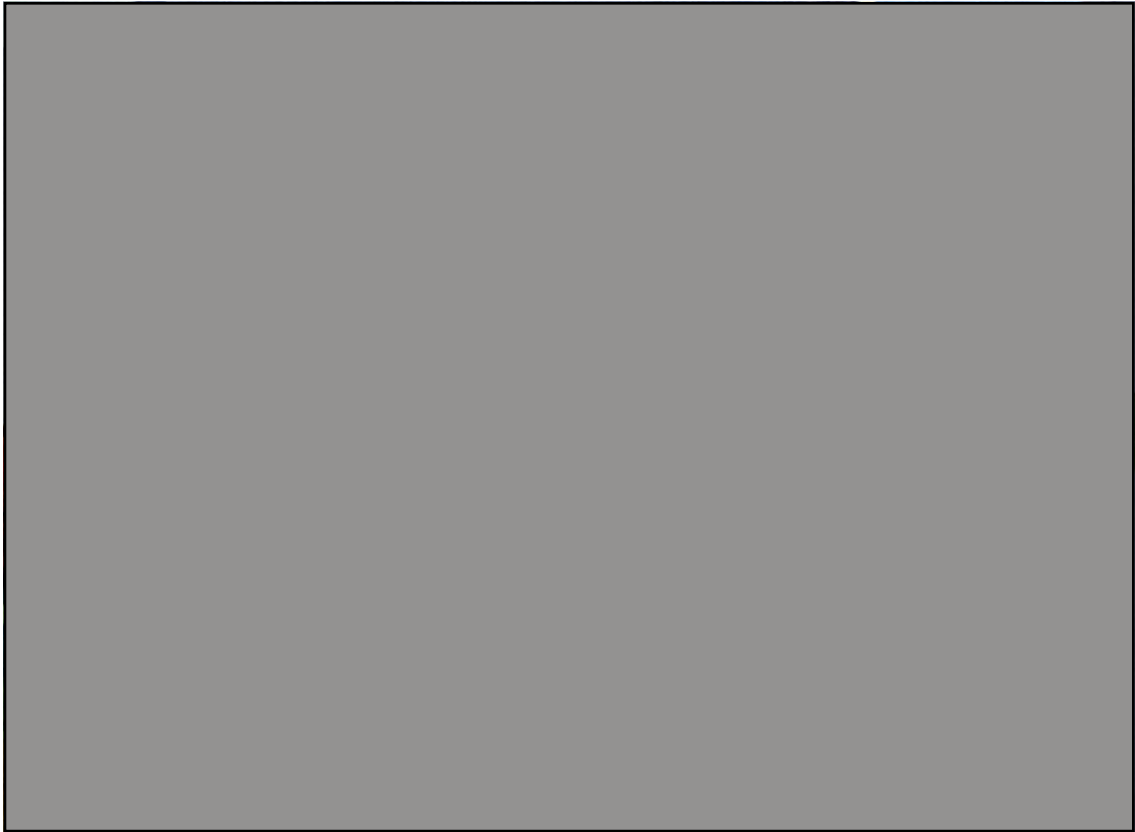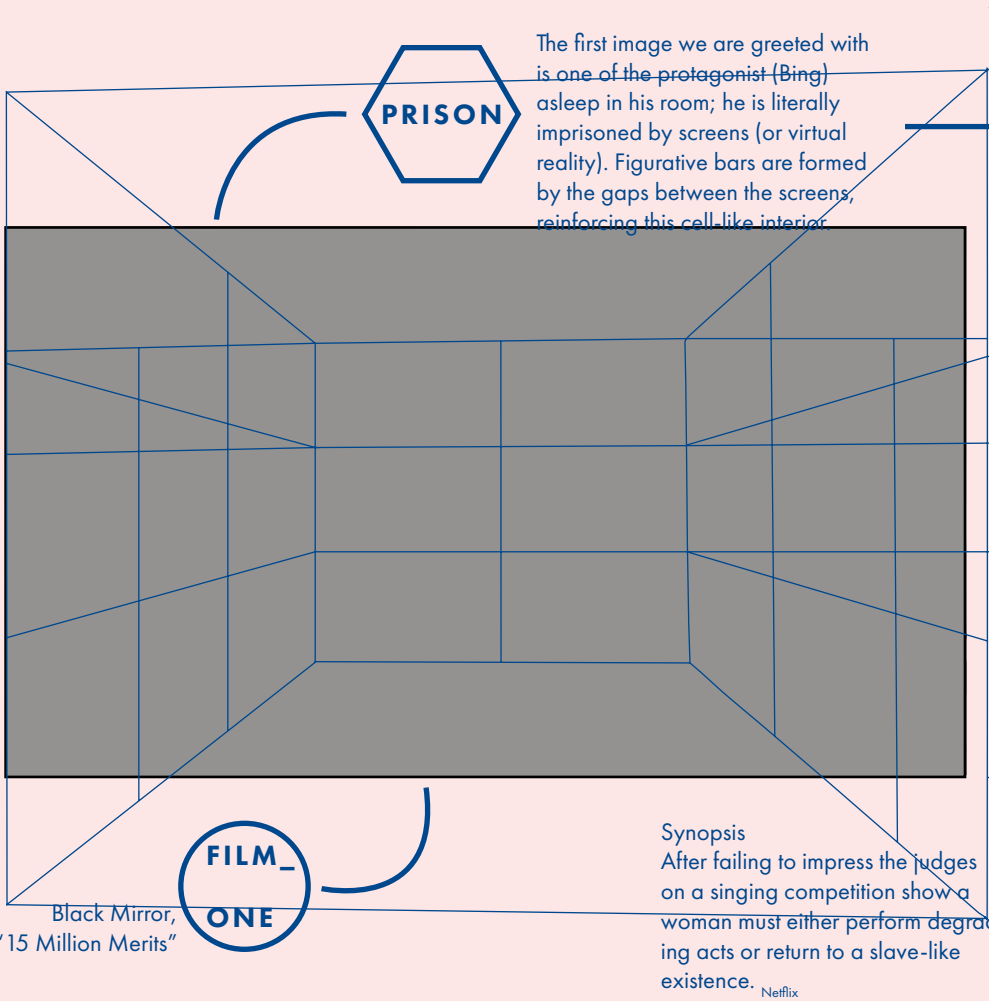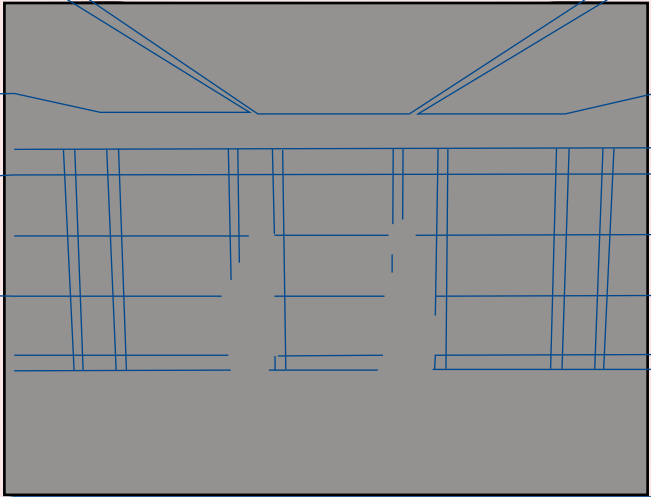FIG. 2.5

Black Mirror Analysis

The *Black Mirror* analysis examines three episodes from the popular Netflix series. "15 Million Merits", one of the first episodes from the first season of *Black Mirror,* takes place in a world hugely different from our own, one of the only episodes that does this in the entire history of the show. In this episode the theme of virtuality is key, as the main character Bingham desperately seeks any kind of 'realness'. The second episode "Nosedive" from the second season takes place in a world not too dissimilar from our own. The main theme of this episode is social media and its controlling nature over every aspect of our life, including the interiors that we surround ourselves with. An example would be our attempt to portray ourselves as something completely different to appease our followers online; or perhaps how we see the interiors of those we adore online and wish to replicate these in our own lives in an attempt to become what we love. The final episode, "San Junipero" examines the theme of VR, or virtual reality. The most obvious example is of a virtual interior space. Unlike the other episodes in the first, second, and even third series, this episode shows a more positive side to technology. It again, like most episodes in *Black Mirror,* takes place in a universe relatively similar to our own; however, in this world the elderly and dying are given the option of entering the virtual beach-side town of San Junipero. The *Black Mirror* analysis began simply as a precedent that looks into speculative interior architecture where virtual spaces have affected the actual spaces to a great degree.

PRISON

The first image we are greeted with is one of the protagonist (Bing) asleep in his room; he is literally imprisoned by screens (or virtual reality). Figurative bars are formed by the gaps between the screens, reinforcing this cell-like interior.

Throughout the expanse of the interior, we are again presented with vertical and horizontal lines, creating a prison-like environment.

CON CLU- SION

The last scene of "15 Million Merits" is one of Bing standing in front of a large glass window (a part of his new living quarters). Throughout the episode Bing regards every aspect of this world as somewhat meaningless and fake (apart from Abi's singing ability). This window provides him a means of escape from the screen-based world which he is from. However, the horizontal lines of the window joints show the audience that Bing is not free and not only remains in this fake prison environment but now he contributes to it with his fabricated nihilistic podcast stream.

FILM_ ONE

Black Mirror, "15 Million Merits"

Synopsis
After failing to impress the judges on a singing competition show a woman must either perform degrading acts or return to a slave-like existence. Netflix
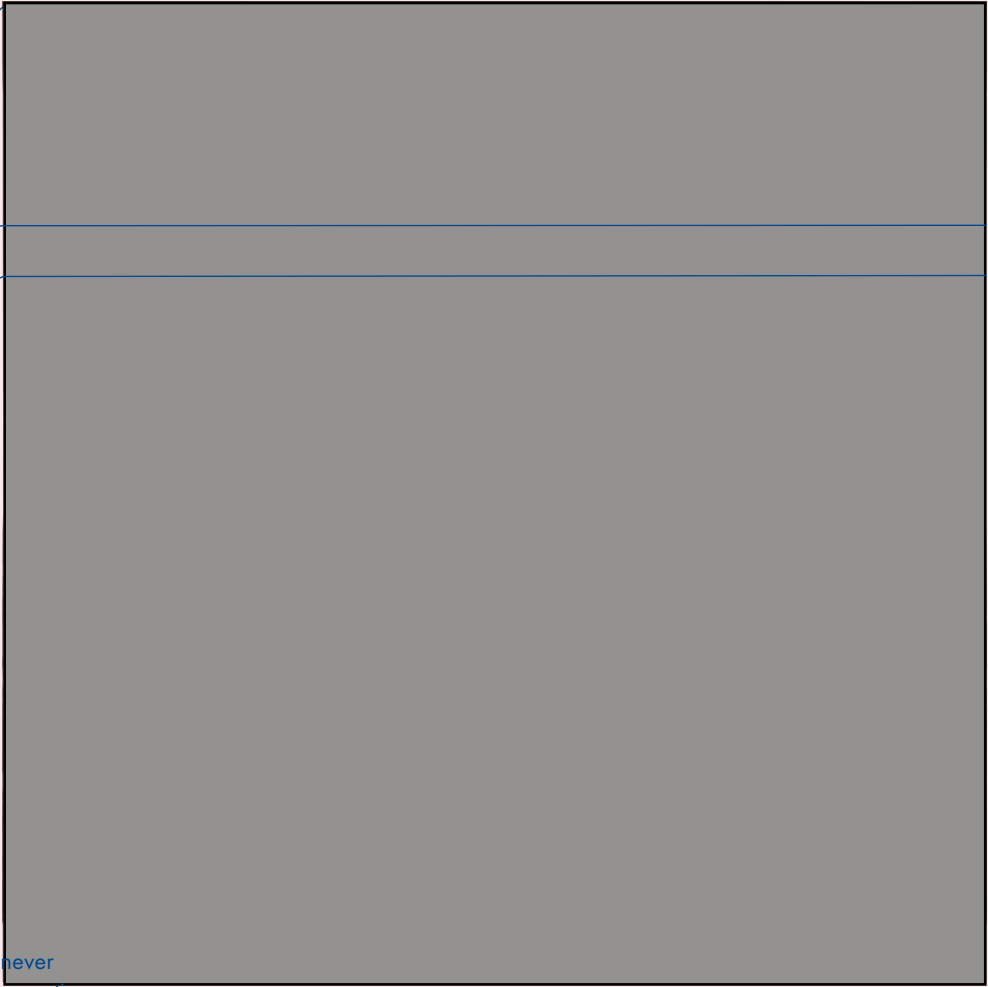
SPACE

The interior space is confusing. The characters never appear to leave their designated work, living, or eating quarters (apart from when contestants want to enter the talent competition). The elevator is used as the only method of transportation between the floors with the floor number being projected through the elevator as it travels. However, the floor numbers make no sense - the numbers go down, regardless of whether the elevator is going up or down.

from left to right Fig. 3.1, Fig. 3.2, Fig. 3.3

Colour is important within these spaces - it is almost like everything within Lacie's house is colour coded so that it indicates whether it belongs to her or her brother. For example, the stereotypical female objects within the interior (the throw pillows, cushions, and the shopping bag) are all coloured pink like her dress, while the surfboard, lawn chair, gaming console are all coloured blue like her brother's clothing. Is the social media platform that they are using reinforcing gender norms? Is it discouraging the characters from enjoying activities and colours that are different from what the media depicts?

FILM_ TWO

The main theme of "Nosedive" is social media. It explores the idea of what if our online personalities determined where we live; where we work; priority in airports, queues, etc.

Black Mirror, "Nosedive"

Synopsis
A woman desperate to boost her social media score hits the jackpot when she's invited to a swanky wedding, but the trip doesn't go as planned. Netflix

MEDIA

PRISON

Eventually, Lacie is driven mad by the constant act she and everyone around her has to play - especially now that nothing has gone to plan. She crashes her childhood friend's wedding (as she was uninvited because her online rating was too low) and is imprisoned for rudeness? Trespassing? This remains unclear. What is odd in this interior (one typically used for punishment and control) is that she can finally be herself, and therefore finally be free.
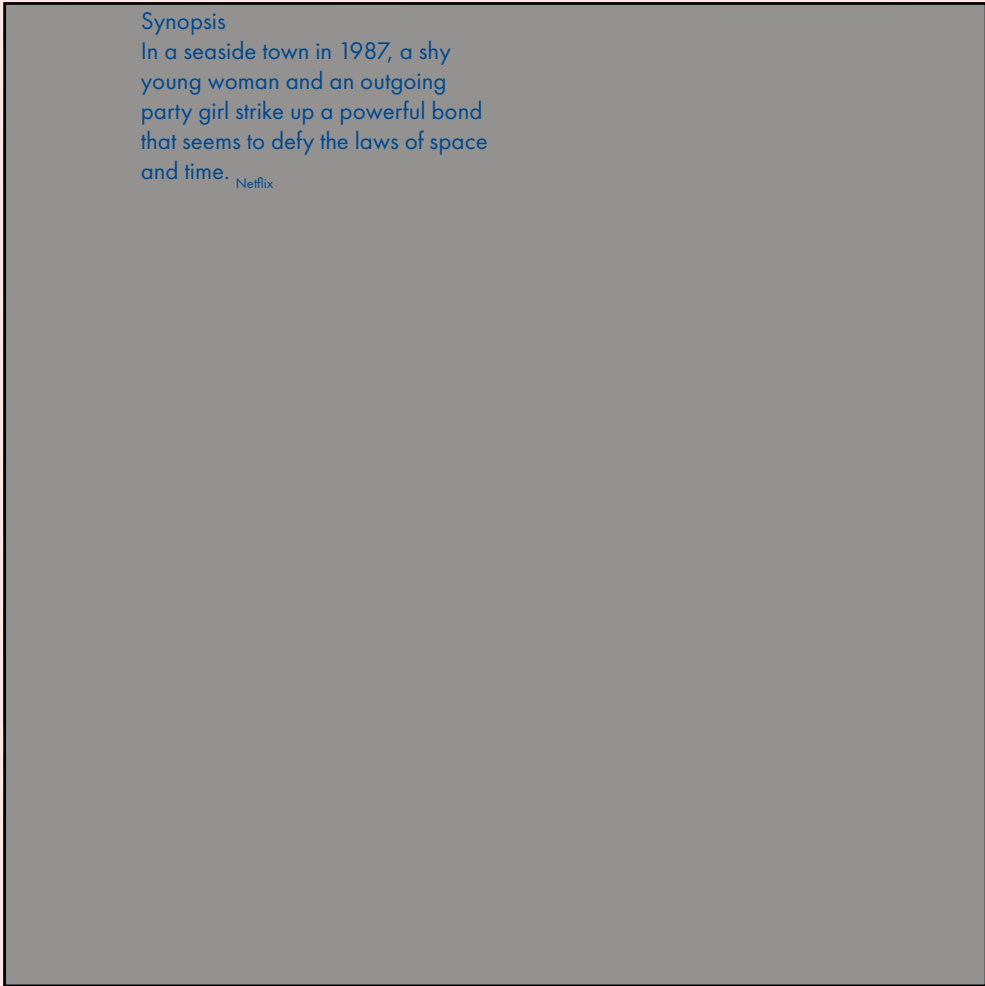
INTE- RIOR

In terms of the interior spaces (specifically the domestic spaces), there is little difference between Lacie's first home and the one she views later in the episode. The second interior, however, is presented to Lacie as a socialising space - or a space where she can increase her online rating through entertaining her 'friends'. The real-estate company even produces a hologram of Lacie (or what her ideal self would look like) within the house. This manipulates her into wanting the property even though it is blatantly obvious it is far too large for just one person.

from left to right Fig. 4.1, Fig. 4.2, Fig. 4.3

EXTE-RIOR

Obviously, a pre-existing site, a wine estate restaurant, which doesn't look like it could be an aged housing facility.

FILM_THREE

Black Mirror, "San Junipero"

Synopsis
In a seaside town in 1987, a shy young woman and an outgoing party girl strike up a powerful bond that seems to defy the laws of space and time. Netflix

PRES-ENT

The hospital interior remains undeveloped, lacking atmosphere and depth - unlike the San Junipero set. Especially in the scene where Kelly and Greg discuss Yorkie's past and the virtual world, the space remains empty and devoid of anything that could indicate a medical facility.
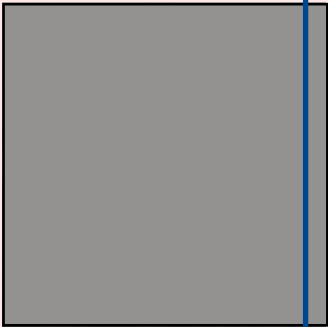
CON-TEXT

The lack of exploration of the present-day interior gives the audience little context for Kelly and the other occupants of San Junipero. Why do they choose the virtual over the actual? Is it purely to relive their youth? Providing more context to the current world they live in could give the audience a better understanding of why they make the decisions they make; for example, decisions about 'passing over' and remaining in the virtual world.

The aged care facility set is unexplored in terms of interiority - the interior looks similar to what we might find today.

PAST

In this episode the San Junipero scenes contain far more depth than the present-day scenes. This is understandable as this is where most of the episode takes place. The scenes are colourful and depict a positive "immersive nostalgia therapy" provideed for the aged or disabled community.

from left to right Fig. 5.1, Fig. 5.2, Fig. 5.3, Fig. 5.4

phase two

Research and Modelling

Phase two starts to explore methods of design and research. This phase begins with a series of physical models that examine the relationship of interior space in film. The first dollhouse model uses the 1977 horror *Suspiria* as a precedent to test the idea of how an audience can form connections between interior spaces that they view in a film. The model is comprised of a series of spaces in which prominent scenes take place, the spaces can be held in different voids within an exterior form or they can be arranged together outside of the exterior form. The second model follows the same themes as the first but in a more abstract sense. The exterior form is now open and grid-like to accommodate the interior scenes, now represented though a number of cubes. Phase two also provides a more in-depth analysis of virtual and actual space, as well as the connecting elements between architecture and cinema through several targeted reviews.

from top to bottom Fig. 6.1, Fig. 6.2, Fig. 6.3

Dollhouse Models

The first set of physical models explore the idea of virtual space in film. The first 'Dollhouse Model' is based upon the 1977 film *Suspiria* directed by Dario Argento. Almost the entirety of the film is set in one location, a prestigious ballet and boarding school in Germany. This model (Figures 6.1, 6.2, and 6.3) depicts seven rooms or sets within the boarding school where a fair amount of the action takes place; the grand entrance, the main staircase, the large dance hall, Suzy's (the protagonist) bedroom, the stairwell leading to the attic, the attic, and the secret room behind the study. This model attempts to map our understanding of the special configuration of the multiple rooms and how they might interact with one another within the actual site. The model is also intended to be interacted with by pulling the rooms out of the site and re-arranging them according to one's own personal recollection

of the film and its interior. This idea came from the lack of connection the film's exterior site has to its interior. All of the interior scenes were filmed on a sound stage (typical in most films), therefore the actual spaces remain separate from one another, and we form our own connections of one room to another based on our experience of the film. One of the negatives behind this model is its lack of connection to the research topic, forming a design that resonates between virtual and actual space. There was an attempt to do this during the making process, as it is a 3D printed model created using computer modelling techniques, and therefore during the manufacturing process, there was a very slight connection from the virtual to the physical, or actual. This however is not clear in the finished model without a proper explanation.

The second model (Fig. 6.4) investigates the same themes as the first but in a more abstract sense. It is inspired by the idea of the first dollhouse model, where it is an external structure that houses multiple spaces within its envelope. The model is comprised of a gridded wooden structure that holds the various rooms or spaces within itself. The spaces are constructed from two different types of acrylic sheet, indicating whether or not it is a public or private space (the clear acrylic indicates public, while the frosted acrylic indicates private). Again, this model is intended to be interacted with, where the user can move the different spaces within the gridded structure to form their own narrative of how the spaces can interact with one another. This model also lacks a connection to the research topic and therefore, again like the first model, has become somewhat redundant throughout the research process. However, it was a useful experiment in that it provided a way of looking at personal narrative as a type of virtual space.◆
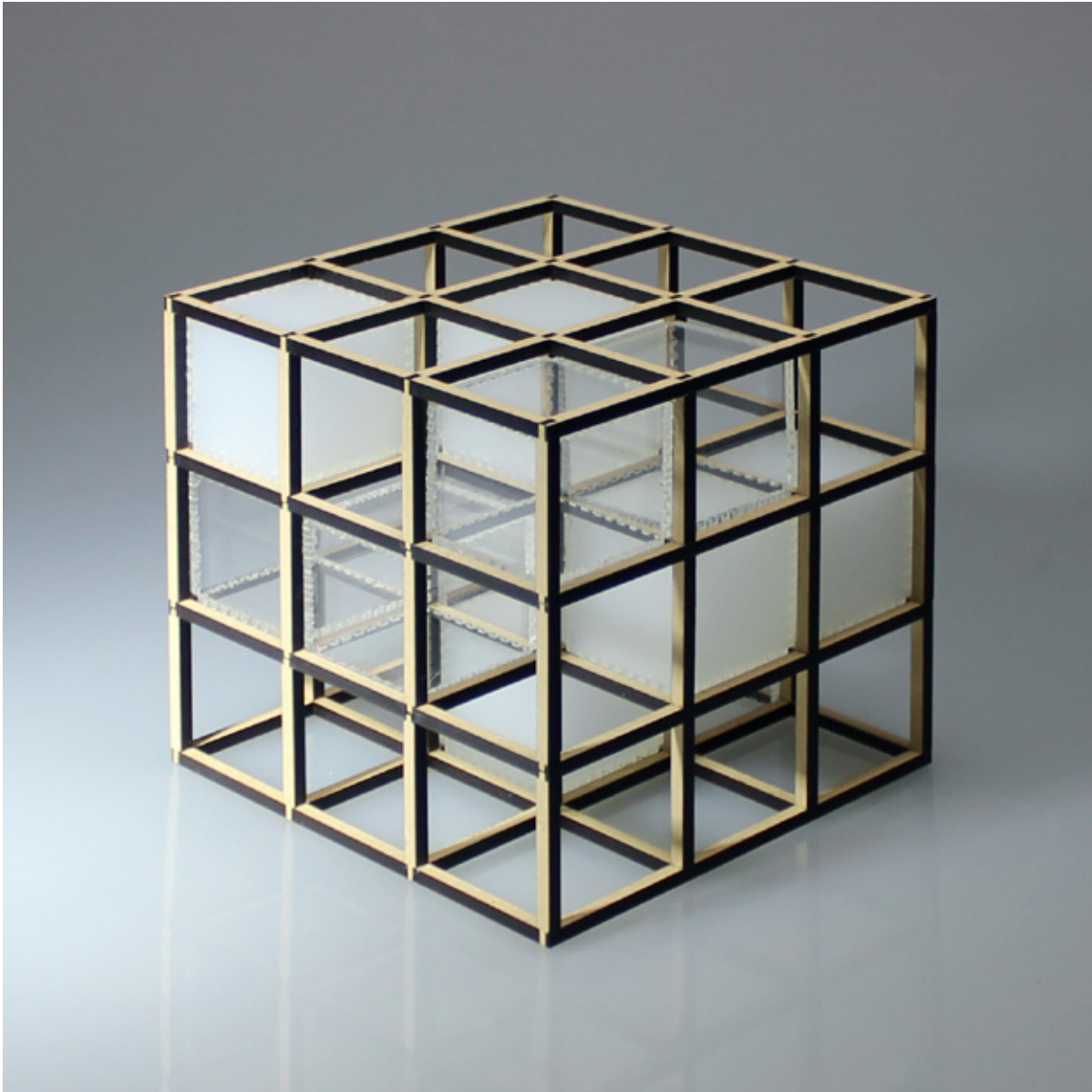
Fig. 6.4

Fig. 7.1

Actual and Virtual Space

DeLanda divides space relative to our human identity into two categories: extensive and intensive. "As biological organisms and as social agents we live our lives within spaces bounded by natural and artificial extensive boundaries, that is, within zones that extend in space up to a limit marked by a frontier. (DeLanda 80). Extensive properties are considered all that is physical within our world. Space which holds intensive properties is somewhat less familiar, properties described as being more or less invisible, however, affect us. These properties include temperature, pressure, gravity, density, tension, just to name a few (80). Gilles Deleuze took this distinction of two spaces further, where it becomes the foundation to his ontology. He adapted this idea of extensive and intensive properties from its thermodynamic origins to a more philosophical point of view (82). Deleuze made a further distinction between space is that of actual space and virtual space. Actual space is the space that holds a sense in extensity; it is the world in which we occupy on a physical level - the ground; the walls around us. Virtual space is something less concrete, but no less real than the actual. It is the non-physical place which we, as both biological and social beings, occupy. Deleuze (pictured opposite) defined this space as not simply the type of virtual reality produced from computer simulations or even cinema, but rather as the internal reality, ideas, thoughts, and feelings that we gain from these mediums. Other philosophers explored this area of thinking about space. Guy Debord, for example, took an approach similar to Deleuze's. His position was both more anarchic and jaded as he felt that through the virtual space produced through art, one could escape the current rationalism (Buchanan and Lambert 4). Deleuze of course "too invests great faith in art, but he doesn't confine the anarchic potential of art to the virtual; he sees its explosive potential extending to the actual, if the artist has the strength to carry it through" (4).◆

Literature Review

The following literature review explores the connecting elements between architecture and cinema and their reflection of the human condition. Both are disciplines that function within the lived space, reflecting a sense of cultural archaeology of the time in which the structure or film has been produced. The purpose of this review is to gain an understanding of fundamental elements that form our virtual experience of both cinema and architecture, and thus creating a basis for design. "Films are studied for the purpose of discovering a more subtle and responsive architecture" (Pallasmaa 13).

Time and Temporality
Of all the similarities between architecture and cinema, time and temporality are two elements that hold possibly the strongest connection. Cinematography literally manipulates time; architecture modifies the sense or existence of time within a space. Pallasmaa believes that while architecture

articulates space, it also manipulates time (Pallasmaa 20). Tawa defines architecture at the most basic level as the "organisation of forms in space," while cinema is the "composition or montage of images in time" (Tawa 131). Although these definitions imply a sense of connection between the two disciplines, they also ignore the effect time has on architecture. Time and space are both fundamental to existence, and with architecture and cinematography representing the human condition, they must incorporate these elements. "Architecture and cinema are always situated within a context - a site, a landscape, a room, a time. Consequently they are always framed by that context and set among the circumstances that environ them" (Tawa 44). Pallasmaa believes that cinema has significance within architecture, quoting Jean Nouvel:

> Architecture exists, like cinema, in the
> dimension of time and movement. One
> conceives and reads a building in terms

of sequences. To erect a building is to predict and seek effects of contrast and linkage through which one passes … In the continuous shot/sequence that a building is, the architect works with cuts and edits framings and openings … I like to work with depth of field, reading space in terms of its thickness, hence the superimposition of different screen, planes legible from obligatory joints of passage which are to be found in all my buildings
> *(Pallasmaa 17)*

Narrative
Narrative, in its most simplistic form, can be described as the abstract concept of a story-like situation formed from the narration of an idea or a feeling. Like cinema, narrative provides architecture with the basis for the conceptual design, it enables designers to visualise the final form before physical construction begins. Narrative within the process of filmmaking is important for "drawing the outlines of the final project, formulating the parts or elements that compose the whole" (Çetín 68).

Cinematography would remain arbitrary without narrative as would architecture without conceptual design processes. We begin to see how architecture frames patterns of life through narrative

design, how drawing plans is not simply a tool to generate spatial configuration, but frames "actual, virtual and latent patterns and trajectories of spacing, occupation and inhabitation; of exposure and shelter; of orientation, disorientation and peregrination; of territorialisation and de-territorialisation; of ambulation, and perambulation" (Tawa 116). The plan depicts a graphical representation of the daily narrative of those who will eventually occupy and infiltrate the space. Architectural narrative also frames a connection between an individual and a location, landscape, culture, country, and possibly the world. Through narrative both cinema and architecture construct space that looks into the human condition and establishes a way of being.

Montage (and Physical Elements)
"Cinematography is, first and foremost, montage" (Eisenstein, *Film Form* 28). Çetín defines the use of montage within film as the act of editing, cutting, and joining together lengths of film as to suggest a continuation of flow to the overall narrative (58). In "Montage and Architecture" Sergei Eisenstein believes that to understand montage in an architectural sense one must view the physical composition of space through the perspective of a filmmaker, where the role of the camera is replaced by the occupier. Using Auguste Choisy's description of the Acropolis of Athens

from Histoire de l'Architecture as an example of architectural composition and montage, Choisy describes the images formed within the Acropolis as being systematically created by the first impression they make. "It is hard to imagine a montage sequence for an architectural ensemble more subtly composed, shot by shot, than the one that our legs create by walking among the buildings of the Acropolis" (Choisy 117). As the occupier we form an "imaginary path" (116), in which our perception of the space changing with each movement through time.

Much like how filmmakers calculate each shot; interior architects can use the filmic element of montage to form a flow or composition of space. An example of the use of cinematic montage in architecture is Bernard Tschumi's Parc de la Villette. The architect credits the preliminary design for the park to a technique of cinematic editing called the Kuleshov Effect (Cohl par. 2). This effect was discovered through an experiment conducted by Lev Kuleshov, a Soviet filmmaker, and is a type of narrative-driven editing technique. An audience was shown a series of scenes containing different events. The audience was then asked to describe the main character's expression. Kuleshov had placed identical frames of the character between the events; regardless on this the audience interpreted the expression based of the prior scenes

in the film. "Kuleshov proved that two shots projected in succession are not interpreted separately by the viewer; in the audiences' mind, they are integrated into a whole" (par. 2). Bernard Tschumi used this as the concept for Parc de la Villette, creating a series of architectural follies arranged in a grid pattern to represent a series of frames within the spatial narrative. To him montage within architecture represents the "dynamics of movement through space" (par. 7).

Çetín also compares the fundamental element of filmmaking that is montage/editing to relational elements (or organisational elements) found within architectural design. However, the author takes a more technical analysis of the filmic element of montage within architecture. Çetín states that the primary aim of architectural relational elements is to compose multiple spaces depending on function, proximity, or continuity. The overall architectural composition of space can "clarify their relative importance and functional or symbolic role in a building's organisation" (93).

Spatiality

Architectural and cinematic spatiality can be divided into two different categories: abstract and ethically constituted space.

"Architectural and cinematic space can be read in two ways. The first concerns

abstract space as a pure measure, disposition, geometry and dynamics. This is the way the built environments and films construct two and three dimensional settings for framing and conjugating sense, such as static geometric patterns and the dynamics implied by related articulations of lines, surfaces, depths and volumes. The second concerns space as ethically constituted. Here, the framework shifts from space to place. That is, from abstract to existential, populated, inhabited, furnished and acculturated environments. In both architecture and cinema, spatial framing establishes regimes which convey specific perspectives on people, place and the world" (Tawa 91)

Another way to look at spatiality as a more physical condition of architecture comparing it with the cinematic equivalent: mise-en-scene. Within architecture we deal with "the shapes and planes that enclose space (floors, walls, and ceiling), openings with a spatial enclosure (windows and doors), and the silhouettes of building forms" (Ching 52). Architecture and cinema are both fundamentally similar to one another, as they both operate within the area of a "lived space" (Pallasmaa 13). Architectural spaces preserve and reflect the culture at the time of their establishment; cinema, however provides a sense of "cultural

archaeology" (13) of the time in which it depicts as well as the time in which it was made. Deleuze argued that the post-war period forged a new type of cinema that began to image a "world without place" (Buchanan and Lambert 1).

"Why is the second World War taken as a break? The fact is that, in Europe, the post-war period has greatly increased situations which we no longer know how to react to, in spaces which we no longer know how to describe. These were 'any spaces whatever', deserted but uninhabited, disused warehouse, waste ground, cities in course of demolition or reconstruction. And in these any-spaces-whatever a new race of characters was stirring, a kind of mutant: they saw rather than acted, they were seers" (Deleuze xi).

Cinema and architecture are two disciplines that share a number of similarities. Both are products of space and time; both convey a sense of narrative, whether it is story-driven or driven by the individual; and both can use montage as a tool to manipulate one's sense of the virtual space before them. Exploring the relationship between architecture and cinema provides one with an understanding of the different elements that contribute to both actual and virtual space.◆

Scenography

Historically, scenography was considered a term that described "all of the elements that contribute to establishing an atmosphere and mood for a theatrical presentation" (Eagan sec. 1; par. 1); for example, lighting, sound, set design, and costume design (sec. 1; par. 1). However, as modern theatre became increasingly mainstream, scenography began to borrow aspects from architecture, predominantly in the way of annotation. Whereas architecture has always relied on scale plans, sections, and elevations, as set design became more extravagant and complex, it soon required the use of these aspects to express the concept of scenography. The most obvious difference between the two disciplines being that set design is a "fictional universe, a neutral space for imagined places" (sec. 6; par. 1).

Atelier Brückner is a practice based in Germany that specialises in set design. First set up by the architect Uwe Brückner, he conceived the idea of utilising scenography as a primary influence for the preliminary stages of exhibition and stage design. "Scenography creates form from content, giving the latter meaning and purpose. It generates its staged spaces from ideas, objects and stories in order to finally convey their messages to an audience. Scenography re-contextualises, which makes tangible objects talk and succinctly endows them with relevance for the present" (Atelier Brückner, "Atelier: Scenography"; sec. 4; par. 1). This re-contextualisation can provide the visitor with a range of emotions and senses, for instance, installing a sense of respect towards the object of great importance; or providing a background context for a collection of items. Scenography is a tool which
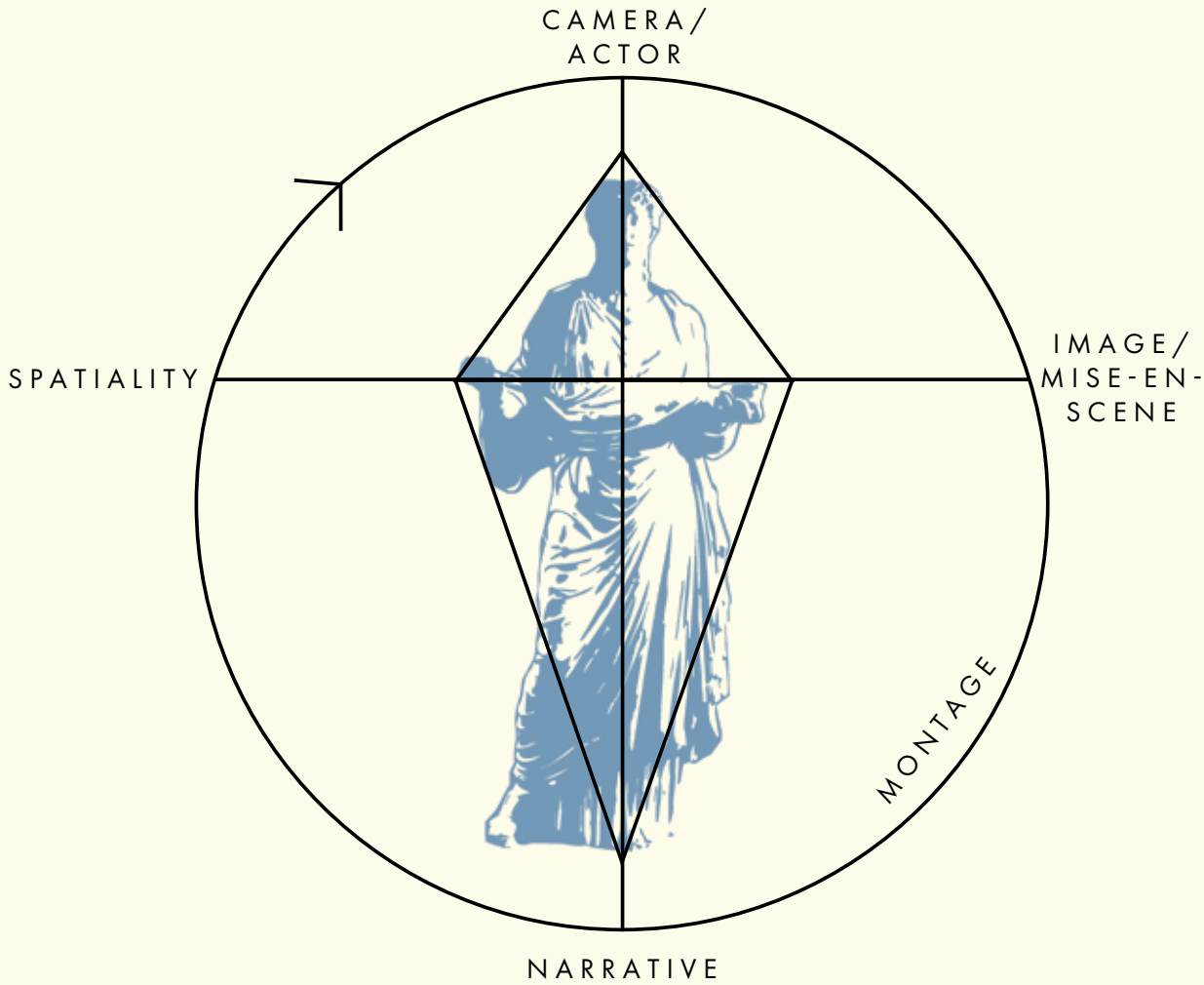
Fig. 8.1
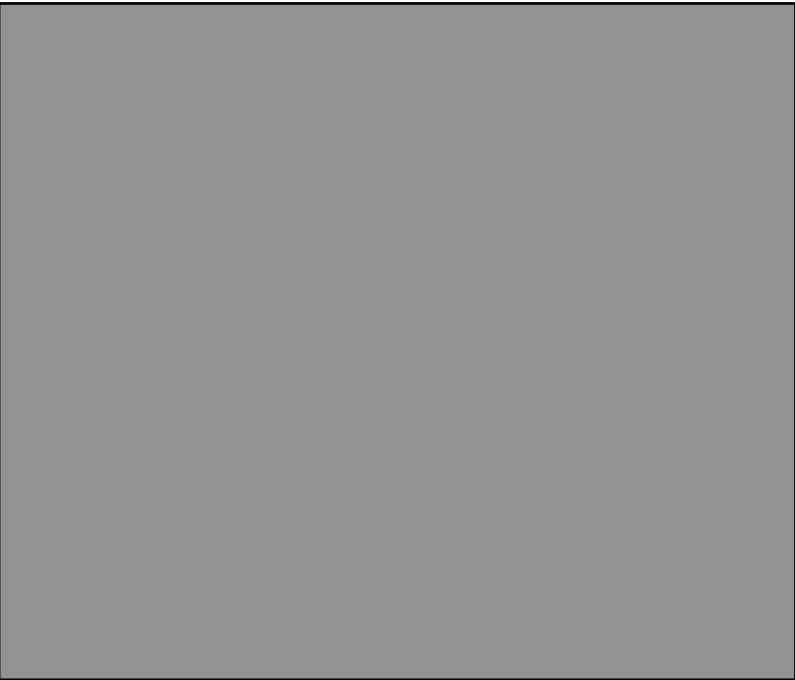
Fig. 8.2
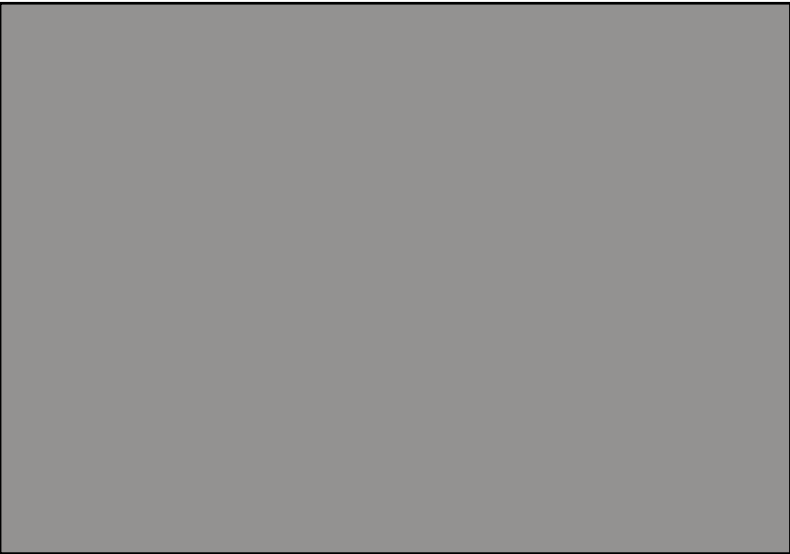
transforms a space for the explicit purpose of communicating ideas (sec. 4; par 2). Scenography fabricates narrative spaces that transform information into stories, ideas into feelings that effect the visitors' impression of an object (sec. 4; para 3). "Narrative spaces create places where questions are asked, avenues of thought are explored, and stories are invented; they can neutralise the statics, materiality and physical limits of a space by completely making the space itself into a narrative event, i.e. the telling of a story." (Atelier Brückner. "Atelier: Scenography"; sec. 4; par. 3).

Influenced by the theory of scenography, Bruckner devised the "Diamond of Suspense" as a tool that explores the design parameters surrounding the recipient (the visitor to the space). It represents the relationship between the separate elements that contribute to the scenography of the space, including the recipient. The 'Diamond of Suspense" is comprised of five elements in total. The object: this is the representation of an item, actual or virtual, "the authentic thing, the bearer of meanings and the storyteller" (Brückner and Greci 25). The content: this is the information or the message behind the object "the overall narrative" (25). The space: the space is the representation of the physical environment, or the actual space. And lastly routing and dramaturgy: these represents the overall flow of the space from one area to another

as well as the structure of the exhibition (25).

Relating back to the subject of an exhibition space designed around the subject of cinema, the five elements of the "Diamond of Suspense" have been altered to accommodate elements found within cinema as a way of creating a richer connection to the subject matter. The recipient has now become the camera; the object has become the image and mise-en-scene; context is the narrative; space remains the same; and dramaturgy has become the overall montage of space.◆

Fig. 8.3

phase three

Programme and Site

The proposed site for this research is Ngā Taonga Sound and Vision, 84 Taranaki Street, Wellington. Originally the showroom and office for a concrete manufacturer, the structure currently houses a café, cinema, storage and office space for Ngā Taonga Wellington. This site offers unique challenges for working between the actual and the virtual, and houses an incredible selection of materials to work with.

It provides the perfect environment for experimenting and creating engaging exhibition spaces that explore the relationship between the actual and the virtual. The site is currently comprised of multiple floors dedicated to private administration and storage, with the ground floor remaining the only area for public access.

Fig. 9.1

Fig. 9.2

Site Analysis

Since the recent integration with the TVNZ archives, Ngā Taonga has slowly began to relocate some of their administration and storage space to a purpose-built facility in Avalon. This transition will allow room for the Taranaki Street site to become an exhibition space for the public to experience the collection in a new immersive environment. Currently, the public is only allowed access to the ground floor of the Taranaki Street site - where the café, cinema, and media library is located. This site is also not without problems. It requires, among other things, earthquake proofing, a new roof, and an elevator, and as outlined in the client brief the public areas of the Taranaki Street sites have been described as small, cold and uninviting. The café is the first aspect that greets the visitors to Ngā Taonga. There is a lack of a sense of a path through the café to the other more key areas of the archives. For example, to reach the cinema or media library, one must almost weave through the table and chairs, making an uncomfortable environment for café customers and movie goers. The cinema and media library are somewhat "tucked away" behind the café and entry space. The media library especially feels out of place. Originally located on the basement level, it has now been relocated to the ground floor, where the large unwelcoming fire door makes the space feel off limits/a staff online area. The cinema feels rather successful in terms of the threshold between it and the light filled café and entry areas. Being "tucked away" is an appropriate move as entries to cinema spaces work well when they are funnelled from a lighter, more open area. This is possibly due to the darkness and intimacy of this type of interior space, a very different atmosphere

from the entry and library areas. The cinema is also the most successful aspect of the film archives as it remains the most popular element for visitors.

Currently, the only access to the immense collection is through the media library located on the ground floor and the Jonathan Dennis Library located on the second floor. The Jonathan Dennis Library is currently only accessible through appointment for researchers to explore the physical collection held at Ngā Taonga (books, periodicals - items from the documentation collection). The media library, however, consists primarily of outdated formats, where the process of accessing the collection can be frustratingly slow, i.e. often requiring visitors to know the exact item from the catalogue that they seek ahead of time so that staff members can retrieve it from storage.

What remains of the building are the private areas located on the upper floors. This is where all the administration (as well as some cold storage) for Ngā Taonga is situated. Apart from the top floor of the building and the mezzanine (first floor), the second and third floors layout feels complex, however, there is a sense of hierarchy and organisation of space according to purpose. For example, the first floor/mezzanine is where meetings take place or where meeting rooms are rented out; the second floor is where audio-visual items are received,

categorised, and put into cold storage to await restoration and digitisation; the third floor contains spaces for the restoration and digitisation of the collection; and the forth contains a lot of the offices for administration and outreach programme.

In terms of the building structure and layout, as the building was originally built for a concrete manufacturer in the late 50s/early 60s, the building is constructed entirely out of reinforced concrete. The building's structural elements are located within the exterior walls. This allows a great deal of artistic freedom to explore the research through an interior intervention that exhibits the collection, something that the site is currently lacking.◆

Fig. 10.1

Fig. 10.2

Fig. 10.3

Fig. 10.4

Fig. 10.5

Fig. 10.6

Client Brief

Ngā Taonga Sound and Vision outlines four key strategic priorities in their 2016-2024 strategic plan: Build a solid, stable foundation for the audio-visual archive for all New Zealanders; Re-imagine outreach and engagement, and showcase the collections and the work of the archive in the best possible light; Re-connect and engage with iwi and Māori in the spirit of partnership; and Ensure that people and collections are safely housed (Nga Taonga 13).

These key priorities directly correspond to Ngā Taonga's four key areas of engagement. Collect, where items are sent to the archives for processing. First the items are unpacked, categorised, and sorted according to category as well as whether they require physical or digital restoration. Store/ Preserve, where physical items are carefully preserved and stored while they await digital copying. Once the items are digitally copied, the physical copies are then stored in another archival building off site. Exhibit, where Ngā Taonga holds screenings of some of the collection in the small cinema located on the ground floor of the Taranaki Street site. And the last area of engagement is Outreach. This is when some of the collection is held in small locations off site. This includes screenings and events at locations not necessarily a part of Ngā Taonga.

For the purpose of this design-led research five 'areas of result' have been chosen for their relation to the research, site and programme. These 5 areas include:

"A future-orientated digital archive" (Nga Taonga 22)
Currently Ngā Taonga Sound and Vision lacks a sense of centralisation regarding the digital processing system. This has led to a replication of infrastructure across multiple workstations. The archives also currently lack certain colour grading technology as well as are unable to scan certain film formats at the current locations. For a future-orientated archives there is a significant online requirement that the current Ngā Taonga lacks. Currently, only a small percentage the of collection is available for online access. The Taranaki Street site has a media library where visitors can access more of the collection; however, this process can be a slow one, requiring one to know exactly what item they are looking for then asking the staff for the physical copy. The desired future state for the archives is one that will have the full collection available digitally for any who wishes to access it, as well as having the capability to fully preserve, repair, and digitise a majority of the collection without the need for outsourcing. Using the available technology can also allow more streamlined communications between the multiple locations of Ngā Taonga Sound and Vision (Ngā Taonga 23).

"Provider of Exceptional Archival Services" (Ngā Taonga 24).
Client services and core-archival work are currently structurally separate from one another, and this creates a strain on those whose expertise is required by both. There is also the problem of experiences with the archive's services being inconsistent with one another. This is caused by a lack of communication about the different ways of accessing the collection. This along with no prioritisation process for preservation, lack of transparency, and a lack of trust worthy information that explains the purpose and focus of the archives ultimately contributes to a lack of external focus. To combat these issues it is necessary for Ngā Taonga to have a clear, transparent, and consistent process for clients and visitors accessing the services (Ngā Taonga 25).

"Valuable and Active Contribution to Education" (Ngā Taonga 34).
The current educational programme at Ngā Taonga is outdated and does not take advantage of the latest digital technology. The programme also has little to no engagement with tertiary education and zero engagement with an archival professional educator. Ngā Taonga's desire for the future is one where it runs a world leading education programme that bridges digital technologies and the audio-visual content and provides programmes that host early childhood and primary children focused events as a way to foster future content creators. The archives also wish to form strong partnerships with researchers and tertiary institutions along with producing audio-visual research facilities of an exceptional standard (Ngā Taonga 35).

"Proactively Supporting Creativity" (Ngā Taonga 36).
Ngā Taonga rarely develops exhibitions that showcase the archival collection to the public. However, they have begun to partner with different organisations as a way to screen content in new, more exciting ways; for example as projections on exterior walls and sides of buildings. And while the archives are proactive in supplying items from the audio collection, they are currently underperforming when it comes to the supply of moving images. The desire for the future of the archives is one that holds closer connections to artists

and filmmakers, becoming the archive of choice for those who fall within those disciplines. This Will ultimately give Ngā Taonga recognition as an organisation that supports the arts. In regards to the lack of exhibiting to the public, Ngā Taonga has outlined plans for a more active exhibition schedule that distributes the collection in more innovative ways through partnerships with galleries, museums, and theatres. However, this could easily be pushed further (Nga Taonga 37).

"Safe Accommodation and State of the Art Public Spaces and Collection Storage" (Ngā Taonga 44). Possibly one of the most important aspects of an archival building is the building's structure and storage capabilities. Currently, the Taranaki Street building is earthquake prone (yellow stickered). The event of a large earthquake could seriously impact on the integrity of the storage and technical facilities housed at the site. The cinema has been described as being cold, uncomfortable, and not big enough for some of the larger screenings. The café located on the ground floor has also been described as being cold and uninviting. The building requires a new lift, roof, and heating/cooling/ humidity control system. The organisation's plan for the future is one that all employees and the collection are housed in a safe environment, and that the venues provide a warm, inviting environment for visitors to the archive (Ngā Taonga 45).◆

Three key aspects will be examined during the final design phase:

THE CREATION OF AN EXHIBITION SPACE THAT EXPLORES THE RELATIONSHIP BETWEEN THE VIRTUAL AND ACTUAL, AS WELL AS PROVIDING A SPACE THAT INTRODUCES THE PUBLIC TO THIS AMAZING BUT IMMENSE COLLECTION.

1

DESIGN A SPACE THAT PROVIDES A CONNECTION TO THE SITE, SO THAT IT GIVES PEOPLE ON THE STREET A SENSE OF THE ARCHIVAL EXHIBITION

2

A DESIGN THAT ADDRESSES THE BUILDING CONCERNS AS OUTLINED IN THE STRATEGIC PLAN

3
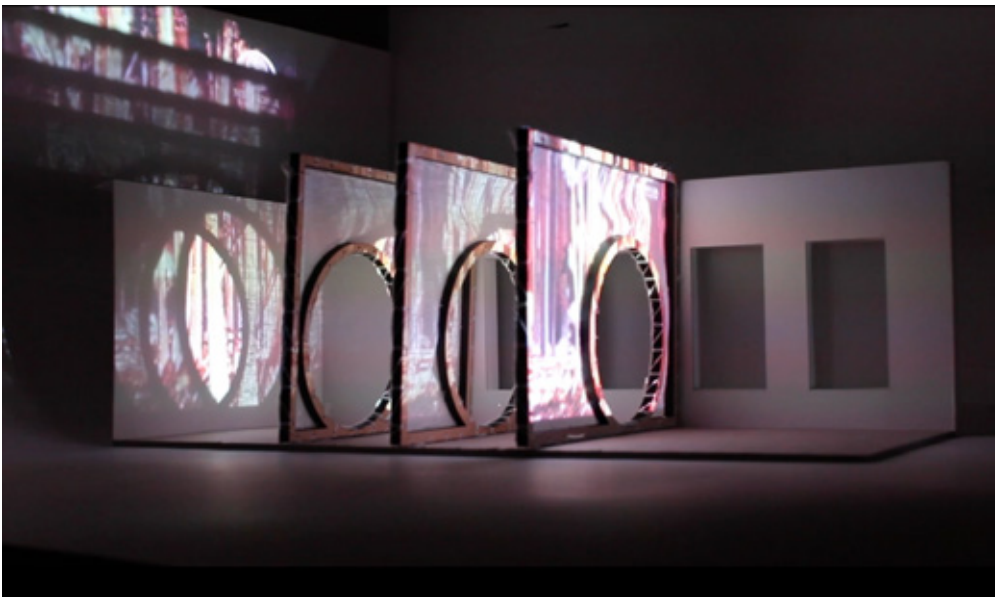
Fig. 11.1

Fig.11.2

Projection Modelling

The projection model is a series of models that explore the relationship between actual and virtual space. Using physical forms, light, sound, colour, and movement, these modelled spaces depict an interior that immerses one in the archival collection at Ngā Taonga. The first two images (figs. 11.1 and 11.2) show a space constructed by a series of projection screens with circular voids 'cutting' into each screen in a different position. This was inspired by the artist John Stezaker, who produces an almost dada-inspired series of collaged images, often cutting voids into old film stills. Using this method within a three-dimensional model creates a very different effect, especially when multiple layers or screens have been applied. The outcome is ever-changing space as one walks through the void. The projected image is in a constant state of movement and with each movement forward by

the visitor in to the space, a completely different perspective is produced. After testing a series of different categories from the Ngā Taonga Sound and Vision collection, it was discovered that this iteration tended to highlight certain aspects of animated films in a way that did translate with the other parts of the collection. This could be possibly due to the two-dimensional origins of animation and the way the space is comprised of a series of flat screens.

Fig. 11.3

Fig.11.5

Fig. 11.4

Fig. 11.6
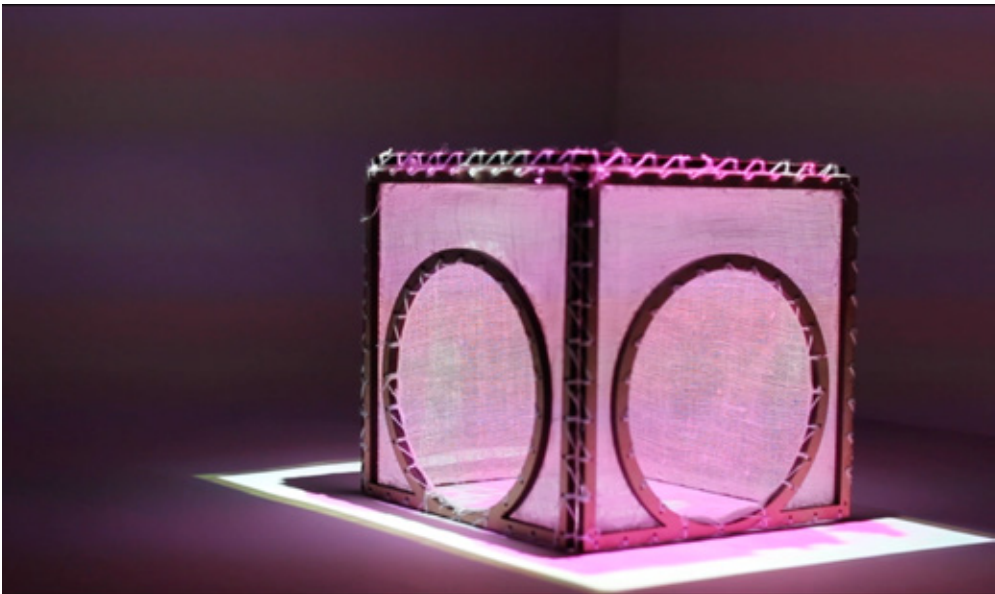
Fig. 11.7
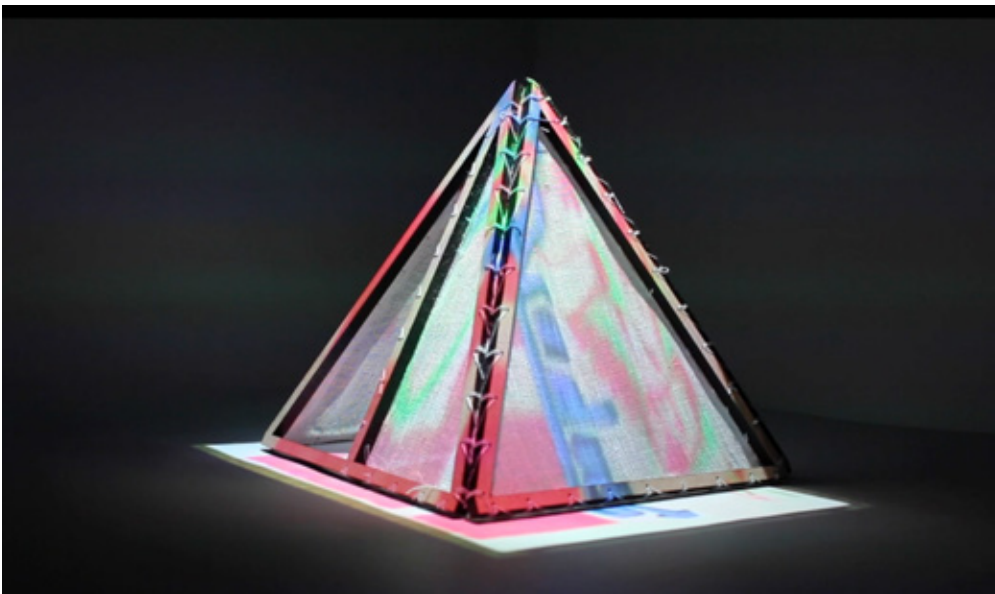
Fig.11.8

The second series of modelled forms (figs. 11.3, 11.4, 11.5, and 11.6) borrows a similar motif to the first. This time a collection of square projection screens have been produced, with some containing circular voids. They have been arranged in a manner that simulates almost a feeling of a three-dimensional form of the films being projected. The circular voids are used again for the purpose of encouraging visitors to walk through the middle of the space, producing a feeling of interaction. The voids also distort the moving images to a degree, causing a different perspective of the film. A number of different films from the archival collection were projected into the space, from historical documentaries to animated advertisements from the 1940s; ultimately, the decision was made that dance and theatre productions created the most engaging environment for this space. The multiple projection screens framed the individuals performing on screen, whether it was a dancer off to the side of the stage or an actor at centre stage, the form immerses one in the production in a way that would not have been achieved from watching it on a flat screen.

The final forms (figs. 11.7 and 11.8) are an attempt to create a more intimate space to browse the collection where previously the media library has failed. Several three-dimensional forms have been produced to create quiet isolation for those who wish to browse Ngā Taonga's collection privately. The act of physically modelling these forms allowed an exploration of the effect that light projection from different angles has on the interior. The idea would be that the number of openings determined the level of privacy of each 'browsing collection' box or pyramid. When occupied a projector overhead would activate, projecting onto the exterior what was being viewed within the interior as a way of allowing those walking between the forms to become intrigued by the collection.◆

phase four

Final Design

Fig. 12.1. Exterior daytime render.

The final design incorporates and addresses the research question through a series of interior iterations.

"How can the relationship between the actual and virtual interior be explored to create a more engaging experience for Ngā Taonga Sound and Vision?"

The key objective of the research was to provide an exhibition space for the New Zealand audio-visual archives, Ngā Taonga Sound and Vision, that resonates within the confines of both virtual and actual space, enhancing both and creating an overall engaging experience for visitors. The site provided the perfect testing ground for this research as it is a programme that has historically remained tangible; however, as technology and the internet have progressed, the collection has become increasingly digital and therefore lost the tangibility it once had. This project is useful in an increasingly digitial world where tangibility is becoming somewhat obsolescent. The design does not propose that actual space is better than or inferior to virtual; the design rather suggests what possibilities can be created when taking into account both the actual and the virtual.
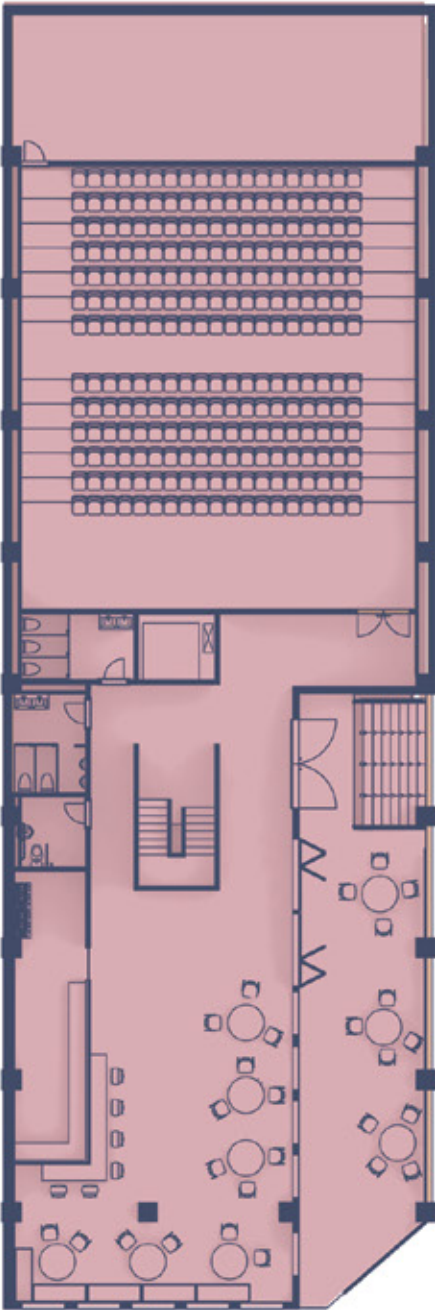
Fig. 13.1. Ground floor plan (not to scale) showing entry, café and cinema.

Fig. 13.2. First floor plan (not to scale) showing exhibition spaces.
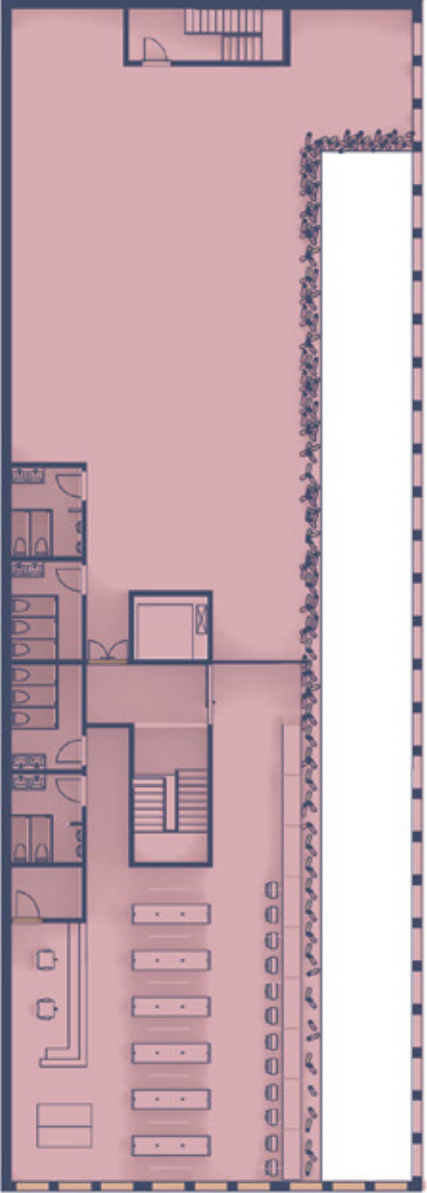
Fig. 13.3. Second floor plan (not to scale) showing Johnathan Dennis Library.

Exterior Engagement and Ground Floor Public Areas

From the street level the re-design of Ngā Taonga Sound and Vision begins to grasp the visitor's attention and imagination. Utilising the technology behind projection mapping, moving images are projected onto a wall comprised of fragmented columns, or 'threads,' that stitch together the various floors that hold the different functions of the archives. Speakers planted on the exterior produce sound to create a multi-levelled experience that draws interest throughout the day and evening. Previously, the building lacked most if any engagement with the exterior. The site simply remained a vault to hold the collection rather than exhibit it. The entrance into the archives has now been moved from Ghuznee Street to the centre of the building in Taranaki Street, an action that allows guests easier access to the café and cinema located on the ground floor as well as the central stair well and lifts. Previously, visitors to the building would have had to weave through the café to reach the cinema and media library. The cinema has also been extended to allow larger screenings of the popular collection. The cinema size was an issue that had been addressed within the strategic plan and client brief.
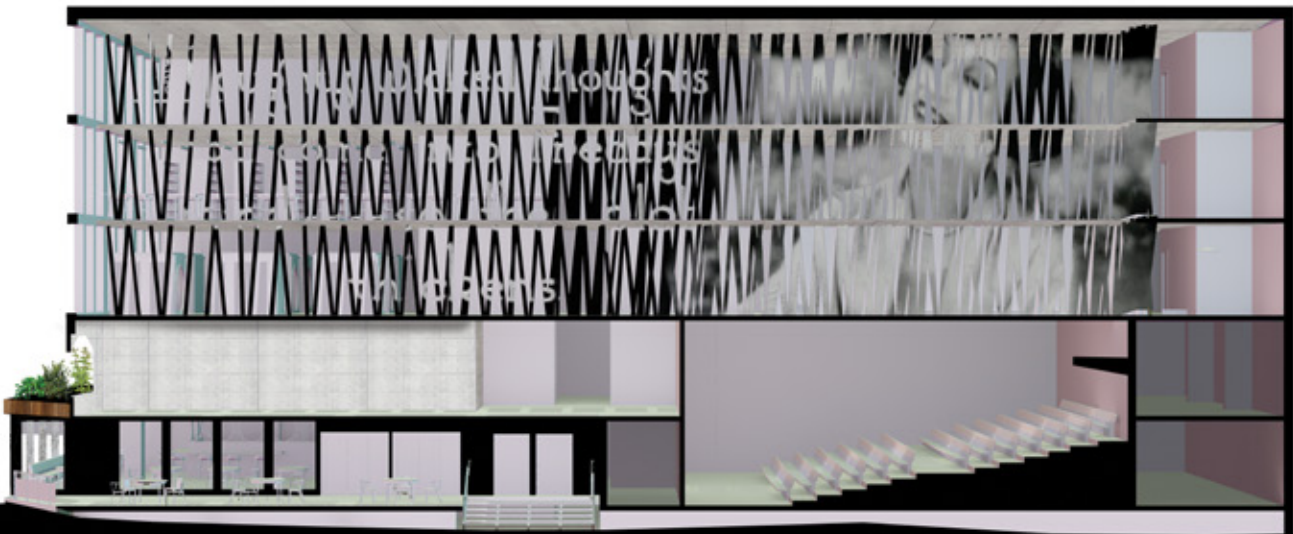
Above: Fig. 14.1. Cafe Render.
Opposite: Fig. 14.2. Section 1 (not to scale) showing the projection mapping wall.

EXPLODED DRAWING OF PROJECTION MAPPING WALL

An exploded view of the facade and projection mapping wall showing the relationship between the existing envelope, new interventions as well as projectors/sound systems that form an atmospheric connection between the interior and the exterior site
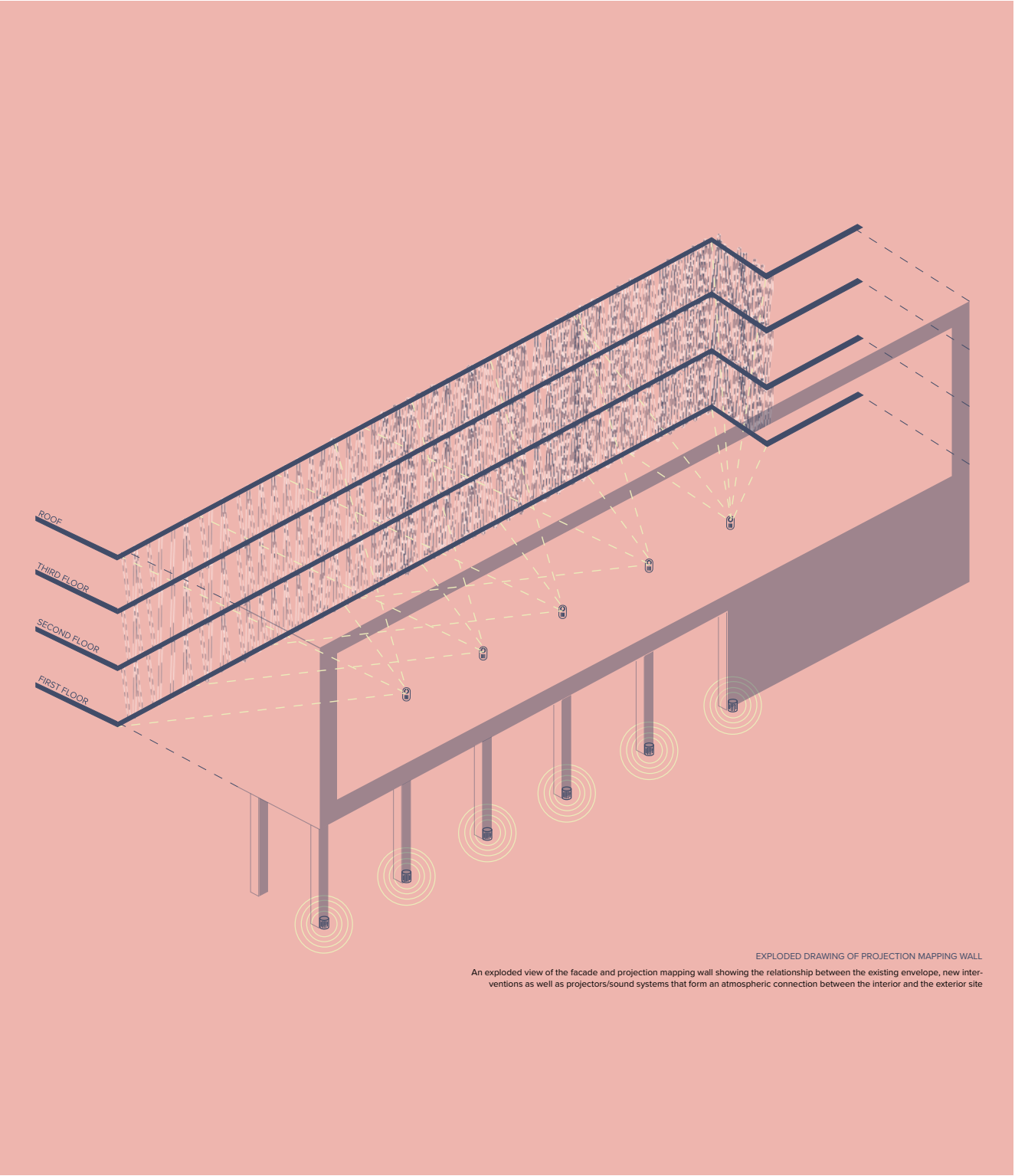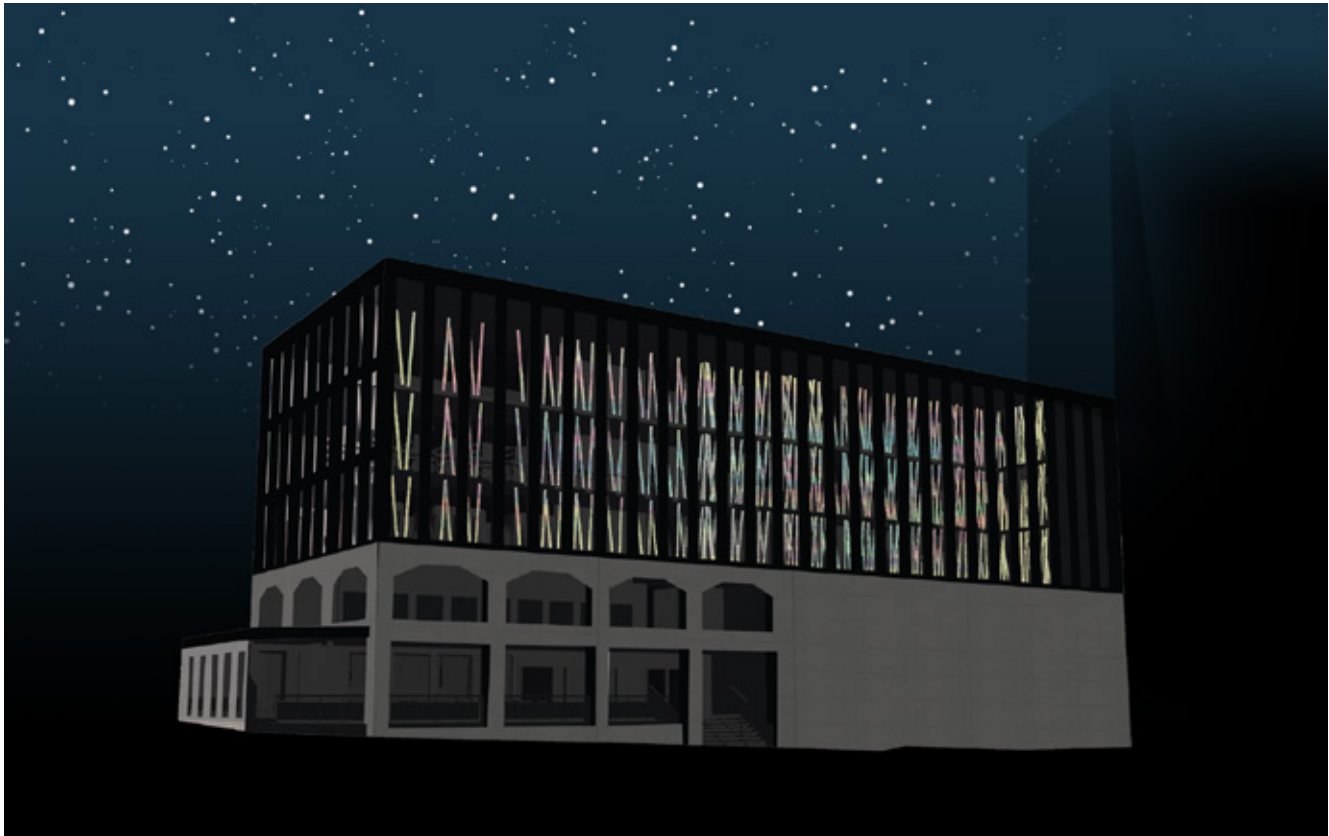
Above: Fig. 15.1. Nighttime exterior render.
Opposite: Fig. 15.2. Projection mapping wall
graphic.

Fig. 16.1. Exploded building render.
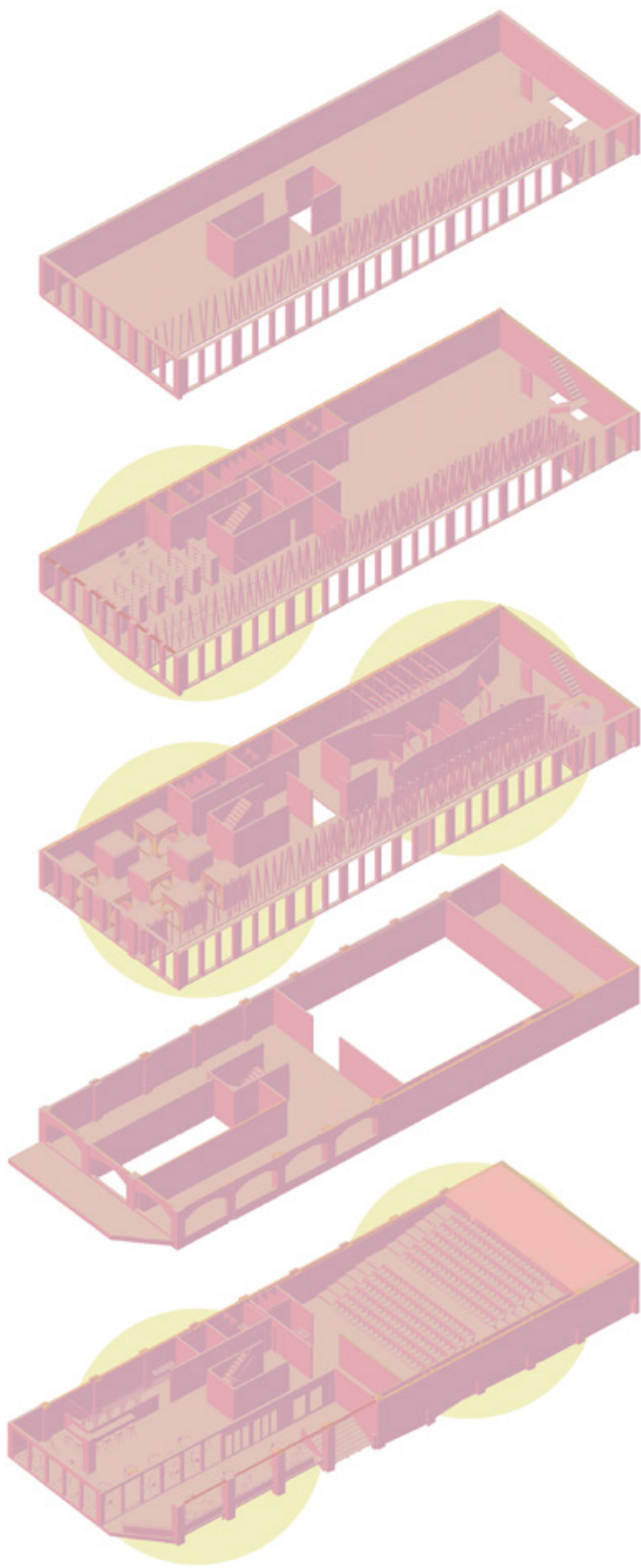
Exhibition Areas

The second floor is now comprised of most of the exhibition and access points to the collection. The north side of the second floor is where the exhibition spaces begin and where the visitors first encounter the theatre and dance exhibit. This exhibit consists of multiple projection screens (made from a wooden frame and white linen blend sheets) arranged on a three-step stage in order to produce a multi-dimensional simulation of a theatre or dance production. It is intended to be experienced from a range of different points of view. The first being the more traditional, viewed from a stationary seating area. The other views points are created by the visitors moving either through the screens or between the screens front, back, or sideways. As visitors make their way through the exhibit, smaller details are framed by the multiple projection screens as well as forming different perspectives on the moving image. The dance and theatre exhibit is composed of two areas separated by a wall with an opening for visitors to pass through. This allows two images to be displayed at the same time as well as encouraging visitors to move through the space forming their own virtual experience of Ngā Taonga's collection.

The second exhibition area is the Animation Exhibit. This is derived from the same concept as the dance and theatre exhibit, however, as opposed to its being a multi-levelled display where the projection screens are arranged in a manner to simulate a three-dimensional experience, the animation exhibit remains true to its genre. What this means is the images are projected onto flat stationary projection screens down a long hallway-like stretch. However, to create a more engaging experience with the collection, large circular voids have been cut into the forms to allow visitors to walk through the moving images being displayed. The circular void is something derived from the work of John Stezaker, a British artist who primarily works in the medium of collage, often cutting and pasting together old film stills and head shots from the 40s/50s. One series in particular that provided inspiration was where Stezaker cut large circular shapes into old film stills, creating a large white void within the scene. This action completely changes the atmosphere and perception of the scene, where the facial expression of the actors became obscured or points of interests have become hidden within the white void – this causes the person viewing the image to form their own connections for the scene, creating a personal narrative or a virtual experience of an otherwise

physical object. This act of 'cutting' into the image is repeated in different locations across the multiple screens, creating a layering of images, so that as a visitor walks through the exhibit, different details of the animated image are framed and given a sense of hierarchy within each layer of projection screen.

The final area on the second floor that exhibits the collection to the public is the collection boxes located on the Ghuznee Street side of the building. The collection boxes is the design response to the outdated media library, previously located on the ground floor of Ngā Taonga. They are comprised of three separate functions, determined by the number of circular openings within each box and their location in relation to one other. The three categories of boxes are the co-sharing collection box, where the two openings are located on two sides touching (public-private); the thoroughfare collection box, where the openings are located on opposite sides from one other (public); and the private collection box, where there is only one opening in the box (private). Along with a difference in appearance, each type of box holds a different intended function according to its level of privacy. For example, the private collection box is intended to be used by a single occupant, which is reinforced by the amount of seating within the box itself. The user also has maximum control of the images being projected, either through casting from a smart device or through the touch screen panel situated within the box. The thoroughfare collection box is the most public of the three, and therefore the user has no control over the audio-visual images being displayed within. This collection box is designed to be walked through by visitors as seemingly random content from the collection is being played and projected on one of the walls of the box – when something piques their interest, there is seating available for multiple people to sit down and watch. The co-sharing collection box lies somewhere between the thoroughfare and private collection boxes in terms of whether it is public or private. It has two openings like the thoroughfare; however, there remains a level of intimacy for those viewing the audio-visual items, as well as some level of control over the viewing content (for example, one can choose a genre: animation, documentary, home movies, etc. As well as control the playback - skip, rewind, pause, etc).◆
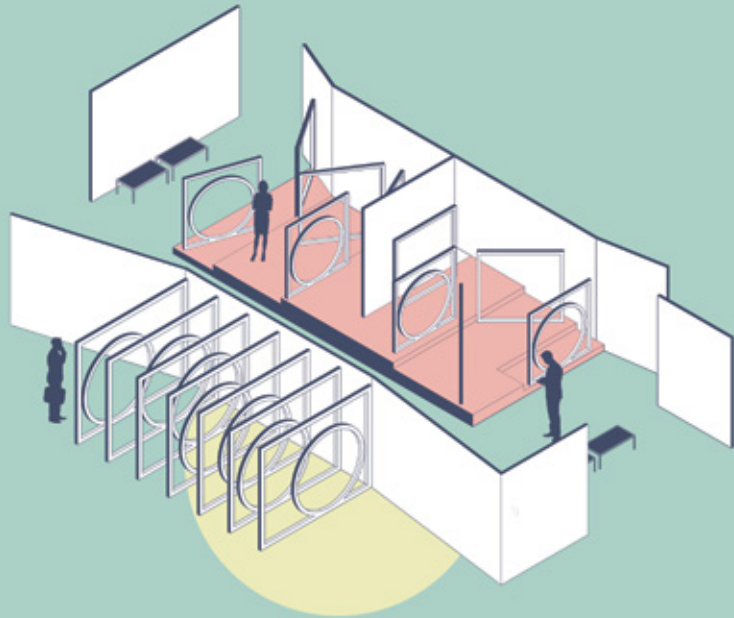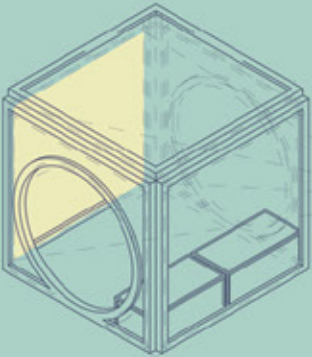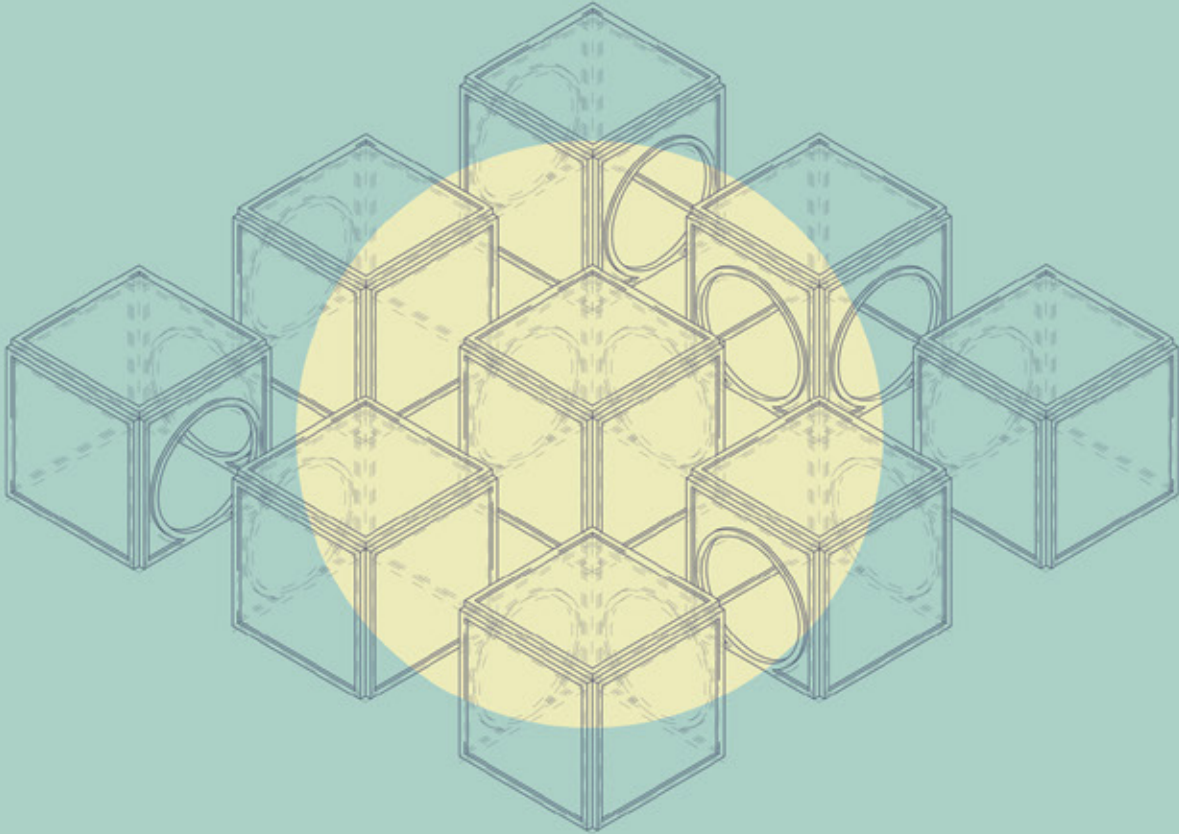
Fig. 17.1. Partially exploded exhibition render
Next Page: Fig. 17.2. Collection Box Graphic Drawings

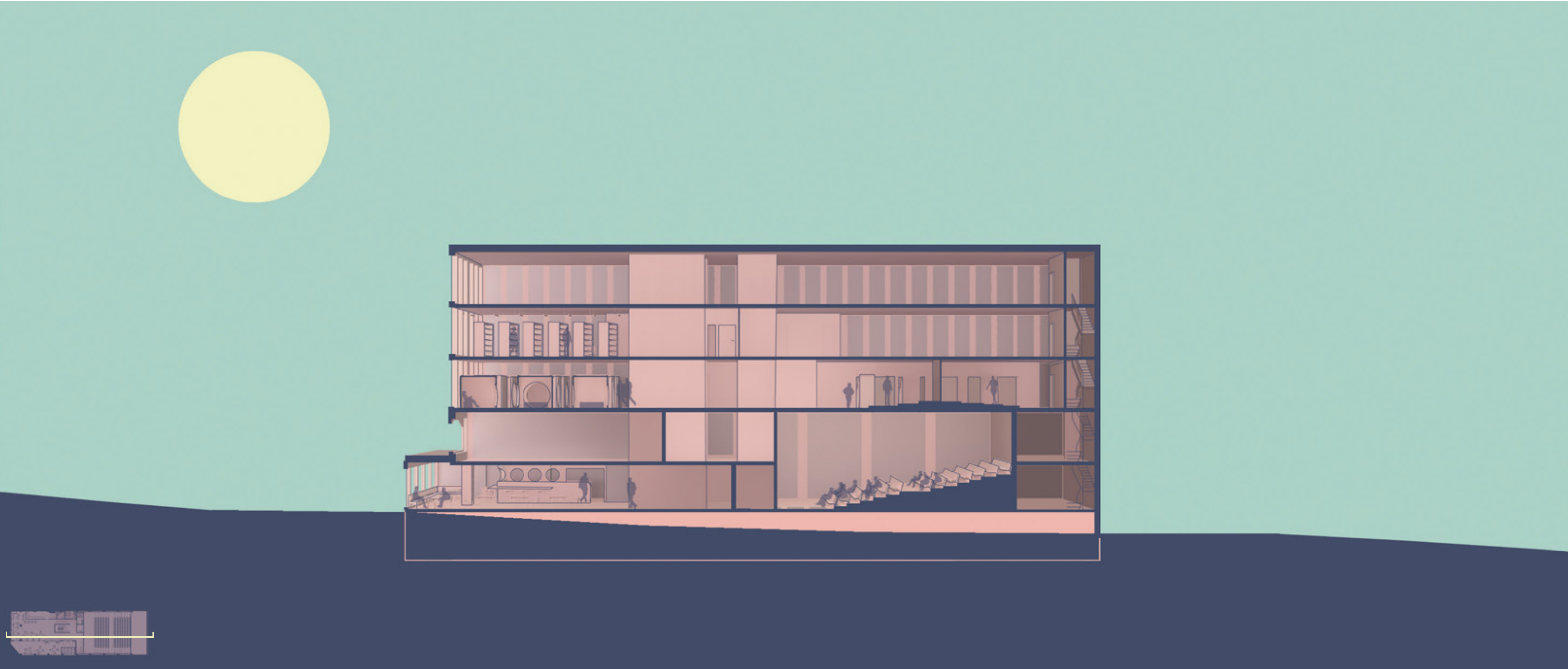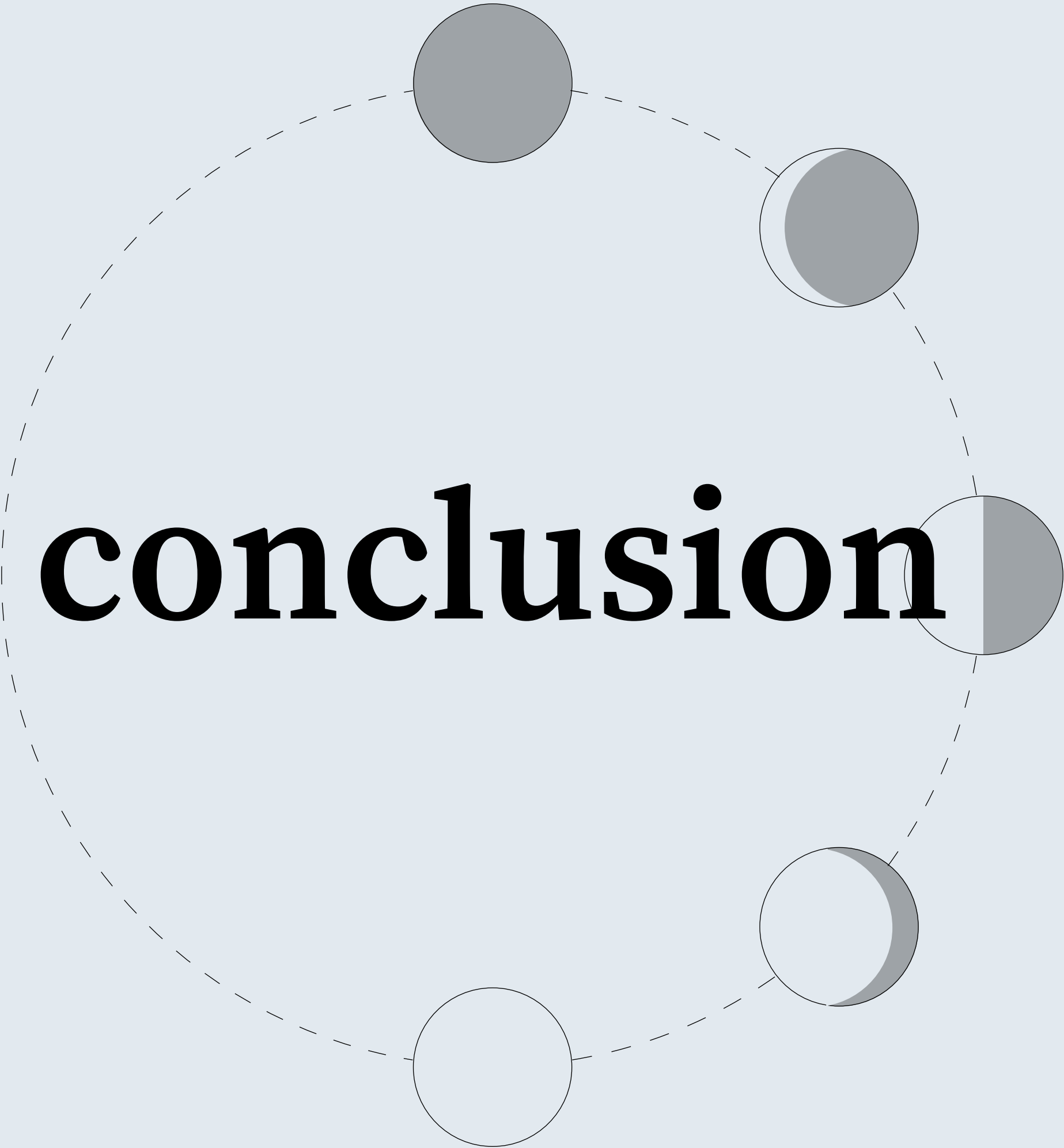fig. 14.2 Section 2 (not to scale)

conclusion

Throughout the thesis there is a clear understanding and exploration of the research topic. The final exhibition design confronts the space in between what is considered virtual and actual space through the use of virtual mediums (light, colour, and sound) and actual (physical forms, walls, and projection sheets/screens). This connection creates an overall engaging experience, generating a level of enthusiasm that was not present within the prior interventions. The design also addresses the client's interior concerns regarding the comfort of the public areas. This formed a comprehensive design that creates an enhanced experience of the Wellington audio-visual archives, Ngā Taonga Sound and Vision.

Phase one of the research was important in the way in which it laid the foundations of what is a virtual interior within the painting, photographic and cinematic medium. The analysis began to explore how we create our own personal narratives or virtual interior from these art disciplines. The *Black Mirror* analysis also provided a primarily design precedent that explored speculative interior architecture influenced by current technology trends. This is important when designing for an archive that is making use of current technology and therefore becoming increasingly digital.

Phase two began to flesh out more of the research topic in terms of exploring the Deleuzian theory of actual and virtual space, as well as elements that are prominent in both cinema and interior architecture; elements such as movement, space, time, and narrative. These elements played a prominent role in the final design, where they were considered to influence the overall forms and how they are presented to the visitor. For example, as the visitor moves through the space, what impact does this movement have upon how the item being projected is perceived? Phase two of the research examines the concept of Deleuze's actual and virtual space, defining it in relation to the research's area of scope. Phase two also introduces Uwe Brückner's design theory of scenography as a precedent for the programme of an archival exhibition

space. Scenography is used as a driving concept for the preliminary design phases as Brückner's practice that specialises in exhibition design. The "Diamond of Suspense" encapsulates Brückner's theory of scenography through design parameters. This became a useful tool when designing an exhibition space as it explores the visitor's connection to the item, the space, the context/narrative, and how these link together through dramaturgy.

The site and programme of Ngā Taonga Sound and Vision is examined in phase three. This phase begins with a description of the site as well as an analysis conducted from several site visits to the Taranaki Street site. The visits provided useful knowledge as to the primary function of the archive and the current access the public has to the collection through the various outreach programmes as well as the access points provided at the Taranaki Street site. The second part of phase three is a client brief derived from the key strategic priorities found in the 2016-2024 strategic plan, where six design objectives were defined from these priorities in relation to the research topic and question. These design objectives include: providing a connection between the public and the collection; bridging together the actual and virtual space through design; providing a connection to site – through day versus night time interactions; activating and improving the public spaces of Ngā

Taonga; creating a sense of tangibility from the digital medium to form an embodied and engaging experience; and lastly providing the community with a sense of access as well as promoting the archives to the public. Phase three also produces a series of design experiments that begin to address these objectives as well as tying into the prior research, using items from the collection and projecting them onto various modelled forms to discover how this enhances the interior and engages one with the collection.

The final phase within the thesis explores the final design within the site of Ngā Taonga. The design gives the previously modelled forms a function within the archives according to the type of item that is being projected. For example, one of the exhibition pieces is intended for animation while another is for dance and theatre films. This is perhaps where the design could have been extended further as the entirety of Ngā Taonga's collection is comprised of several hundred thousand items, coming from a range of different genres and categories. Although, the third exhibition piece, the 'Collection Boxes,' attempts to exhibit a wider range of the collection to the public; the exhibition could have been pushed even further in terms of outreach and form. However, overall the final design addresses the research question and produces an interior intervention that exhibits the collection

and engages the visitor in an environment produced through both virtual and actual means, an environment that lingers between the virtual and actual.◆

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List of Figures

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