

THE CINEMATIC SPACE

How to use cinematography as a design tool in architecture

Written by

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CHALMERS
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STUDENT BACKGROUND



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ABSTRACT

Within the cinematic universe, colour, lighting, framing, and composition are important narrative tools used deliberately to transport the viewer from the real world into the cinematic one. In films, these techniques are used to steer our emotions and help us relate to the themes of the film. So, why do architects rarely use these tools to help people understand and relate to their designs?

This master's thesis explores the parallels between cinematography and architecture by examining how cinematic principles can be used as design tools in architecture and architectural representation. By using principles such as framing, composition, colour theory, lighting, and storytelling, the intention was to determine how these could influence the architectural design process. Connections between the visual language of film and architecture were drawn to strengthen the argument that cinematography is a beneficial design tool that should be used by architects. The theories were manifested into design through a speculative approach where an old industrial building in Gamlesta-den, Gothenburg, was transformed into a cinema using cinematographic methods. This transformation revealed how cinematic elements strengthen the phenomenological aspects of architecture and contribute to a more immersive and meaningful architectural experience.

One central argument for this thesis is that storytelling is a crucial and useful part of architecture and representation that is often dismissed or forgotten. Storytelling has the potential to impact our spatial perception by focusing on how human narratives instil meaning in the built environment, breathing life into architecture. It shifts the focus from the building itself to the human perception of it and the lived experience.

Understanding the relationship between architecture and cinematography, provides new perspectives on how cinematography, when integrated into the design process, can enrich architecture, and create more immersive and emotionally resonant built environments. This research is relevant to anyone within the fields of architecture interested in pushing the boundaries of traditional design methodologies.

Keywords : Architecture, Cinematography, Architectural Representation, Film, Design Tools, Phenomenology, Industrial Transformation, Spatial Experience, Cinema

INTRODUCTION

THESIS QUESTIONS

- How can cinematography be used as a design tool in architecture and architectural representation?
- How can cinematography benefit the architectural practice?

DELIMITATIONS

The primary focus of this master's thesis is on film and cinema; therefore, theatre and other types of live stage productions will not be included. When referring to mise-en-scène in this research, it includes "all of the elements that comprise a single shot; that includes, but is not limited to, the actors, setting, props, costumes, and lighting"(Merriam-Webster.com, n.d.). While film sets and theatre stages do share some similarities, it is the way space is framed and presented through the camera lens, along with the storytelling abilities of film, that inspires this research.

Another reason for limiting this thesis to film is simply because much more has been written about architecture and theatre in comparison to architecture and cinematography. Consequently, it has the potential to introduce several new perspectives to the field of architecture.

AIM

The aim of this thesis is to examine if applying cinematographic methods to architecture can alter our perception and understanding of space. Additionally, the thesis aims to formulate a concrete design method by implementing the theories through the design of a cinema within an existing building. As a result, this design exercise will serve as a practical test of the thesis question: 'How can cinematography be used as a design tool in architecture and architectural representation?'

BACKGROUND

INTRODUCTION

Cinematography can be defined as “the art of photography and visual storytelling in a motion picture or television show. Cinematography comprises all on-screen visual elements, including lighting, framing, composition, camera motion, camera angles, film selection, lens choices, depth of field, zoom, focus, color, exposure, and filtration” (MasterClass, 2021).

This definition underscores the complexity and nuance involved in crafting captivating visual narratives, making it a tool that could be useful in the architectural design process, particularly in terms of architectural representation. Cinematographers employ these straightforward yet powerful tools to bring life into their visual compositions, seamlessly intertwining subjects with their surroundings to create believable and emotionally resonant narratives that help the viewer understand the story and the space on a deeper level.

In contrast, I have found, throughout my years of studying architecture, that architects often prioritise the more tangible aspects of architecture, such as function, programme and materiality, allowing the atmospheric qualities to become a result of those choices rather than a primary focus throughout the design process.

As described in “Atmospheres: Feeling Architecture by Emotions,” atmosphere is the experiential aspect of architectural design, stating that it encompasses both the physical parameters of the built environment and the intangible personal feelings and experiences. Atmosphere is described as the impression left on our senses when experiencing architectonic space. Even though it might not be immediately noticeable, it is an essential part of how we perceive space which makes atmosphere inseparable from architecture (Canepa, et al., 2019).

Reflecting on how the built environment is represented by architects, atmosphere again becomes secondary to form and function. The human perspective and narrative are at times left as an afterthought or as a result of all the other qualities that are deemed more important by architects. When it comes to architectural representation, people and objects are often randomly placed out to make the space appear more lively and less empty as well as a reference for scale.

Through the exploration phase of this master’s thesis, I have found that creating narrative within an image helps bring life to architectural imagery. When people or objects are placed out at random it often has the opposite effect, making the space appear more lifeless with a lack of narrative and purpose, which as a result feels staged.

The realisation that architects and cinematographers depict space in very different ways and the fact that there is something missing in my own renderings and drawings opened up a whole new way of viewing architecture and architectural representation. If cinematographers are able to fill a space with life and purpose within a single frame, then surely architects can achieve similar results using those same techniques.

Exploring cinematography and viewing architecture through a cinematographic lens has the potential to not only enrich the way architects work with representing space through renderings and drawings, but cinematography could also be a useful tool for architectonic design. Using techniques such as framing, composition, colour and lighting more deliberately to create narrative within a space has the potential to enhance the overall architectural experience and puts a focus on the atmospheric qualities of architecture.

It is important to note that architects do work with composition, light, and colour. But as opposed to cinematographers, who use it more deliberately to create narrative, architects tend to use it more as an aesthetic tool rather than a narrative one. Architects and cinematographers alike use colour to evoke emotions but as mentioned above, narrative is the main difference. Architects will instead use colour for its abilities to create a unique identity and ambience in the built environment (S3DA Design, 2024).

During my five years of studying architecture, a total of one workshop about colour theory was provided by the university as well as one optional guest lecture provided by Architects Sweden, the collective trade union for all architects in Sweden. Although the amount of time spent learning about colour theory varies from school to school and between different countries, the fact that some architectural institutions provide as little as one mandatory lecture on the subject speaks volumes about where colour falls on the list of important tools for architects.

Most architects can agree that colour plays an important role in architecture. But the varied amount of time spent on colour theory leads one to believe that colour along with lighting and composition are instinctive qualities that one is expected to acquire naturally rather than something that needs to be taught. The same could be said for the early use of colour in motion pictures. In “Color Consciousness,” Natalie M. Kalmus urges the film industry to be mindful when using colour in films, stating that the same principle of colour, composition and tone needs to be applied to film as to the art of painting. A colour consciousness needs to be adopted to fully appreciate a motion. She goes on to say that both monotony and the abundance of colour is uninteresting and unnatural and that the overuse of colour can have an unpleasant effect on the eyes and mind. It is therefore important to understand how to use colour, tone and composition in film (Kalmus, 1935). Between then and now, a lot has happened in the film industry, and understanding colour and how it can be used is now a regular part of the job for cinematographers.

BACKGROUND

FRAMING ATMOSPHERE

Composition, light and colour, when used intentionally, have the potential to hugely impact the way space is perceived. Take the work of cinematographer Christopher Doyle as an example. He, together with director Wong Kar-Wai manages to create intimate and relatable atmospheres in their films thanks to the use of colour and lighting. In their most popular films, “In the Mood for Love” and “Chungking Express,” there is also a focus on architecture that, without feeling forced and without taking away from the overall plot of the film, aids the storyline. If architecture in film can be used as a narrative tool to help deliver the theme of the film, then surely the reverse is possible. Using cinematography and its narrative qualities to express and heighten the atmosphere of the built environment.

Another example of architecture being used to strengthen the plot of a motion picture is in the Academy Award winning film “Parasite,” where architecture is used as a metaphor for the unequal division of wealth in South Korea. The story takes place in two houses, one being a lower-ground apartment and the other a luxurious mansion. The plot is set in these two very contrasting houses so that the entire theme of the film can be understood through the construction of space (Effiom, 2022). If filmmakers are able to use architecture as a narrative device, then surely so can architects.

Architecture often exists in relation to something else: music, philosophy, religion, politics, geography etc. (Tawa, 2010). If architecture can be strengthened by the application of other fields and artforms then cinematography should be no exception.

THE MAGIC OF CINEMA

This thesis explores how the magic of film can be brought into architecture by designing a cinema inspired by the artistry of film and cinematography.

The decision to focus on a cinema as the subject of this design is motivated by several factors. Firstly, it aligns closely with the theme of film and cinematography, as historically the cinema has served as a venue for viewing films. It is a space that holds memories, emotions, and community; even in today’s digital age, there’s something special about sitting in a darkened theatre, surrounded by others, and getting lost in a story on the big screen.

My personal connection to cinemas is another reason behind this choice. I have vivid memories of going to the local cinema near my childhood home, a charming old functionalistic building from 1939. I still cherish many fond memories of going there with my primary school class and becoming mesmerised by the venue and the films playing. Those visits helped shape my love for both film and architecture and are a big reason why I still frequently visit the cinema.

Through this research, I hope to capture the essence of what makes cinemas and film so special and translate it into a design that honours the legacy of it while also enriching the cinematic experience.

BACKGROUND

THE ARCHITECTURE OF CINEMA

In preparation for this thesis, a field trip to Bio Roy was arranged, allowing me to learn about the ins and outs of running a cinema. After conversing with the staff, it was evident that the people working at Bio Roy possess a genuine passion for their work. The projectionist offered a tour of the facilities and explained in detail how the projection room operates, emphasizing that it involves more than simply starting the film. There is a special schedule for when the lights dim, when the gong goes off, when the curtains open, and when the film begins to play, perfecting the cinema experience and making it into a ceremony of sorts. The projectionist also remarked on the magic of cinema and how the ritual begins the moment you enter the foyer. He explained how they put a lot of thought and effort into making every part of the cinema experience memorable.

As Kjell Furberg describes in "Svenska biografen", the cinema as a space is a buildup that one only briefly gets to experience, making each step of the cinema ritual significant in shaping the overall film experience. He described the visitor's journey from outside the building, through the foyer, and into the auditorium, where he referenced the sound of the gong signalling that the film is about to begin as the curtains covering the screen part (Furberg, 2000). These steps remain just as vital in 2024 as they were in the early 1900s and will likely continue to hold value for as long as cinema exists.

By visiting Bio Roy, it became clear which components make a good cinema experience. There needs to be a reception area where people can sit down, as well as a front desk or ticket booth for purchasing snacks and tickets. Additionally, a projection room and an auditorium are necessary. Like any other building, there should also be toilets, storage rooms, emergency exits, staff rooms, and so on. A balcony in the auditorium is optional, but it does add an element of charm. Many modern cinemas do not include a balcony, but they can bring a sense of elegance and character to the space, making the auditorium feel more thoughtfully designed rather than just a big room with chairs and a projector, which are technically the most important elements.

Bio Roy, formerly known as Bio Royal, opened its doors to the public on 20th April 1940 (Furberg, 2000). Built in the functionalist style that dominated at the time by architect Nils Olsson, Bio Roy is regarded as one of the most elegant, modern, and well-preserved cinemas in Gothenburg. One feature that immediately catches the eye is the red neon sign above the canopy, marking the entrance. The canopy and the neon sign are highly representative of functionalism, a style that remained popular for cinemas from the 1920s until the end of the 1950s (Furberg, 2000). The red neon sign continues to be strongly associated with cinema, with similar examples found in both newly constructed and older cinemas.

Even though the building is quite old, the cinema has kept up with technological advances without losing its original character. During renovations in 1994, they preserved a lot of the interior and added a new sound system, making it the first cinema in Gothenburg to receive THX certification, a mark of quality for sound and imagery (Bio Roy, n.d.).

With its beautiful interior and friendly staff, Bio Roy perfectly showcases the blend of the old and the new. It manages to stay current with technology without compromising its integrity and maintaining its cultural significance as one of Gothenburg's oldest running cinemas. Its unique design enhances the cinema ritual, transporting visitors from one world to another before they finally enter the realm of film.

THEORY

ARCHITECTURE & CINEMA

In "Agencies of the Frame: Tectonic Strategies in Cinema and Architecture," Michael Tawa compares and contrasts architecture and cinema, describing the differences and interdependencies between the two practices by focusing on the way they deal with time and space (Tawa, 2010).

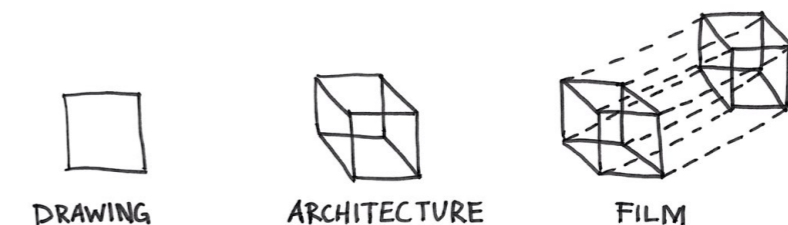
Cinema is a time-based practice that relies on time to unfold its narrative or its sequence of events. It needs space in order to be experienced and to exist. Cinema presents moving images to an audience whose physical position is fixed, engaging primarily through sight and sound. Architecture on the other hand, focuses on creating physical spaces that could not be experienced, designed, or produced without time. In other words, architecture involves designing and constructing physical buildings that people experience while engaging all their senses, and where the movement through those spaces plays an important role. The architectural experiences unfold in spatial sequences and narratives that offer various possibilities in terms of movement, rhythm, and interaction. Individuals experiencing architecture will bring their own subjective perceptions and interpretations, influencing how they perceive visual elements, viewpoints, paths, and movement within the space. In cinema, as opposed to architecture, the scenes are more carefully orchestrated to evoke certain emotions and to enhance the overall theme of the film, making the individual's personal experiences less pivotal (Tawa, 2010).

These limitations are fundamental to both architecture and cinema. Limits such as physical boundaries, conceptual constraints, or technical limitations define what is possible within each field. Despite these limits, or perhaps because of them, there are opportunities for transformation. In architecture, this transformation happens through "place making," which is the practice of creating meaningful and functional spaces, while in cinema, it is through "cinematography," the art of visual storytelling (Tawa, 2010).

Tawa goes on to state that we should challenge the assumptions and limits within architecture and cinema. By doing so, we can overcome the constraints imposed by disciplines, materials, and technology. Pushing the boundaries and challenging the conventional roles of architecture and cinema can lead to transformative experiences that go beyond ordinary perceptions, allowing for extraordinary and uncanny moments to arise (Tawa, 2010).

DRAWING – ARCHITECTURE – FILM

Architecture cannot exist without drawing, in the same way that film cannot exist without architecture. The drawing is the first step into the built environment. The same can be said about film. Before there is ever anything on screen, a script, and later a storyboard, need to be formed. Both of which could be considered the drawing in the world of film. Architecture is a three-dimensional realisation of a drawing and film is the frame-by-frame sequence of events within a space presented on a screen. The temporal aspects of film and the fact that architecture, although static cannot exist without time and movement, allow for a bond between the three. This relationship is best described through a simple illustration.



Film shows architecture in its full potential, adding narrative and purpose. Film can capture architecture and all its ambitions. With cinematography one can make the most unbelievable fantasies feel like reality and it can bring out the life and phenomenological aspects of architecture and drawing. Film is in many ways the perfect way to represent architecture because we do not simply look at a space as a space but rather as a venue for life and for a story to unfold, the same way a physical building is not just its different components. It is a place where life happens, where memories are formed, and associations are made. Cinematography as a tool for architectural representation will bring out the full potential of the built environment and allow us to form a connection to what is yet to be built, the same way it allows us to feel connected to a universe that only exists within the world of cinema.

The parallels between drawing, architecture and film are a chain of events where the last two parts cannot exist without the other in more ways than one.

THEORY

THE HISTORY OF CINEMA

Today, a film can be viewed just about anywhere: on a television in the privacy of one's home, on a small screen attached to the seat in front of you on an aeroplane, or via a laptop or smartphone wherever the desire to watch a film strikes you. However, in the beginning, there was only one place where films could be experienced: the cinema. For many decades, this statement held true.

But what exactly is a cinema? Can any room with a projector be classified as such? Kjell Furberg, in his book "Svenska biografer" (Furberg, 2000), defines a cinema as a venue specifically designed for the regular projection or display of moving images, particularly feature films, on a screen during public performances for a paying audience.

The first cinema opened in Paris on 28th December 1895, created by the Augustine brothers and Louis Lumière. They transformed a pool hall into the Cinématographe Lumière, a space that could accommodate up to 120 visitors (Furberg, 2000).

Just six months later, cinema was introduced to Sweden on 28th June 1896 at the industry and craft exhibition in Pilstorp, Malmö. This cinema was housed in a theatre specifically designed for the event by Swedish architect Theodor Wählin, featuring a Moorish interior similar to that of the Cinématographe Lumière (Furberg, 2000). Years later, in the 1920s, the trend of incorporating Asian architectural influences into Swedish design continued. A notable example is Chinateatern in Stockholm, designed by Albin Stark, who drew inspiration from his visit to Beijing, becoming the second European to enter the Forbidden City. Another significant influence for Stark was Grauman's Chinese Theatre, a renowned cinema on Hollywood Boulevard inspired by Chinese design (Chinateatern, n.d.).

There are many connections between early cinemas and Asian design, which aligns well with the theme of this thesis, where the films of Hong Kong-based director Wong Kar-Wai, inspired and influenced the final design for this project.

Historically, cinema has played a vital role in social and cultural life. As industrialisation took hold, people moved from the countryside to cities. This shift brought more freedom and stable incomes, making cinema the perfect pastime activity. Even though ticket prices in the early 1900s were still high, in comparison to the price of going to the theatre, cinema was a luxury that even working-class people could afford. It met the growing need for entertainment as people found themselves with more leisure time (Furberg, 2000). Cinema allowed the public to experience culture and entertainment that had previously been accessible only to the wealthy, turning it into an activity for everyone, democratising entertainment and providing a space for communities to gather and enjoy a shared experience (Furberg, 2000).

Furberg describes cinema, with its architecture, interior, and artistic ornamentation, as a significant frame, surrounding the imaginary worlds of film since its beginnings. He explains that the cinema is a space experienced only briefly before the lights dim and the film begins, which is why it has been designed to impress and heighten expectations in those moments before the magic of the film unfolds (Furberg, 2000).

This experience begins outside the cinema, with bright signs and posters decorating the entrance. The atmosphere carries through to the foyer, where tickets and snacks are purchased, and where one awaits their companions. Ideally, the foyer creates an ambiance that heightens the senses, preparing visitors for what is to come. Finally, you enter the most special part of the cinema: the auditorium, where you get to soak in the light and colour of the space before the lights are dimmed and the film begins (Furberg, 2000).

Furberg argues that cinema illustrates the evolution of Swedish architecture and design. From the beginning, cinemas have been designed to impress. Looking at the few cinemas that remain from the golden age of cinema reveals that trendiness is the true architectural strength of these venues. Architects ensured that the atmosphere perfectly reflected the latest trends and fashions, making each cinema characteristic of its era. Unfortunately, this focus on trends also contributed to their decline. Newer trends led to renovations that stripped away the charm and essence of earlier designs, with elegant details and ornamentations being removed or painted over in favour of even more fleeting trends (Furberg, 2000).

Much has changed since the golden age of cinema. The rise of television, film rentals, and streaming services has significantly impacted the importance of cinema. Nevertheless, going to the cinema remains a popular pastime for people from all walks of life. It is a social activity to be enjoyed with friends, family, or romantic partners as well as something one can do on their own if one so wishes. Even though times and designs may have changed, the ritual of going to the cinema remains the same. This suggests that the design of a cinema should be deliberate and expressive, creating an atmosphere filled with emotion in anticipation of the wondrous experience on the film screen. As the architecture and design of the cinema are experienced only briefly, they should not hold back but instead serve as a representation of contemporary trends and ideals, as well as a reflection of the imaginary worlds of film.

THEORY

THE VOCABULARY OF FILM

Architecture often incorporates terminology from other disciplines to clarify its own practices (Tawa, 2010). Michael Tawa described architecture as "...a discipline so greatly dependent on others to outline its identity, define its scope, and articulate its practices" in his book "Agencies of the frame: Tectonic strategies in cinema and architecture" (Tawa, 2010). If this is the case, then incorporating the vocabulary of film into architectural practice can only enrich our understanding.

When discussing cinematography, it is impossible to overlook the concept of composition. Composition is a broad term that helps the director or cinematographer tell a story, convey a message, or express an idea. Art, in all its forms, is a medium of communication between the creator and the viewer. Sometimes the message is clear and direct, while at other times it may be vague or cryptic, depending on the artist's intentions (StudioBinder, 2022).

In the context of cinematography, composition refers to the arrangement of elements within a frame. It involves the placement of one subject in relation to one another, the size of these subjects in relation to the space around them, and how colour is used to create contrast or direct focus within a scene (StudioBinder, 2022). To design using the principles of cinematography, it is essential to define and understand its vocabulary.

The definitions provided here are taken from sources such as StudioBinder, the National Film Institute, and the book "The Art of Cinematic Storytelling: A Visual Guide to Planning Shots, Cuts and Transitions" by Kelly Gordon Brine.

Establishing shot: A shot that establishes where a scene takes place, often showing buildings, objects, or other elements of the setting.

Focal point: The point of focus, or the area where you want the viewer's eye to go within a scene.

Frame within a frame shot: A shot that uses any shape or visual element to frame the subject, drawing attention to them.

Point of view shot (POV): A camera angle that shows what a character is looking at, from a first-person perspective.

Insert shot: A shot that focuses the viewer's attention on a specific detail within a scene.

Single shot: A shot that captures only one subject.

Two shot: A shot that includes two characters in the frame.

Three shot: A shot that includes three characters in the frame.

Crowd shot: A shot featuring a large group of people.

Over-the-shoulder shot (OTS): A shot that shows the subject from behind the shoulder of another character.

French over shot: An OTS shot taken from behind two characters who are positioned shoulder to shoulder.

Over-the-hip shot (OTH): A camera angle where the camera is placed at the hip of one character to focus on another character.

Back Shot: A shot that shows the back of a character.

Reaction shot: A shot that shows a character's reaction to the preceding action.

Cut-in shot: A shot that cuts into the action, providing a different view of what is happening in the main scene.

Cutaway shot: A shot that cuts away from the main action to focus on a secondary action, adding additional context or information to the scene.

Master shot: A long/wide shot that captures most or all of the action in a scene.

Deep focus: A shot in which the foreground, middle ground, and background are all in sharp focus.

Leading lines: Lines in a shot that lead the viewer's eye towards important elements within the scene.

Cross-cut: A technique in which the film switches back and forth between two or more scenes to show actions occurring simultaneously in different locations.

Extreme long shot: A shot that shows the subject from a great distance, often used to establish a location or setting.

Long shot: A shot that shows the subject from head to toe but does not necessarily fill the frame.

Full shot: A shot where the subject fills most of the frame, typically showing the subject in their entirety.

Medium shot: A shot that typically shows the subject from the waist up.

Medium close-up: A shot where the subject is shown from the chest or shoulders up, falling between a medium shot and a close-up.

Close-up: A shot that tightly frames the subject's head or face.

Extreme close-up: A shot that focuses on a small detail of the subject.

THEORY

Eye-level shot: A shot where the camera is placed at the same height as the character's eyes.

Low angle shot: A shot where the camera is angled upwards, often used to emphasise a character's power or dominance.

High angle shot: A shot where the camera is angled downwards at the subject, often used to suggest vulnerability or inferiority.

Aerial shot/helicopter shot: A shot taken from a great height, typically from a drone or helicopter, to show a large area or landscape.

Birds-eye-view shot/overhead shot/top shot: A shot taken from directly above the subject, often used to create a sense of scale or to show movement.

Shoulder-level shot: A shot where the camera is placed at the same height as the character's shoulders.

Hip-level shot: A shot where the camera is placed at the same height as the character's hips.

Knee-level shot: A shot where the camera is placed at the same height as the character's knees.

Ground-level shot: A shot where the camera is placed at ground level, capturing what happens on the ground.

Dutch-angle/tilt shot: A shot where the camera is tilted sideways.

Sequence: A series of shots that work together to tell part of a story.

Dirty shot: A shot containing an object or character in the foreground that partially obstructs the view.

Clean shot: shot that does not contain any foreground obstructions or elements that distract from the subject.

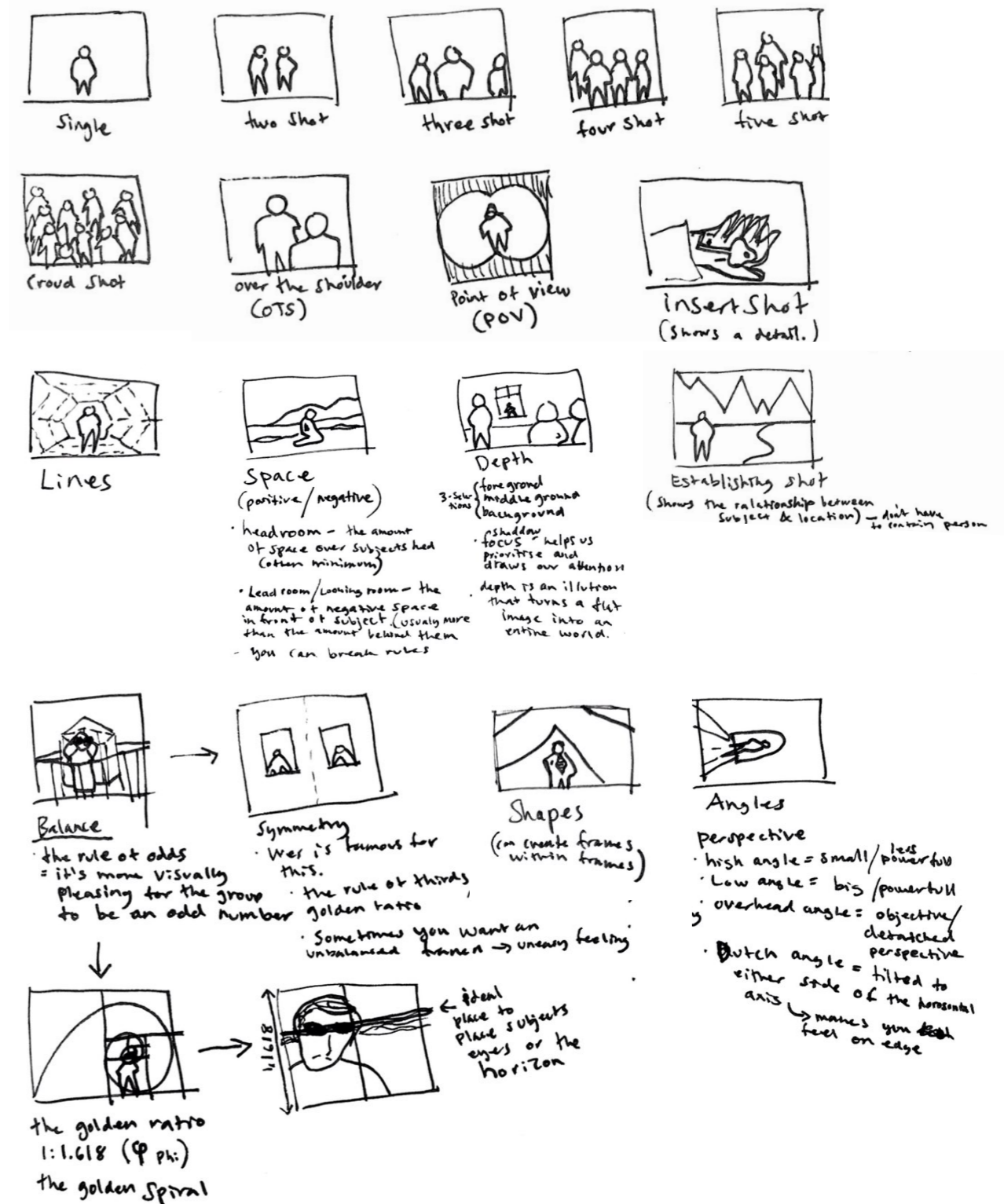
Foreground: The part of the scene that is closest to the camera.

Background: The part of the scene that is furthest away from the camera.

Middleground: The area between the foreground and background.

Depth of field: The distance between the nearest and furthest objects in a scene that are in relatively sharp focus.

Sources: StudioBinder (StudioBinder, 2022), the National Film Institute (National Film Institute, n.d.) and "The Art of Cinematic Storytelling: A Visual Guide to Planning Shots, Cuts and Transitions" by Kelly Gordon Brine (Brine, 2020).



Quick sketches of different type of shots (made by the author).

THEORY

COLOUR IN FILM

Colour has a profound impact on us. It can affect us psychologically, emotionally, and physically (StudioBinder Inc., 2016). It is a crucial aspect of visual storytelling and an important narrative tool in film, conveying meaning as effectively as any actor, while communicating in a language of its own. Films use visual elements, often subtly, which means that everyday objects, such as curtains or clothing, can be used to convey deeper meanings. This highlights the power of colour in films, allowing it to quietly express significance without being explicitly stated; it can also function as a strong metaphor. When used thoughtfully, colour becomes as expressive and impactful as an actor, communicating emotions or themes through its mere presence (Bramesco, 2023). If the aim is for a scene to resonate emotionally in a subtle way, choosing a colour associated with that emotion might be one of the most effective methods (Hellerman & Fusco, 2023).

In a scene, colour has the potential to create harmony or tension. It can even direct attention to key themes (StudioBinder Inc., 2016). Some of the ways colour can convey a story include evoking psychological reactions, drawing focus to important details, representing a character's traits, marking changes in the story, or setting the overall tone of the film (StudioBinder Inc., 2016).

One great example of how colour can significantly impact a film is the use of the colour red in the 1993 film "Schindler's List". Although most of the film is shot in black and white, one element that stands out is the red coat worn by the young girl. Despite the girl appearing in only one sequence, the red coat lingers in the viewer's memory, not only as the only colour in an otherwise bleak and colourless world shaped by the horrors of World War II, but also for its emotional weight. When the red coat reappears later in the film, on a cart filled with dead bodies, the sense of loss and sadness hits particularly hard. Death is a recurring theme in the film, and the girl in the red coat is neither the first nor the last person to lose their life to the atrocities of the war. However, it is the symbolism of having a single character portrayed in colour that lends these scenes their profound significance (McCormick, Walters, & Trujillo, n.d.).

The decision to use a single colour in an otherwise black-and-white film was intended to catch the audience off guard. It reminded viewers to recognise the victims of the Nazis as individuals. Although millions were killed in a similar manner, each person was an individual with a life and a story of their own. Had the entire film been in black and white, the young girl might have become just another anonymous victim, but her red coat ensured that the viewer would remember her and truly grasp the cruelty of the time (McCormick, Walters, & Trujillo, n.d.).

In film, the colour red can symbolise many things: love, passion, violence, danger, anger, or power (StudioBinder Inc., 2016). In the case of the girl in the red coat, it is likely that red represents the violence and dangers of the era. Although the little girl has no lines, her presence in the film speaks volumes. The choice of colour and its use convey the entire story.

When studying the use of colour in film, colour is divided into three key elements: Hue, which refers to the colour itself; Saturation, defined as the intensity of the colour; and Value, which determines how dark or light a colour (StudioBinder Inc., 2016). Altering any of these elements will change the tone of the film, resulting in an entirely different cinematic experience. These elements can then be used in a variety of ways. For instance, in "Schindler's List", the use of a single colour is highly impactful. However, a more expansive colour scheme can communicate the themes of the film just as effectively.

A harmonious relationship between colours on the colour wheel is known as a balanced colour scheme, which can make a film appear more cohesive. While there are many techniques for creating a balanced colour scheme, the four most commonly used are:

Monochromatic: This scheme involves the use of different shades of the same colour, which has in a soft and calming effect on the audience. The director Wes Anderson is known for using monochromatic colour schemes in his films (StudioBinder Inc., 2016).

Complementary: In this scheme, colours that are opposite each other on the colour wheel are used, allowing warm colours to mix with cool ones, thereby adding contrast to a scene. This contrast can be used in various ways, for example, to add drama or to highlight conflicting themes or emotions within the film (StudioBinder Inc., 2016).

Analogous: This scheme consists of neighbouring colours on the colour wheel. Similar to the monochromatic scheme, the analogous palette creates a soothing and harmonious viewing experience. In scenes where the analogous colour scheme is used, one colour is often selected as the dominant hue, while a second colour is used as support, and the third colour, along with greys, blacks, and whites, is used for accent (StudioBinder Inc., 2016).

Triadic: In this scheme, three colours evenly spaced around the colour wheel are used, creating a vibrant and colourful experience for the audience. Here, one colour is chosen as the dominant one, while the other two serve as accent colours (StudioBinder Inc., 2016).

Opposite to the balanced colour scheme is the discordant colour scheme. This occurs when a colour is deliberately introduced to deviate from the existing balanced colour scheme. The discordant colour scheme is an effective way to make something stand out, refocusing attention on a specific moment, character, or detail within the film (StudioBinder Inc., 2016). A great example of a film using the discordant colour scheme is "Schindler's List". The contrast between the black-and-white colour palette and the red of the young girl's coat is an effective way to work with discordant colour schemes.

THEORY

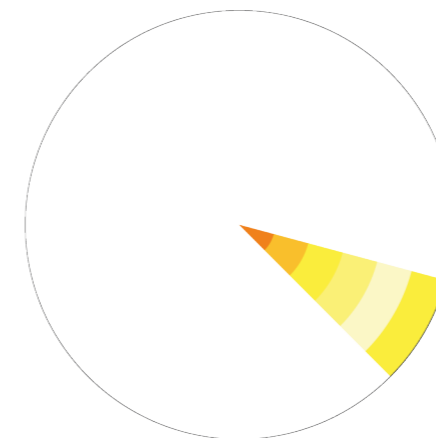
Colour is used as a narrative tool in cinema in various ways. It can function as a symbol when it is recurrently associated with a character, theme, object, or place. Another common way of using colour to create narrative is through transitional colours. This occurs when a colour or colour scheme shifts as the story progresses, representing a change or transformation in the plot, theme, or character (StudioBinder Inc., 2016). For example, if a character begins the film dressed in pastels, leading a peaceful life, but gradually becomes more corrupt as the story unfolds, one way to depict this transition is by shifting the colour scheme to darker tones, symbolising the character's transformation from good to evil.

In cinema, certain colours are heavily associated with specific themes and emotions. The psychology of colour has been studied across various fields and can be used in multiple ways, making an understanding of which colours correspond to which particular emotions a powerful tool in visual storytelling.

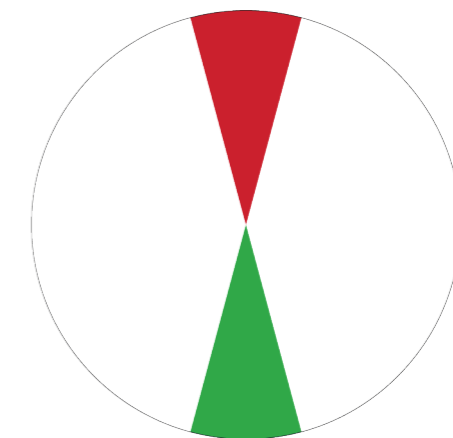
Red:	Love, passion, violence, danger, anger, power
Pink:	Innocence, sweetness, femininity, playfulness, empathy, beauty
Orange:	Warmth, sociability, friendliness, exoticism, youth
Yellow:	Madness, sickness, insecurity, obsession, idyllic, naïve
Green:	Nature, immaturity, corruption, ominousness, darkness, danger
Blue:	Cold, isolation, cerebral, melancholy, passivity, calm
Purple:	Fantasy, ethereal, eroticism, mystique, ominousness

(StudioBinder Inc., 2016)

It is important to note that although there are clear associative patterns linked to the psychological reactions to certain colours, there is no right or wrong way to use colour in film. It all depends on the themes of the film and how the filmmaker chooses to represent them (StudioBinder Inc., 2016). In one film, red can represent love and passion, while in another, it may stand for violence and anger. Similarly, the colour blue can symbolise love, and green can represent violence—if the filmmaker so decides. The key point is that it is not the colour itself that determines its meaning, but rather how it is used within the context of the film.



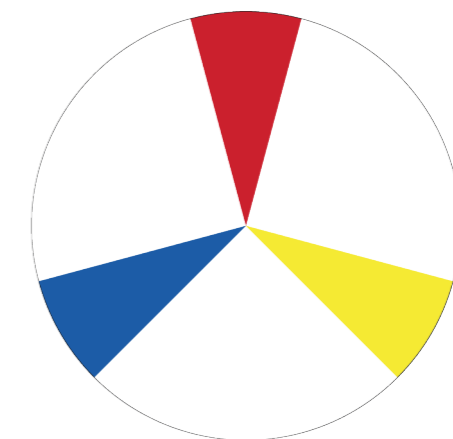
MONOCHROMATIC



COMPLEMENTARY



ANALOGOUS



TRIADIC

Illustration of the colour wheel and the different colour schemes commonly used in film. (Figures by the autho).

THEORY

FROM FILM TO ARCHITECTURE

There is something truly cinematic about the café located in Nguyen Sieu, Vietnam. The café which aims to imitate the feeling of the train from the movie 2046 does a good job of breaking the barrier between film and architecture. The way shapes, colour and light is used makes the space feel in movement as if you are watching the world outside pass by from a train window. There is also something about the use of colour that perfectly captures the cinematic universe of Wong Kar-Wai. On their website, Red5studio wrote the following about the atmosphere they tried to recreate for the Okkio Coffee in Nguyen Sieu. "Space is the movement of time frames, the past, present, and future intercut constantly without end, that creates the train 2046. Space is a range of blurred colors that are created from the continuous movement of the train over several time periods" (Red5studio, 2024). Their way of designing from film scenes not only recreates the aesthetic of the film but also creates the illusion of movement, making it a perfect reference for why cinematography and film can be used in design.

Another example of architecture inspired by the film 2046 is the other Okkio Coffee located in Xuan Thuy street, also designed by Red5studio. This Café looks very different from the one in Nguyen Sieu. Instead of working with different vibrant colours they have chosen to focus on the colour red and gone for a more retro look as well as working more with the cinematographic concept of frame within a frame. They have also tried to draw inspiration of the train itself as well as the feeling of a train ride (Red5studio, 2024). On their website, they describe the concept of the café and how Okkio is designed to evoke a sense of time passing and movement, much like a train journey or a cinematic experience. The lighting, particularly the LED HUE system positioned by the bar, plays an important role in creating the perfect cinematic atmosphere. As the day unfolds, the colours of the lights shift, reflecting the changing moods of morning, afternoon, and evening (Red5studio, 2024)

In the morning, the café is flooded with natural daylight, giving it a bright and cheerful atmosphere that energises the space. As the day moves into evening, the lighting shifts to create a warm and romantic feel, with a focus on the bar area that invites intimacy and relaxation (Red5studio, 2024).

When viewing it at sunset, Okkio stands out as a striking red building with its façade evoking a sense of nostalgia, much like a scene from a film that transports you to back in time. This interaction of colour and light not only enhance the overall experience, but also captures the sense of movement, making each visit feel like a journey through time (Red5studio, 2024).

In addition to the café drawing inspiration from film, Red5studio, together with the photographer Do Sy have used cinematographic techniques when photographing the building. They have worked with colour, lighting, composition and characters to create a narrative similar to the one in the movie 2046. The shots consist of several, frame within a frame shot as well as single shots of a man smoking which could be taken straight out of any Wong Kar-Wai film.

The way Red5studio works have worked with cinematography when designing and representing the two coffee shops does not only result in a beautifully built environment but also gives an opportunity for the visitor to enter the universe of Wong Kar-Wai and his film 2046.



Photograph by Đỗ Sy



Photograph by Đỗ Sy

While this project focuses on architecture, the person depicted in the photograph perfectly sets the scene and mood. The man adds an element of mystery, thus illustrating a story within the space. Without him, many of these qualities would be lost. The dynamic interplay between the individual, the overall composition, colour, and lighting brings the image to life, allowing it to narrate its own story.

METHOD

CINEMATOGRAPHY AS METHOD

The methods used in this thesis aims to integrate cinematography and other film techniques into architectural design, with the transformation of an old industrial building into a cinema. The method consists of four key steps, each adding to the realisation of a cinematic space.

1. Scriptwriting:

As with filmmaking, this process begins with the development stage where scriptwriting is the first step. Scriptwriting when applied to architecture is where narrative and storytelling techniques are used to enhance space. By developing a story arc connected to the building, the intent is to enrich the design with a sense of narrative progression which in turn will strengthening the viewer's connection to the space.

2. Storyboarding:

Following scriptwriting, storyboarding adds a visual dimension to the narrative. Through framing and composition, the storyboard guides the design process, ensuring a natural unfolding of the narrative in architecture. This process visualises the storytelling abilities of architecture through spatial framing.

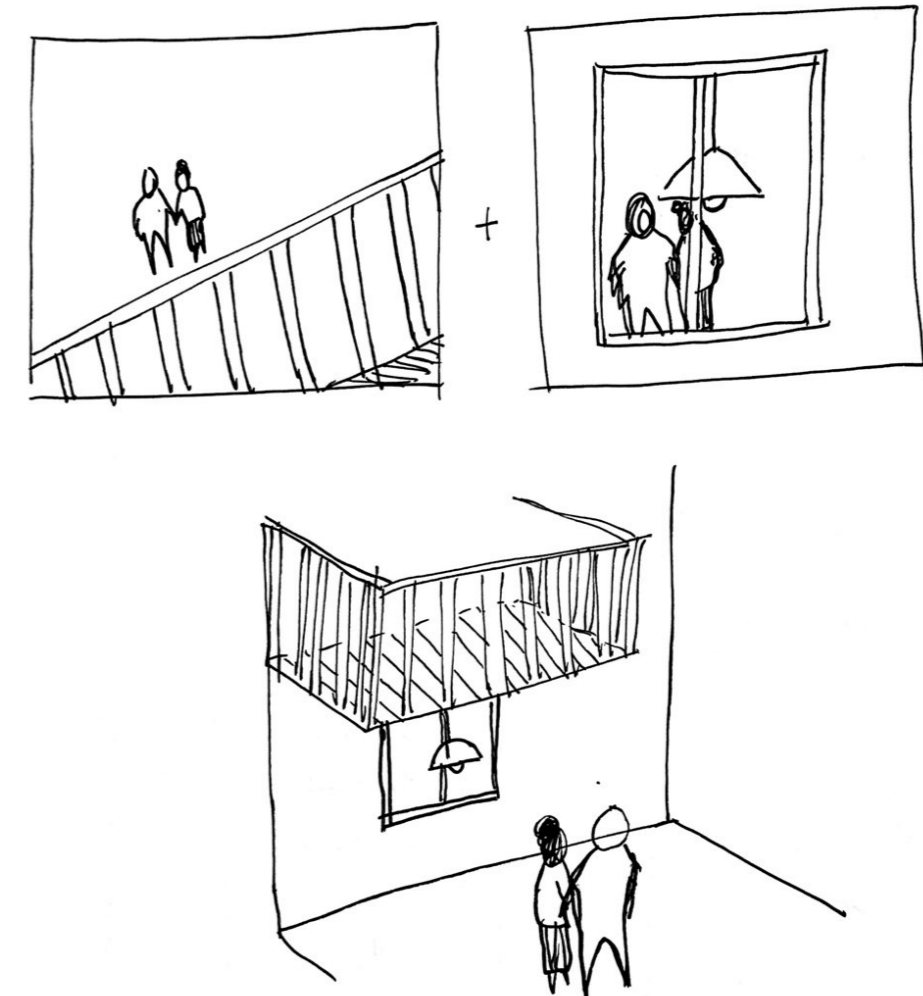
3. Floor planning and sectioning:

The third step involves translating the narrative-driven concepts from the storyboard into architectural plans. Based on our understanding of the spaces depicted in the storyboard, floor plans and sections are conducted, effectively merging cinematographic design methods with architectural principles. This is where visual storytelling elements are transformed into tangible architectural features.

4. Set design:

Following floor planning and sectioning, the next step is to design the set by creating a physical model to visualise the space effectively. Incorporating cinematographic principles, such as composition, colour, and lighting, into the model-making process brings forth the cinematic qualities of architecture.

This method aims to bridge the gap between architecture and cinematography, using narrative-driven design to create immersive spatial experiences. This way of working will not only expand our understanding of space but will also emphasise the potential of integrating cinematographic techniques into the architectural practice.



Assumptions about a space can be made based on what is shown in the frame.

If a couple is shown from a high angle behind a railing in one scene, we can assume that some sort of balcony must exist. If, in the next scene the couple is framed through a window in a frame within a frame shot, there has to be at least one window in the building.

METHOD

SCRIPTWRITING

A film script, also known as a screenplay, is a document written in a specific format that contains details of the narrative and visual elements of a film. It is important to note that all scripts should be written in a specific font, called Courier, and have the same margin size (StudioBinder, 2023).

In a script, there is a component called a scene heading, which serves to differentiate between physical spaces and helps the production team and reader understand the geography of the story. In scenes set in interior spaces, *INT.* is stated at the top of the paragraph, while *EXT.* indicates exterior spaces. This is followed by a description of the setting and the time of day when the scene takes place (StudioBinder, 2023). An example of a scene heading would be *INT. ITALIAN RESTAURANT – EVENING.*

Transitions, such as *CUT TO:* and *FADE OUT:*, are written at the bottom right of the paragraph (StudioBinder, 2023).

When a character is introduced in the script, their name should appear in uppercase letters, followed by their age, and then a brief description of the character's personality or other traits (StudioBinder, 2023)

The visual or audible actions taking place are described using action lines, which should be written in the present tense and in the third person (StudioBinder, 2023)

To test the method, a trial script was written about a man waiting for his date in a cinema, where their first meeting awaits. I wanted to see if scriptwriting would help me visualise a space through storytelling.

STORYBOARDING

Continuing from scriptwriting, storyboarding begins the pre-production phase of filmmaking. This is where the story in the script is visualised. A storyboard is a tool used by filmmakers to illustrate their films frame by frame in a comic-book-like manner. It can include camera directions, dialogue, composition, or any other relevant information relating to the shot (StudioBinder, 2023). It serves as a draft and an indication of what the film will look like, drawing each scene in a way that best fits the story and how it is to be portrayed. Storyboarding can also serve as a guide for the mise-en-scène and everything else that will appear within the frame.

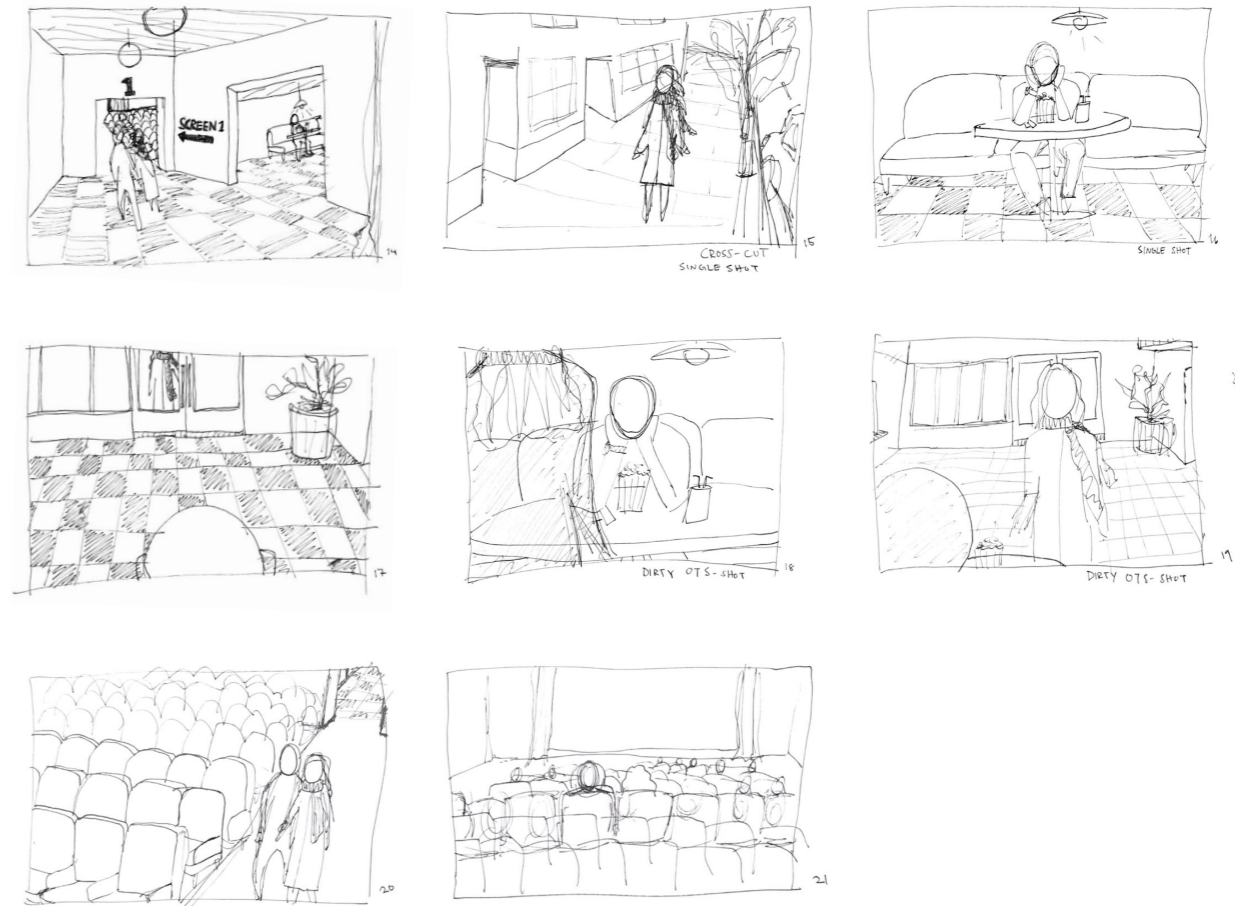
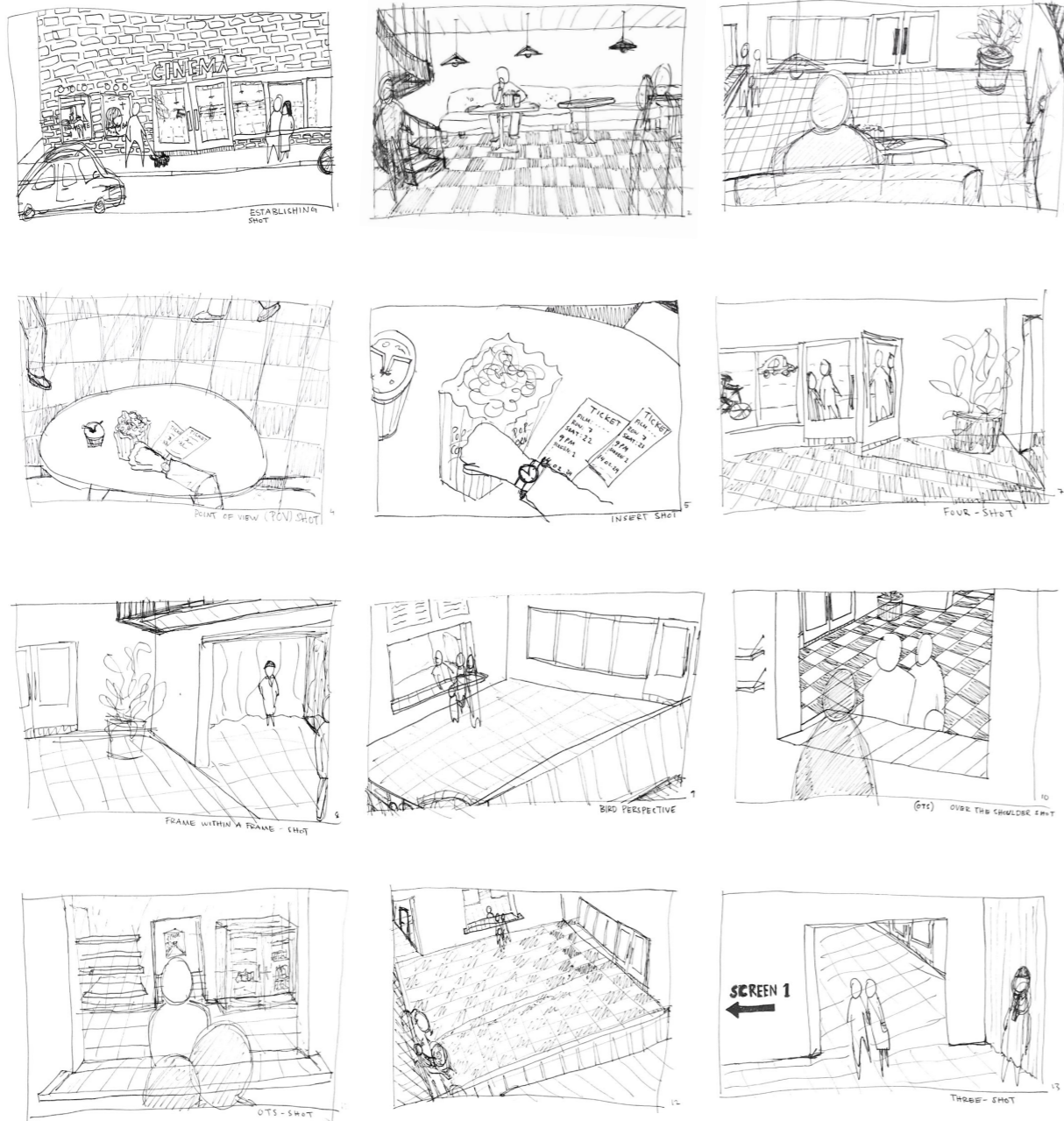
If the script helps visualise the space through writing, then the storyboard is a visual representation of the script. There is no set format for how a storyboard must appear. It can feature photographs, detailed drawings, or simple stick figures, as long as it conveys the filmmaker's vision; the quality or style of the storyboard is unimportant (StudioBinder, 2023). While it is unclear if there is an equivalent to scriptwriting in architectural terms, storyboarding shares some similarities with sketching out different perspectives of a building. It is my impression that in architecture, perspective views and drawings sometimes are a later part of the design process, while the storyboard is an important starting point for visualising ideas. Some may feel that storyboarding and sketching out ideas are closer comparisons, but I disagree. Sketching in the early stages of the architectural design process is rarely narrative-based, nor does it serve any purpose other than to represent the building. Only rarely does a sketch visualise a space's atmospheric and phenomenological qualities.

The renowned director Alfred Hitchcock was famous for his detailed storyboards (StudioBinder, 2023). When comparing his storyboards to the finished films, the resemblance is truly striking. The precision of his drawings was so close to the finished product, indicating that the storyboard is not only a useful tool for filmmaking but also a valuable technique for visual representation; one that could surely be adapted to fit other fields outside of cinema.

I attempted to visualise the trial script using the storyboarding technique. Since the script I had written lacked detail, the design for the trial cinema was relatively simple. However, the atmosphere was easier to capture on the pages through storyboarding than it would have been if I had simply sat down to sketch the cinema. The different frames provided a visual representation of how I imagined each scene when writing the script. They also map different cinematographic techniques connected to framing and composition, all of which are defined in The vocabulary of film, a section of this thesis. It was a deliberate decision to primarily use film terminology. Being able to shape the space with an already established method of framing proved very helpful, rather than having to draw without any frame of reference. The ability to make connections; for example, between an insert shot and a detailed drawing in architecture, or between an establishing shot (which acts as an entryway into the overall story) and an exterior perspective or façade drawing; has enriched my approach to working with architecture immensely.

Had more detail been added to the script, the design would surely have followed suit. There is significant potential in designing and visualising through storyboarding, making it a highly adaptable method for design.

METHOD



The trial storyboard depicting a man waiting for his date to arrive at the cinema.

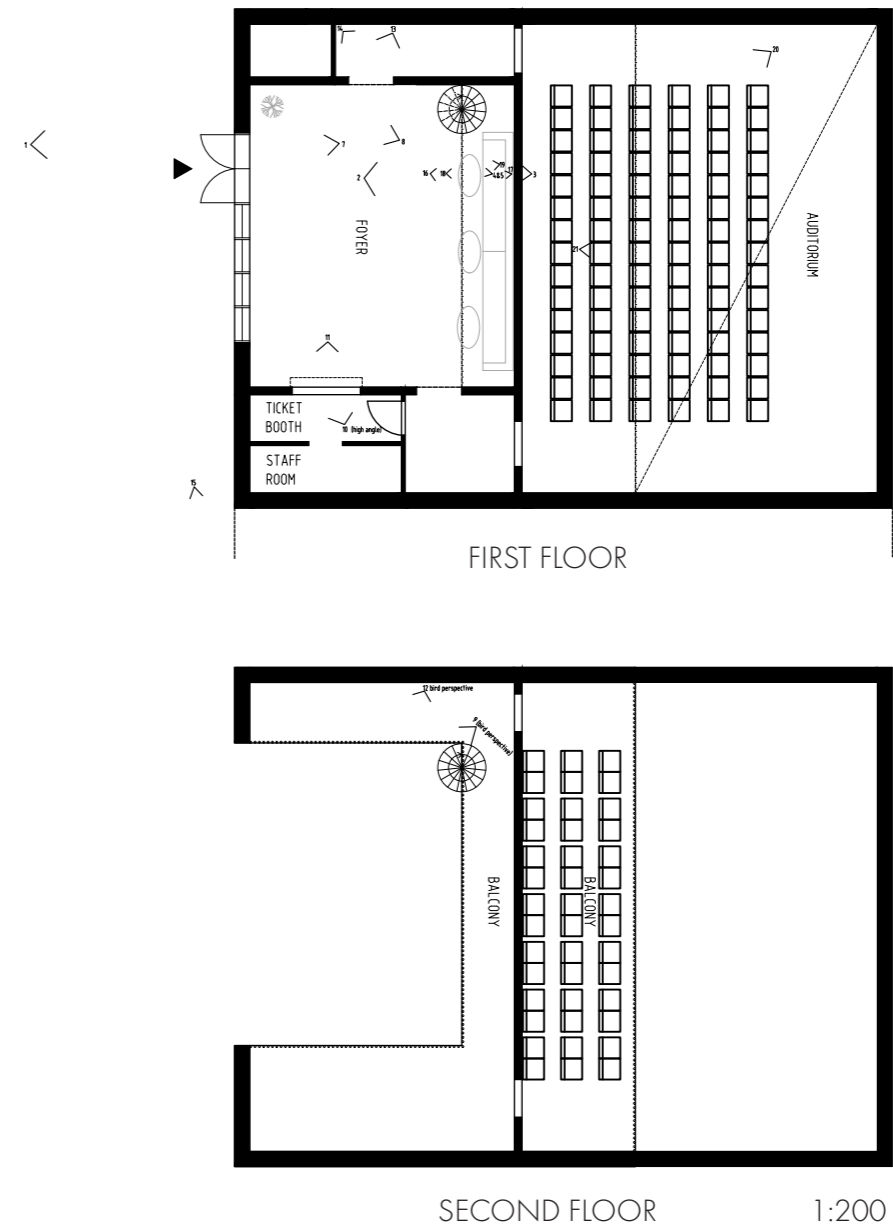
METHOD

FLOOR PLANING & SECTIONING

This step illustrates how architecture supports cinematography, rather than the other way around. The floor plan and section, although sections are optional in this case, are used to depict the space from an architectural perspective, adding important interior elements that are crucial to the scene. At this stage, incorporating the characters is also significant. However, the primary purpose of the floor plan is to indicate camera placement and angles. The floor plan shows where the camera will be positioned within the building.

This part of the method bridges a commonly used architectural technique with cinematography. This approach to planning a shot reinforces the idea that there is a direct correlation between film and architectural techniques; an idea that often goes unnoticed. On a film set, this technique could be used to specify where the camera should be placed, or to help the set designer understand which areas of the room will be visible on screen.

The floor plan is primarily based on the storyboard of the trial cinema design, acting as a way of translating cinematography into architecture.



The floor plan of the trial cinema, illustrating the various camera placements

EXPLORATION

BUILDING FROM FRAME

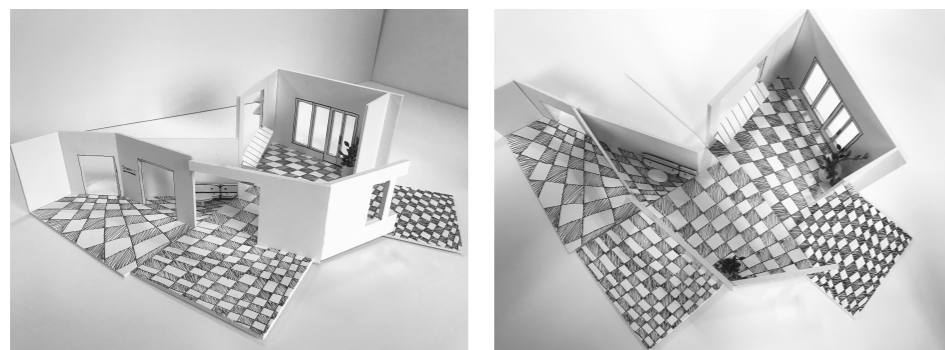
I wanted to explore the effect of translating scenes from the storyboard into a physical model. I aimed to take the concept of the film's backdrop to the next level by working with forced perspective. The models can be seen as a direct transition from 2D to 3D.

Individually, the different models represent different frames from the trial version of the storyboard, but when combined, they form something entirely different.

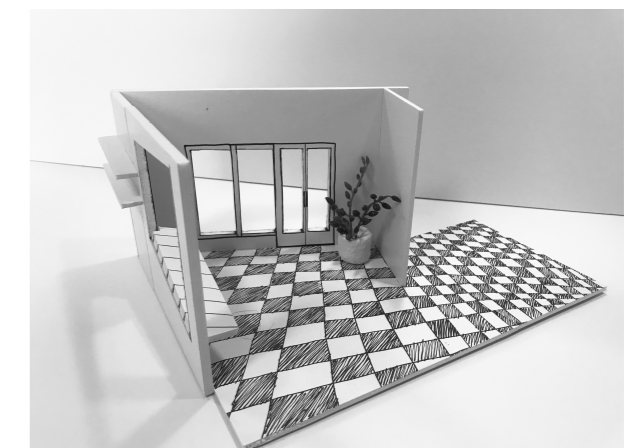
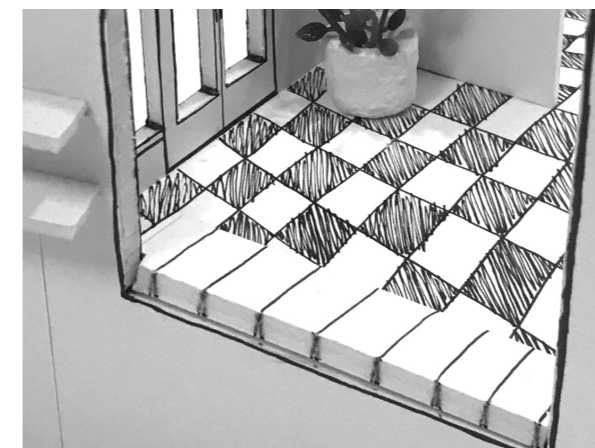
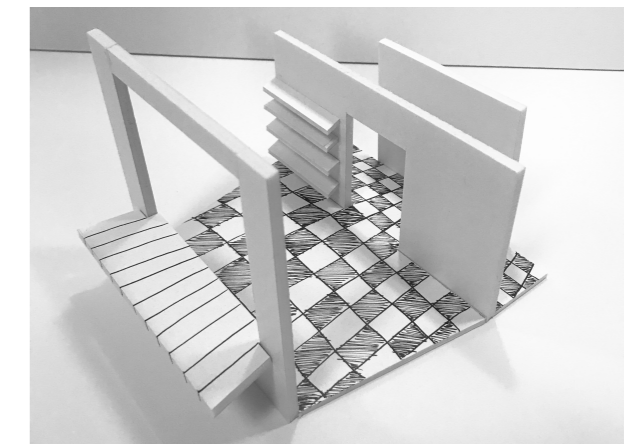
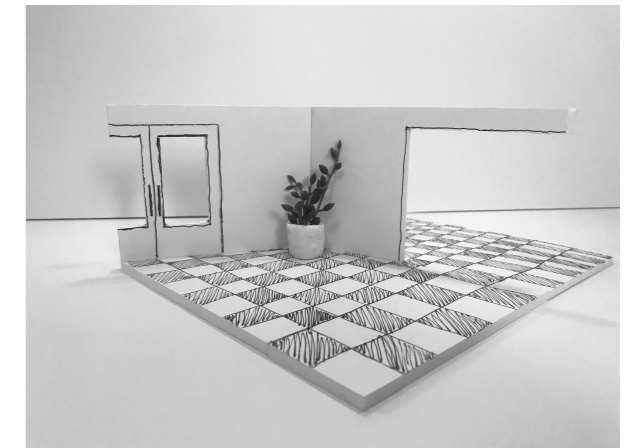
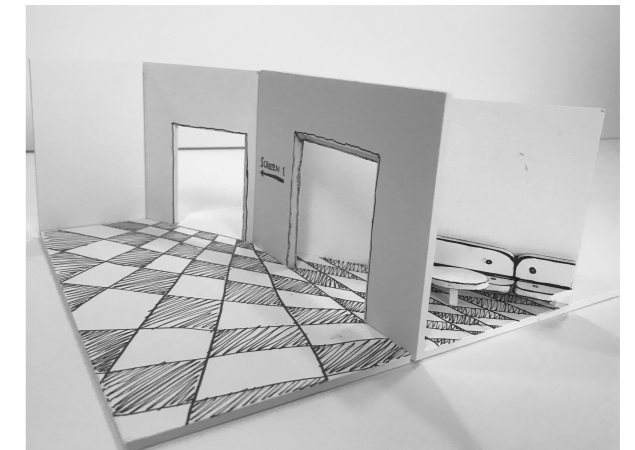
What I found was that, although piecing together these rooms was challenging, it resulted in some interesting spaces. I can see that there is definitely potential in this approach. However, for the purposes of this thesis, it would not make sense to include this in the method. I found that, in many ways, it contradicts the primary aim of this thesis: to investigate whether cinematography can help create more relatable and phenomenological spaces. The results of this exploration produced spaces that, in many respects, did not relate to human perspectives at all. The spaces were more closely connected to the camera and the person viewing the film, rather than to the person actually experiencing the space. While it created an interesting and psychedelic atmosphere, pursuing this approach further would have taken the thesis in a direction different from the one I intend to explore.

I learned that the cinema I design should focus on storytelling and composition from a human perspective. It should incorporate the aspects of film that I feel are often lacking in architecture, creating a cinematic space.

What I will adapt into the design proposal is the way this exercise addressed architectural representation. The physical models were able to exist within the same universe, sharing the same visual language as the storyboard. Through this exploration, I was able to discover my personal approach to representing architecture through both drawing and physical models.



The different models assembled to create a new constellation of rooms.



To the left is the model, framed in a similar way to its corresponding frame in the trial storyboard, while the model is shown in its entirety on the right-hand side

EXPLORATION

CREATING NARRATIVE

For this exercise, I aimed to explore how lighting, colour, and composition can influence the perception of a scene, and to examine the narrative potential of cinematography. To do this, I incorporated people into a photograph of a physical model, in order to investigate how highlighting specific characters within the space could shape the narrative. In film, subjects can be emphasised or drawn into focus through various techniques, including the use of colour, lighting, focus, and overall composition.

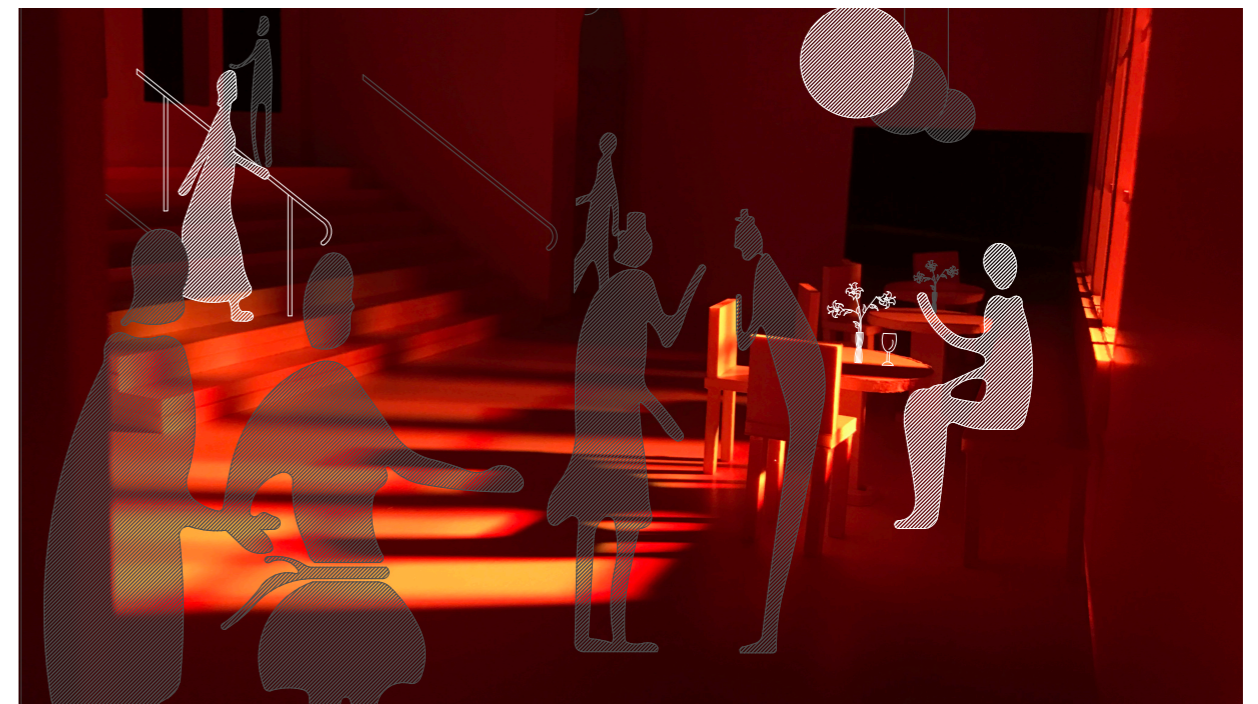
In the first image, every person is depicted in the same white colour. This uniformity makes it difficult to identify which individual is in focus, contributing to the sense of a busy and crowded room. Moreover, the lack of main characters makes it challenging to establish any distinct storylines.

The model is photographed under orange lighting. In film, the colour orange typically signifies warmth, happiness, and an overall sense of friendliness (StudioBinder Inc., 2016). This choice of lighting does not contradict the atmosphere in the scene, despite the absence of any main characters or a clear narrative.

In the second image, the individuals are no longer uniformly in the colour white, but are instead depicted in grey, with the exception of two figures; a man and a woman, who are highlighted to stand out as the main characters. In addition to these two figures, one of the stair railings is also emphasised, directing the viewer's attention. The highlighted rail suggests a path down the stairs, leading the woman towards the man, who is waiting at the table. On the table, both a glass of wine and a vase filled with flowers are highlighted, subtly indicating that the two are meant to be on a date. Finally, a lamp hanging above their table is also accentuated, further emphasising the sense that, despite the crowded setting, the two of them and their intimate moment are the focal point.

These subtle changes transform the scene from simply showing a crowded room into an entirely different one. The story now becomes clear, revealing itself through the strategic use of lighting and composition; elements that would have been impossible to convey otherwise.

Just as in film, where composition, colour, and lighting can be used to emphasise key elements and craft a story within a story, similar techniques can be applied in architectural design to create narrative depth and influence the viewer's perception.



The images illustrate the importance of narrative, showcasing how cinematographic techniques such as colour, lighting, and composition can alter the perception of a scene.

EXPLORATION

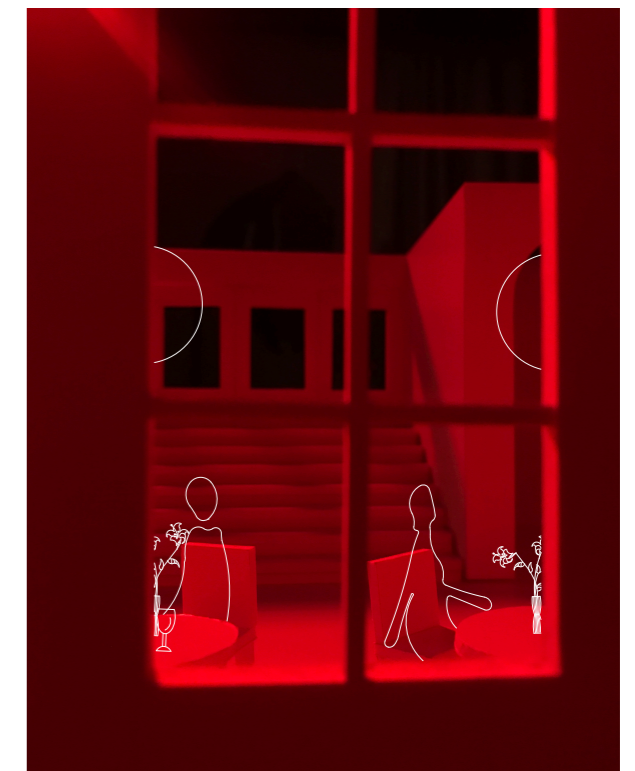
In this example, we see what happens when colour is introduced into the equation.

In the first image, the man at the top of the stairs is highlighted, while the woman in the foreground is not. However, since the room lacks any other colour, it is difficult to interpret what is happening in the scene. Do the man and woman know each other, or is the man the main character, with the woman merely a background figure who has just noticed him enter the room? There is also no indication of whether there is any romantic tension or what the overall atmosphere is intended to be. In this case, the lack of colour creates confusion.

In the second image, two characters are seated at separate tables, not facing each other. Neither is more emphasised than the other, and although they have no direct contact, the way the window frames them creates the impression that something is occurring between them.

Another significant difference between the two images is that the second one is photographed under red lighting, which in film often symbolises love and passion (StudioBinder Inc., 2016). Thanks to the use of colour, we can assume that the two characters share a romantic relationship. The way they are positioned, as well as the way the window frames and separates them, suggests the possibility of an affair.

Composition is important, but without the use of colour, it can lead to confusion. These two elements work most effectively when combined; two different languages that together create a narrative.



The images illustrate how colour, together with composition, creates clearer narratives

SITE

SLAKTHUSET

Instead of constructing a cinema from the ground up, this project will focus on transformation. For a building to be suitable for a cinema, it needs to be spacious enough. Therefore, repurposing an old industrial building is the ideal solution. An old industrial building is a fitting choice, as there are many such areas to choose from in Gothenburg. Since a cinema is a business reliant on attracting visitors, the location is crucial. The building should be centrally located and easily accessible from all parts of Gothenburg. However, as there are already several cinemas in the city's most central areas, adding another would merely compete in an already fragile market. Instead, an area slightly further out, with good public transport links, is the best option. I had heard previously of plans to redevelop the old meatpacking district, Slakthuset, in Gamlestaden, which made it the perfect location for this project.

Gamlestaden is a former industrial area in Gothenburg that has hosted a variety of industries, including a sugar mill, a cotton spinning mill, SKF (Swedish bearing and seal manufacturing company), and, of course, the meat industry (Gamlestadens Fabriker, n.d.). The area is currently undergoing significant development, and its population is expected to double in the coming years. It is evolving into a densely populated and attractive district, with new residential areas, retail spaces, and services being established (Göteborgs Stad, n.d.). Gamlestaden is a multicultural area, with a wide range of restaurants and businesses, making it a lively and dynamic part of the city. Gamlestads Torg, the town square, is easily accessible by bike, public transport, or on foot, and is located just a few minutes' walk from Slakthuset.

Slakthuset was inaugurated in 1905, and even at that time, its location was strategically significant due to its central position and proximity to the river and railway, which made it easy to transport goods to and from the area. Since the closure of the meat industry in the 1960s, many new businesses have moved into the area (Göteborgs Stad, n.d.).

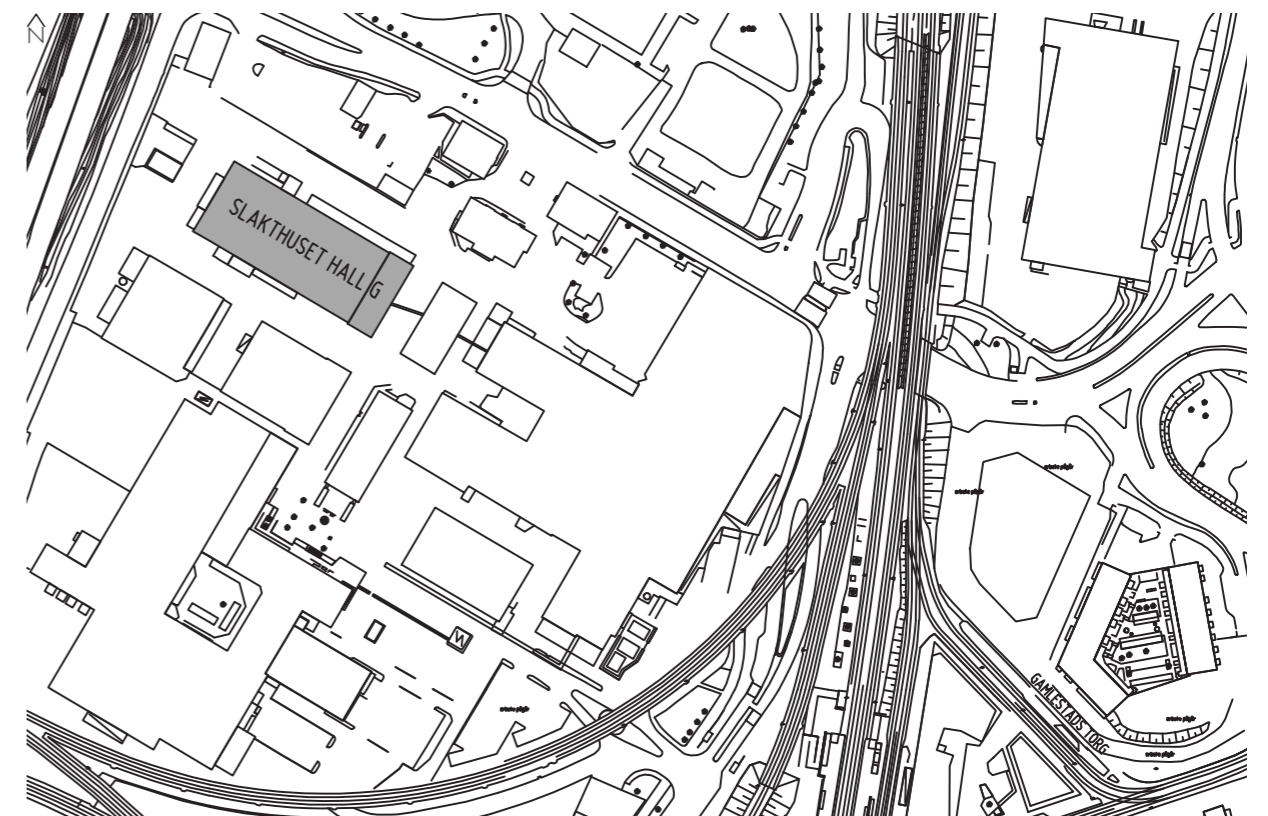
Although Gamlestaden is thriving with a wide range of businesses, there is currently no cinema in the area, making it an ideal location for this project. In 1959, a cinema named Rex opened in Gamlestaden, but after closing in 1973, no new cinemas have been established in the area (Bjelkental, 2009). Despite this, the area has a strong connection to television, with many popular TV programmes being recorded there today. Given its historical significance, there are strong arguments for reintroducing cinema to Gamlestaden. This would not only reconnect the area with its cinematic past but also add significant cultural value to the district in the future.

HALL G

After contacting Higab, the organisation that owns many of the buildings in Slakthuset, I was introduced to Hall G. Hall G consists of a two-storey building connected to a single-storey building, which is primarily used for storage today. The two-storey building, which currently functions as an office building, is the part that will be transformed into a cinema in this project. Higab has stated that they want the area to attract many visitors and to be a hub for food, drinks, design, and culture (Higab, n.d.). After touring both sections of Hall G, it was decided that Bio Slakthuset would be located in the two-storey part of the building.

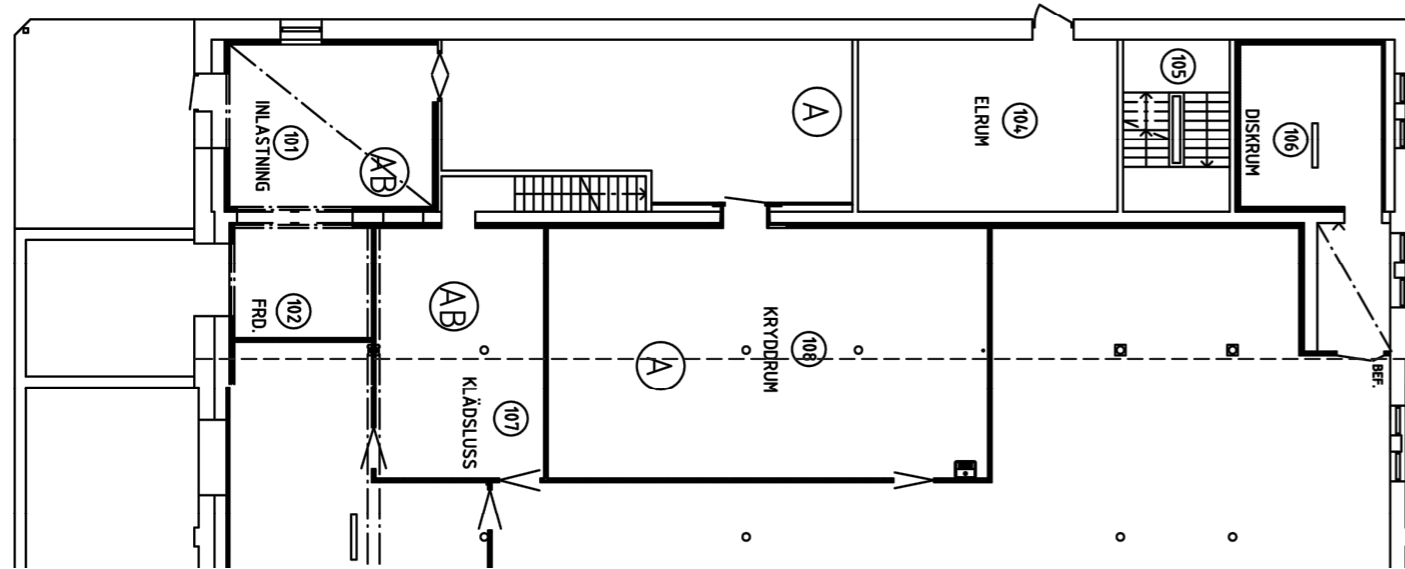


Photograph of Hall G (taken by the author)

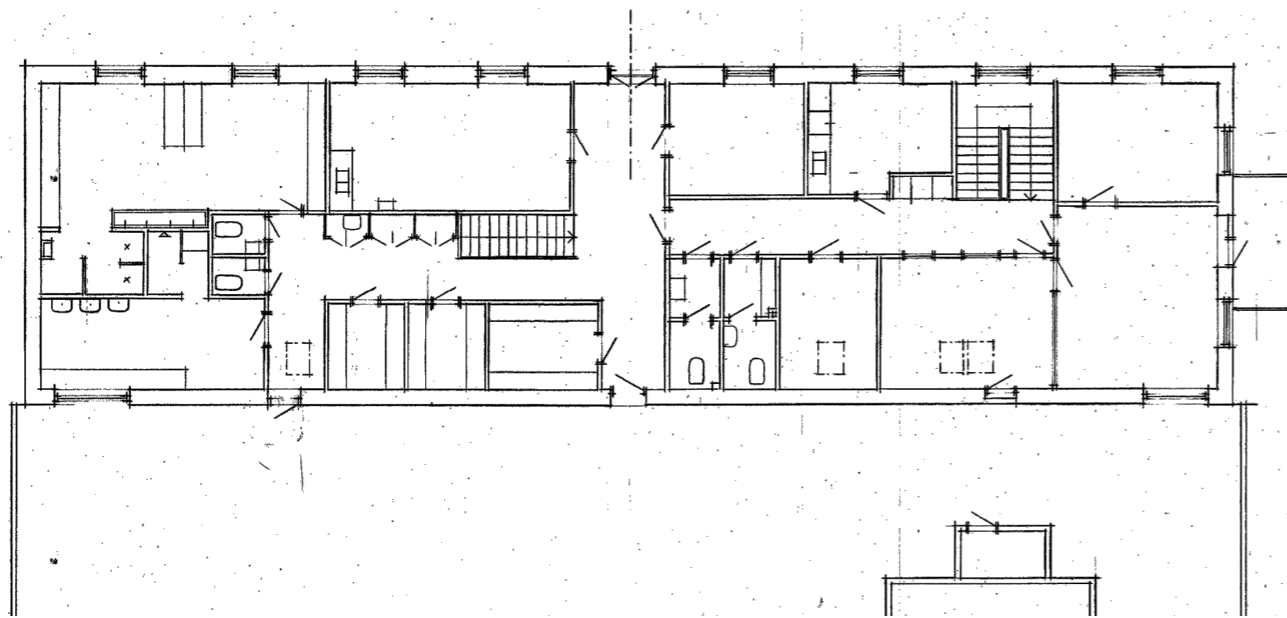


SITE PLAN 1:3000

SITE

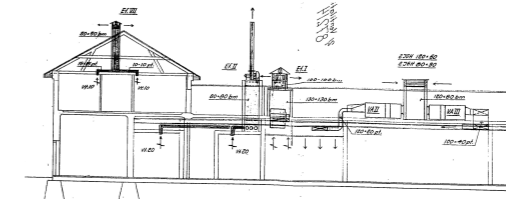


FIRST FLOOR 1:200

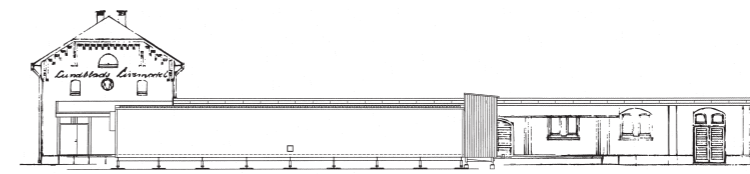


SECOND FLOOR 1:200

Floor plans of Hall G today, cropped to show the two-storey part of the structure.



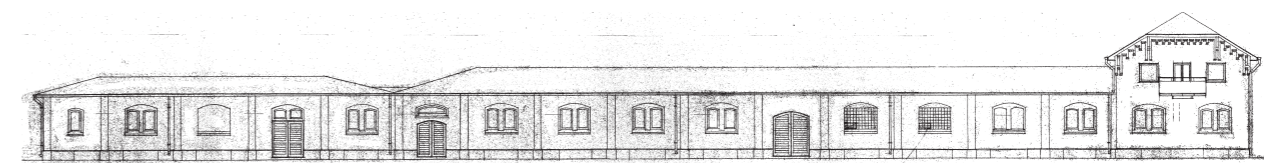
SECTION



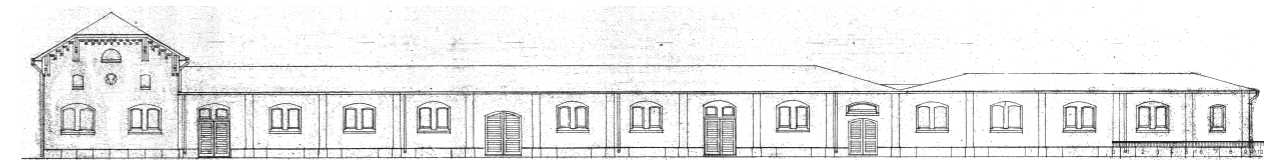
NORTH FACADE WITH ATTACHED TIN STRUCTURE



EAST FACADE WITH ATTACHED TIN STRUCTURE



SOUTH FACADE



NORTH FACADE

Section and façade drawings of Hall G.

DESIGN

THE SCRIPT

The first step in making a film is writing the script. To explore whether a cinematographic method could be applied to architecture, I began by writing a script that created an imaginary world where Bio Slakthuset is up and running. In this process, characters were introduced to help me understand the building. By experiencing the cinema through the eyes of a defined group of people, I was able to better manifest the design and identify the key elements, viewing them frame by frame.

For this film, I chose to focus on two main characters: a member of the cinema staff (the projectionist) and a visitor (the man), who is waiting for his date to arrive so they can watch a film together. The supporting characters include another member of the staff (Dan) and the visitor's date (the woman). As in any film, there are also extras moving through the background, who, though they have no individual storyline, help fill the space and contribute to the overall atmosphere, setting the tone for the narrative.

Writing the script required me to imagine not only the cinema itself, but also how it would fit within an already existing structure. I had to put myself in the shoes of the characters, considering what they were seeing and feeling in each scene. At the same time, I needed to ensure the design included all the necessary components to support different types of compositions, such as a 'frame within a frame.' This approach proved to be a fascinating way of working that truly emphasised the phenomenological aspects of architecture.

Had I chosen a different storyline, with other scenes, the final design of the building might have looked completely different.

In scriptwriting, *Ext.* stands for "Exterior" and *Int.* for "Interior," indicating whether the camera is placed inside or outside.

For clarity, each frame in the script is numbered and includes detailed notes about the composition. This makes it easier to connect the script to the storyboard and floor plan, which shows the camera placements.

1	EXT. CINEMA, SLAKTHUSET - AFTERNOON	1
	Establishing shot of the façade from across the street (01: Establishing shot). The red neon cinema sign lights up the 20th-century brick building. Through the large glass door, the silhouette of the ticket booth can be seen, where a woman is standing behind the counter (02: Establishing shot focused on what is behind the door).	
2	INT. TICKET BOOTH - AFTERNOON	2
	THE PROJECTIONIST, A WOMAN IN HER EARLY 30S.	
	THE PROJECTIONIST is about to begin her shift in the busy cinema. In her hand is a note written by one of her coworkers, who has already left for the day (03: Frame within a frame shot).	
	She looks up from the note and notices a MAN (mid-20s, nicely dressed) standing on the other side of the counter, waiting to be served (04: Frame within a frame/back shot).	
	After handing the man two tickets to 'In the Mood for Love', one large popcorn, and one drink with two straws, she gets back to reading the note. The camera zooms in on the piece of paper, revealing a list of tasks that needs to be completed before the end of the day.	
	First task: change the broken lightbulb in the accessible toilet (05: Insert shot/POV shot).	
3	INT. THE FOYER - AFTERNOON	3
	She exits the ticket booth and walks through the meandering corridor of the foyer towards the toilets (06: Follow shot).	
4	INT. THE STORAGE ROOM - AFTERNOON	4
	She makes a quick stop by the storage room to get the lightbulb and the small ladder before continuing her way towards the toilets (07: OTS shot/Frame within a frame shot).	
5	INT. THE FOYER - AFTERNOON	5
	With the lightbulb in one hand and the ladder in the other, the projectionist walks in the direction of the entrance, where she notices the man she just served, sitting alone on a small bench, staring hopefully at the front door (08: Follow shot).	

DESIGN

6 INT. WC - AFTERNOON 6

The projectionist is standing on top of the ladder, reaching out to replace the old lightbulb with the new one (09: High angle/single shot).

7 INT. THE FOYER - AFTERNOON 7

THE MAN, CASUALLY DRESSED AND IN HIS MID 20S.

The man is seated on the opposite side of the restrooms (10: Single shot), with his whole body turned towards the entrance. He's holding the two tickets in his hand, and right next to him are the popcorn and the drink with its two straws sticking out of the lid. His gestures suggest that he is deep in thought, waiting for someone to walk through the door (11: Single shot with the door in the background).

For a moment, his thoughts are interrupted by the projectionist, who is on her way back to the ticket booth, where a group of people are now standing, waiting for her assistance (12: Master shot).

The man's gaze alternates between the door, different parts of the room, and his watch (13: POV shot/insert shot of the man looking at his watch revealing the time along with the details on the movie ticket).

TMATCH CUT TO:

8 INT. TICKET BOOTH - AFTERNOON 8

The projectionist is looking at the wall where the clock hangs, which shows the same time as the man's watch (14: Establishing shot).

With things being a bit calmer than before, she starts to tidy a few things up in the ticket booth, stopping every few moments to look up to see if any new customers are lining up to buy tickets. Since no one is there waiting, she takes the note out of her pocket to see what's next on her to-do list. Next task: cover for DAN in the café while he's on break (15: POV shot/insert shot)

9 INT. CAFÉ - AFTERNOON 9

DAN, A BEARDED MAN IN HIS MID 40S, WHO WEARS FILM RELATED T-SHIRTS WITH HIS BEER BELLY PROTRUDING.

Dan, who has just finished serving two customers (16: Dirty OTS shot) strikes up a conversation as the projectionist enters the café.

Mid-conversation, she notices the young man from earlier through the window separating the café from the ticket booth. His hands full with the items he had bought from her upon arrival, he walks in their direction and takes a seat at the empty table directly across from the café counter. The man looks more anxious this time around (17: Three-quarter two shot with the man in the background) (18: OTS shot/react shot).

The man, who is now resting his head on one hand (19: Single shot), tilts to the side to watch a group of people line up in front of the auditorium door (20: React shot). He changes his gaze to look through the café window and to the front door (21: Back shot/react shot/frame within a frame shot). He checks his phone to find that there are no new messages (22: POV shot/insert shot of the man holding his phone, showing the time and his last message being left on read).

10 INT. THE CAFÉ - AFTERNOON 10

Behind the counter in the café, the projectionist is standing, looking up towards the projection room. She's contemplating if she has enough time to cross another one of her tasks off the list before heading up there to prepare for the screening (23: Back shot).

The camera pans down to the man, now alone in the café's seating area. The warm, dim light from the lamp above his head captures the gloomy mood of the man (24: OTS shot/react shot).

She notices all the messy tables and decides to ignore the list, using the minutes she has left before the film starts to clean the place up (25: Insert shot of the dirty tables).

11 INT. THE CAFÉ SEATING AREA - AFTERNOON 11

He looks at his watch one last time, revealing only a few more minutes before the film is about to start (26: POV shot/insert shot).

He looks back at the entrance door. With the projectionist out cleaning the tables, there's nothing blocking his view of the entrance (27: Frame within a frame shot with the door in focus).

The man, both hands now over his forehead, looks down, hiding his facial expression while the projectionist cleans in the background (28: Two shot).

DESIGN

12 INT. THE CAFÉ SEATING AREA - AFTERNOON 12

The projectionist, having just finished cleaning all the tables, realises that Dan isn't back from his break yet. There's already a long line of people standing in front of the auditorium door, as well as a shorter line in front of the spiral staircase, waiting to go up to the balcony(29: OTS shot/crowd shot) (30: OTS shot/crowd shot).

Just as she's about to drop everything and tend to the big queue, Dan rushes in through the door next to the staircase with a book in his hand. This isn't the first time that Dan has lost track of time while reading in the outdoor seating area (31: Frame within a frame shot of Dan rushing through the door/crowd shot).

With Dan tending to the queue by the staircase, the projectionist begins to check the tickets of the people waiting by the auditorium door (32: Middle ground Shot of the projectionist tending to the line of people).

13 INT. THE CAFÉ SEATING AREA - AFTERNOON 13

The man lifts his head to watch the last few people walk up the stairs to the balcony (33: Dirty OTS shot).

As he looks towards the other line of people his eyes meet the projectionist's, and she offers him a small comforting smile before he turns his gaze to see if anyone has walked through the front doors (34: Back shot/frame within a frame shot).

With an embarrassed expression on his face, he grabs the two tickets in one hand and crumples them with his fist (35: POV shot/insert shot) before once again resting his head on his hands and defeatedly looking down at the floor (36: Clean single shot).

CUT TO:

14 EXT. SLAKTHUSET - AFTERNOON 14

A WOMAN IN HER MID 20S, WEARING A TRENCH COAT AND A KNITTED SCARF.

A WOMAN running. Above her is a flyover with the word 'SLAKTHUSET' written in bold black letters (37: Follow shot/cut-away shot/cross-cut).

The woman's scarf swings behind her as she rushes past some of the old brick buildings in the industrial area.

BACK TO:

15 INT. THE CAFÉ SEATING AREA - AFTERNOON 15

The man, head held low, is lit up by the dim light in the seating area, still in the same seat as before (38: Clean single shot).

16 INT. THE FOYER - AFTERNOON 16

The woman wearing a scarf and trench coat looks straight down the meandering corridor. She notices the man through the opening in the ticket booth and makes her way to him (39: Back shot).

17 INT. THE CAFÉ SEATING AREA - AFTERNOON 17

The man looks up at the woman standing in front of him (40: OTH shot).

CUT TO:

18 INT. THE AUDITORIUM DOOR - AFTERNOON 18

The man and woman are standing side by side in front of the projectionist (41: Dirty OTS shot/shot-reverse-shot). The woman hands the projectionist the two crumpled-up tickets while the man holds the drink and popcorn and offers the projectionist a shy smile (42: Dirty OTS shot/shot-reverse-shot).

19 INT. THE AUDITORIUM - AFTERNOON 19

The pair walk down the dark aisle, looking for their seats (43: Follow shot).

Once seated, the two of them reach for the popcorn at the same time (44: Intimate two shot in crowded cinema) as the film begins to play (45: Back shot showing the film playing in the background).

20 INT. THE PROJECTION ROOM - AFTERNOON 20

After admitting the last few people into the auditorium the projectionist enters the projection room (46: Dirty OTS shot). She gazes out at the people on the balcony enjoying the film through the slightly tinted window in front of her (47: Three-quarter rear shot). As the film "In the Mood for Love" begins, she can't help but think about the man and his date sharing the popcorn and the drink with two straws somewhere in the auditorium.

She goes through the to-do list again, crossing out the final task: 'start the film'. With all the tasks completed, she can finally enjoy a cup of coffee in the peaceful projection room, decorated with movie posters and other miscellaneous. (48: POV shot/insert shot of the projectionist holding the completed list and a mug of coffee).

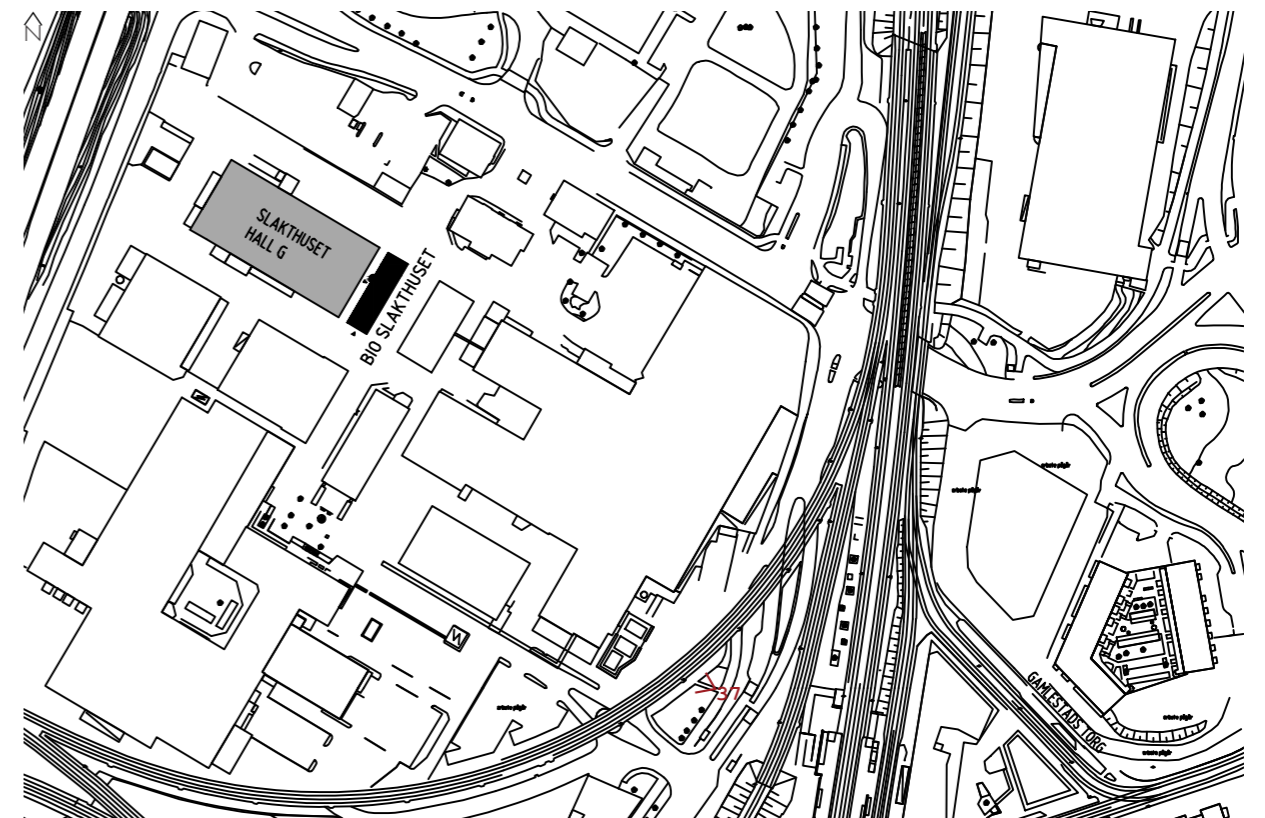
End.

DESIGN

DESIGN PROPOSAL

Drawings, such as the façade, floor plan, and section, illustrate the new design proposal from an architectural perspective. I found it easier to work with cinematography when I allowed myself to incorporate more traditional architectural tools. By combining the two practices, it became much easier not only to design but also to present in a more precise manner, with exact measurements that could be handed to a construction worker or set designer.

The most significant change to the original building is the separation of the two-storey structure, where Bio Slakthuset will be located, which was previously attached to the single-storey building, thereby creating a passageway between the two. This passageway creates an intimate space between the buildings, where an additional seating area will be located, extending the café from inside the building to the outside.



NEW SITE PLAN 1:3000

The new site plan shows the location of Bio Slakthuset and the new pathway between the two buildings. The plan also features the camera placement of frame 37 from the new storyboard (highlighted in red).

DESIGN

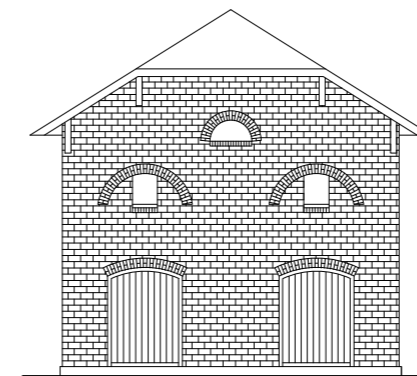
The main entrance to the cinema is located on the southern façade. The old balcony has been repurposed as a canopy, decorated with a red neon sign bearing the words “Bio Slakthuset.”

On the new western façade, which was previously attached to the single-storey building, a spiral staircase has been added. This staircase provides access to the auditorium balcony and the projector room from inside the cinema. It will be showcased with block glass, allowing the lights and colours from inside the building to shine through. The exterior material of the west façade is yellow brick, following the same style as the rest of the building.

Currently, many of the windows are barred shut. In this design proposal, the windows on the first floor that are not in use will be transformed into display windows, where film posters and programmes can be hung.

On the west façade, there are two doors: the one to the left is an emergency exit, while the one to the right leads from the café’s indoor seating area to the outdoor seating area.

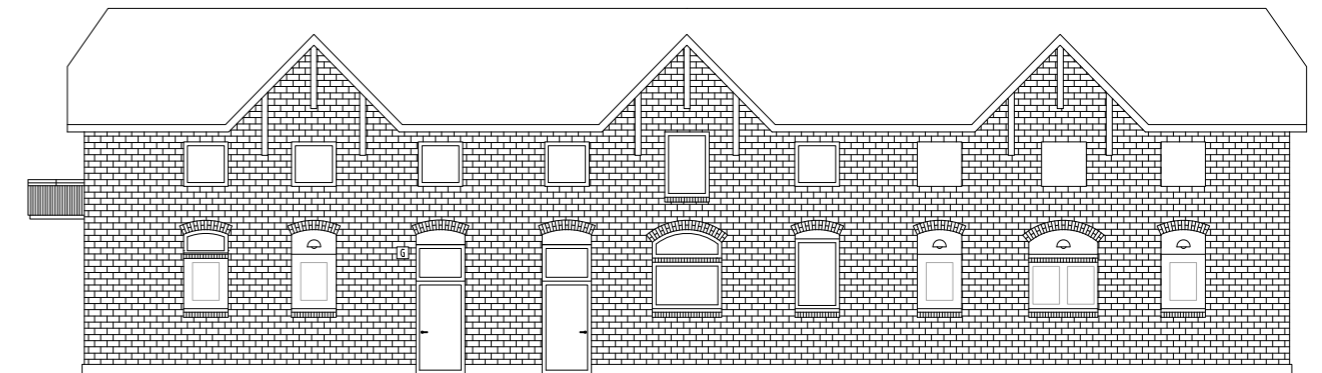
On the opposite side of the building, on the eastern façade, there are two doors: one leading to the recycling room and another emergency exit.



NORTH FAÇADE



SOUTH FAÇADE

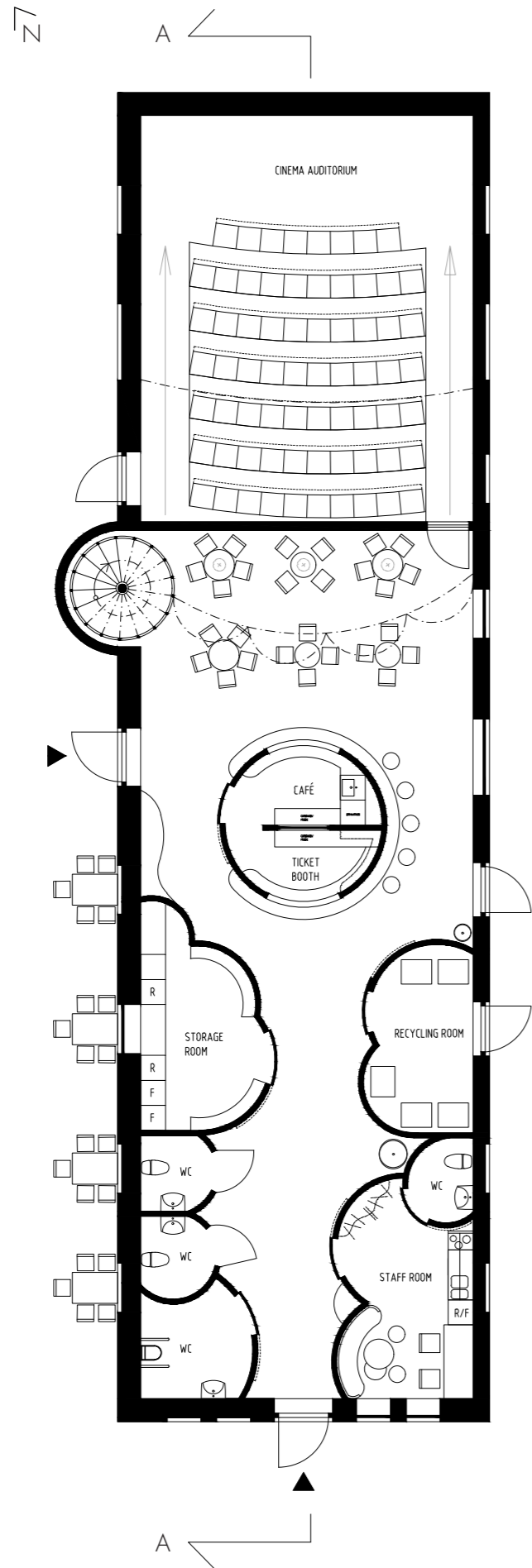


EAST FAÇADE

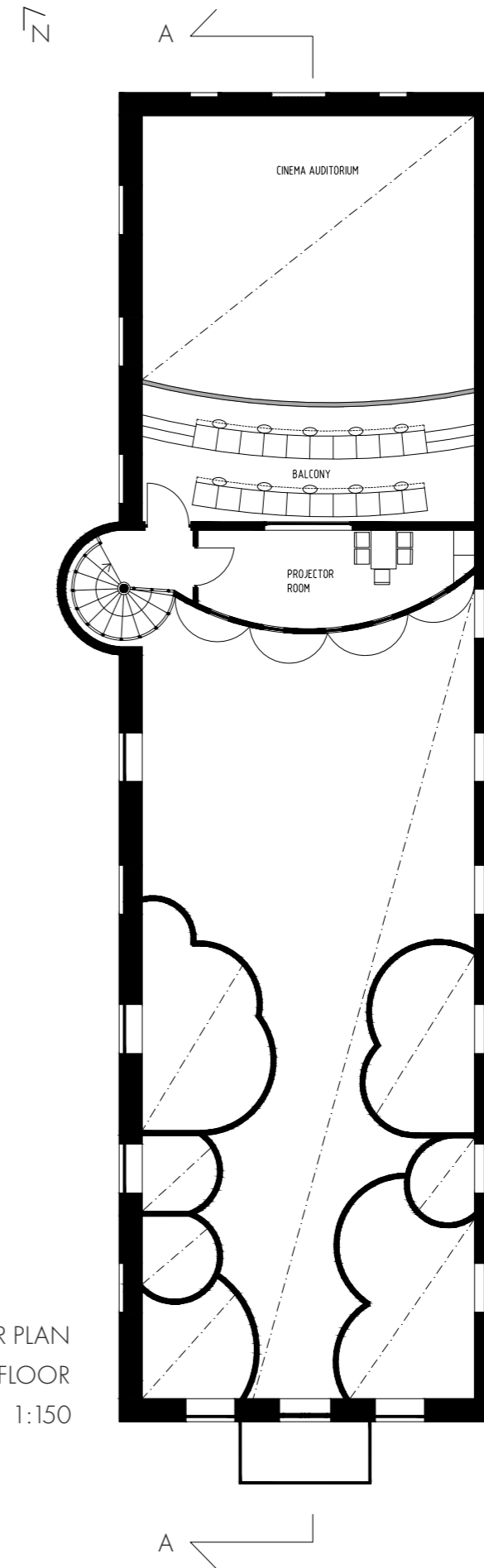


WEST FAÇADE

1:200



FLOOR PLAN
FIRST FLOOR
1:150



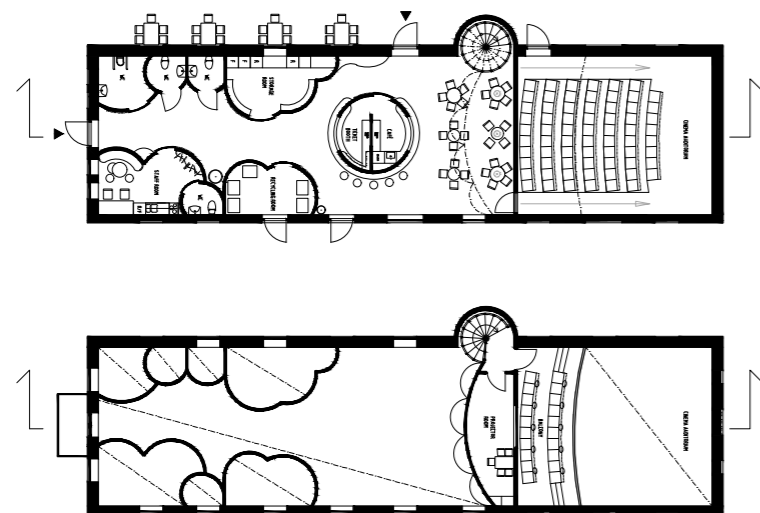
FLOOR PLAN
SECOND FLOOR
1:150

DESIGN

The interior can be split into three parts. For the sake of using cinematography, I chose to view it as a sequence. The meandering corridor is designed to resemble a narrow street with tall buildings. I wanted to steer away from the usual straight corridor, to create a more interesting and dynamic way of moving towards the ticket booth.

I wanted the ticket booth and café to be the focal point in the cinema, which is why I worked with the concept of leading lines; a technique used by cinematographers to guide the viewer's eye towards the focal point (StudioBinder, 2022). The tiling on the floor of the corridor directs attention to the ticket booth, which can be seen in many frames of the storyboard.

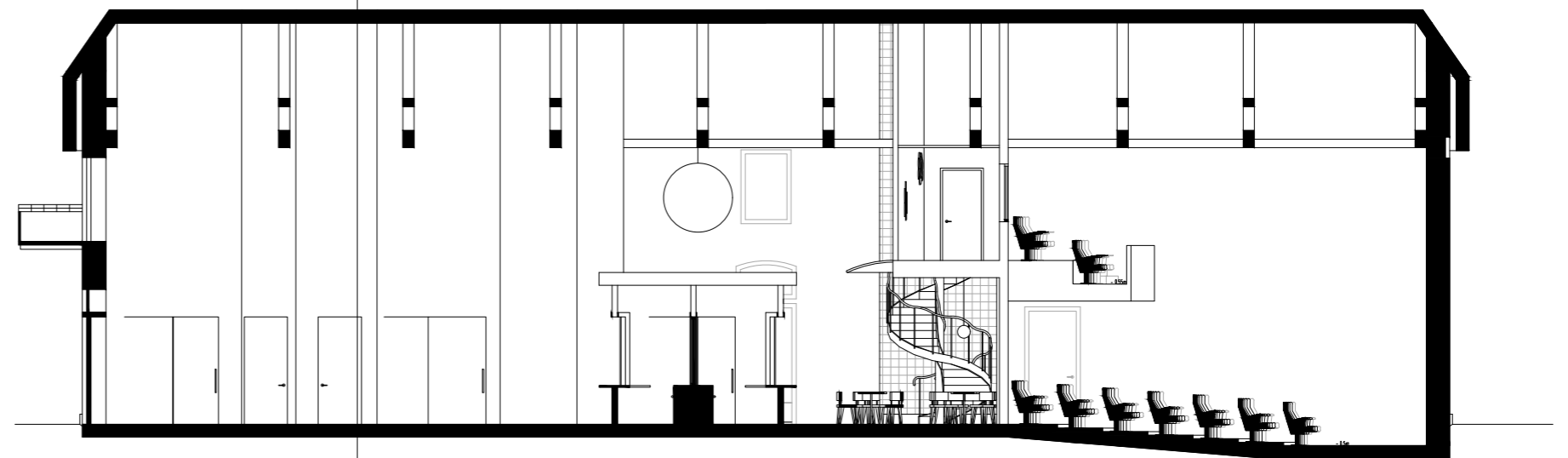
All the walls of the rooms off the corridor extend to the ceiling, enhancing the feeling of walking through an urban landscape, with tall buildings on either side of the path. However, the ticket booth is the only element that does not reach the ceiling, which creates the feeling of an opening in the busy street. This shift in design changes the scale of the space from feeling tall and narrow to more spacious and open. This marks the transition to the second part of the building sequence, where the café and seating area are located.



From this part of the building, there are two possible ways to transition to the third part of the sequence. One route is through the spiral staircase, which leads either to the projection room or the auditorium balcony. The other route involves passing the seating area and walking through the doors directly into the auditorium, where the third and final part of the sequence takes place.

The auditorium itself is simple in design, drawing all attention to the film screen, where visitors are transported into the world of cinema.

It is the journey from the entrance to the auditorium that forms the sequence. This brief series of events makes up the 'plot' of the architecture, truly making it a cinematic space.

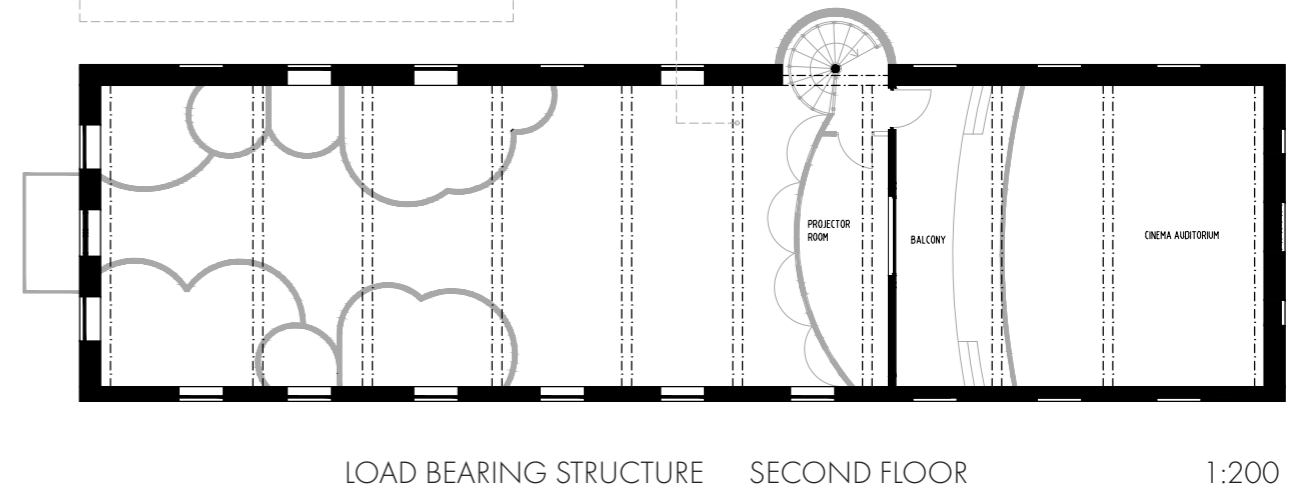
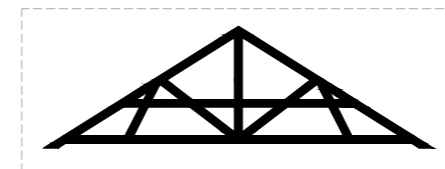
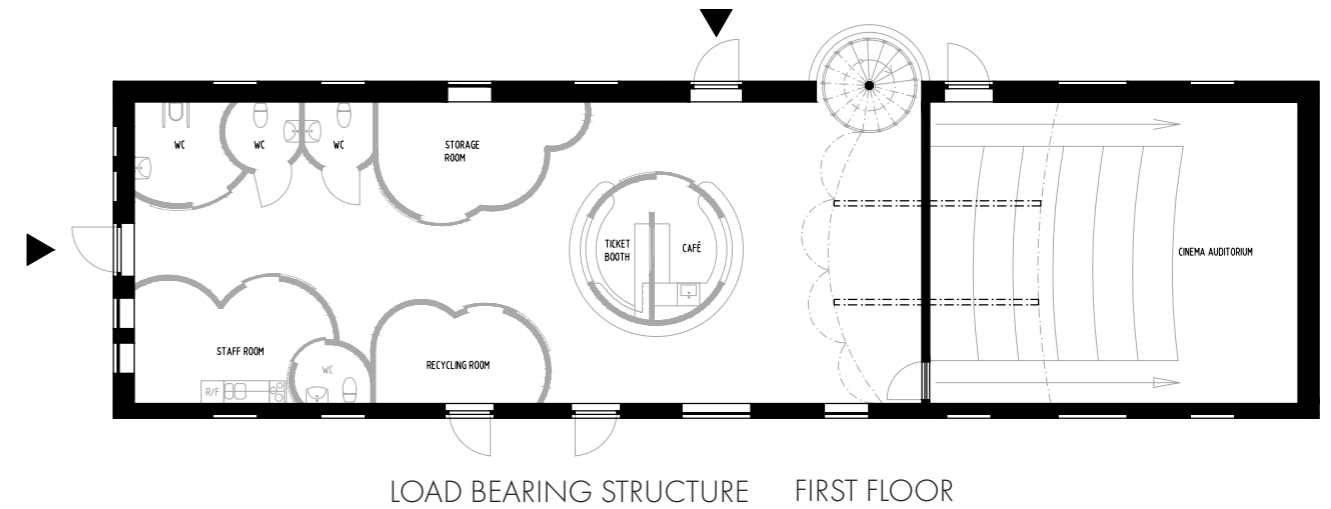


SECTION A - A 1:150

DESIGN

In the new proposal, the second floor has been removed to meet the need for an open and spacious auditorium. Given the addition of a balcony with extended seating and a projection room, the load-bearing structure needed adjustment, leading to some minor changes in the trusses to enhance the strength of the structure. However, the placement of the trusses remains the same as in the original building.

To support the new second floor, the load-bearing structure is located in the wall separating the auditorium from the café's seating area. Beams are concealed within the joists, which, along with the façade walls, bear the load of the second floor.



1:200

● LOAD BEARING ● NOT LOAD BEARING

DESIGN

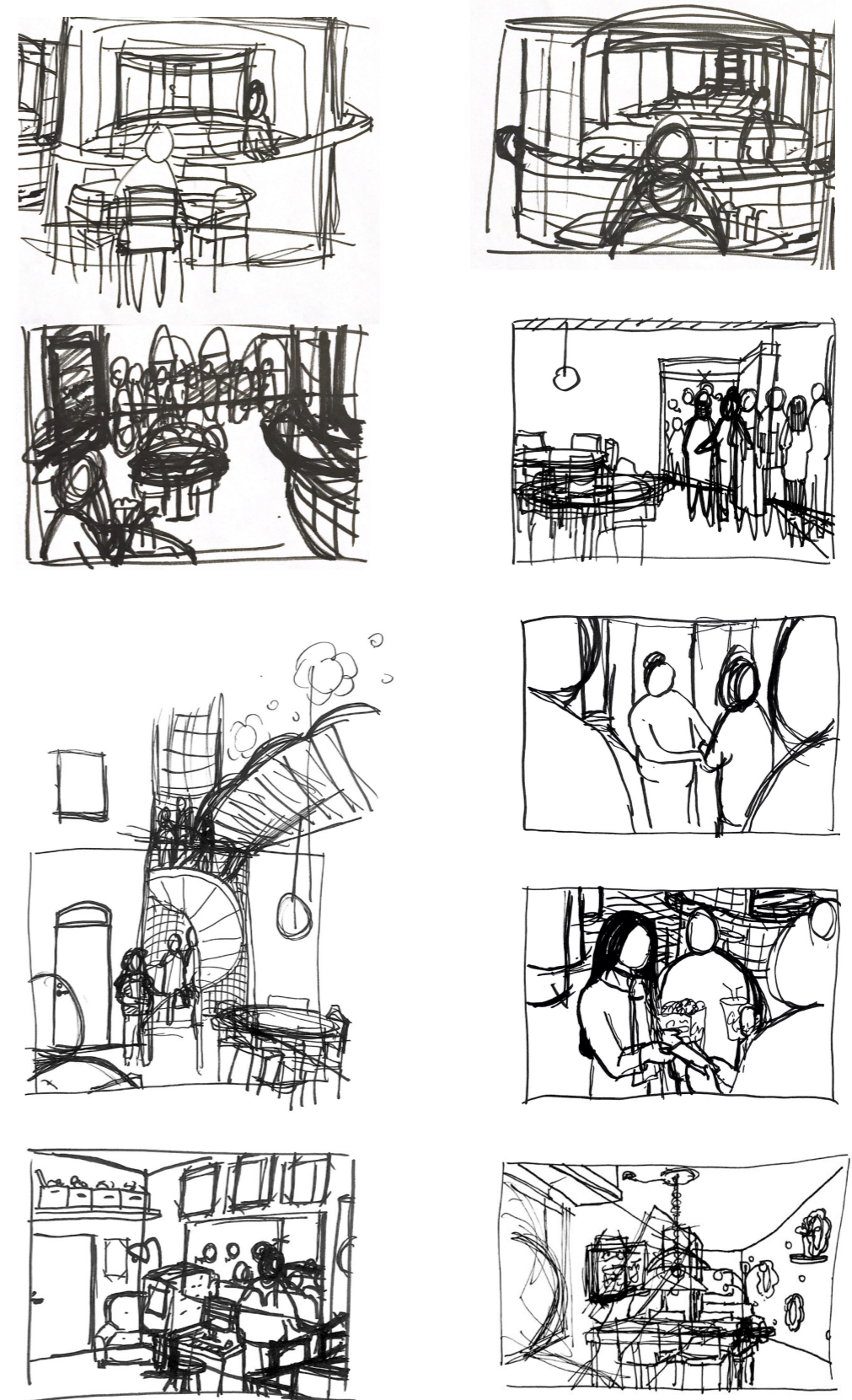
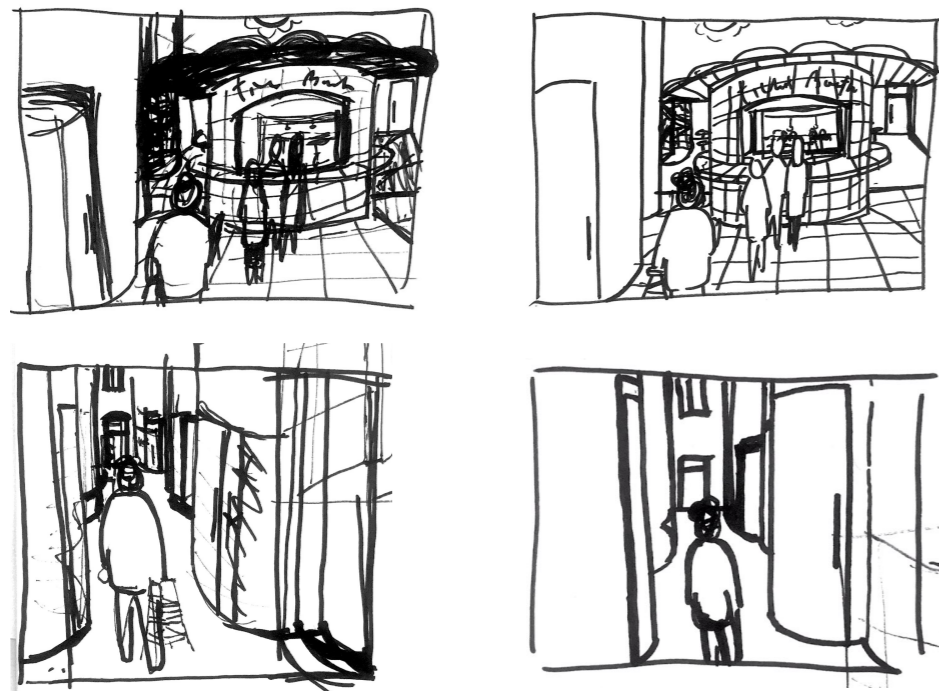
THE STORYBOARD

The process of exploring the building through storyboarding helped bring the space to life, as well as increase my awareness of how a space is experienced and perceived from the perspectives of different people. Creating narrative in architecture, much like creating narrative through imagery in film, proved to be a useful tool. Each frame of the storyboard depicts the plot of the script as well as the environment in which it is set.

Each frame is numbered and describes the composition using cinematographic vocabulary. This corresponds to the script, making it easier to connect each scene with its respective frame.

The process of finding the right style of sketching was an interesting one. The first drafts were often quite blurry, capturing the ambience and movement of the cinema effectively, but lacking in precision. I needed the storyboard to present the architecture more clearly, allowing for a better understanding of the building itself, not just its atmosphere. Therefore, finding the right representation technique was crucial. Many of the initial attempts at illustrating a scene resonated with me more emotionally, which is why I chose to feature them in this thesis. I view them as an addition to the storyboard. If the storyboard were to be made into a film, I would hope that the scenes would capture the ambience of the drafts as well.

The process of representing narrative is significant, and it proved that there is no single correct way to make a storyboard. It is ultimately a matter of preference.



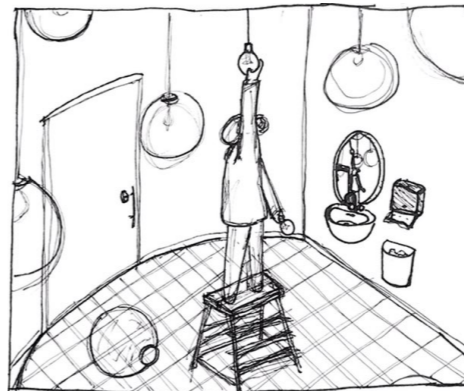
DESIGN



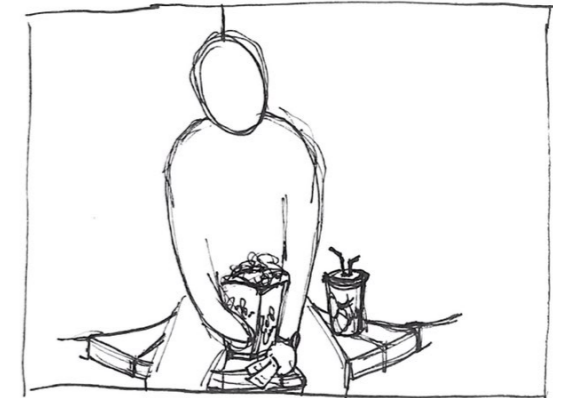
01: Establishing shot.



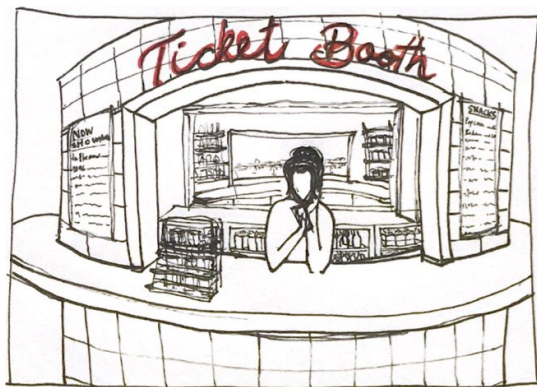
02: Establishing shot focused on what is behind the door.



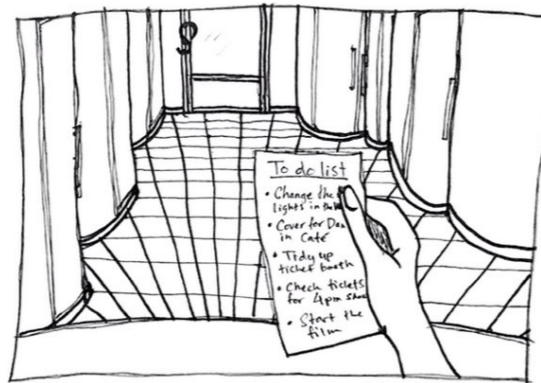
09: High angle / single shot.



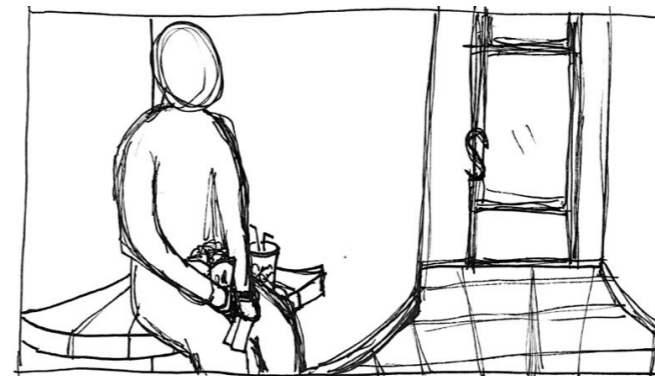
10: Single shot.



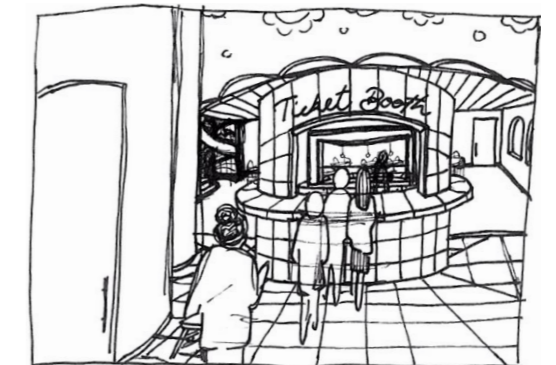
03: Frame within a frame shot.



04: Frame within a frame / rear shot.



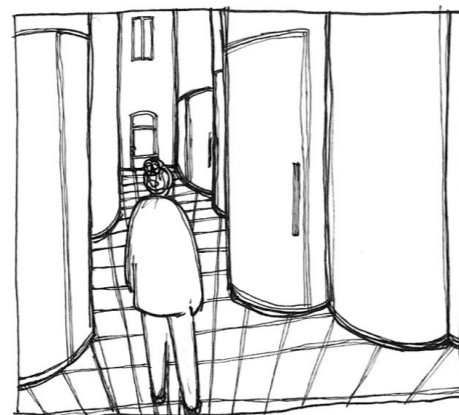
11: Single shot with the door in the background.



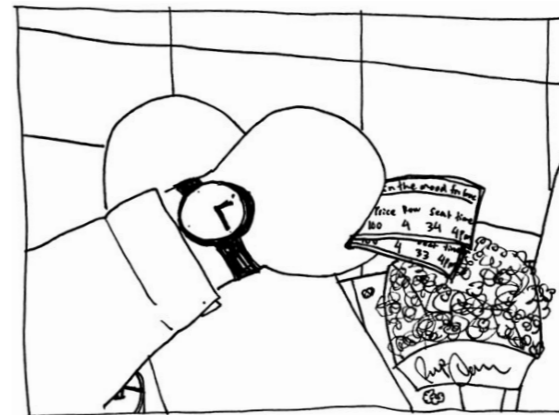
12: Master shot.



05: Insert shot / POV shot.



06: Follow shot.



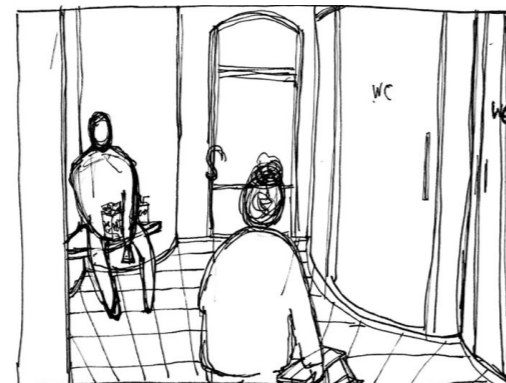
13: POV shot / insert shot of the man looking at his watch revealing the time and the details on the movie ticket.



14: Establishing shot.



07: OTS shot / frame within a frame shot.



08: Follow shot.



15: POV shot / insert shot.



16: Dirty OTS shot.

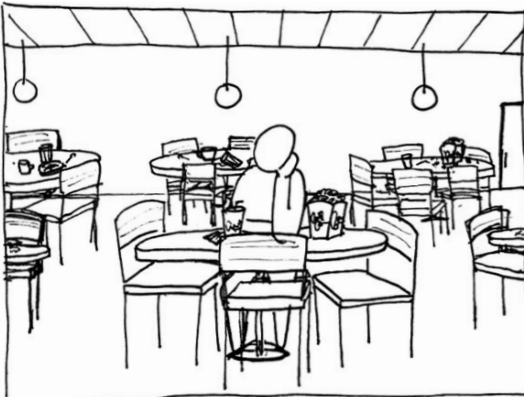
DESIGN



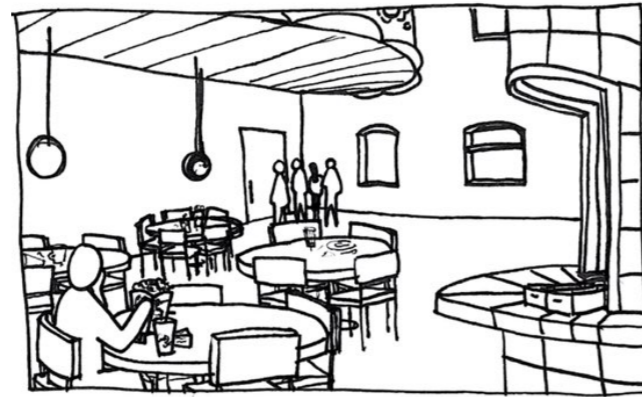
17: Three-quarter two shot with the man in the background.



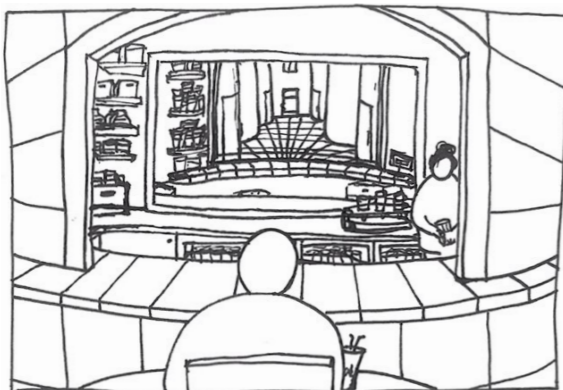
18: OTS shot / react shot.



19: Single shot.



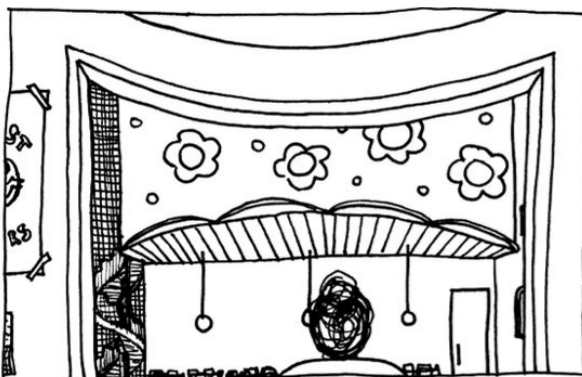
20: React shot.



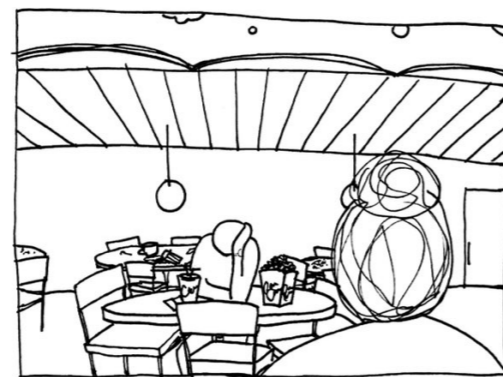
21: Back shot / react shot / frame within a frame shot.



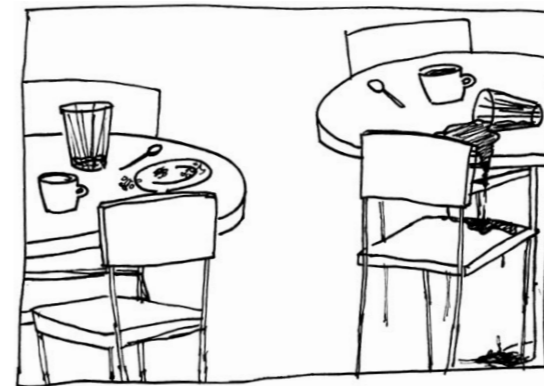
22: POV shot / insert shot of the man holding his phone, showing the time and his last message being left on read.



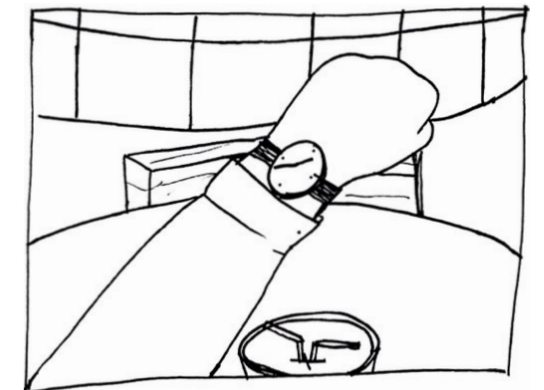
23: Back shot.



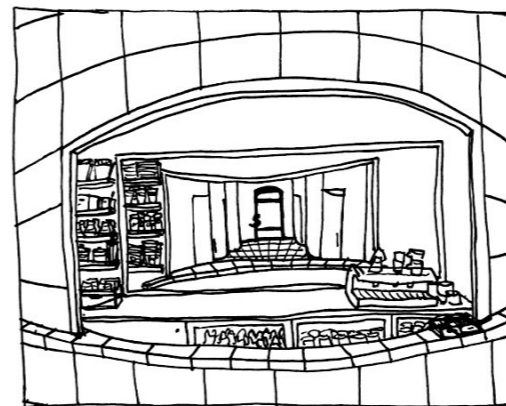
24: OTS shot / react shot.



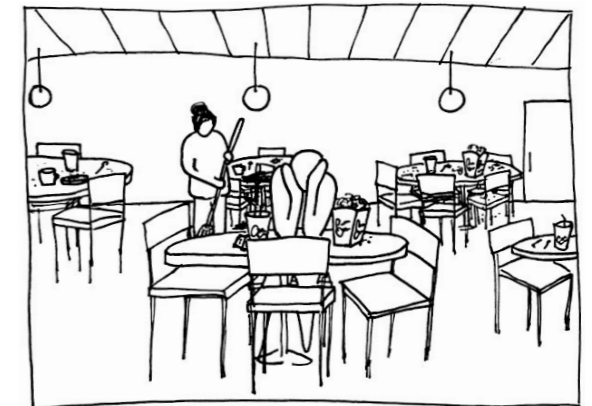
25: Insert shot of the dirty tables.



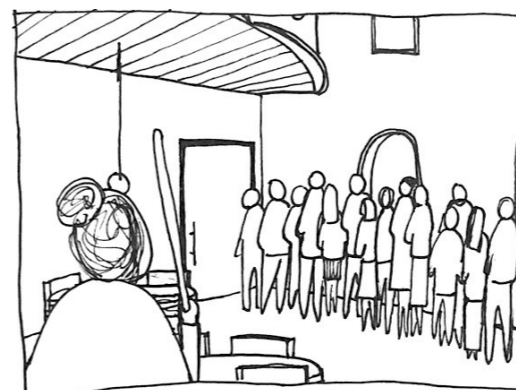
26: POV shot / insert shot.



27: Frame within a frame shot with the door in focus.



28: Two shot.



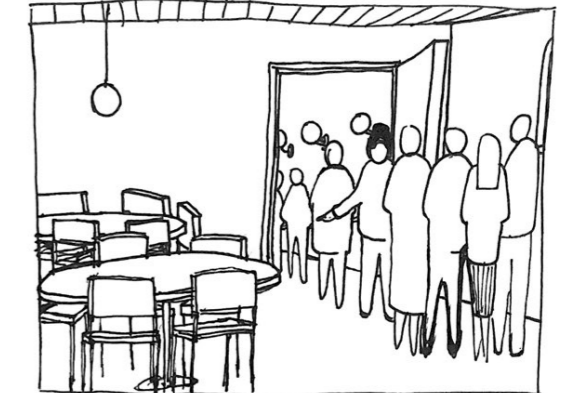
29: OTS / Crowd shot.



30: OTS shot / Crowd shot.



31: Frame within a frame shot of Dan rushing through the door / crowd shot.

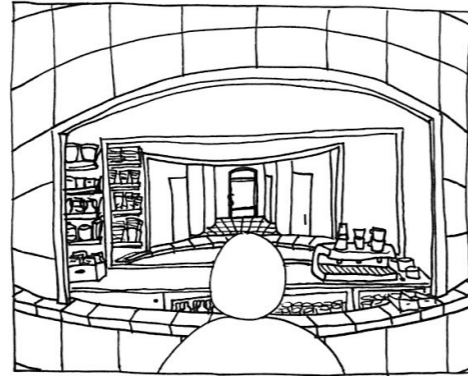


32: Middle ground Shot of the projectionist tending to the line of people.

DESIGN



33: Dirty OTS shot.



34: Back shot / frame within a frame shot.



35: POV shot / insert shot.



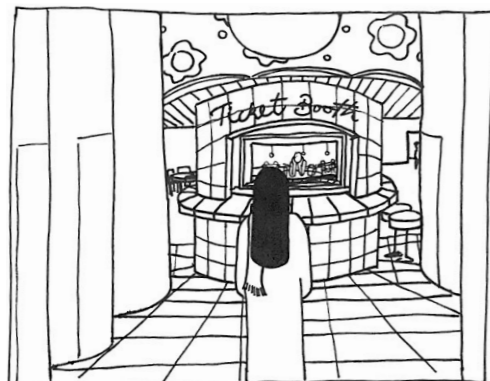
36: Clean single shot.



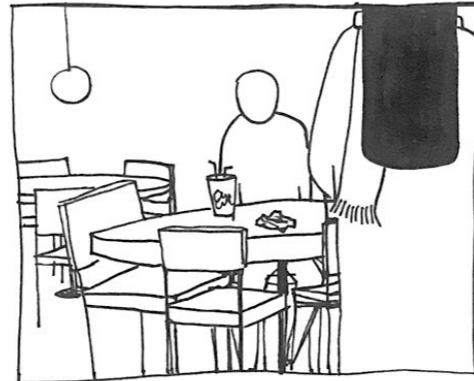
37: Follow shot / cut-away shot / cross-cut.



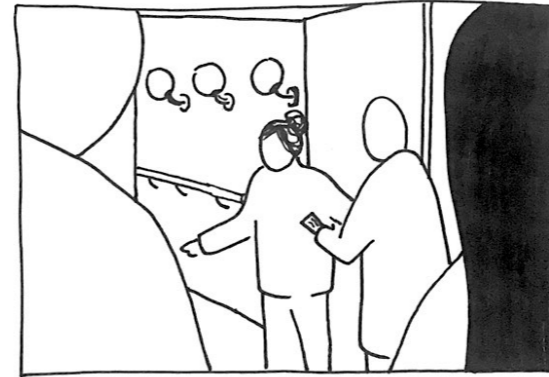
38: Clean single shot.



39: Back shot.



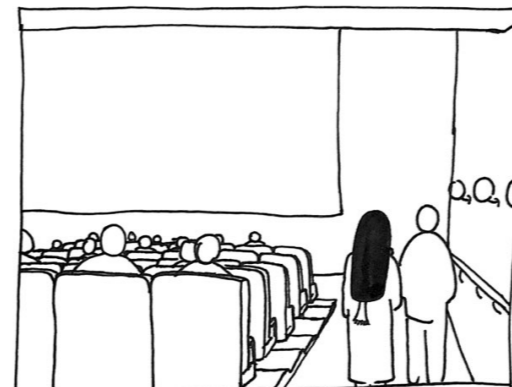
40: OTH shot.



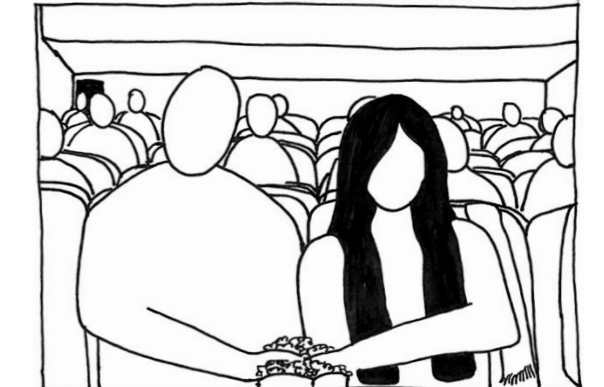
41: Dirty OTS shot / shot-reverse-shot.



42: Dirty OTS shot / shot-reverse-shot.



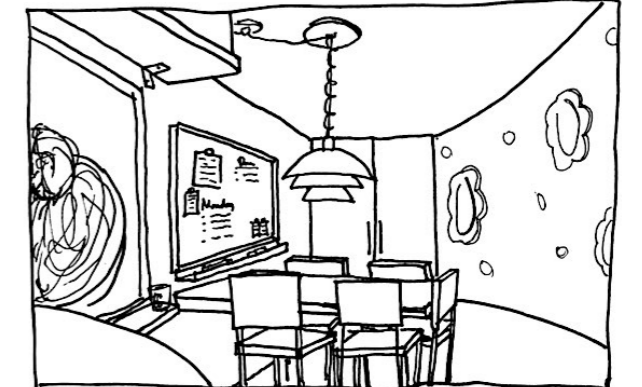
43: Follow shot.



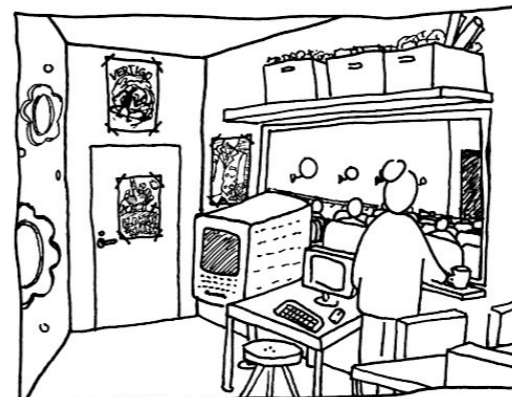
44: Intimate two shot in crowded cinema.



45: Back shot showing the film playing in the background.



46: Dirty OTS shot.



47: Three-quarter rear shot.



48: POV shot / insert shot of the projectionist holding the completed list and a mug of coffee.

DESIGN

CAMERA PLACEMENTS

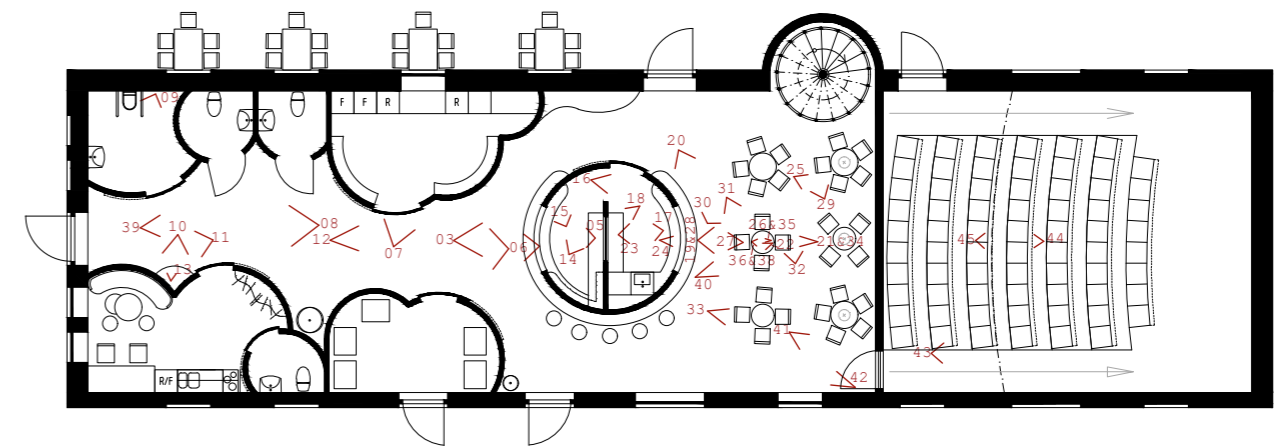
- 01: Establishing shot.
- 02: Establishing shot focused on what is behind the door.
- 03: Frame within a frame shot.
- 04: Frame within a frame/back shot.
- 05: Insert shot/POV shot.
- 06: Follow shot.
- 07: OTS shot/Frame within a frame shot.
- 08: Follow shot.
- 09: High angle/single shot.
- 10: Single shot.
- 11: Single shot with the door in the background.
- 12: Master shot.
- 13: POV shot/insert shot of the man looking at his watch revealing the time along with the details on the movie ticket.
- 14: Establishing shot.
- 15: POV shot/insert shot.
- 16: Dirty OTS shot.
- 17: Three-quarter two shot with the man in the background.
- 18: OTS shot/react shot.
- 19: Single shot.
- 20: React shot.
- 21: Back shot/react shot/frame within a frame shot.
- 22: POV shot/insert shot of the man holding his phone, showing the time and his last message being left on read.
- 23: Back shot.
- 24: OTS shot/react shot.
- 25: Insert shot of the dirty tables.
- 26: POV shot/insert shot.
- 27: Frame within a frame shot with the door in focus.
- 28: Two shot.
- 29: OTS shot /crowd shot.
- 30: OTS shot/crowd shot.
- 31: Frame within a frame shot of Dan rushing through the door/crowd shot.
- 32: Middle ground Shot of the projectionist tending to the line of people.
- 33: Dirty OTS shot.
- 34: Back shot/frame within a frame shot.
- 35: POV shot/insert shot.
- 36: Clean single shot.
- 37: Follow shot/cut-away shot/cross-cut.
- 38: Clean single shot.
- 39: Back shot.
- 40: OTH shot.
- 41: Dirty OTS shot/shot-reverse-shot.
- 42: Dirty OTS shot/shot-reverse-shot.
- 43: Follow shot.
- 44: Intimate two shot in crowded cinema.
- 45: Back shot showing the film playing in the background.
- 46: Dirty OTS shot.
- 47: Three-quarter rear shot
- 48: POV shot/insert shot of the projectionist holding the completed list and a mug of coffee.

01&02

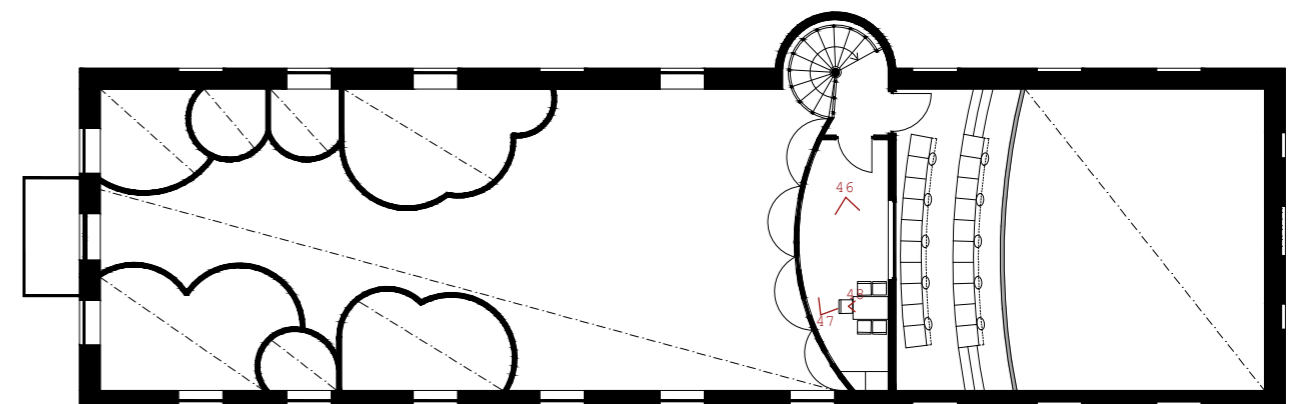
The floor plan is used as a tool to inform the placement of the camera and how it relates to the storyboard, serving as a seamless transition from the world of film to the world of architecture.

Being able to apply the tools I have mastered during my years of studying architecture to a new field further strengthens the argument for combining different methods. By moving away from simply viewing the floor plan through the eyes of an architect, I reimagine it as a map or set of instructions for the film crew, guiding them on where to place the cameras in order to recreate the frames first envisioned in the script and later in the storyboard.

Naturally, the floor plan also works in its traditional role.



FIRST FLOOR



SECOND FLOOR

1:200

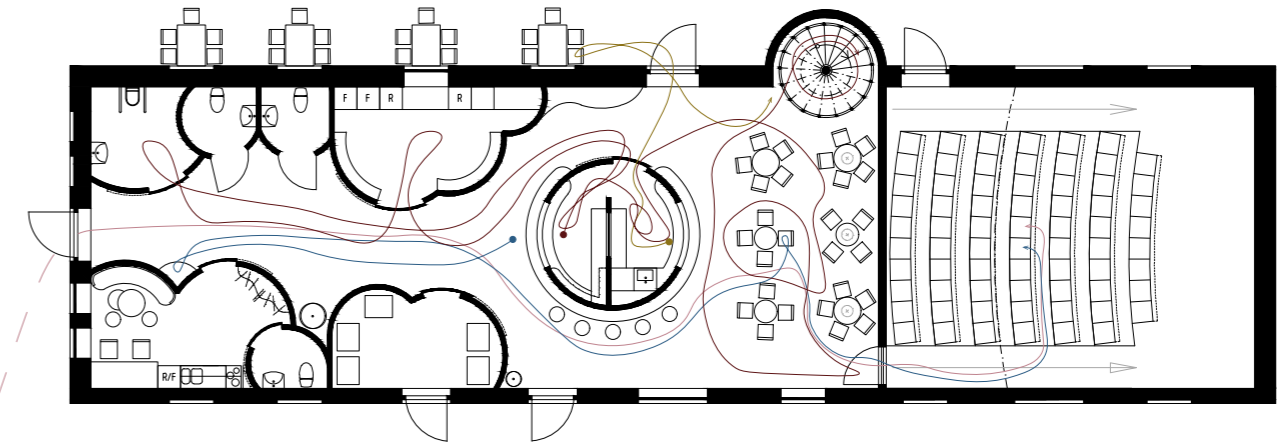
DESIGN

MOTION

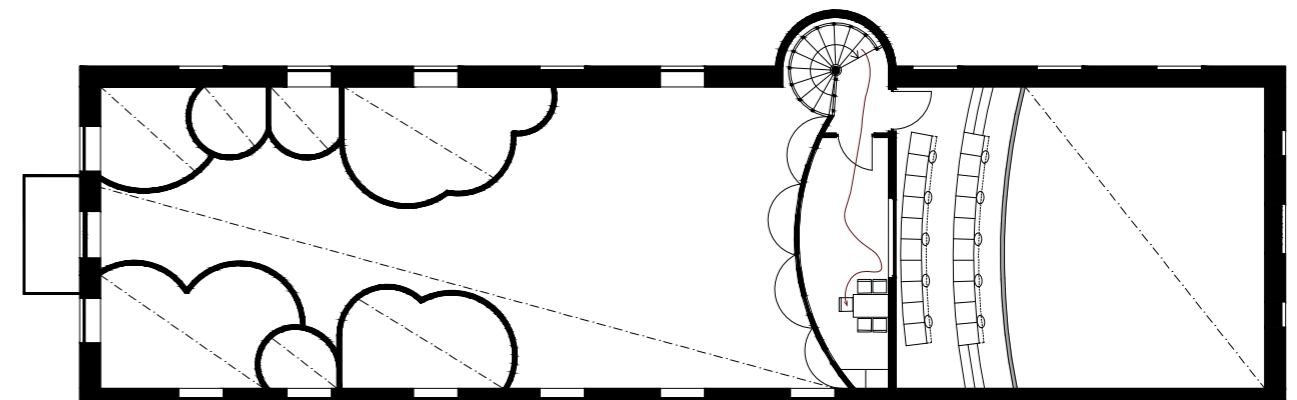
To provide more information about the events taking place inside the cinema, each character's movement is tracked and mapped onto the floor plan. This could potentially be handed to an actor, showing them where to position themselves in each scene, or to the cinematographer or set designer, helping to ensure that the positions of characters and the composition of the set work together.

Showing the movement within a building is a technique commonly used by architects, which could be useful in the film industry. However, I do believe that this technique could also be limiting if followed too strictly. Nonetheless, it works effectively to convey how the characters exist in the space they inhabit.

It is important to note that background characters were not included in this drawing, as I wanted to limit it to the four most important characters to the story.



FIRST FLOOR



SECOND FLOOR

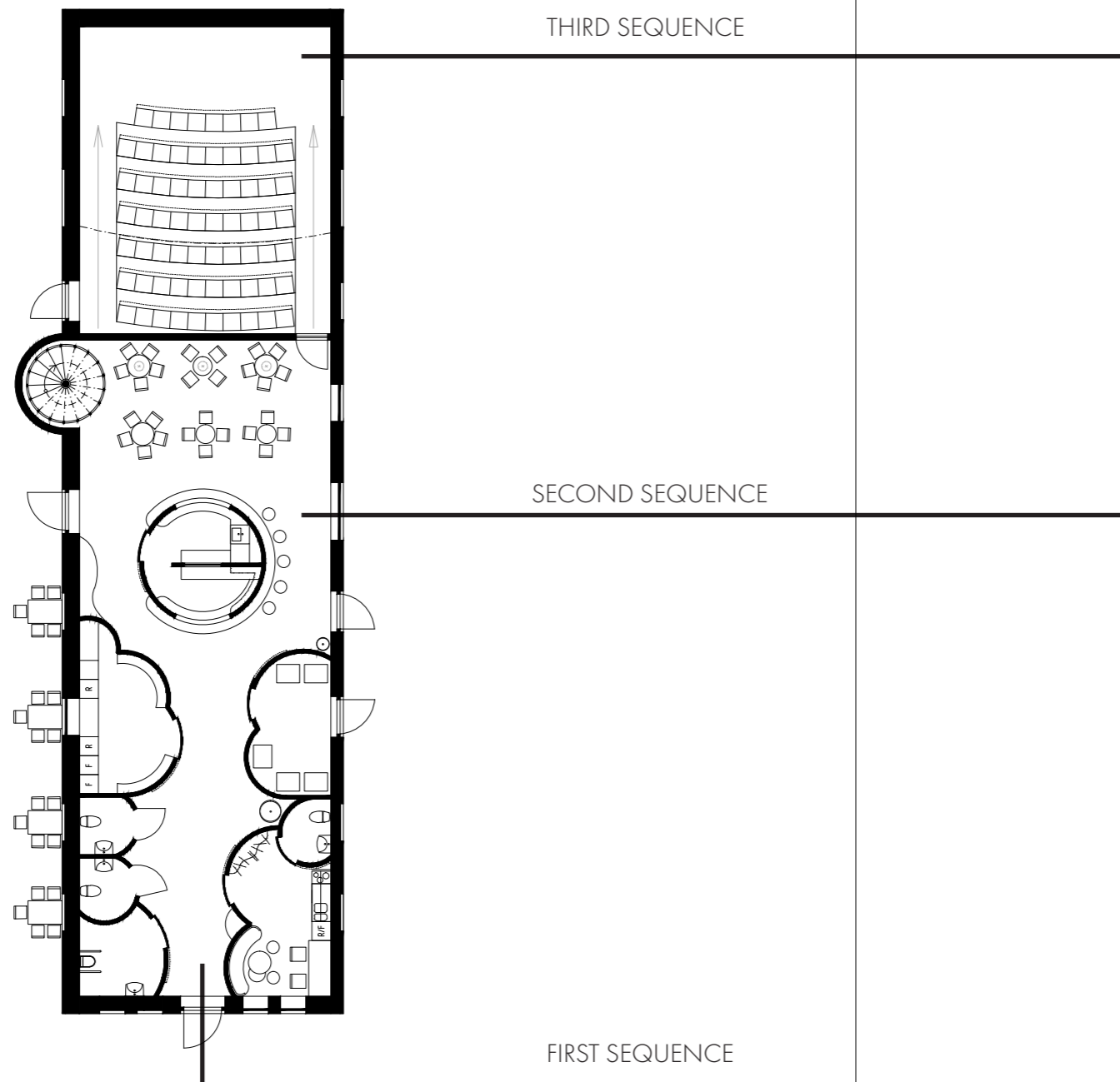
1:200

● THE PROJECTIONIST ● THE MAN ● DAN ● THE WOMAN

DESIGN

MOOD BOARD

This mood board illustrates how I envision the colours in the different sequences. To align with the colour schemes of Wong Kar-Wai and his cinematic universe, the main colours will be red and green, as they are complementary colours and feature in many of his films, including *In the Mood for Love*. Various shades of pink have been chosen because they are adjacent to red on the colour wheel, while blue has been selected to support its neighbouring colour, green. The two colour schemes that best align with the chosen colours are the complementary colour scheme and the analogous colour scheme.



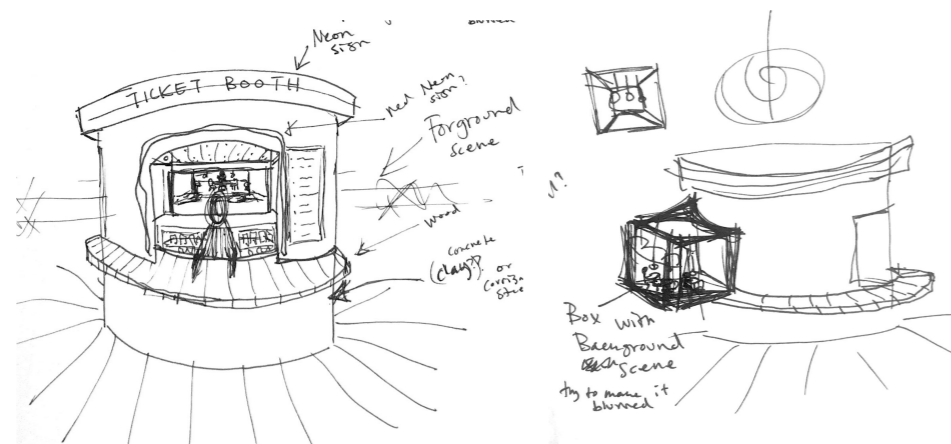
DESIGN

THE MODEL

The model showcases a 3D representation of a scene from the storyboard. Certain aspects are heightened to truly capture the cinematographic qualities of the design. The “frame within a frame” technique is an important element and was a deciding factor in the final design proposal. The model depicts the ticket booth in the foreground, the café in the middleground, and the seating area in the background. The perspectives have been exaggerated for dramatic effect and to emphasise the hierarchy of the composition. The aesthetic of the model shares certain qualities with the storyboard to strengthen the correlation between the two. It also shares the same visual language as the models created while exploring the method.

This model is not a representation of the finished built environment, but rather one way to represent a building. It exists in a universe of its own, alongside the script and the storyboard. Since models in architectural projects do not have to be realistic representations of the finished building, I chose this approach for the representation. In architecture, models may lack texture or use colours and materials that differ entirely from the actual building in order to emphasise certain aspects.

By building the model to illustrate a scene or a specific frame of the film taking place in Bio Slakthuset, it holds different values from many other architectural 3D models; different, but equally important.

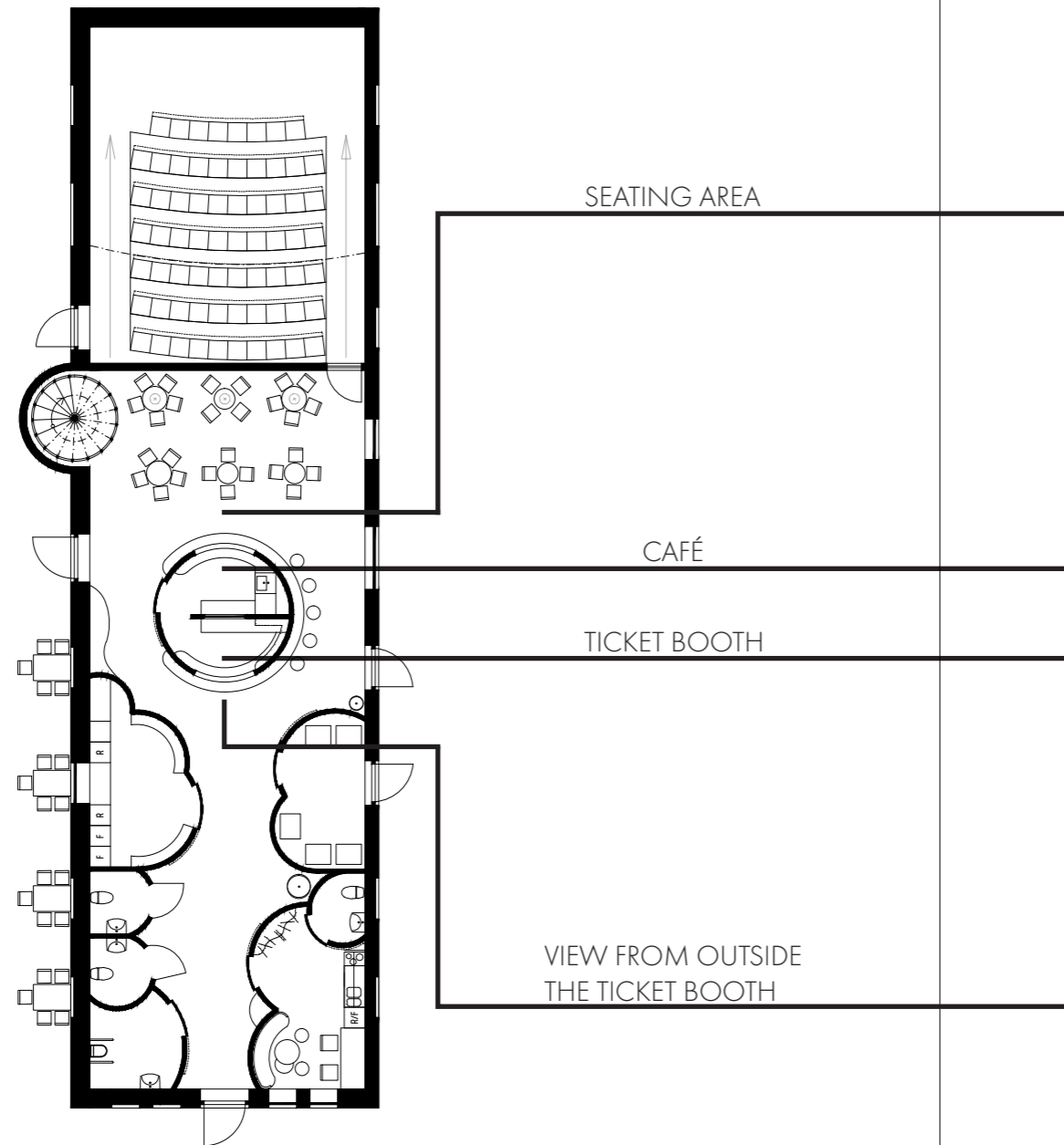


Sketches of the model illustrating the concept of working in different scales and with forced perspectives.

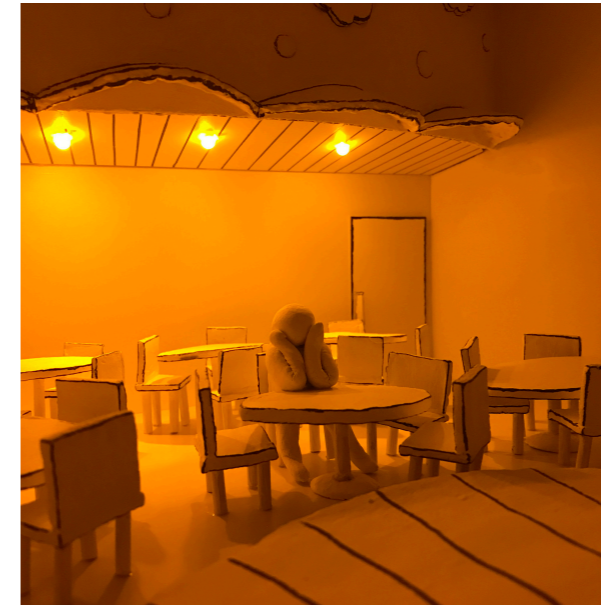


Photographs of the model showing the process of making the two volumes and how adding them together creates a scene by working with composition and the concept of foreground, middleground, and background.

DESIGN



Floor plan correlating to the photographs of the model.



Photographs of the model focusing on the different rooms, aiming to capture the atmosphere of the space.

REFLECTION

Through the research conducted for this thesis and the application of the methodology, it is evident that cinematography can be utilised as a design tool in architecture and architectural representation. Architects already employ various cinematographic techniques, such as colour and composition, often instinctively during the design process. This thesis primarily defines these techniques and adapts them to better suit the architectural practice. One potential addition to the method could have been to incorporate the post-production phase (including special effects, SFX) of the filmmaking process. In the context of architecture, this would relate to renderings and the creation of collages as methods of architectural representation.

Upon applying the method, it became apparent that architecture could also serve as a beneficial tool for cinematography. While much has been written about film theory and cinematography, it proved more difficult to find relevant literature addressing cinematography in architecture in a manner suitable for this thesis. The most useful sources for developing the method were instructional books for filmmakers on the process of making motion pictures. Combined with the architectural design process, these texts made it possible to identify areas where parallels could be drawn between the two art forms. Cinematographic techniques with equivalents in photography or other forms of visual art, such as painting, were the easiest to connect to architecture, while techniques related to film editing, such as how to cut and edit films, proved more challenging to apply. However, it is likely that someone with more expertise in film editing would have been able to establish a clearer connection between the two fields.

Narrative was the primary force driving the thesis and the design forward. The concept of narrative in design remains significantly underrepresented in the field of architecture. However, given that every piece of literature related to film or cinematography referenced in this thesis addressed the concept of narrative, it became evident that it would be difficult to design using cinematographic methods without making narrative the focal point. Narrative-driven design, by its nature, captures the phenomenological aspects of architecture, which, even for architects, are often difficult to define.

Had the design criteria been to create a new building from the ground up, the method might have been applied differently or adapted. However, working with an existing structure brought the design process closer to cinematography, as many film sets are constructed within existing buildings, piecing together different backdrops to achieve a believable environment within the frame.

Finally, how can cinematography benefit the architectural practice? As with any discipline, broadening our perspective and considering different points of view opens up new opportunities to enrich our understanding of the subject. The primary motivation for exploring cinematography in this thesis stemmed from the limitations inherent in architectural representation, which are not present when space is viewed through film. After studying architecture for five years and realising that it cannot be represented as effectively as in film, it became apparent that architecture could benefit from adopting new ways of working. As expressed in *Agencies of the Frame*, the need for architecture to use other disciplines to define itself (Tawa, 2010) is an invitation to further expand the scope of architecture. The final design proposal is simply one manifestation of how the method could be applied in practice. Writing another script or choosing different compositions for the storyboard would have led to a significantly altered final design. Perhaps the greatest benefit of cinematography to the architectural practice lies in its ability to highlight the underlying storytelling potential of architecture and to articulate the intuitive knowledge many architects already possess. By adapting the vocabulary and techniques of film, the instinctive design process used by architects becomes more accessible to those interested in understanding the practice.

REFERENCES

Bio Roy. (n.d.). Om Bio Roy. Retrieved September 26, 2024, from Bioroy: <https://www.bioroy.se/om-bio-roy>

Bjerkendal, G. (2009). Göteborgs alla biografer - en resa i 100 år. Gothenburg: Rundqvist Boktryckeri.

Bong, J. (Director). (2019). Parasite [Motion Picture].

Bramesco, C. (2023). Colors of Film: The Story of Cinema in 50 Palettes. Frances Lincoln.

Brine, K. G. (2020). The art of cinematic storytelling: A visual guide to planning shots, cuts and transitions. New York: Oxford University Press.

Canepa, E., Scelsi, V., Fassio, A., Avanzino, L., Lagravinese, G., & Chiorri, C. (2019). Atmospheres: Feeling Architecture by Emotions. OpenEdition Journals, 1.

Chinateatern. (n.d.). om Huset och arkitekturen. Retrieved September 19, 2024, from Chinateatern: <https://www.chinateatern.se/om-oss/om-china-teatern/huset/>

Effiom, E. (2022, October 6). Architecture in film: modernism, futurism and beyond. Retrieved from Wallpaper*: <https://www.wallpaper.com/architecture/architecture-in-film-through-the-decades>

Furberg, K. (2000). Svenska biografer. Stockholm: Bokförlaget Prisma.

Gamlestadens Fabriker. (n.d.). Historien om Gamlestadens Fabriker. Retrieved September 27, 2024, from Gamlestadens Fabriker: <https://www.gamlestadensfabriker.se/historia/>

Göteborgs Stad. (n.d.). Om Gamlestaden. Retrieved November 07, 2024, from Göteborgs Stad: <https://goteborg.se/wps/portal/start/goteborg-vaxer/hitta-projekt/stadsomrade-nordost/gamlestaden/om-gamlestaden>

Göteborgs Stad. (n.d.). Slakthusområdet – Gamlestaden. Retrieved July 9, 2024, from Göteborgs Stad: <https://goteborg.se/wps/portal/start/goteborg-vaxer/hitta-projekt/stadsomrade-nordost/gamlestaden/slakthusområdet>

Hellerman, J., & Fusco, J. (2023, August 30). The Psychology of Color in Film. Retrieved from nofilmschool.com: <https://nofilmschool.com/color-psychology-in-film>

Higab. (n.d.). Slakthuset. Retrieved Mars 20, 2024, from Higab: <https://www.higab.se/projekt/slakthuset/>

Kalmus, N. M. (1935). Color Consciousness. Journal of the Society of Motion Picture Engineers, 139-147.

MasterClass. (2021, October 1). Film 101: What Is Cinematography and What Does a Cinematographer Do? Retrieved March 4, 2024, from MasterClass: <https://www.masterclass.com/articles/film-101-what-is-cinematography-and-what-does-a-cinematographer-do>

McCormick, C., Walters, J., & Trujillo, C. (n.d.). Schindler's List: What The Girl In The Red Coat Represents, Explained. Retrieved 10 29, 2024, from Screenrant: <https://screenrant.com/schindlers-list-girl-red-coat-meaning-explained/>

Merriam-Webster.com. (n.d.). mise-en-scène. Retrieved february 29, 2024, from Merriam-Webster.com: <https://www.merriam-webster.com/dictionary/mise-en-sc%C3%A8ne>

National Film Institute. (n.d.). Types of Film Shots: 80+ Shots You Must Know. Retrieved November 7, 2024, from National Film Institute: <https://www.nfi.edu/types-of-film-shots/>

Red5studio. (2024, April 11). Okkio Coffee-Nguyen Sieu. Retrieved from red5studio.vn: <https://www.red5studio.vn/chapter/75/Okkio-Nguy%E1%BB%85n-Si%C3%AAu>

Red5studio. (2024, April 16). Okkio Coffee-Xuân Thuỷ. Retrieved from red5studio.vn: <https://www.red5studio.vn/chapter/12/Okkio-Coffee>

S3DA Design. (2024, January 2). The Role Of Color In Architectural Design: Aesthetics And Emotional Impact. Retrieved from S3DA Design: <https://s3da-design.com/the-role-of-color-in-architectural-design-aesthetics-and-emotional-impact/>

Spielberg, S. (Director). (1993). Schindler's List [Motion Picture].

StudioBinder. (2022). The Elements of Composition the Complete Guide: Visual principles for Art, Photography, & Film. StudioBinder Inc.

StudioBinder. (2023, march 23). How to write a screenplay: A step-by-step guide. Retrieved from StudioBinder: <https://www.studiobinder.com/blog/how-to-write-a-screenplay/>

StudioBinder. (2023, October 12). What is a Storyboard? The Fundamentals to Get You Started. Retrieved from StudioBinder: <https://www.studiobinder.com/blog/what-is-a-storyboard/>

StudioBinder Inc. (2016). How to Use Color in Film: 50+ Examples of Movie Color Palettes. StudioBinder Inc.

Tawa, M. (2010). Agencies of the Frame: Tectonic Strategies in Cinema and Architecture. Newcastle upon Tyne: Cambridge Scholars Publishing.

Wong, K.-W. (Director). (1994). Chungking express [Motion Picture].

Wong, K.-W. (Director). (2000). In the Mood for Love [Motion Picture].

Wong, K.-W. (Director). (2004). 2046 [Motion Picture].

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