M. Arch

The Influence of Cinematic strategies on Architectural Design. Towards a Film Institute for Durban

[Dissertation]

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"As arguably the defining art form of the twentieth century,

film has had a profound effect

on both the way **architects envision their work** and the way **the public consumes architecture."**

– Mark Lamster

DECLARATION

Submitted in fulfillment of the requirements for the degree of Master of Architecture, in the Graduate Programme in Architecture, University of Kwa-Zulu Natal, Durban, South Africa.

I declare that this dissertation is my own unaided work. All citations, references and borrowed ideas have been duly acknowledged. I confirm that an external editor was not used. It is being submitted for the degree of master's in architecture in the faculty of Humanities, within the School of Built Environment & Development Studies, University of Kwa-Zulu Natal, Durban, South Africa. None of the present work has been submitted previously for any degree or examination in any other University.

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SUMAIYA YUSUF BHAYAT

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Date

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DEDICATION

This dissertation is dedicated to my Mother. A role model and best friend who dedicated her life to providing for and protecting her family. Your strong personality, amazing work ethic, focus and determination to always pull through no matter what difficulty are admirable characteristics which I will always take with me.

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CHAPTER ONE: INTRODUCTION

1.1 RESEARCH TOPIC

1.1.1 Background

Semiotics is used as a structural tool to understand the process of meaning, for the understanding and interpretation of architecture. Architecture, like other is a system of signs whose meaning is generated from the shared interpretations of the society within which it is created. Shared interpretations (in their variations of place and time) are achieved through a specific mechanism of the interaction of interpretations provided by ordinary users, professionals, as well as the architect. Since the shared interpretations are usually beyond the control of the architect, a strategy has been proposed whereby the architect engages in the process of interpretation through cinematic strategies which, in so doing, will create a meaningful environment **-** architecture. What facilitates our use of architecture is, apart from the possibility of the function of the objects, the meanings connected with these objects, which dispose the viewer to a particular functional use of them. Since architecture is a system of signs, the task is to categorize these signs using cinematic strategies/ principles.

1.1.2 Justification of study

In an era of easy access to knowledge and means on any field of practice, there are many benefits of learning from other disciplines that could potentially enrich one's own field of practice. This dissertation aims to investigate a means that could possibly become trend in the following years of architectural design.

The world of the image, widely studied in the fields of illustration, painting, sculpture, photography, design, filmmaking, etc... plays a significant role in architectural design, thus bringing the architect into studying these fields. In order to determine the dissertations framework and point out how the focal point of this study differentiates from other studies on architecture and cinema, it is important to inform generally about the most common shared fields in relation between two fields which began in 1895 and has turned into an interaction since 1980s. The relationship between architecture and cinema had begun with the first steps of the moving image at the beginning of the 20th century. the late eighteen hundreds capturing everyday events and images of the city." (Webb, M, 1987. p. 05.)

The impacts of such cooperation had been seen especially in the 20s and 30s when architects were examining the potential influence of moving pictures on spectators to promote the 'Modern' movement.

This cooperation has growth improvably until now not only in the contribution of the progress of different thoughts, beliefs, and visions belonging to different decades of this century, but also in the use of representation techniques of cinema for the construction of architect's sphere of imagination. It was really a long interactive evolution for both fields. Throughout

this progression, the world of architecture and cinema have reinforced their junction by learning various intellectual, representational, and practical devices from each other in order to reconfigure their own systems of Knowledge. Several parallel and similar points have been discovered in the design and production processes of architecture and film by using whom one has looked through the other in order to find a field of study dealing with similar subjects, or similar concepts.

1.2 DEFINITION OF THE RESEARCH PROBLEM

1.2.1 Issues inferred by research

How does the Architect create a meaningful environment? The task of the architect is to create a physical environment that goes beyond the architectural form which connotes meanings which are beyond its function. Meaningfulness is a result of the process of interpretation. This process is shaped by society's involvement despite the influence of the designer. The interpretation of forms has its life cycle whereby the form begins to be recognized by people; then different meanings are ascribed to it until finally the form becomes a Montage. A montage as described by Sergei Eisenstein (Eisenstein,S 1940) is the juxtaposition of one image against another, defines film. In the collision of two disparate shots or images, film is able to transcend the nature of the still image and enter into a more direct dialogue with the human mind and spirit. This can be understood as creating a narrative, Narrative can be defined as the abstract concept of the scenario that narrates an idea, a feeling or a concept by organizing a number of components which construct the whole story. (Monaco, J, 1981) It is through a full understanding of this process of interpretation that a different attitude for the designer can be developed.

1.2.2 Aims

The research paper will seek to investigate how to shift the paradigm of current accepted methods of architectural process, using the language of film and the image

1..2.3 Objectives

- To understand the process of meaning formation in architecture.
- To use Semiotics as a methodological tool to comprehend the process of meaning through cinematic techniques.
- To understand how the language of cinema can be used to represent Architecture.
- To understand how cinematic techniques such as:
  - Space – creating perception and emotional state
  - Scene – Creating sequence and continuity
  - Light – Quality, source and colour
  - Movement – Motion perspective, cinematography and illusion

- Montage – Composition and narrative -Can be used as a tool to create meaningful Architecture.

1.3 DELINEATING THE RESEARCH PROBLEM

1.3.1 Delimitation of Research Problem

How does the Architect create a meaningful environment? The task of the architect is to create a physical environment that goes beyond the architectural form which connotes meanings which are beyond its function. Meaningfulness is a result of the process of interpretation. This process is shaped by society's involvement despite the influence of the designer. The interpretation of forms has its life cycle whereby the form begins to be recognized by people; then different meanings are ascribed to it until finally the form becomes a Montage. A montage as described by Sergei Eisenstein (Eisenstein,S 1940) is the juxtaposition of one image against another, defines film. In the collision of two disparate shots or images, film is able to transcend the nature of the still image and enter into a more direct dialogue with the human mind and spirit. This can be understood as creating a narrative, Narrative can be defined as the abstract concept of the scenario that narrates an idea, a feeling or a concept by organizing a number of components which construct the whole story. (Monaco, J, 1981) It is through a full understanding of this process of interpretation that a different attitude for the designer can be developed

1.3.2 Definition of Terms

Meaningful: in the context of this dissertation, this is defined as having a serious, important, or useful quality or purpose that surpasses the practical primary function of the built environment.
Perception: the act or area of apprehending and understanding by means of the senses or of the mind; cognition.
Space: The area in which we design and live, as defined by boundaries.
Form: The shape and/or arrangement of elements.
Shot: A single, uncut strip of film.
Sequence: A series of shots connected by transitions.
Light: The natural agent that stimulates sight and makes things visible
Movement: An act of moving
Scene: A sequence of continuous action in a play, film, opera, or book.
Narrative: Aspoken or written account of connected events; a story
Montage: the technique of selecting, editing, and piecing together separate sections of film to form a continuous whole

1.3.3 Stating the assumption

Assumption can be made that the process and techniques through which a film is created can provide something useful to the realm of architectural design. The process of creating a film - the planning, constant revisions during both filming and editing, and critiquing the finished product – are not dissimilar to many of the processes that occur in the creation of architecture. One obvious area where fi lm can provide a richness of both information and analysis is in the breadth of material it can capture in the documenting of building sites and their surrounds. Cinematic techniques used in film to convey and enhance narrative – by drawing focus, setting both the scene and an emotional register– can provide invaluable material for the design phase.

1.3.4 Stating key questions

1.3.4.1 Primary question

How can the strategies used in film inform the process of Architectural design?

1.3.4.2 Secondary questions

- What are the strategies used in cinema?
- How can these strategies be used architecturally to create a narrative/montage?
- How can the Application of Montage be used to create meaningful Architecture?

1.4 KEY CONCEPTS AND THEORIES

1.4.1 Introduction to key concepts

This dissertation will examine three key concepts which are critical to understanding the research topic and questions. The breakdown of these shall correspond with the theories explored later in the literature review component. These concepts are: Architectural Semiotics – Meaningful Architecture, Film as Composition and The Dynamics of Architectural Design.

1.4.1.1 The Theory of Montage and its application to architecture

It can be argued that Architecture should serve a far greater purpose than fulfilling function and program but also be a tool that can aid in the improvement of the greater community and society as a whole. Montage (montäzh', Fr. môNtäzh'), can be described as the art and technique of film editing in which contrasting shots or sequences are cpmbined together to create a greater meaning than the individual elements themselves. used to effect emotional or intellectual responses. It was developed creatively after 1925 by the Russian Sergei Eisenstein; since that time montage has become an

increasingly complex and inventive way of extending the imaginative possibilities of film art. In still photography a composite picture, made by combining several prints, or parts of prints, and then rephotographing them as a whole, is often called a montage or a photomontage. Sergei eisenstain (1948) who defined the term montage believed that it could be applied to architecture in the form of a narrative, where the building itself creates a story as the user moves through it and experiences the spaces creating scenes and constructing an experience of their own. This can be understood as creating a narrative, Narrative can be defined as the abstract concept of the scenario that narrates an idea, a feeling or a concept by organizing a number of components which construct the whole story. (Monaco, J, 1981). It is through a full understanding of this process of interpretation that a different attitude for the designer can be developed.

1.4.1.2 The strategies used in film and its application architecture

The use of cinema as a representative tool for architecture and the application of its techniques in the hands of an architect to formulate a new design process constitute most of the ways penetrating from the field of cinema to the field of architecture. On the other hand, the effects of architecture on cinema have been structured with a shallow agreement that architecture is just a setting and a lived stage for cinema. Most of the time, these assumptions have limited the attempts transferring the ability that is developed in one medium into another one. To uncover a new interaction, point between cinema and architecture, this study will focus on a general concept at the intersection of architecture and cinema offering a framework with a critical approach into the subject of “Montage”. It will discuss the importance of the fundamental cinematic organization from the view point of an architect. This will be done by using the principles of movement, light, space and scene which will be further investigated in order to create a montage or architectural arrangement

The act of creating architecture is a kind of design process in which the arrangement and the organization of architectural elements are promoted in order to solve a spatial problem in response to conditions of function, purpose, form and context. According to the usual meaning of the word, “architecture is the art of constructing, ordering and ornamenting buildings in conformity and practicality with plans drawn beforehand. (Gilson, 1966) Not only does architecture provide a physical shelter protecting us from environmental conditions, it also creates an orderly arranged framework for our activities by expressing symbolic or ethical values. In lessons of “Scenic Architecture”, Allsop (1997) proposes that Architecture does provide the scenery for people’s lives, and that scenery affects the way they live, he states that architecture helps to create an atmosphere. It may be respectful or frenetic, cowed or complaisant, but what architects design most certainly affects the way people can live and feel. (Allsop, 1997) Moreover, Beatriz Colomina describes architecture as the creation of spaces intentionally taking into consideration the users movement and perception. For Colomina, she argues that architecture is not simply a platform that accommodates the viewing subjects. It is a viewing mechanism that produces the subject. It precedes and frames its occupants. (Colomina, 1994)

1.4.2 Introduction to key theories

This dissertation will examine three key theories which are critical to understanding the relationship that can be established between cinema and architecture. These are: Einstein's Montage Theory, Perception and Representation. These three theories are to be investigated and understood so to relate them back to the key concepts and ultimately the key questions.

1.4.2.1 Einstein's Montage Theory

Sergia Eisenstein believed that film montage could create ideas or have an impact beyond the individual images. Two or more images edited together create a third meaning that makes the whole greater than the sum of its individual parts. "Sergei Eisenstein, practiced what is known as dialectical montage which is a sequence of shots where the shots appear to collide forcing a viewer to engage their powers of reason to create the necessary connections that bring meaning. Sergei Eisenstein defined the term MONTAGE and was its most passionate defender, A film can present a fragmented data set with confidence, as the human mind *has no choice but to construct a whole.*

1.4.2.2 Theory of Perception

Perception can be defined as the sequences of psychological processes by which people's brains recognize, organize, synthesize, and give meaning to the sensations which are received to the sensory organs from environmental stimuli. (Sternberg, 2003, p. 534). Perception plays an imperative part in the psychology of human life and how we see and experience it. Perception is part of our sensory experience and involves our recognition of stimuli within the environment and how we respond to these stimuli in our actions. This perceptual process gives us the opportunity to receive key information about characteristics and elements of our environment that are crucial to our survival as humans. (McLeod. 2007) Perception involves all senses; sight, touch, hear, smell and taste experiences. The Gestalt theory of visual perception came about after the first World War by German psychologists, Max Wertheimer (1880 -- 1943), Wolfgang Koher (1887 -- 1967) and Kurt Koffka (1886 -- 1941). The theory bases its understanding on the concept that we as humans perceive objects as well-organized patterns rather than separate component parts. The "whole" that the observer sees is something that is more structured and cohesive therefore it reads easier to the visual eye than a group of separate particles. The key findings in the Gestalt theory of visual perception is that the observer's eye utilizes the idea of "grouping," or how it interprets a visual field or issue in a certain way. The key factors that affect the „grouping" process within the Gestalt theory are; *„proximity'* which is how elements are perceived as being grouped together due to their

closeness, _*similarity'* which is elements that tend to be similar and therefore are grouped together, _*closure'* which is elements that are grouped together if they complete a pattern and lastly _*simplicity'* how items are organized into figures according to symmetry, regularity, and smoothness.

1.4.2.3 Theory of Representation

The theory of representation is to use symbols or signs that take the place of something else or stand in for something. It is through representation that people are able to organize the world and reality through the act of naming its elements (Mitchell. 1995). Many philosophers have regarded man as the representational animal, Aristotle for instance considered that all the various modes of representation from verbal, visual, or even as far as musical were all natural to human beings and thus this was one of the elements that distinguished man from animals, the pure ability to create and manipulate signs. (Mitchell. 1990) Plato, different to Aristotle, he was more cautious in his interpretation. He perceived literature as a representation of life but at the same time, it was these representations that created worlds of illusions leading one away from the "real things". (Hall. 1997) Plato described the theory of representation to be quite similar to that of contemporary media, it intervened between the user and the real, creating a sense of illusion that would seemingly separate its connection to the "real things". The theory of representation often played a key role in the understanding of literature, aesthetics such as Art and semiotics (signs).

Aristotle describes how humans from a young age have an instinct for representation and how we are more imitative and learn our first lessons through interpreting and imitating things. He also defines representation in three ways: **The object** which is the symbol being represented, **the manner** which is the way this symbol is being represented and **the means** (Mitchell, 1995) which *the material that is used to represent it*. The most crucial aspect of representation lies in the relationship between the material and what represents it. In the history of human culture, it is noticeable that people have continued to become dissatisfied with languages ability to express reality and due to that, new modes of representation were developed. There was a need for new ways to construct reality due to the knowledge of reality being through representation and thus arose the contrasting and alternative representational modes of abstraction, realism and modernism, amongst many others.

This theory of representation can be related to both cinema and the built environment. Architecture in essence, is a symbol that communicates to the viewer sense of that place, the period it was designed and built, the people and the context it serves. Buildings however represent much more than practical and functional space for the immediate users, but have identity, cultural and symbolic characteristics. With the techniques used in cinema, the idea that is visualized is then physically portrayed, therefore translating the representation of an idea.

1.5 RESEARCH METHODOLOGIES

The research findings will provide the foundation for the creation of a conceptually strong, effective and efficient design. All of the research, whether it be primary or secondary, was conducted in order to provide answers for the aforementioned research questions, all of which are asked in an attempt to provide a clear framework within which the proposed building will be designed, the questions focused on investigating how can the strategies used in film, can inform the process of Architectural design and the first step was to ask about the different strategies used n cinema that could be linked to architecture, and how they can be applied to architecture and finally how can they be used to create a montage

1.5.1 Qualitative Research

Qualitative research methods at are pertinent to the topic, concept/theories and vision carried out in this dissertation. The literature review was considered as the key research as the findings from the review began to inform the necessary precedent studies, case studies, to investigate, as well as the appropriate interview questions that were carried out with relevant individuals/organizations. The key findings of this qualitative research component informed the appropriate architectural intervention and program.

1.5.1.1 Literature Review

Through the exploration of the literature review, through a general understanding and consensus of architectural environments and the perception of cinema, these two relationships were critically analyzed. This provided an architectural understanding for both the form and facilities required.

The secondary data sources included various published materials namely books, journal articles and internet pages. In addition, non-published items, such as other theses, design and construction drawings were also analyzed.

1.5.1.2 Precedent Studies

A major section of the qualitative research conducted investigated existing international and local precedent architectural projects. The projects were chosen based on how well the cinematic elements came through in the architecture itself and how the building creates a form of montage, the precedents were also chosen from a program perspective to find out the required spaces for the proposed typology. The appropriate aspects of the chosen designs were examined through an analysis of published journals, books, photos and written descriptions.

1.5.1.3 Case studies

The study of buildings within the same typology or in a similar socio-political, climatic or geographic setting was crucial in order to. The AFDA school of Motion Picture and Performance studies in Durban was critically analyzed and compared and it is out of these findings that conclusions have been drawn. Conclusions which that informed the design of an appropriate architecture.

1.5.1.4 Interviews

In addition to this critical analysis of the case study designs a number of interviews were conducted. For the intention of this research Purposive Sampling particularly heterogeneous purposive sample was chosen when choosing the individuals for the research because the aim is to get as much insight about elements of film and architecture. These interviews served as data gathering exercises which complement the case studies, while providing a more complete set of findings. The interviews were conducted with both film professionals as well as Architects so that a comparison and interlinking between the fields could be discovered from the interviews. The chosen professionals in the field of Architecture were individuals with vast experience and knowledge within the field, some of whom have over 25 years in the field, are familiar with the aims of this dissertation and whose idea and theories of place making is influential to this research.. The Chosen individuals in the field of film are from the AFDA school and one of whom is the head lecturer in film directing who allowed me the privilege of sitting into a directing class, another individual chosen, is the lecturer in screenwriting and directing and spent an entire day with me allowing me to participate in conversation about my research as well as a tour of the AFDA facility. Other Film professionals included, a successful AFDA alumni and founder on Cignil Hill film and a Vega school alumni and founder of KZN media, along with a few other film makers from Cape Town film maker from Cape Town. A lecture on directing performed by one of the lecturers from the AFDA School will also be attended in order to learn about film making as a director which in this dissertation is being compared to an architect.

1.6 CONCLUSION

The basis of this introductory chapter was to introduce a distinct structure on the background, motivation/ justification of the study, aims and objectives that will be addressed in the dissertation. As well as stating the assumptions, a hypothesis and key questions for the study and creating a break-down of each of the chapters. Each of these chapter break-downs includes a brief explanation of literature that will be investigated. Finally the various concepts/ theories and research methods have also been defined. In the following section the review of various literature that is pertinent to the dissertation topic, concepts and theories, as well as key questions shall be investigated.

CHAPTER 2: THEORETICAL FRAMEWORK

2.1. Introduction

This chapter will set out the theoretical and conceptual framework for the research. The theories selected are interrelated and are aimed at investigating relationships between cinema and Architecture. Thereafter, the ways in which cinema can be used to inform the process of Architectural Design. The study examines the three key concepts which address the research topic, questions, and objectives. Thus, each concept will be broken down diagrammatically to show the understanding of how they relate to and address the research questions and theories.

2.2 The Theory of Montage and its application to architecture

The theory of Montage shall explore a means of communication by creating a narrative that will show how architecture can become more than a building that serves only to function by investigating how a montage can be applied to architecture to create a narrative. Having developed the theory of montage, which is characterized as a process of assembling words and images in order to establish specific meanings, Eisenstein was now confronted with the problem of precisely conveying these new concepts. (Eisenstein, S 1942 p. 32) Five specific categorized levels of montage were developed by Eisenstein; four of which (metric, rhythmic, tonal, and overtonal) could be described as purely physiological, while the fifth (intellectual) was to direct not only emotions but the whole thought process. (Eisenstein, S 1942 p. 32) These five categorized levels of montage establish relationships between separate film fragments which, through their juxtaposition, create meaning in the mind of the viewer.

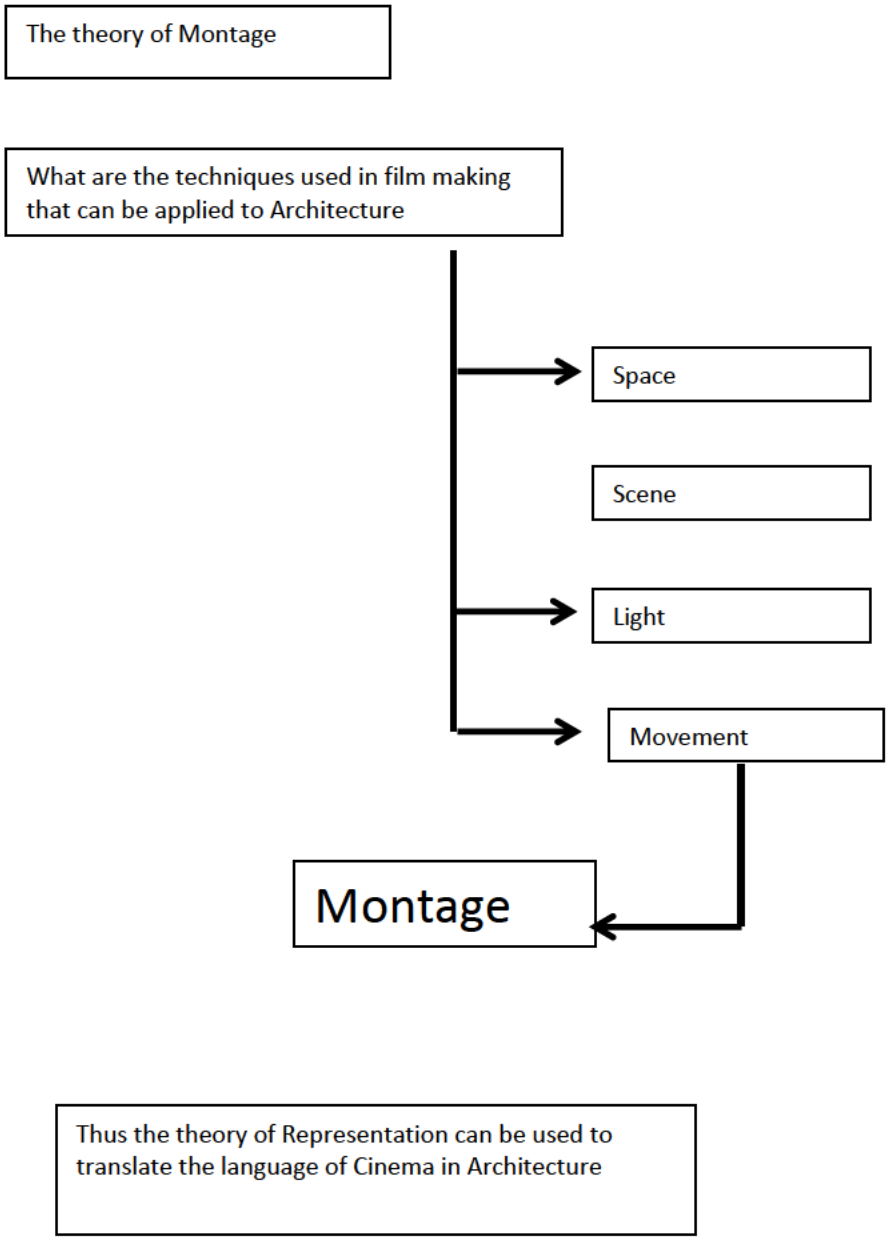


Figure 2.1 Author, 2016

2.3 The strategies used in film and its application to architecture

This study will focus on a general concept at the intersection of architecture and cinema offering a framework with a critical approach into the subject of "composition". It will discuss the importance of the fundamental organizing elements of architectural design and their compositional principles in cinematic organization from the view point of an architect.

The examination of the theoretical writings of Bernard Tschumi reveals several distinct concepts which relate to the montage theories developed by Eisenstein. These concepts were organized into a series of three identifiable e structures (Programmatic, Operative, Formal) each structure relating to one, or more, of the five methods of montage. (Tschumi, B 1981, p. 9) The following i s a description of those structures, each with it s particular set of conceptual elements.

Architectural product can be defined as “the final shape of the edifice plus visual qualities like size, color, texture, position, orientation and visual inertia articulating the sense of three-dimensional mass or volume”. (Agrest, D, 2000, p174) Alternatively, it can be defined in terms of solids and voids including the interior and exterior as “the manner of arranging and coordinating the elements and parts of a composition so as to produce a coherent image”. (Agrest, D, 2000, p174) Composition, defined as the orderly arrangement of elements, enables the organization itself to be the final product of architectural design. In Francis Ching’s terms, architectural product is the “formal image” and “spatial definition” (Agrest, D, 2000, p175) of an architectural program devised with respect to the fundamental principles of architectural design.

Additionally, such statements are also relevant to cinema, due to the fact that the arrangement of the elements of a composition is not only the main subject of architecture, but also affects the perceptional and evolutional criteria of the cinematic experience. It shapes the basics of design in cinema and, if used effectively in filmic composition, has the potential to differentiate the narration and thereby the film. In means of composition, the object of cinema and the object of architecture can be pointed out as to display similar qualifications and share similar ordering principles as well. Therefore, it can be claimed that the fundamental principles of architectural design can be operated in both cases.

Sergei M. Eeisenstein’s 1938 essay (published in English in 1989) titled Montage and Architecture is considered to be the fi rst attempt to make the connection between montage and architecture (Deriu, 2007). Eeisenstein noted the cinematic quality of ancient architecture as the precursor of montage in film. The first association of montage to the creation of architecture is the cinematic quality of architecture as its occupants move through space. In early modern architecture, this relationship is more implied. Beatriz Colomina (1992) suggested that a house by Le Corbusier is “no more than a series of views choreographed by the visitor, the way a filmmaker effects the montage of a fi lm” (Deriu, D, p.114). Later, Bernard Tschumi had also adopted methods from the cinema to architecture. Other than the relationship between montage and architecture established specifically through film, there are recent discussions that look at montage and architecture from a different perspective. Essays by David Deriu and Detlef Mertins examined the relationship of montage with architecture at the early modern era when montage is extensively discussed in Benjamin’s writings. (Deriu, D, p.114)

Mertins (2011) argued that Benjamin’s understanding of montage with architecture is comparable to the association of montage with the camera. Architecture is an ‘optical instrument’. Just as the camera can help the masses to discover the ‘optical unconscious’ by making things analyzable through isolation, architecture allowed an ‘expansion of vision’ as well (Mertins, 2011, p.124-125). Here, architecture is the instrument that allows a montage operation on the city. It ‘provides opportunities to crop, cut, reframe and abstract’ (Mertins, 2011, p.130). An estranged and fragmented
view of the city is created as the masses venture through these montage structures.

Selected techniques used in Cinema that are space, scene, light and movement will be studied further to compose a Montage and be applied to Architecture.

CONCLUSION

Architecture and the built environment is the platform that we often connect with one another. We share our narratives and daily undertakings and thus our collective memories and experiences are preserved here. The built environment is the art that illustrates and captures the essence of the people, place and period - a *'symbol'* and vision of the society. Each age has its own essence, different to any other, to which Architecture can and does express/pay homage, which in principle embodies cultural movements (Snodgrass, A & Coyne, R. 2006; 4). This then requires the

great significance of *'meaning'as* it plays such a crucial role in how we experience and live our lives. The aim of the literature reviewed in this document will be to investigate how the arrangements of elements using the cinematic techniques to create an architectural composition can contribute to the experience of a space. The elements will further be investigated and compared to both cinema and architecture to find a parallel.

CHAPTER 3

3.1 CHAPTER OUTLINE

This chapter is a review of literature pertaining to the main research topic and questions. It lays a foundation for understanding existing research dealing with cinematic strategies; with particular emphasis on the how the language of cinema can be used to represent Architecture. The literature bridges a number of academic disciplines, from architecture and design to sociology and psychology, to inform an appropriate architectural typology and intervention.

The works of accomplished authors/theorist such as Bernard Tschumi, Jean Nouvel Juhani Pallasmaa, Dr Sabine Marschall, Christian Norberg-Schulz amongst other key theorist shall be investigated to give the research dissertation a stronger theoretical framework and grounding.

3.1.1 introduction

This section of the literature review is to understand the purpose of architecture and the symbol it portrays within society and how Architecture can be used as a language of communication through means of a narrative. The work of Sergei Eisenstein (1942) and Bernard Tschumi (1981) will be looked at to understand the theoretical interplay of film and architecture and how the theory of montage can be used to create a narrative.

3.1.2 Architecture as a language of communication through Montage

Space, Event, Movement; The relationship that gives meaning to architecture. Abstracted from a user or a context, a building has no meaning.
There is no such thing as a neutral space. Architecture does not exist without something that happens in it. Our perception of architecture depends on the activities that take place inside it. The space is transformed by events." (Tschumi, B 1981, p. 10)

Sergei Eisenstein is a father of the montage of attractions. In 1923 he explain in his essay that: An attraction (in our diagnosis of theatre) is any aggressive moment in theatre, i.e. any element of it that subjects the audience to emotional or psychological influence, verified by experience and mathematically calculated to produce specific emotional shocks in the spectator in their proper order within the whole. These shocks provide the only opportunity of perceiving the ideological aspect of what is being shown, the final ideological conclusion. (Eisenstein, 2009a, p.30)

Montage is a combination of the compositional generalization about the image and the image itself: a purposeful 'fusion' of compositional elements together with a generalized 'contour' of the image.(Eisenstein, 2010, p.4) Shot was broken into fragments. The juxtaposition of two details produces a representation of another, the psychological. For example, water and eye signifies 'to weep', representation of an ear next to a door means 'to listen', mouth and bird signifies 'to sing'. Eisenstein pointed also that the shot is by all means a montage element. It is a montage cell. And what characterizes the shot is a conflict between two neighboring fragments. He distinguished the conflict of:
graphic direction (lines),
shot levels (between one another),
volumes,
masses,
spaces etc.,
close-ups and long shots,
different directions of graphic symbols,
conflict between light fragment and dark.
Conflict should appear not only within the shot but also within the frame. In his essay 'The Dramaturgy of Film Form (The Dialectical Approach to Film Form)' he described montage as not an idea composed of successive shots stuck together but an idea that DRIVES from the collision between two shots that are independent of one another. (Eisenstein, 2009d, p.95)

Metric Montage

Metric montage refers to the length of the shots relative to one another. Regardless of their content, shortening the shots abbreviates the time the audience has to absorb the information in each shot. This increases the tension resulting from the scene. The use of close-ups with shorter shots creates a more intense sequence (Eisenstein, 2009e, p. 117).

Rhythmic Montage

Rhythmic montage refers to continuity arising from the visual pattern within the shots. Continuity based on matching action and screen direction are examples of rhythmic montage. This type of montage has considerable potential for portraying conflict because opposing forces can be presented in terms of opposing screen directions as well as parts of the frame. (Eisenstein, 2009e, p. 118).

Tonal Montage

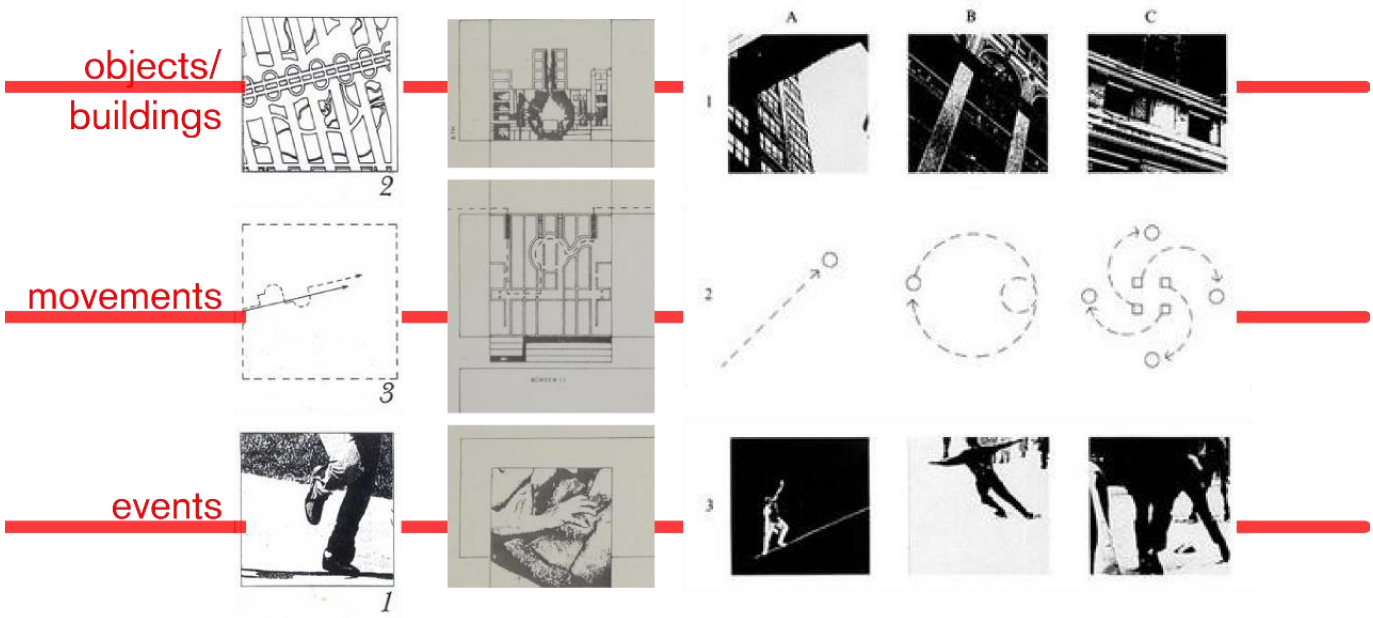
Tonal montage refers to editing decisions made to establish the emotional character of a scene, which may change in the course of the scene. Tone or mood is used as a guideline for interpreting tonal montage, and although the theory begins

to sound intellectual, it is no different from Ingmar Bergman's suggestion that editing is akin to music, the playing of the emotions of the different scenes. (Eisenstein, 2009e, p. 119).

Intellectual Montage

Intellectual montage refers to the introduction of ideas into a highly charged and emotionalized sequence. (Eisenstein, 2009e, p. 120).

The unique quality that Architecture possesses, as implied by Bernard Tschumi (1981), is the way it materializes its



concepts and the way it expresses, both socially and visually. It also states that Architecture links to events in the same regard as the policeman to the criminal, the doctor to the patient, order to chaos etc.

He further suggests (Tschumi, B 1981, p. 11) that actions can qualify spaces the same way that spaces qualifies actions, and Architecture and events are always transgressing each other's rules, whether its explicitly or implicitly. He states that these rules or organized compositions may exist, however, they will remain points of reference. A building is a point of reference for the activities set to negate it. A theory of architecture is a theory of order threatened by the very use it permits, and vice versa. (Tschumi, B 1981, p. 11)

Firstly, there is a violence that all people impose on spaces by their very presence, by their intrusion into the order and control of the architecture itself. Entering a building is a delicate act, but it contravenes the balance of a precisely structured geometry. Architecture is therefore only an organism that is passively engaged in ceaseless association with its users, whose bodies disobey the carefully established order and architectural thought." (Tschumi, B 1981, p. 11)

Figure 3.1 "Bernard Tshumis space event movement", Emperor's New Architecture, accessed 20 April 2016

Similarly, Sergei Eisenstein (Eisenstein, S 1942) states that there is perceptual interchange that happens between mobility and immobility. There is a sort of dynamic mobility that is

involved when watching movies, even if the spectator is not moving and is static, he states that the immobile spectator moves along an imaginary path, travelling various sites an times. Their fictional movement connects moments and places.

Film gains the possibility of such a visual voyage from the architectural field, for the person who wonders through the building or a site also absorbs and connects visual spaces. In this sense, the person viewing the architectural space is the prototype of the film spectator. Thus, as Eisenstein claimed elsewhere, the cinematic path is the modern version of an architectural itinerary.

Eisenstain says that an architectural ensemble is a montage from the point of view of a moving spectator, just like cinematographic montage's, is to 'link' in one point – the screen – various elements (fragments) of a phenomenon filmed in diverse dimensions, from diverse points of view and sides. (Eisenstain , 1942)

The film camera could provide a new way of thinking about and looking at the city; a way to critically apprehend what seems to have become culturally invisible; to achieve an understanding of self in relation to others in the social space we inhabit.

Figure 3.2 "Dialetical Montage"

The camera intervenes with the resources of its lowering and liftings, it' interruptions and isolations, it's extensions and accelerations.

Fragmentation becomes a way of understanding the modern world, montage becomes its essential tool.

Sergei Eisenstein believed that the introduction of discontinuity in the montage would force the spectator to engage an internal work of interpretation and thinking, thus propelling him into active thinking."

(Eisenstein, S 1942 p. 39)

Montage is not simply the technique of cutting shots together, it is a dynamic system for the expression of ideas. Aaron Taylor Harvey / Cinematequetonics

3.2 CREATING A NARRATIVE

3.2.1 Introduction

The aim of this section is to understand the theory of representation to translate the language of Cinema in Architecture. The techniques used in cinema are explored to see if they can be translated architecturally to create a narrative or montage that will thus create meaningful Architecture. The literature reviewed assisted in creating an understanding of the theoretical interplay of film and architecture and how the theory of montage can be used to create a narrative. The elements being explored are space, scene, light, and movement, with the latter being the most important element based on the idea that an architectural ensemble is a montage from the point of view of a moving spectator. (Eisenstein, S 1949 p. 45) The assumption is that the following elements, if used as a design tool in Architecture, will have the capability to create a design that communicates meaning and a story just like film creating a montage. The aim would be the idea of representing a person moving through a building like a camera through a set, thereby creating a "picturesque" path and a meaningful space. The application of narrative structure principles to an architecture project involves a thoughtful arrangement of program, circulation, and sequence of spaces to create a certain experience for the project user. A structure already exists in the experience of an architectural project, from the first entry to the site, leading to the eventual purpose of visiting the site. It is in embedding meaning in that experience that a narrative structure begins to develop. There must be an approach developed in the sequence of how elements are revealed or hidden within a project. This structure can be enhanced by the integration of a web of symbols. This group of symbolic objects can enhance, as well as support the structure and development of the narrative. The work of Tawa (Tawa, M 2010) and his book "Agencies of the Frame" and Schonings Manifesto for cinematic Architecture will be studied to further understand the theoretical interplay of film and architecture and how the theory of montage can be used to create a narrative.

3.2.2 Movement in Cinema and Architecture

Movement is found in nature, in all living organism, even static elements change with time and offer a sense of movement when exposed to elements such as wind, rain, or different temperatures.

In this project, movement is applied to the construction of perspectival space. A combination of differentiated elements along with a sequence of different spaces suggests a kind of architectural motion.

Movement is enhanced with continuity, sequence and fluidity.

Continuity – Elements appear in a sequential manner.

Flow – A continuous and smooth movement that may carry a directional change caused by external forces.

In cinema, the camera is able to move through space, like humans do frame. In contrast, architecture defines space, which creates an experience. This is why movement is important in cinema, it not only dictates how and what one may see but defines the overall experience. Pascal Schoning (Schoning, P 2006), in his *Manifesto for a Cinematic Architecture*, reinforces this idea, describing space as something we experience through our senses - in both cinema and architecture primarily through sight and sound.(Schoning, P, 2006) Sight, being the primary sense in cinema, is subject to the perception of motion and thus the movement of the camera is as important as the way in which one may move around an and architecture primarily through sight and sound.(Schoning, P, 2006) Sight, being the primary sense in cinema, is subject to the perception of motion and thus the movement of the camera is as important as the way in which one may move around an architectural space. The movement of the camera or the movement of subject in front of the camera – or the lack of either – creates an experience that will be perceived differently based on the positions, angles and motions in the scene.

Tawa (Tawa, M 2010, p 116) states that the "Camera position and movement in relation to place and action are crucial". He suggests that a still camera set frontally and normal to the action that moves parallel to its picture plane will convey a very different regime of visuality and looking than a camera that is set high, shooting obliquely at an acute angle and moving diagonally in relationship to the setting and action. (Tawa, M 2010, p 116) These are points that Deleuze expands upon mentioning that each shot will have its own focus and spatiality during its own duration (Deleuze, 2005). While discussing the experience of architectural space, Schoning (Schoning, P 2006), comments that one may have to walk through a space to fully experience it. "The time it takes to do this gives the spectator another consciousness of the space. But of course that's not all, because the events that happen during our passage through the space

influence their perception of it" (Schoning, P, 2006, p. 21) Sergia Eisenstain also states that, much like watching a film where the (im)mobile spectator moves across an imaginary "path", traversing multiple sites and times, this fictional navigation connects distant moments and far apart places. He states that film inherits the possibility of this spectoral voyage form the architectural field because a person who wonders through a building or site also absorbs and connects visual spaces.

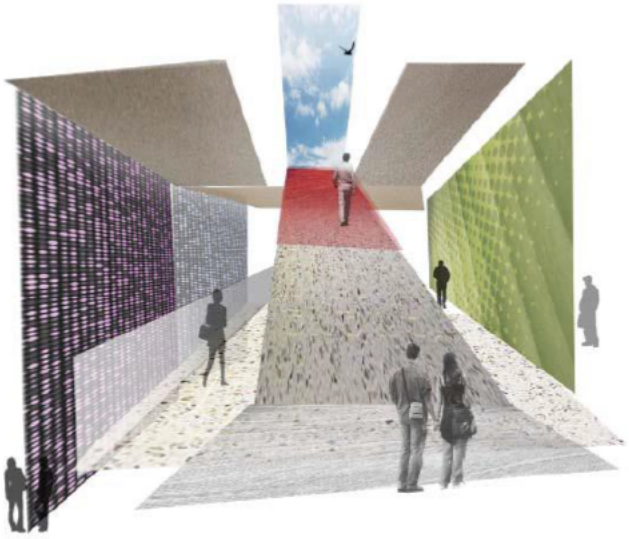


Figure 3.3 "movement and perspective" Author

Figure 3.4 Static elements in architecture can suggest motion, Schoning, Accessed April 2016

The user of architectural space is the prototype of the film viewer, thus the filmic path is the modern version of an architectural itinerary. (Eisesnstain, 1980)

Movement is situated at the very core of architecture and practice. It is difficult to imagine architecture without moving through it. As soon as one begins to move, the built environment begins to change and transform.

A building's contours immediately shift, adjust and recompose into new forms as one approaches from a distance. When the building is at arm's length, one may be no longer able to perceive its overall shape but can acquire new information in recompense: details of surface texture that were previously invisible, a range of architectural stimuli registered not just by the eyes, but by the fingertips, ears and nose, or underfoot. movement ensures a allows contemplation of the details of architecture.

3.2.3 Space in Architecture and Cinema

Space is also an area in which there is a crossover between architecture and cinema. Both disciplines are firmly anchored to location and setting, yet each engage and construct their worlds with distinctive characteristics and opportunities.(Tawa, 2010) This relationship with space is riddled with potential in its organization, and composition, as well as the use of patterns, tensions and energies for narrative, semantic, pragmatic or expressive ends.(Tawa, 2010) How these are then used to frame the idea or subject is what allows cinema and architecture to link their worlds and human experience together.

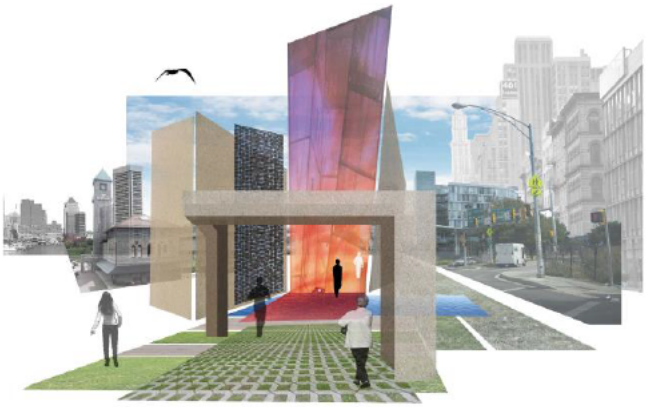


Figure 3.5 "visual interpretation of threshold" Author, 2016

Architecturally, the term space has a greater importance than it does in cinema, as it is one of the

key building blocks whilst simultaneously being final product. The architect's creation and manipulation of space creates the architecture that is then inhabited by the occupant. Tawa says that geometric systems are used in architecture to frame human occupancy "in the interstices and folds of form". (Tawa, M 2010, p 117) His use of words, such as 'interstices' and 'folds', reveals his position on the permeability and flexibility of architectural space – something he refuses to see as having hard boundaries. This is in keeping with his view of the cinematic frame and that the opportunities both afford are dynamic and open to change.

Tawa's (Tawa, M, 2010) thoughts of a frame in architecture do not only stem from the nature of his book but also from his ideas about architectural plans. He relates architectural plans to that of a frame, an architectural frame of a site and, in particular, its relationship to landscape and setting. However, his frame is more focused on looking after and searching for these relationships than looking at them directly. These can be seen in the strategies and structures that interact with the ground; how aspects are literally framed – how they are visible or invisible, how they are overlooked, or how they engage with context and situation, be it urban context or natural light. (Tawa, 2010)

3.2.3.1 Spatial boundaries and thresholds in Architecture

Every day we move across a number of special boundaries, moving or transitioning from one zone to the next. We live in transition. Architecture is built on this transition and thresholds interrupt spatial boundaries for a transition from one zone to another. The occurrence of the threshold thrives on spatial uncertainty. Thresholds organize transitions and open up spaces while the also are read that as part of the boundary and can be recognized as a barrier. Spaces that is delimited by thresholds and space-defining elements can be converted into a threshold space.

Threshold spaces are required to provide access to the actual functional spaces, and they provide a introduction to perception of architectural space. They live in the sequences and arrangement of what lies in the past, present and future. This means: threshold spaces also live in the expectation of what is to come.
Threshold often announced and preface entrances to spaces. They are integrated into the sequence of arriving and, with their braking properties, slow down those approaching. In particular, thresholds in entrance aras organize the transition and the mediate between outside and inside. In their extended form or in summation, Thresholds also create spaces. Together with space-defining elements, they establish the staging for threshold spaces.
As transition points, social spaces are usually complex spatial structures. In terms of perception, they are a challenge to the interacting human senses. Often difficult spaces have multiple functions that can be derived from the respective typology of the architecture.

Spatial thresholds are perceived, recognized, and used in spatial contexts. Wolfgang Meisenheimer calls them “tools for architectural choreography” and identifies the narrative moment in the threshold. He emphasizes the dual nature of thresholds, namely that they have the power to connect and separate.
Architects react to this distinctive characteristic in the design process. “Threshold details are the most sensitive, elegant repertoire in the architectural language.” (Boettger, T, 2014, p.10)
The spatial staging or organization of transitions and the particular ways in which modern architecture deals with social spaces are fundamental. All architecture organizes access. The zones of architectural transitions are planned, realized, and used.

The choreography of movement through space is a critical role of the architect and filmmaker. There is a shifting in the relationship between viewer and setting with the viewer being fixed in film observing a moving setting and the setting fixed and immobile in architecture as the viewer experiences the place. Promenade is created through the placement of point, line, and plane that orient and direct the movement through space.
Aside from the physical elements of the environment that influence promenade there are visual and social aspects of space that influence movement. For example, a bright colored form or a space for gathering influence movement through space as a physical barrier might re-direct movement. In the sequential media of film, there is a subtle or explicit revealing of information dependent on the desired effect the director wishes to produce. The experience of an architectural project with its programmatic elements and series of spaces becomes a sequential experience as well allowing the architect to take a position as to the
sequence of the hidden and revealed. Form often follows function displaying and telegraphing use to the public often revealing the uses within.

In creating a cinematic space, the architect must give meaning and richness to the segments of time associated with site. The concept of time within a site finds varying meanings dependent on the length of interaction within and around it. The fleeting interaction of the passing motorist allows but a moment to convey meaning, while the neighbor of the site interacts with it throughout the seasons, through changing landscape and weather conditions. The longer segment associated with the historic identity of the site and region involve yet another layer of time attached to the site and its context.

3.**2.4 Mise en scene in Architecture and cinema**

When the architect is designing, he is imagining the experiences of a space, while similarly the filmmaker designs the events of that world. Although in cinema the structure of experiences that are forward by the director allows one to live through the real or imagined experience of inhabiting from the eyes of the director; but in the case of architecture, the built

space could not be perceived through which the architect have anticipated or imagined, but by the individuals experiencing it themselves.

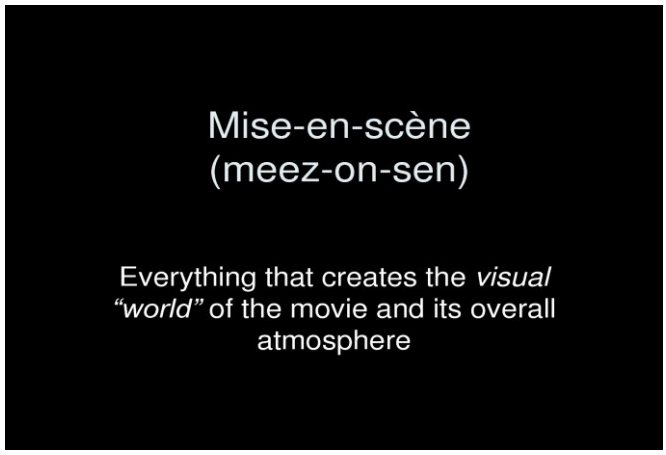


Figure 3.6 ëxplanation of mise en scene", Rita Santos, accessed 27 April 2016

Nevertheless, the composition of a stage set, the scene within the frame, and the relationship of characters and cameras to both becomes a dynamic controlled by the director similar to the architect's attempt exerting on the design of physical elements itself. Therefore, the properties, which give the final appearance to any sort of form with reference to the outer appearances and positional attributes, can be examined for both fields under the headings of 'physical elements' for architecture categorized as 'visual' and 'topological' elements, and 'mise-en scene' for cinema.

Space in cinema is the creation of a world within a frame, or as Tawa puts it "a setup that brings into relation different elements within an interactive field" (Tawa, M 2010, p 121) that encompasses the three dimensions and six directions of space – left, right, up, down, front and back. He goes on to state that there is then a regime of "related spatial qualities such as enclosure and exposure, layering, symmetry, scale, proportion and rhythm." (Tawa, 2010)

3.2.5 Perception in scene making

Charles Jencks explored and understood the concept of meaning in Architecture in a manner that states how meaning cannot be encapsulated in as one thing or word that is common to all; it has numerous interpretations. It is multivalent (Jencks, Kropf, 1997). He refers to „the triangle" which is the composition of three key and complex elements that are fundamental in making up Semiology: "a percept, a concept and a representation" (Jencks, Kropf, 1997). This can then be further related back to both Architecture and Cinema, the observer first interacts with the objects, they view and perceive it, conceptualize the object through interpretation then document it through words when describing the

Charles Jencks Model

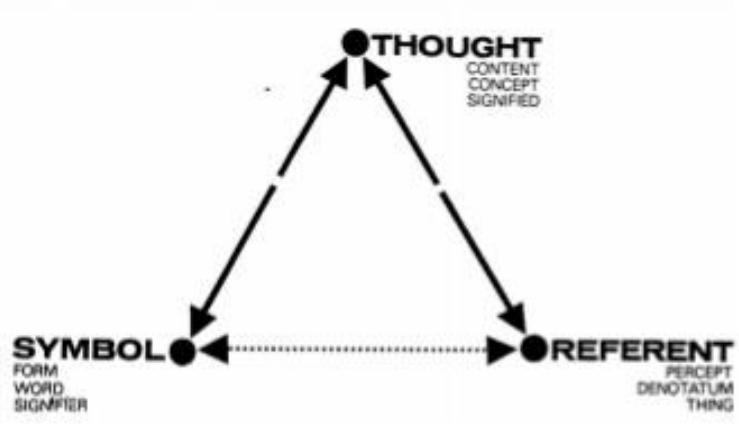


Figure 3.7 "perception diagram" Jenks Kropf, 1997)

experience. His summation of the semiology triangle is that there are simple relations between language, thought and reality. (Jencks, Kropf, 1997)

The role of Architecture in our society is highly significant as it is where we share majority of our life experiences with one another. Eco distinguishes in his connection between semiotics and Architecture by emphasizing that when designing what is truly perceived as „Architecture", Architects should design structures for "variable primary functions and open secondary functions". (Eco. 1997; 173) He defines the primary function as Architecture being a functional object and the secondary function being Architecture as a symbolic object.

Eco states that If semiotics, beyond being the science of recognized systems of signs, is really to be a science studying all cultural phenomena as if they were systems of signs, one of the fields in which it will undoubtedly find itself most challenged is that of architecture on the hypothesis that all cultural phenomena are, in reality, systems of signs, then that culture can be understood as communication.ll (Eco. 1997; 174)

Semiotics reveals how the relationship between the sign and the „something else" ris a result from what our society has taught us (Curtin. 2007; 51), the „something else" in this situation being Architecture. Our perception or reading of the objects around us is often influenced by past experiences or how we as humans are socially conditioned. Central to semiotic analysis, in this respect, is the recognition of how visual and material culture is coded; the social conventions which link signs with meanings. (Curtin. 2007; 61). The scene therefore, in architecture would be the combination of the physical structure, the functions applied to the activities that happen within it and how the users themselves react to these elements and the individual experiences that are both literal and phenomenal.

Figure 3.8 "view of The acropolis", Greece-athens, accessed 27 April 2016

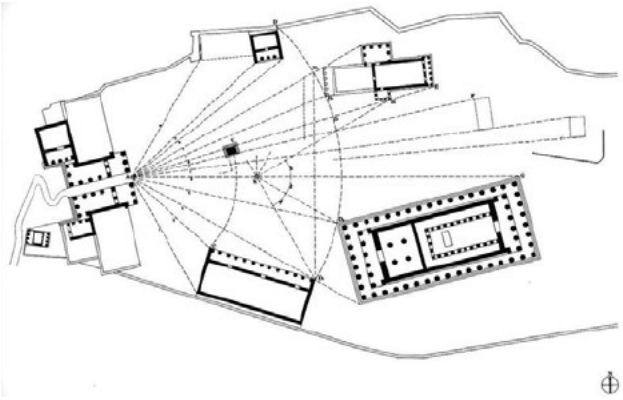


Figure 3.9 "plan of the Acropolis, The Athanian Acropolis, Acessed May 2016

The following views are described by Sergei Eisenstein
in his article "Montage and Architecture" that appeared in Assemblage in 1989. Edited by Yve-Alian Bois.

3.2.6 The Acropolis

In 1889 the French engineer Auguste Choisy released the publication Histoire de l'architecture. This seminal piece was of particular interest to Le Corbusier (as discussed in the famous *Towards a new Architecture*) and also the Russian film director Sergei Eisenstein. His essay *Montage and Architecture* takes a close look at the narratives of Choisy in his description of the Acropolis and asks the reader to see it through the eyes of a filmmaker. He focuses on four composed shots of the Acropolis, using Choisy's sketches and descriptions to illustrate the composition of these shots. Choisy and Eisenstein both argue, after analyzing the compositions, that the Greeks calculated their place, scale, size and timing on the first impression they make.

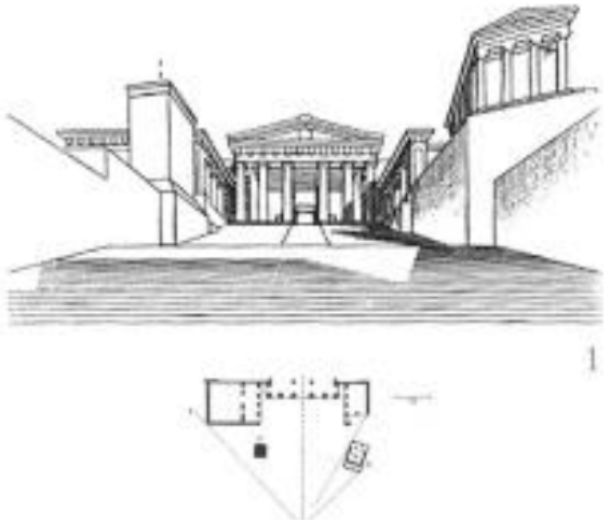


Figure 3.10 "The Acropolis entrance view" The Athanian Acropolis, Acessed May 2016

view 1

The general idea of the plan of the Propylaeum can be seen in view 1 ...

the spectator sees the symmetrical central block and two noticeably different wings — the right-hand one broader and the left-hand one less so. ... At first sight, nothing could be more uneven than this plan, but in fact it constitutes a completely balanced whole in which the general symmetry of the masses is accompanied by a subtle diversity in the details. ... The optical symmetry is impeccable. Both wings of the Propylaeum balance out at the exact moment when the general view of the building opens out in front of us. (Bois and Glenny, 1989, p 117)

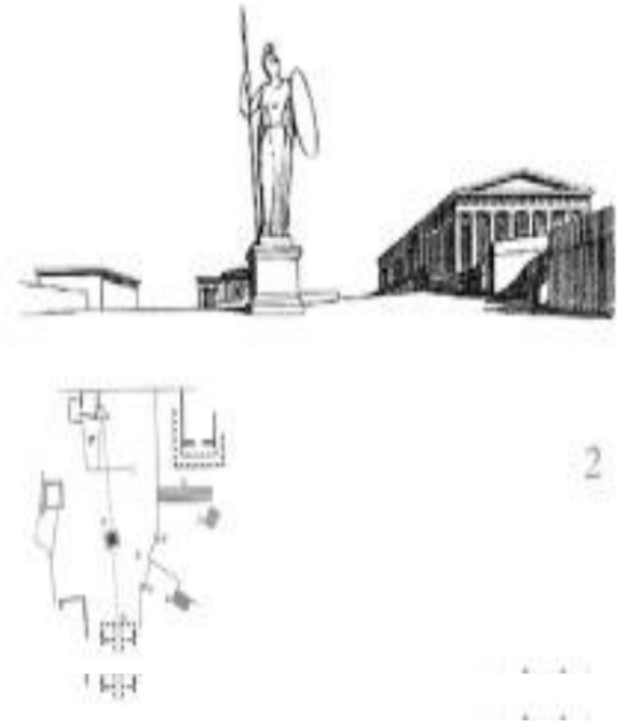


Figure 3.11 "The Acropolis monument viewt" The Athanian Acropolis, Acessed May 2016

view 2

First view of the square; Athene Promakhos. Passing by the Propylaeum, the spectator's eye embraces the Parthenon, the Erechtheion, and Athene Promakhos (view 2). In the foreground towers the statue of Athene Promakhos; the Erechtheion and the Parthenon are in the background, so that the whole of this first panorama is subordinated to the statue, which is its central point and which creates an impression of unity.

The Parthenon only acquires its significance when the visitor loses sight of this gigantic piece of sculpture. (Bois, 1989)

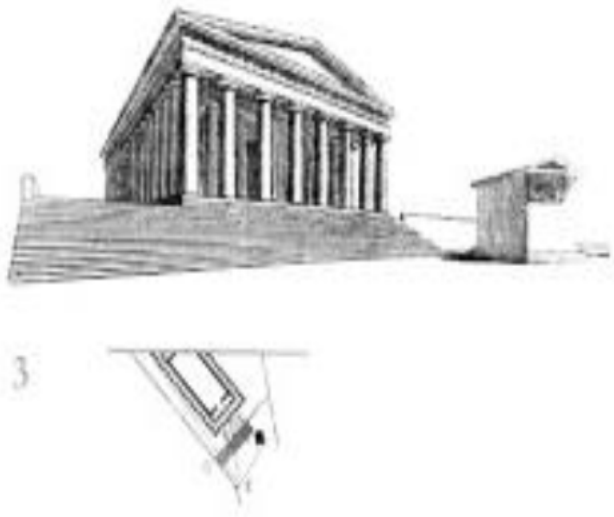


Figure 3.12 "The Acropolis oblique view" The Athanian Acropolis, Acessed May 2016

view 3

The parthenon and its oblique perspectives. To modern thinking, the Parthenon — the great temple of the Acropolis — should be placed opposite the main entrance, but the Greeks reasoned quite differently. The cliff of the Acropolis has an uneven surface, and the Greeks, without altering its natural relief, placed the main temple on the highest point at the edge of the cliff, facing the city (view 3). Placed thus, the Parthenon first of all faces the spectator

obliquely. The ancients generally preferred oblique views: they are more picturesque, whereas a frontal view of the facade is more majestic. (Bois and Glenny, 1989, p 117) Each of them is allotted a specific role. An oblique view is the general rule, while a view in face is a calculated exception. (Bois and Glenny, 1989, p 117)

view 4

After the first panorama from the Erechtheion, at point 3 the Parthenon is still the only structure in the spectators field of vision but if they move on to point 4, it will be so close to them that it enables the viewer to encompass its shape; at that moment the Erechtheion becomes the center of the panorama. It is precisely from this point that it offers one of its most graceful silhouettes (view 4). The bare wall is enlivened by the Porch of the Caryatids, which stand out from it as though against a background specifically created for them. (Bois and Glenny, 1989, p 119)

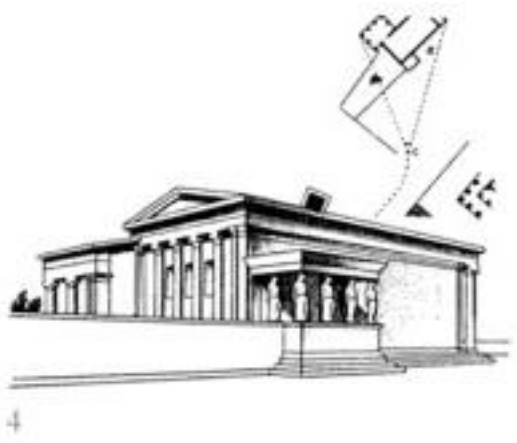


Figure 3.13 "The Acropolis Pantheon View" The Athanian Acropolis, Acessed May 2016

Conclusion

These shots and the architectural sequence undoubtedly render a cinematic experience. The compositions/shots, their placement and remnants in the viewers mind and timing create a directed emotional response.

Views are related very closely to the fourth dimension since they are a constant shifting occurrence which is experienced when space is embodied. The habitation of space in itself becomes an exhibit. Jane Jacobs also argues that "the sight of people is what still attracts other people" and this curiosity contributes to safer streets and neighborhoods (Sanders, 2002: 175). Views aren't just pure entertainment, they go beyond the human desire to dream, to inhabit distant vistas. In a cathedral, the high vaulted ceilings and the use of light and fresco paintings focus the gaze to the heavens. The Acropolis makes the user "a consumer of views" (Bruno, 2007: 58). Corbusier designed his strip window for the view he states that in his own work he seems to think just as Eisenstein does in his films" (Bruno, 2007: 58). In fact, film has changed the way we view our world. The camera has become our "prosthetic eye" (Bruno, 2007: 256). Film set designers include camera angles creating important view vistas on their plans. Perhaps architects can learn from these representations.

Tschumi's diagrams in Manhattan Transcripts are read like a film: and cannot be understood alone, one diagram forms part of the larger representation. Event Cities by Tschumi further explores the use of multiple drawings to explain his concepts. If one represents an architectural reality in a dynamic way, it will inevitably influence the way one designs. One perspective cannot stand in for the whole design. Architecture must evolve from the Renaissance architect; space will be

explored from a multitude of angles. Memory is the element makes us aware of time; the impact of the past transforms into memories of the present (Comte-Sponville, 2004). In the film Memento the lead character Leonard (Guy Pearce) has lost his ability to remember, an every day he has to establish with the help of tattoos and notes, where he is, when it is and where he is going. In fact, the film illustrates the power of memory when he distorts his past to "manipulate his future self" (Martin-Jones, 2006: 179) to commit an unmotivated murder. Without memory, it would be impossible to experience architecture, or film. We cannot determine our place in the world without memory and it is through memory that we can understand the moving image – we remember the preceding frames, and our minds can follow the trajectory of movement. "They establish a memory of the preceding frame, of the course of events. Their final meaning is cumulative; it does not depend merely on a single frame (such as a façade), but on a succession of frames or spaces" (Tschumi, B 1981, p. 11)

Figure 3.14 "scene from the movie Momento", Scifinow, accessed 28 April 2016

Figure 3.15 "scene from the movie Momento", A reverse review for Memento, accessed 28 April 2016

Sanders believes that every film viewer has a mental New York imprinted within their mind. We construct blocks and streets with the fragments of memories left by the New York movie saga. In fact the way we 'record' the world is similar to our film experiences according to Quintillian: "To remember the various parts of a discourse, one would imagine a building and implant the discourse in site as well as in sequence: that is, one would walk around the building and populate each part of the space with an image; then one would mentally traverse the building, moving around and through the space, revisiting in turn all the rooms that had been 'decorated' with imaging. Conceived in this way, memories are motion pictures" (Bruno, 2007: 221). John Ruskin said that also said that there wouldn't be any remembering without architecture. (Californication, 2007).

Bruno states that when revisiting an old building one used to inhabit, one not only remembers the place, but we also remember and recall the people we met, the conversations had, and the things one once did there. The brain is like a room; neurons are triggered, and long forgotten images are projected in our minds. The brain does not record events like the movie camera does.

Through montage in one's own mind, one is able to rework and construct old memories into a sequence, making them applicable to new situations – a sign of human intelligence. Architecture has the ability to play on these memories, most importantly the 'collective memories' as Carl Jung names it, the collective unconscious. Public architecture can recreate comfortable, welcoming, intimate spaces, or spaces that are a sign of movement, like corridors. Architecture can create spaces for relaxation, viewing – all concepts that are understood by the man on the street.

At a fundamental level, both cinema and architecture are created from the main human senses, namely what they can see and hear. Tawa explains that it is light and sound that create what a person sees and experiences in cinema and that how it is perceived is dependent on the techniques used. Similarly, architecture is dependent on how materials absorb, reflect, or transmit light and sound.

3.2.7 Light in Colour in Architecture

Architecture, like cinema, is perceived through light and sound. However, unlike cinema, architecture acts as "a receptor, modifier and transmitter of light and sound." (Tawa, M 2010, p 122)) The materials, from which architecture is created, react differently. They can "absorb, reflect and transmit light, or modify the spectrum of white light in different ways." (Tawa, M 2010, p 122) Cinema can capture this, but it is architecture that can react to it and manipulate i.t

Like Van Hurkman, Tawa reiterates how light changes during the day and the effects that has on light levels, colours and clarity. He refers to high summer sunlight "that bleaches colour or dissolves the edges and boundaries of form" and low morning or afternoon light "that reinforces contour and profile, that darkens shade and shadow or reveals form and its multiple articulations." (Tawa, M 2010, p 123)

Figure 3.17 "Dennis Shepstone building mid-day without activity" Author, 2016

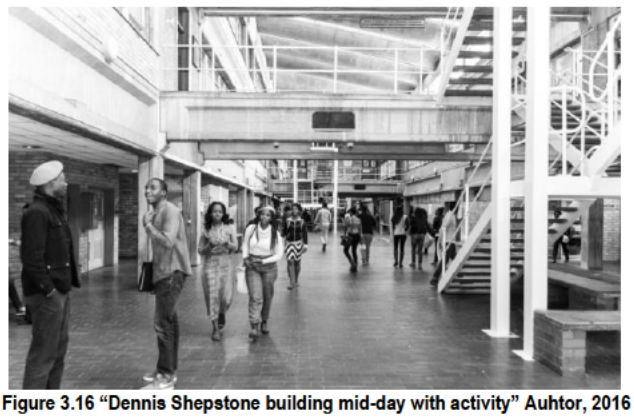


Figure 3.16 "Dennis Shepstone building mid-day with activity" Auhtor, 2016

The qualities of light in architecture are linked to the time of day as well as location and it is possible to manipulate these and, in doing so, one can enhance, create or locate the architecture both spatially and temporally. Schoning takes this to the extreme, pointing out that in daylight he can estimate dimensions by eye but in the dark he is unable to (Schoning, 2006 an obvious point, but one that clearly illustrates the dependence architecture has on light.

3.2.8 Transparency in Architecture

In general, physical terms, transparency is considered as a characteristic which is defined by the amount of light passing through a material as well as the capability of seeing through an object that is otherwise solid. In architecture, we assume that transparency is what makes us perceive various spaces at the same time, creating different perceptions and sensations within the space. The way to achieve transparency through a building that is made out of solid elements, one needs to consider two crucial aspects which are permeability and reflection. Permeability is the property of a material that allows a fluid to pass through a porous space. In architecture, transparency can mean having boundaries that function as filters rather than solid confines; or openings that allows things to pass through or to be viewed through. This concept allows individuals that are within and outside a space to perceive the immediate physical world around them. Reflection is defined to cast back light or to show an image of an object or surface like a mirror effect. Reflection assists in giving a sense of transparency in solid objects, making them merge of vanish with the surrounding space. As a result, the building is perceived to have a sense of lightness.

The two modes of Transparency are Literal and phenomenal

The key aspect found in Rowe and Slutzky's essay on Transparency: Literal & Phenomenal, is the distinction made of the two types of transparency. They state that literal transparency, or perceptual transparency, is a quality immanent to physical features, such as in mesh screens, translucent walls. The second, phenomenal transparency is a conceptual transparency, a quality immanent in the volumetric and special organization (Rowe & Slutzky, 1982). Rowe and Slutzky, quotes Gyorgy Kepes for defining transparency as "a result of transparent figures interpenetrating each other without optical destruction", but states that transparency also implies something broader than visual effects, as it also includes spatial effects. "Transparency means a concurrent perception of different spatial locations. Space not only recedes but also shifts in a continuous activity" (Kepes quoted in Rowe & Slutzky, 1982). This overlapping and interweaving of figures creates an ambiguity or even a contradiction of spatial dimensions.

The concepts and conditions of transparency is parallel to movements of Relativity theories and their consequences; where space-time relativistic thinking allows for two objects to co-exist concurrently in the same space and time, as such transparency is a space-time condition of a simultaneous view or perception of space.

Perceptual vs Conceptual Transparency: Eye vs Mind, Looking vs Reading

To include new terms into the language of transparency, one can use the terms of Sol Le Witt, and the Conceptual Art movement of the 1960s, in order to reinterpret and understand transparency as being perceptual or conceptual. Le Witt contrasts the two as follows, "Art that is meant for the sensation of the eye primarily would be called perceptual rather than conceptual" (Le Witt, 1967). Le Witt adds that, "Conceptual art is made to engage the mind of the viewer rather

than his eye or emotions" (Le Witt, 1967). By juxtaposing the terms and definitions together, Literal transparency can be understood as a type of perceptual transparency because it engages with the eye, whereas Phenomenal transparency can be seen as a conceptual transparency which engages the mind of the viewer, in one's interpretation and understanding or reading of the spatial organization.

"Place, time, form, and color coexist in a single composition conceived to bring out the object's dynamic reality through a simultaneity not limited to the simple unfurling of an action in time but embracing all the elements that could convey the sensation of speed visually." (Coen, 1988)

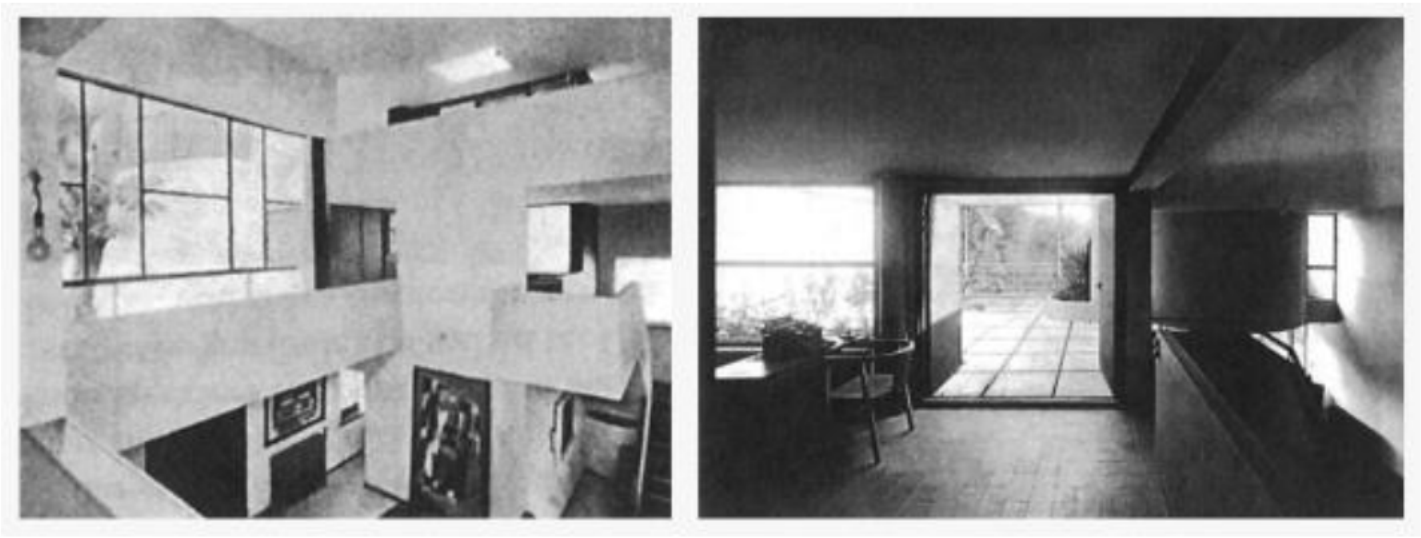


Figure 3.18 (left): Le Corbusier's La Roche House, Architecturality, accessed 30 April 2016

Sigfried Giedion describes in his book that all buildings, "By their design, are as open as possible, he states that they fade their arbitrary boundaries and seek connection and interpenetration" (Giedion, 1995). Giedion relates the notion of intepenetration to both Le Corbusier's paintings and buildings, with reference to Jeanneret 1924, he writes that just as transparent objects interpenetrate in the painting, Corbusier with every means intends to also lighten the conventional gravity of the house" (Giedion, 1995). Air flows through Le Corbusier's houses; there is only one indivisible space and that's where the shell between interior and exterior falls away and this is described as spatial interpenetration (Giedion, 1995). Transparent simultaneity also exists in Le Corbusier's Cook House, where the exterior roof terrace space and the adjacent interior spaces merge and blend together through means of an interlocking gesture (Giedion, 1995)

Adolf Loos says that "architecture is not conceived in plan, but rather in terms of spaces or cubes, therefore the *Raum* – or Space – *plan*, which achieves a merging of storeys and spaces into a contiguous and continuous space."

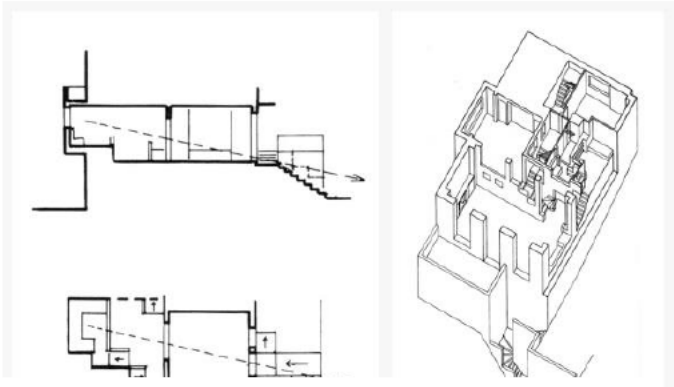


Figure 3.19 **Adolf Loos:** The Diagonal View – The Journey of the Gaze, Socks Studio, accessed 5 May 2016

"Spatial continuity between rooms can be created by not omitting walls but by puncturing them with wide openings so that views are always framed. The connection between rooms, often, was only visual, through a proscenium. At their interface, these spaces had a cinematic quality" (Colquhoun, 2002). As such, the viewer is allowed to 'journey or movement' through the space, thereby creating a spatial continuum of the layered planes. This reiterates the notion
of transparency as a seeing – or passing – through, either in terms of journey or a passing through of the gaze.

Adolf Loos: The Diagonal View – The Journey of the Gaze

The plans and sections of the Muller House depicts a diagonal direction, this denotes the perspectival view in or out. This diagonality is important, because the arrows refer to the same view in both the plan and section, both arrows are in effect the same because they both denote the same sequence of framed views. The user in the building is occupied in a cinematic voyeuristic gaze when passing through the framed spaces. The *Raum plan* demonstrates a framing of frames, a seeing or piercing through the consecutive frames of vistas. Hence, phenomenal or conceptual transparency is achieved, following what Rowe and Slutzky mentioned with regards to the notion of stratification which is the sequential layering of frontal planes and spaces

3.3.9 Light and colour in Cinema

In the Color C*orrection Handbook* Alexis Van Hurkman in discusses the use, and/or control, of light and colour in video and cinema post-production. Van Hurkman, a professional colourist, points out that the aim of colour correction is to draw focus and to aid the narrative of material that has already been filmed; however, he also highlights areas that should be considered during filming. In his book he refers to a technique of creating depth by using depth cues. He describes three depth cues – perspective, occlusion and relative motion – that are worked with during filming. Three main depth cues that can be manipulated during post production: luminosity and colour contrast, that can elude to depth and bring forward subjects; haze and atmosphere where higher contrast areas appear closer as do warmer colours, whereas cooler colours and low contrast are perceived as being further away; and texture and depth-of-field with closer

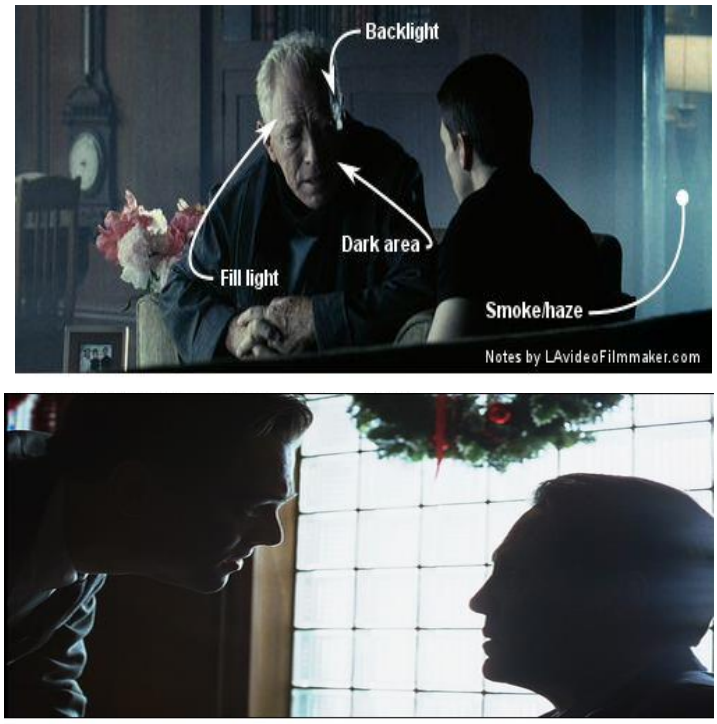


Figure 3.20 "An outstanding example of lighting" a film still from Minority Report, Media Button accessed 5 May 2016

objects having more detail.(Van Hurkman, 2010) The overarching idea behind this work is that these cues can be utilized to bring a subject into focus.

3.3 SUMMARY

This disassembly and analysis of the various techniques used in capturing and manipulating cinema and discovery of their uses and relationships, enables their reassembly and utilization in architectural projects. Tawa argues that "design is an opportunity to collect, mobilize, and direct such diverse assemblages, assuming they and their components have been properly identified. If only a portion of their components have been recognized and worked with, the rest remain undiscovered and will influence the processes and outcomes of design."(Tawa, 2010) Here Tawa contends that the breakdown of cinematic techniques can lead to their subsequent reassembly into an architectural design or process, even if some techniques are favored over others, as they are all connected and don't operate in isolation.

3.4 CONCLUSION:

In using these elements, movement, space, light, scene and montage, the impacts of organizational arrangements can be found in the characteristics of a film in order to make us consider the film as a composition. The fact that any composition whatever the type is requires an underlying system of rules to integrate all sorts of complex relations into a unified whole by the orchestration of different elements, can also be achieved by the examination of the fundamentals of architectural design in the field of cinema.
When using these elements as an architectural guideline, one could break it down in the following way:

Movement: The first step would be to consider movement and apply it both in the site analysis phase as well as the design phase. In the site analysis phase one would look at movement to get a sense of how people move around a site or area, from cars to non-motorized transport modes to visual connections and physical connections, much like Sergei Eisenstein's method when exploring the acropolis museum.
Space: From exploring the element of movement, one can then explore space. This would be the second step that will explore the public and private spaces existing and the spaces that would be possible.
Light: The third step would be looking at light, since film is a play on light and architecture is a play on space, but both are essentially equally real to us: "*Cinematic space moves does not only through time and space or narrative development but also hrough inner space. Film moves, and fundamentally "moves" us, with its ability to render effects and, in turn to affect "*. (Bruno, 2007: 7).

Scene: By forcing perspective to the viewer through the medium of a montage, the artist creates a timeline which sets the scene and establishes How/When/Where which, therefore, enables the viewer to join the narrative and allows the story to continue once established.

CHAPTER 4

PRECEDENT STUDIES

4.1 INTRODUCTION

This chapter of this research is a representation of precedent studies of existing buildings, they are used as guides in generating an appropriate intervention. The rationale for the wide spectrum of building typologies was to cover different aspects of the proposed building, by analyzing specialist buildings. For this dissertation, a qualitative example and several international examples have been chosen for a far greater understanding of the diverse functionality of the proposed intervention. The precedent studies that have been chosen each focus on distinctly separate areas.

In this chapter, the precedent studies are critically analyzed using the understanding of various elements such as film techniques used in film and design and the representation of the built form through these strategies. The architectural structures were also analyzed in terms of fundamental functionality. Conclusions drawn from the precedents played a crucial role in informing the development of the proposed building typology of the dissertation.

4.2 EYE - **NEW DUTCH FILM INSTITUTE**

Amsterdam, Netherlands

Delugan Meissl Associated Architects

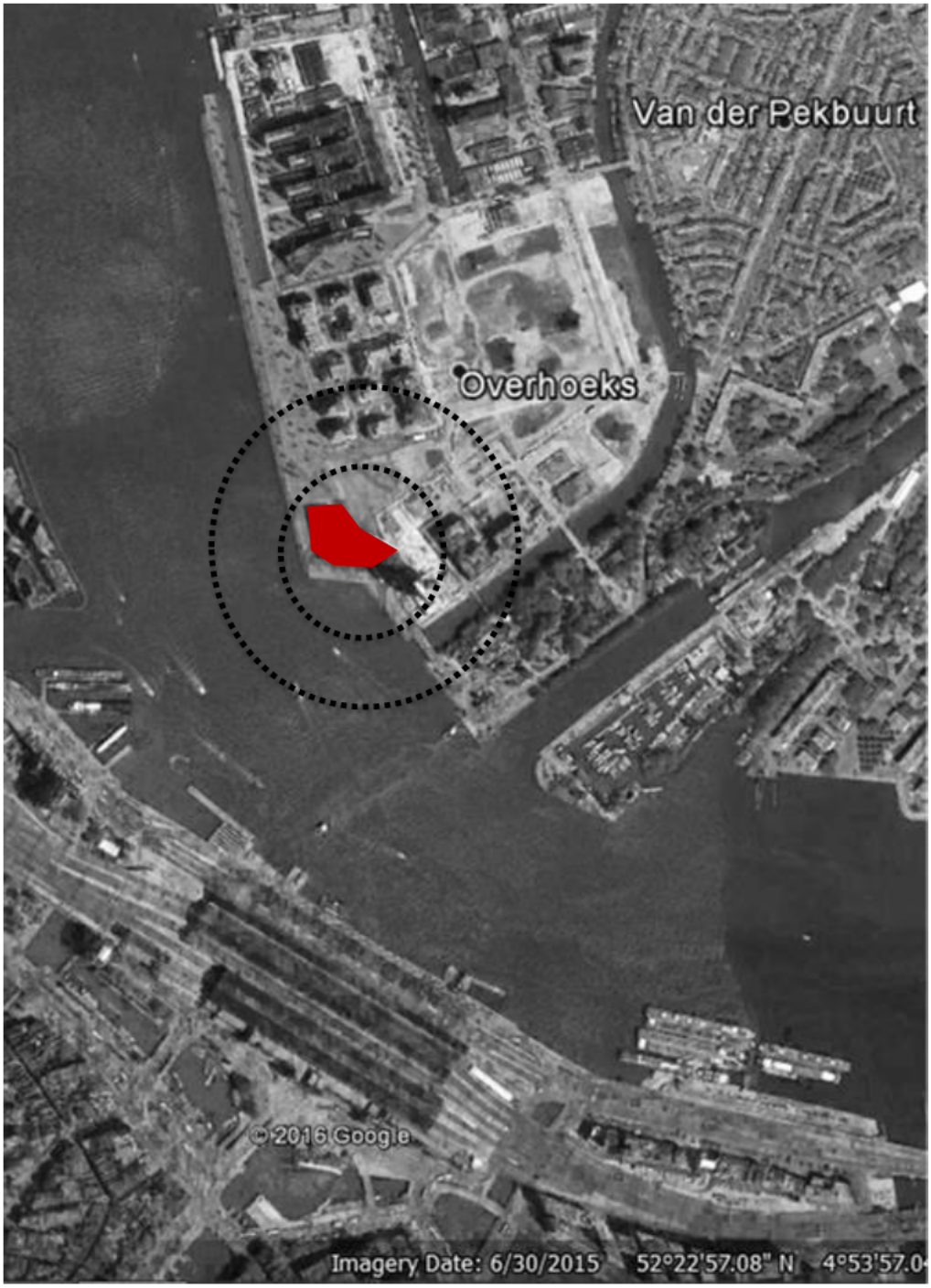


Figure 4.1.1 "New Dutch Institute",Iwan Baan, accessed 5 May 2016

The Architect himself stated (Meissl, E, 2012) *that* film is an illusion that is created by the scenic arrangement of light, space, and movement, which becomes true through projection. The interplay between these parameters, in architecture, defines the intensity and success of the individual's spatial perception quite significantly. These interplays are understood to be the integrative components of spatial construction, their effect which is projected through sequences of human motion and unfolded in multilayered ways. (Meissl, E, 2012)

Movement:

The Structure is accessible from various directions in a variety of ways. On the northern side an access road leads into a public basement parking, and on the east-west side a cycle path and a footpath allows access along the river. (Meissl, E, 2012) A scenic ride on the traditional urban ferry line gives access to the North, and this slow approach allows for an spectacular scenic change before visitors continue their way at their own speed from the northern embarkation point.

Figure 4.1.2 "New Dutch Institute",Iwan Baan, accessed 5 May 2016

Figure 4.1.3 "New Dutch Institute",Iwan Baan, accessed 5 May 2016

Figure 4.2 "New Dutch Institute", Iwan Baan, accessed 5 May 2016

The shore strip which is an inclusion into the outer area of the Film Museum's is connected as a long-stretched, stepped access ramp that runs parallel to the river and connects the museum directly to the existing promenade where the Overhoeks Tower is situated. (Meissl, E, 2012) This articulation represents a fundamental part of the dramatic composition of the museum. Visitors access the building over a gentle slope and are in constant deceleration, the optical changes of the surrounding city vistas become the main focal point. (Meissl, E, 2012) The view over the city and the water is widened with increasing height, the mental and perspective effect of the barrier-free access area determines the movement. The

Spatial density and transparency ascend into an exciting atmospheric moment before reaching the building's interior in an almost imperceptible approach. The dynamic room sequence is clearly perceptible from the building's general external geometry and massing, it develops on the inside as a rational, spatial and visual succession of single spaces. (Meissl, E, 2012)

Space:

The museum is located in the affluent riverside area in the middle of Amsterdam, the Institute represents the visual landmark of the new Amstrdam Noord quarter. This development area extends over to the former Shell Terrain on the opposite side of the river to the Centraal Station, which is Amsterdam's train station. As the international oil company's former research centre, this area held a sensitive function because it is located close to the city centre and along the busy urban water vein. (Meissl, E, 2012)

The Museum is flanked by the appealing river promenade relating to the Overhoek spark on the northern IJ shore, the

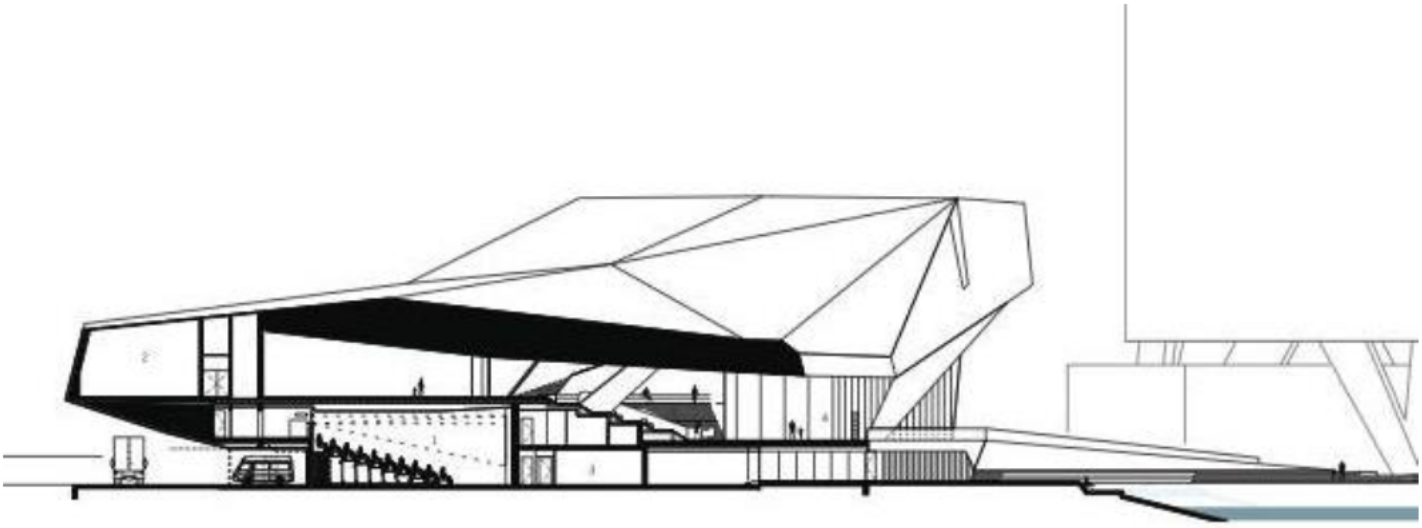


Figure 4.2.1 "New Dutch Institute", Iwan Baan, accessed 5 May 2016

new building combines the existing usability qualities into its general architectural concept. The landscape of the riverbank and the changing movement on the river IJ characterizes the building's city- facing side turning into essential design factors, the new building generates several urban and interior conditions which through their communicative

orientation contribute to the urban and social additional value. Resulting in the Film Institute's striking and impressive appearance which complements the city's highly qualitative cultural offering and highlights Amsterdam's role as a world-renowned top cultural site. (Meissl, E, 2012)

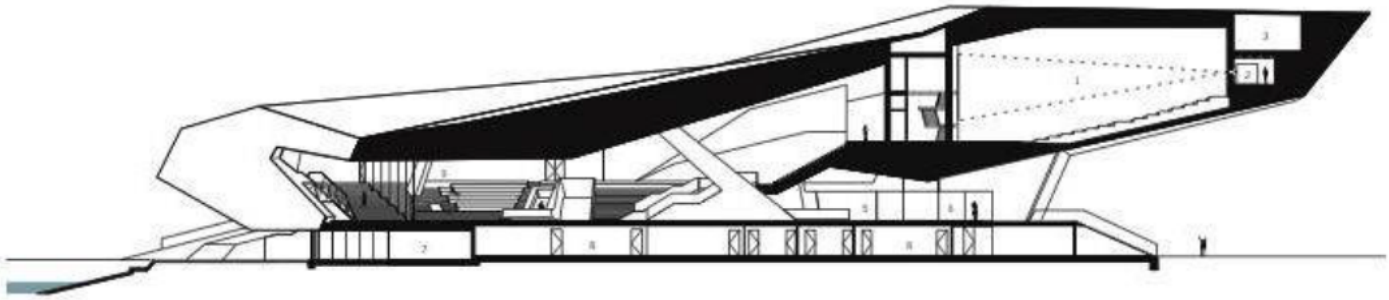


Figure 4.2.2 "New Dutch Institute", Iwan Baan, accessed 5 May 2016

Light:

The entry into the foyer is defined by lighting, materials and spatial development alongside the glass front. The foyer acts as both, a dwelling and distribution area The fluid layout and the pleasant terrace acts as an extension of this communicative space. At the centre of this zone, all internal pathways are integrated into the spatial formulation of this neuralgic area and the open interior unfolds its full dimension. The usability notion allows good orientation and freedom of movement that is unimposing at all points, whereby the foyer also portrays the exit- and endpoint of any form of use.

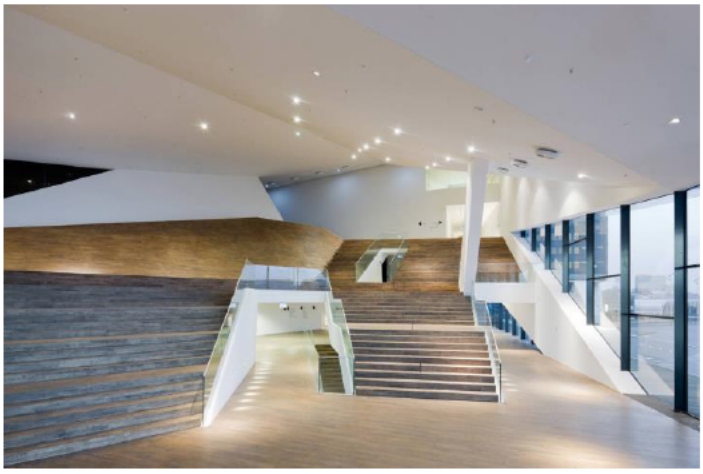


Figure 4.3 "New Dutch Institute light", Iwan Baan, accessed 5 May 2016

The tribune-like steps define a partly assigned and partly changeable function areas. The exhibition level, projection rooms and the restaurant can be accessed via this rooms topography. (Meissl, E, 2012) A staircase directs to the level below where the office area, the canteen, and the film production lab with an adjacent production workshop are situated. It is where the valuable content of the institute's archive is professionally cared for. The three screening rooms can be accessed at the rear end of the foyer level. In compliance with their functionality they are designed as consolidated and introverted passages.

Figure 4.4 " Internal View of New Dutch Institute", Iwan Baan, accessed 5 May 2016

Scene:

The buildings design concept becomes the story board through the architecture the and scenography. By delivering an effective interchange, the building's assigned function oscillates between acting as the protagonist of the urban scenery's and as a dramaturgical element placed in front of a heterogeneous landscape setting. On the interface between land and water, between historic centre and modern development area, the building embraces many faces from each viewpoint, thus finding itself in a constant interchange with its surroundings. Its radiance overcomes the city's natural divide and historic lifeline, the IJ river, and is interpreted by its exchange with the surroundings, its positioning, and geometry.

CONCLUSION

The distinctive communicative effect of the area, goes beyond the confines of the building, thus transforming the visit to the Film Institute into a sustained encounter between the urban reality and cinematographic fiction. As a multi-functional meeting point, the building's architectural composition complies in multiple ways with the influence held by a cultural institution of the highest functionality and sustainability.

4.3 CINEMATHEQUE QUEBECOIS

Montreal_ Canada

Saucier + Perrotte architectes

Figure 4.5 "Cinematheque Quebecoise street view ", 2016, Google Earth, accessed 5 May 2016

Figure 4.5 "Cinematheque Quebecoise street view ", 2016, Google Earth, accessed 5 May 2016

This urban cinema centre, which includes a film school, was built between two existing structures to incorporate a brick school building. Glass and steel layers allow glimpses of the past by exposing fragments of the concrete structure of the existing school. (Carter,B, 1998: 75)

Movement: and light

The movement patterns of the city were considered in the design of the building's public interface. A gridded glass screen spans the main elevation across the restored stone and brick façades of the old school. Moving images are projected onto a translucent portion of the screen that is visible from the street. An internal walkway, located between the projector and the screen, adds silhouettes of movement within the building to the series of projections. This combination of transparency and opacity stimulates the curiosity of onlookers.

The architects combined the idea of the moving image into the design itself. The user is an active protagonist and an active part of the building and its activities, constantly aware of the functions within the building and is not just a bystander. By designing a cinema in the foyer of the building, open for the public, the designers moved away from the idea of cinema as a thing that happens in a box and connected to a public realm.

Figure 4.6 "Cinematheque Quebecoise internal view ", INTERSTICE Architects, accessed 12 May 2016

Space:

The notion of the cinema as an enclosed space, confined by rigid walls, is deliberately questioned. Suspended above the entrance is a canopy of seating facing a suspended projection screen. By placing the screen and seating in mid-air the cinema ceases to be private and enclosed and becomes an activity node that forms part of the public realm (Heathcote, 2001:187).

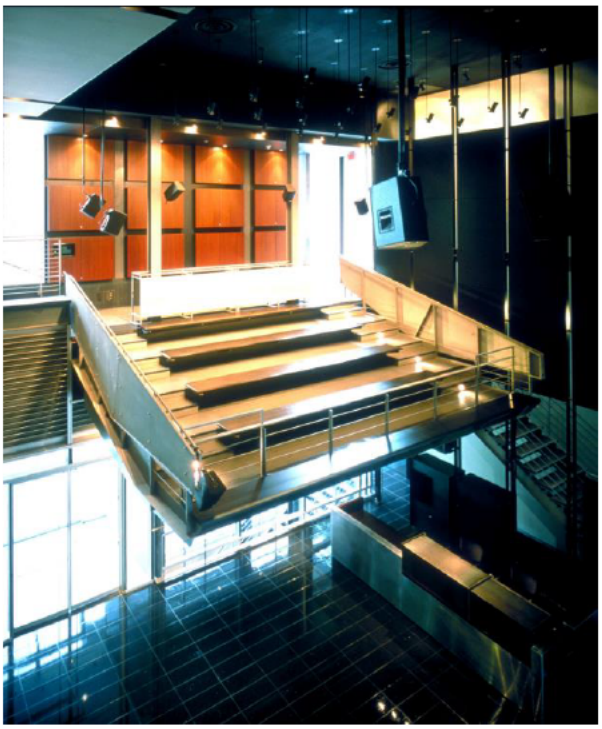


Figure 4.7 "Cinematheque Quebecoise internal view ", INTERSTICE Architects, accessed 12 May 2016

Figure 4.7.1 "Cinematheque Quebecoise plans ", INTERSTICE Architects, accessed 12 May 2016

Figure 4.8 "Cinematheque Quebecoise external view ", INTERSTICE Architects, accessed 12 May 2016

Scene: The building creates and frames a series of glimpses, combining activity and artefact, old and new architecture, actors and audiences, street and room. These are images that are projected into the life and spaces of the city".(Saucier & Perotte, n.d.).

The materials within these internal spaces are monochromatic and with differences in texture. The designers created a space that comes alive as the user moves through it. Emphasis has been placed on the placement of different functions throughout the building.The light lobby sheathed in glass and metal houses the functions that take advantage of the daylight together with the other functions, like the cinema auditorium and exhibition space housed in the old buildings, where the daylight can be controlled. (Carter,B, 1998: 74)

4..4 THE BIOSCOPE, MABONENG PRECINCT

Johannesburg, RSA
Daffonchio and Associates

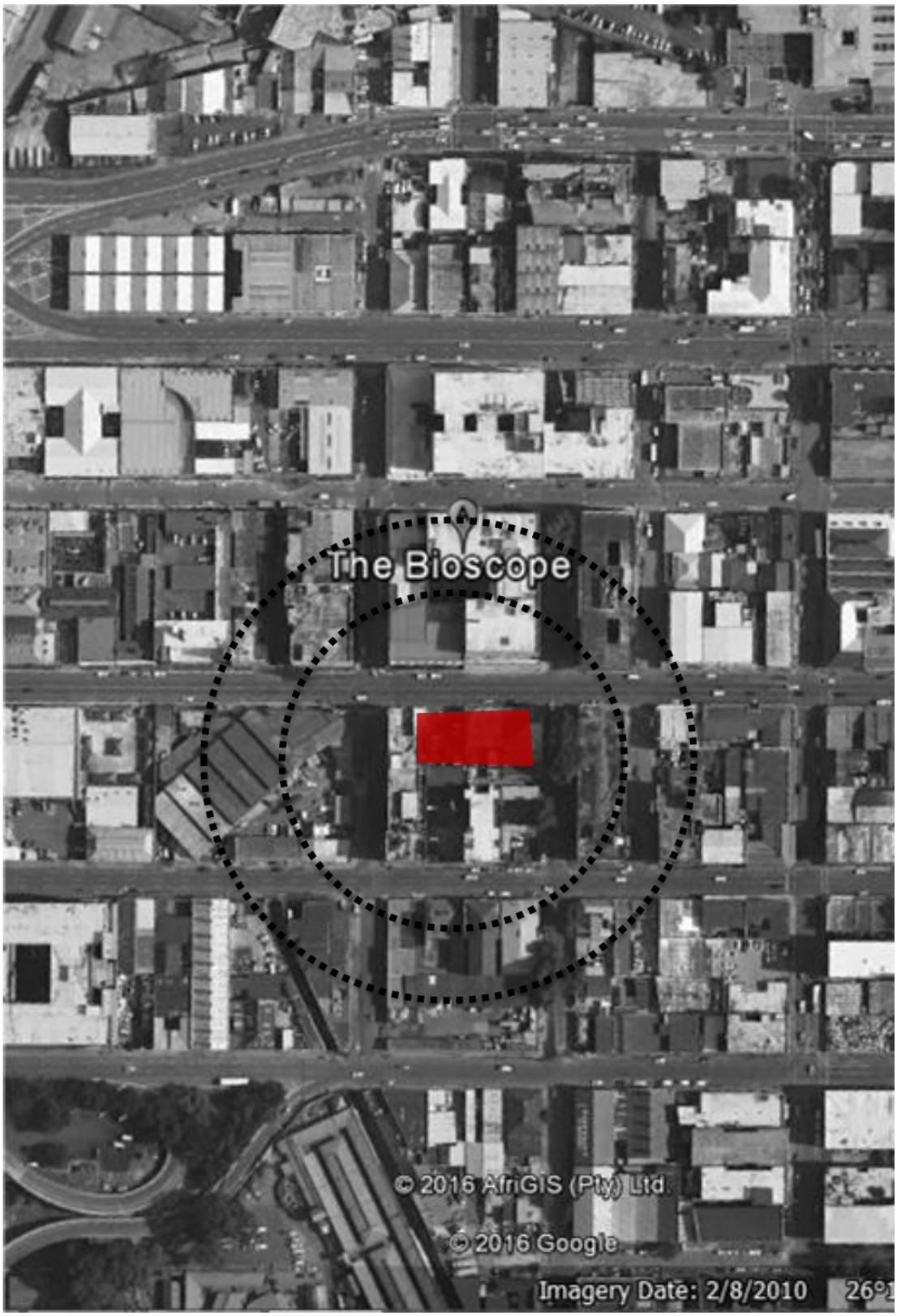


Figure 4.9.1 "The Bioscope location", Google Earth, accessed 16 October 2016

Figure 4.10 "View from Main Street –maboneng",Lauren Kim, Accessed 15 May 2016

Figure 4.9.12 "Bioscope- maboneng" ", 2011, One Small Seed, Accessed 15 May 2016

The Maboneng Precinct is located in downtown eastern Johannesburg city. It is situated amongst large scale industrial district with the precinct itself once an industrial space. The precinct breathes new life into what was an area that was considered a no-go zone within the city with dilapidated industrial warehouse being the generic model. The representation of the above figure best illustrates the Maboneng Precinct, in an area with no life and attraction, this urban regeneration has brought light and colour to a somewhat gloomy image, hence again the appropriateness of the Maboneng - "Place of light".

Movement:

The experience of moving through the dingy and grimy industrial area changes drastically when one is met by rich street life and urban landscape that creates a sensitive interface to those moving past by foot or bicycle. It is distinct from the point of access into Maboneng that it is an area which promotes arts, culture and street life. The buildings all spill out to the vibrant street where people sit and interact in trendy coffee bars, restaurants and public spaces. One can't help but feel overwhelmed by the ambience created in Maboneng.

Space:

Located in a restored industrial building, it is one of several venues in a complex that combines residential studios, retail shops, a rooftop events venue and a boutique hotel. With its trendy location and commitment to supporting the growth of South African film, the Bioscope is an attractive alternative to the mainstream cinemas located in suburbs and shopping malls.

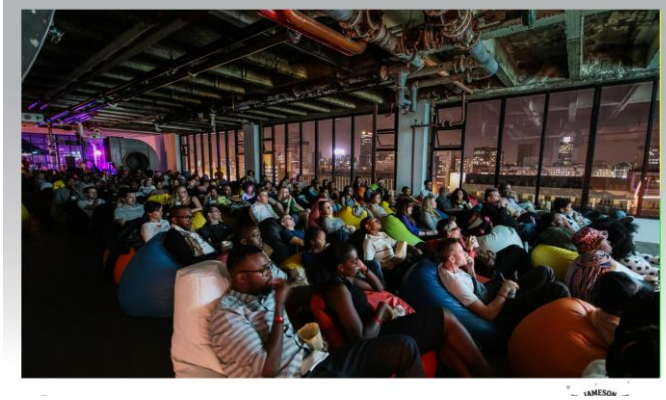


Figure 4.11 “Bioscope- Indoor Cinema”, the Bioscope, Accessed 20 June 2016

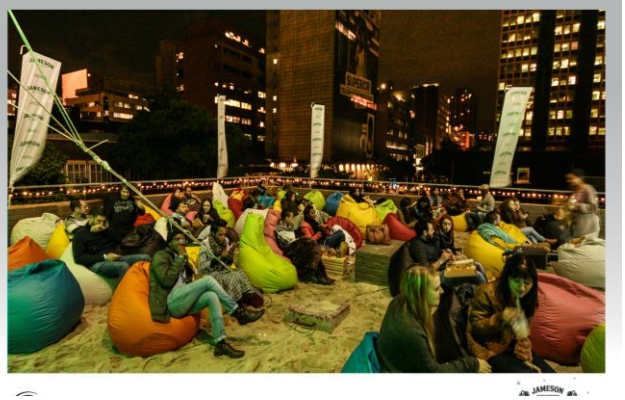


Figure 4.12 “Bioscope- Outdoor Cinema ", the Bioscope, Accessed 20 June 2016

Scene

With these kinds of innovations, the Bioscope is much more than just a cinema; it facilitates an entertainment experience with a twist. The venue has become an important part of the city's cultural scene, making a significant contribution to the regeneration of the inner city. It does so by supporting local industries and collaborating with organizations that share the vision of a warm, engaging cinema space in the heart of the city.

Maboneng was to be a fitting name for the district as the Sotho word when translated means “place of light”. The way in which he envisioned the project was to imagine how the district would be if people’s negative perception towards downtown Johannesburg changed, if the issue of crime was addressed and if a critical mass could be achieved to create a sense of a community, these were the drivers and then the intervention would have to create this scenario. He was to approach acclaimed sustainable architectural and urban design firm based in Johannesburg, Daffonchio and Associates.

The main aim and objective was to transform a section of downtown Johannesburg which was industrial space into an creative art and culture district which was to draw people through the concept of „live-work-play‟ environment. The district was to house artist studios, art galleries and a range of shops, restaurants and coffee bars that are fueling an inner-city lifestyle, with entrepreneurship and creativity at its core.

4.5 FILM PRECEDENT

Movie: Birdman (2014)
Directed by: Alejandro G. Iñárritu

Figure 4.13 "Birdman theatre poster", IMDb, Accessed 14 October 2016

Birdman, is a 2014 American satirical dark comedy-drama film that directed by Alejandro G. Iñárritu. The story follows Riggan Thomson (Keaton), who is a faded Hollywood actor best known for playing the superhero "Birdman", as he struggles to mount a Broadway adaptation of a short story by Raymond Carver. Of which the film focuses on the period of previews and events leading to the play's opening, and with a brief exception which is that the entire movie appears as if filmed in a single shot, an idea Iñárritu had from the film's conception.

Inarritu has maintained his habit which well-known to followers of his previous films, for deliberately including multiple plot lines in this film which are intentionally left unresolved at the ending. Leaving the viewer open to interpretation. (Cowden, Catherina, 2015)

Many aspects of film theory were concerning and debated the film by critical reviews which included, among other subjects, (a) film genre; (b) intended and unresolved ambiguities of plot; and (c) the complex interaction of Riggan's (main character) personal life with his professional life as an actor .

Space

The movie is set within and around a Broadway play house, showing both backstage, onstage and front of stage scenes as one continuous space, the viewer is somewhat trapped in this set depicting the emotional state of the main character whose sanity and obsession is the play he is directing and living at the same time.

Figure 4.14 internal scene, IndieWire, Accessed 14 October 2016

The set looks designed for the camera, endless corridors of sets. Where theater props become film props blending theater, reality and fantasy in one swoop. Using camera work that requires a living set, where everything can and will have to be in shot. The director uses the camera movement to shift power from character to character and compliments the sets with a creative use of lights.

Figure 4.15 Birdman internal shot, New York Film Locations, Accessed 14 October 2016

Scene

Birdman is a very profound film about an artist's malaise, yet is innovative, and ambitious in its approach. "Iñárritu captures the artist's battle between ambition, admiration and celebrity with great extent and skill in the form of a one take continuous format, as his camera sweeps through the backstage corridors, across the stage, out on the busy NYC streets, and back again in breathtaking fashion."

Figure 4.16 Birdman external shot, Creative Planet Network, Accessed 14 October 2016

Movement

The film was made to look as if filmed in one shot. This required the direct collaboration of all departments to create this seamless plan-sequence film.

The decision to make the film appear as a single shot came from his realization that "we live our lives with no editing." By presenting the film as a continuous shot he could "submerge the protagonist in an 'inescapable reality' and take the audience with him". (Foundas, Scott, 2014)

Figure 4.19 üse of light to create emotion", Cinema Blend, Accessed 14 October 2016

Light

Camera movement wasn't *Birdman*'s only technical achievement. Iñárritu did not hesitate away from using bold colors like red, blue and green to enhance the drama of the film. Blue and red were used in particular on stage in the play-within-the-movie. While the scenes shot outside, with the theater exterior just yards away from Times Square and a key scene in the heart of Times Square itself, meant the filmmakers had to work with New York City's omnipresent artificial lighting.

Figure 4.18 "use of light to create intensity", New York Film Academy, Accessed 14 October 2016

Lubezki was able to soften the image, with the use of lens flares adding visual texture to *Birdman*. By having lens flares on the film's copious wide-angled close-ups, it lowered the contrast and made the actors' more intimate scenes appealing and more emotional.

Figure 4.17 "camera shot in continuous sequence", Wikipedia, Accessed 14 October 2016

4.5 CONCLUSION

This chapter of the dissertation was an analysis of the Theories, concept mentioned in Chapter 2. The chosen Precedent studies were to reflect the theories that were mentioned in the previous chapter and be relevant to the topic of research. Through the critical analysis of these three case studies, one has a clear understanding of how these buildings function and the impact of film on architecture and the techniques used to create these impacts.

The study investigated the various key aspects required to create a meaningful architecture that is not only functional but aims to create a greater sense of place and uplift those within its community, as well as driving factors that illustrated representation in and of cinema and architecture as a tool to design and act as a narrative for the past and the present of its place and the individuals.

The investigated case studies, as well as the precedent studies from the previous chapter will be used to generate a brief for the design of a Motion Picture Gallery and Studio for the city centre of Durban.

CHAPTER 5

5.1 CHAPTER OUTLINE

There are several key components that need to be understood to be able to generate a facility for film that has a variety of functions and layers. program requirements and observations of similar typologies for a film facility were to be dealt with within this component of the dissertation. This chapter of this research shall be a review and investigation into local case studies of existing buildings and precincts which shall be used as guides in generating an appropriate intervention. Primary data was collected through a series of interviews with the architect, staff members and individuals visiting the case studies. These discussions yielded vital data regarding the functioning of the buildings and either their successful or unsuccessful configurations. Further information was obtained by the analysis of the building's design.

In this chapter, the case studies will be critically analyzed through the understanding of various components. By evaluating the different case studies, conclusions shall be drawn, and these will play a crucial role in informing the development of the proposed building typology of the dissertation.

5.3 Case Study - AFDA Film School

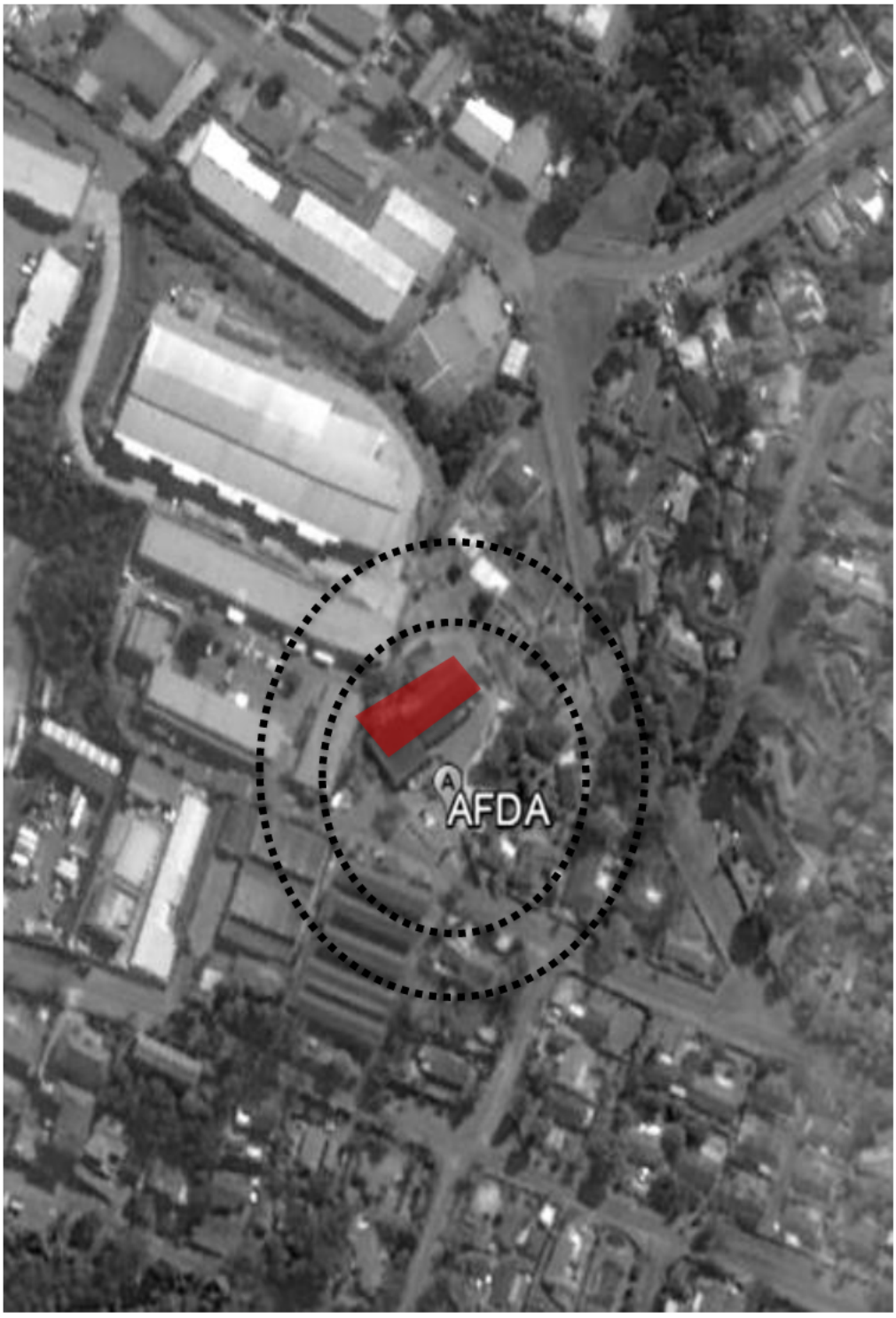


Figure 5.1.2 "Location of AFDA", Google Earth accessed October 2016

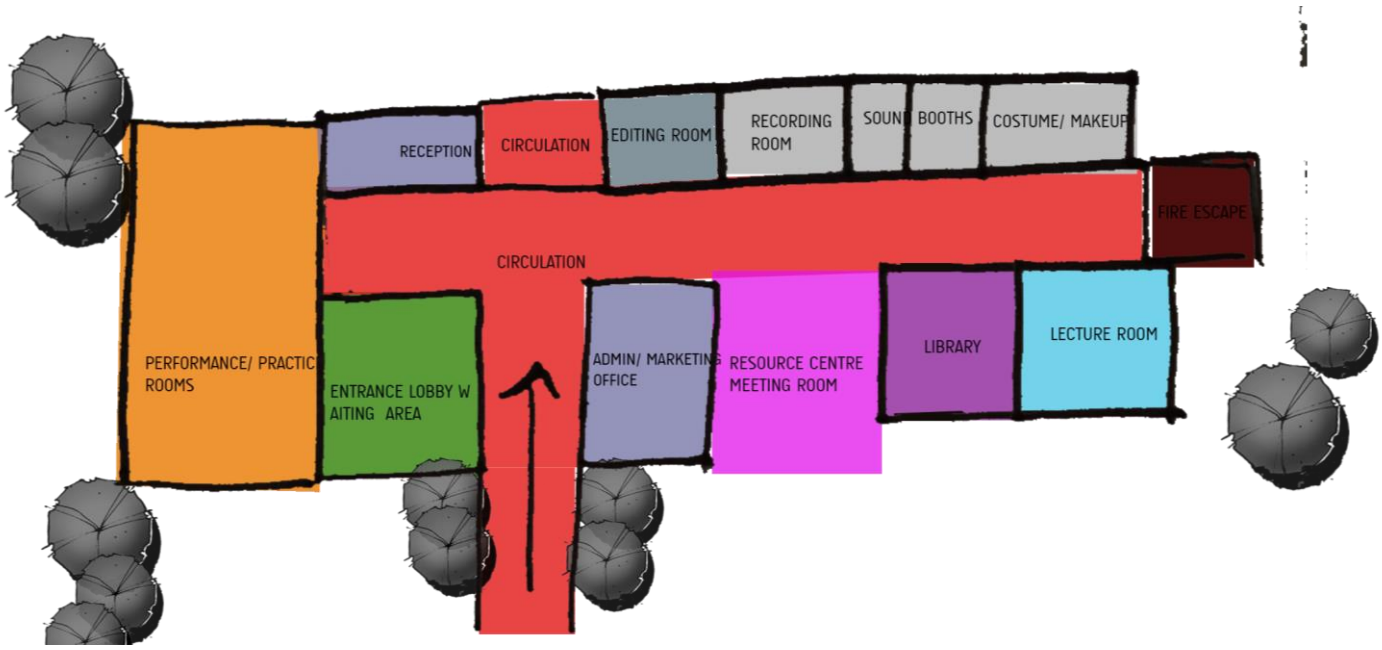


Figure 5.2 "Main level- first floor plan", author, 2016

The AFDA Film school was chosen due to its typology and programmic features, It will provide insight into the type of spaces and requirements a film facility would need. Interviews were conducted (chapter 6) and lecture was attended at the campus.

AFDA, the South African School of Motion Picture, Media and Performance, is an independent tertiary institution. The school is the most comprehensive film school in South Africa and the winner of the 2006 Oscar in the Honorary Foreign Film category of the Student Academy Awards (AFDA, 2008). Programmatically, AFDA contains a wide range of facilities necessary for education in film production, however in terms of its design the building does not allow the user to engage with the composition as a whole.

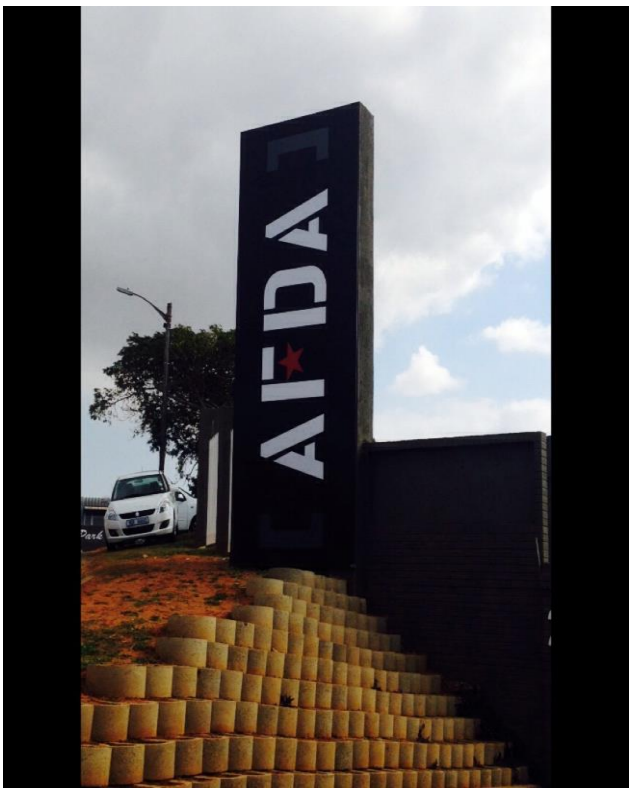


Figure 5.1.1 "Entrance to AFDA", author, 2016

The location of the facility is not ideal due to the fact that it is situated within a residential area and not easily accessible. It is currently the only predominant film institute in Durban yet it dies not have any iconism or impact to the context and the city as a whole. Durban is home to one of the most important film festivals in the world, but the facility does not pay homage to that fact.

Movement

When arriving to the building the entrance is very hard to find, if the site did not have a massive sign, one would not know that this is a film school. The entrance or lobby the most critical component, however it is not celebrated, it is hidden away. The AFDA entrance lobby acts as an exhibit space as well as waiting area, showcasing awards and successful films and alumni from the school. The use of the entrance lobby as an exhibit space is a good combination because it creates a keen interest and excites the user. The different functions of the school are split into different levels with the classrooms being on the lower level, the resource centre on the main level and production facilities above. This allows these programs to be easily accessible and the user does not have to walk from on end to the other if they are in a specific stage of film making because the functions are clustered.

Figure 5.4 "Library", author, 2016

Figure 5.3 "resource centre",author, 2016

The lobby opens leads into the resource center and library area which is uses as a meeting area for students, It encourages impromptu encounters between students, visitors and professionals.

Light

The library and resource centre receives light from the opposite end of the hall which faces North, non of the spaces actually face north directly. The resource centre faces South and which works well because of the diffused sunlight. The Performance center is also located on the main entrance level. The performance center is a box that is completely enclosed with no openings, this is so that various scenes can be created, due the structure being basically just a box it is positioned on the side of the site along the main façade and does not add to the aesthetic of the school and does not allow any light into the entrance lobby, it is however easily accessible to the main level and editing rooms. The walls and

floors are painted black and the space acts as a multifunctional canvas for scenes and can be turned into a hall to showcase live shows.

The Ground Floor which is below the main entrance level consists of the lecture rooms, student and staff facilities. The classrooms vary in size are and not cluttered.

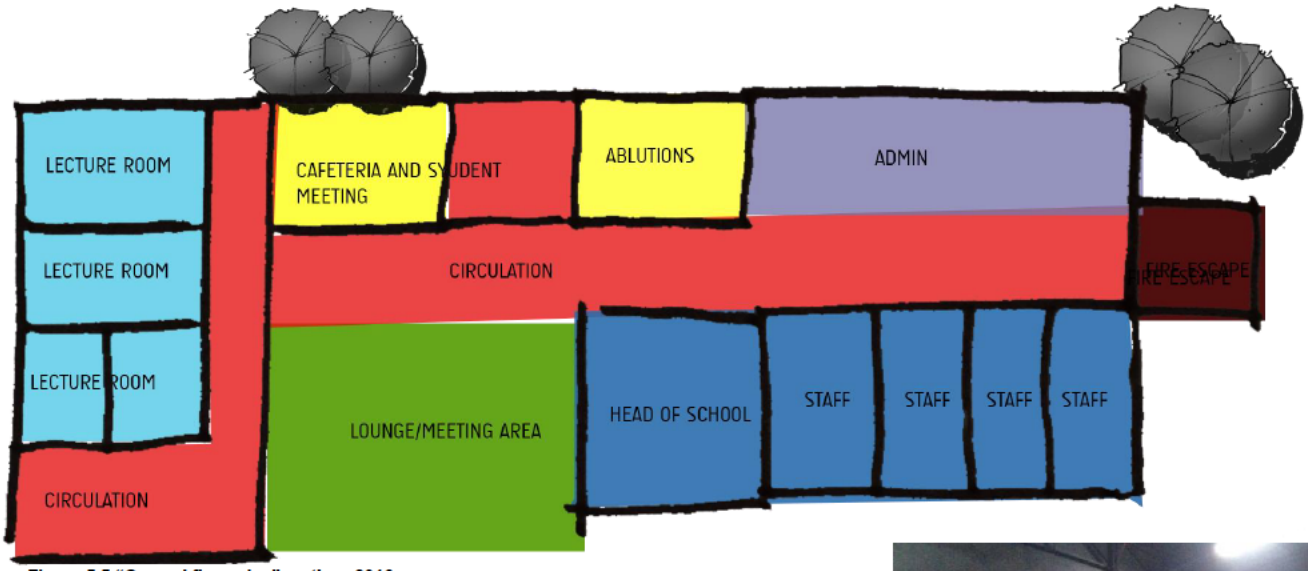


Figure 5.5 "Ground floor plan", author, 2016

Scene

Lecture spaces include expression spaces for the students to showcase their work or for films to be shown. For budget purposes, the two spaces can be combined, by keeping one side of the lecture room a blank white wall. This will allow for a screen for showcases. The classrooms do not have windows because many of these require dim lighting for videos to be shown and nearly all walls within the classrooms and along the corridors are painted white so that movies can be projected onto them.

Figure 5.6 "Interior of Performance centre", author, 2016

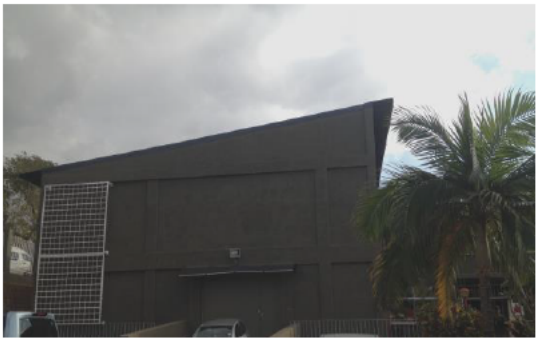


Figure 5.7 "Exterior of Performance centre", author, 2016

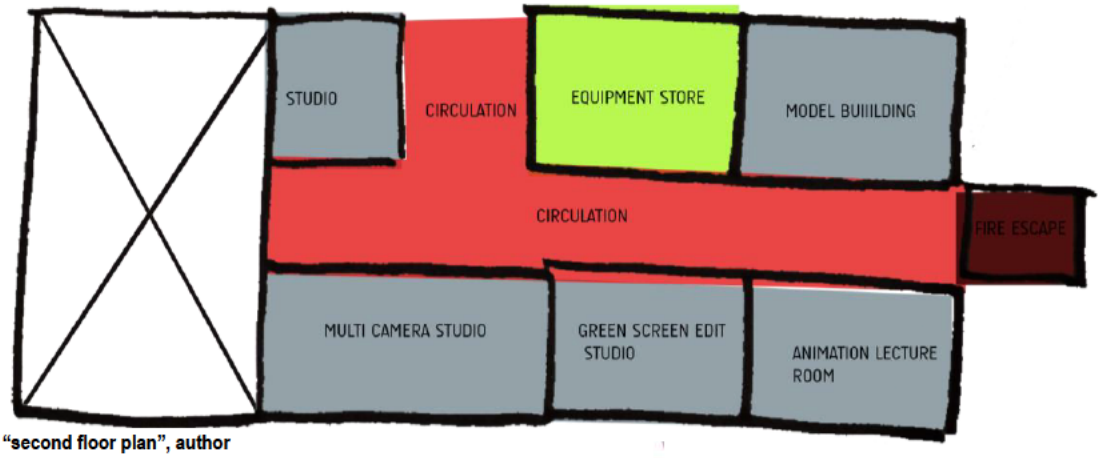


Figure 5.08 "second floor plan", author

Figure 5.09 "Editing studio", author

The second floor consists of mainly studio spaces, various studio spaces are required with different sizes, a multi camera studio for filming and green screen studio for CGI and special effect filing and composing. There is also a model building studio for production design. All these functions are on one level which is the production level, making it easier to transfer scene sets and equipment to the studios. Their performance studio however is located on the level below.

Figure 510 "canteen", author

Space

Space is an integral part of the building. A courtyard and canteen is welcoming and inspire creativity. The staff spaces and offices are open plan which make it less intimidating, there is also a mixed lounge area for both staff and students to share. There is no defines separation between students and staff, all are combined which makes a more interactive facility.

CONCLUSION

The relocation of film school functions and facilities into an existing site and buildings, do not allow for optimal design resolution and prevented optimal spatial organization. There is no user experience within the building that sets its apart and allow the user to feel that they are in a film school. The buildings seem like they were not initially designed for the purpose of a film school however it is the most successful film and prestigious film institute programmatically, AFDA contains a wide range of facilities necessary for education in film production and the necessary people required to interview for the administration of such an institute.

The facility allows users to not only learn about film but create movies too. The facility can provide both equipment, space and set components for shooting. Th spaces within the building are not the only spaces utilized, the outside is also used to outside shoots. This facility was informative and allowed a more in-depth insight into the needs of such a facility and the solutions to create a more successful film institute. The facility lacked an experiential impact, much like a movie, the spaces should take the user on a journey, a narrative, this facility failed to do so which allows the opportunity for a new design to consider the idea of a narrative and construct the experience within the building into an experience.

CHAPTER 6

6.1 FINDINGS

This chapter of the dissertation shall investigate first hand views on the opinions through interviews that were undertaken with the professionals while visiting the case studies, as well as key professionals in the field of Architecture and film. The data collected was to gain a further understanding of cinema, the techniques used in it, as well as what role the built environment plays in this. The questionnaire was broken down similarly to the literature review with the research and questions addressing my main elements which are movement, space, light and scene and lastly meaningful architecture and how this can be represented to the users of the space. This chapter will only highlight the most significant responses and views from the questionnaires and interviews.

In order to gain insight on these 5 principles/theories in order to design a building, I interviewed 5 Film Professionals as well as 5 Architects and asked them questions based on my main cinematic elements which are, Movement, space, light and scene. I received insight from both a film and Architectural perspective. The interviews were becoming a very insightful conversation between the three of us. I was also privileged enough to attend a lecture in directing.

6.2 INTERVIEW WITH ARCHITECTS AND URBAN DESIGNERS

The following questions were asked to professionals in the Architectural filed and these questions focused mainly on the elements of movement, space, light and scene and the impact these elements may have in creating meaningful architecture.

What is the importance of movement in architecture?

Movement in architecture relates to the user's journey and experience of buildings, both from within and from around a building. The dynamism in movement, expressed in form, enhances the experiential qualities of buildings and space and may be used to accentuate an experience or a particular part of a building. Movement can, and should, be juxtaposed with "stillness" to create a dialogue and counterpoint.

The use of movement as a generator of form results in buildings that have uniqueness as opposed to the "sameness" of early modernism. When movement is considered with light, time, and shadow creates a building that convey a range of experiences. Pascal Schoning, in his *Manifesto for a Cinematic Architecture*, reinforces this idea, describing space as something we experience through our senses - in both cinema and architecture primarily through sight and sound.(Schoning, 2006) Sight,

being the primary sense in cinema, is subject to the perception of motion and thus the movement of the camera is as important as the way in which

one may move around an architectural space. The movement of the camera or the movement of subject in front of the camera – or the lack of either – creates an experience that will be perceived differently based on the positions, angles and motions in the scene. Eisenstain also states that movement is situated at the very core of architecture and practice. It is difficult to imagine architecture without moving through it. As soon as one begins to move, the built environment begins to change and transform. A building's contours immediately shift, adjust and recompose into new forms as one approaches from a distance. (Eisenstein 1980)

What are the most important principles in the creation of meaningful spaces?

Most of the responses first described what meaningful space is which informed what principles makes a space meaningful, Meaningful spaces are those that are inherently well considered at a scale of a person and which enhances a human quality. Both within a building, and external to a building, the proportioning and scale should be considered carefully relative to its users.

Secondly, meaningful spaces can only be created through an integrated design approach which is cognizant of environmental conditions, contextual and urban conditions.

Thirdly, meaningful spaces are those that offer a narrative, be it around a particular cultural context, an event (negative or positive) or simply tied to local culture and appreciation.

Just like Adrian Snodgrass and Richard Coyn (2006) Stated that architecture and the built environment is the platform that we often connect with one another. We share our narratives and daily undertakings and thus our collective memories and experiences are preserved here. The built environment is the art that illustrates and captures the essence of the people, place and period - a *'symbol'* and vision of the society. Each age has its own essence, different to any other, to which Architecture can and does express/pay homage, which in principle embodies cultural movements (Snodgrass, A & Coyne, R. 2006; 4).

What is the importance of light and how does it affect spaces and perception?

Light allows for connecting spaces with your consciousness of time and place. It makes for an architecture that responds to understanding of the physiological, spiritual, and temporal qualities of people.

The play of light can make for dramatic spaces, or intimate spaces, with the judicious interplay of both, forms an important basis for buildings that delight, offer meaning, stirs emotions, allowing architecture to move people beyond the mundane. Architecture, like cinema, is perceived through light and sound. However, unlike cinema, architecture acts as "a receptor, modifier and transmitter of light and sound."(Tawa, 2010) The materials, from which architecture is created, react differently. They can "absorb, reflect and transmit light, or

modify the spectrum of white light in different ways."(Tawa, 2010) Cinema can capture this, but it is architecture that can react to it and manipulate it.

In cinema the concept of mise en scene (the arrangement of scenery to create a narrative) is used, how can the concept of a narrative be used in architecture?

The Responses stated that buildings that offer the greatest experience are those that are built around a narrative. Be it social, celebratory, cultural, memorial – the narrative behind the architecture offers users meaning and

6.3 INTERVIEWS WITH FILM MAKERS:

The following questions were asked to professionals in the field of cinema and these questions focused mainly on the elements of movement, space, light and scene and the impact these elements may have in creating meaningful architecture.

How is montage used to create a narrative?

From all my interviews, Montage was described as taking two shots – each of them signifying an idea –and placing them next to each other in order to create a third, associated meaning. An example was given, if a viewer is shown a picture of an ice cream and then the scene cuts to shot of a person staring at something off-screen, it conveys the notion that the person really likes that ice cream. However, if you flip the order to arrange the shot of the person first and then the ice cream, the interpretation is purposefully shifted to portray a sense of expectation.

How are spaces manipulated in filmmaking to imply certain emotions?

The answers received focused on the frame and what we perceive within the frame, as the saying goes a picture say a million words, it's easy to let the space tell the kind of environment your characters are in.

The principle of mise-en-scène refers to everything that appears in front of the camera and its arrangement—composition, sets, props, actors, costumes, and lighting. The "mise-en-scène", along with the cinematography and editing of a film, influence the credibility or believability of a film in the eyes of its viewers. The various elements of design help express a film's vision by generating a sense of time and space, as well as setting a mood, and sometimes suggesting a character's state of mind.

Another example of a technique that can be utilized is open framing, which is the practical opposite of mise-en-scène where the director will deliberately leave a component off-screen, thereby drawing attention to it.

Moving through the space in film also plays a part of how the viewer responds to it. For example, panning the camera horizontally or vertically very slowly in a shot to gradually reveal information creates anticipation and curiosity whereas moving the camera really quickly in the same setting creates the sense of panic and urgency.

An example that one of the lecturers likes to use with his students is a close up of a flower, which leads the viewer to wonder if it is in a flowerpot or garden - which create assumptions by association. Then cut to montage, a wide shot of a single flower in the middle of a desert or in the middle of a battlefield, which expands your idea of the space and also creates the aforementioned associated meaning (in this case, hope).

How could light be used to add value to/intensify a scene?

All the answers received stated that light was an extremely important element in film making, firstly, light can be used to choose what is shown in a shot. Full illumination is used to show all elements in the shot whereas one beam of light can be used to highlight certain components or to draw attention to small details. It is also about selectively revealing and concealing information, thereby creating questions or creating a mysterious or ominous mood.

The direction of the light source can also contribute to the purpose of a shot. For example, if there were a person sitting in a dark room, light shining on the person from below creates the ominous or eerie feeling, however, a light shining from above would imply vulnerability due to the exposure of the subject.

Other variations of light contribute to the impact of the shot as well. Some of the other factors that can be used to manipulate light is the colour, the tone, the intensity, sharpness and the physical source.

How is the camera's position, angle and motion; the spatial configuration of the set; and the sequence of different shots affect our perception and understanding of a film?

The responses received focused mainly on how a camera is uses and the types of shots uses, motion Picture is only alive for a little over 100 years, and from the early days filmmakers have always tried to push the medium. This medium has now been overpopulated with creative minds of the 21st century, but the fundamentals will always stay the same. A wide shot establishes a setting, A Close Up creates Impact and anything in-between is a touch of grey that can be experimented with, as long is it stays true to the central theme of the film with regards to its visual communication devices.

Moving through the space in film also plays a part of how the viewer responds to it. For example, panning the camera horizontally or vertically very slowly in a shot to gradually reveal information creates anticipation and curiosity whereas moving the camera really quickly in the same setting creates the sense of panic and urgency.

The movie industry main thing is to project visuals in a way the eye see reality, the simple way to do it 3 shoots wide, medium and close up ,then you intercut between then.

How can this be applied to designing meaningful Architecture?

Lines. Vectors. Vanishing Points. Structure. Shape. Texture. Design. Mood. Feeling. Space. Dynamics. All these words have meaning in Architecture and with Motion Picture, it will always try to express the Narrative World and capture the essence of that real-life experience, to really engage with the viewer who observes from a 2 dimensional medium.
Visualize are there to influence same as Architecture, the amount of light that space get should be coming through 80% of the structure, and the structure its self should be flexible to manipulate, or direct light based on how it move or its intensity. Lot of emotional benefits are gain, less energy consumed.
Visual anticipate what the view would like to see, or they guide the viewer visual consumptions. If most places where not build in linear way.

Like in movies, the director places elements or clues in order to direct the viewer's attention or to make them feel a certain way. I want to use the same principles in order to 'direct' people in my building. What type of spaces are required for an additional studio space similar to the one here at AFDA?

The first things to include are classrooms, of adequate size and not cluttered. Lecture spaces would also be required but so would expression spaces for the students to showcase their work or for films to be shown. For budget purposes, the two spaces can be combined, by keeping one side of the lecture room a blank white wall. This will allow for a screen for showcases. Communal space is an integral part of the building. A courtyard and canteen should be welcoming and inspire creativity. Of course there would be a need for staff spaces and offices, however, the less intimidating, the better.
The entrance or lobby would be the most critical component. It should be welcoming and inviting while being visually appealing and exciting.
Overall, all aspects of the building should be able to tell someone what you do, who you are and what you strive for.

6.4 Interview and lecture by Afda Director of Film making

What are the similarities between cinema and Architecture?

Like with film, architecture requires symbiosis with the context, culture and people around you. The surrounding environment can influence your ideas as well as your building materials. For example, the Eastgate Centre in Harare epitomizes the best of green architecture and ecologically sensitive adaptation. It uses biomimicry principles whereby the

building has no conventional air-conditioning or heating yet stays regulated year round with dramatically less energy consumption using design methods inspired by the self-cooling mounds of African termites.

Lecture on Directing by Mr Richard Green: attended at AFDA on 22 July 2016

In directing, there are five important elements one needs to focus on and these are:

- The script the movement, actions, expression, and dialogues of the characters are narrated.
- The Translation: The translation of the story to the viewer
- The aesthetic: The style and look and feel of the visuals
- The editing: how everything is put together.

The story also has a construction, it has three acts which is the :

- Premise: build up
- Inciting: the event that catalyzes the film into motion
- Climax: the point of highest impact in the movie

From this lecture, the similarities between a film director and an architect could be made and similarities in the design process of both film and architecture could be compared.

CONCLUSION

Just like the script of a film, the architect plans out the concept and "narrative "the building is to communicate. The way this story or meaning is going to be translated is then decided by the design, the materials, the context. Just like film, the aesthetic also plays a vital role in the way a building communicates, the overall look and feel is important for user experience and an important factor in creating meaningful architecture.

The construction of a story in film can also be compared to architecture, the premise or buildup of a story is much like the entrance of a building or site, the inciting event can be compared to the circulation of a building and how one circulates the building as a whole and the climax point can be compared to the core function of the building typology.

It is evident from this lecture that film making, and architecture do have various similarities and approaches, and each can influence the other to create more meaningful way of communication.

CHAPTER 7

7.1 CONCLUSION AND RECOMENDATIONS

The research conducted from the literature and case studies have shown that applying a semiotic approach using the elements of movement, space, light and scene as tools bring a new level of detail, observation, analysis and editing techniques to their projects and enable new ways to communicate design. At the forefront of these findings is the critical ability of the moving image to capture and depict time, to create a more realistic world than any other media is capable of. Shown throughout the research, the separation of time from cinema is impossible and its manipulation serves to enhance its presence.

The **aims** of this to investigate how to shift the paradigm of current accepted methods of architectural process, using the language of film and the image and the objectives was to understand the process of meaning formation in architecture by the use of Semiotics as a methodological tool to comprehend the process of meaning through cinematic techniques.
To understand how the language of cinema can be used to represent Architecture. The use of cinema as a representative tool for architecture and the application of its techniques in the hands of an architect to formulate a new design process constitute most of the ways penetrating from the field of cinema to the field of architecture has been proving from throough research into these techniques thativerlap from the firld of cinema and into the field of Architecture and these are movement, space, scene and light.

The **Primary questions** which was “Can the p**rocess** and **techniqu**es through which **film** is created, inform the process of Architectural design?” has been answered because:
To determine a meaningful architecture through discussion of the relationship between architecture and cinema showing common threads between the two disciplines. Both disciplines manipulate time, space, light, colour and sound; in the case of cinema, to reinforce the narrative of a film, and in the case of architecture, to manifest the ideas behind a design. The research of cinematic techniques, and investigation into their application in an architectural project, has created the beginnings of a tool set for architects that provides a new utility in the documentary, editing and portrayal of design projects.
Therefore, as stated in the **hypothesis**, to determine a meaningful architecture through discussion of the relationship between architecture and cinema showing common threads between the two disciplines. Both disciplines manipulate time, space, light, colour and sound; in the case of cinema, to reinforce the narrative of a fi lm, and in the case of architecture, to manifest the ideas behind a design. The research of cinematic techniques, and investigation into their application in an architectural project, has created the beginnings of a tool set for architects that provides a new utility in the documentary, editing and portrayal of design projects.

A film creates its own conception of time and space. Time can either be expanded or compressed and move forward or backward dependent on plot or remain stationary. Film and visual media captures and encapsulates a unique moment in time to display concurrently or at a future date. Film and visual media convey different segments of time yet still remain constrained to the electronic image and the will of the viewer. Film often uses the technique of montage that uses a series of short shots or moments that are edited to create a sequence that condense or expand space, time, and information. The viewer mentally pieces the information together to form a unique and personal synthesis of the visual information. In the short time a visitor has in experiencing a small building project there are few moments to embed meaning to create a holistic and meaningful experience.

7.2 CONCLUSION

The cinematic technique of montage becomes an important technique to apply to an architecture project.
In creating a cinematic space, the architect gives meaning and richness to the segments of time associated with site. The concept of time within a site finds varying meanings dependent on the length of interaction within and around it. The fleeting interaction of the passing motorist allows but a moment to convey meaning, while the neighbor of the site interacts with it throughout the seasons, through changing landscape and weather conditions.

The moving image provided a valuable form of feedback that will allow the designer in the design process to critically think about how the end user will experience the space. Here it is the creation of an environment for the end user to experience that the architect is designing.

7.3 RECOMMENDATIONS

The primary objective of the research is to create a meaningful architecture that will be appropriate for its users and place. It is highly significant that generated architectural and urban intervention becomes a representation of its user and its environment and the application of montage theory is suitable for the design process in order to creative a narrative. Contemporary architecture in the South African context must be culturally attentive and engage itself with its users and surrounding contextual setting. Understanding the techniques used in cinema was pivotal and the literature review revealed how powerful the elements of movement, space, light and scene are in order to create a narrative.
This disassembly and analysis of the various techniques used in capturing and manipulating cinema and discovery of their uses and relationships, enables their reassembly and utilization in architectural projects. Tawa argues that “design

is an opportunity to collect, mobilizes, and direct such diverse assemblages, assuming they and their components have been properly identified. If only a portion of their components have been recognized and worked with, the rest still remain and will influence the processes and outcomes of design." (Tawa, M 2010, p 24) Here Tawa contends that the breakdown of cinematic techniques can lead to their subsequent reassembly into an architectural design or process, even if some techniques are favored over others, as they are all connected and don't operate in isolation.

The following elements have been researched and identified as elements that can be applied to both cinema and architecture and therefore be uses as a design tool in Architecture allowing the capability to create a design that communicates meaning and a story just like film creating a montage. The idea of representing a person moving through a building like a camera through a set, will thereby create a "picturesque" path and a meaningful space. The application of narrative structure principles to an architecture project involves a thoughtful arrangement of program, circulation, and sequence of spaces to create a certain experience for the project user.

Movement: In order to create movement, the design process will first need to consider the current conditions on the site which are how people already access the selected site by car and foot. This analysis should inform the most active edges of the building therefore implying were a preferred entrance should be. From this establishment, a flow or sequence can be designed based on the levels and program of the building.

Light: Light will play an important role in the overall experience and the use of natural light will be required in many of the spaces as well as artificial lighting in spaces such as cinema and studios. Orientation of the different spaces and functions is there for important and along with access and movement within these spaces will add to the user experience.

Space: establishing a program and organization of these functions will start to construct a narrative, in order to create a narrative a journey needs to be considered for the user. From the time the user enters the building till the end, the experience should be progressive and continuously change and impact the user. For the film school the spaces should be organized according to the program which will be to inspire, teach and create which therefor means that the user should first experience an exhibition and showcase of cinema, followed by an educational experience which ill teach them about cinema nd then finally the production element which will allow the use to create their own movie making the overall experience a narrative journey.

Scene: Setting the scene of the building will first start on the streetscape, users should experience a sneakpeek of what is to come, much like a Mcuffin (an object or itenm that sereves as a mere trigger for the plot). The spaces outside the building should excite and intrigue and trigger the overall experience. The provision of a public space/ cinema outside the building will allow for this.

Montage: By using the above-mentioned elements within the design, the concept of montage is reinforced and the user experience within the building becomes a journey. The building does not just become a space but a story which allows people to create their own stories and serve as a platform enabling the average film maker.

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QUESTIONAIRE GIVEN TO PROFESSIONALS WITHIN THE FIELD OF FILM MAKING.

Question 1: Montage

1.1 What is Montage?

1.2 How is montage used to create a narrative?

Question 2: Space

2.1 How are spaces designed/manipulated to apply an emotional state to the scene?

2.2 How are these represented emotions captured?

Question 3: Scene

3.1 What are the components required to create a set sequence/continuity of observation within a setting?

3.2 How are principles such as “frame” and “depth” used when creating a scene?

Question 4: light

4.1 How is light used to intensify a scene?

4.2 What are the depth cues applied when filming?

Question 5: Movement

5.1 How is the camera’s position, angle and motion; the spatial configuration of the set; and the sequence of different shots affect our perception and understanding of a film.

5.2 How can this be applied to designing meaningful Architecture?

QUESTIONAIRE GIVEN TO PROFESSIONALS WITHIN THE FIELD OF ARCHITECTURE.

Interview questions:
Using cinematic techniques (movement. Space, light and scene) as a tool for design

1. What is the importance of movement in architecture?

2. What are the most important principles in the creation of meaningful spaces?

3. What is the importance of light and how does it affect spaces and perception?

4. In cinema the concept of mise en scene (the arrangement of scenery to create a narrative) is used, how can the concept of a narrative be used in architecture?

Ethical clearance

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

12 August 2016

Ms Sumaiya Y Bhayat 208509143
School of Built Environment & Development Studies
Howard College Campus

Dear Ms Bhayat

Protocol reference number: HSS/0357/016M
Project title: Semiotic studies and thire influence on Architectural design- Towards a Motion Picture Gallery and Studio for Durban.

Expedited Approval

In response to your application dated 06 April 2016, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL.**

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. Please note: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Y[redacted]y

.....
Dr Shenuka Singh (Chair)

/px

cc Supervisor: Lawrence Ogunsaya
cc Academic Leader Research: Prof Oliver Mtapuri
cc School Administrator: Ms Nolundi Mzolo

Humanities & Social Sciences Research Ethics Committee
Dr Shenuka Singh (Chair)
Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Telephone: +27 (0) 31 260 3587/8350/4557 **Facsimile:** +27 (0) 31 260 4609 **Email:** ximbap@ukzn.ac.za / snymanm@ukzn.ac.za / mohunp@ukzn.ac.za
Website: www.ukzn.ac.za

PART B

DESIGN REPORT

THE INFLUENCE OF CINEMATIC TECHNIQUES ON ARCHITECTURE

PROBLEM STATEMENT:

DURBAN IS HOST TO ONE OF THE MOST PRESTEGIOUS FILM EVENTS IN THE WORLD, THE DIFF, BUT THERE ARE NO FACILITIES IN THE CITY TO ENABLE FILM MAKERS TO MAKE THEIR OWN FILMS. THERE IS A NEED FOR A FACILITY THAT IS DEDICATED TO THE HISTORY AND THE PRODUCTION OF CINEMA

CONCEPTUAL FRAMEWORK

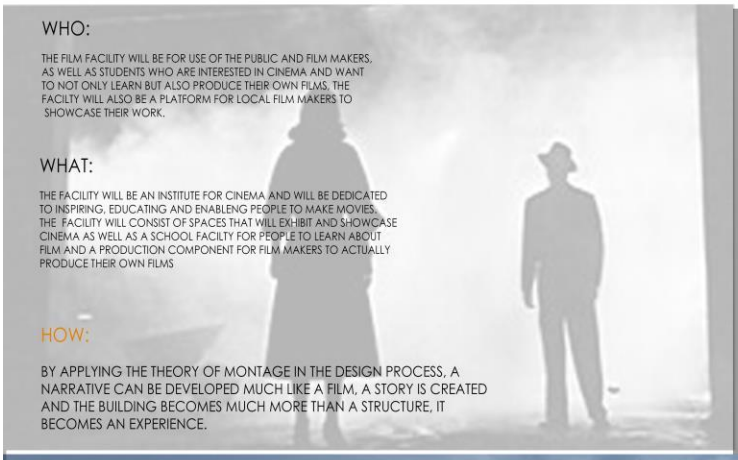
THE CONCEPT OF MONTAGE WILL BE USED IN ORDER TO CREATE A NARRATIVE.
THE DESIGN ITSELF WILL BASED ON THE NARRATIVE EXPERIENCE THAT THE BUILDING AIMS TOCREATE.
THE IDEA IS THAT PERCEPTION AND PHOMENOLOGY CONTRIBUTES LARGELY TO THE MONTAGE OF A BUILDING AND MOVEMENT IS THE PHYSICAL LINK TO COMBINE THE NARRATIVE AND EXPERIENCE TOGETHER

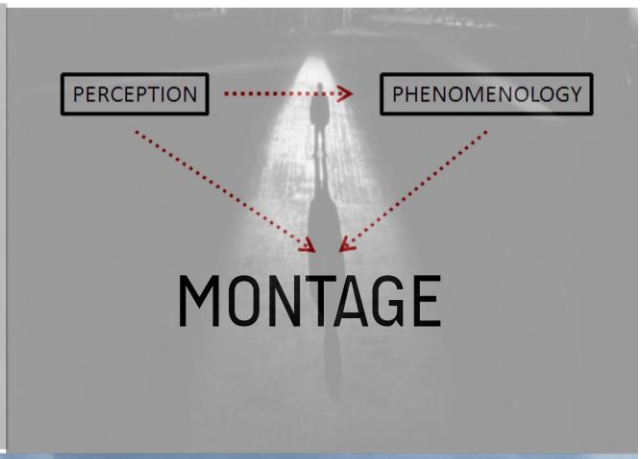
THEORETICAL FRAMEWORK

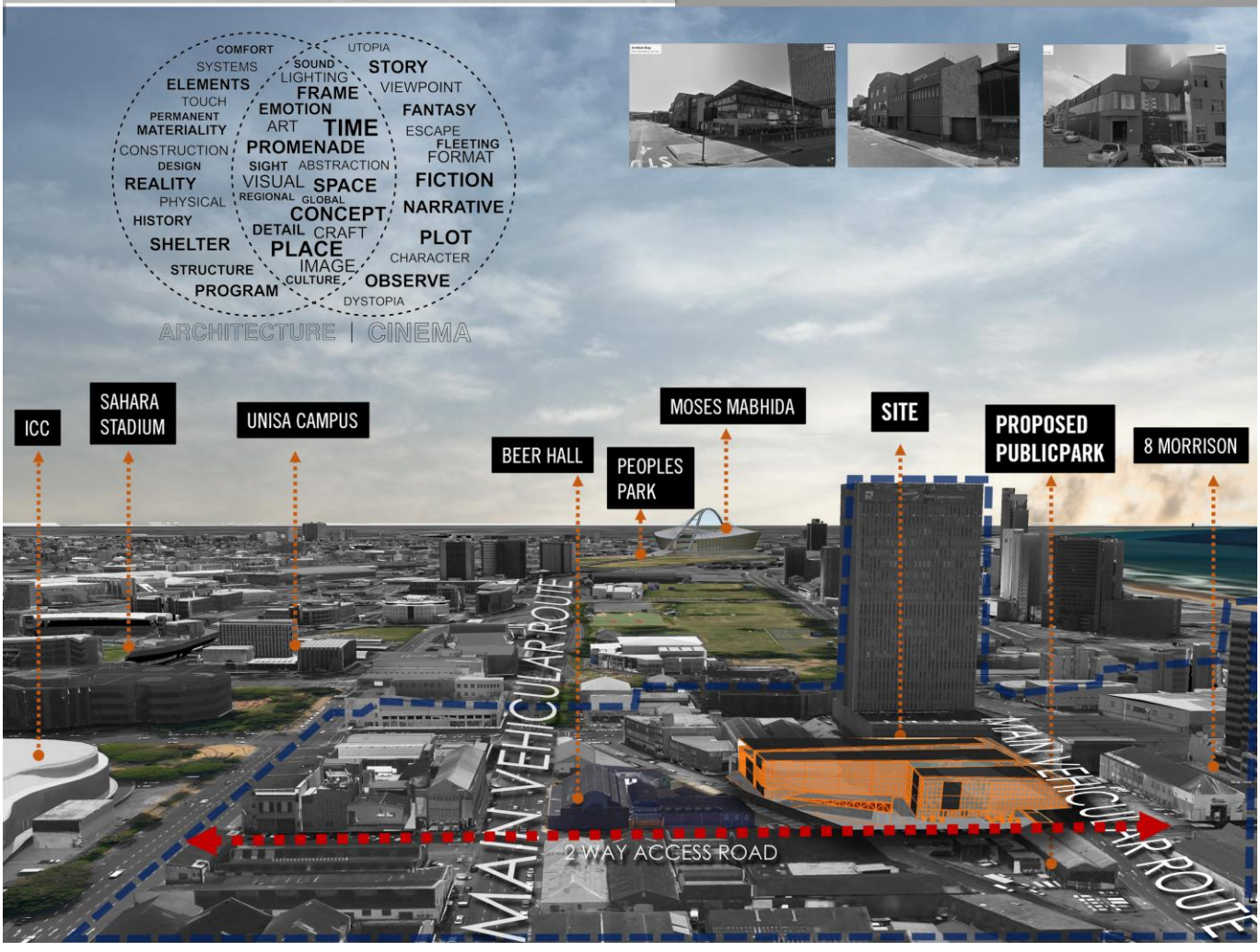
TIN ORDER TO ESTABLISH A MONTAGE WITHIN THE DESIGN, CINEMATIC PRINCIPLES WILL BE APPLIED TO CREATE THE NARRATIVE WHICH FORMS THE MONTAGE

THESE PRINCIPLES ARE:

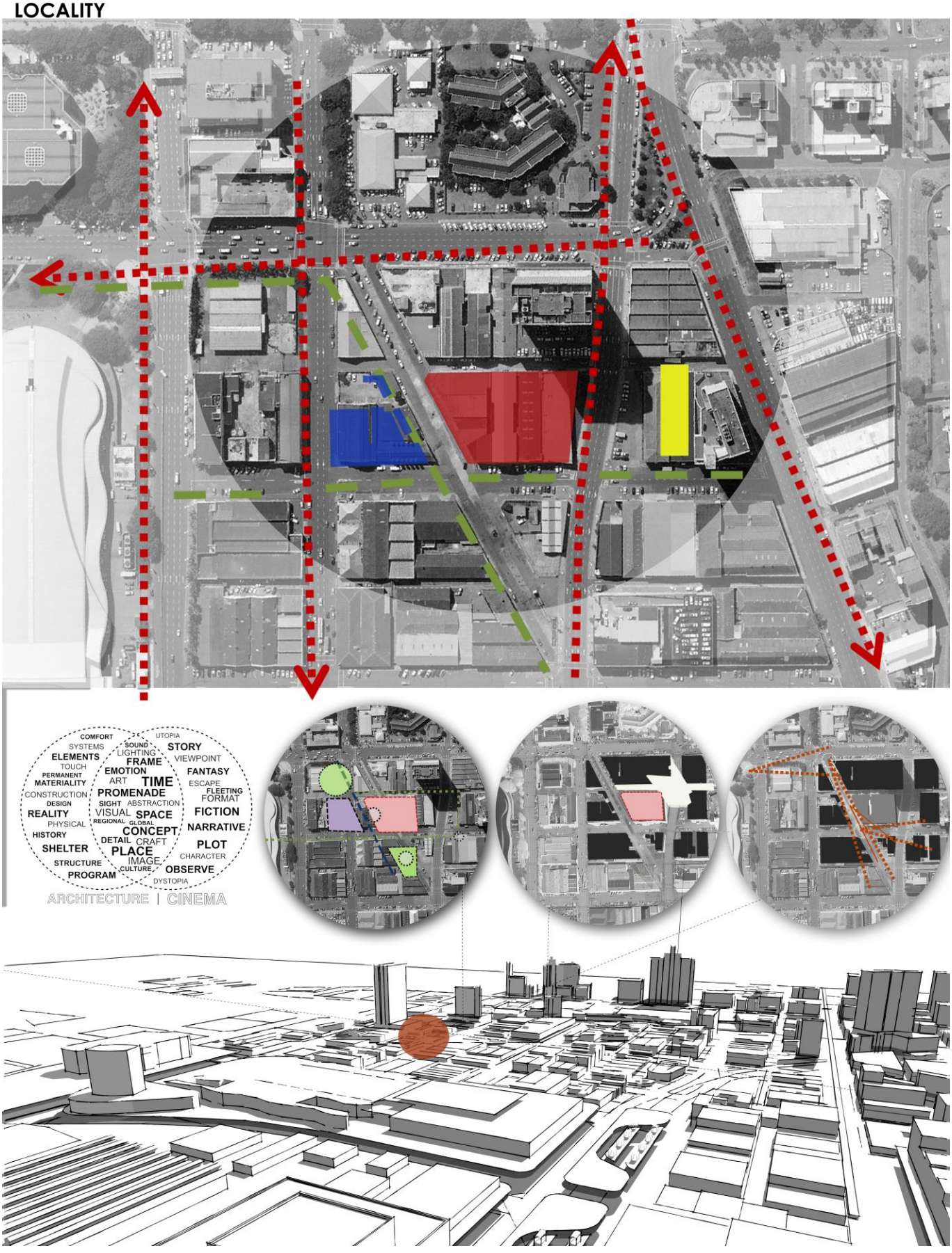
MOVEMENT SPACE
LIGHT SCENE

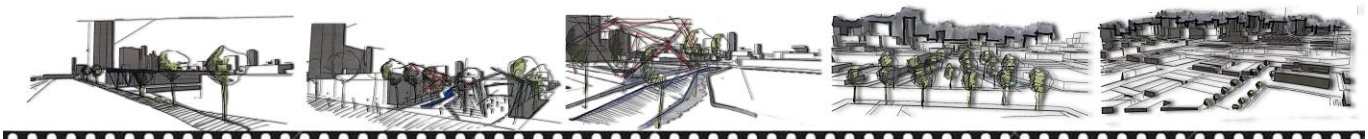


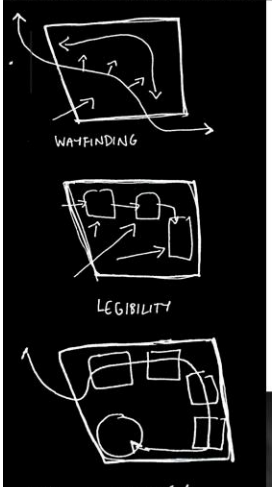




LOCALITY


COMFORT
SYSTEMS
ELEMENTS
TOUCH
PERMANENT
MATERIALITY
CONSTRUCTION
DESIGN
REALITY
PHYSICAL
HISTORY
SHELTER
STRUCTURE
PROGRAM
UTOPIA
SOUND
LIGHTING
FRAME
EMOTION
ART
TIME
PROMENADE
SIGHT
ABSTRACTION
VISUAL
REGIONAL
GLOBAL
SPACE
CONCEPT
DETAIL
CRAFT
PLACE
IMAGE
CULTURE
DYSTOPIA
STORY
VIEWPOINT
FANTASY
ESCAPE
FLEETING
FORMAT
FICTION
NARRATIVE
PLOT
CHARACTER
OBSERVE
ARCHITECTURE | CINEMA





BRIEF:

THE BRIEF WOULD REQUIRE A FACILITY WHICH OFFERS:

AN EXHIBITION/ MUSEUM FACILITY TO HOUSE CINEMATIC ART DEDICATED TO CINEMA. IT SHOULD HAVE BOTH PERMENENT AND TEMPORARY EXHIBITION SPACES TO ALLOW LOCAL ARTISTS TO SHOW CASE THEIR WORK

THE FACILITY SHOULD ALSO HAVE A SCHOOL/ EDUCATIONAL FACILITY THAT WILL OFFER CLASSES IN THE MOTION PICTURE MEDIUM. IT SHOULD BE EQUIPED WITH ALL THE NECESSARY REQUIREMENTS OF A FILM SCHOOL AS WELL AS A MEDIA/ LIBRARY THAT WILL BE AVAILABLE TO THE PUBLIC

THE INSTITUTE WILL ALSO HAVE A PRODUCTION FACILITY FULLY EQUIPED WITH PRODUCTION SETS, EDITING FACILITIES AND SOUND STAGES

THE FACILITY SHOULD BE EASILY ACCESSIBLE AND DEMONSTRATE THE FUNDEMENTAL PRINCIPLE OF MONTAGE WTHIN ITS DESIGN

ACCOMODATION:

- PRE-PRODUCTION -
PRODUCER'S LABORATORY (8 CUBICLES): 20M 2
- MEETING ROOM: 40M 2
- PRODUCTION DESIGN STUDIO: 100M 2
- MAKE-UP AND COSTUME DESIGN STUDIO: 100M 2
-MULTI-CAMERA STUDIO: 400M 2
- SPECIAL EFFECTS STUDIO: 200M 2
- MODEL OR SET BUILDING STUDIO: 350M 2

- POST-PRODUCTION
- VIDEO EDITING LABORATORY (9 COMPUTERS): 50M 2
- LARGE: 25M 2 + 30M 2 (VOICE BOOTH)
- SMALL: 20M 2 + 10M 2 (VOICE BOOTH)
- AUDIO EDITING SUITES (X2): 20M 2
- DUBBING STAGE: 50M 2

- OFFICES
- MANAGEMENT (X2): 40M 2
- STAFF (X18): 180M 2
- TEA ROOM AND LOUNGE: 50M 2
- MEETING ROOM: 50M 2

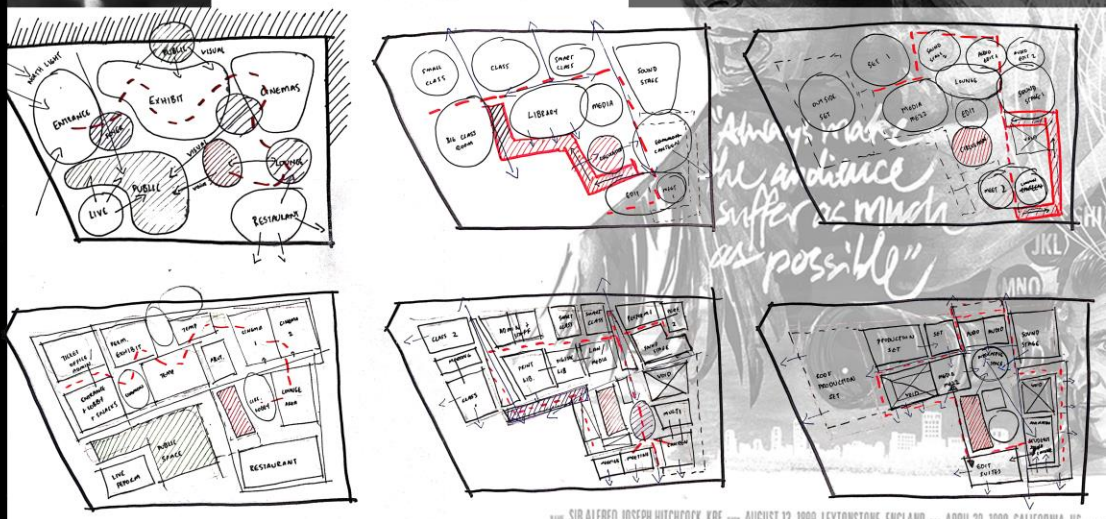
- LECTURE ROOMS (180 PEOPLE): 200M 2
- LIBRARY: 200M 2

PUBLIC FACILITIES
- RECEPTION AND LOBBY: 150M 2
- EXHIBITION SPACES: 300M2
- SMALL EXHIBIT SPACE 150M2
- INFORMAL LECTURE ROOM (80 PEOPLE): 100M
2 LARGE AUDITORIUM (200 PEOPLE): 300M
2 SMALL AUDITORIUM (100PEOPLE): 150M 2

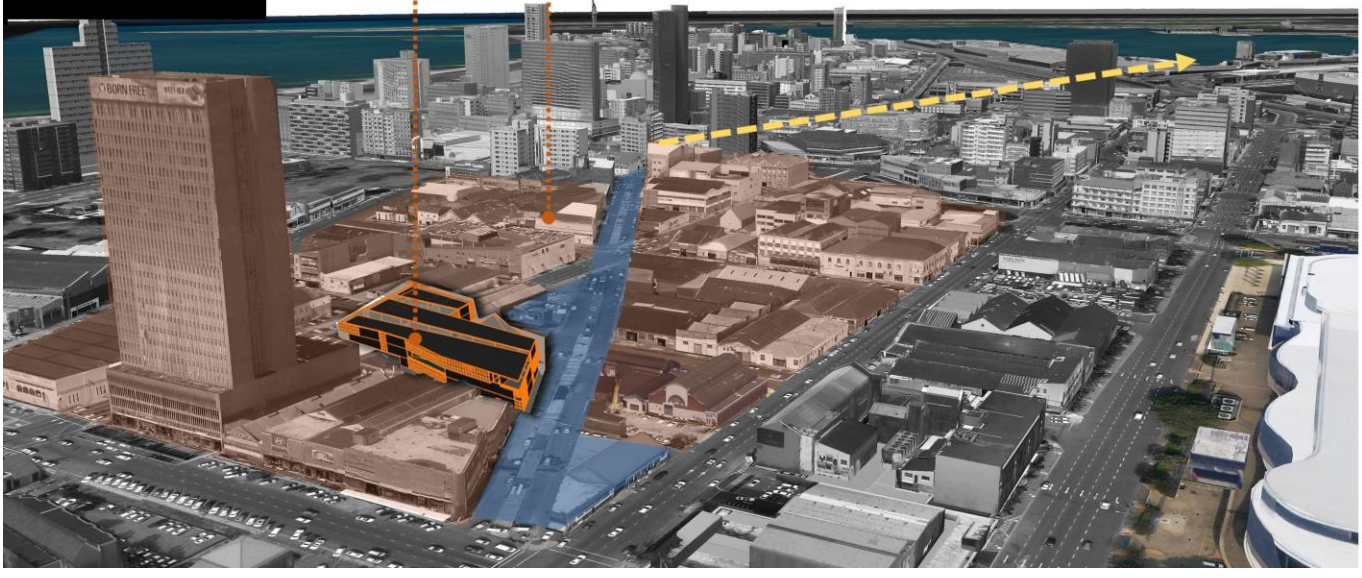
VOYEURISM

MCGUFFIN

/Submit
noun
noun: McGuffin
an object or device in a film or a book which serves merely as a trigger for the plot



SITE FILM PRECINCT



EYE- NEW DUCH FILM INSTITUE - AMSTERDAM

MOVEMENT

The shore strip which is an inclusion into the outer area of the Film Museum's is connected as a long-stretched, stepped access ramp that runs parallel to the river and connects the museum directly to the existing promenade where the Overhoeks Tower is situated. This articulation represents a fundamental part of the dramatic composition of the museum. Visitors access the building over a gentle slope and are in constant deceleration, the optical changes of the surrounding city vistas become the main focal point. The view over the city and the water is widened with increasing height, the mental and perspective effect of the barrier-free access area determines the movement. The Spatial density and transparency ascend into an exciting atmospheric moment before reaching the building's interior in an almost imperceptible approach. The dynamic room sequence is clearly perceptible from the building's general external geometry and massing, it develops on the inside as a rational, spatial and visual succession of single spaces.

SPACE

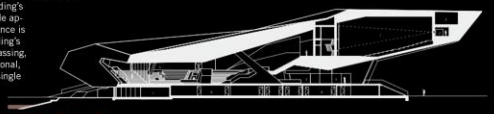
The Museum is flanked by the appealing river promenade relating to the Overhoek spark on the northern IJ shore, the new building combines the existing usability qualities into its general architectural concept. The landscape of the riverbank and the changing movement on the river IJ characterizes the building's city- facing side turning into essential design factors, the new building generates several urban and interior conditions which through their communicative orientation contribute to the urban and social additional value. Resulting in the Film Institute's striking and impressive appearance which complements the city's highly qualitative cultural offering and highlights Amsterdam's role as a world-renowned top cultural site.

LIGHT

The entry into the foyer is defined by lighting, materials and spatial development alongside the glass front. The foyer acts as both, a dwelling and distribution area The fluidl laid out and the pleasant terrace acts as an extension of this communicative space. At the centre of this zone, all internal pathways are integrated into the spatial formulation of this neuralgic area and the open interior unfolds its full dimension. The usability notion alows good orientation and freedom of movement that is unimposing at all points, whereby the foyer also portrays the exit- and endpoint of any form of use.

SCENE

The buildings design concept becomes the story board through the architecture the and scenography. By delivering an effective interchange, the building's assigned function oscillates between acting as the protagonist of the urban scenery's and as a dramaturgical element placed in front of a heterogeneous landscape setting. On the interface between land and water, between historic centre and modern development area, the building embraces many faces from each viewpoint, thus finding itself in a constant interchange with its surroundings. Its radiance overcomes the city's natural divide and historic lifeline, the IJ river, and is interpreted by its exchange with the surroundings, its positioning, and geometry.



CINEMATHEQUE QUEBECOIS - CANADA

MOVEMENT

The movement patterns of the city were considered in the design of the building's public interface. A gridded glass screen spans the main elevation across the restored stone and brick façades of the old school. Moving images are projected onto a translucent portion of the screen that is visible from the street. An internal walkway, located between the projector and the screen, adds silhouettes of movement within the building to the series of projections. This combination of transparency and opacity stimulates the curiosity of onlookers.

SPACE

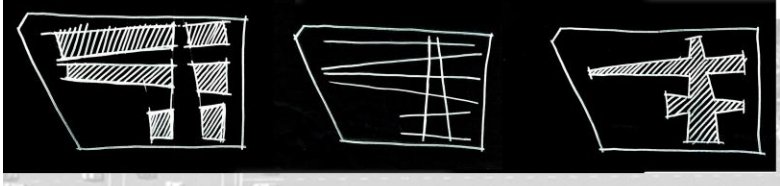
An internal walkway, located between the projector and the screen, adds silhouettes of movement within the building to the series of projections. This combination of transparency and opacity stimulates the curiosity of onlookers.

LIGHT

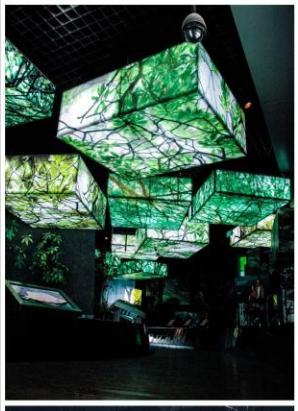
The notion of the cinema as an enclosed space, confined by rigid walls, is deliberately questioned. Suspended above the entrance is a canopy of seating facing a suspended projection screen. By placing the screen and seating in mid-air the cinema ceases to be private and enclosed and becomes an activity node that forms part of the public realm

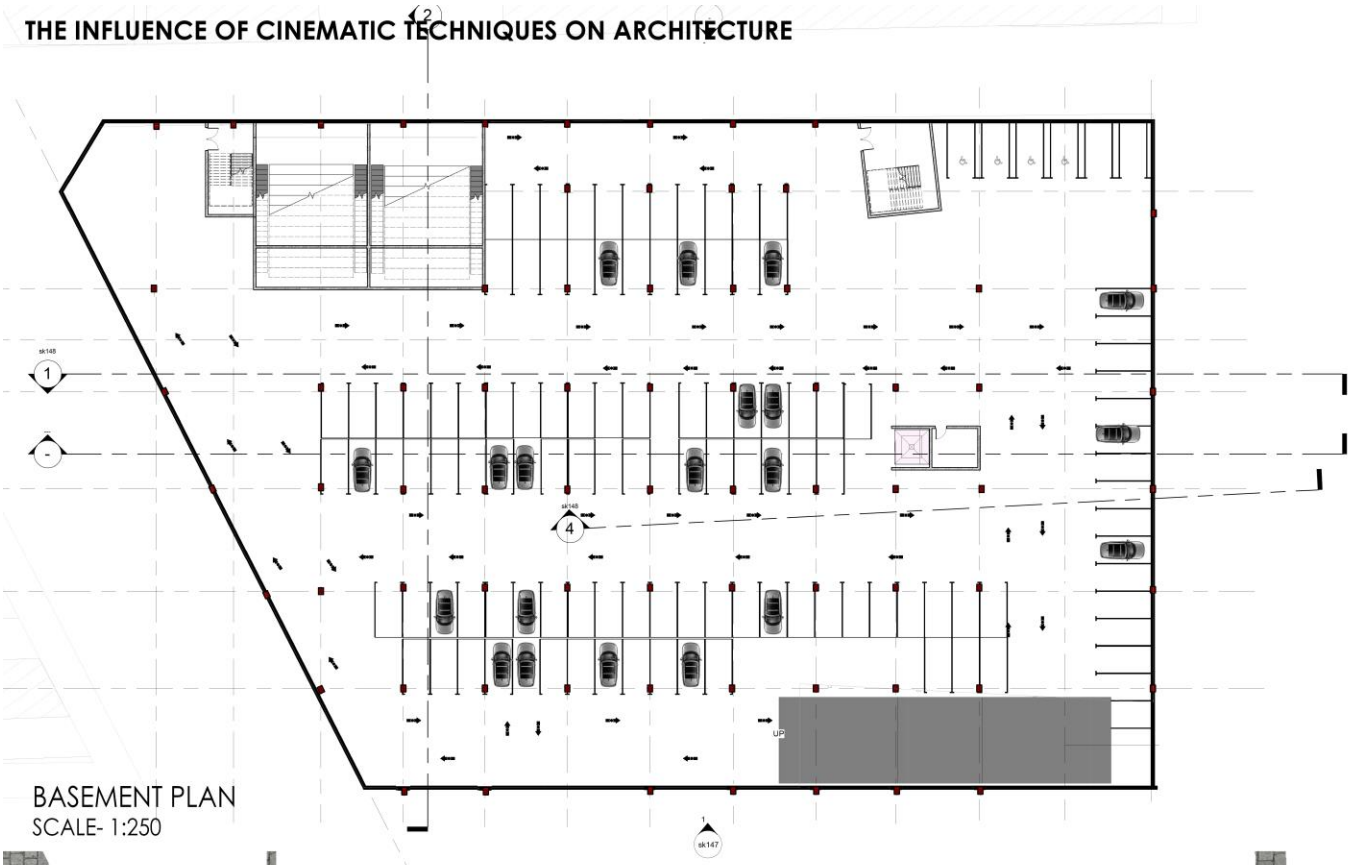
SCENE

"The building creates and frames a series of glimpses, combining activity and artefact, old and new architecture, actors and audiences, street and room. These are images that are projected into the life and spaces of the city

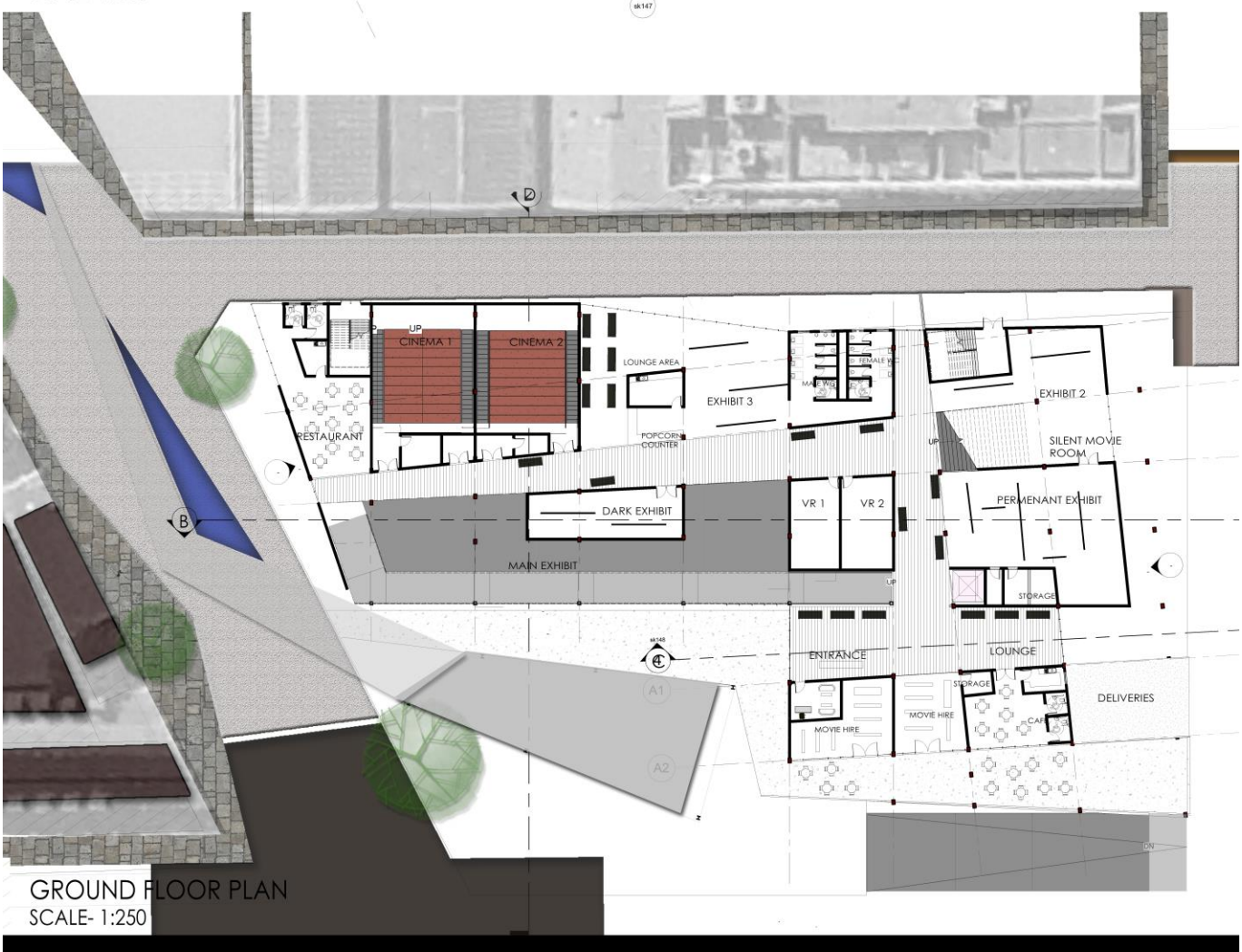


SUMAIYA BHAYAT - 208509143

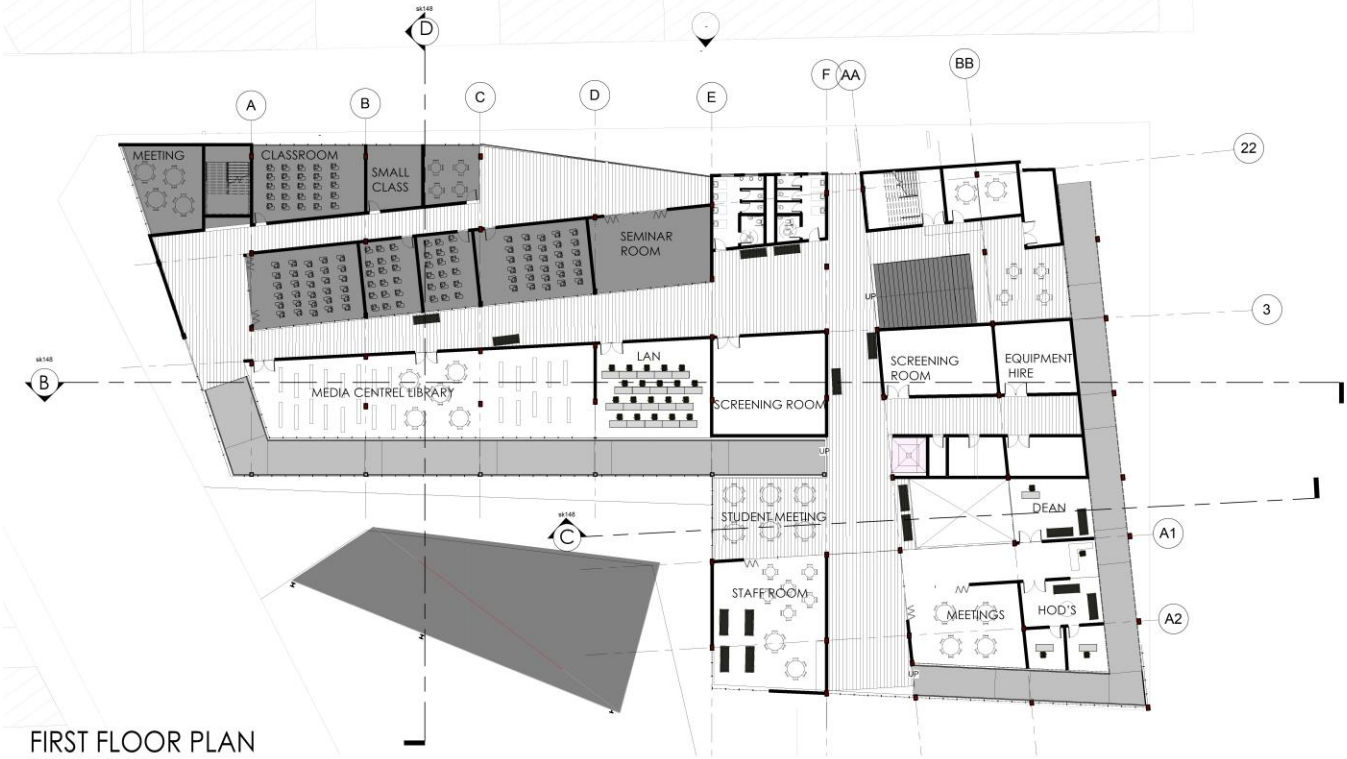




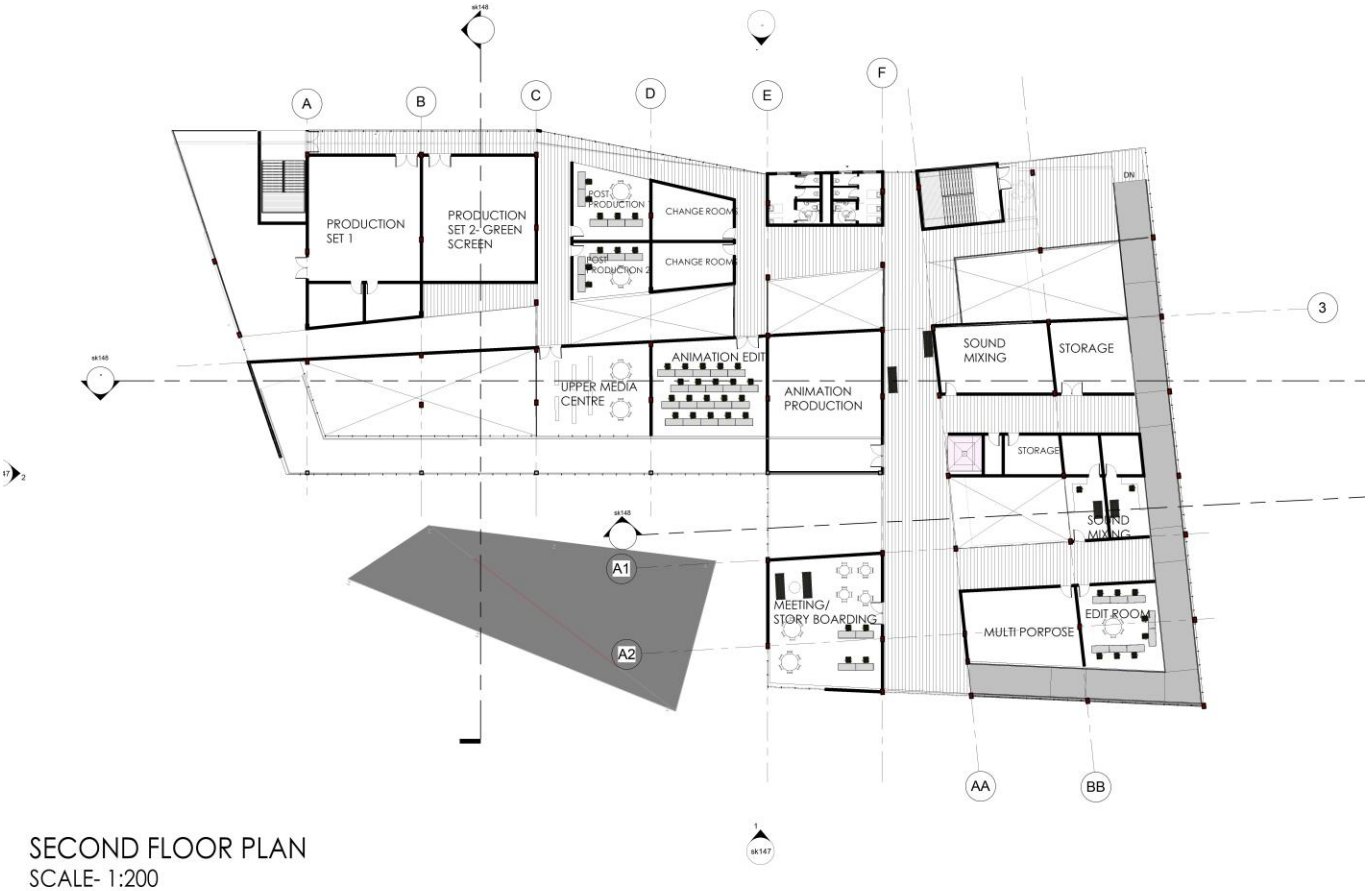
BASEMENT PLAN
SCALE- 1:250



GROUND FLOOR PLAN
SCALE- 1:250

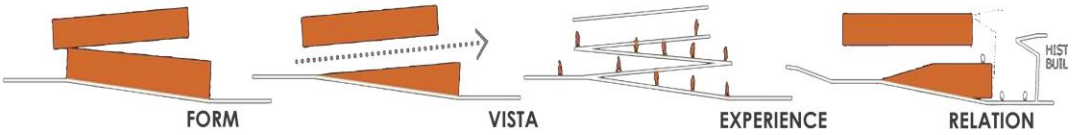


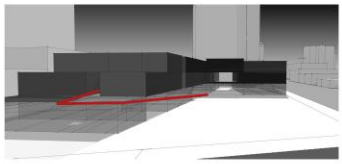
FIRST FLOOR PLAN
SCALE- 1:200

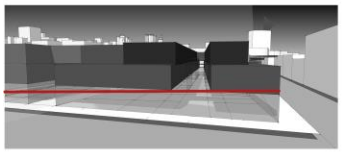


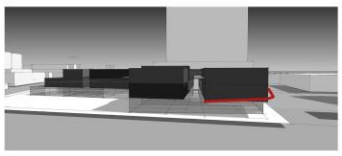
SECOND FLOOR PLAN
SCALE- 1:200

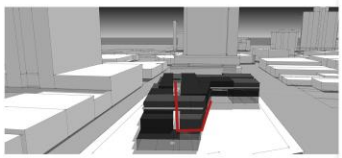

CONNECT
APERTURE
VIEW
PUBLIC

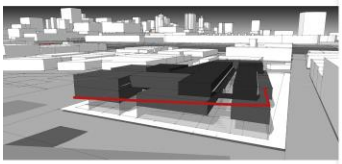

FORM
VISTA
EXPERIENCE
RELATION

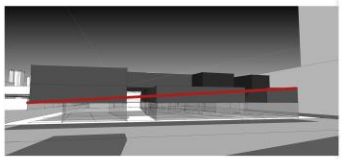


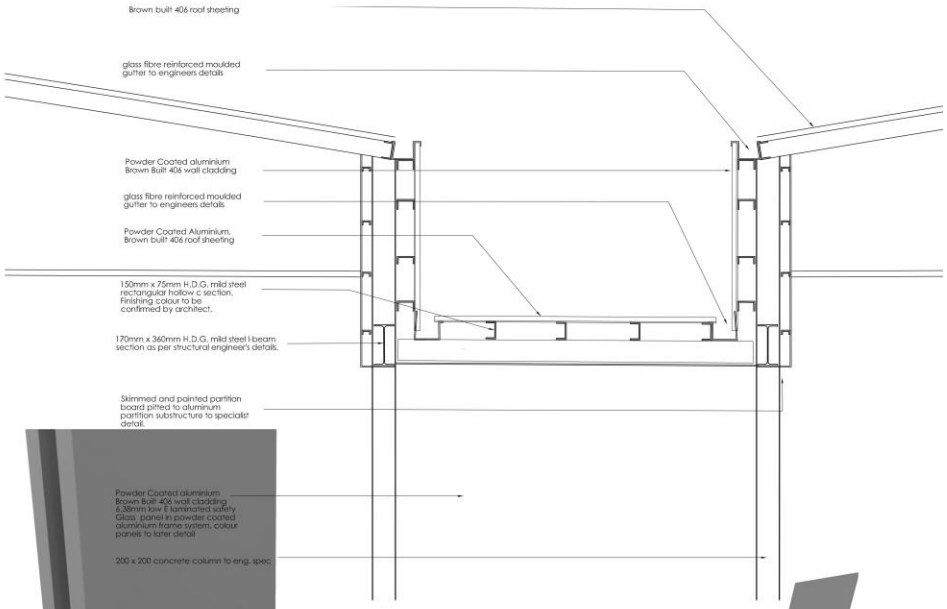


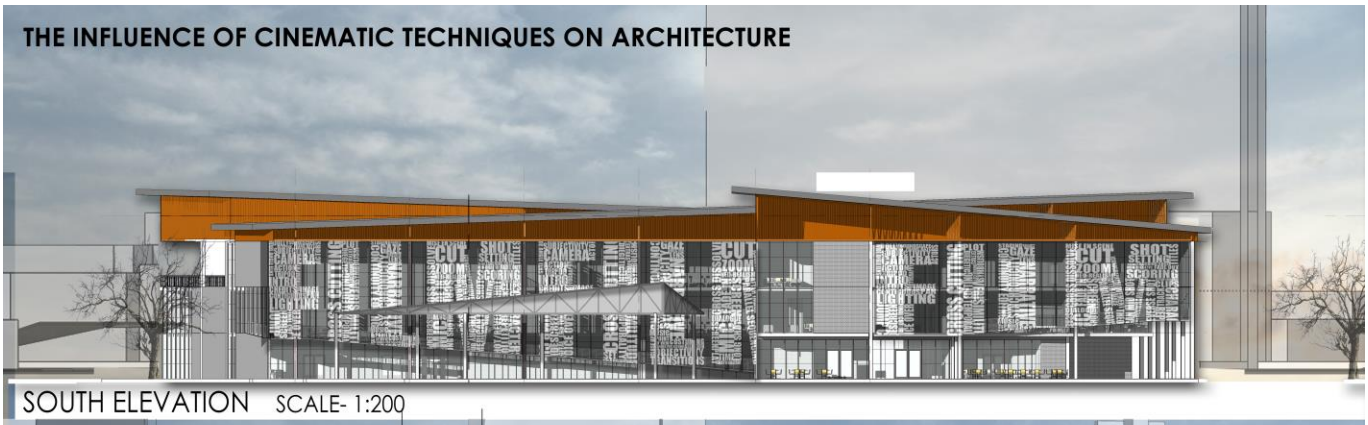









Brown built 406 roof sheeting
glass fibre reinforced moulded gutter to engineers details
Powder Coated aluminium Brown Built 406 wall cladding
glass fibre reinforced moulded gutter to engineers details
Powder Coated Aluminium, Brown built 406 roof sheeting
150mm x 75mm H.D.G. mild steel rectangular hollow c section. Finishing colour to be confirmed by architect.
170mm x 360mm H.D.G. mild steel I-beam section as per structural engineer's details.
Skimmed and painted partition board pitted to aluminum partition substructure to specialist detail.
Powder Coated aluminium Brown Built 406 wall cladding 6.38mm low E laminated safety Glass panel in powder coated aluminium frame system. colour panels to later detail
200 x 200 concrete column to eng. spec



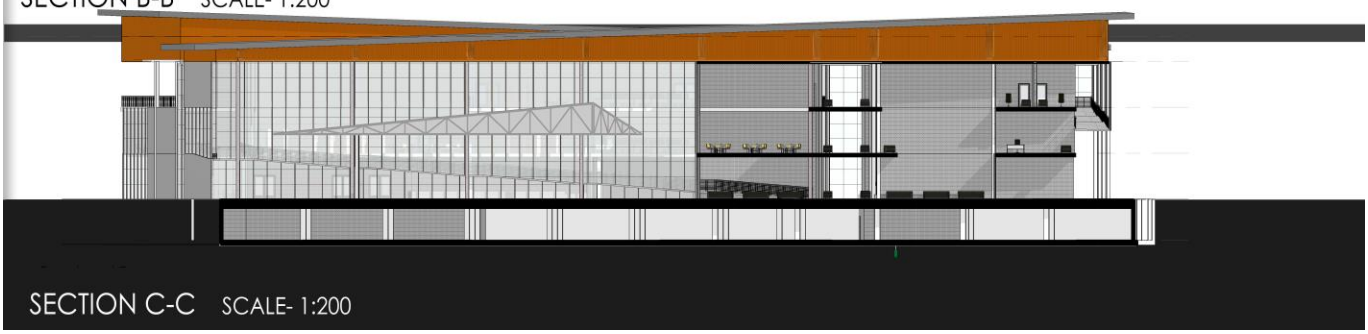
SOUTH ELEVATION SCALE- 1:200

WEST ELEVATION SCALE- 1:200

EAST ELEVATION SCALE- 1:200

SECTION A-A SCALE- 1:200

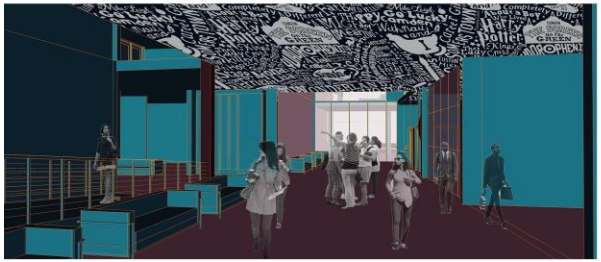
SECTION B-B SCALE- 1:200

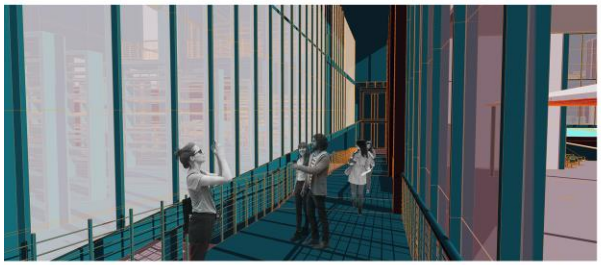
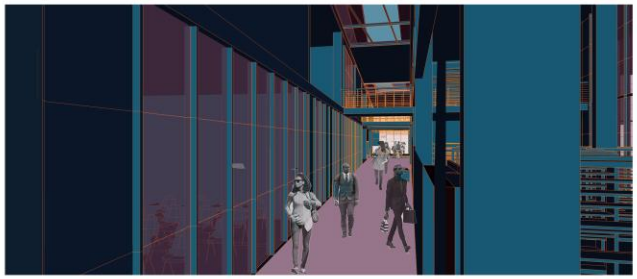
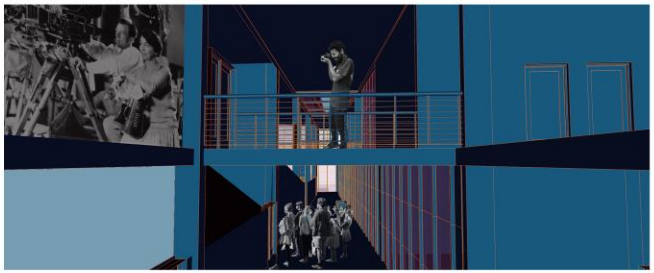
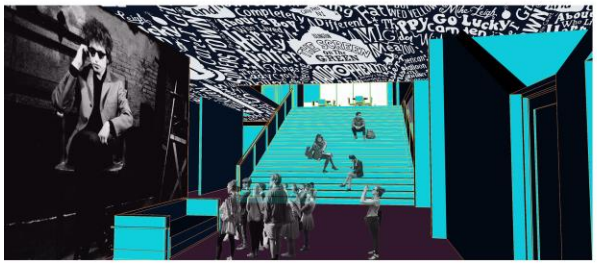


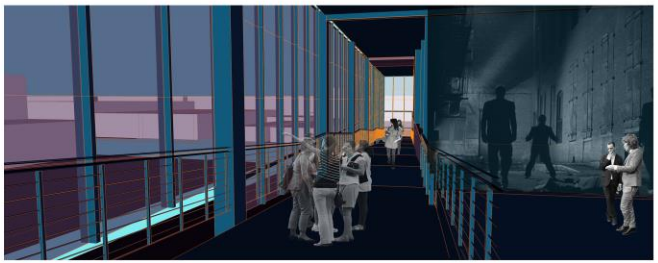
SECTION C-C SCALE- 1:200

THE INFLUENCE OF CINEMATIC TECHNIQUES ON ARCHITECTURE

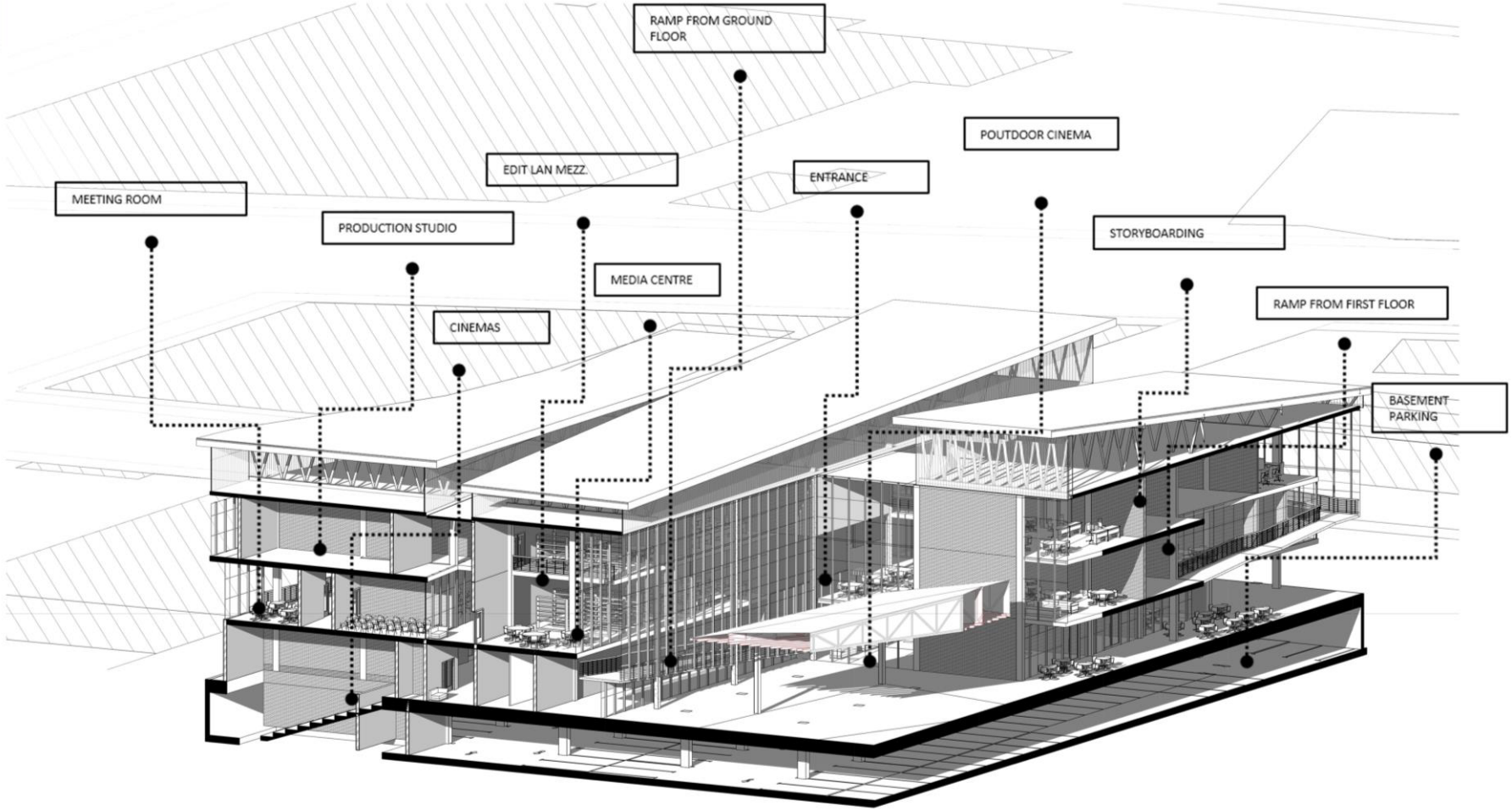


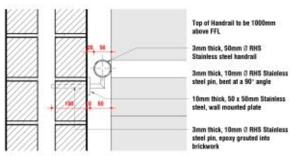







STORYBOARD

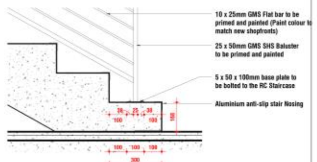

RAMP FROM GROUND FLOOR
POUTDOOR CINEMA
EDIT LAN MEZZ.
ENTRANCE
MEETING ROOM
PRODUCTION STUDIO
STORYBOARDING
MEDIA CENTRE
RAMP FROM FIRST FLOOR
CINEMAS
BASEMENT PARKING

3D SECTION



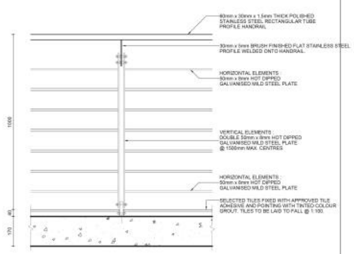
WALL MOUNTED HANDRAIL

SCALE: 1 : 5

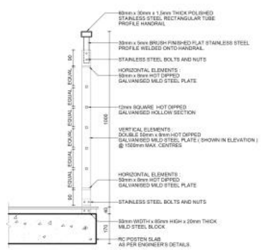


TYPICAL BALUSTER FITTING DETAIL

SCALE: 1 : 10



TYPICAL PART ELEVATION OF BALUSTRADE TYPE "D"
SCALE 1:10



TYPICAL SECTION THRU' BALUSTRADE TYPE "D"
SCALE 1:10

D — 1000mm HIGH HOT DIPPED GALVANISED MILD STEEL BALUSTRADE WITH POLISHED STAINLESS STEEL RECTANGULAR TUBE PROFILE

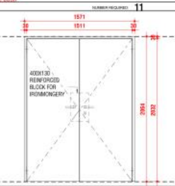
BALUSTRADING NOTES :

1) ALL BALUSTRADING TO COMPLY WITH SABS 0400
2) TOP OF ALL BALUSTRADE TO BE 1000mm ABOVE FFL.
3) ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO MANUFACTURE. DISCREPANCIES TO BE BROUGH TO THE IMMEDIATE ATTENTION OF THE ARCHITECT.
4) SHOP DRAWINGS REQUIRED FOR APPROVAL BY STRUCTURAL ENGINEER AND ARCHITECT PRIOR TO MANUFACTURE.
5) ALL FIXINGS OF BALUSTRADES AND HANDRAILS BY SPECIALIST AND TO BE APPROVED BY STRUCTURAL ENGINEER.

PROJECT

TITLE: 1511mm x 2032mm double door- 2 HOUR FIRE RATED-DOUBLE DOOR — LOCATION: STAIR 01 & STAIR 02, AC, WORKSHOP

DOOR TYPE: D01 — NUMBER REQUIRED: 11



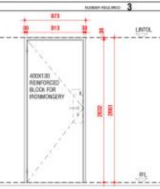
DESCRIPTION	Solid hardwood meranti class B fire rated external double door with a double rebated steel frame to suit 230 & 280mm Maxi brick wall. Door and frame to be supplied with min. 3 off, galvanised building in lugs per style or as per manufacturers specification.
DOOR TYPE	44mm thick class B fire rated solid double external door in equal leaves with rebated meeting stiles.
DOOR FINISH	Door is to be and sanded down to smooth finish and prepared to receive painted finish. Apply one no.coat Universal primer and 2 no. finishing coats Plascon "Velvaglo" (Or sufficient to cover) As per the manufacturer's Specification. COLOUR: To be selected by the Architect.
FRAME TYPE	Standard 1,6mm thick pressed , glavanised mild steel door frame with double 52mm x 25mm rebates and profiles to conform to SABS 1129- 1977, with galvanised fixing lugs. Frame to suit 230 & 280mm wall and double 'Class B fire door.'
FRAME FINISH	Apply 1 no. shop coat of 'Zinga Galvanic' o.e.a protection coat as per manufacturer's Specification, Steel frame is to be cleaned down and de-greased with 1 no. coat Plascon Galvanised Cleaner o.e.a. and. Apply 1 no. coat 'Galvogrip' metal primer o.e.a and two no. coats Plascon "Velvaglo". o.e.a. COLOUR as approved by the Architect.
IRONMONGERY	See Schedule
NOTES	All dimensions to be checked on site during construction before placing orders. Any discrepancy to be reported to the office of the architect prior to order, manufacture and installation

TITLE		REVISIONS		
DOC TYPE: AL	DOC ZONE_NUMBER_LEVEL: F-ALL-4000 — REVISION:	No.	Description	Date
DRAWING STATUS: INFO / TENDER / CONSTRUC	DRAWN BY: — CHECKER: — DATE: 07/29/11 — SIGNED:			

PROJECT

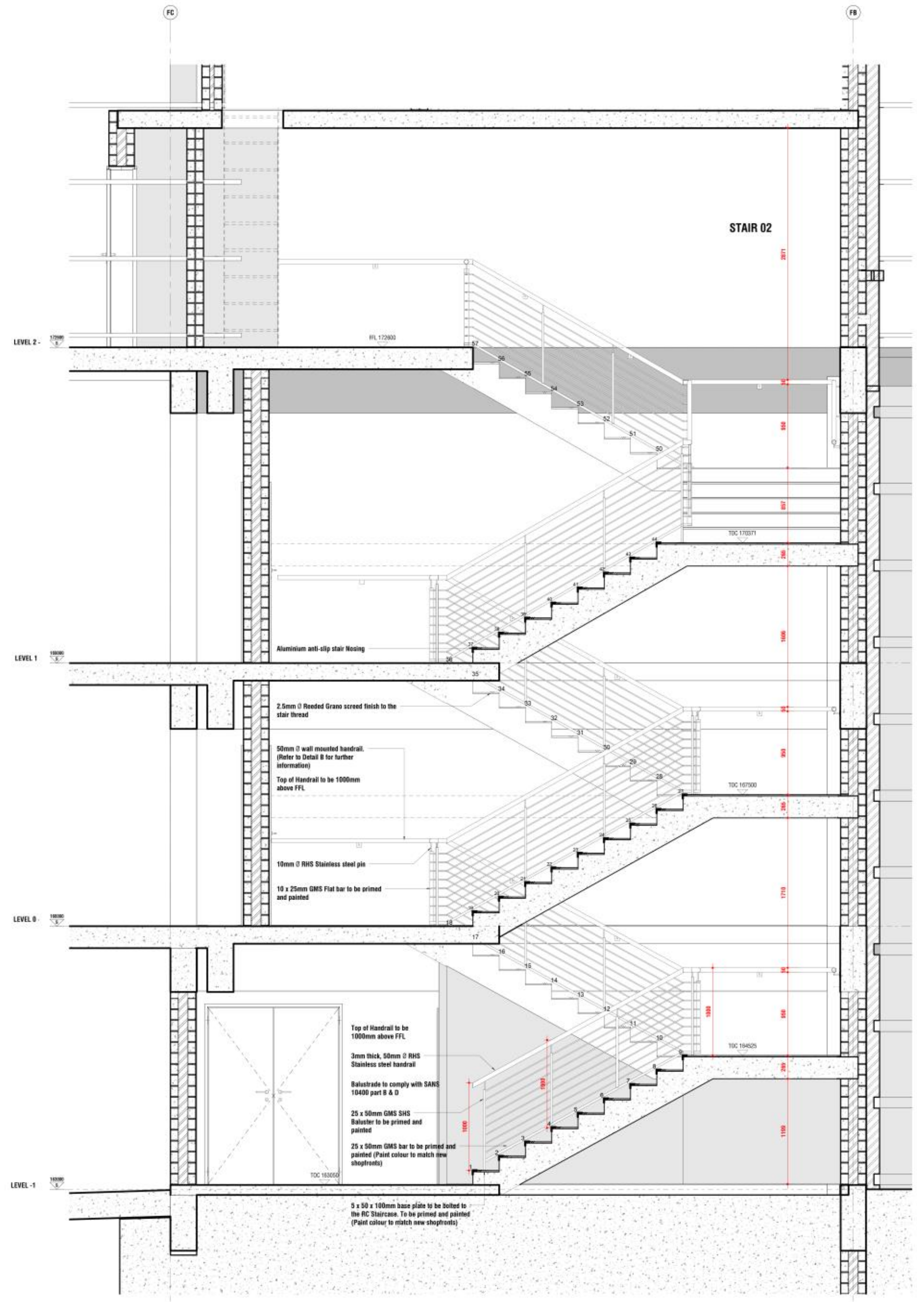
TITLE: 813 x 2032 x 44mm thick semi solid flush panel door — LOCATION: STAIR 02-STORE ROOM,PLANT RM,DB CUPBRD

DOOR TYPE: D03 — NUMBER REQUIRED: 3



DESCRIPTION	2032 x 813 x 44mm thick semi solid flush panel door with hardboard veneer and concealed edges suitable for painting. door to be supplied with timber "lock blocks" to take ironmongery as specified.
DOOR TYPE	813 x 2032 x 44mm thick semi solid flush panel door
DOOR FINISH	1st universal undercoat & 2st paint. Door to be lightly sanded before applying undercoat. Stop between coats to allow for paint to dry before applying next coat. Finish to all edges. Colour to be selected as per Architects specification.
FRAME TYPE	Standard 1,6mm thick pressed , glavanised mild steel door frame with single 52mm x 25mm rebates and profiles to conform to SABS 1129- 1977, with galvanised fixing lugs. Frame to suit 90, 190, 230 & 280mm wall.
FRAME FINISH	Apply 1 no. shop coat of 'Zinga Galvanic' o.e.a protection coat as per manufacturer's Specification, Steel frame is to be cleaned down and de-greased with 1 no. coat Plascon Galvanised Cleaner o.e.a. and. Apply 1 no. coat 'Galvogrip' metal primer o.e.a and two no. coats Plascon "Velvaglo". o.e.a. COLOUR as approved by the Architect.
IRONMONGERY	See Schedule
NOTES	All dimensions to be checked on site during construction before placing orders. Any discrepancy to be reported to the office of the architect prior to order, manufacture and installation

TITLE		REVISIONS		
DOC TYPE: AL	DOC ZONE_NUMBER_LEVEL: F-ALL-4002 — REVISION:	No.	Description	Date
DRAWING STATUS: INFO / TENDER / CONSTRUC	DRAWN BY: — CHECKER: — DATE: 08/11/16 — SIGNED:			



STAIR 02 - SECTION

SCALE: 1 : 20

GENERAL

- All work is to be done in accordance with the SANS 10400 National building Regulations.
- All materials and workmanship are to comply with the relevant SAN 10400 codes and or the specified international codes where applicable in the Architectural specifications. Where relevant South African National Standards, British Standards, BS codes of practice, or Agrément Certificates applicable to the design exists, the recommendations and requirements of such documents to be considered a minimum standard for the works.
- The contractor shall in all aspects of the works comply with the provisions of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and any regulations promulgated in terms of that Act or the Factories Machinery and Building Works Act of 1941.
- The contractor shall set up, document and maintain a quality assurance and quality control system, in accordance with SANS 9001/ISO 9001, able to be checked to the satisfaction of the Architect, that all materials and workmanship, whatever their sources, meet the requirements of the Specification. Should the Contractor or any of his sub-contractors be certified to the SANS 9000 family of standards then monitor these works accordingly.
- This drawing must be read in conjunction with all the relevant drawings, schedules and specifications from B+P and all other consultants related to the project.
- All portions of the works related to any service or consultant's information is to be done in accordance with the National Building Regulations.
- This drawing is not to be scaled. Figured dimensions to be used. All dimensions are in millimeters unless otherwise stated.
- All dimensions and levels must be checked on site by the contractor before putting work in hand.
- All work to be executed by competent persons qualified for the specific trade.

REVISION

REV	DATE	DRAWN	DESCRIPTION

CLIENT

PROJECT

FILM INSTITUTE

TITLE

STAIR 02 BALUSTRADE DETAILS

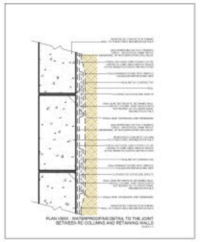
SCALE: As indicated @ A0

DOC TYPE	DOC ZONE_NUMBER_LEVEL	REVISION
1	F_ALL-8025	

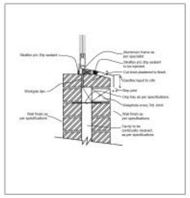
DRAWING STATUS: INFO / TENDER / CONSTRUCTION

DRAWN BY: DS — CHECKED BY: AK

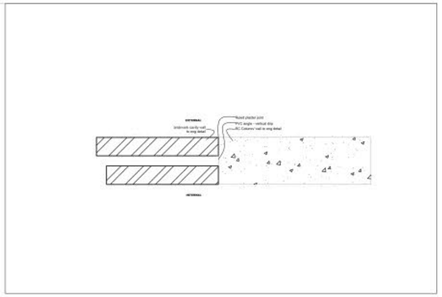
DATE: 08/12/16 — SIGNED:



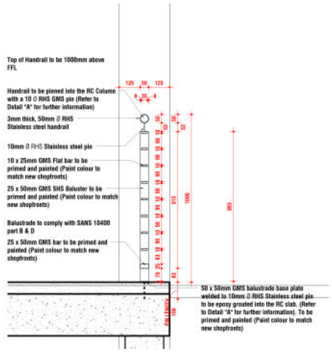
PLAN VIEW -WATERPROOFING DETAIL
SCALE 1:5



SILL SECTION DETAIL
SCALE 1:10

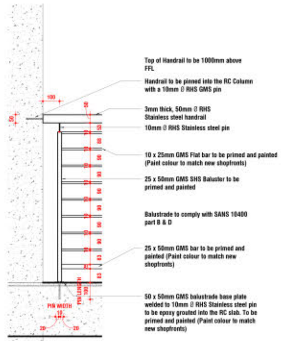


BRICK CAVITY WALL DETAIL
SCALE 1:10



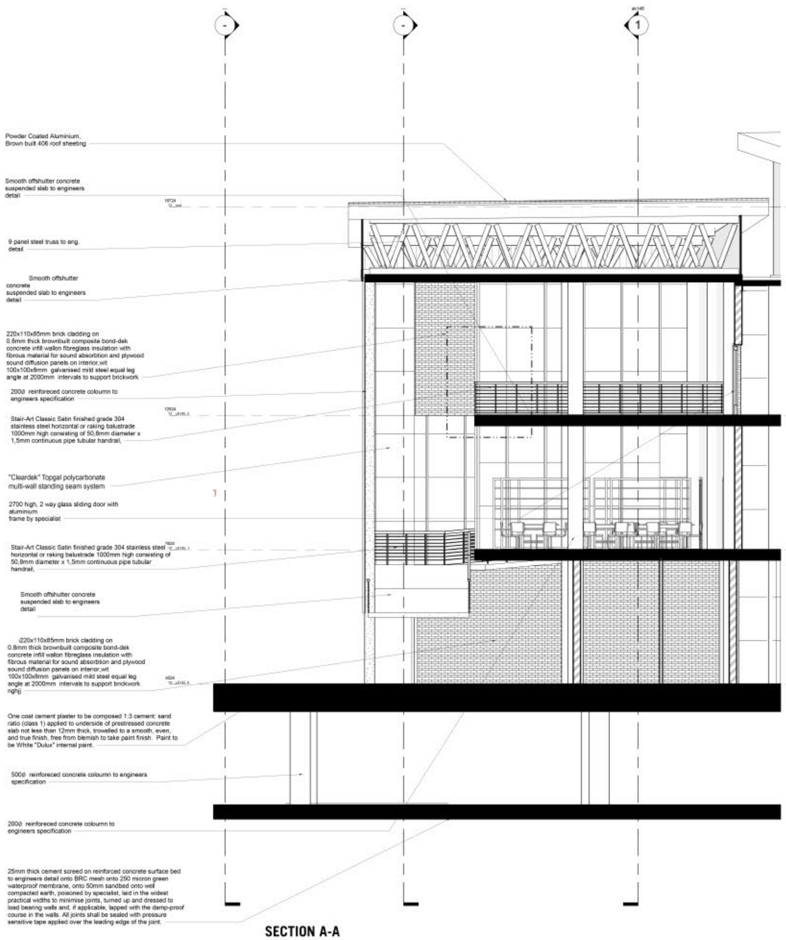
Top of Handrail to be 1000mm above FFL
Handrail to be pinned into the RC Column with a 10 Ø RHS GMS pin (Refer to Detail "A" for further information)
3mm thick, 50mm Ø RHS Stainless steel handrail
10mm Ø RHS Stainless steel pin
10 x 25mm GMS Flat bar to be primed and painted (Paint colour to match new shopfronts)
25 x 50mm GMS SHS Baluster to be primed and painted (Paint colour to match new shopfronts)
Balustrade to comply with SANS 10400 part B & D
25 x 50mm GMS bar to be primed and painted (Paint colour to match new shopfronts)
50 x 50mm GMS balustrade base plate welded to 10mm Ø RHS Stainless steel pin to be epoxy grouted into the RC slab. (Refer to Detail "A" for further information). To be primed and painted (Paint colour to match new shopfronts)

TYPICAL BALUSTRADE SECTION
SCALE: 1 : 10



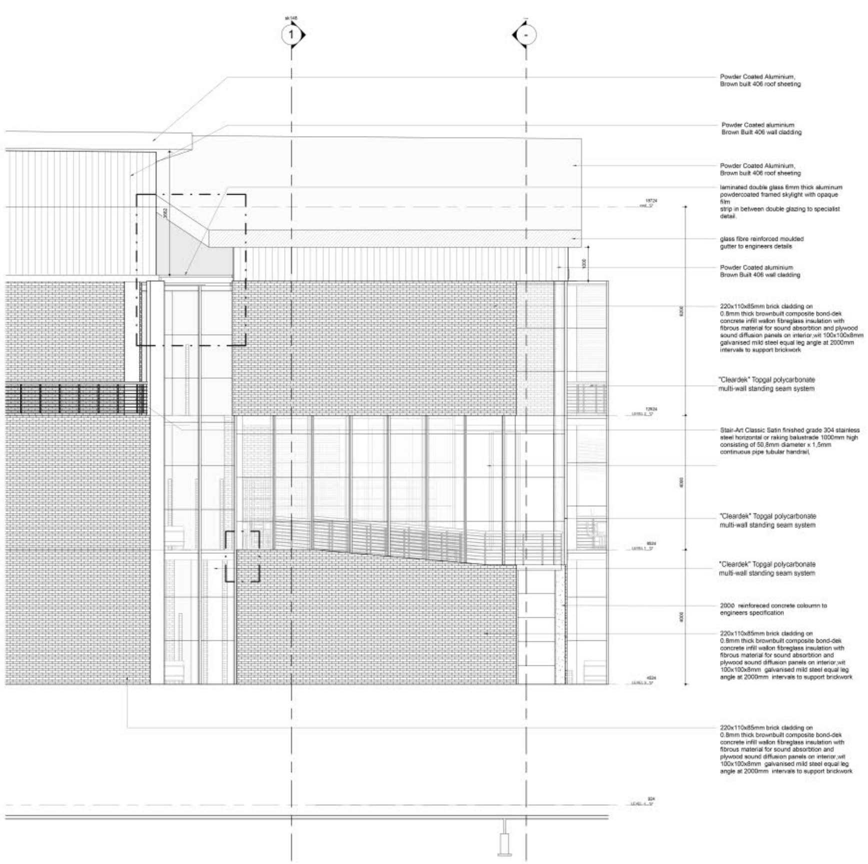
Top of Handrail to be 1000mm above FFL
Handrail to be pinned into the RC Column with a 10mm Ø RHS GMS pin
3mm thick, 50mm Ø RHS Stainless steel handrail
10mm Ø RHS Stainless steel pin
10 x 25mm GMS Flat bar to be primed and painted (Paint colour to match new shopfronts)
25 x 50mm GMS SHS Baluster to be primed and painted
Balustrade to comply with SANS 10400 part B & D
25 x 50mm GMS bar to be primed and painted (Paint colour to match new shopfronts)
50 x 50mm GMS balustrade base plate welded to 10mm Ø RHS Stainless steel pin to be epoxy grouted into the RC slab. To be primed and painted (Paint colour to match new shopfronts)

TYPICAL DETAIL A
SCALE: 1 : 10



Powder Coated Aluminium, Brown built 406 roof sheeting
Smooth offshutter concrete suspended slab to engineers detail
9 panel steel truss to eng. detail
Smooth offshutter concrete suspended slab to engineers detail
220x110x85mm brick cladding on 0.8mm thick brownbuilt composite bond-dek concrete infill wallon fibreglass insulation with fibrous material for sound absorbtion and plywood sound diffusion panels on interior,wit 100x100x8mm galvanised mild steel equal leg angle at 2000mm intervals to support brickwork
200Ø reinforced concrete coloumn to engineers specification
Stair-Art Classic Satin finished grade 304 stainless steel horizontal or raking balustrade 1000mm high consisting of 50,8mm diameter x 1,5mm continuous pipe tubular handrail,
"Cleardek" Topgal polycarbonate multi-wall standing seam system
2700 high, 2 way glass sliding door with aluminium frame by specialist
Smooth offshutter concrete suspended slab to engineers detail
One coat cement plaster to be composed 1:3 cement: sand ratio (class 1) applied to underside of prestressed concrete slab not less than 12mm thick, trowelled to a smooth, even, and true finish, free from blemish to take paint finish. Paint to be White "Dulux" internal paint.
500Ø reinforced concrete coloumn to engineers specification
200Ø reinforced concrete coloumn to engineers specification
25mm thick cement screed on reinforced concrete surface bed to engineers detail onto BRC mesh onto 250 micron green waterproof membrane, onto 50mm sandbed onto well compacted earth, poisoned by specialist, laid in the widest practical widths to minimise joints, turned up and dressed to load bearing walls and, if applicable, lapped with the damp-proof course in the walls. All joints shall be sealed with pressure sensitive tape applied over the leading edge of the joint.

SECTION A-A
SCALE 1:50



Powder Coated Aluminium, Brown built 406 roof sheeting
Powder Coated aluminium Brown Built 406 wall cladding
Powder Coated Aluminium, Brown built 406 roof sheeting
laminated double glass 6mm thick aluminum powdercoated framed skylight with opaque film strip in between double glazing to specialist detail.
glass fibre reinforced moulded gutter to engineers details
Powder Coated aluminium Brown Built 406 wall cladding
220x110x85mm brick cladding on 0.8mm thick brownbuilt composite bond-dek concrete infill wallon fibreglass insulation with fibrous material for sound absorbtion and plywood sound diffusion panels on interior,wit 100x100x8mm galvanised mild steel equal leg angle at 2000mm intervals to support brickwork
"Cleardek" Topgal polycarbonate multi-wall standing seam system
Stair-Art Classic Satin finished grade 304 stainless steel horizontal or raking balustrade 1000mm high consisting of 50,8mm diameter x 1,5mm continuous pipe tubular handrail,
"Cleardek" Topgal polycarbonate multi-wall standing seam system
"Cleardek" Topgal polycarbonate multi-wall standing seam system
200Ø reinforced concrete coloumn to engineers specification

PART ELEVATION
SCALE 1:50

GENERAL

REVISION

REV	DATE	DRAWN	DESCRIPTION

CLIENT

PROJECT

FILM INSTITUTE

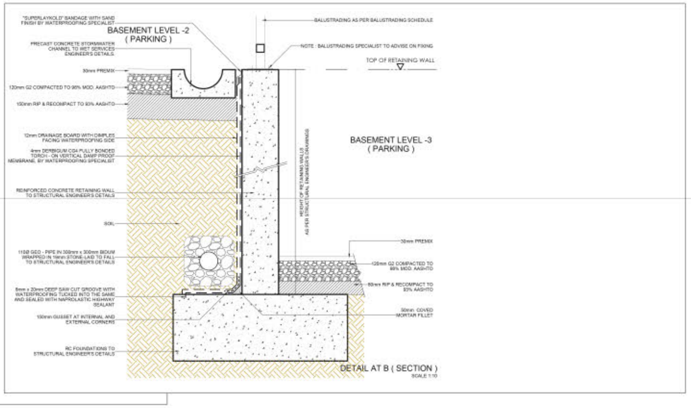
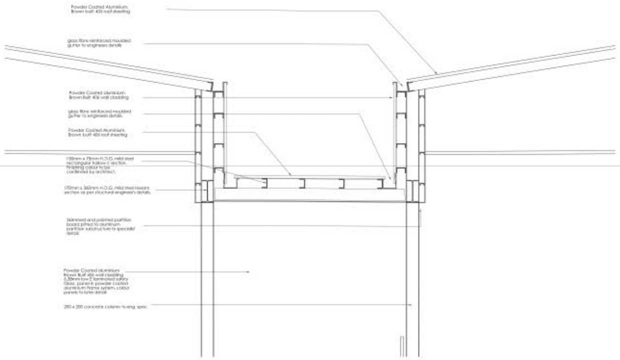
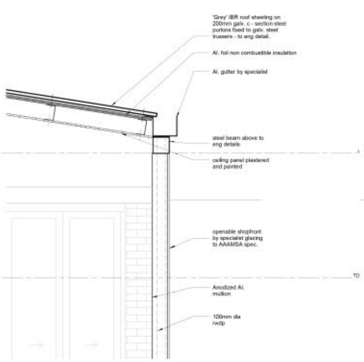
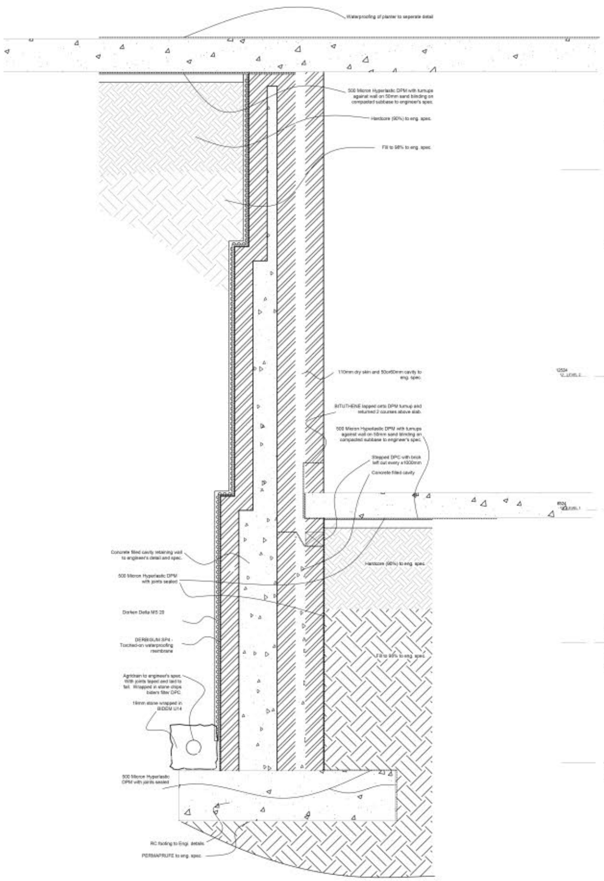
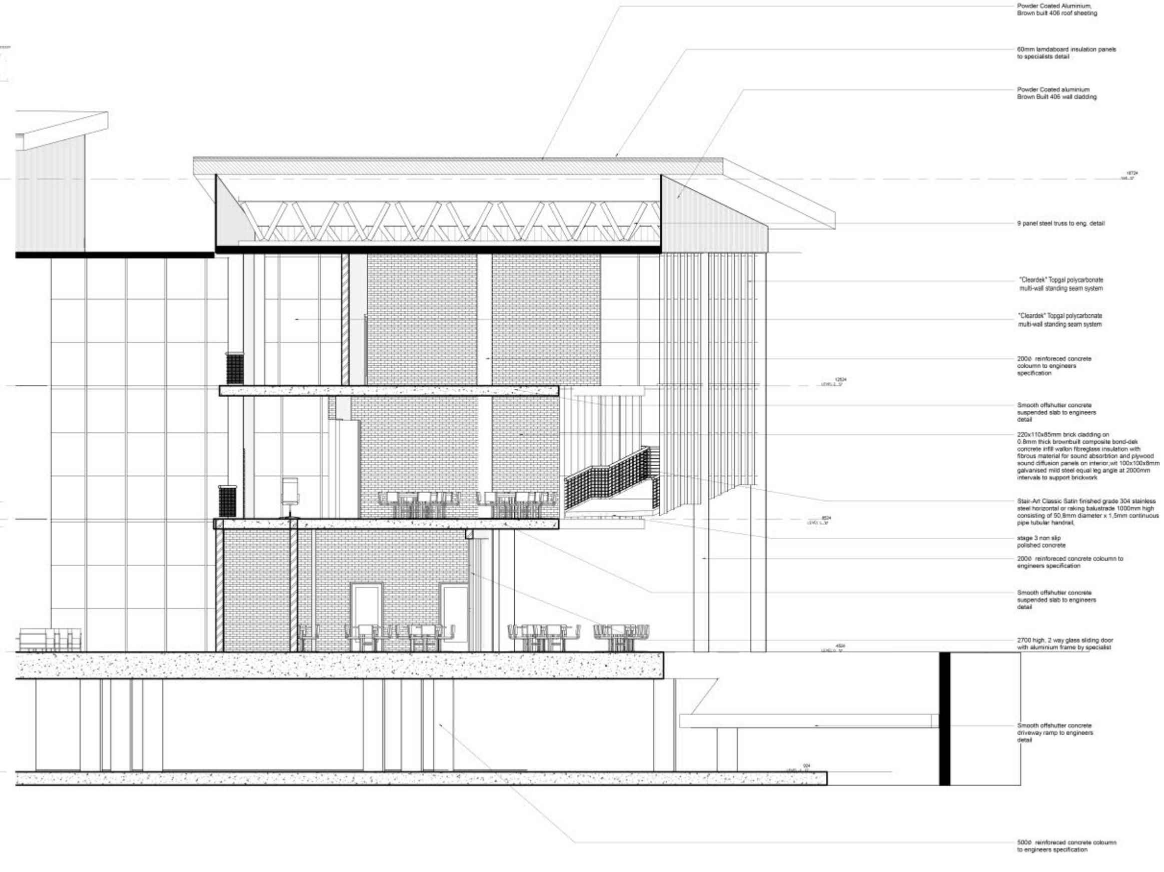
TITLE

PART SECTION AND ELEVATION

SCALE: As indicated @ A0

1 F_ALL-8025

INFO TENDER CONSTRUCTION


"SUPERLAYKOLD" BANDAGE WITH SAND FINISH BY WATERPROOFING SPECIALIST
BASEMENT LEVEL -2
(PARKING)
BALUSTRADING AS PER BALUSTRADING SCHEDULE
NOTE: BALUSTRADING SPECIALIST TO ADVISE ON FIXING
TOP OF RETAINING WALL
PRECAST CONCRETE STORMWATER CHANNEL TO WET SERVICES ENGINEER'S DETAILS
30mm PREMIX
120mm G2 COMPACTED TO 98% MOD. AASHTO
150mm RIP & RECOMPACT TO 93% AASHTO
BASEMENT LEVEL -3
(PARKING)
REINFORCED CONCRETE RETAINING WALL TO STRUCTURAL ENGINEER'S DETAILS
SOIL
DETAIL AT B (SECTION)


'Grey' IBR roof sheeting on 200mm galv. c - section steel purlons fixed to galv. steel trussers - to eng detail.
Al. foil non combustible insulation
Al. gutter by specialist
steel beam above to eng details
ceiling panel plastered and painted
operable shopfront by specialist glazing to AAAMSA spec.
Anodized Al. mullion
100mm dia rwdp


Powder Coated Aluminium, Brown built 406 roof sheeting
60mm lamdaboard insulation panels to specialists detail
Powder Coated aluminium Brown Built 406 wall cladding
9 panel steel truss to eng. detail
"Cleardek" Topgal polycarbonate multi-wall standing seam system
"Cleardek" Topgal polycarbonate multi-wall standing seam system
200⌀ reinforced concrete coloumn to engineers specification
Smooth offshutter concrete suspended slab to engineers detail
220x110x85mm brick cladding on 0.8mm thick brownbuilt composite bond-dek concrete infill wallon fibreglass insulation with fibrous material for sound absorbtion and plywood sound diffusion panels on interior,wit 100x100x8mm galvanised mild steel equal leg angle at 2000mm intervals to support brickwork
Stair-Art Classic Satin finished grade 304 stainless steel horizontal or raking balustrade 1000mm high consisting of 50,8mm diameter x 1,5mm continuous pipe tubular handrail.
stage 3 non slip polished concrete
200⌀ reinforced concrete coloumn to engineers specification
Smooth offshutter concrete suspended slab to engineers detail
2700 high, 2 way glass sliding door with aluminium frame by specialist
Smooth offshutter concrete driveway ramp to engineers detail
500⌀ reinforced concrete coloumn to engineers specification

GENERAL

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- The contractor shall set up, document and maintain a quality assurance and quality control system, in accordance with SANS 9001/ISO 9001, able to be checked to the satisfaction of the Architect, that all materials and workmanship, whatever their sources, meet the requirements of the Specification. Should the Contractor or any of his sub-contractors be certified to the SANS 9000 family of standards then monitor these works accordingly.
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- All dimensions and levels must be checked on site by the contractor before putting work in hand.
- All work to be executed by competent persons qualified for the specific trade.

REVISION

REV	DATE	DRAWN	DESCRIPTION

CLIENT

PROJECT

TITLE

STAIR 02 BALUSTRADE DETAILS

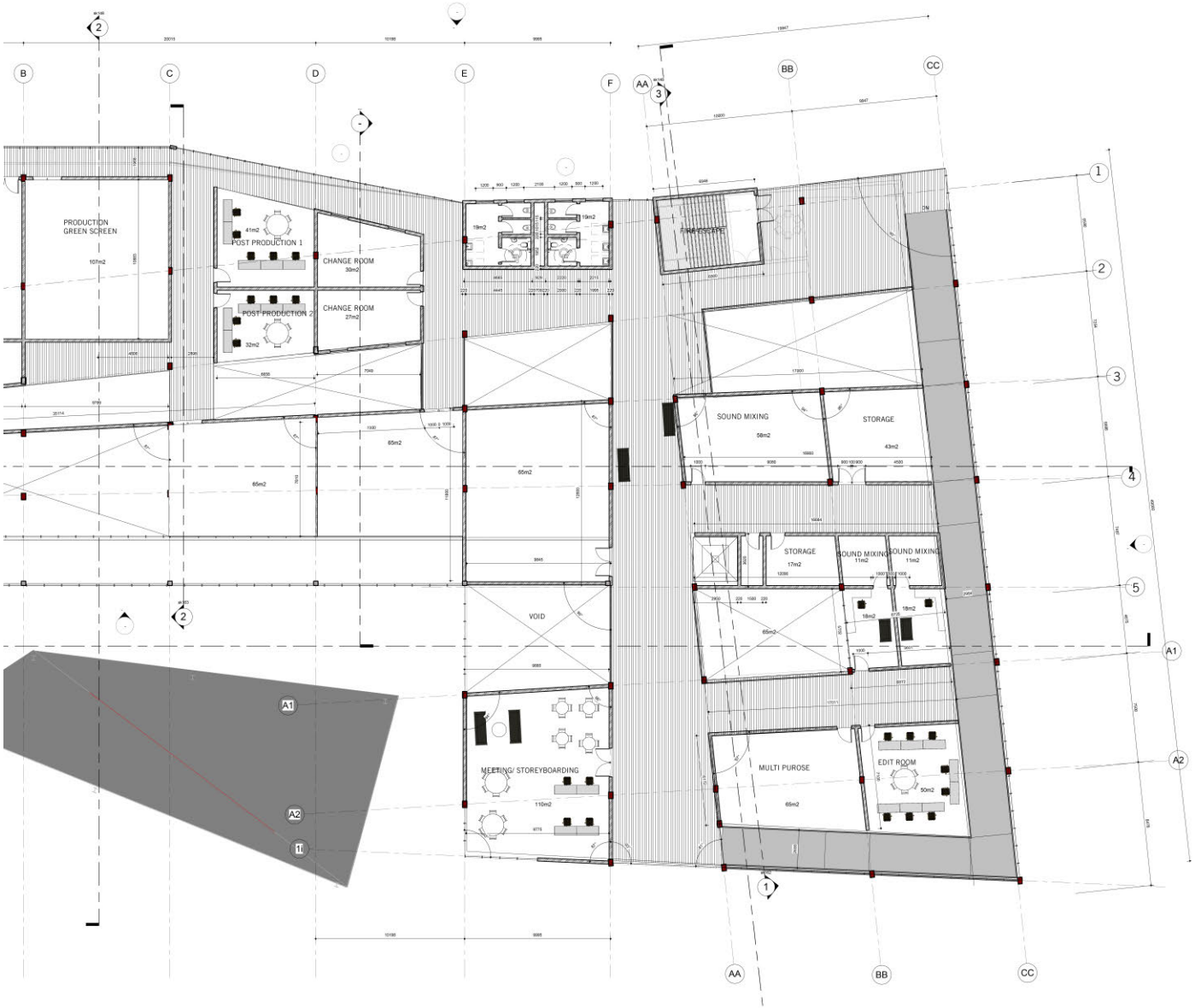
SCALE: As indicated @ A0

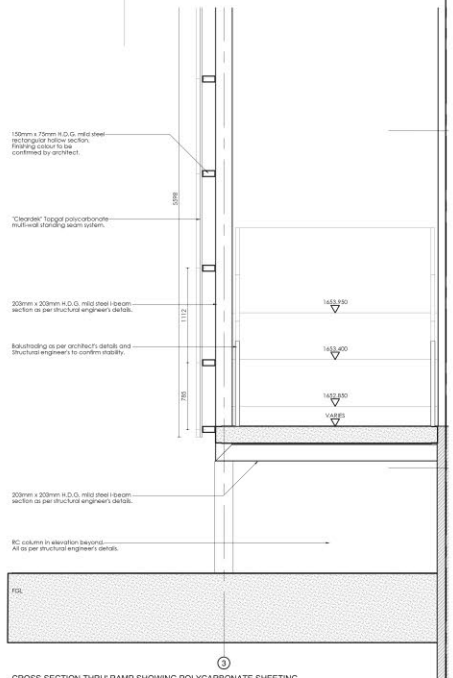
DOC TYPE	DOC ZONE_NUMBER_LEVEL	REVISION
1	F_ALL-8025	

DRAWING STATUS: **INFO** | TENDER | CONSTRUCTION

DRAWN BY: DG CHECKED BY: AA

DATE: 08/12/16 SIGNED:





CROSS SECTION THRU' RAMP SHOWING POLYCARBONATE SHEETING
SCALE 1:50

GENERAL NOTES:
ALL WORK TO BE IN ACCORDANCE WITH THE
NATIONAL BUILDING REGULATIONS SANS 10400-2011.
ALL LEVELS AND DIMENSIONS TO BE CHECKED
AND VERIFIED ON SITE PRIOR TO COMMENCEMENT OF WORK.
ANY DISCREPANCIES TO BE REPORTED TO THE ARCHITECT IMMEDIATELY.

GLAZING NOTES:
ALL GLAZING TO COMPLY WITH PART N OF SANS 10400-2011.

STAIR & BALUSTRADE NOTES:
BALUSTRADES, HANDRAILS, HEIGHTS AND OPENINGS TO COMPLY WITH PARTS M & D OF SANS 10400- 2011.
BASIC STAIR NOTES:
MAX 200mm RISER MIN 250mm TREAD
BALUSTRADES 1.0m HIGH WITH NO GAP MORE THAN 100mm

IF THE STAIRCASE FORMS PART OF AN ESCAPE ROUTE
IT IS TO COMPLY WITH PART M OF SANS 10400- 2011.

DEMOLITION WORK:
ALL DEMOLITION WORK TO BE CARRIED OUT IN
ACCORDANCE WITH SANS 10400 -2011 PART F
NO DEMOLITION WORK IS TO BE CARRIED OUT
WITH RELEVANT MUNICIPAL AND/OR CLIENT APPROVAL

PLUMBING & DRAINAGE:
ALL PLUMBING TO COMPLY WITH PART P OF THE
SANS 10400- 2010

ALL WASTE PIPES AND DRAINS TO BE ACCESSIBLE
ALONG THEIR ENTIRE LENGTH. PROVIDE INSPECTION
EYES AT ALL DRAIN BENDS AND JUNCTIONS AND
AT A MAX. 25m ALONG STRAIGHT RUNS.
INSPECTION EYES TO BE PROVIDED AT ALL BENDS AND JUNCTIONS OF WASTE PIPES.
WASTE TO BE FITTED WITH
64mm RESEAL TRAPS
WATER CONNECTIONS TO FITTINGS:-
15mm DIA TO WHB, WC AND SHOWERS
20mm DIA TO GEYSERS
25mm DIA TO FHR
ALL VENT PIPES TO DISCHARGE TO EXTERNAL AIR
50MM : WASTE PIPES REQUIRE A 75MM : SLEEVE
110MM : WASTE PIPES REQUIRE A 150MM : SLEEVE
ALL NEW SEWER LINES TO RUN IN THE CEILING VOID
OF THE FLOOR BELOW.

FOR PLUMBING AND DRAINAGE LAYOUT PLANS AND CROSS SECTIONS REFER TO
REGISTERED WET SERVICES ENGINEERS' DRAWINGS FOR RATIONAL DESIGN
DRAWINGS
ALL STORM WATER TO BE COLLECTED AND DRAINED TO COMPLY WITH PART P OF
THE SANS 10400- 2010 AND DRAIN TO MUNICIPAL STORM WATER DRAINAGE SYSTEM
TO ENGINEERS DETAILS

STRUCTURAL:
ALL REINFORCED CONCRETE WORK AND RETAINING WALLS TO BE STRICTLY IN
ACCORDANCE WITH REGISTERED STRUCTURAL
ENGINEERS' DETAILS AND SPECIFICATIONS

MECHANICAL VENTILATION & LIGHTING:
ALL LIGHTING AND VENTILATION (FRESH AIR AND
EXTRACT) TO COMPLY WITH PART O (SANS 10400- 2011)
IN ACCORDANCE WITH REGISTERED MECHANICAL
ENGINEERS DRAWINGS
AND REGISTERED ELECTRICAL ENGINEERS DRAWINGS
ALL ARTIFICIAL LIGHTING TO COMPLY.

SANS 10400XA
ENERGY:
NON-MASONRY WALL WILL HAVE 'R' VALUES AS PROVIDED. (SANS 10400-XA -4.4.3.1)
DOUBLE SKINS MASONRY WITH PLASTER INSIDE OR RENDER
OUTSIDECOMPLIES.SINGLE LEAFE. MIN. 140MM WITH PLASTER INSIDE AND RENDER
OUTSIDE COMPLIES. (SANS 10400-XA -4.4.3.2)
OTHER MASONRY WALLS WILL HAVE 'R' VALUE OF 0.35. (SANS 10400-XA -4.4.3.3)

FENESTRATION:
AIR LEAKAGE SHALL NOT EXCEED 2L/s/m² FENESTRATION AREA. 0.306 L/s/m² FIXED
GLAZING AND 5 L/s/m² REVOLVING SWING DOORS. (SANS 10400-XA -4.4.1.1)
FENESTRATION MORE THAN 15% TO NETT FLOOR AREA PER STOREY THEN (SANS
10400-XA -4.4.4.2)
FENESTRATION UP TO 15% AREA TO NETT FLOOR AREA PER STOREY COMPLIES.
(SANS 10400-XA -4.4.4.1)
SOLAR HEAT GAIN AND HEAT CONDUCTANCE TO COMPLY WITH SANS 204 -4.3.4.

DEMOLITION PLAN AND MINOR REFURBISHMENTS

ANY ASBESTOS MATERIALS TO BE
REMOVED AND DISPOSED OF STRICTLY
IN ACCORDANCE WITH LOCAL
MUNICIPAL REGULATIONS

ASBESTOS TREATMENT
ALL ASBESTOS TO BE HANDLED AND
DISPOSED OF IN STRICT ACCORDANCE
WITH THE OCCUPATIONAL HEALTH AND
SAFETY ACT, 1993 (ACT NO. 85 OF
1993) ASBESTOS REGULATIONS 2001

GENERAL

- All work is to be done in accordance with the SANS 10400 National building Regulations.
- All materials and workmanship are to comply with the relevant SANS 10400 codes and/or the specified international codes where applicable to the Architectural specifications. Where relevant South African Standards do not exist, materials shall be used of whatever, or Agrément Certificates applicable to the design and construction recommendations and requirements of such documents to be considered a minimum standard for the works.
- The contractor shall in all aspects of the works comply with the requirements of the Occupational Health and Safety Act, 1993 (Act No.85 of 1993) and any regulations promulgated in terms of that Act or the Factories Machinery and Building Works Act of 1941.
- The contractor shall have in place a fully operational quality insurance and quality control system, in accordance with SANS 9001/ISO 9001, able to be checked to the satisfaction of the Architect, that all materials and workmanship, whatever their sources, meet the requirements of the Specification. Should the Contractor or any of his suppliers not have SANS/ISO 9001 or SANS 9000 family of standards then monitor these works accordingly.
- This drawing must be read in conjunction with all the relevant Architectural, Engineering and Specifications from th1f and all other consultants related to this project.
- All portions of the works related to any service or consultant's information is to be done in accordance with the National Building Regulations.
- Drawings are not to be scaled. Figured dimensions to be used. All dimensions are in millimeters unless otherwise stated.
- All dimensions and levels must be checked on site by the contractor before putting work in hand.
- All work to be executed by competent persons qualified for the specific trade.

REVISION

REV	DATE	DRAWN	DESCRIPTION

CLIENT

PROJECT

TITLE

STAIR 02 BALUSTRADE DETAILS

SCALE: As indicated @ A0

DOC TYPE	DOC ZONE_NUMBER_LEVEL	REVISION
1	F_ALL-8025	

DRAWING STATUS

INFO	TENDER	CONSTRUCTION

DRAWN BY: SC
DATE: 09/02/15
CHECKED BY: AA
WORKS