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Cinematic Architecture evokes and sustains specific mental states; The architecture of film is an architecture of terror, anguish, suspense, boredom, alienation, melancholy, happiness or ecstasy, depending on the essence of particular cinematic narrative and the director’s intention. Space and architectural imagery are the amplifiers of specific emotions.

A B S T R A C T

The art that is closest to cinema is Architecture.

Film does not exist without architecture. In every movie that has ever been made throughout history, the cinematic image of architecture is embedded within the picture. Throughout my studies and research, I began to see that there is no director who can consciously or unconsciously deny the use of architectural elements in his or her movies. Architecture offers a strong profile to distinguish characters and story. In the early days, films were shot in streets surrounded by architecture, and then they were projected on the exterior walls of buildings where the audience could come and watch.

Here, I have studied elements such as light, time, space and matter- storymaking tools common to both Architect and Director. Light, for example, in architecture, is used as a strong theme by Louis I. Kahn, "the most poetic of architects" in his Kimbell Art Museum. Similarly, Alfred Hitchcock, renowned filmmaker, utilizes light to distinguish the characters of his movies to create remarkable and sometimes horrifying scenes.

This thesis aims to capture the cinematic movement of these elements in the building design. The project’s program is a film museum and school that is sited in Southwest Washington DC.

A R C H I T E C T U R E
A N D  F I L M
S A H A R H A Z J A V A H E R I
"All this will not be finished in the first 100 days. Nor will it be finished in the first 1,000 days, nor in the life of this administration, nor even perhaps in our lifetime on this planet. But let us begin."
- Inaugural Address 1961 John F. Kennedy
A woman in her mid-thirties has just opened up her camera box, and is trying to test-record it at a surprise birthday party preparation, but is only getting black and white images. Everyone in this place is doing something to get ready for this party. Some people are in the kitchen cooking and baking, others are decorating the walls and setting up the furniture, while kids running and laughing holding balloons.

Though the woman is rushing from one room to another and asks for help so she can record in color, no one will help her make it work. She is constantly playing with different buttons on the camera and focus, but nothing seems to work. Eventually, she gets tired of trying, leaves the camera on the corner of a table, and goes off to the second floor where everyone had gathered to wrap the gifts.

Suddenly, in the silence of the decorated room, the birthday boy turns the key of the door and walks in, amazed at what he sees. He walks around the balloons and banners, smiling, yet wondering if anyone is home. After a few minutes of silence, the woman comes downstairs, notices him and calls everyone else alerting them that "he is home". Everyonerushes down excited to hug and celebrate his birthday, then woman asks them to wait until she gets her camera ready and turns it on. "3,2,1.." and she turns off the camera, without knowing she has already been recording this whole time!

This was an uncut five minutes short movie I had made a few years ago, without any interruption during the entire length of the movie. To make this five minute video, we had to rehearse for weeks, practicing the specific dialogues, the camera moves, lighting, focus and placement of the object and elements. It was there when I realized the power of little things that come together to make a project as a whole.

Later when the time came for me to pick my thesis topic, I decided to define the gap between film and architecture, and truly discover the four elements common to architecture and film: time, light space and matter as well as Making (production) and performing (the final result) of the two arts. This book in front of you is a study stemming from my interest in bridging the gap between filmmaker and architect.
To begin the analysis, I started looking into the idea of frame. In film making, directors intentionally create the boundary to gather information which helps the script and the story. The four edges of the frame, captured in the lens, limit the audience’s view of everything else beyond it, which is what ultimately separates the audience and the cinema. Moreover, in some shows such as House Of Cards (Beau Willimon) the actor directly looks into the camera and minimizes the visual distance between the audience and the play. In architecture on the other hand, idea of framing can be presented in many shapes and forms.

A tree could be captured in a window presenting a portion of its beauty completing the image of sky with. Threshold is also another kind of frame in the architecture which could appear in the change of materials of the walls and ceiling from one room to another, or doorways. Looking at what is on one side and what is on the other side of the threshold, and what makes it essential to the information captured inside the frame, we start seeing the different ways that architecture uses frame buildings. A window or a door frame can substantially have the same role as the camera lens and director’s intention to box a view to reinforce a new experience.

Among the techniques of film making and the frame, there is the process of making and performing in the cinema. What is behind the camera, the techniques, script, crew, equipment, and work that is put on making movies is often well hidden to prevent the audience from distraction of the message and the story. The cinema and movie are supposed to take the audience away from their own world, and engage them into the events and sequence of the story. Similarly in architecture, the making process (construction) and the final product of the building are often two separate sides. In most of the buildings, the real framework of construction is buried behind the clean veneer on the occupied architecture. In some cases, the covers disappear to present the mark, tools and equipment which makes the architecture.

Performative architecture reveals the essence of true material, reveals its connection to the context of the site and expresses the beauty of the structure.
Interpreting framing director’s hand into a search tool for capturing specific and powerful information of the different contexts of site options.
Previously, the directors shot the movie in the actual environment and landscape. The film crew traveled and relocated to places to use the architecture in different scenes. In The Birds by Alfred Hitchcock, the movie was created with architectural elements such as an abandoned attic in a house and the attacking birds come through the room from a small opening in the window. Every element of this scene is physical and just like the actor, performed at that specific part of the play. In today’s technology however, the fast speed of production limits the use of architecture in the making of the movie, the elements of film making have changed and impacted the process of production, editing process where the where film can be prepared architecture can be added in square green rooms, and ad to the movies with the then revised by computer computer software, any software to create specially inside the dark and special effects and moods. isolated rooms and away As a result, the outside from our physical build physical world has a very small influence on the production of the image. Behind the stage techniques on the other hand, don’t remain a mystery when watching the movies. The effects, sound, light and space are added and modified later after the shooting, never presented in the production level before the reaching the editing rooms. The film crew has less connection to the world of architecture and its effects. Everything remain to be part of the
Thinking of my favorite buildings and museums, I began to visualize spaces in the form of storyboard to better understand how the spaces influenced my experiences there.

As I.M. Pei says, "It is not the amount of time spent in a museum that’s important, it’s the quality of the experience. I learned that many years earlier when we’d take our children to museums. They were never very interested in The Metropolitan, despite its terrific collection, but always loved to go to Guggenheim, I never forget that." (I.M. Pei Complete Works. Pg 135.)

On my storyboard, I visualized a scenario where curiosity leads an individual to start a journey into a building, where varying threshold change his perspective at every view and opening. In this storyboard, a window for example, is framed specifically towards sections of certain objects where it metaphorically projects the completed image of those objects towards us. I then had my character go through different geometric shaped rooms of spatial characteristics such as narrow hallways or radial spaces, to analyze the idea of unique spaces as individual, and as parts of a large building when they all come together as whole.
The physical models present different studies of light, space, matter and time. From the earlier stages of thesis, models were integral to designing different spatial qualities, even before having a specific program or site. By not having a specific site or a program, study models developed the true character of what was later captured in the final architecture. A linear series of stairs, leading to different platforms, and connecting or disconnecting different floors, became the representation of the “cut” in filmmaking, which connects or disconnects perspective or scene changes. Moreover, the stair series itself became the journey which one goes through to get to the end of the movie/last floor of the building. Each floor becomes a different sequence of events that complements the movements though the stairs.
John Fitzgerald Kennedy's Presidential Library and Museum designed by I.M. Pei was one of the most influential precedents studied to understand the essence of emptiness and sacred silence in a museum. At the beginning, visitors enter the lobby and journey through a series of dark exhibition rooms to see and experience Kennedy, his life and his family. These exhibitions all with water's edge.

On my visit into this building, I experienced the break, a moment of pause by approaching this window. A single opening framed the skyline of Boston, command silence from visitors in the exhibition rooms; it projects significant indirect light into the dark museum. This opening remains essential for its uniqueness throughout the entire museum and visible from the exterior side of the building.

They thoughts become the memorial" (I.M. Pei Complete Works, Pg 107.) The memorial materialized in my mind as I understood the confluence of the building's bright color against the calm river, against the geometric progression of stairs, against their meeting and experience Kennedy, his life and his family.
"We place our feelings, desires and fears in buildings. A person who is afraid of the dark has no factual reason to fear darkness as such; he is afraid of his own imagination, or more precisely of the contents that his repressed fantasy may project into the darkness. The great mystery of artistic impact is that the fragment is capable of representing the whole. A mere hint or foreboding claim the authority and experiential power of reality, and detached fragments make up a story possessing a sense of logical progression."

35 mm film negatives: the physical media of movies. I analyzed this essential, though unseen material, to see how it could inform architectural elements and pieces of a building. The notion of proportion, length of the film, and ongoing sequence of events were used to develop a series of sections and plans. These incorporate stairs and their progression as they land at different floors, a wall and its functions that change from the bottom to the top of the building as well as a thick, lower seating area which progresses to a thin railing on a balcony.
Cinematic section suggests the programmatic opportunities within the building; the theatre which feels heavy being the lowest level embedded on the ground while the studio spaces sit on the top and metaphorically point towards the infinite sky of knowledge and learning.
While making and remaking was a big part of the initial design, I began looking into the public versus private in architecture. I started to create a museum of film where people come together to be part of the backstage of the film production, and where they could be behind the glass walls and watch the actors rehearse. In this museum, the public could step into the semi-private areas to engage into the process of film making, or in some parts be the actors as well. I then began creating the individual functional spaces such as a practice room, which eventually would be part of a bigger space such as a production room. Walls could move from one end to another and make specific spaces smaller or larger. Therefore, the functions of the rooms would be determined by the demand of the user. Rooms could be set for any size or dimension for the big or small scenes. Trying to bring back the qualities of into the production level of movies, I designed the material of the walls with different textures where they could be part of the set. One being stone and one being brick, the users had the option of shooting the movie in different parts of the room to take advantages of different aspects of materiality in architecture.
Site Plan: Metaphorically demonstrating the light, camera and action.
From the earliest site visit, where South Capitol Street meets the water, I noticed the great potential of this site due to its location near the Anacostia River, land and the Frederick Douglass Memorial Bridge; the building in this site could act as a threshold and the gate to the city. The South Capitol Street site is located close to an area called Buzzard Point, in the Southeast Washington D.C. Another reason for picking this site was its strong axial connection to the Capitol. When first visiting the site, I couldn't resist noticing the small lights shining from the Capitol building visible on the perspective. The street was like a director's cut with the north-south axis chopping the site into two parts, similarly on how it connects/disconnects the city into west and east and continues to merge into the water.
While the proposal of the Buzzard Point Urban Design Development planned on placing a building to block South Capitol Street exactly where my chosen site meets the water, I had already envisioned a different scenario. I had vision the different scenario. I had designed the historic street to remain uncut and continue running through the site towards the end of the block. The 60' promenade (followed by the width of the South Capitol Street) remains undisturbed where it meets the water. After research and studies, I planned a combining analysis from past decades, along with the proposal for the site's future development, as well as my own design. As a result, a combination of past, present and future formed the proposed site plan for my thesis. As a result, a combination of past, present and future formed the proposed site plan for my thesis.
I visited the site in the daytime and nighttime, on different days of the week. I carefully analyzed the views towards and from the location of the site. I studied the context, materials, sounds, surrounding buildings, the river, vegetation, sun orientations and topography. I imagined numerous possibilities of ideas by clearing the restriction of the things I could or could not do towards designing this building. The street setback, zoning, regulations, and height restrictions have started to inform the initial mass of the building. Moreover, the grid of the city on the left side of the site reinforced a strong linear edge, where the river suggested of a more flexible language and a platform which could gradually meet the edge of the water.
I studied the land and the edge of the water on Buzzard Point throughout the history. Looking at the maps of the Library of Congress from 1818, 1894, 1960 and the current situation of the site, I learned that a great level of transformations that happened on the streets and the edge of the water around my site. In 1818, the current location did not exist in the way we see it today; in fact, it was all covered by water. Little by little, land has been added to the water front and extended the historic street further to the south, yet the future proposal of have shown renderings of a building blocking the street from going further south to the water. Interesting facts from the historic and the future proposed plan led me to pick ideal elements such as maintaining the 60' street and more flexible design on the water side to create a proposed site plan.
I sketched the site analysis on the drafting table to prepare a boundary of which I could start designing the exterior form from, where my structure system could be defined and where the "cut" through the site could gain more meaning. I analyzed the qualities of the river and its impacts on the site as well as the land followed by a grid on the west side.
Having a major historic street divide the site into two parts, I started to look at this cut similar to director’s cut between two scenes. I began thinking of site A and site B, where they both had different characteristics depending on their surroundings, yet shared a few similar program spaces, such as the 60’ promenade that would connect the two sides together. One side was exposed to the water and its natural float, and one was mimicking the rigid city block and the grid of that was repeating on the west side. Looking closer at the historic street of South Capital, I noticed that not only is it dividing my site in two, but also it cuts the city of Washington D.C into two parts, East and West. The street through the site was similar to its qualities in the city, as if it has been the joint, the glue in between the two sides. The street was the strong connection to metaphorically represent stitching the art of film making and architecture. I then realized my earlier studies on making and performing as well as public and private. It was then when I realized the duality of my researches and studies have come into the place into picking the location of my site.
These sketches show the initial designed proposal of the exterior form of the building, divided into two parts by an uninterrupted cut of the street through the middle of the site.
Rendering of interior space shows the quality and material studies to appear and disappear the significant views from the building. This view was studied to be presented as one of the glorious moments as one arrives on the very top floor of the building.
Physical models of the exterior form, along with sketches of the structural grid of the building were inspired by the 35mm negative film. The east form of the building gradually began to cascade towards the edge of the water, while the one on the west remained strong, thin and tall following the street orders and grid.
After site analysis and considerations about the kind of building the site needed to become, the programs were assigned to the space. Performing and performance have stayed strong throughout my studies topic. As I began to define the characteristics of the building by programs, I couldn’t resist defending the narrow building as the practice, behind the scenes and private space, which eventually became to be the Film Academy. The other half of the building remained as public museum, which is also projected towards the river. The space in the middle which was the public promenade remained the same and a ground theatre in the lower level of the promenade was established.
The structural grid of the linear building had been influenced by the negative film, repeating different sequences of events throughout the progression of space; casting different shadows and movement depending on the movement of sun in different times of the day.
The ratio of the cinematic screen defined the veneer and exterior size of materials on the façade. One of the walls has different openings and punches to cast shadows and light into an exhibition space, gently informing the visitors of the gradual movements of the sun throughout the day.
Rendering through an interior space with the light casting through the openings of the wall.
Interior perspective of the museum and the café below the stairs.

Roof plan on the site
Special qualities of different rooms through a cross section express different levels of three different building parts, the film museum, the promenade and the film academy.

A screen was placed on the elevation of the museum, for the public to view films from the promenade, as well as the students to view their own movies that they had produced in the other building, Film Academy.

Longitudinal section showing the red beams below the promenade space.

Cross section, Introducing three sections of the building. The film Academy, the promenade, and the film museum.
Study model of the cascading stairs from the promenade platform meeting the edge of the water.
Longitudinal section through the promenade stairs

Cross Section and roof analysis
Green Wall: Presenting all study models, sketches and site analysis
Perspective rendering through the film academy. Structure reinforced the progression through the space as one goes through sequence of events, similar to the film negative.
The promenade level encourages visitors to walk up the stairs, look back towards the historic South Capitol street, circle around the building and walk down the cascading stairs towards the water and the café on the lower level adjacent to the water. Visitors themselves circumnavigate the building as they discover the journey, similar to a camera going around specific and important objects in movies.
East Elevation From The Water: Looking Towards The Museum
Longitudinal Section Through Museum.

Cross Sections through Film School, Theatre Lobby and Museum.
Longitudinal Section through Promenade, Elevation of the Museum in the Background.
Longitudinal Section through Film Academy. Beams above the glass ceiling cast a shadow through the linear stair space.
Longitudinal Section Through Theatre. Elevation of the school in the background.
For the final presentation, I separated the pin-up room into two parts: the behind the scenes of the production and design process, versus the performance area with the final drawings. The color green is associated with the green room and red with the performance in the theater. I separated the walls where the green wall was covered by all the studies, sketches, site analysis and study models, and the red walls presented the final renderings and plans of the design.
To My Committee Members—Paul, Thank you for truly giving me one of the biggest lessons at WAAC, that everyone loves story, and no architecture fails at engaging people into the building once it uses storytelling. Susan—For challenging and pushing me to get the best out of me. Marcia—For encouraging me to let out all of my ideas and never let go a single one of them. Markus, for teaching me about the strong voice of an architect, and to keep reminding me to keep my voice strong throughout my thesis design progress.

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CITATION

IMAGE CREDITS


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