



## Investigation of basics and relationship between architecture and cinema

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### Abstract

This study aims to investigate the basics and relationship between architecture and cinema. The research method is descriptive-analytical using library sources. Like cinema, architecture flows within two dimensions of time and movement. Human perceives and imagines a building in her/his mind within different sequences. The design and construction of a building must anticipate and search for mutual effects and communication of people who pass by it. A building consists of continuous sequences-plans that the architect creates with cuts, framings, openings, and editing. If cinema is based on the judicial aspects' connection of the subject in front of the camera in its most narrative form, the first joint chapter of the two arts of cinema and architecture would be the volumetric view of filmmaker and architect towards their works. Architect's art is manifested in space shaping using the expressive tools of walls, ceilings, doors and windows, and façade. In contrast, the filmmaker's art is seen in space-making by using camera displacement techniques, Mise-en-scène, and relationships of elements inside the scene in the first step, which separated these pieces as an expressive and comprehensive generality.

**Keywords:** Architecture, Cinema, Space Shaping, Continuous Plans, Volumetric View

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### Introduction

Image presentation is the most effective and lasting technique for presenting information. The information received through the eyes is transferred to the right hemisphere of the brain. Humans deal information intuitively with the right hemisphere of the brain; it means that information remains there and leaves the most considerable and deepest influences on the human's character. Psychology asserts that each image equals a thousand words. The leaders of this artistic field have presented their ideas and goals to the world in the language of image leaving the highest influence in conveying meanings to the audience through the simultaneous involvement of perception and feeling. The advent of the cinema industry had a considerable influence on humanity and mankind has tried to develop it from the past to now (Navabakhshi, 2002).

In cinema, the spectator also feels the existence of a scene and its space through the pauses that appear in the continuity of a scene. The audience's viewing angles of the subject would determine and explain its nature, status, and

modes. Architect's art is manifested in space shaping using the expressive tools of walls, ceilings, doors and windows, and façade. In contrast, the filmmaker's art is seen in space-making by using camera displacement techniques, Mise-en-scène, and relationships of elements inside the scene in the first step, which separated these pieces as an expressive and comprehensive generality. In this way, the spectator receives a feeling from the space of scenes, which is created in them due to their presence in an architectural space. When watching a film, the spectator is in a situation surrounded by various images as expressive elements so he/she feels him/herself in the scene of the film. When the camera moves, the place of the spectator is also changed. By getting close to or getting away from the camera, the spectator also feels this closeness and distance. The movie spectator indeed observes an event from different angles within a fence created in the scene by Mise-en-scène. The objectivity of the observer's exposure to the subjectivity of the spectator's presence in the movie scene is a functional similarity of the continuity and flow of an element called space in these two arts



(KeshavarzShokri, 1984).

Cinema and the events shown on the screen undoubtedly live in a subjective space so one can consider it closer to architecture rather than literature or painting. Although the space created on the cinema screen is more contractual and artificial and only creates a schema of it in the mind of the spectator instead of encompassing the reality, this factor is comparable with the 3D reality of architecture instead of its contractual aspects. Painting is indeed a 2D space, i.e., it is shaped on one surface. The 3D reality envisioned in the painting results from the technical efforts of the painter and some tools such as shadow light and perspective knowledge. Sculpture is also a 3D art but the spatiality of statute can be simply converted to a surface in the final analysis. In other words, it can be stated that the statute is based on reality but never embraces it completely. A statute is indeed a polyhedral surface and space has an external relationship with it and does not fit in it despite its existence in the space. On the contrary, not only space is not an external element in architecture but also is naturally an internal element. Architecture is not used as an ordinary surface but its structural relations are in the form of volume and dimension that makes connection with the spectator. Finally, it can be stated that an architectural work not only is an object that lives in the space but also makes it possible for space to live in it (Jodat, 2003). Space is one of the common elements of architecture and cinema. Space is created by the "character" in both arts, and the important feature of this space in the current world is that it gives the right to choose the spectator. According to the mentioned points, this study aims to examine the basics and relationship between architecture and cinema.

## Theoretical foundations

### Cinema concept

It is a branch of art in which, a story is shown through a sequence of animated images (movie). A cinematic work that is called a cinematic movie is composed of image (as a collection of frames) and sound (dialogue, sound, and music) elements. A movie is produced based on a script or scenario by actors, directors, cinematographers, and other individuals. Cinema is the newest branch of art known as Seventh Art, which now presents one of the most public and

popular artistic productions. Cinema also refers to a place where the movie is shown publicly. The word cinema is derived from the Greek term κινῆμα, -ατος which means movement (Jin Kim, 2003).

Cinema is a creative form of expression and the filmmaker also tends to present a personal insight like any other expense. It can be imagined at the first step that cinema media is a mixture of all artistic elements but a new, specific, and rare thing in Cinema. Operations of filming individual pictures and showing them with a certain speed provided an expressive possibility and combined conditions to the new media. This possibility and condition were hidden in the technique of these operations. In practice, the production of a movie starts with recording a subject in the form of image and sound on film tapes, which is called view. Shaping views allows the filmmaker to express his/her thoughts and feelings. Therefore, view the initial and expressive element of cinema so one can introduce it as a primary and underlying material of cinema, which is used to produce a complete movie. Structurally, a view is the smallest component of filmic expression. Views do not have fixed components and elements, but they are unsustainable. The position can be addressed in a way to has different appearance, views, movement aspects, visual value, speed, and sounds. Views don't need to be a direct display of the subject. Moreover, the color of the painter doesn't need to present the color seen in nature. Views provide a reality for the subject that is explicit and recognizable and also reflects meanings, signs, feelings, and thoughts (Soflaee, 2004).

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### What is architecture?

Architecture is an inevitable art. Le Corbusier defines architecture as follows: you employ stone, wood, and concrete, and with these materials, you build houses and places. That is construction. Ingenuity is at work. But suddenly you touch my heart, you do me good, I am happy and I say: this is beautiful. That is architecture. Art enters it. My house is practical. I thank you, as I might thank Railway engineers or the Telephone service. You have not touched my heart. Suppose that walls rise towards heaven in such a way that I am moved. I perceive your intentions. Your mood has been gentle, brutal, charming, or noble. The stones you have erected tell me so.



My eyes see what indicates a thought. A thought that is revealed not by sound or words, but only using forms that are in a certain relationship with each other. They are the mathematical creation of your mind. They are the language of architecture and evoke emotions. That is architecture (Fatahi, 1937).

### **Cinema and Architecture**

Architecture and cinema are full collections of art and its relevant rules, which are mixed by architects and artists. Both arts adhere to common principles and are achieved through space and time information. Some elements such as movement, scene, light, and space are observable in both arts. In other words, some visual factors such as surface, color, line, point, etc. that are available in the texture of an architectural building are the same agents behind the scenes of a movie (Rahimzaseh, 2003).

The important point is that movie makers create an identity for a place by using architecture and visual-semantic space-making. Moreover, when an architectural building is used as an event in the movie then social, temporal, cultural, historical, and other situations are obtained. This occurs when a space or city is intentionally and seriously employed in cinema art.

Cinema makes the space by combining some elements, such as color and light, view angle and scene, editing, and sound to create a strong relationship with the spectators facilitating their imaginative journey in the movie. Nevertheless, space is the essence of architecture. In cinema, filmmakers achieve the goal of space-making subjectively, and architecture gives objectivity to the space in the architecture. In cinema, the spectator deals with the movie space in a way that mental conditions of the movie and narration pull them into nested layers of the movie, and human is surrounded by the space in architecture. In cinema, the spatial illusion is obtained through characterizations, movement (subject and camera), and editing. On the contrary, space element is made by combining lines, colors, shapes, shadow and light, and repetition of volumes in architecture. In other words, cinema is similar to a window and architecture acts as the place where this window is placed in it. Undoubtedly, aesthetical discussions about common and joint points of cinema and architecture are not possible unless

through comparing some cinema works and determining them within an explanation of an architectural body. To achieve this goal, there is no but architectural search through cinema. The movie analysis history is full of objective stances about space in the movie picture. Most analysts have addressed space in cinema pictures in terms of scene architecture but these architectural spaces of movie scenes are not anything beyond a tool for mental stimulation of the audiences who are sitting in the cinema salon. We find in the final analysis of the mental conditions of watching a movie that the viewer reaches the final understanding of the movie's meaning and concept through a mental journey in the movie. On the contrary, the architecture viewer is an objective passenger and perceives the nature and reality of architecture by moving through it and feeling the rhythm, durability, and continuity of architecture's spaces (Akbarnejad, 1984).

### **Space in cinema and architecture**

Cinema fundamentally appeared in a human civilization based on motion decomposition and its recombination. Cinema cannot exist without visible motion, which implies dynamism in front of the camera, and invisible motion, which is the physical motion of a movie strip to recreate real motion. Cinema's potential depends on this fundamental element, i.e., motion. Architecture at the cinema scale is an art based on the stability of various volumes, which is created when continuous and noncontinuous spaces are mixed. The most general definition of architecture introduces it as an art that shapes the space. Architecture is also based on motion from one point of view. However, this motion does not seem like an invisible motion of a movie and is considered an internal motion because it expresses the connection between various spaces. On the other hand, one cannot perceive space in the architecture unless the spectator moves in it. This is the spectator movement that makes the architectural space tangible. It is not, however, only the nature of motion that integrated cinema into architecture and vice versa. There are other elements involved in this artistic interaction. These elements have a common base and specific position in creating aesthetics in both arts, in which time and space are the most important ones, and other elements, including rhythm, color, texture, light, motion, and continuity are the most effective



ones. Cinema makes the space by synthesizing some elements, such as color, light, angle, scene, and sound editing to create a strong relationship with spectators and facilitate their imaginative journey in the movie. Nevertheless, space is the essence of architecture. In cinema, filmmakers achieve the goal of space-making subjectively, and architecture gives objectivity to the space in the architecture. (Moghadam, 1994). In cinema, the spatial illusion is obtained through characterizations, movement (subject and camera), and editing. In other words, space is not a coherent and monotone object in cinema but is more similar to a fluid material in that its shape is changed. In cinema, space is indeed like a physical space that we change its shape in imposition and imagination or our dreams. On the contrary, the element of space in architecture appears from the combination of lines, colors, shapes, shadow and light, and repetition of volumes. In other words, cinema is similar to a window and architecture acts as a place where this window is placed in it (Moghadam, 1994).

### **Montage as the architecture of cinema**

Cinematic reality means reality shown in the movie, which is distinguished from common reality either in time or in place. In architecture, this reality is finally shaped in the montage, so if we consider this concept for montage, it does not lead to disconnection and assembly of signs or views and makes a fully active relationship with decoupage and mise-en-scène. Therefore, montage is no longer an action only related to monitor, particularly after the end of filming but the main montage is done by the director throughout all film production stages. An architect gradually fosters his/her initial imagination having in mind and shaping the considered space. Filmmakers also do the same and gradually realize their mental imaginations in external forms based on the expressive rules of cinema. The movie is completed by the director and his external experiences and internal evolutions. If we consider montage as the architecture of cinema, it would shade from the beginning to the end. If we abstract the constituent elements of reality (e.g., time, place, events, characters, etc.) from each other, we will more clearly find the meaning we are looking for. None of these concepts are similar to their meanings in real life. The place does not have a quantitative existence in cinema and is

considered only as an element that can create a proper psychological or mental space.

The concept of place in real life is highly different from its meaning created in cinema. We usually live in places that have accepted them inevitably due to unwanted factors. Therefore, the living place never reflects our soul. However, there is a mutual effect and influence between us and the space we live in, and at least the indoor space of houses somewhat reflects our souls. For instance, potted gardens inside the rooms are symbols of our esoteric belonging to nature, which has been manifested after civilization moved away from nature. The modern cities also reflect the conscience of today's humans outside them. The analytical geometry of Descartes has become a part of our culture, and that culture has shaped cities. However, it is not true for all individuals and details. As mentioned before, the life of our city and the architecture of the space where we live mostly follow some undesired factors that direct us toward a specific orientation. What directs an architect is the final image he/she has in mind about the considered space. In a few cases, the built space is matched with the final imagination of the architect however, space and place have an abstract, absolute, idealistic, and dreamy nature in cinema so it is similar to the spaces we see in dreams. The dreamy places always point to our esoteric qualities and are similar to our dreams.

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### **The relationship between time and place in cinema**

Cinema can replace time with space and replace space with time through fast and slow movements. According to the academic thought of the past, these two factors were completely separate and each followed some specific regulations. The space was closed and had an Euclid structure but the time implied an endless stream. In modern science, space and time form a framework based on which, the world is created. We go ahead in time as we move in the space, and space has a floating quality. As a determinant in cinema, editing contributes to the temporalization process of space. In other words, cinema expresses different times by displaying various parts of space. This point returns us to the basics and fundamental principles of cinema. It means cinema consists of a set of fixed images of space that are arranged within time. On the



other hand, another phenomenon appears in movie editing, which is the temporalization of space. In a movie, time becomes temporal because we can go ahead or return like when we move in space. In a movie, moreover, the time of each view is present; i.e., any image that appears on the screen is something that is occurring. In addition, time is shown in a dramatic form through the display of a set of situations from one to another view or inside a view. In this case, space and time are two fundamental aspects of cinema- moving with each other and making a continuous interaction. What is displayed in the movie is space and nothing else so this space must be used to express time. However, this space should be experienced in time and must be placed in a temporal pattern. On the other hand, this temporal pattern is a pattern that is constantly flexible allowing us to move in time as we move in the space. These are cinema-specific features that distinguish cinema from the real world and all arts (Taghizadeh, 2006).

### **Rhythm in cinema and architecture**

In architecture, its components and elements are placed next to each other. Hence, we can name architecture a spatial art. However, views come one after another in cinema. Therefore, cinema is a temporal art. These differences separate these two arts as much as the space definition in time does this. Time manifestation is seen in space change, and space view fully depends on the time sequence. Although time does not change in architecture, the rhythm is changed. Consider the image of swallows on power cables shaping, such a beautiful mixture of life and geometry. The structure of this image is highly simple. It includes several parallel lines with several birds sitting on them in front of a simple background. In this simple pattern of the straight line, however, the movement and displacement of birds create some diversities in the context of the image that is highly cinematic. One can even hear their sound. The same simple diversity can be found in the fixed order and discipline in the world of architecture. For instance, consider a row of houses in a street that is constructed with the same shape and during a temporal course within a general design. Architecture does not have a temporal aspect by itself, and no apparent motion exists in it. Therefore, architecture cannot have rhythms like music and dance. However, experiencing the architecture means one should

spend time watching and living in it. The simplest method for architecture is the regular repetition of an element. The application of movies has had a different form over history. The architecture of renaissance tended to create coordination and clarity in components to bring tension and ambiguity to the spectator. A restless rhythm appeared in Baroque architecture, which created spatial succession instead of unity and coordination. Indentations that led to other indentations. Contemporary architecture has tried to remove the monotone rhythm and tradition of architecture instead of using the limited symmetry of previous centuries. For instance, the house called Taliesin East and West constructed by Lloyd Wright is the most outstanding sample of this movement (Bahrainy, 1998).

### **Space in modern architecture and cinema**

Space is one of the common aspects of architecture and cinema. Space is built by the “character” in both arts, and the right to choose for the spectator is an important feature of this space in the modern world. Engineer “ShadmehrRastin,” a cinematographer and architect-engineer who lectured on the behalf of Office of Cultural Research in the House of Artists about the subject “architecture, space, cinema” explained that choosing is the first power of humans in free space. In the modern era, the audience is allowed to choose a willful character. Under such circumstances, this is the human who defines the performance and use of space in architecture and also participates in understanding movies and cinema. Therefore, the modern architect tries to design a building that is inviting not oppressive. In cinema, the director also removes him/herself from the cinema. The director uses long shots and allows spectators to make their dramas in the scene and identify with the hero and character of the movie if they like. He explained that the goal of choice possibility in architectural space and cinema is to achieve dialogue, participation, and familiarity, and stated that “public space is a space other than the private space (home) and governmental space (offices, workplace). All kinds of arts, including the art of architecture and cinema tend to discover and know this space because human beings show or shape important and complicated aspects of their characters in this scape, which are not incorporated either in private or public



space. Public spaces include some places, such as theaters, sidewalks, hangouts, etc. Very few public spaces exist in Iran. This case creates a problem for the chooser human of the new age. This shortage of public spaces has influenced both our architecture and cinema and caused disturbances in private and public or governmental spaces. Therefore, Iranian people show some behaviors in these places while they do not belong to these spaces” (Foyuz, 1990).

### Conclusion

We feel space when change our place through time. As we move in time and space, our understanding of these two factors will change constantly. It means we look for this subjective change and search to see diversity in our surrounding world. On the other hand, we tend to find a subjective structure of the world that is reasonably constant and permanent. When we experience architecture temporally, the nature of its design is rooted in the internal relations of its perceptual diversity and appearance permanence. According to Bolding, ten aspects influence the way illustrate our world. Temporal image is one of these aspects, i.e., our situation and time stream in that flow. The subjective structure of the world in the minds of humans would change through time. What begins as a subjective structure or schema of architecture when entering a building will evolve through time and result in the rich subjective structure of their internal relationships, parts, and spaces. In other words, what is formed initially as relative transition ways from one to another point in the human mind would change the movement, time, and relative perception of human in their surrounding environment based on the continuity of the stream. Ultimately, when a human faces a place frequently and sequentially then his/her spiritual dependence on that place will be increased. The more we experience a place or space, the fewer the physical features it will be and the higher our dependence and attachment to the general thought that space and its accessories evoke in us. Time would create a conflict for an architect. On the one hand, change and evolution are some of the attributes of spatial systems that architect pays attention to. However, many units that constitute a spatial structure are static. They are indeed the static units placed in a dynamic system (physical environment). Contemporary architecture

considers architecture one among several phenomena occurring in time and space continuity. For example, some architects such as Frank Lloyd Wright and Alvar Aalto pay considerable attention to visual sequence and time-space connection in their works.

A filmmaker sees a scene in a volumetric form by breaking and separating the continuous events. The view angles in the scene vary at different moments. This status occurs through the intangible displacement of the camera (spectator’s eyes) and the spectator has used this method so that he/she does not believe in its existence and diversity. In specific cases, however, the presence of the camera is felt intentionally or the physical presence of the camera would remove the illusion created in the mind of the spectator if required attention has not been paid to the presentation and separation of scenes. Therefore, the description of cubism art or volumetric art and the astonishing similarity of its fundamental definition with the most basic definition of cinema formation brings itself into the emergence when addressing the similarity and closeness between the two spatial arts of cinema and architecture.

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