CINEMATIC SCIENCE FICTION SCENES AS A SOURCE OF INSPIRATION AND A CASE STUDY FOR TEACHING INTERIOR ARCHITECTURE STUDENTS

مشاهد الخيال العلمي السينمائي كمصدر للإلهام ودراسة حالة لتعليم طلاب العمارة الداخلية

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ABSTRACT

Cinema and film were used as means of inspiration that helped students in the third year in the interior design course to develop creative thinking at the end of the semester, after noticing the weakness of the students in communicating ideas and applying them in their projects for interior architecture.

The aim of the study is to exploit the ability of science fiction technology to realistically represent the possibilities of imagined cinematic events spatially and environmentally, as this important technology affects students' thinking and develops creative thinking when designing interior architecture by asking students to critically understand film structures, analyze the potential of interior environments, and critically understand the actual meaning of the subject and concept, and how this affects their Conceptual design when designing interior architecture projects. The emergence of virtual reality technologies and cinematic science fiction technologies also increased the realism of expression.

KEYWORDS:

Inspiration; Brainstorming; Cinematic Science Fiction.

الملخص

تم استخدام السينما والفيلم كأحد وسائل الإلهام التي ساعدت طلاب السنة الثالثة في مقرر التصميم الداخلي على تطوير التفكير الإبداعي في نهاية الفصل الدراسي، بعد ملاحظة ضعف الطلاب في توصيل الأفكار وتطبيقها في مشاريع العمارة الداخلية. ووجود عقبات معرفية تتمثل في تبني الطلاب لطريقة واحدة في التفكير والنظر إلى الأشياء، وهذا يرجع إلى طبيعة البيئة التي يعيش فيها الطالب سواء في المنزل أو في الجامعة

وتهدف الدراسة إلى أستغلال قدرة تقنيات الخيال العلمي على تمثيل إمكانيات الأحداث والمواقف السينمائية المتخيلة بشكل واقعي مكانيًا وبيئًا، حيث تؤثر تقنيات الخيال العلمي السينمائي المهمة على تفكير الطلاب وتطور التفكير الإبداعي لديهم عند تصميم العمارة الداخلية. وتتم منهجية البحث من خلال مطالبة الطلاب بتقييم هياكل الأفلام بشكل نقدي، وتحليل إمكانات البيئات التصميمية الداخلية، والفهم النقدي للمعنى الفعلي للموضوع والفكر الدرامي، وكيف يؤثر ذلك على الفكر التصميمي لدى الطلبة عند تصميمهم مشاريع العمارة الداخلية فى مقرر تصميم العمارة الداخلية. وقد زادت واقعية التعبير لدى الطلبة عند تصميم مشاريع العمارة الداخلية بعد استخدامهم تقنيات الواقع الافتراضي وتقنيات الخيال العلمي السينمائى .

الكلمات المفتاحية

الالهام؛ العصف الذهني؛ الخيال العلمي السينمائي

1. INTRODUCTION

Developing creativity is part of the instructor's responsibility to develop the creative aspects, recognizing and accepting the students' different abilities. It has been observed that there are cognitive obstacles represented by students adopting one way of thinking and looking at things, and this is due to the nature of the environment in which the student lives, whether at home or at school. Therefore, the instructor should strive to raise the level of students' thinking through brainstorming and other things. SPSS Statistics was used for data management, advanced analytics, and multivariate analysis. (Table 1) The results of the analysis showed that many students lack the skill of creative thinking, teamwork, and the ability to collect project data and analyze this data to serve the design process.[*]

Table 1: Analysis of the level of students of Interior Architecture in the skill of creative thinking, teamwork and the ability to collect project data to serve the design process.

Define the Problem			Design Process			Brainstorming			Concept analysis			Develop Solutions			Communication skills		
value	**Freq.**	**pct.**	**value**	**Freq.**	**pct.**	**value**	**Freq.**	**pct.**	**value**	**Freq.**	**pct.**	**value**	**Freq.**	**pct.**	**value**	**Freq.**	**pct.**
1	2	13.3	4	1	6.7	2	2	13.3	3	1	6.7	4	1	6.7	4	2	13.3
2	7	46.7	5	3	20	3	3	20	4	4	26.7	5	4	26.7	5	3	20
3	6	40	6	7	46.7	4	4	26.7	5	2	13.3	6	7	46.7	6	6	40
	15	100	7	4	26.7	5	3	20	6	4	26.7	7	3	20	7	4	26.7
				15	100	6	2	13.3	7	4	26.7		15	100		15	100
						7	1	6.7		15	100						
							15	100									

13.3% of students received a value of 1/5, 46.7% of students received a value of 2/5, 40% of students received a value of 3/5 in Define the Problem. 13.3% of students received a value of 2/10, 20% of students received a value of 3/10, 26.7% of students received a value of 4/10, 20% of students received a value of 5/10, 13.3% of students received a value of 6/10, 6.7% of students received a value of 7/10 in Brainstorming. 6.7% of students received a value of 3/10, 20% of students received a value of 3/10, 26.7% of students received a value of 4/10 (Table 1)The article is an experiment that connects the study of interior design with the study of film production with third-year students of the interior design department (15 students) through one

[*] [*] (SPSS Statistics is a statistical software suite developed by IBM for data management, advanced analytics, multivariate analysis, business intelligence, and criminal investigation. Long produced by SPSS Inc., it was acquired by IBM in 2009).

Of the projects of the interior architecture course at the faculty of architecture and design, where it is required to design a reception space in one of the film productions companies. The film, like the interior design, is expressed through mental perception, metaphor, and symbolism, which is similar to the idea of designing any interior. If the elements of film production are well and thoroughly studied in the interior architecture curriculum, we will gain special experience that will help us produce an interior design that has the components of a successful project.

In this design task, students need to fully understand the compositional medium of the custom film, freeze special shots, understand the compositional and purposeful concept of scenes, identify the content and inspiration provided by the director, understand three-dimensional representations of designed environments, clarify objective interpretations of ideas based on literature. The project trains interior design students in the thinking process of choosing a proper design for the space to be designed. Then individually they create their own "design" that uses both script film and architectural space.

"*Interior architects are required to learn to envision, then to represent spatial solutions using tools or mediums to represent their ideas so the client and end-user can see the translation of them into some form of 'reality*" (Mcauliffe, 2021, p. 211)[1]

Researching the actual content of the film prompts students to study more closely to properly understand all the elements of the film, the themes, and spatial relationships in film editing.

Studying film production is an unconventional way to enable interior design students to become familiar with (and even master the use of) interior design elements well. It works on developing the student's feelings towards the elements of interior design and creates architectural spaces that leave the visitors with the appropriate feelings for the intended activities, which increases the pleasure of human life and motivates it with various spatial experiences charged with emotions and feelings.

Architecture is about movement, says Bernard Tschumi. "It's not like being in front of a painting that doesn't move," he says. "You have to move through it and appreciate the spatial quality – it's such an important issue." "But he says he also learned a great deal from film theory – perhaps more from the Soviet Constructivists and the new wave filmmakers than from architectural history". (Tschumi, 2012).[2]

Students will engage in research to understand the choices and expression of architecture used in film and the impact of the same on interior architectural design. "*The ultimate goal of design thinking is to find innovative solutions to design problems. It is concerned with how things ought to be".* (Rashdan, Wael & Ashour, Ayman, 2022, p.3). [3]

"*In design, where designers are constantly exposed to visual stimuli, visual analogies are considered to be particularly helpful*." (Casakin 2010, p.2)[4]

(I believe that teaching should simultaneously encourage the production of highly innovative professional calibre work from students). (Prvanov, 2017, p.5). [5] Understanding the

relationship between movies and interior architecture is enhancing our ability to express via interior architectural elements our complex ideas.

2. THE SEARCH PROBLEM

Through evaluation of student projects by specialized arbitration committees, and through discussion and conversations with students, the interior design students' weakness in creative thinking and brainstorming was noted. Students also lack the appropriate way to the management and the arrangement of the steps of the design process. They also lack the ability to choose the appropriate elements of inspiration and do not know how to properly take advantage of the selected elements of inspiration to achieve the creative thought of interior design. "*Solutions need to go beyond the look and the functionality of the spaces referring to design for a purpose, design for experience, design for emotion, design for sustainability and design for transformation*". (Ngoc, P.T., & Fassi, D, 2018, p.3)[6]

Students also lack the skill of working in a group. "Working in a group on a team challenge offers more adaptability, productivity, and creativity than one would expect from an individual working alone". (Tang & Vezzani, Valentina & Eriksson, 2020, p.8)[7]

Therefore, this study seeks to find ways to help solve the problems of arranging ideas, searching for stimuli, improving the weak creative conceptual thinking among students, and taking the film as a distinguished example.

3. EMPLOYING THE FORMATIVE ELEMENTS OF VISUAL ARTS IN THE FILM

Cinema is the most complex of arts because it uses the rest of the other arts. Therefore, it is sometimes called "the art of mixed arts". In addition to the interference of industry in all its stages, cinema like other arts is dependent to design basics similar to the basics of architecture, interior design, and plastic arts. Some thinkers tend to consider cinema as a new form of plastic art because the image plays the main role in it.

The truth is that plastic arts do indeed play a major role in cinematic work. Since the inception of cinema relied on plastic artists in the design and implementation of its decorations and scenes. Cinematography itself in some films has risen to the level of plastic creativity.

It also has the power to change the laws of time and space, as any film can look to the past, or predate the horizons of the future, and can make a few seconds seem like hours, or compress a century into minutes. "*Using methods that improve creativity in design education allows the student to gain different perspectives by enhancing his imagination and accumulation of knowledge*". (KAYA, Pelin & Erten Bilgic, 2020, p.283)[8]

Using of films in this teaching assignment helps provide an increased understanding of the experiential nature of interior spaces. These experiences can transcend the language barriers that may exist in written information sources.

4. FILM INDUSTRY AGAINST INTERIOR DESIGN INDUSTRY

The interior architecture designer plays a major role in the film industry. Since its inception, cinema has relied on an interior designer to design and realize its visions. The film director also uses the constituent elements of the visual arts such as line, shape, mass, size, and composition. Like interior design, the film exploits the perfect interplay of shadow and light.

"*The architects through perfect and exact designing of film space, using text, prop, light, color, and other architectural elements, could manifest concepts and would have a profound effect on the presentation of thought*". (Panahi, 2018, p.6). [9]

"*There are great opportunities to exploit the potentials of film in order to enhance the critical dialogue regarding visions of the architecture of the past and future*". (TERRI BOAKE, 2007, p.519).[10]

An interior designer's ability to control and keep interior design elements balanced is key to creating an aesthetically pleasing interior. Making these elements work together in harmony will also increase functional efficiency. "*Eric Rommer (1970) points to the distinction of space function into the architectural, narrative, and artistic, where the relation between the real and manufactured architectural spaces is examined, as well as the relation between the narrative and scenario, and the artistic elements of the image*". (Georgiadou, 2016, p.6)[11]

The film deals with the place in its three dimensions and focuses on moving images. These animations have a rhythmic rhythm. The synthesized rhythms in the film are similar to those found in music, poetry, and plastic art. It is also similar to the design of blocks, furniture, windows, and lighting units within the interior design spaces. "*Josep Lluís Mateo says: "As happens with photography, the cinema is giving us a specific point of view about things, about the reality and the architecture into it. Into the invention of the plot, the reality (and the architecture inside) appears in a special way, with a special light, in a special frame, in a special context*" (Josep Lluís Mateo, 2011)[12]

Cinema films are the imaginary version of the real world and design is the realistic vision of imagination. The two fields (cinema and architectural design) seem to be the only visually expressive means in which the third dimension is conceptually replaced by time. In the designing procedure, as well as in cinema, the two dimensions are transformed by the narration into a third dimension.

"*Architecture exists, like cinema, in the dimension of time and movement. One conceives and reads a building in terms of sequences. To erect a building is to predict and seek effects of contrast and linkage through which one passes...*" *Jean Nouvel.* (YATZERLAB, 2007-2023)[13]

"*Albrecht says that the imagined designs are transferred to the screen thanks to the modern architecture in cinema. Thus, architecture gains a new vision and is marketed globally through cinema*". (Erbay, Muteber. 2013, p.15)[14]

"*Relevance is the key that activates learning, shifting concepts into real practice. It enables the student to justify their effort*". (Whitburn, Samuel & Allan, Penny & Kebbell, 2016, p.2).[15]

It achieves it by creating a total synthetic spatial dimension that the user is aware of, from the overlay and succession of fragmented places that may not have a functional relationship except through the general idea and personality of the place, just like the drama in the cinema. The interior designer, just like the director, seeks to create an integrated design unit between the elements and spaces of the building from one space to the next.

5. USING FILM AS AN INSPIRATION

The association of cinema with architecture and interior design enhances its value as a science linked to human capabilities. If the matter goes beyond that, to the desire to reach formations and shapes, whose goal is to achieve relative artistic beauty, the matter makes it move from the field of humanities, to become one of the branches of fine arts, there is no objection to achieving beauty in architectural work. If the architectural work aims to reach a work of art in itself, based on schools of art and models, then here it may not achieve the desired goal, which is the benefit. Therefore, design teaching aims to introduce the interior design student to the basics of functional design - first - then focusing on developing the skill of creativity and innovation.

"*After all, it is to design with; it is to address aspects of imagination and creativity and introduces the channels one can use to achieve creativity in architectural design*" (Elsemary, 2014, p.11).[16]

"*Creativity resides not only in the outcome of student work but also in the actions and definitions provided by design educators. As Wiley states: "Altering the instruments, tools, and the process used during design increases the students" awareness of the influences exerted by their method and such awareness could further the expression of an idea*." (Bar-Eli, Amos. 2020, p.10)[17]

Emphasis should be placed on teaching the basics and training the student to use them with an organized and creative mind. This can be achieved by teaching the way of thinking in the design studios and inventing ways to inspire ideas, such as studying the production of cinematic films as an influence and inspiration for the interior designer.

6. THE RESEARCH METHODOLOGY

The student uses the analytical method in studying the components of the cinematic film. The student analyzes the elements of film production such as scenario, story, photography, architectural design of the film, lighting, etc. The student uses the critical method to criticize the results of analysis, comparison, and observation. As well as the applied approach to implement the results of the study. The experiment procedures begin by dividing the students into a number of groups and showing a number of films chosen by the faculty members supervising the project so that they contain high artistic value and are characterized by

distinguished thought, directing, filming, and professional scenes, to choose, and determine the reason for the selection. Then the students choose the appropriate film based on an initial explanation of the artistic values the film contains.
The student then uploads the film. So, after an in-depth viewing, the students analyze the main idea of the film and explore its distinctive character based on their personal opinions, after polling the opinions of the critics and the film director. The student impersonates the director of the film in order to reach the concept that the author wanted in the main story, which the director translated in a complete cinematic way.
After arriving at these facts, the students select several scenes that are considered the most important events in the film and consider them to be the most emotional and illustrative of the main idea of the film. From these scenes, important shots are identified that illustrate the most important features of the design of the elements built within the film's décor, through these scenes, the student explores the technique of execution and photography, style, lighting, color, furniture, materials, movement, etc.....

6.1. IDENTIFIES AND STUDIES THE FOLLOWING ELEMENTS:

- **Perception of space:** The importance of the interior space is due to the fact that it allows a space to accommodate the elements contained within the building. It also allows seeing these elements from multiple angles, thus generating a variety of scenes and visual sensations.
- **Ratio and Scale:** The humanistic scale represents an important aspect of the interior designer's concerns as it represents reality. The dimensions of the space, furniture, and openings are compared to the proportions of the human body. Meaning that the human being is the measure that must be used in the built environment.
- **Comparison:** There are some visual properties (such as scale, texture, color) that a person feels only for a group of elements, not a single element because they have a relative nature.
- **Contrast with the surroundings:** There are two cases to achieve the distinction of the elements of the space. They are the clarity of seeing the element from more than one direction and its contrast with its local surroundings.
- **Processing of visual information perceived:** This makes this process dependent on culture and experience more than direct perception.

6.2. VISUAL INFORMATION:

- Pictures that the mind recalls from memory through imagination and manual sketches that translate the visual characteristics of the design.
- Knowledge of planning and movement axes leads to the formation of an initial mental map of the space.
- Classifying the information received from the space in detail, and this classification depends primarily on the goals and trends of the student.
- Purification of natural events, maintaining a sound logical sequence of events and showing the relationships that distinguish this space from others.
- Processing the data after organizing it and placing it in a logical sequence that depends on the student's personal trends and needs.

6.3. CRITICAL DISCUSSION:

After a thorough study of the design elements, the construction of the film (Film script), the idea, and all that is required of the group of students to study, the students are asked to create a detailed, objective presentation related to the selected film. All of these issues must be researched to initiate a critical discussion fully supported by the film's visuals and its interior and exterior architectural facts.

6.4. SCHEMATIC ABSTRACT AND CONCEPT DIAGRAMS:

The comprehension of this film group should be translated into a schematic abstract that highlights the most important elements that make up the production of the film, such as images, compositions, spaces, volumes, lighting, materials, colours, transparency, openness, convergence, etc..... (Fig.1&3&5**).**

(Steven Holl, 2002, p.73) *states that "I depend entirely on concept diagrams; I consider them my secret weapon. They allow me to move afresh from one project to the next, from one site to the next".*[18]

To understand the rules that govern the relationships between the parts and the whole, as well as the elements and their compositional arrangements, the results should appear in the form of professional graphics and sample sheets. It is essential in enhancing students' abilities to think objectively and conceptually, critically understand the actual meaning of the topic and concept, and how it plays out across the designed environments.

"Problem structuring is the process through which information transferred from our knowledge is used to better define an ill-defined design problem, whereas problem solution is the process through which specific design schemes are formulated." (Dogan 2013, p.3)[19]

After the critical discussion session, benefiting from what was studied, the feelings and susceptibilities that were imprinted on him, and the inspiration he got from watching the movie, the group separates and each student has his or her own project to start designing the space he is required to design for one of the reception spaces in one of the film productions companies.

6.5. THE INSTRUMENTS USED IN EXPERIMENTS

Computer with Auto CAD, 3D Max, and Sketch-up programs. Data shows the device with a screen.

Sketching papers, pencils, and markers.

7. CASE STUDY

7.1. FIRST CASE STUDY (AEON FLUX'S FILM)

Director*: Karyn Kusama,* **Written by***: Phil Hay and Matt Manfredi*

7.1.1. ANALYSIS OF THE ARCHITECTURAL DESIGN ELEMENTS OF THE FILM

The students concluded that everything was modern and futuristic. This futuristic, circular city has high concrete walls. With great shapes and modern hidden rooms, some of these rooms seem to be underground. The exterior of the building where Aeon lives is the Bauhaus-Archive Museum Gestaltung in Berlin, the most important school of architecture, design, and art of the 20th century in a building designed by Walter Gropius, (Bauhaus founder). The oval corridor with vertical slats in the government complex in the film is the aerodynamic test tunnel for

German aircraft, which was built in 1932 before World War II. It is located in the Aerodynamic Park in Berlin. All members of the council are seated in a Ribbon Chair by Pierre Paulin. (Fig1). The movie was named Aeon Flux because of the ionic bond between the ion, and electrons, and how they move around the ion in a circular shape. In the movie, they used to recycle the DNA of the human body to clone more people from the same DNA.

7.1.2. THE INSPIRATION FROM THE MOVIE

The students chose the oval shape and repeated it in the form of overlapping bars and ovals in the plan to express the movement of electrons around the ion. It also connects the parts of the space strongly, which is influenced by the oval corridors with vertical slats. These strips define the interior spaces and divide them into different functional areas.

One of the students says, "One of the most important characteristics of the use of color is its understanding as a symbol. So, the symbolism of color is centered on being the carrier of the dramatic idea and the system of expression". It is finding a comprehensive explanation by looking at everything that the eye sees, feelings stored, or the mind absorbs as a source of inspiration based on seeing things or developing them in a different way than they actually exist. He used modern materials, such as concrete in Gray, to express the mechanism, the scientific, and the loss of feelings. The student added a little wooden parquet to express a few remaining feelings. (Fig.2).

Fig.1. Concept diagrams of the first group of students for Aeon Flux's film.

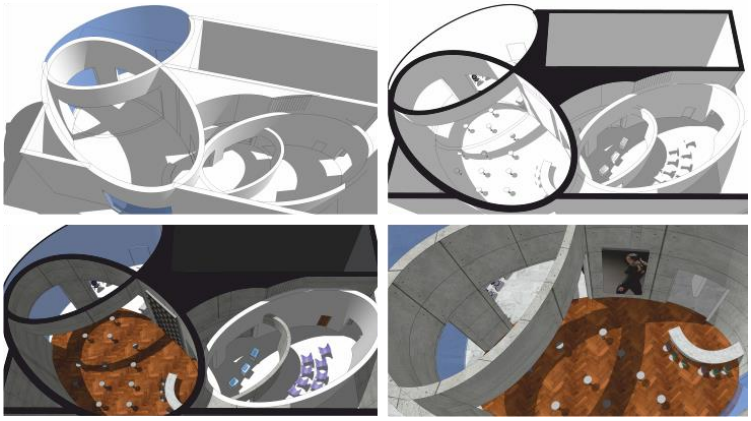

Fig.2. The first project of the first group - Aeon Flux's film- students' work.

7.2. SECOND CASE STUDY (LUCY'S FILM)

***Directed by**: Luc Besson, Aug 12, 2014, **Starring**: Scarlett Johansson, Morgan Freeman,*

7.2.1. ANALYSIS OF THE ARCHITECTURAL DESIGN ELEMENTS OF THE FILM

Lucy's film reveals the purpose of life which is to impart knowledge. The film is based on the legend that we only use 10 percent of our brain, and is driven by the idea of unlocking 100 percent of the brains potential. Her body turns into a black substance that begins to spread and transforms into a new generation of supercomputers. Lucy's mental abilities increase and she soon realizes that emotions are primary functions and only hold us back from exploring our true potential, she acquires increasingly enhanced physical and mental abilities, such as telepathy and telekinesis, and becomes callous and emotionless. (Fig.3)

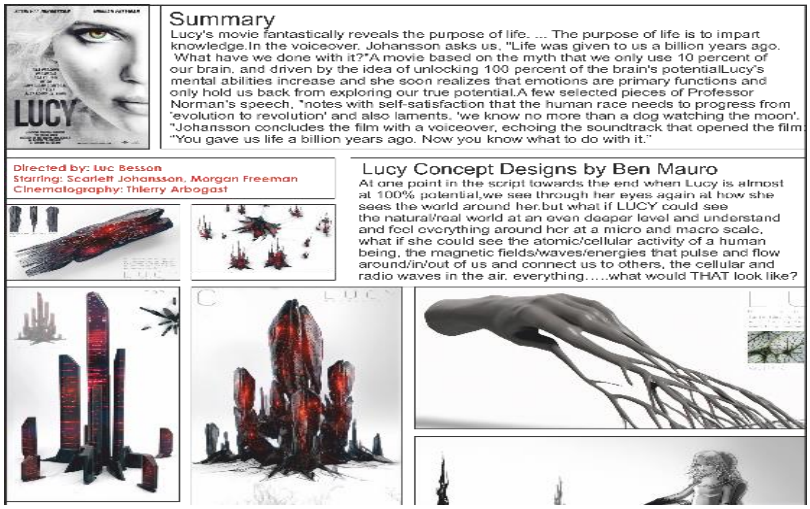

Fig.3. Concept diagrams of the second group of students - Lucy's film. (Analysis of the film architectural design elements - students work)

7.2.2. THE INSPIRATION FROM THE MOVIE

The student worked on the idea by visualizing Lucy's brain parts and future computers seen at the end of the movie when Lucy turned into him. At some period in the movie _towards the end when Lucy is nearly at 100% potential, we see through her eyes again how she sees the world around her. What if after being transformed into a material and a supercomputer_ she could see the natural world at a deeper level and understand and feel everything around her?

The student translated his perception of the computer material that spreads and penetrates, to all places, and times and feels a deeper level. Translated this into sequential and transformed diagram segments that spread into the interior space. The design started from the outside of the entrance, spread into the interior space, and dominated it. He also emphasized this heroic element by repeating it in the counter design. Also, in the same way, a human face was placed on the wall, and the interior wall was covered with strips of stainless steel, emphasizing the idea of control and transformation. He chose the stainless-steel material for the slices, and the Corian material for the spread panels and the counter, emphasizing the future and development.

The student used the color scheme emphasized by the director in the film, which is black, white, and red. Lucy also always wore white or black. She also turned into a computer and became a black-spread material. While the director also used red and grey a lot in the film, the student used the general color Gray as an expression of intense materialism and lost feelings. To confirm the statement that emotions are primary functions, and only hinder the exploration of our true potential, as mentioned in the film. (Fig.4) the artist's imagination plays the role of the inspiring hero and the vital stimulant in transforming tangible sensory perception into an expressive creative factor, true to the statement that "there is nothing in the mind unless it was previously in the senses."

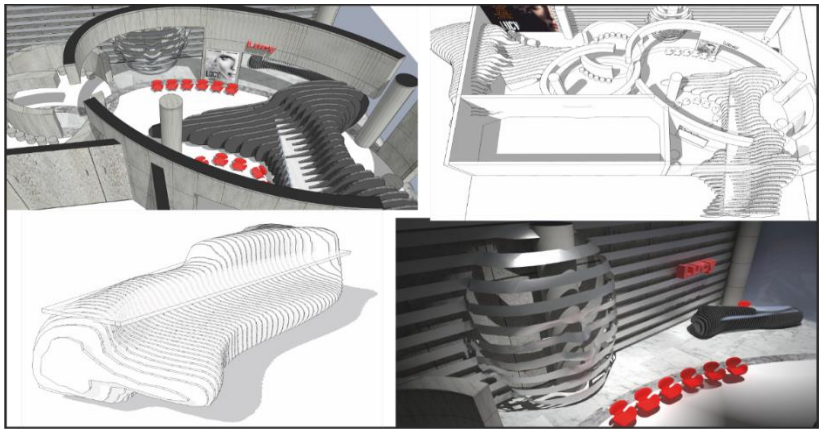

Fig.4. the project of the second group - Lucy's film. - Students work.

7.3. THIRD CASE STUDY (INCEPTION'S FILM)

7.3.1.ANALYSIS OF THE ARCHITECTURAL DESIGN ELEMENTS OF THE FILM

The film revolves around companies using technology to stealth into the subconscious mind and extract information through a shared dre0020am world. The strange idea that the movie

presents is that there is a technology that allows you to enter and share the same dream with another person. This gives you access to his subconscious. If he sleeps deeply enough, the usual bodily sensations, such as the sensation of falling, will not affect him. Getting out of this state is very difficult. (Fig.5)

7.3.2.SCENE PRODUCTION TECHNOLOGY

For the dream sequences in Inception, the director used computer-generated images. In Inception "The camera is used as much as possible, and then computer graphics are very useful to build on or improve upon." The director had artists produce concept sketches, and then create rough animations on the computer to give a clear idea of what the sequence looked like in motion.

7.3.3.CONCEPTS EXTRACTED FROM THE FILM

(Sharing a dream with someone else, the subconscious mind, maze, upside down, dream, reality, virtual reality, place and time, folding, levels, gravity, and rotation).

Dreams seem real to us when we dream. The reason for this is our mind's ability to construct a fake-real environment for us to interact with our dreams. Often this dream is like an inhabited city in which other people wander. It takes an architect to create spaces in dreams because dreams have a changing structure, we have a way to transform. Its architecture also has a way of ignoring gravity, tilting buildings, floating characters, and winding streets. The movie is a puzzling maze and the architect is the designer of dreams. In this case, he builds the levels within the dream, with all the details required from the subconscious mind and memories. Stairs are incorporated into the film to emphasize the impossible things that can be found in dream worlds.

Fig.5. *Concept diagrams of the third group - Inception's film.*
(Analysis of the film architectural design elements - students work)

7.3.4.THE INSPIRATION FROM THE MOVIE

In the color cinema, the creator of the film entered a new stage with color, which is the stage of conflict with the colors of nature, a battle of imagination, and stylistics to choose the color and its presence in the film. Each color has a clear effect on the psychological state and mood, this is what the director brilliantly played on through the film, whether by using some dull, grey colors to explain that this scene is a dream, or using the same faded colors to express distress and anger, feeling boredom, or other emotions that the director controls through different colors and degrees. After analyzing the "Inception" movie, the students chose the concept of the contradiction between dream and reality differently. Where he designed part of the space with traditional and stereotypical shapes, and elements, with traditional colors and materials such as wood with natural colors. While he designed the other part in a style that carries the characteristics of imaginative futurism, in unconventional and flexible forms, in another part, the style of deconstruction. He also uses modern materials such as acrylic, stainless steel, and flex glass. Inspiration is just a motivation that activates the mind of the student by collecting different data and merging them with some influences to create a new thought that did not exist before. With this concept of inspiration, we can explore the presence and role of inspiration in every creative process. (Fig.6)

8. FILM DIRECTING AGAINST ARCHITECTURAL DESIGN

Film Directing and Architectural Design is a comprehensive word that combines preparation processes, initial preparations, and implementation processes. It combines management, leadership, and know-how, to link and strengthen the relationships between technical units, human energies, and equipment, in harmony and understanding, so that the idea turns into a movie (or interior architecture) in a visual image.

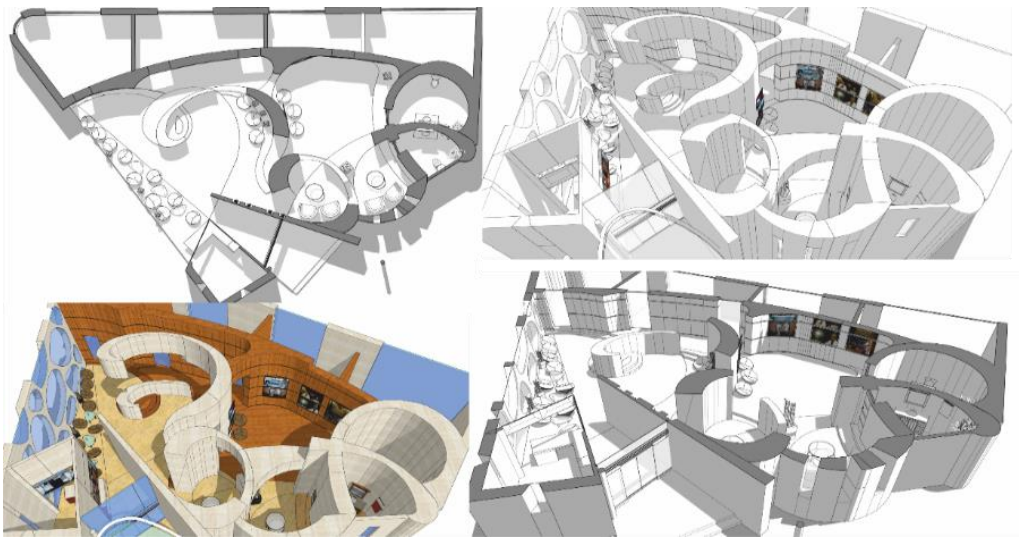

Fig.6. the second project of the third group - Inception's film. - *Students work.*

Through his work (the architect _ the director), he tries to put his ideas, opinions, perceptions, Fantasies, and methods of organizing and building (the film _ the architectural space) in a plan, explaining the method, form, and style to bring the work into existence. He also puts in his plan

tools, technical devices, and other things, analyzing the work into scenes and clips, to facilitate the implementation process, and to reach the goals through the scenario presented to him. *"Students, however, need to more fully understand the technical medium to embark on a fully supported critical discussion of film imagery and the architectural, urban realities that are chosen for it to represent. Even films that have already been "seen", can be deeply explored with new insights, given the right questions".* **(**TERRI BOAKE, 2007, p.2**)**[20]
*"This kind of transforming from subject to object, from concept to referent and from mental and consciousness to concrete and physical world is a complicated process which is becoming more and more complicated than before in cinema and architecture, as they have eventual dynamic spaces" (*Siamak Panahi, 2018, p6). **[21]**
The concepts and hypothetical approach of this teaching experience have analyzed the designing of film architecture and its elements. The research analytical methods are based on visual semiotics and a combination of case studies against theory research. Before the discussion and judgment session, the instructor submits a report on the student's status of what was observed throughout the work period on the project, to be a criterion for the judging committee when evaluating the student's final work. SPSS Statistics was used for data management, advanced analytics, and multivariate analysis.

Table 2: Linking the intended learning outcomes of the course with its measurement.
(SPSS Statistics was used for data management, advanced analytics, and multivariate analysis)

		Collect Information	**Data analysis**	**Define the Problem**	**Specifications**	**Design Process**	**Collaboration**	**Presentation**	**Brainstorming**	**Concept analysis**	**Gather Feedback**	**Develop Solutions**	**Communication skills**
N	Valid	15	15	15	15	15	15	15	15	15	15	15	15
	Missing	0	0	0	0	0	0	0	0	0	0	0	0
Median		4	4	4	4	8	8	8	9	9	8	8	9
Mode		3	4	4a	4	8	7a	8	8	9	8	8	9
Range		3	2	3	2	3	4	2	3	3	4	3	3
Minimum		2	3	2	3	6	5	7	7	7	6	7	7
Maximum		5	5	5	5	9	9	9	10	10	10	10	10
Percentiles	25	3	3	3	4	8	7	8	8	8	8	8	8
	50	4	4	4	4	8	8	8	9	9	8	8	9
	75	4	5	5	4	9	9	8	9	9	9	9	9

(Table 2&3) Which shows the measurement criteria on which the level of each element of the evaluation was determined by the arbitration committee. Where shows the method of classification and arrangement, then analyzing and extracting the required results and their specifications.

Table 3: Develop brainstorming, concept analysis and design solutions.
(SPSS Statistics was used for data management, advanced analytics, and multivariate analysis)

Brainstorming					**Concept analysis**					**Develop Solutions**				
		Frequency	Percent	Cumulative Percent			Frequency	Percent	Cumulative Percent			Frequency	Percent	Cumulative Percent
Valid	7	1	6.7	6.7	Valid	7	2	13.3	13.3	Valid	7	1	6.7	6.7
	8	6	40.0	46.7		8	3	20.0	33.3		8	9	60.0	66.7
	9	5	33.3	80.0		9	8	53.3	86.7		9	3	20.0	86.7
	9-10	3	20.0	100.0		9-10	2	13.3	100.0		9-10	2	13.3	100.0
	Total	15	100.0			Total	15	100.0			Total	15	100.0	

The buildings and the spatial environment present in the film are one of the most important factors of its success. The student is essentially an architectural designer of sorts, working to create an environment that fits the story and makes it exist. There are directors whose works reveal a philosophy of place as much as a philosophy of directing. They were architects as much as they were film makers. At the top of these in Egyptian cinema is Shadi Abdel Salam, the owner of the movie “The Mummy”, produced in 1969 AD. Shady was an architect before he became a director.

Alfred Hitchcock is considered one of the top directors who possessed a philosophy of place and worked to employ it in their work. The Encyclopedia Britannica attributed to him saying: “The art director must possess extensive knowledge and a deep understanding of architecture.”

Therefore, cinema is considered one of the most important and inspiring disciplines for the student of interior architecture.

9. CONCLUSIONS

9.1. New educational strategies must be adopted, to coincide with the revolutionary development of information and communication to give greater information independence. One such strategy is the development of teaching methods.

9.2. Using the film as one of the distinctive sources of inspiration provides many opportunities, for the interior design student to obtain a variety of sources of inspiration in accordance, with his personal interests and inclinations, and creates an endless diversity of sources of concepts.

9.3. Exploiting the base used in the production of the film, which is similar to what is found in the interior design, in the expression of the inner spiritual self, creative imagination, skills, and these elements are closely related to forms, abstract expression, and personal creative freedom.

9.4. Creating a discussion environment that encourages students to present their ideas and questions with fluency and courage, it is used as a standalone strategy or as part of most other educational strategies, it is one of the modern strategies that encourage creative thinking.

9.5. The realism of expression increased with the advent of virtual reality technologies and cinematic science fiction technologies, as these technologies helped students of interior architecture to demonstrate ideas in the form of a simulation of reality.

9.6. To link the course's intended learning outcomes with their measurement, SPSS Statistics was used for data management, advanced analytics, and multivariate analysis. The results of the analysis showed a high percentage of students using brainstorming to solve problems, and 8 students obtained a score of 9 -10/10 out of 15 students. Also, 10 students obtained a score of 9-10/10 in the element of design concept analysis, while there are still some shortcomings in the student's ability to develop a solution to design problems, as only 5 students obtained high grades of 9/10. Shows (Table 3) the level of students benefit from the experiment in the various evaluation elements. Their communication and cooperation skills were high, while the collection and analysis of information and the discovery of the design problem were medium-level.

9.7. Knowledge and understanding Student understanding of how to define a problem, how to define a tentative conception to solve a problem, and how to make an outline for the proposed solution.

9.8. Cognitive and intellectual skills (thinking and analysis) at the end of this project, students became familiar with the principles and arrangements underlying the research methods for conceptualizing architectural design.

9.9. Communication skills (personal and academic) the student used appropriate methods to effectively communicate the results of the research, as well as effective presentation techniques used to express the proposed design concept. This action strengthened the student's level of communication and encouraged him to express his abilities.

9.10. Professional skills :The ability to work independently has developed with a problem-solving orientation, analysis, design, and implementation of a solution to a real problem, professionally written reports, and presentations covering all aspects and stages of an engineering project.

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