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

استخدام تكنولوجيا الخيال العلمي السينمائي كمصدر إلهام ودراسة حالة لتعليم طلاب العمارة الداخلية

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ABSTRACT

There are attempts to give more importance to imagination and creativity in design under names such as "creative design" and "brainstorm", and apply them to any design process. The ability of advanced technologies, and science fiction technology, to realistically represent the possibilities of spatially and environmentally imagined cinematic forms and events, is just one of the many ways, in which this important technology can influence students' thinking when designing interior architecture. Asking students to understand film structures aids in their critical understanding of what they see in the films, analyze the potential of the interior environments represented in this film, and critically understand the actual meaning of the subject and concept, and how it plays out across the designed environments.

The results are expected to be very surprising and should be seen as essential in enhancing students' abilities to think objectively and creatively.

KEYWORDS

Cinematic Science Fiction; inspiration; Brainstorming; Critical Dialogue; Thematic approaches.

الملخص

هناك محاولات لإعطاء أهمية أكبر للخيال والإبداع في التصميم تحت أسماء مثل "التصميم الإبداعي" و "العصف الذهني" ، وتطبيقها على أي عملية تصميم. إن قدرة التقنيات المتقدمة، وتكنولوجيا الخيال العلمي، على التمثيل الواقعي لإمكانيات الأشكال والأحداث السينمائية المتخيلة مكانيًا وبيئيًا، هي مجرد إحدى الطرق العديدة التي يمكن أن تؤثر بها هذه التكنولوجيا المهمة على تفكير الطلاب عند تصميم العمارة الداخلية. إن مطالبة الطلاب بفهم هياكل الأفلام تساعد في فهمهم النقدي لما يرونه في الأفلام، وتحليل إمكانات البيئات الداخلية الممثلة في هذا الفيلم، وفهم نقدي للمعنى الفعلي للموضوع والمفهوم، وكيف يتم تشغيله عبر البيئات المصممة.

من المتوقع أن تكون النتائج مفاجئة للغاية ويجب اعتبارها ضرورية في تعزيز قدرات الطلاب على التفكير بموضوعية وإبداع.إن جعل الفيلم خيارًا تعليميًا قابلاً للتطبيق يساعد الطلاب على دراسة المحتويات المواضيعية السينمائية، وتطبيقها على المساحات المصممة، فضلاً عن تطوير عين نقدية للمناهج المواضيعية.

الكلمات المفتاحية

خيال علمي سينمائي؛ الهام؛ العصف الذهني؛ حوار نقدي؛ المناهج المواضيعية.

337

1. INTROTROCTION

The film, like the interior design, is expressed through mental perception, metaphor, and symbol. Which is similar to the idea of designing any interior space. The research is an experiment linking the study of interior design with the study of film production with students of interior design in the third year. If the elements of film production are studied well and thoroughly, then we will have gained a special experience that will help us produce an interior design that has the ingredients for successful work.

Cinema travels through time and space freely, just as it deals with design styles and architectural styles in interior design. This is what the interior designer does when he gives the building a concept with a specific design language, and style, or philosophical idea. It is not imaginary, but rather a sensible and sensible reality, and it works and performs a function successfully. Science fiction technology allows digital data in movies to seamlessly integrate into our perception. As a result, the user of this technology can see the real world augmented with virtual forms so that they can interact with it as it happens in everyday life.

In this design task, students need to fully understand the compositional medium of custom film, freeze special shots, understand the compositional and purposeful concept of scenes, identify the content and inspirations given by the director, understand three-dimensional representations of the designed environments, and articulate objective interpretations of literature-based ideas.

The project trains interior design students in a similar thinking process for choosing a good 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)

Researching the actual content of the film prompts students, to study more closely to properly understand all the elements of the film, and 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 mastering 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. (Dodsworth 2009 - claims that "conceptual work is not about perfection; it is about capturing and communicating the spirit and character of a space"). (Izadpanah, 2021).

Belief in creative ideas is what creators need to carry out their works. Whoever breaks the traditional rule and believes in creative ideas in the world of architecture and interior design, and stands supportive and corroborator, there is no doubt that he shortens time towards the future.

2. INTERIOR DESIGN EDUCATION THEORTIES

Design is an organized mental process, by which we can deal with multiple types of information, integrate it into one set of ideas, and end up with a clear vision of those ideas. Until recently, designers completely relied on intuitive methods and design ability as an unlearning inner sense. The projects were given degrees according to the increasing complexity and composition of the solutions. The project was described as producing a solution and not as a solution to a problem.

The educational attention on the product and not the way. And this trend has led to long neglect of studying the methods and theories of interior design, and access to the science of design.

338

Design science is the study of the methods, basics, applications, and procedures used in design in general. And how to develop an appropriate structure for the design process, develop applications, techniques, and procedures for new design methods, and think about the nature and extension of design information and its applications to design problems.

Max Bill 1956 and his colleagues tried to free themselves from the grip of the Bozar school legend and tried to come up with a more dogmatic method and follow the scientific trend. Feelings and art were replaced by analytical and scientific methods ("One of the first representations of the design process was presented by Bruce Archer in 1963, in a sequence of articles for Design magazine. In these articles, he suggested that the designer's work combines intuition and cognition and that the formalization of the creative process tends to transform it into more scientific practice."). (Van der Linden, 2011) (Such as the theory of design illustrated by Anthony Antioniades in which he called Poetics of Architecture. Antioniades presented some factors that could help in the design process in order to reach creativity in architecture. He tried by this theory to navigate the channels of creativity through which one can move, in order to stimulate one's imagination and create the design).(Elsemary, 2014)

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. And 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 same basics as architecture, interior design, and plastic arts. Some thinkers tend to consider cinema as a new form of plastic arts because the image plays the main role in it.

The truth is that plastic art plays a major role in cinematic work. Since the inception of cinema, it relies on plastic artists in the design and implementation of its decorations and scenes. And cinematography itself- whether colored or not- has become in some films the rising to the level of creative plastic.
Similar to drama, the film expresses visually and verbally, visually through action and sign, and verbally through dialogue. Finally, like the story, the film stretches or compresses time and space, freely traversing forward and backward within their spacious limits.

The film is not specific, not only in its choice of subject matter but also in the extent of its treatment of that subject matter. The character of a film and its treatment of its subject can range between lyric and epic. And it can focus on surface facts and purely sensual matters, or delve into the depths of mental or philosophical consideration. 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.

Finally, the film can strike all the chords of feeling, from the most tender, and beautiful emotions to the most fierce, violent, and alienating. The use 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. (Using methods that improve creativity in design education allows the student to gain different perspectives by enhancing his imagination and accumulation of knowledge). (KAYA, 2020).

4. FILM INDUSTRY VS 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)

The film is a series of scenes arranged in a manner consistent with the events of the script. And the cleverness of the director lies in trying to achieve the equation of the composition. And his ability to integrate the elements of the production of the film without one element dominating the other is what determines the strength of the scene, and his ability to attract the spectator to follow the whole movie with suspense without feeling bored. 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)

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. (Table 1)

Table 1: Filmmaking Process Diagram

Development	Pre-production	Production	Post-production
idea	storyboarding	modeling & rigging	data management
story line	crewing	layout	data analysis
planning	visual development	character	systems setup
synopsis	casting	surfaces	post scheduling
treatment	locations	effects	shots reviews
outline	scheduling	camera set-up	editing notes
script	equipment	makeup & practice	dubbing
dialogue	funding	lighting & audio	sound design
screenplay	budgeting	shoot	color correction

(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)

(The cinema rules the world – for better or for worse." Le Corbusier _"Film's undoubted ancestor … is – architecture." Sergei M. Eisenstein). (Sergei M. Eisenstein 1989) ("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. DEEP SHAH says, "I feel movies have an unparalleled ability to affect both our emotions and our memories in ways that quality architectural spaces do") . (DEEP SHAH)

340

And 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. And 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. (Table 2)

Table 2: Comparison between the Interior design making process and film

	Filmmaking	**Interior Architecture Making**	
Scenario	It's the course of the film and the events in it, by putting the context that tells the story in a vivid, powerful image. And to formulate it in the form of scenic and sequential positions.	Programmatic concepts are abstract approaches the designer can use to solve the client's goals and needs. This differs from the design concept, which represents the physical solution. like: Density, Grouping, Flow	Programmatic concepts
Cinematic Dialogue	Dialogue is the conversation between the people in the movie. And it has to be brief or concise, and it has as much meaning as possible, in the least possible terms.	In the interior design, there is a dialogue between the elements of space such as walls, floors, windows and columns. A dialogue between design elements such as furniture, shapes, colors, lighting and materials.	Interior design
Cinematography	A film strip consists of a series of static images, or frames, shot by a cinematography camera.	Every architectural drawing has a purpose. It may explain proportions, show dimensions, or provide details about materials. In this way, an architectural drawing tells a story. The artistry in how it's told is a major factor in how effective it is.	Shots, Elevations, and
Light And Shadow	Lighting is used to help enhance the emotional content of a scene .The spontaneous response to shadow and light is an important element in psychology that a film director uses to influence the viewer.	Light is used to highlight the aesthetic values of design, by showing the compositions and their embellishment, whether static or animated and by showing the third dimension, which is the depth of design. It enhances optical illusions, masks certain flaws, confirms important elements of design, and deepens the sense of space.	Light And Shadow
Composition In the Scene	The Composition within the scene means placing all the elements of the scene in a harmonious relationship so that they contribute to the dramatic impact of the scene. To achieve this, the composition must include some plastic elements such as the shape, consideration of formatting lines, appropriate distribution of light, shadows, and colors, the balanced distribution of the visual elements, and the rhythm.	Spatial composition means using the available space in order to create the desired environment and convey the mood that the owner or builder's picture. It's the part where all the separate elements come together to form a whole.	Composition In the interior spaces

341

The Actors	The actor is one of the cinematic means of expression, and the actor expresses the character he is performing, and he can also express changing psychological situations such as: anger, pain, surrender, submission, love, and jealousy.	It is convenient that places remind us of the main features of our identity, "there is a complex interaction between a person and space. The person defines the space, the space defines the person; the person gives meaning to space, space gives meaning to the person. In other words, there is a complex and bilateral interaction between the person and space in its cultural, psychological, economic and physical dimensions" (Mahmoud, Heba-Talla 2017).	The client and user
Scenery	It gives full freedom to the scriptwriter and the director in creating the appropriate atmosphere for the events and helps crystallize the vision of each because the interior scene serves as an embodiment of the psychological state of the characters in the film.	It is about how you want people to feel in that space. Creating a mood is a very personal thing. What may be beautiful and cozy to me may feel overbearing and bright to someone else. That is why affecting a mood for you is about knowing yourself.	Mood and style
Accessory	The accessory is placed in its appropriate place in order to clarify the intended idea of the scene, and accordingly the accessory in the scene must be related to its events. The silent film had no other elements of expression other than that it was sufficient to reveal the necessary information.	Accessories enhance the interior space by allowing synchronize interior elements with each other. The finishing touches to a room's decor are largely about the accessory pieces, such as wall art, sculptures, designer rugs, and throws, exquisite vases, and decorative bowls or displays.	Interior Design Supplements
Sound Effects	They are the sounds that represent everything that surrounds us in our daily lives. It expresses the reality of the place in which the event takes place, or in which the actor moves. It helps increase the spectator's sense of the scene, tells us what we don't see, and gives us more information than we can see.	Interior architecture and sound co-influenced one another in inspiring musical forms and original interior design solutions. Interior designers have all adjusted their work in order to achieve the best possible spatial and sound effects.	Sound Effects
The Color	Each color has a clear effect on the psychological state and mood, whether by using pale colors to indicate that the scene is a dream, or using the same faded colors to express distress, anger, boredom, or other feelings. The symbolism of color is concentrated in being the carrier of the dramatic idea and the system of expression.	Colors can make us feel happy or sad, and they can make us feel hungry or relaxed. These reactions have psychological, biological, and cultural effects. Designers use color, lighting, textures, and artwork to create motivating, uplifting spaces that will promote efficiency, creativity, happiness.	Color Scheme
Film Directing	Through his work, the director tries to put his thoughts, opinions, perceptions, fantasies, and ways of organizing and constructing the film into a plan. Explaining the method, and form, to bring the work into existence. He also puts in his plan, tools, technical devices, and other things. Analyzing the film into scenes and shots, to simplify the implementation process, and to reach the goals through the scenario presented to it.	Undertake design projects from concept to completion. Define project requirements and schedule during the "brief". Interpret and translate customer needs into rough plans. Set costs and project fees according to budget. Research and decide on materials and products sourcing. Produce "sample" and "mood products". Supervise work progress. Work closely with designers, decorators, architects, and constructors. The goal is to design practical spaces but yet visually pleasing.	interior designer

5. USING FILM AS AN INSPIRATION FOR STUDENTS

The association of cinema with architecture and interior design enhances its value as a science linked to human capabilities. But if the matter goes beyond that, to the desire to reach formations and shapes, whose

342

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.

But 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. Design teaching is to introduce the interior design student to the basics of functional design - first - and then focus 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)
Emphasis should be placed on teaching the basics and training the student to use them with an organized and creative mind. And 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.

As for the issue of teaching creativity as a goal in itself (before teaching the basics), it transforms the interior design profession from being an applied humanities science to making it an abstract work of art.
(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)

6. THE PROCEDURE REQUIRED

The experiment procedures begin by dividing the students into a number of groups and showing a number of films to choose from them and determining the reason for the selection. And after downloading the film, which is characterized by a distinctive thought, directing and photography, and professional scenes. After an in-depth viewing, the student's group analyzes the basic idea of the film, explores its distinctive character. Enters the mind and soul of the director, and impersonates his character, to reach the concept that the author wanted in the main story, which was translated by the director in a complete cinematic form.

After reaching these facts, the students choose several scenes that consider the most important events in the film and consider that they are the scenes that most excite their feelings and clarify the basic idea of the film. From these scenes, they cut important shots that show the most important features of the design of the elements built inside the movie's decor . (Through these scenes, the student explores the design technique, style, lighting, color, furniture, materials, movement, etc........)

6.1. IDENTIFIES AND STUDIES THE FOLLOWING ELEMENTS

6.1.1. **Perception of Space**: The difference between perceiving space and perceiving a painting, or sculptural artwork, is that the human moving within the space, then a variety of visual properties are generated, and they are related to the visible features of the 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.

6.1.2. **Ratio and Scale:** The human scale represents an important aspect of the interior designer's concerns, as the human scale represents reality. And 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.

343

6.1.3. **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.

6.1.4. **Exposure:** Exposure is a visual property, which means the degree to which an object can be seen for a certain period of time. There are factors that help to increase the efficiency of exposure, both quantitatively and qualitatively.

6.1.5. **Contrast with the Surroundings:** There are two cases to achieve the distinction of the elements of the space, and they are the clarity of seeing the element from more than one direction and its contrast with its local surroundings, and the contrast may be related to functional importance.

6.2. PROCESSING OF VISUAL INFORMATION PERCEIVED

Although the space is perceived (from the scientific point of view) as a single unit, the human translation of the information that he perceives from the space (from the visual point of view), depends on memory, learning, and the ability to imagine. This makes this process dependent on culture and experience more than direct perception.

The Results from Translating 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 its details, 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, 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

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,

344

compositions, spaces, volumes, lighting, materials, colors, transparency, openness, convergence, etc...). 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. And when the sensory, spatial, and plastic perceptions grow, with a sense of the type of the material and the scale of the human being, it is possible to deal with the architectural space directly without an intermediary, so that only the functional relations between its elements remain after that.

After the critical discussion session, 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. Benefiting from what was studied, the feelings and susceptibilities that were imprinted on him, and the inspiration he got from watching the movie.

Experiments

Use the following items in experiments:
Computer with AutoCAD, 3D Max, and Sketch-up programs was used.
PowerPoint with a screen was used.
Sketching papers, pencils, and markers were used.

7. The First Group study (Aeon Flux's film)
Director: Karyn Kusama
Written by: Phil Hay and Matt Manfredi

7.1. Storyline

99% of Earth's population was killed by a deadly virus in the year 2415, and the surviving humans live in a utopia city by a group of scientific elites.

But they don't seem happy. To avoid extinction, cloning has been used to preserve humans who retain memories. The Prime Minister is working on experiments to allow natural childbirth again until it succeeded and one of these cases became pregnant.

7.2. Built Element Design

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. Contemporary architecture in Berlin marks the setting of the fictional city in Aeon Flux, with little change. The interior and exterior of the Baumschulenweg crematorium served as the headquarters of the ruling regime in the film. This crematorium, the newest crematorium in Europe.

345

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 Bauhaus founder Walter Gropius. 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. The leaning concrete columns, and the site of the final battle, are in fact the entrance to the Mexican Embassy. All members of the council are seated in a Ribbon Chair by Pierre Paulin. (Figure 1)
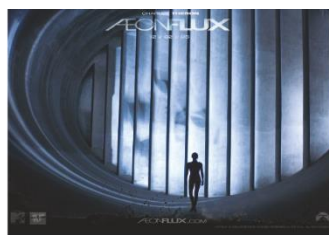
The main idea
In this futuristic sci- a thriller set 400 years in the future, Charlize Teron stars as Aeon Flux, the top underground operative at war with the totalitarian the regime governing what appears to be a perfect society. But is this perfect life hiding a perfect lie?

Concept
The movie was named Aeon Flux because of the ionic bond between the ion, 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. Aeon's DNA was different and has special powers at's why she was chosen as the main character of the human body to clone more people

Architecture
Its modernist and contemporary architecture it became an obvious choice for Aeon Flux's c-2415 tional city of Bregna in the year

Line type

Materials
Wood - Steel - glass - Concrete

Forms
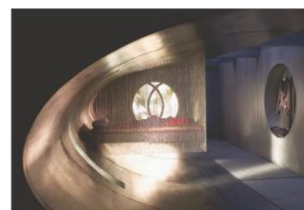**Geometric shapes**

Natural light
(a reflection of the natural Skylight on the internal area)
Articial light,Indirect light, spot light

Color scheme
The shade of grey
Red - Orange
Green

They used the basics of design such as

Rhythm   Symmetry   Repetition   Focal point

Figure.1. Schematic abstract of the first group of students for Aeon Flux's film

The movie was named Aeon Flux because of the ionic bond between the ion, 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 .

Aeon's DNA was different and has special powers it's why she was chosen as the main character of the human body to clone more people.

7.3. The first project

In the first project, the student 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

346

space strongly, which Influenced by the oval corridors with vertical slats in the government complex in the film. These strips define the interior spaces and divide them into different functional areas.

He used modern materials, such as concrete in gray, to express the mechanism, the scientific, and the loos of feelings. But he added a little of wooden parquet to express a few remaining feelings .One of the most important characteristics of the use of color is its understanding as a symbol. The symbolism of color is centered on being the carrier of the dramatic idea and the system of expression. (Figure.2).
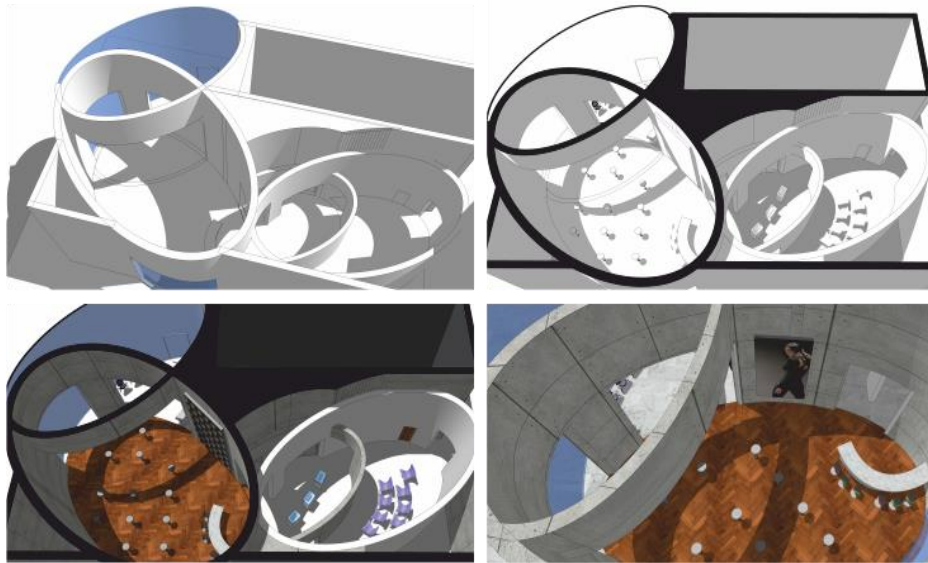
Figure.2. the first project of the first group - Aeon Flux's film

7.4. The second project

Another student from the same group placed the circle in the middle of the horizontal plane as a main and distinctive element and a focal point as if it were the hero in the design, as the film director did by choosing the circle as a recurring element in most parts of the building. He also emphasized what the film's director had done by making the committee's meeting room in a circular shape and surrounded by high columns. The student also placed the red strip chairs designed by Pierre Paulin in a circular shape around the wall to confirm the idea of the film director.

We also find that he chose reinforced concrete as a material to implement the interior space, influenced by what the director of the film did, and an expression of modernity in the design, and an emphasis on the contrast between the gray and the red color of the seats, and an expression of the contradiction in the feelings in the film .(Figure.3.)
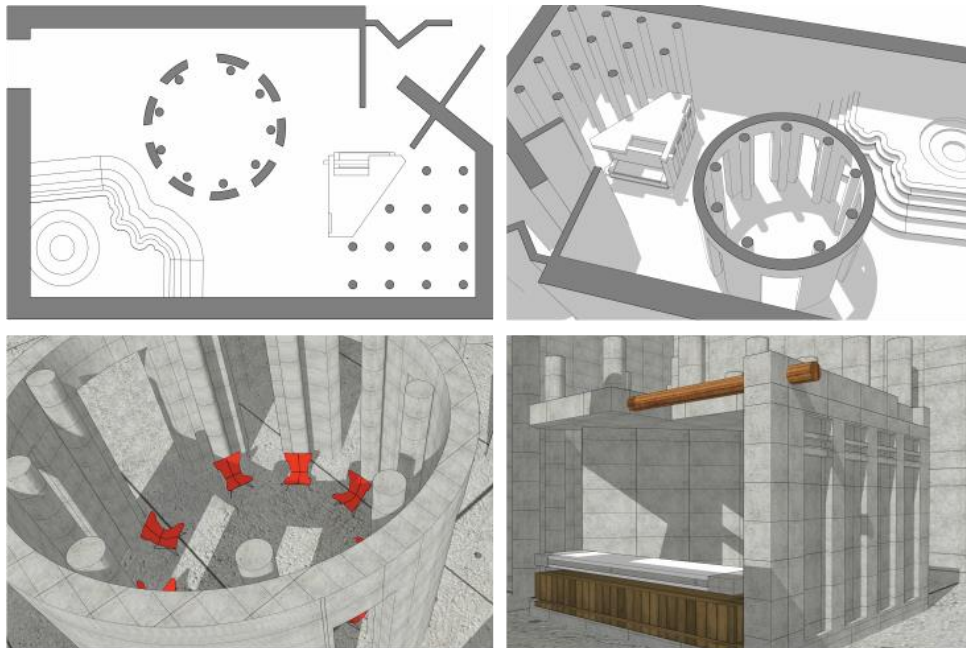
Figure.3. the second project of the first group - Aeon Flux's film

8. THE SECOND GROUP STUDY (LUCY'S FILM)

Directed by:	Luc Besson, Aug 12, 2014.
Starring:	Scarlett Johansson, Morgan Freeman
Cinematography:	Thierry Arbogast

8.1. STORYLINE

Lucy's film fantastically reveals the purpose of life which is to impart knowledge.
(In voiceover, Johansson asks us, "Life was given to us a billion years ago. What have we done with it"?). (Theatlantic.com/2014)

Lucy's 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 brain's 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. (Figure.4).

(A couple more choice bits from Professor Norman's speech, which is still being interspersed with the main plot: He notes with self-satisfaction that the human race needs to advance from "evolution to revolution," He also laments that "We don't know anything more than a dog that watches the moon."). (Theatlantic.com/2014)

Johansson concludes the film with a voice-over, echoing the voice that opened the film. ("Life was given to us a billion years ago. Now you know what to do with it."). (quora.com)

Figure.4. Schematic abstract of the second group of students - Lucy's film

8.2. DESIGN RESULTS

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. But 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. Translate 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, which he and the interior wall covered with strips of stainless steel, emphasizing the idea of control and transformation. And 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.

349

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 gray 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. (Figure.5)
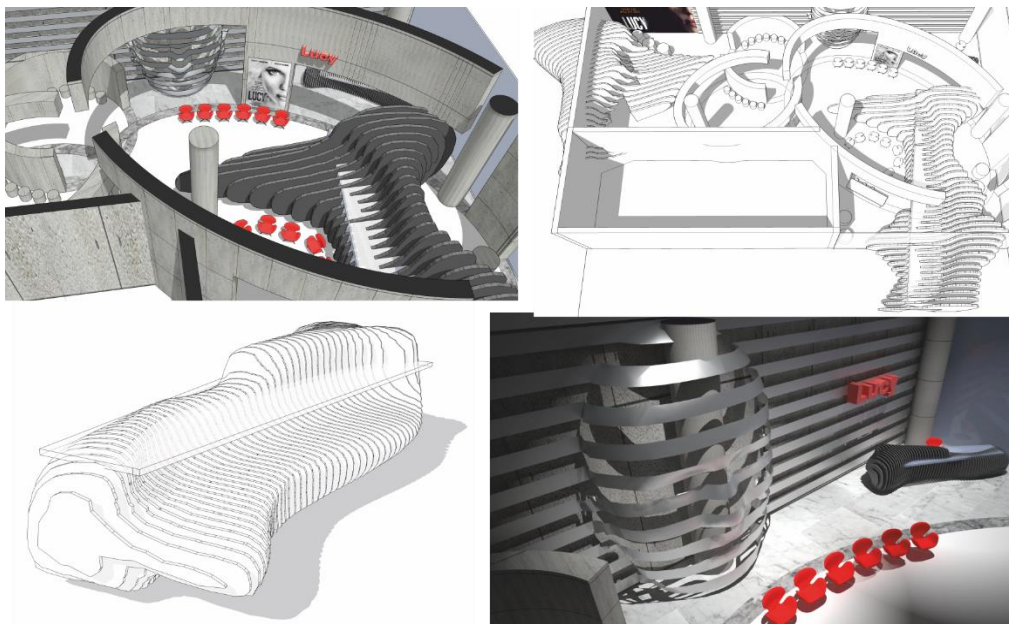

Figure.5. the project of the second group - Lucy's film.

9. THE THIRD GROUP STUDY (INCEPTION'S FILM
9.1. STORYLINE

The film revolves around companies using technology to stealth to the subconscious mind and extracts information through a shared dream world. A professional thief is used to create a new idea in the mind of another young billionaire. 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.

It is a dictatorial computer-controlled world, the plot is so puzzling that the audience often wonders if the scene is real or a dream. The deeper in sleep, the further the mind drifts away from reality. The longer the period of sleep, the more difficult it is to wake up from it, and the dream becomes more vivid and closer to the truth.

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. (Figure.6)
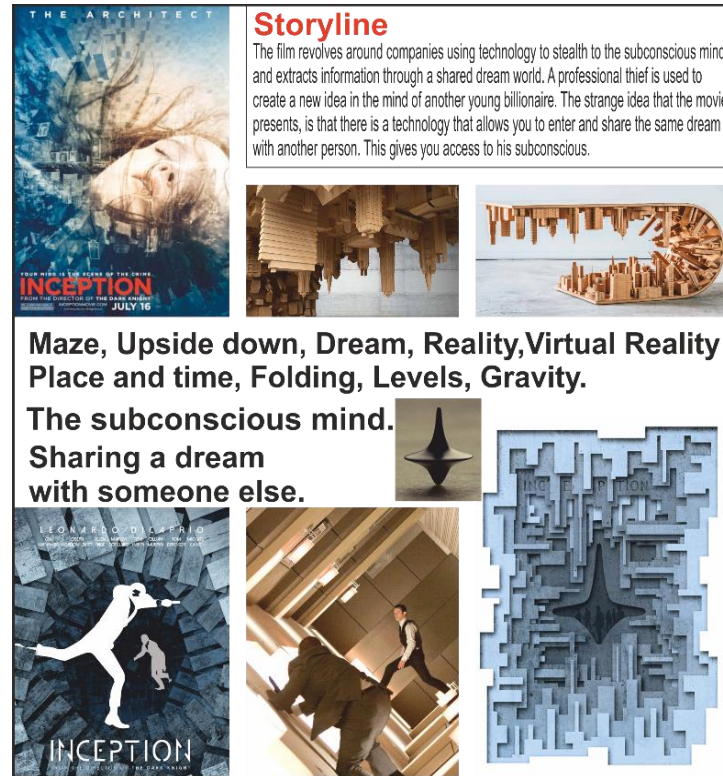
350

Figure.6 Schematic abstract of the third group - Inception's film.

9.2. SCENE PRODUCTION TECHNOLLGY

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, then create rough animations on the computer to give a clear idea of what the sequence looked like in motion.

9.3. CONCEPTS EXTRACTED FROM THE FILM

Sharing a dream with someone else. The subconscious minds. 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 within 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. The architect is the designer of dreams. In this case, he builds the levels within the dream, with all the details required from their subconscious mind and memories. Stairs are incorporated into the film to emphasize the impossible things that can be found in dream worlds.

351

9.4. THE FIRST PROJECT

After analyzing the elements of the film and extracting the ideas of the film, the student chose the concept of Upside down and the idea of Gravity and Rotation. Then he drew an interior space in the form of a space tube with a rectangular section. Then he put it starting from the entrance and penetrating the space with it. Then he twisted the space tube at an angle of about 30 degrees in the vertical direction. And also, he twisted it in the horizontal direction, to become in an oblique position with the walls of the original space perpendicular. To create a dynamic spatial relationship to give the space a distinctive vitality. Then he made openings for doors and windows in unconventional places at the top of the wall and placed furniture on the ceiling against gravity. (Figure.7)
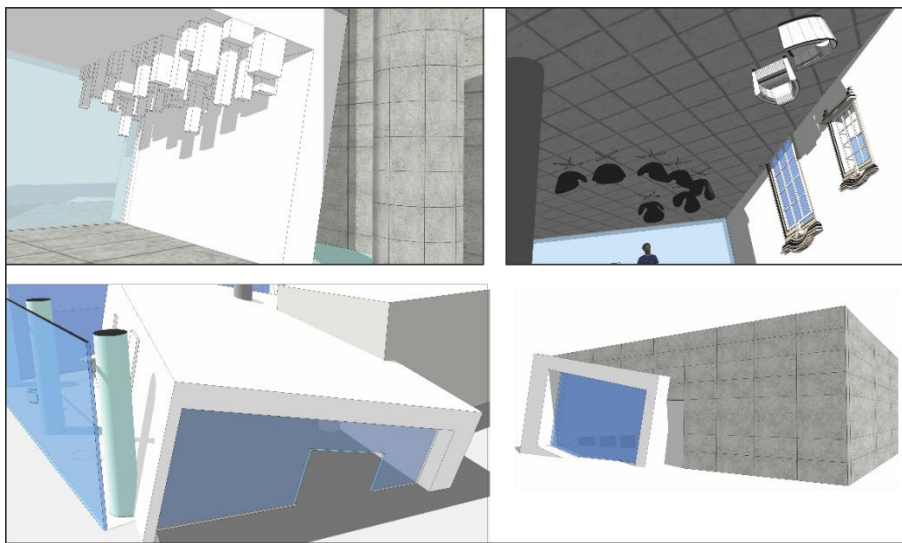

Figure.7 The first project of the third group - Inception's film.

The student also applied the idea of the contradiction between reality and dream, through the contradiction between the original space and the twisted added space. Also, the contrast between the neutral colors of the gray color group, expressing a dream, and the real colors expressing reality.

9.5. THE SECOND PROJECT

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, and this is what the director brilliantly played on through the film, whether by using some dull or gray colors to explain that this scene is a dream, or using the same faded colors to express distress and anger, or feeling Boredom, or other emotions that the director controls through different colors and degrees.

After analyzing the "Inception" movie, another student 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, and 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, and in another part in the style of deconstruction. He also uses modern materials such as acrylic, stainless steel, and flex glass.
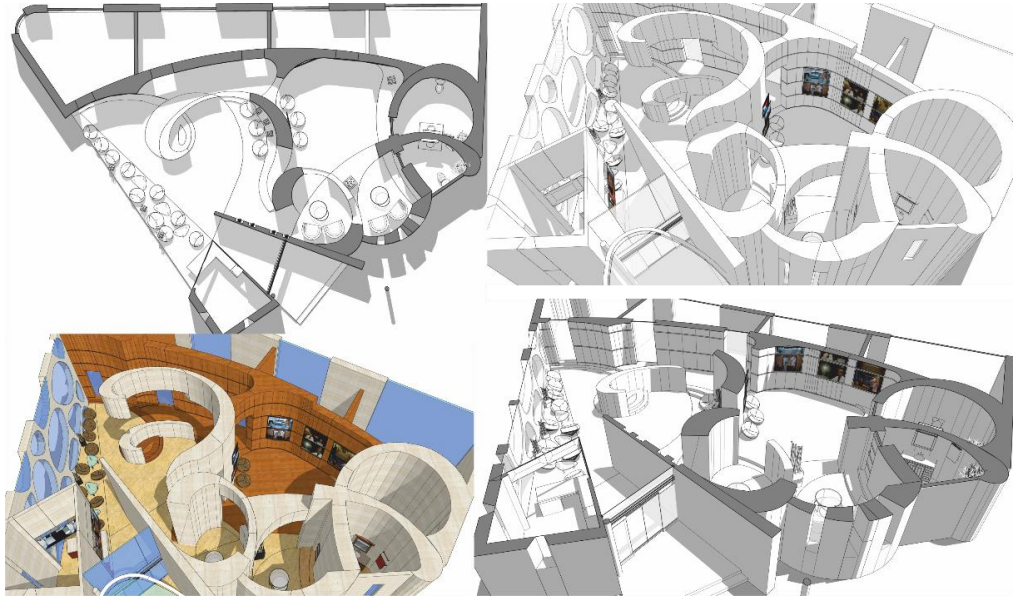
352

Figure.8 The second project of the third group - Inception's film.

Inspiration is just a motivation that activates the human 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.

10. CONCLUSIONS

- There was a need to adopt new educational strategies, to coincide with the revolutionary development of information and communication, and to grant greater independence to information. One of these strategies is the development of teaching methods.

- Giving more freedom of access to information and ideas. Therefore, it was necessary to pay attention to students' self-learning and to search for ways and strategies that develop their attitudes towards self-learning without the presence of a teacher who teaches them the information.

- 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. Group discussion is one of the ways that change the motives and attitudes of group members. It is one of the modern strategies that encourage creative thinking and release the potential energies of learners in an atmosphere of freedom and safety, which allows the emergence of all opinions and ideas, where the learner is at the top of interaction with the situation.

- Providing as many opportunities as possible for the interior design student to obtain a variety of sources of inspiration in harmony with his interests and personal inclinations. The sources of inspiration are infinitely diverse and change not only from one field of knowledge to another, or from one time to another, but within the same field at the same time.

353

- The rule used in the inner design is the expression of the interior spiritual self, creative imagination, and skills. These elements are closely related to forms, abstract expression, and personal creative freedom.

- Expression of design ideas through physical media such as paper and pen, turned into expression by computer. The realism of expression increased after the emergence of virtual reality technologies, as these techniques helped to show ideas in the form of a simulation of reality.

Film	Concept	Space	Planning	Design Elements	Materials	Colors
Aeon Flux	Ionic bond between the ion, electrons, clone, contradiction in the feelings.	A focal point, modern and futuristic, high concrete walls, committee's meeting room in a circular shape and surrounded by high columns.	Repeating circular shapes of different sizes, underground rooms.	Oval shape, circle, Bauhaus of Walter Gropius, leaning concrete columns, Ribbon Chair.	Concrete, wooden parquet, Glass.	Gray, Brown, Red, contrast between the gray and the red color of the seats.
Lucy	The purpose of life is to impart knowledge, we only use 10 percent of our brain, turned into a supercomputer, and emotions hold us back from exploring our true potential.	Spreads and penetrates, to all places, and times, and feels a deeper level.	Control and Transformation, Repetition, Formation.	Turns into a black substance, translate this into sequential and transformed diagram segments that spread into the interior space.	Stainless-steel, Corian, Concrete.	Black, White, and Red. The general color gray is an expression of intense materialism and lost feelings.
Inception	It is a dictatorial computer-controlled world, Sharing a dream with someone else. The subconscious minds. Maze, Upside down, Dream, Reality, Virtual Reality. Place and time, Folding, Levels, Gravity, and Rotation.	An inhabited city in which other people wander, it spaces in dreams changing structure and transforming. A tube with a twisted rectangular section is a part in a style that carries the characteristics of imaginative futurism, in unconventional and flexible forms, and in another part in the style of deconstruction.	Create rough animations on the computer to give a clear idea of what the sequence looked like in motion. A contradiction between reality and dream, the contradiction between the original space and the twisted added space.	An architect builds the levels within the dream, with all the details required from their subconscious mind and memories. Stairs are incorporated into the film to emphasize the impossible things that can be found in dream worlds.	The contradiction between traditional colors and materials such as wood with natural colors. He also uses modern materials such as acrylic, stainless steel, and flex glass.	Using some dull or gray colors to explain that this scene is a dream or reality or other emotions that the director controls through different colors and degrees.

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