Cultural Buildings Design between Visual Creativity and Psychological Impact

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- Abstract:

Creative Design solutions of cultural buildings are visions of the designer's ability to manage vocabulary and expression in new contexts to convey a certain meaning, and thus to understand and interpret it. What distinguishes the creative act is the ability to perceive the visual system of the metaphor before it takes shape, which the designer reaches into a dialogue language that stands between the visual and the mean. In this context, the embodiment of cultural symbols has become a goal pursued by any nation to highlight its unique characteristics. As culture includes intellectual content, the design is at the forefront of the cultural features that could embody authentic national issues, represented in the design that plays a prominent role in reaching a specific identity that reflects cultural reality. In the frame of spreading cultural and national awareness, cultural buildings such as museums and cultural centers are the most important platforms to shed light on the stages of life development, support channels of communication with the world and attract attention to our Arab issues. The design of these buildings depends not only on the functional basis but also on enriching the design philosophy with intellectual determinants that have the potential to have a psychological impact on the users of these buildings. Some international models that use non-stereotyped design methods have been introduced, and non-traditional intellectual trends have been adopted based on new visual creativity such as uncanny architecture, exotic design with psychological effects to create a civilized language embraces artistic heritage, historical and express humanity, and its path in a new image away from the manner of indoctrination. The problem of the research focuses on the dialectic of the conflict over the trends of architecture that are not familiar between the control of visual creativity of the design production in the Arab world and the inability to express local cultures. This confirms the existence of an intellectual and design crisis as a result of neglecting the role of unconventional design solutions to enhance identity, and visual effect on the recipient, as well as to reflect the psychological impact on the users of these buildings to interact with Arab issues. The research aims at uncovering the effectiveness of symbolic projection of hidden values and messages behind the design and finding factors determining the nature of the dialectic between design data and psychological effects. The research includes a theoretical study based on the method of description and analysis of the concepts of research axes and an analytical study that includes case studies of cultural buildings that deal with national issues through analysis. The research concludes with applicable results by drawing up a list of design criteria to benefit from the philosophical approaches to nontraditional architecture and uncanny arts to create a positive interactive field with Arab issues.

Keywords:

Creative design solutions – Visual creativity – Psychological impact – Cultural Buildings – Uncanny architecture – National issues – Design process.

Research problem:

The problem of the research focuses on the dialectic of the conflict over the trends of architecture that are not familiar between the control of visual creativity of the design production in the Arab world and the inability to express local cultures. This confirms the existence of an intellectual and design crisis due to the neglect of the role of non- traditional design solutions in enhancing the concept of cultural identity, in addition to embodying the psychological impact on the visitors of cultural buildings to interact with Arab issues.

Research Aims:

The purpose of this research is to uncover the effectiveness of symbolic projection of hidden values and messages behind the design and to find determinants of the nature of the dialectic between design data and psychological effects.

Research Significance:

The significance of the research is that it is one of the studies that aim at enhancing the Arab cultural identity with the directions of modern and uncanny architecture and interior design, highlighting the Arab personality as a distinctive feature, and focusing on national issues by using intellectual trends and unconventional design methods that introduce the idea of shock and the concept of uncanny, and work on the formulation of the strange into familiar and the familiar into strange considering the design style used.

Research Methodology:

The research includes a theoretical study based on a descriptive and analytical approach to the concepts of research axes and an applied study that includes case studies of selected cultural buildings that deal with national issues.

1- Theoretical Study

1.1. Cultural Buildings' Design between Subjectivity and Objectivity

The main role of cultural buildings is concerned with preserving the cultural heritage of people throughout the ages and protecting the social legacy of individuals, from science, arts and all aspects of life as indicators to identify the phases of development of human life and its civilizational achievements.[1]

١,١,١ Cultural Buildings Definition

Cultural buildings were established to acquaint contemporary generations with their history and culture. Nowadays, cultural buildings have become one of the most prominent architectural elements, where architects and interior designers find a great opportunity to show their artistic vision and academic study in the treatment of architectural facades and interior spaces that are commensurate with the cultural significance to be expressed to obtain an integrated structure of design and symbolism.[2]

Accordingly, Cultural buildings are subject to several design considerations:

- Presentation Subject: It implies the issue that is expressed and presented, which have a significant impact on the interior spaces of the cultural building, its expressive tools and the theme displayed.

- The audience (the recipient): the public is one of the most important factors that meddle in the design structure of the cultural building as it determines the type and manner of presentation regarding the introduction, nature, size, extension, and circulation, and decides the timeframe that the visitor will stay.[3]

1.1.2 Classification of Cultural Buildings (Function, Elements, Contents)

Because of the role played by cultural buildings in preserving human heritage, and with the increase in exhibits and different styles and methods of presentation, there has become a kind of specialization in cultural buildings, and there was an urgent need for many facilities and specialized cultural buildings so that they can carry out its mission to society culturally, artistically, archaeologically, scientifically and nationally, it becomes a beacon of creativity that elevates sense and conscience.[4] They can, therefore, be classified to the following:

Artistic Cultural Buildings	Heritage Cultural Buildings	Scientific Cultural Buildings
The scope of the exhibition includes paintings in addition to sculptures, ceramics and other visual art elements.	Those expose the heritage of different civilizations and hestorical periods.	which show the scientific methods and discoveries through which the benefit in the development of various environmental sciences, laboratory and industrial.
Environmental Cultural Buildings	**Educational Cultural Buildings**	**National Cultural Buildings**
which show different types of vocabulary of the environment such as wood and various minerals, natural biology and other elements of nature.	where samples of materials that serve the scientific and cultural aspects of education are displayed.	which expose a specific issue or several issues expressed in specific ways that take a commemorative character to preserve the artistic and cultural heritage of a country.

Source: Copyrights to the authors. Fig.1: Cultural Buildings Classification.

1.1.3 Functionality in the design of cultural buildings

The concept of the function is that the design is consistent with the purpose for which it was designed, and the function is one of the basic tasks that the interior designer must achieve in his design, and without achieving it the interior designer can not achieve its objectives in creating a more cohesive and harmonious environment.[5] The interior space function has multiple classifications that can be summarized as follows:

- **Operational Function**: It concludes the space capacity and the number of individuals occupying the space, the activities in which it is practiced, the flow of movement and circulation in the interior space, the elements and forms of spaces through walls, ceilings, flooring, furniture and accessories, and other design considerations.

- **Environmental Function**: There is a link between the type of environment and human capacity regarding the impact of the surroundings.

- **Expressive Function:** The expressive and symbolic function depends on the recipient's response to the design of the space and its formal vocabulary. The designer may have the ability to connect functional systems between expressive content and the design codes to translate the correct understanding of functionality through the sensory data in a form of force, heritage, contemporary, empathy or any other expressive meanings.[6]

1.1.4 Objectivity in the Design of Cultural Buildings

The interior design of public spaces, especially cultural buildings, cannot be based entirely on the designer's tendencies but should be based on rational criteria attached to design standards. Objectivity confirms the extent to which the designer takes a response to the components of the surrounding environment, whether physical or emotional and describes the objectivity in human situations as the mental state associated with the individual's response as a continuous organization of emotional and cognitive processes.

Objectivity can represent a straight line between two points, one of which represents the maximum acceptance and suitability of the design, while the other represents the maximum rejection of this design, and the distance between them is divided into total neutrality. Objectivity also reflects the aesthetic goal that the designer tries to achieve through a set of basis that links the technical work in a coherent unit that concludes;

- The harmony that forms the relationship between the parts and the nature of their association with the general form.

- Achieving Morphological integration to create a sense of the continuing relevance of the constituents of space, without distracting the audiences in interior spaces.[8]
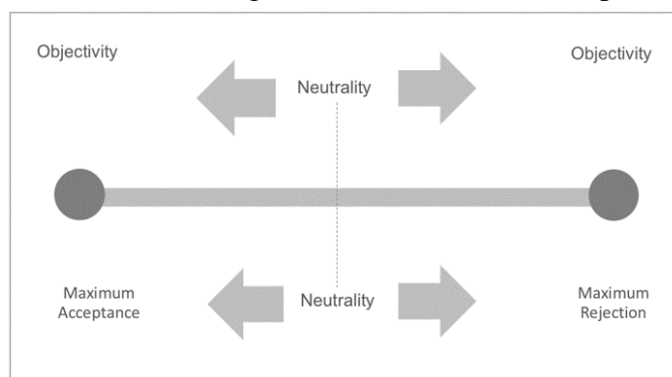
Source: Copyrights to the authors.
Fig.2: Diagram that shows the objectivity concept in the design of interior spaces.

### 1.1.5 Subjectivity in the Design of Cultural Buildings

The concept of subjectivity is linked to the set of emotions and reflective processes that are inferred through behavior and the consciousness and thinking of the person emphasizes the methods of guidance, organization, and encouragement. Self-projection is not a negative indicator, as long as the designer can create an environment that is genuinely acceptable and satisfactory to the community, as well as providing morphological data that reflect a positive behavior that characterizes the interior space by uniqueness. The product which comes purely from the designer's subjectivity and intellectual variables could emphasis an argument and this could happen whenever a designer who belongs to a certain civilization or a set of ideas in an original form has attempted to design an interior space that belongs to different civilization or anti-self manner ideas. What the designer sees as reflecting a situation within the context of his society and civilization may be met with aversion and rejection by another community. The designer may have to use intellectual subjectivity in design as a tool to shock society or direct public opinion towards a specific issue and highlight it, in this case, subjectivity is not a negative trend as it stems mainly from the hidden objectivity the designer used to achieve his goals.[9]

1.2. Psychology Impacts of Cultural Buildings Design

The psychological impact is an essential principle in building the national character. Calls for preserving identity and heritage are growing in light of the spread of globalization, preached by some intellectuals in America and spread in the cultural circles in the world, and certain countries have become interested in the sovereignty of their culture on the pretext that they are the most economically strongest and most civilized, and thus nations dissolve if they do not preserve their cultural heritage and provide for Its civilization because the fate of modernity is a return to heritage.[11]

1.2.1 Expressing National Issues through the design of Cultural Buildings

The mechanisms of expression in interior design are the mechanisms of supporting the creative system of a design product. They conclude methods of cognitive abilities that are characterized by associative reasoning, which is known as a similar ability that when the designer reaches, he achieves a poetic language that stands between the truth and the metaphor message.[12]
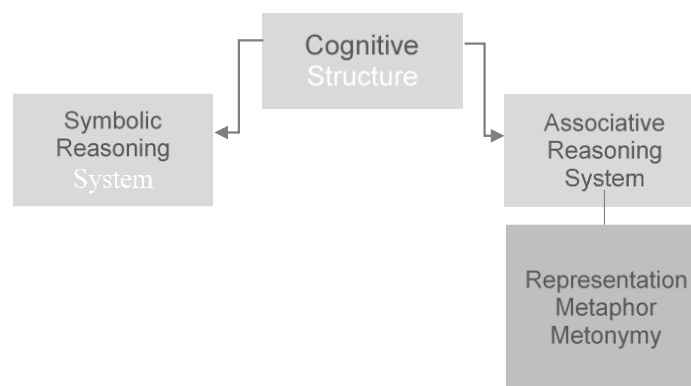
Source: Copyrights to the authors.
Fig.3: Diagram of the cognitive structure for reasoning through Representation, Metaphor and Metonymy.

The most prominent of these mechanisms can be identified as follows:

- **Representation:** is the ability to link and combine things or different ideas, representation is one of the main forms of similarity, it can be seen as a general classification enveloping analogies. An approach to recognize the two is to sort similarities as things analyzed from a mysterious class and analogies from things thought about from various classifications. Thus, from simple relationships, or complex systems representation could be created by the essence of similarity, which lies in the existence of an important semantic between two things. There are several similar patterns of representation:

- Personal Representation - Direct Representation - Symbolic Representation - Imaginative Representation.

- **Metaphor:** Metaphor utilized as analogy or delegate from something that we needed to portray. Aristotle looked at the metaphor to go beyond the simple real expression and defined it: "The transfer of a name denotes one thing to another and the transfer is either from sex to type or type to sex or type to type or according to representation.

- **Metonymy:** the transition from the necessary to the required. That is, a necessary attribute for a particular thing, inferred by that thing.[13]

1.2.2 Impact of Belongingness Factors on the Design of Cultural Buildings

To create an objective interior space, there should be several factors and criteria that are acceptable to users of cultural spaces. These factors could be achieved by:

- Functional Standards   - Expressive and Symbolic standards   - Aesthetic Values.

Those factors are shared in achieving belongingness values at the level of the morphological vocabulary of interior spaces, the sense of belongingness is a fundamental pillar associated with the recipient perception and the extent of his cognitive accumulative experiences, it can be classified through the following:

- Cultural Belongingness: The morphological vocabulary in the interior space, with its symbolic contents, can confirm a state of belongingness to a particular civilization and some forms of relationships.

- Functional Belongingness: Space cues enhance the sense of the functional performance of the interior space, so that the nature of space activity could be recognized, whether religious, touristic, medical, or educational, etc.

- Self-Belongingness: This type of Belongingness refers to a particular form that is attached to a character of the recipient and accordingly it will lead hid perception to deal with space as if it was designed by the individual himself and represent his taste and experiences.[14]

1.2.3 Impact of Sense of Identity on the Cultural Buildings Design

The interior design of cultural buildings aims to create distinct identifiable spheres in the recipient memory. Identity is defined as "the single-core attributes that, if changed, change the matter".[15] Identity does not mean transient phenomena, incidental variables or circumstantial situations because they occur in essence. The identity of the interior space is dynamic. It originates through ourselves and our environment and is influenced by the traditions and customs of that environment. It is not a fixed element, but a variable of time, which is not something tangible but linked to the impact of civilization. Charles Correa states that identity does not only seek reference to be subordinate, but is tireless to express the place, its natural environmental indicators, and its time indicators. Identity is a series of processes. Identity is developed by dealing with what people are aware of. From the foregoing, there is a relationship between identity as an intellectual system and the mechanisms and design forms adopted by the interior designer for expression.[16]

Cultural identity in its general sense means: "The process that distinguishes the individual from himself, that is, the identification of personality.[17] As defined by the French thinker Alex Mikfili as: "An integrated system of physical, psychological, moral and social data involves a pattern of processes of cognitive integration, and is characterized by its unity, which is embodied in the inner spirit, which involves the sense of identity".[18] To determine the reference of Arab cultural identity, it is necessary to define a framework of references for Arab identity based on the following:

- Religion. - Usages. - Language. - A sense of value. - Awareness of Arab issues and cultural heritage.[19]

1.2.4 Reviving National Issues through Cultural Buildings

The research behind the consolidation of national issues remains central to national innovation strategies. Interest in the concept of reviving issues for the nation dates back to mid-1990. It describes the practice of construction to promote a stunning image of a particular nation for the

rest of the world and to benefit from public diplomacy, trade and export, promotion and tourism.[20]

The concept of embedding the knowledge of the nation's issues is emphasized as the dominant channel of communication for national identity, and although there are many differences between the type of architectural design and national identity, there are also convergence points. One such point, for example, is that national identity can help remove misconceptions about a nation or state while helping the country to raise awareness of the issues involved.[21] The aesthetics of architecture and design can be used to embrace and defend specific issues, and to destroy certain symbols contrary to authentic political systems. Understanding the layers of national history is, therefore, an integral part of understanding the larger concept of the influence of architecture and design trends on national identity.[22]

1.3 Trends of Unconventional Architecture (Uncanny architecture) in the design of Cultural Buildings

In the early 1980s, some architects began to question the alphabets of architectural design based on traditional architecture. Notable among them are architects such as Coop Himmelblau, Bernard Tschumi, Peter Eisenman, Zaha Hadid, Frank Gehry, and Daniel Libeskind. These architects were categorized under the title disassembly, a term that not only confirms their familiarity with the idea of deconstruction but also emphasizes the paradoxical relationship of the new generation with the beginning of Russian constructivism in the twentieth century, which expresses a preference for architecture aesthetics that are more disturbing than reassuring.

As Anthony Vidler said in his book "The Architectural Uncanny", some of these architects were inspired by unconventional vocabulary to incite discomfort and dissatisfaction.[23] After the emergence of postmodernist trends in architecture in the 1960s, this was the result of an approach inspired by unconventional or traumatic sources in the literature and cinema industry. From 1970 onwards, architectural projects that were closely linked to unconventional forms stemming from deconstruction were developed to take on a new composite and more complex image, later known as the Uncanny Architecture.

1.3.1 Deconstruction Concept

According to architect Aisenman; deconstruction is seeking the beautiful within the ugly, logical in the irrational.[24] The dissertations of the French philosopher Jacques Derrida constitute a theoretical reference to the concept of deconstruction and those philosophical theses focused on the belief that (Being lies in the presence). The term deconstruction in architecture has emerged as a natural reaction to the revolutionary feeling in the world that calls in some respects for evasion of the capitalist past, and which comes with psychological implications calling for the rejection of the architectural heritage of peoples who do not have that wealth in the first place. The ornaments and motifs disappeared, the symmetry disappeared, as well as the columns and partitions as a reflection of this movement.[25]

1.3.1.1 Characteristics of Deconstruction Concept

What distinguishes this movement in terms of architectural design, breaking the differences between painting and sculpture and re-mix in one architectural crucible[26], **which appears in each of these factors:**

Movement Characteristics	Analysis	
Unconventional Forms	Distance from conventional and all what is familiar.	
Motives Free	Rejection of motifs.	
Morphological Relations	Exclusivity of the aesthetic values of the building in which include the morphological relations of volumes, shapes, and forms.	
Material Use (Metal/ Glass)	The construction forms which are highlighted by the use of new materials such as metal, glass and plastics to follow the idea of reflecting life in the form formulated by science.	
Shocking Elements	Advocacy to use the element of surprise, which can develop as a factor of shock often.	
Distorted Vocabulary	Use of the vocabulary of classical architecture in reverse or distorted form.	

Source: Copyrights to the authors.

Table 1: Conceptual analysis of Deconstruction movement characteristics.

1.3.1.2 Deconstruction Trends

Deconstruction trends included philosophical and psychological concepts that support the idea centered on human perception of the spaces and his ability to derive the idea and purpose behind them through the experience of the scene and the image and engage with them intellectually and emotionally. These trends included:

First: Discontinuity and Fragmentation

The pioneer of this trend is the architect Frank Gehry. This trend is based on the idea of independence of the building and its elements where he sees that the building must be independent in itself and surrounded by other buildings to show the creativity and sophistication in it. Also, it is based on the idea of separating the building' elements where each element is independent with keeping the interdependence and attraction between them in easily and skillfully.[27]

Second: Neo Constructivism

Neo Constructivism transfers man from the real world to the world of flying buildings or space. Zaha Hadid is considered one of the most important pioneers of this trend which is based on the use of three dimensional (3D) futuristic organic forms in addition to the use of stark colors with clear artistic abstraction in elements (construction elements, communication tools, grids, crustal slabs).[28]

Third: The Follies – Follies

The most important pioneers of this trend are Bernard Tachumi, and this trend was clearly affected by the work of Kandinsky, as well as the work of Derrida, and this trend depends on

the philosophical thought of what will be the buildings of the future, including sculptural elements of iron and glass. It generally adopts the concept of nonfunctional buildings that were erected to enhance a natural landscape. It has an ornamental structure oftentimes strange, fantastical, or whimsical built for pleasure.

Fourth: Positive –Nihilism
The pioneer of this trend is Peter Eisenman, and this trend calls for complete intellectual emancipation, independence, and separatism. It does not associate itself with any school, direction, or name. Therefore, liberality is evident in design and construction methods, it calls for independence and separatism.[29]

Fifth: Uncanny (Uncommon – Shocking)
This term was first used by the German psychiatrist Ernst Jentsch in 1906 in an article entitled "Non-racial psychology", in which he described the term "Unheimlich" in German as "strange - unusual". What he meant was something new and unknown which could initially be seen as negative. However, Sigmund Freud's 1919 article entitled "The Uncanny", paraphrased the idea as a situation in which something familiar and strange at the same time could be contradictory to the perception that the idea was both known and extraneous. Artists and architects influenced by the Surrealist movement relied on this description and produced artworks that combined familiar objects in unexpected ways to create strange feelings. It thus often combines previous intellectual trends in addition to its ability to reflect artistic and expressive meanings in the creation of feeling and crystallization of perception. Architect Anthony Vidler is one of the first architects who tended to use this intellectual direction in architecture and the first to depend on it as a unique architectural term. Also, architect Daniel Libeskind who have applied this trend in buildings of great renown and international political issues that have been embodied and expressed through this concept that was initially attacked as it was characterized by extremism and exaggeration, It was based on provoking recipients' sympathy and exposing them to the feeling of pain and distress. This is evident in the architecture and design of the Jewish Museum in Berlin where Libeskind adopted Freud's description: "This stranger is not something new or strange, but something familiar and old in the memory that has become strange to him only through the process of repression."[30]

2- Applied study
2.1 Case Studies
The case studies included four different models of cultural buildings which are belonged to the unconventional trends in deconstruction concept in architecture and design, according to the different axes mentioned in the research.

2.1.1 Case Study 1: Amusement Park "Parc de la Villette" - Paris - Bernard Tachumi 1982
One of the most famous architectural projects designed by Bernard Tachumi in 1982, It belongs to the (The Follies - Follies) trend which Tachumi produced an urban park for the 21st century, which intended a radical break to the familiar form of the park. The red booths that stand at a regular distance from each other throughout the park supported the idea of looking behind the structural signs in the design and were not seen as sabotage or distortion of the garden but as a shocking and unconventional design style.[31]

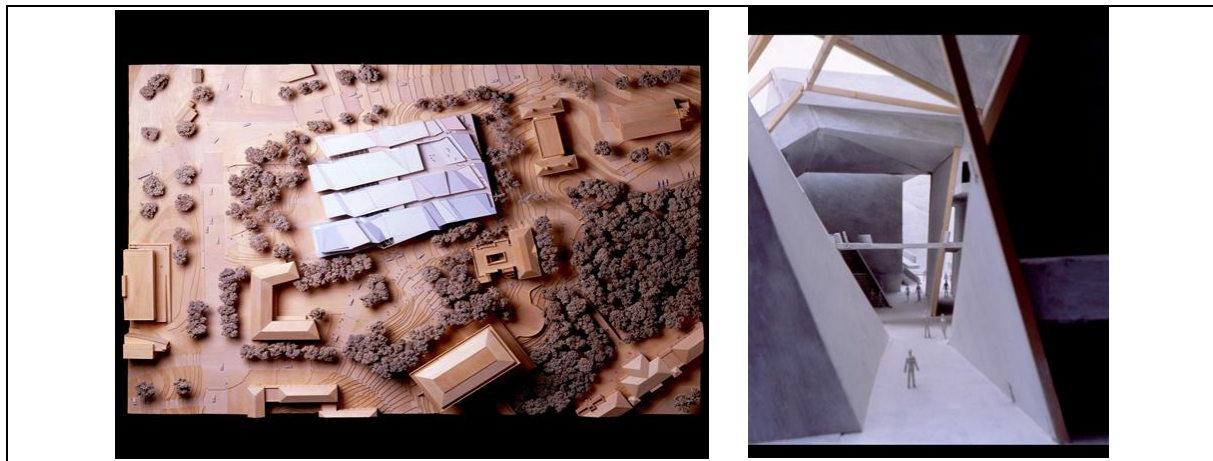**Fig.4: Amusement Park "Parc de la Villette" - Paris - Bernard Tachumi 198*2***
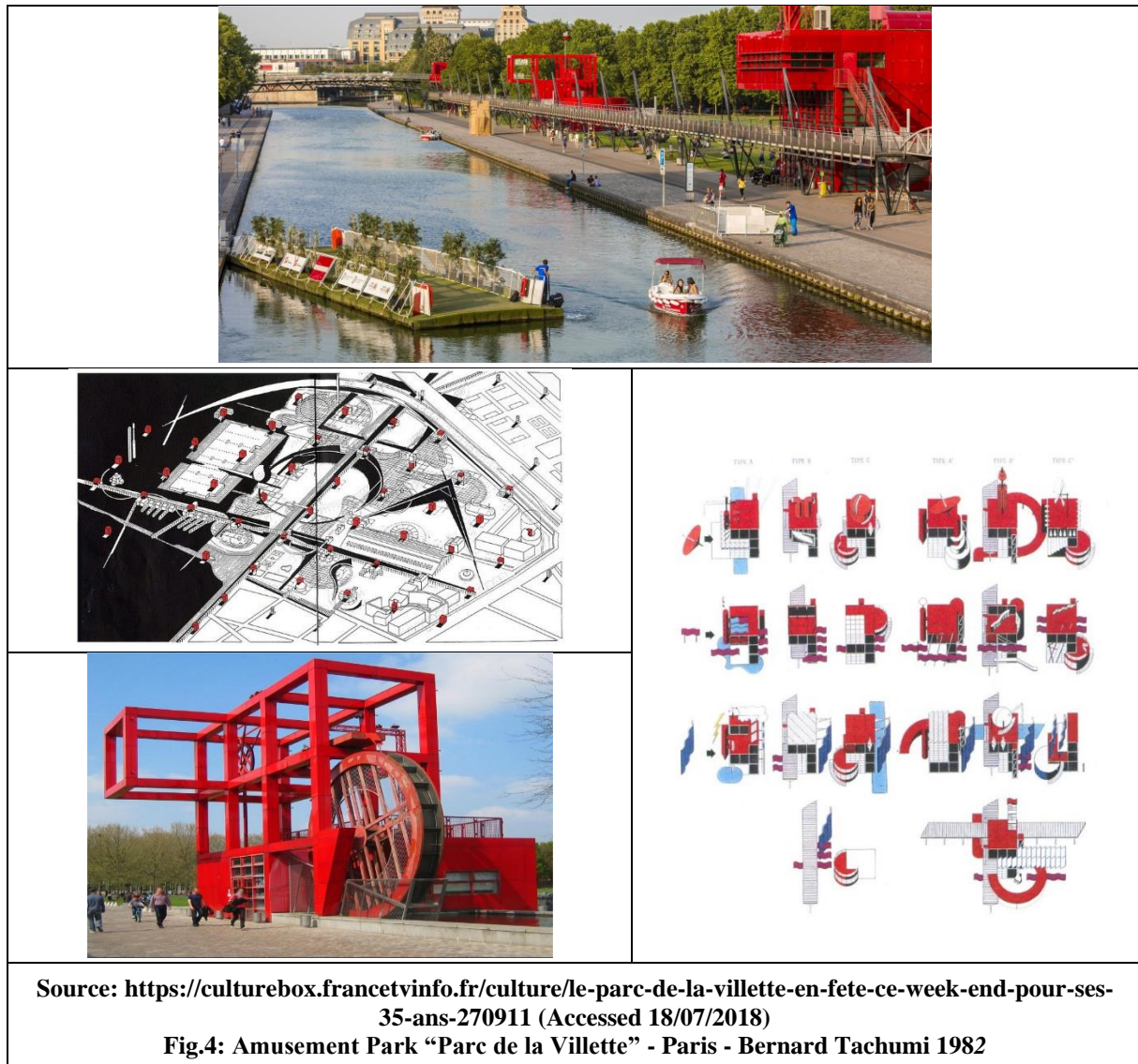
The architect moved radically away from modernist functions and worked to emphasize the sustainability of visual attraction and the psychological impact on the park's visitors. Some Russian architects believe that architecture can work as an ideal remedy because it guarantees happiness and harmony and therefore the structural symbolism of Parc de la Villette should be understood as a subversion of this philosophy through the idea of repetition as a means of reaching the pleasure of superposition. The park architecture based on layers of horizontal and vertical lines that express "stages". At each stage, a three red cube is created that can be used for any activity. These buildings have no specific function and can be used as a multifunction space such as a showroom, a cafeteria or any other public space. There is no symmetrical space with another space in the park, some spaces have cylindrical or triangular shapes and some without walls. In this way, Tachumi wants to investigate the mysterious relationship between the basics and the concept of deviation through the irregular formation. In the second layer, the lines define the circulation in crossing the park in many ways and possibilities in the form of an interconnected network of dashed and wavy lines winding through the landscape. The center of this linear network consists of two axes, connects north and south, and east and west. The third layer consists of open areas that are qualified to bring in many open activities whose visitors
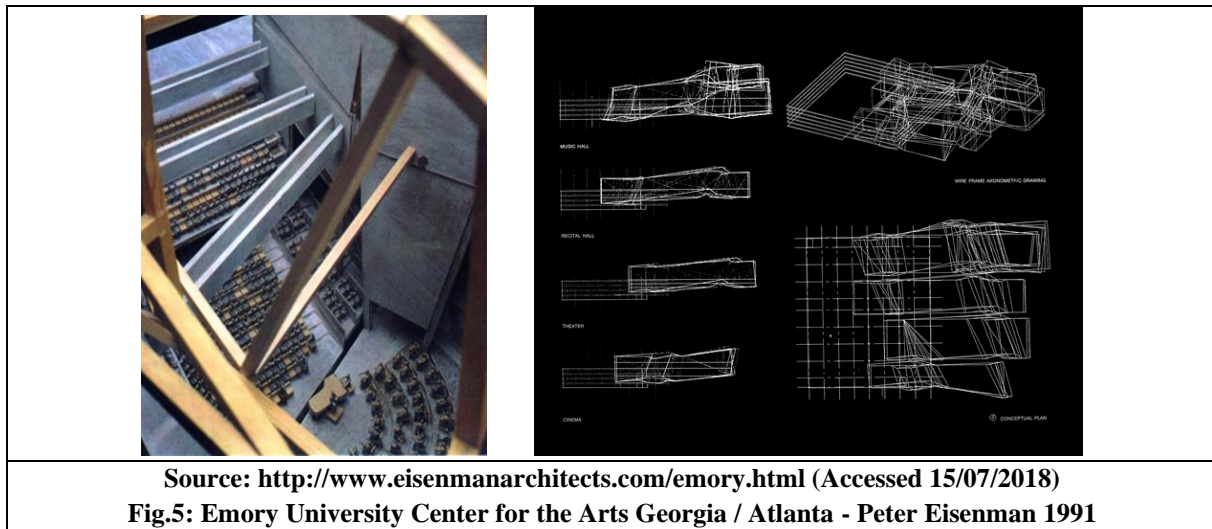
represent an architectural element to involve the human factor as one of the main architectural vocabularies.

By combining these layers, the design allows some forms of interaction between three independent systems. The principles of coincidence, contiguity, and a series of mysterious intersections play a role in challenging the status of ideal forms, traditional formulation, ideas of perfection, order, to the sources of imperfection, and the insurrection. With this design, anyone looking for a traditional theme park will have to leave the park unhappy. However, after a while, the visitor may have to abandon his quest for meaning and surrender to the game of arbitrariness and opportunities of exploration in which the architect puts it, and gradually composed it.

2.1.2. Case Study II: Emory University Center for the Arts Georgia/ Atlanta - Peter Eisenman 1991

Peter Eisenman searched for a design formula in which he could present the term "post-functional" in architectural and design discourse and express his affiliation with the positive – nihilism direction. However, the project ultimately involved more than the original task for which it was set. Eisenman wanted to form a whole block of the city against the ancient Berlin Wall so that an underground garden was named "City of Excavations". The architect had hoped to explore the monuments of the old city. However, no traces were found to indicate the history of the city. It was not the real purpose behind the actual excavation of the antiquities but drew attention to the history and civilization of it, which he chose as an archaeological city of ancient civilization, even if it is not. For this reason, the excavation city was meant to contain part of an ancient wall as a virtual reconstruction of the site. Eisenman searched for the hidden concept to reveal or produce what should have remained unknown in human architecture and has been able to apply that design connotation by exploiting the slopes down as a metaphor for exploration and research in the past. From Eisenman's point of view, seeing many deconstructed buildings can frustrate the recipient, and provoke feelings of self, instability and confusion. Hence unconventional forms emerge in this attempt to tear loose architecture. He realized this possibility with a technical tool called "folding". In his design of the Emory Center for the Arts, Eisenman first used folded shapes. The center has an emotional spatial dimension, whereby the folded surfaces of the Emory Center express geological layers and terrestrial fossils that suggest a hidden civilization that is supposed to be excavated.

Source: http://www.eisenmanarchitects.com/emory.html (Accessed 15/07/2018)
Fig.5: Emory University Center for the Arts Georgia / Atlanta - Peter Eisenman 1991

2.1.3. Case Study III: Jewish Museum / Berlin - Daniel Libeskind 1999

Libeskind often uses explicit metaphors in his works, especially concerning historical events and political issues. He belongs to the unconventional trend "The Uncanny", and he sees that spaces should be part of the story you are trying to communicate with. It has to provoke recipients' imagination beyond reality. Libeskind started to ask questions that may point to hidden answers such as; how a building can commemorate people, and how a city like Berlin can invite the Jews to the past after they have been murdered and tortured. The dilemma he has been through was how to embody this sense of unusual, or this sense of contradiction, with the possibility that the contemporary architectural and design construction can remain quite distinct from the history to which it refers.

The concept of the "Jewish Museum" itself was considered controversial. The architect aimed to show the influence of the Jewish culture in the long-term history of the city, giving it the importance it deserves. Although the Jewish Museum in Berlin will generate the sense of turbulent return and represent a sudden revelation of a previously buried past, the idea of repatriating the stranger is the idea was adopted as it considered the perfect one to describe the greatest plight of Jewish memory in Germany today, the Holocaust, which has not yet healed, and which makes the recipient awake in the unconscious due to a sense of disturbance and anticipation.
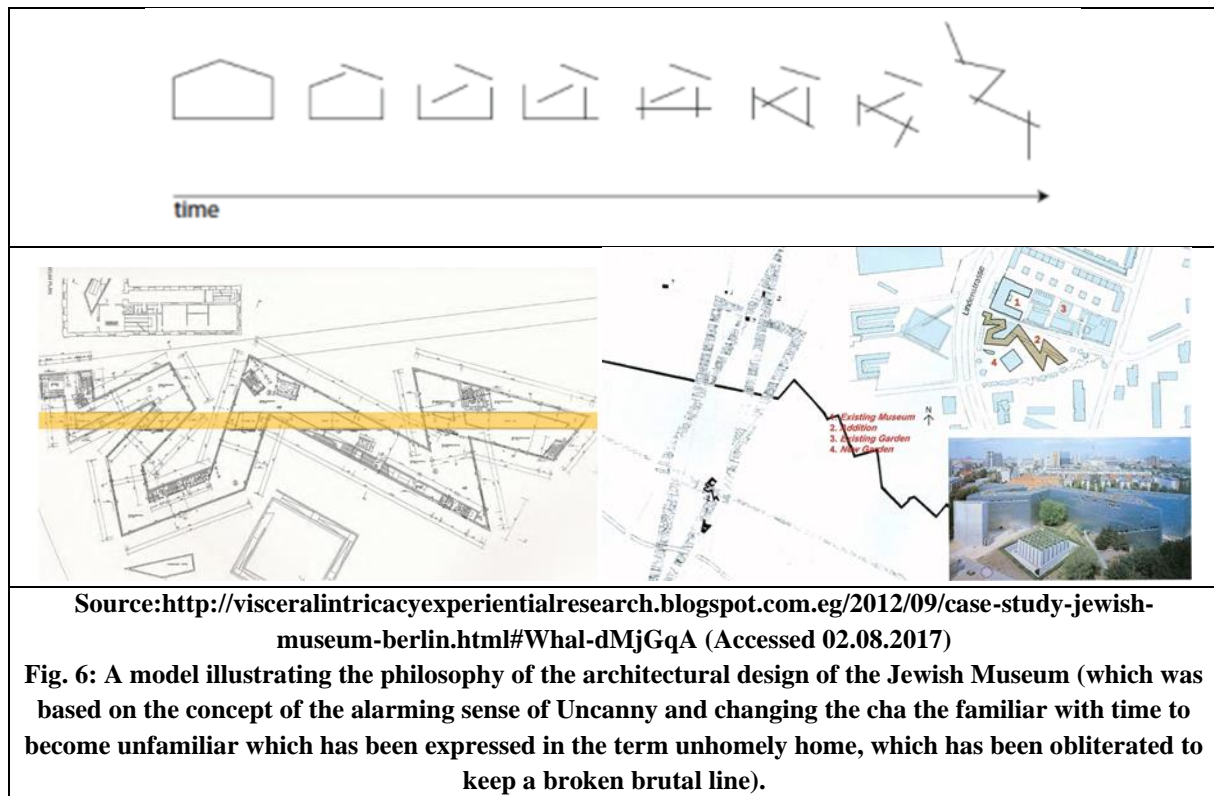
The design concept of the museum was mentioned in these two-point:

 -It is impossible to understand the history of Berlin without understanding the tremendous intellectual, economic and cultural contributions made by the Jews as citizens.

  -The need to integrate the meaning of the Holocaust, physically, psychologically and spiritually, into the consciousness and memory of Berlin.

During the design process, Libeskind drew addresses of prominent Jewish and German citizens on the pre-war map of Berlin to form an irrational and invisible matrix on which to form the building. The structure of the building was based on the distorted Star of David, with a straight axis running along with the building with a metaphorical symbolism.

Source:http://visceralintricacyexperientialresearch.blogspot.com.eg/2012/09/case-study-jewish-museum-berlin.html#Whal-dMjGqA (Accessed 02.08.2017)
Fig. 6: A model illustrating the philosophy of the architectural design of the Jewish Museum (which was based on the concept of the alarming sense of Uncanny and changing the cha the familiar with time to become unfamiliar which has been expressed in the term unhomely home, which has been obliterated to keep a broken brutal line).
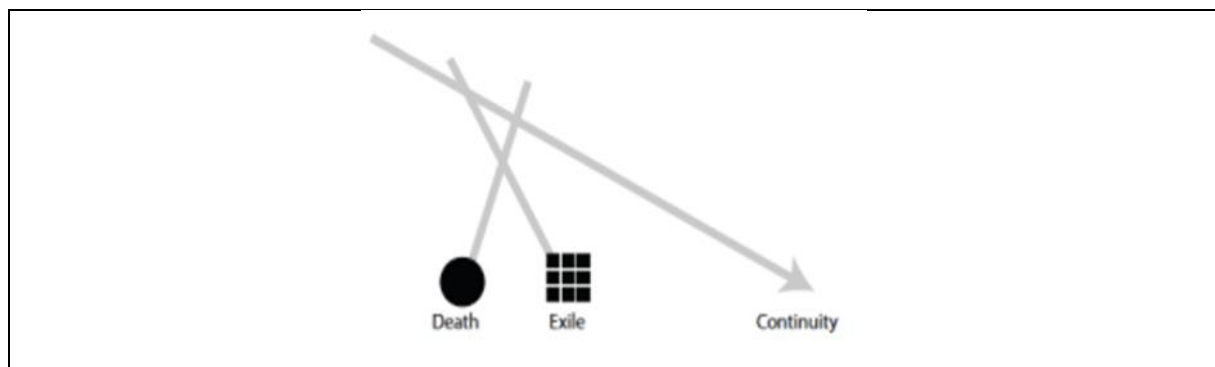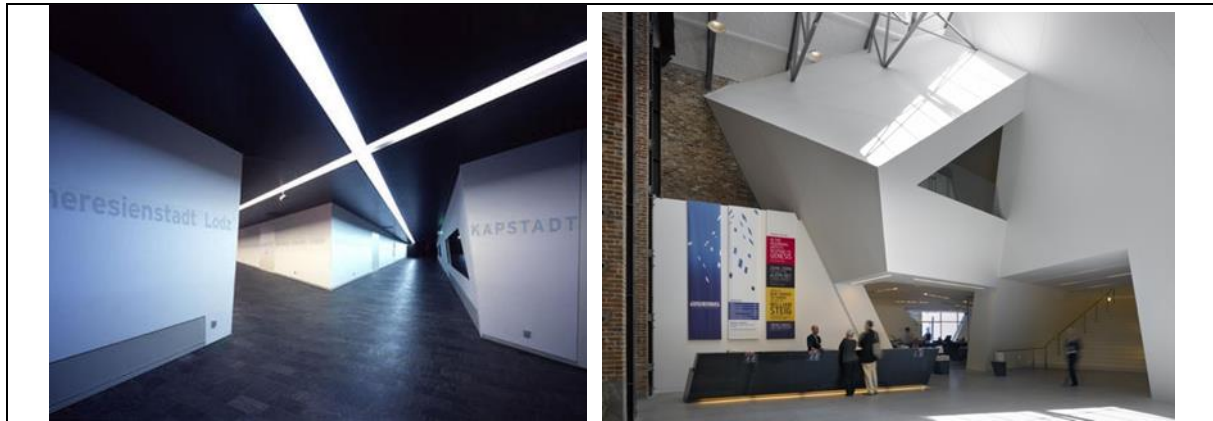
While the interior spaces cannot be seen from the outside, the fragmented shape still creates interstitial spaces, and there is an additional building that serves as a Holocaust memorial and stands empty, which Libeskind describes as "empty space". Incomplete hierarchical forms were an unconventional addition to the ambiguity of the structural elements of the building, and the contradiction between the old classical structure and the modern addition of the museum stimulated a sense of confusion and tension. The metaphor of the museum's interior design is evident in the design of its main axis. Libeskind says, "The straight space that cuts the museum is the place of Berlin because it indicates what cannot be displayed when it comes to the history of Jewish Berlin, where humanity turns to ashes." The parts of the building were distributed in a way that cannot pass through all the internal spaces in it to inspect the history with its details and the events of its memory.[34]

Fig.7: Interior spaces of Berlin Museum.
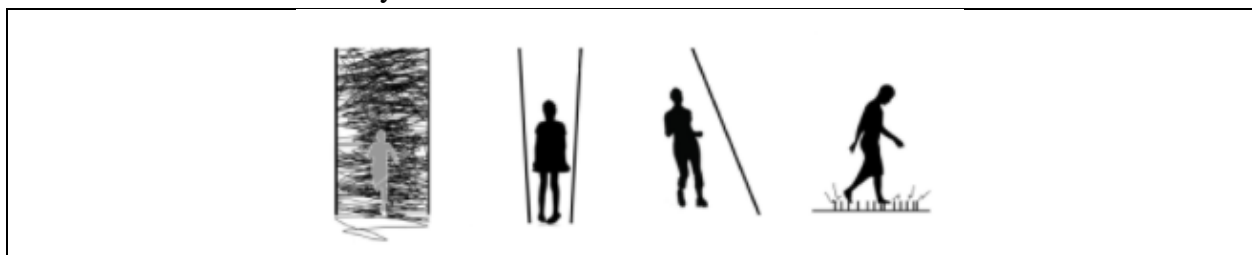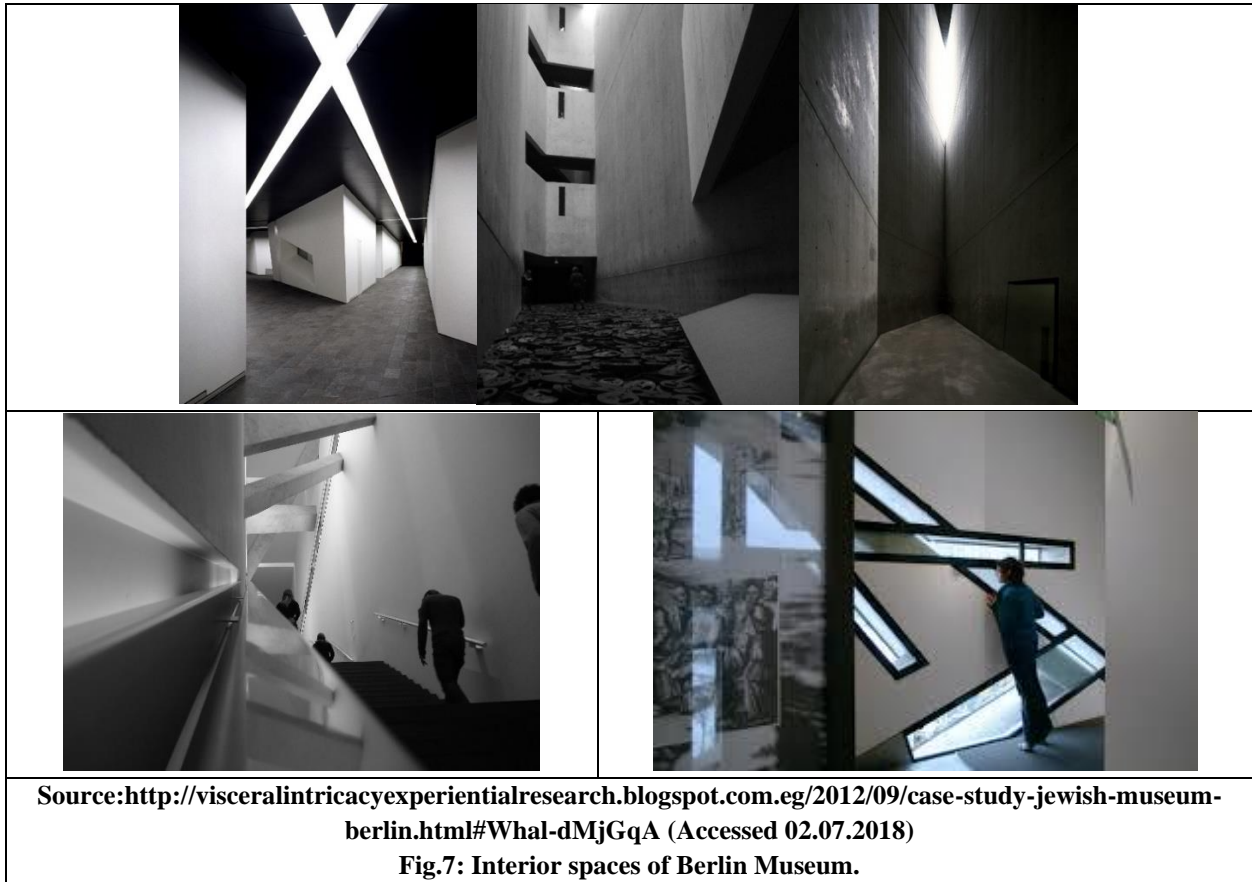
The other design metaphor for the interior spaces of the building is evident in the entrance path, where visitors face pathways that reflect the choices of Jews during the Holocaust, where the landing leads to three central underground tracks, each telling a different scenario. The first and the longest follow a path leading to the continuity staircase, then to the exhibition spaces in the museum, emphasizing the continuity of history. The second leads to the building and to the garden of exile and immigration where they are forced to leave Berlin. The third leads to a dead-end - the Holocaust.
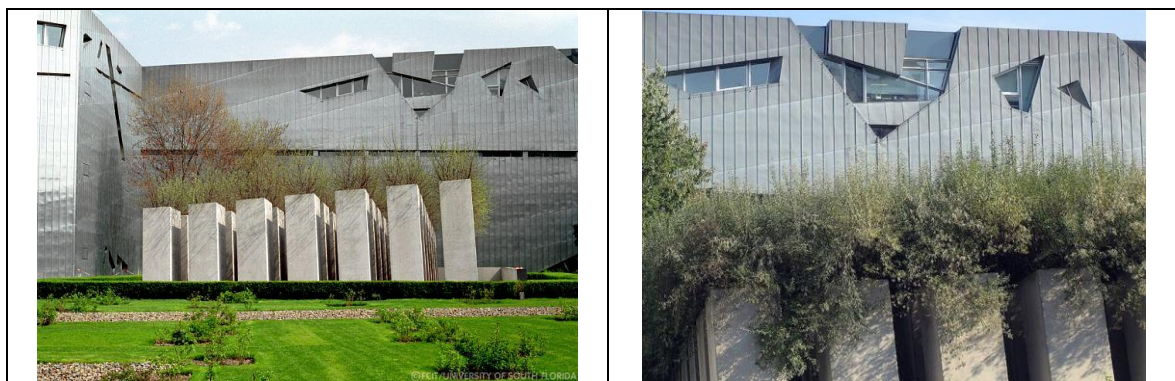
Source:http://visceralintricacyexperientialresearch.blogspot.com.eg/2012/09/case-study-jewish-museum-berlin.html#Whal-dMjGqA (Accessed 02.07.2018)

Fig. 8: A model illustrating the use of a design metaphor for space to express the desired message.

The park where visitors move out of the museum is an attempt to completely displace the visitor. The park represents the wreck of history. This was achieved by tilting the floor. This is particularly effective given that the park appears to be the only structure in the museum consisting of a grid system at right angles. Also, the vegetation is placed above the structural elements, leaving the ground inside the concrete pillars and the solid ground below, and the interlocking plants above and out of reach. This distracts the visitor whose typical concept of parks is characterized by the presence of plants rooted in the ground.[35]

Source:http://visceralintricacyexperientialresearch.blogspot.com.eg/2012/09/case-study-jewish-museum-berlin.html#Whal-dMjGqA (Accessed 02.07.2018)

Fig. 9: Design of the outside garden of the Berlin Museum.

The constructive approach of the Berlin Museum design can be summarized by using the metaphors and architectural vocabulary that psychologically affect the museum's visitors to convey a sense of confusion and anxiety to gain the attention and sympathy with the Jews of Germany.

Mechanism of Expression	Expressive Element		
	Architectural elements	Design elements	Gardens
Design Metaphor	-Space Concept. -Star of David. -Circulation structure.	-The Three Paths of the Jews. -Dead ends. -Paths that cannot be crossed.	-Dead plants. -concrete pillars
Formal Metaphor	-Irregular shapes. -Sharp angles. -Distorted Star of David.	-No straight paths. -Beam of chaos -The vacuum is the centerpiece of the building.	-No fragmentation (only orthogonal grid in the building). -Plants were placed above the columns.
Spaces (Empty Spaces)	-The Holocaust Tower. -Empty Space.	-Spaces without heating or air-condition. - No display units.	-Tombstones are anonymous.
Confusion & Distraction	-Irregular shapes. -No clear hierarchy. -The contrast between the old museum and the modern addition.	Three tracks at the entrance to the museum that causes confusion.	-Illusion of Regularity. Inclined ground. -Plants away from sight.

Source: Copyrights to the authors.
Table 2. Mechanisms of Expression in Spaces of in Berlin Museum.

2.1.4 Case Study IV: The Kurdish Museum - Erbil - Iraq - Daniel Libeskind 2009 (under construction)

The Kurdish identity has a long history and yet there is no single documented fact about the Kurdish origin, however, according to the recent political history dating back to World War I, the historical site of the Kurds in small Asia is a strategic location extending from northwest Zagros and the Eastern Taurus mountains, covering a small part of Armenia. Nomads, peasants, speakers of different languages, numerous dialects, followers of Islam, Christianity, Judaism, and a wide range of compromise religious communities used to live side by side but Kurdistan today is divided among five different nations across international borders as a result of the Lausanne Treaty of Peace in 1923.[36]

The relationship with the Citadel of Erbil is one of the most important functions of the Kurdistan Museum to be built in this region, which was planned for several years, but stopped due to the threat to the region and political instability, as it is supposed to be re-established once the region stabilizes. The project, designed by Daniel Libeskind, is an important architectural building in the region, where the structure of the museum will be built in a multicultural area. Therefore, the museum building will be of a quality that will present Kurdish culture, history and art along with the cultures there, which in turn will give the world a picture of the Kurdish civilization, and works to remove the confusion between the culture of Kurds and their history and those of neighboring civilizations. Libeskind describes the goal of the Kurdish Museum as a rich cultural element that reflects the spirit of the Kurdish people, and a structure that will reflect the future of Kurdistan. The design concept was based on the idea of reviving Kurdistan, emphasizing the emotional side of the grief and tragedy of past experiences, and the joy and hope that describe the future that the Kurds aspire to. Libeskind used Linear, distorted angles, intersecting geometry and gaps to emphasize the concepts of "absence", "loss" and "memory distortion". The museum will be built in the area where the Governor's building is located near the historic Citadel of Erbil on an area of 150,000 meters square. The museum includes permanent and

temporary exhibitions, an educational theater, a multimedia educational center for Kurdish history, a large archive and a meeting room.

The museum will be constructed with four interlocking geometric figures representing the Kurdish regions: Turkey, Syria, Iran, and Iraq. The sizes intersect with a line divided into two angles representing the past and future of Kurdistan where the two corners create an emotional duality that is divided into both a heavy and submerged mass symbolizing the genocide under Saddam Hussein and a line of freedom, a network of greenery that rises toward the sky and culminates in an eternal flame as a powerful symbol of Kurdish culture. An open-air courtyard is a quiet place in the heart of the museum. The landscape offers performance spaces, benches and picnic areas.[37]

Source: https://libeskind.com/work/kurdistan-museum/(Accessed 02/07/2018)

Fig. 10: The Initial designs of the general site of the new Kurdish Museum, which shows the design axes and their relationship to the national concepts to be emphasized in the museum.

Source: https://libeskind.com/work/kurdistan-museum/(Accessed 02/07/2018)

Fig. 11: The establishment of the museum with four interlocking geometric figures representing the Kurdish regions: Turkey, Syria, Iran and Iraq.

Figure 12. Shots of the new Kurdish Museum, which shows the interior and exterior spaces.

2.1.5 Case Study V: Al Alamein Museum – New El Alamein City - Egypt - 1956

Al-Alamein Military Museum was founded on the 16th of December, 1956, when the late president Gamal Abd Elnasser ordered its establishment to commemorate Egypt's fundamental role in one of the most important battles of World War II, Al-Alamein battle, which broke out between the allies and the Axis Powers in October 1942. The museum witnessed development, renovation, and maintenance measures and was renewed on the 50th anniversary of Al-Alamein battle on the 21st of October, 1992, and later went through other development measures including the set-up of an exhibitory display, to be reopened on the 21st of October, 2014. The Museum aims to document Al-Alamein battle by introducing a group of weapons, armors, and models which symbolize Al-Alamein battles and the contributing forces, besides a group of battle course-of-action maps, as well as acquisitions of battle commanders.

A divided Block of two sectors from El-Alamein Battle Map that reflects the conflict between the Attacking Forces " Axis Powers " and the defending Forces " allied powers " highlighting the defense line used by allied forces to stop axis powers of north African Campaign.

Fig. 13: Al Alamein Museum – New El Alamein City - Egypt – 1956.
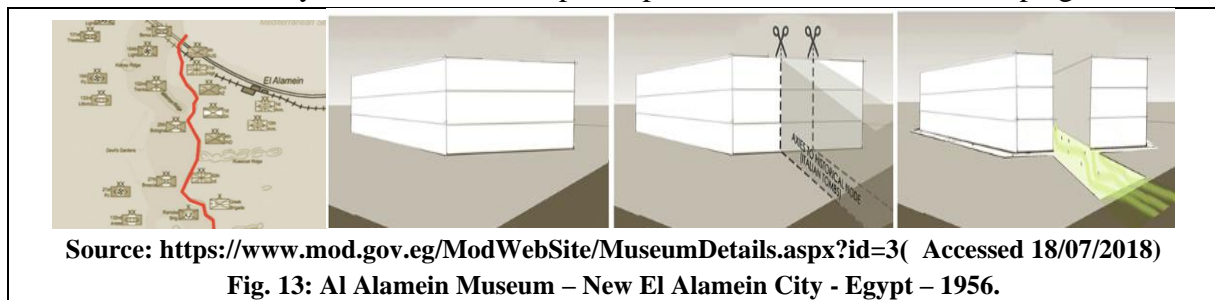
It recites the major events of Al-Alamein battle and the role of the participating forces. It is divided into 3 parts, which are the open-air showground, the permanent display showroom, and the temporary display showroom.

- **Open-air show-ground:** where the Allies and Axis Powers' weapons and heavy equipment are displayed (canons – personnel carriers – tanks – airplanes – armored vehicles).
- **The permanent display showroom:** It is divided into 2 parts, the Main Lobby, plus 5 halls: (combined hall – Britain hall – Egypt hall – Germany hall – Italy hall).
- **The main lobby:** a space whose walls are decorated with graffiti illustrating stories from the war as well as graven images of the contributing army commanders, including the English Commander Bernard Montgomery, and the German Commander Erfin Rommel, and the War maps of North African states. The lobby also exhibits some acquisitions labeled with comments and details in English, Deutsch, Italian, and Arabic. A memorial in the middle of the main lobby is erected to refer to the years of War which substantially ended in peace.
- **Combined Gallery:** which includes some military acquisitions for all the countries which took part in the War (a soldier's cutlery – models for some soldiers – a soldier's Holy book).
- **Britain Gallery:** which includes a wonderful collection of maps of the British forces involved in the battles of North Africa in its various formations, as well as figures of soldiers and officers of the British army, as well as the weapons and ammunition used by the British forces in the war.
- **Egypt Gallery:** which documents the Egyptian role in World War II logistically and field-based, according to the convention between Egypt and Britain, during the British occupation of Egypt at that time, and the losses that Egypt suffered during the War.
- **Germany Gallery:** displays a group of acquisitions, maps, and weapons that belong to the German Forces which contributed in North Africa battles with its various formations, in addition to sculptures of soldiers, officers, and commanders' acquisitions such as Erfin Rommel's.
- **Italy Gallery:** includes a model embodying the Italian Forces' emblem during the World War, in addition to statues of soldiers and officers in several outfits, besides some of the weapons and ammunitions used by the Italian forces during the Alamein Battles.[38]

Source:https://www.mod.gov.eg/ModWebSite/MuseumDetails.aspx?id=3(Accessed 18/07/2018)
Fig. 14: Al Alamein Museum – New El Alamein City - Egypt – 1956.

Conclusion:

In reference to the analytical study, the paper concludes with a list of design standards of cultural buildings mentioning the criteria and factors that should be considered while using the trend of uncanny architecture.

Design Standards of cultural buildings through using Uncanny architecture trend	
Functional Standards	
Operational Function	-Considering space capacity and the number of individuals occupying the space. -Listing activities in which it is practiced, the flow of movement and circulation in the interior space. - Linking elements and forms of spaces through walls, ceilings, flooring, furniture and accessories, and other design considerations.
Environmental Function	- Linking the type of environment and human capacity regarding the impact of the surroundings.
Expressive Function	- The ability to connect functional systems between expressive content and the design codes to translate the correct understanding of functionality through the sensory data in a form of force, heritage, contemporary, empathy or any other expressive meanings.
Objective Standards	
Spatial Sense	-In accordance with the design aim, stimulation of the spatial sense should be represented through the maximum acceptance and suitability of the design, or the maximum rejection of this design, and the distance between them is divided into total neutrality.
Spatial Relationships	- Considering harmony that forms the relationship between the architectural and interior elements and the nature of their association with the general form. - Achieving Morphological integration to create a sense of the continuing relevance of the constituents of space, without distracting the audiences in interior spaces.
Aesthetic Values	- Aesthetic goals should be considered through a set of basis that links the technical work as a reflection to objectivity.
Subjective Standards	

Designer's Vision	**-The designer can create an environment that is genuinely acceptable and satisfactory to the community.** **- The designer may have to use intellectual subjectivity in design as a tool to shock society or direct public opinion towards a specific issue and highlight it.**
Behavioral Expression	**- Designer's Vision should be linked to the set of emotions and reflective processes that are inferred through behavior and the consciousness and thinking of the audience emphasizes the methods of guidance, organization, and encouragement.** **-Providing space cues that reflect a behavior that characterizes the interior space by uniqueness.**
Morphological Standards	
Form	- Distance from conventional and familiar forms. - Rejection of unexpressive motifs and useless ornaments. - Exclusivity of the aesthetic values of the building in which include the morphological relations of volumes, shapes, and forms.
Architectural Elements	-Architectural elements should support the idea centered on human perception of the spaces and his ability to derive the idea and purpose behind them through the experience of the scene and the image
Materials	-The construction forms could be highlighted by the use of expressive materials, colors and textures with certain messages to follow the idea of reflecting life in the form formulated by science
Expressive Symbolic Standards	
Design Concept	-It is characterized by extremism and exaggeration, It is based on provoking recipients' sympathy and exposing them to the feeling of pain and distress.
Metaphor	-Metaphor methodology could be utilized in design as analogy or delegate from the issue that is needed to portray.
Belongingness Values	-The sense of belongingness is a fundamental pillar associated with the recipient perception and the extent of his cognitive accumulative experiences and could be enhanced through the architectural vocabularies.
Sense of Identity	- It is necessary to define a framework of references for nations' cultural identities based on; religion, usages, language, sense of value, awareness of political issues and cultural heritage.
Shocking Symbols	- Advocacy to use the symbols of surprise, which can develop as a factor of shock often.
Distorted Architectural Vocabularies	- Using of the vocabulary of classical architecture in reverse or distorted form enhance the concept behind uncanny architecture.

Source: Copyrights to the authors.
Table 3: Design Standards of cultural buildings through using Uncanny architecture trend.

Research Results:

The research concludes with a set of results which are mentioned in the following points:
 -Unconventional architectural trends rely on the use of abstract psychological and symbolic concepts that can be used to provoke the feelings of the visitor of the cultural building in a shocking way that makes the stranger look familiar and push him to think about the hidden message.

-The uncanny architecture is different from everything that looks traditional or familiar.

- Trends in unconventional architecture are bold in communicating messages even if the recipient senses its unbalance at first sight.

- The combination of the subjectivity of the designer and the objectivity of the design idea enriches the message presented to the recipient.

- The designer's ability to express the design objectives through the design elements plays a major role in design success.

- Expressing national issues through cultural buildings enriches the nation's civilization and preserves its cultural history.

- The affirmation of the Arab cultural identity in the interior design lies in the keenness to include elements of cultural and artistic heritage in the designs by the rules and principles of the design method used and supposed to suit the desired message.

-Symbolic metaphors in the design of cultural buildings play an important role in expressing the idea to be expressed.

- Deconstructive trends in the interior design of cultural buildings can be applied as a representative of the latest design schools, in line with the Arab cultural identity, but it can also be optimally exploited in expressing Arab national issues by shocking the recipient or provoking his emotions towards an idea which can be adapted to draw the world's attention to Arab issues.

- Research Recommendations:

- The research recommends paying attention to study the modern and unconventional trends of architecture and design in cultural buildings, which stem from symbolic psychological concepts that provoke the visitors in a shocking way that will interact with Arab national issues.

- The research also recommends focusing on preserving the cultural heritage and the national issues through the design of cultural buildings and the use of appropriate expression tools that stimulate the emotions of the visitor to reconsider all hidden concepts and invite him to think about the desired message.

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