



## RESEARCH ARTICLE - ENGINEERING

### Time as a Founding Factor in Architectural Thought

Heba Abbas Hameed<sup>1\*</sup>, Arshad Alanizi<sup>1</sup>

<sup>1</sup>Architecture Department, College of Engineering, ALNahrain University, Baghdad, Iraq

\* Corresponding author E-mail: [hebaabbasarch@gmail.com](mailto:hebaabbasarch@gmail.com)

Article Info.	Abstract
<p><i>Article history:</i></p> <p>Received 21 August 2023</p> <p>Accepted 22 September 2023</p> <p>Publishing 31 December 2023</p>	<p>The research dealt with the concepts of time and architectural thought and the extent of the influence of Ideas derived from the element of time on the variation and differentiation of architectural movements and schools, by reviewing a group of vocabulary such as nostalgia, present, and looking forward to the future, the null of the present and immortality in architecture and the null or deferred future, and the study of the duration of its reflection on architectural thought to lead to the differentiation of each of the architecture of Mesopotamia, Classical architecture, Modern architecture, Post-modernism, and Autonomous architecture, Deconstruction architecture according to these terms. The problem of the research was the lack of clarity on the influence of the element of time and its role in the differentiation of architectural thought. The main goal of the research is to focus on the role of the element of time in the differentiation and uniqueness of architectural thought. As for the research hypothesis, it focused on emphasizing the role of thought that distinguishes time in the differentiation of architectural thought, which in turn guarantees the uniqueness of societies, and the most important finding of the research is that Classical architecture is distinguished by its interest in the principle of nostalgia, and that there are some trends in Contemporary Iraqi Architecture based on the principle of nostalgia represented by nostalgia for formal elements, and that modern architecture urged in most of its buildings nostalgia for the present.</p>
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### 1. Introduction

Architectural thought represented by architectural movements, schools, and doctrines stems from being affected by many environmental, social, economic, and technological variables, and the architectural productions are affected by the prevailing thought that gives a character to the era or time of the productions in general, And that time differs and is distinguished according to the thought that distinguishes it and determines its affiliation, and among the most important intellectual principles that lead to the differentiation of time are the principle of nostalgia, present and future, and the principle of the null of the present, and eternity in time as well as the null or deferred future. According to those times, the architecture of Mesopotamia, classical architecture, the architecture of modernity, postmodernism, deconstructionism, and independent architecture can be distinguished, as well as defining each of these architectures according to the type of time that expresses them.

### 2. Research Methodology

The problem of the research was the lack of clarity on the influence of the element of time and its role in the differentiation of architectural thought, about the main objective, is summarized as understanding the differentiation and uniqueness of architectural thought through time in a way that serves to reach the uniqueness of society to distinguish its architectural and cultural identity. The importance of the research stems from the importance of the role played by the element of time in crystallizing the architectural and cultural identity based on the foregoing and as a result of the lack of clarity of distinction and uniqueness in the architectural thought that guarantees the uniqueness of society and enhances the spirit of the age in it, the hypothesis of the research focused on emphasizing the role of thought that distinguishes time in the differentiation of architectural thought that guarantees the uniqueness of societies.

About the research method or approach, the research will depend on comparative and correlational descriptive approach, as the research includes an analysis of architectural movements, schools, and styles, and how they are distinguished from each other, and a study of the impact of time on architectural thought within the framework of reaching an architectural product that is rooted, authentic, and distinct according to the time that you are interested in.

### 3. A Review of Literature

By reviewing the previous literature that dealt with the link between time and architectural thought and discussed the changes that occur in architectural thought at different times and according to multiple visions, the research suggests the possibility of presenting and analyzing it to

reach the role of thought that distinguishes time in the differentiation of architectural movements and schools, among which we mention the researcher's study [1] "Towards new architectural dimensions for communication between Islamic identity and the challenges of future architecture" in the search for the relationship of the past with the present and the future by linking the Islamic cultural heritage and the vision of the architecture of the future by reformulating the Islamic cultural heritage in a manner commensurate with modern trends to create a new architectural language that links the Islamic heritage and contemporary architecture.

As for [2] "Inspiration of urban heritage from reproduction to consolidating and sustaining local architecture and urbanism", his study was crystallized on evoking the local architectural heritage that is deeply rooted through an emotional orientation driven by feelings of nostalgia to recall it through formal reproduction or material vocabulary of heritage and re-employment and use of its details in buildings of various uses in the present time. The result was an architectural distortion that expresses an intellectual superficiality that does not represent valuable heritage concepts.

On the other hand, the study [3] "Interior architectural design between the multiplicity of intellectual concepts in the twentieth Century" discussed the analysis of the contradictory developments in intellectual concepts about interior design between the two architectures of modernity and post-modernism and revealed the ambiguity that accompanied them and the reasons for the difference and diversity in interior design, As for the most important objectives of the research, it focused on reaching intellectual concepts commensurate with the cultural and technical data in the Arab society, which is reflected in the Arab architecture and the requirements of its society.

As for [4] "Space Flow: Past, Present and Future," the research focused on developing a special identity by sending Signs or gestures to heritage values in the past time and evoking them in contemporary buildings in the present time on them. He urged the researcher to return to the past time as a source of originality and cultural identity and the rejection of the principle of modernity based on a break with the past.

Other studies discussed the relationship between different times, including the study [5] "A Visible History: A Synthesis of Past, Present, and Future through the Evocation of Memory within Historic Contexts" which worked to create a new space for innovation by reviving the past time and making it rooted to the future time. The study focused on creating a visual history that combines the past, present, and future (Panorama) by reviving the memory of race in a historical context,.

As for [6] "the dialectic of time within the architectural product" they discuss the temporal changes in the architectural product by raising questions about the architecture's view of time and framing the temporal correlations in architecture. Through this research, time can be read in the architectural product as a link in a general time course consisting of a panoramic historical series of architectural works distributed between the past and the present, The researcher considers that time is a founding and apparent element in the processes of design, implementation, operation, criticism, and history of the architectural product. The most important findings of the research were that time is continuous through its movement. As for the architectural product, it is relatively constant.

For his part, [7] "Time As A Tributary Of Architectural Work" distinguishes two types of tenses, one of which is physical, which is represented by lived time or (the present) and has certain measurement units, and the other is psychological through which it is possible to return to the past time and summon its concepts to progress towards the future, and the research aims to shed light on time as a design concept in Contemporary architecture and monitoring and analysis of how to use the element of time as a design tool The research concluded that time in architecture varies between the present time (the time of stability) and the time of retrieval to the past and is used to link with distinctive meanings and identity and the future time that refers to the aspiration for the future. One of the most important findings of the research is the possibility of using shapes and elements that cannot be understood at first glance, which means that there is a deferred reading within the temporal dimension, meaning that time is dynamic.

As for [8] "Ellen, Fixing the future? How architects make time in buildings for later life care" their study clarified the different relationships of architecture in the present time and its aspirations for the future, by studying the design of residential buildings in the present time for use in the future time, taking into account future needs and considerations. Depending on the skill of the future vision in the present time and the analysis of new theories and methods about forming special relationships with the aspirations of the future time for architecture.

The study [9] "Time as a Critic Factor in Architecture" focuses on testing and evaluating architectural texts by giving time the role of the critic to show its weaknesses and strengths according to the social, cultural, economic, and technical conditions. It is possible to predict the period to which that thought belongs by analyzing the basic intellectual principles prevailing in a particular architectural school or movement. The research confirms that time has a physiological effect on people or the urban environment because it depends on what is entrenched in the mind from the past time through collective memory, as well as on the intellectual changes that occurred in architecture in the present time.

#### 4. Discussion and Analysis

The research will address the vocabulary of Authenticity (novelty), nostalgia, present, and future, as well as the null of the present, immortality in architecture, and then the null or deferred future, and study the extent to which architectural thought reflects on that vocabulary, which leads to differentiation and contrast of architectural movements and schools as follows:

##### 4.1. Authenticity

The principle of authenticity (novelty) according to Kierkegaard is the realization of the authentic by facing reality, making a decision, and then sticking to it with passion [10]. Mesopotamian architecture was one of the first to adopt this principle, this was illustrated by adopting the proportional relationships that were found in nature and re-hiring them in their architecture, the most prominent of these relationships is the golden ratio, which is equivalent to 1/1.618, which is one of the most important aesthetic methods, as well as their use of basic geometric shapes given in nature, such as the circle and the rectangle. or it may be the nostalgia for the art of mathematics that is inspired by the dimensions and proportions of the material elements organized according to a divine pattern in nature and their use in their architecture as a method of construction, the golden ratio, and other aesthetic proportions can be seen in the dimensions of the buildings of the ziggurats, palaces, temples and other buildings that belong to the Sumerian, Babylonian, Assyrian and Akkadian architecture [11].

## 4.2. Nostalgia

Nostalgia is a term coined by Swiss medical student Johannes Hofer in 1688 AD from the Greek word *nostos* (homecoming) in the wake of Homer's *Odyssey* [12]. Nostalgia in architecture varies between nostalgia, past nostalgia, which is represented by returning to the cultural identity that characterizes a society in the past, or to the present time, which is continuous living from the past to the future, present nostalgia, and it may be to the future time looking forward to it, as follows Explains how nostalgia relates to architectural thought:

### 4.2.1. Past nostalgia

Nostalgia is one of the methods of architecture dealing with time, as returning to the past and nostalgia for it means respecting the historical and architectural cultural heritage of the country and evoking that past reflects the ideas of its designers, so classical architecture was based on nostalgia and its evocation, as the classical architecture was derived from the Greek architecture and ancient Rome with the collapse of the western part of the Roman Empire, where the architectural traditions ceased to be practiced in large parts of Western Europe, but they continued in the Byzantine Empire, which soon developed into Distinctive Byzantine style [13].

Researcher Cartwright confirms that the Renaissance period witnessed the interest of architects in the past on the one hand, and their exposure to ideas and buildings from different cultures and countries on the other hand, which led to the spread of new concepts as a result of the influence of classical architects on these new ideas, as in the works of the Italian painter and sculptor Michelangelo (1475 – 1564) [13]. One of the most important quotes from the past is what the French architects did in the second half of the eighteenth century when they employed classical elements by adding them to the facades of the buildings of their era, as in the design of the St. Genevieve church building in Paris, which was borrowed from the design of the Temple Roman Parthenon.

The Classical period was distinguished by its passage through different stages, the most important of which is the historical movement in architecture, as it is considered one of the most important trends that call for nostalgia for the past, and its beginning was specifically from the middle of the nineteenth century and continued until the twenties of the last century and details and styles dating back to a time gone by, and it was in two stages, the first of which was the Revivalism Movement Historical movements based on the principle of nostalgia for the past through the revival and employment of classical thought and styles of classical architecture such as the Renaissance style, Gothic style, Baroque, Rococo and others, which were distinguished by their buildings such as churches And Roman baths, terraces and temples, so the architects of the revival movement chose one of the architectural styles from the past and re-employed them in new buildings by adding an aesthetic element belonging to a past time [14].

The second stage was represented by the Eclectic Architecture, which appeared at a later stage of the Revivalism Movement, as it was concerned with selecting a group of classic styles, mixing them, and re-employing them in one independent building, that architecture relied on individual subjectivity in choosing historical styles [14].

One of the clearest examples of the principle of nostalgia in classical architecture is the Federal Reserve Bank building in Washington, whose designer borrowed the façade of the Parthenon building and re-employed it in the façade of the bank building to express that the American financial system is old, sober, strong, balanced and unaffected by time, as shown in the Fig. 1.



Fig. 1. Federal reserve bank building [15]

As for the present time, buildings belonging to classical architecture, the Gothic style, the non-western historicist styles, and others have appeared, since the aforementioned buildings were known as The New Classic Architecture (1760 – 1830) AD, which in turn was based on several principles, the most important of which is nostalgia time and the rejection of the continuation of the concept of modernity (1890-1945) AD, and the disagreement with the principles on which postmodern architecture is based, as postmodern architecture rejected the continuity of modernity, so they reject modernist buildings with forms dating back to previous times, but the neoclassicism made a return and nostalgia to the traditional rules of classical architecture, resulting in contemporary buildings with forms that formally belong to architecture classic [16].

The research believes that it is possible to apply the principle of nostalgia by evoking formal elements dating back to original architectural styles with timeless intellectual principles belonging to past times. As the exterior of the building appears to the recipient as if it was designed at an earlier time, while the interior design of the building must achieve contemporary functions that meet the desires of its occupants in the present time.

Ponta indicated that the great modernist architects tended to leave the established references to the intended indications instead of the reference, in an attempt for modernity to prove its existence and cut off from the past, but with that insistence, it could not completely cut off from the

past due to the association of those forms with the functional and technological program. As in some buildings, such as the Helsinki Cathedral in Finland shown in Fig. 2 [17].



Fig. 2. Helsinki cathedral in finland [10]

#### 4.2.2. Nostalgia for the present and the impact of technology on the architecture of the present and the future (Present Nostalgia)

The architecture of Mesopotamia, in addition to its great influence on human thought and the arts that represented the culture of society, but their architecture was highly influenced by religious beliefs and the prevailing religious ideology, so the gods and priests had a great role in the social and moral system, which they called by names from nature, such as the sun god, the moon god, and the god of life. The Residents built temples and high dwellings of the god to take shelter in them from disasters and protection from dangers that threaten their lives [18].

Classical architecture, although most of its buildings are based on the principle of returning to the past, does not prevent some periods of classical architecture were urging nostalgia for the present and leaving the past. In the period between 1600 AD – 1750 AD, Baroque art appeared in Germany after the end of the Renaissance Early in France and the High Renaissance in Italy as a reaction to the strict rules of the Renaissance, where Rome is considered the first source of Baroque art, as Baroque architecture was characterized by curved lines, and the oval plan replaced the rectangular planning of the Renaissance, as church plans contain oval shapes or incomplete signs that intersect With each other [19].

As for the architecture of the Rococo era, it developed in France in the late seventeenth century as a continuation of the style of art and architecture in the Baroque era, especially in the era of Enlightenment in which secularism prevailed and the attitude towards religion and morals declined to a large extent, and this was evident in their use of light colors, decorations and sculptures that express About an aristocratic life free from worries and problems, Rococo architecture also expresses nature and open spaces, but this period did not last long because it did not reflect the general public, so the neoclassicism movement was formed in France (Neoclassicism) [20].

Hatmal believes that one of the most important results of the great philosophies in the nineteenth century is the crystallization of the modernity movement at the beginning of the twentieth century and it still affects the contemporary time, Modernity liberated itself from the traditional form, put forward a record of estrangement from the past and heritage, moved away from the traditional cultural stock, and came up with new ideas that changed the world [21].

In the architecture of modernity, artists tried to move away from the traditional artistic forms that they considered old and expressed their desire to create new forms in art, philosophy, and social organization that reflect the newly emerging industrial and technological progress. Many modernists rejected religious fanaticism and the frankness of realistic ideologies and works of the past, as one of the salient features of modernity is the self-awareness of artistic and social traditions [22].

The idea of discontinuing and moving away from the principles of architecture and construction methods in the past was adopted by the theorist and architectural historian Eugene Violet Ludek in his book entitled *Entretiens sur Architecture*, which was published in the year 1872, through it, he stressed the importance of relying on the available data and capabilities of the era, and moving away from the overlapping traditions of the past, because they are no longer viable according to its philosophy, thus we can produce modern, contemporary and futuristic architecture [23].

The orientation of the founders of modern architecture at the end of the nineteenth century was towards creating an architecture that expresses nostalgia for the present and its requirements and supports moving away from the principles of decorating and ornamentation in the ancient classical architecture of the past and moving towards a purely functional architecture that meets the requirements and comfort of its occupants, and this was accompanied by a major revolution in technological development. Building materials such as iron, reinforced concrete, and glass sheets, which in turn led to the production of buildings with strong structures, lighter weight, and higher than their predecessors [24].

Jencks and Karl confirm that technology has a pioneering role in reformulating the formal patterns that belong to the past in a new way that expresses nostalgia for the present time and its advanced technical, technological, and structural data, and is distinguished by its difference and distinction from what preceded it. New buildings are unfamiliar in the past time [25].

In addition, the mechanism of design and construction differed in the past from the present time because of the capabilities and techniques introduced by contemporary technology in design and construction, in addition to the fundamental changes that occurred in people's lives on the civilized level through the inclusion of material and technical aspects that achieved an unprecedented boom [26].

#### 4.2.3. Nostalgia for the future

The Mesopotamian civilization preceded Western civilization by thousands of years with their future intellectual belief, especially in astronomy. Tablets were found showing, with high accuracy, the system of the solar system and the planets, and they had concluded that the sun is the center of the universe and that the earth is spherical and is one of the planets that revolve around the sun, as the Sumerians predicted the existence of another planet, which they called Nibiru first (Planet X), and they had determined its place within the solar system and that it would appear after 3600 years. In the current era, studies are continuing on the existence of (Planet X) [27].

In the field of architecture, by reaching the ideologies of modern thought, moving away from the past, and optimally employing the future vision, the first ideas of nostalgia for the future are generated, which were embodied through the declaration of future architecture by Antonio Sant'Elia and Mario Chilton, and the employment of those visions in several new capitals more flexible and dynamic, by taking into account the technical and technological developments that simulate the reality in which societies live, which led to the formation of previously unfamiliar architectural products such as skyscrapers, pedestrian walkways, bridges, and others [28].

When thinking about architecture based on the principle of nostalgia for the future, it is necessary to do so according to theoretical intellectual foundations, the most important of which is the principle of communication between the three items, the designer (the sender), the product, as well as the recipient (the addressee), because they are overlapping and connected and affected by each other and what is around them [29].

One of the most prominent architectural projects based on the principle of nostalgia for the future is what Eisenman did based on Freud's reflections on memory by comparing Rome with the mechanisms of memory by developing the design program for the Museum of Art at the University of California, as the building simulates a science fiction conception of the future and his idea emerged from imagining the shapes of buildings in (2049) [30].

Alanezi explains that Autonomous with its nostalgia for the future is opposed to the ideas of Freud, who emphasizes the exclusion of future aspirations. It is also affected by the present, as in Eisenman's (present nostalgia), but with these two nostalgia for the present and the future, it does not forget its first reference, which is the nostalgia, as in Rossi's post nostalgia [31].

Another trend of nostalgia for the interesting future is the creation of environmentally friendly buildings integrated with the technology of the present time and urges the exploration of new technologies and construction materials that are more durable and resistant to environmental conditions, which can be one of the future horizons by shifting towards 3D printed buildings that generate shapes The shape of futuristic architecture has changed, such as the Hi-Fi building in New York [32].

#### 4.3. *The absence of the present*

In this article, The End of the Classical, Eisenman describes, "This idea of progress gave a false value to the present and an incorrect imagination about an unlimited end " The crisis of the utopian charter of modernity led to the fading of the echo of progress to the end, and that period came to be called the Null of the present or Postmodern crisis or fear of non-existence. Therefore, according to Eisenman, another past and present that has no future must be invented another past in which Manhattan and New York play the leading role by changing the position of history and past time and evoking the present time [33].

In the context of occupying the void or crisis left by the architecture of modernity, Postmodern architecture emerged, which is a philosophical, artistic, and architectural current that appeared at the end of the last quarter of the twentieth century, It was distinguished by the beauty of creation, creativity, and innovation in forms and eclecticism, and it came as a response to the stagnation of the modernity movement [17]. Architect Philip Johnson had put forward the idea that modern architecture had excluded symbols, history, and traditions, and after the appearance of post-modern architecture, the architects of this approach adopted the idea of reviving the past, symbols, history, and traditions that modernity had excluded, in addition to that the architecture of modernity Do not care about the site, unlike postmodern architects, they are inspired by the spirit of the place intelligently, in addition to that, the architecture of modernity was purely functional, far from symbols [21].

Jenkins defines postmodern architecture as having a double expression, one of the parts is modern and the other symbolizes the past, context, symbolism, and the relationship to place he explained that postmodern architecture is associated with certain characteristics such as unexpected exaggerations or distortions of classical scale and proportions, while it embraces technology industry and at the same time avoid sham high-tech architecture [34].

Postmodern proposals formed general frameworks, as they focused on urban integration between the current architecture and all the traditions that were included in the previous storage, within the framework of achieving spatial and temporal affiliation, communication, and cultural continuity. Postmodern architecture included two approaches to dealing with the past:

##### 4.3.1. Historicism

Looking for continuity with the past to achieve a communicative architecture based on the model and the frame of reference, in which classicism is the main engine for its production [35].

##### 4.3.2. New modernism

They (D. K. CHINGA & others) showed that this trend tends to revive the artistic and aesthetic values of modern architecture, and although these trends urge a return to traditions and the need to rely on the experiences and experiences of the past to create the architecture the present, they produced a discrepancy in the interpretation of the idea of (returning to the past). Some interpreted the return to traditions with a view of preserving the cultural heritage, considering that traditions represent fixed models that continue without change, while others look at the past with an open view that includes a set of rules and ideas for different periods [35].

The research finds that both of the above approaches emphasize the return to the past, whether it is considered as a reference model or to preserve the cultural heritage. Thus, they emphasized the relationship of postmodernity with the past time to address the crisis of the null of the present.

Mondoure confirms that the relationship of the present time with the past time is a relationship between the evocation of cultural thought and the formal elements of the past time. And work to re-employ them in contemporary buildings for their time [4]. Makhoul mentions that symmetry

in constructions and buildings around the world dates back to the era of globalization and the association of people with unified provisions and laws, so it became difficult to distinguish between the culture of one society from another, but on the other hand, society today can achieve a balance between returning to identity, uniqueness and originality, and looking forward to the future through Building bridges of communication between the past, present, and future, in other words, between nostalgia for the source of inspiration and architectural thought rooted in identity in the past on the one hand, and the development of technology in the present time to preserve cultural continuity and reach it to subsequent generations in the future on the other hand [36].

Abdul Latif and Al-Meligy add another approach to addressing the null of the present by returning to the Islamic identity rooted in the past, by studying the relationship between two aspects, the first of which is nostalgia for the past and the desire for progress in global and local contemporary architecture in the present and future on the one hand, which can be achieved through The merger between the architecture of the past time represented by the material forms used in Islamic architecture with moral meanings and principles represented by balance, honesty, and the appropriateness of the architectural product to its location and environment, which express an original and immortal intellectual and cultural depth over the three times (past, present and future), while the other side of the mentioned relationship is represented With the requirements of the present time that seeks cultural continuity in the present and until the future, by reformulating the independent and timeless Islamic formal vocabulary and employing them in the buildings of the present time to produce buildings that meet the requirements of the times and have a deep-rooted intellectual depth [1].

However, the researchers whose proposals addressed the principle of nostalgia time did not reach the degree of the appropriate process to achieve the aforementioned principle, as other systematic ways are more practical and clear to the principle of nostalgia time that the researchers did not address, represented by the schools of new rationality and new realism, both schools support a return to the past, but the nature of the return is different. The new realist school considers history as a repository of images and forms, as historical formal elements from the past time linked to themes from the popular culture of societies are selected from multiple sources that do not belong to architecture, and work is being done to re-employ them in designing buildings in the present time, the form is thus independent and immortal in the trio of time (past, present and future) [31].

As for the new school of rationality, it considers history as a continuous quantity in which the indicative rules and principles of architecture arise and develop, as it urges a return to order and the use of the rules of annexation and installation that distinguish the various styles of buildings as a basis for generating the form [31].

#### 4.4. *Immortality in architecture*

##### 4.4.1. The concept of immortality in linguistic and reformist dictionaries

The concept of immortality is defined as stated in the dictionary of meanings as immortality, and immortality is the permanence of survival, and the immortality of its remembrance made it immortal and perpetual, and the abode of immortality is heaven and hell, and the immortality of the soul means its survival after death and its non-annihilation, and immortality is the perpetuity or continuity of survival at all times and does not require that it be in One time without the other [37].

##### 4.4.2. Immortality in architecture

The development of the idea of material immortality for man led to the development of architectural thought, after which architects began to construct religious buildings and the development of their construction and details according to the data of the era and its available techniques to be a monumental product immortal through the trilogy of time (past, present and future) that expresses the spirit of his era to the aftermath.

Moral immortality in architecture is linked to fixed conceptual principles and values, which are achieved by originality and civilized continuity of formal relationships, intellectual principles, and timeless basic concepts. Several buildings have learned to achieve immortality and continuity in architecture. However, the Autonomous Architecture is one of the most important of these buildings and the most realization of the principle of immortality, because the basic intellectual principle of it is based on the principle of the eternity of forms and their re-employment in a time other than their time to achieve another meaning for them [31].

Alanezi confirms that Autonomous Architecture indicates that the form is independent of time and place, and it is independent of function, pattern, scale, symbol, meaning, motivation, matter, style of appearance and beauty, as well as the level of culture and thought [31].

The immortality of the form is one of the aspects of moral immortality in architecture, as the form is immortal in all times and all that takes place on it is a change in viewpoints to the truth, but the truth does not evolve, and in this case we look at the times of the past, present and future as one presence that is always present, and what As long as the form is eternal, it is separate from the human being, and as long as the meaning is linked to the human being, thus the form is independent of the meaning not all forms need to fall under one style [31].

##### 4.4.3. The concept of immortality in the architecture of Mesopotamia

The architecture of Mesopotamia was distinguished by its advanced architectural art, and the ziggurat is the most important feature that distinguishes its history. The term ziggurat means the high place, and the Sumerians, Akkadians, Babylonians, and Assyrians had established these ziggurats as pyramidal temples listed at high altitudes. The number of ziggurat discovered so far has reached about 35 ziggurats in Iraq. Sources are indicating that it is older than the pyramids of Egypt, Peru, the Mayans, and the Mexican Incas [38].

The construction of the Mesopotamian ziggurat dates back to the end of the third millennium BC, while the Ur ziggurat dates back to around the year 2100 BC. The ziggurat was built on a rectangular, oval, or square platform and is a pyramidal structure topped by the temple and its layers range from two to seven layers [18].

Bricks made of adobe, palm trunks, and cane sticks are used in the construction of ziggurats, and bitumen as a bonding material. Its walls were covered with adobe which has a large thickness that sometimes reached about 6.7 feet. Equivalent to 2.04216 m, this packaging does not include all the ziggurats that were built during the Sumerian eras, so we find most of its features collapsed and disappeared [18].



As for the reasons for building the ziggurat, sources are indicating its use as an astronomical observatory for scientists, and other sources indicate that the temple at the top of the ziggurat is a resting place for the (their virtual) gods when they descend from heaven [18].

Alanezi states that the principle of independence of form from matter (proof of immaterial form) was present in the ancient Mesopotamian civilization and architecture, and this was proven by some tablets dating back to the intermediate Assyrian period between the years 1231-1205 BC, whose theme symbolized the independence of immaterial value and its separation from physical [31].

Alanezi adds that what confirms the independence of the immaterial value from the material is the idea of placing a closed door in front of the entrance passage to the ziggurat of Ghoga Zambil, which dates back to the twelfth century BC in Sumer, as the visitors of the ziggurat circle around the door without going through it, that principle enhances the human feeling of moving from one space to another as a prelude to entering the ziggurat through the idea of the existence of the entrance, even if the entrance is through it [31].

#### 4.4.4. The concept of immortality in ancient Egyptian architecture

The goal of building the pyramids in this way and the horizontal arrangement was and still is ambiguous and not agreed upon, and scientists and specialized researchers conducted many studies that tried to reach the mystery of building the pyramids, and each of them explained the reason from his point of view [39]. However, the scientist Robert Temple concluded that the philosophy of building the pyramids in this order and consistency is due to a great equivalence and interdependence with the arrangement of the stars of the Orion belt, which represents a star group consisting of three stars, and Robert concluded that there is an amazing correspondence between the sizes of the pyramids and the distances between them and the distances that separate the stars Orion's belt separated from each other and their sizes were very closely matched. Thus, scientists were certain that the pyramids of Giza are a true picture of the sky on earth, and that the Nile River is a ground reflection of the Milky Way galaxy that passes between the stars [40].

As for English astronomers such as Howard Fees and Piazzzi Smith, they concluded that the pyramids were built as astronomical observatories for astrology because the Pharaohs considered astronomy part of their faith, and the English mathematician John Taylor discovered the pyramid inch and through it revealed the mathematics of the pyramid, as it is mentioned that it determined the time and date Events in days and hours [41].

As for Pythagoras, he confirmed that the geometric forms have a great power that man cannot visualize and that the shape of the triangular pyramid's ribs acts as devices that modify the frequency of the energy of the universe, which comes from cosmic rays or sunlight [36].

#### 4.5. The null or deferred future

Deconstruction appeared in political and economic conditions dominated by tension and anxiety, and the emergence of irrational philosophies, which reject constants and are based on questioning and demolishing everything rational and stable. It works to destroy the text, dismantle it, then rebuild it and create a new meaning for it, Deconstruction becomes a constructive and anti-constructivist movement at the same time [42].

Al-Khafaf indicates that the deconstructive language confirms that there is no absolute truth, no foundation, no essence, and no traditions, and this works to destroy the centrality of the mind and presence, as there is no homogeneous text with a unified meaning, so the principle of (the death of the author) appears to open the way for more interpretations and interpretations in the meaning [43].

Hollinger indicated that Derrida's analytical methods of deconstruction summed up some of the principles of transition in time through deconstruction, as the scientific thinking in deconstruction is based on the principle of dismantling the classical past period and demolishing the existing social, political, and cultural principles in the present time. Thus, the principles of deconstruction are based on dismantling the idea of absolute time by displacing the current moment in time (now) from its fixed place on the line of time [44].

It seems that something is linking autonomy with deconstruction, which makes the latter a frozen shadow left by AUTONOMOUS during its movement (immanence of ends), although both of them talk about the subjectivity of ends and the separation of the thing from itself, Autonomous does so from a distance linked to the essence, to return after that to reform the subject of architecture (thing) in contrast to deconstruction, in which there is no certainty, center, or essence [31].

The metaphysics of existence indicates that the present or (now) only exists, but the past and the future are considered disconnected because the past has ended and the future has not yet ended, Derrida dismantled the philosophy of presence and linked the past and the future as the past is connected to the present and the future is absent, meaning that Derrida believes that there is A continuous link between existence and absence, indicating that there is no absolute existence or absolute absence [45].

In addition, the most prominent principles of deconstruction were to move away from the traditional architectural vocabulary and work to transform it into abstract images, leaving the freedom of self-interpretation for the recipient of their buildings, the adherents of deconstruction have urged distinction and ambiguity in the architectural thought of their projects and the dismantling of contradictions such as (presence and absence, darkness and light, gravity, and lack of it, life and death as well as complexity and contradiction), and rebellion against everything that belongs to the classical past time, and accordingly it is an architecture that demolishes the past time and moves towards the present tense in the absence of the future [46].

One of the most important examples of the application of the principle of deconstructive architecture is Peter Eisenman's House X. The house was designed on an area of 8,000 square feet on a large sloping site punctuated by landscaping. The house was divided into four quarters to reduce the scale. The composition of the house is understood initially as an assembly of four Neighboring squares that are not connected, but in the final configuration it is a more complex principle, as it represents from the front a more complex and incomplete structure, as for the back, it refers to a simple and stable unitary structure, as Eisenman expressed in it the principle of deconstructive architecture based on destroying the triad of time in the present time, where all times become omnipresent time, as for the structural aspect of the house, the architectural grid in the Eisenman house becomes present in the ceiling, walls, and floor, so its design appears as if it is not based on anything, as there are no exposed columns or beams, but rather it is covered with horizontal surfaces [47], the Parc de la Villette urban park project in Paris by Bernard Tschumi is one of the most important and largest projects that express the principles and ideas of deconstructive architecture [48].

## 5. Conclusions

- Classical architecture is distinguished by its interest in the principle of nostalgia represented by returning to the intellectual, cultural, and architectural structure that dates back to the times that preceded it, as it thus acts as a link between the past and the present and its continuity in the future. These intellectual principles were represented by strength, balance, and precise geometric proportions, and work to revive them to represent the value of classical architecture in the present time.
- There are some trends in contemporary Iraqi architecture based on the principle of nostalgia represented by nostalgia for the formal elements with timeless intellectual principles that go back to the architecture of Mesopotamia, so the exterior of the building appeared to the recipient as if it had been designed earlier. As for the interior design of the building, it must achieve contemporary functions that meet the desires of its occupants at present.
- Some exceptions in the architecture of modernity relied on classical principles such as unity, stability, and consistency because it could not completely break away from the past and move towards the present, and this appeared in some of their buildings such as the Helsinki Cathedral in Finland.
- Classical architecture, despite its nostalgia and its revival of it, nevertheless, in some of its joints, emphasizes nostalgia for the present, as some neoclassical revival movements were built on intellectual principles and concepts that moved away from what was prevalent in ancient classical architecture and followed the requirements of its present age and its social and intellectual data. One of the most prominent examples of that period is the monument to the English scientist Isaac Newton in 1784 to the architect Etienne Louis Boullée (1728-1799).
- Adopting the principle of returning to the past to occupy the null of the present is one of the most important ways to enhance the civilization and cultural identity rooted in society and express its belonging, as the formal elements of symbolic importance in the past time are a source of inspiration for the architecture of the present and future times.
- The Autonomous Architecture is distinguished by its eternity in time because the form is eternal in all times and is independent of meaning, function, symbol, and scale.
- The belief of the architects of deconstruction in the death of the author made them renounce the past, leave the future, and think about the present only, and they considered that the future is null for them, meaning that their architecture was designed only to dismantle the present.
- The most of previous literature that the research addressed is a review of the formal vocabulary or architectural relations within a specific time and is not a reflection of the thought derived from the concepts of time in architecture. This is called synchronization or timing (Chronology), which means the association of a specific formal item (usually old) with a specific time. Our research discusses the existence of ideas derived from the element of time such as eternity and the extent of its impact on architectural thought, and the existence of aesthetic experience outside the human body, as well as the existence of timeless elements brought by independent architecture.
- Modern Architects were not able to completely cut off from the past by the solidity of the sign and its intended significance, and some exceptions in the Modern Architects did not express the present time and its available techniques only, but relied on nostalgia and could not completely cut off from Classical thought. It was based on classical principles such as unity, stability, and consistency, which the architects of modernity employed in the forms of their buildings, which seem simple but have a deeper meaning to express the ideas and principles of modernity and the revolution it brought against classicism.
- The research finds that the architecture of modernity urged most of its buildings to break with the past and deal with the present and the future and its available technologies, and that the proposals of modernist architects and other artists and writers represented a call for a revolution to completely transform from previous architecture and reject all its fixed and imposed components on human, the city and society, and this revolution was achieved quickly Superhero due to the new concepts of its era and the era of liberalism, technologies, metal, glass, and electricity.
- The research concludes that despite the great potential of technology and the remarkable developments in the field of architecture brought about by nostalgia for the present time on architecture, which produced buildings that had no precedent in the past, as well as the competition of societies among themselves to produce the most prominent and most advanced buildings in line with the requirements of the present time, but The separation between the three times is placebo, as the present cannot be separated from the past, and the future cannot be detached from the present, because the present is an accumulation of phenomena that occurred in the past and employed a deity in the present. As for the future, it cannot be built on a vacuum, it must start from what has been achieved in the past and present. Therefore, the research encourages and urges a reconnection and nostalgia, because in that there is a return to the well-established architectural thought that is rooted and to immortal forms that express themselves, carrying the immortal meanings that express the identity and privacy of society, which distinguishes it from what is lacking in the buildings of the present time with repeated and borrowed forms from several cultures. , since the architectural thought in it has declined and most of the buildings of the present time have become a reflection and imitation of the forms of other international buildings, and most of the projects follow the same design, construction, and formal methods, thus representing a global style followed in most Arab and international societies so that the architecture of the present time becomes a lost identity for being The product of a mixture of multiple cultures.
- The research tends to make future architecture an integral part of its natural environment and its surroundings, as the idea of borrowing forms from the natural environment of a community and employing them in future buildings contributes to creating an architectural thought that expresses the identity of that community and enhances its material and moral environment that distinguishes it from others. The shape of the building will be immortal and ethereal from past time to future time and confirms the overlap and continuity of the three times (past, present, and future) with each other, as the research sees in the framework of producing a local future architecture that expresses nostalgia for the future, it must be in its two physical and moral parts that Simulate the intellectual depth Which expresses the civilized and cultural heritage and achieves the requirements of comfort and luxury and enhances the identity of our Iraqi society by relying on the available technologies of the era, so the research considers and encourages the production of future architecture by returning to the well-established.
- The most important reason for adopting the principle of returning to the past to occupy the null of the present is the similarity in the structural and formal structures and structural elements that have come to represent globalization with unified principles called the international style that can be perceived all over the world, which led to difficulty Distinguishing a specific cultural identity that goes back to an idea rooted in the past, so this research suggests returning to the past as one of the ways to strengthen the cultural and civilizational identity that is rooted individually for societies and that expresses the belonging of its population. Returning to the past in the present means nostalgia for the timeless concepts and formal elements of the past that have material and moral value and that will become a source of inspiration for the architecture of the present and the future.



- The research concludes from the foregoing that the deconstructive architecture focused on working with the principle of breaking down the triad of time, As the present time is a linking point between the past and the future, which is the result of the present time, thus there is no separation between the three times (past, present, future), so they are all interrelated and interdependent. On the other hand, the future time for deconstructionism is considered null, as the founders of deconstructive architecture believe that the future time exists in the present time spiritually, so there is no future goal in most cases, because the main goal of deconstructionist architecture is to dismantle the material, moral and symbolic bases of the past and present time, so most of their buildings came in strange shapes and it is not interconnected.

## 6. Recommendations

- Urguing the designers of the architecture of the present time to return to the fixed principles rooted such as strength, balance, and proportion in classical architecture because they express a deep intellectual depth and re-employment by the requirements of the architecture of the present time
- The necessity of extending bridges of communication with the past time represented by the architecture of Mesopotamia, because this is a return to the well-established architectural thought and to the timeless forms that express themselves, carrying the timeless meanings that express the identity and privacy of society.
- The importance of moving towards future buildings that are environmentally friendly and integrated with the technology of the present time, and be inspired by the well-established intellectual and formal principles that express the culture of society and enhance its identity.
- The possibility of adopting the principles of Autonomous Architecture based on returning to the formal material principles of the past time and re-employing them in the buildings of the present and future time because Autonomous architecture works according to the principle of eternity in time.
- Refuse to design buildings according to the principles of deconstructive architecture, because this is not consistent with the intellectual and cultural principles of Iraqi society, and deconstructive architecture is based on breaking the triple time (the null future) and not belonging to the previous intellectual principles in the past time.

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