



The abstraction of architectural heritage in contemporary local architecture: Abstraction in contemporary Iraqi architecture.

تجريد التراث المعماري في العمارة المحلية المعاصرة: التجريد في العمارة العراقية المعاصرة.

Sura Kassim Ameen ^{a*}, Ibrahim Jawad Kadhim ^b, Ali Moussa Hussein ^c

^{a,b,c} Department of Architectural Engineering, University of Technology, Baghdad, Iraq

Submitted: 09/10/2019

Accepted: 31/12/2020

Published: 25/1/2020

KEYWORDS

Architectural heritage,
abstract philosophy,
contemporary architecture,
heritage.

ABSTRACT

Abstraction is used in architectural and interior design and is based on abstraction with formal values, taking into account the functional aspect of architecture. Architectural heritage represents the cultural value that directly affects successive generations, and embodies cultural values to reflect the social, economic and political aspect that contributes to the advancement of human civilization, and architectural heritage is the basis of architectural thought in societies that have unity. Cultural. He found that the concept of the philosophy of abstraction has multiple views, whether Western and local and dependent on the nature of cultural, social and environmental thought, and for this the aim of the research was to activate the role of the philosophy of abstraction in the formal formations of both the vocabulary of heritage architecture and contemporary architecture by architectural elements, Analysis of international, Arab and local architectural productions, to reach a conscious understanding of the philosophy and thought of abstraction in contemporary heritage architecture, and its spiritual values to reach the essence of things. The practical study was the analysis of Western and Arab and local projects with heritage architectural values and a practical study compared to them to see which architectural outputs were able to generate heritage values stable from its past in abstract geometric forms reflecting different ideas.

الكلمات المفتاحية

التراث المعماري، فلسفة
التجريد، العمارة المعاصرة.

الملخص

يستخدم التجريد في التصميم المعماري والداخلي ويعتمد على التجريد بالقيم الشكلية مع مراعاة الجانب الوظيفي للعمارة. أما التراث المعماري يمثل القيمة الحضارية التي تؤثر بصورة مباشرة على الأجيال المتعاقبة، ويجسد القيم الثقافية ليعكس الجانب الاجتماعي والاقتصادي والسياسي الذي يساهم في رقي الحضارة الإنسانية، ويعتبر التراث المعماري هو أساس الفكر المعماري في المجتمعات التي تمتلك وحدة ثقافية. لقد وجد ان مفهوم فلسفة التجريد له وجهات نظر متعددة سواء كانت غربية ومحلية ومعتمدة على طبيعة الفكر الثقافي والاجتماعي والبيئي، ولهذا جاء هدف البحث تفعيل دور فلسفة التجريد في التكوينات الشكلية لكل من مفردات العمارة التراثية والعمارة المعاصرة من جانب العناصر المعمارية، وتحليل النتائج المعمارية العالمية والعربية والمحلية، للتوصل الى الفهم الواعي لفلسفة وفكر التجريد في العمارة التراثية المعاصرة، وما تحويه من قيم روحية للوصول الى جوهر الأشياء. تمثلت الدراسة العملية بتحليل مشاريع غربية ومشاريع عربية ومحلية تحمل قيم معمارية تراثية ودراسة عملية مقارنة بينها لمعرفة أي النتائج المعمارية تمكنت من توليد قيم تراثية مستقرة من ماضيها بأشكال هندسية مجردة تعكس أفكار مختلفة.

*Correspondent Author contact: 9008@uotechnology.edu.iq, +964 7721046000

DOI: <https://doi.org/10.36041/iqjap.v19i1.490>

Publishing rights belongs to University of Technology's Press, Baghdad, Iraq.

Licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/)

Introduction

In past few years, the architectural activity witnessed global architectural products that simulate and conform to the criteria of architectural creativity from the side of formal formation and the respect of ideas of culture and local architectural heritage, this requires highlighting the philosophy of abstraction to find a contemporary architectural style stemming from a flexible concept featured by local architecture. Thus, the relationship between heritage architectural values and contemporary architectural trends must be studied. Architectural trends have emerged calling for the application of concepts and patterns that represent the integration between heritage and contemporary aspects in terms of architectural formation as it is in postmodern architecture, it attempted to restore the human dimension, cultural and historical identity of the architecture. This requires an analysis of the architectural projects with heritage values through the philosophy of abstraction and investigating several concepts to be used in contemporary local architecture and defining the set of local heritage architectural values that ensure the continuation of the local identity. Defining heritage values contributes to building a future vision for architectural productions in such a manner that equals contemporary with heritage, where both influence each other to reach architectural products featured by contemporary architectural creativity and linked to the local identity.

- The research problem was: -The presence of a knowledge gap about the abstraction of contemporary heritage architectural values in local architecture.
- Research Objective: Activating the role of the abstraction philosophy in the formal formations for each vocabulary of heritage and contemporary architectures in terms of architectural elements.
- Research_ Methodology: Building a knowledge framework about the concept of abstraction of architectural values and contemporary architecture to extract vocabularies and indicators related to contemporary local architecture.
- Conducting a comparison through the vocabularies and indicators that were obtained between abstracting heritage architectural values and contemporary architecture.
- Research results and conclusions.

The concept of heritage and heritage architecture

Heritage is a name given to the total outcomes of the previous civilizations that are inherited from the Ancestors, and it the product of human experiences, desires and sensations, whether in the fields of science, thought or literature, and it extends to include all the material and emotional aspects of society, including philosophy, religion, art and urbanism

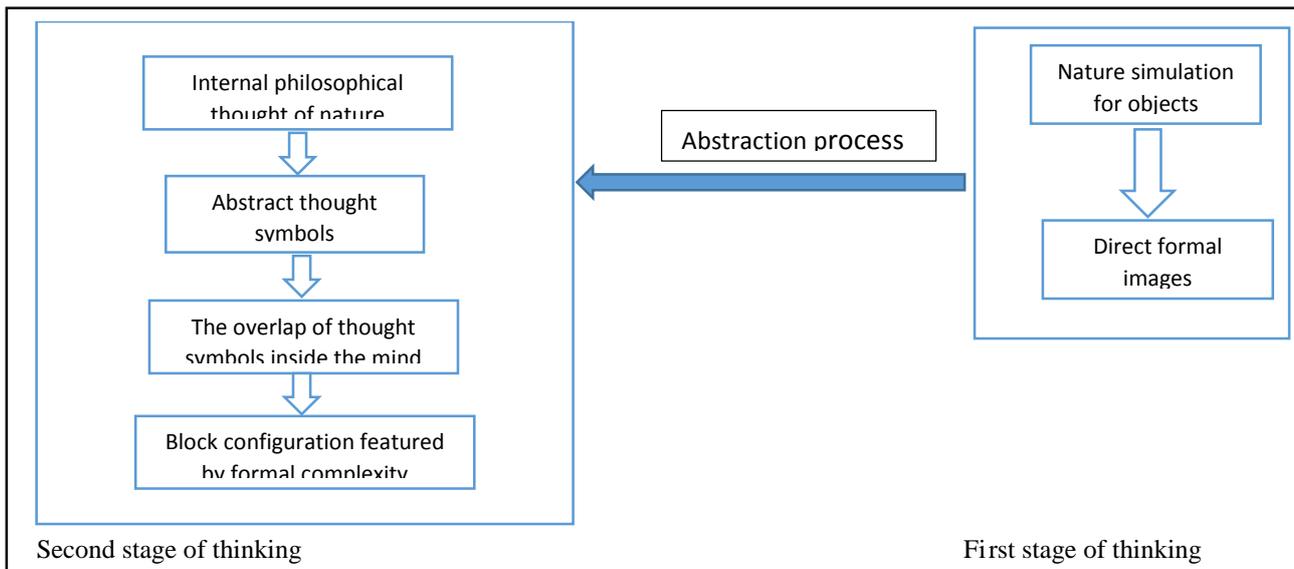
That heritage forms a living element on which the lives of human societies are based this day and continues to the future, it grants the human society advantages that make it different from other societies, because heritage is preserved, recorded and transmitted from one generation to another. In fact, heritage is considered -in its original form- stored in the society, and it is an identifier to the nature of human behavior in its daily life. Thus, it does not represent a physical stock only or a theoretical, conceptual entity in its own right; instead, it appears in two levels, material imaginary. (Jelawy, 2013, P 3).

Heritage represents a source of creativity, since it is a product of religious beliefs, social and mythical circumstances ..., which were embodied in magnificent artistic images to express these beliefs and conditions, and rooted in the conscience of the groups. Heritage has a link to generations over time, as it gives people a sense of their roots in history. Heritage architecture, with its material and moral components, represents a real civilized vision that reflects prosperity and development of life and continues as an architectural heritage and distinctive milestones across generations to achieve societal communication through previous experiences and cultures. It is considered the front expressing human civilizations (Kloppen, 1999, P28-32). Thus, heritage architecture is considered one of the ancient architectural monuments that reflect sequenced and accumulated experiences that respect the environmental, cultural, social and aesthetic privacy and driven from the components of nature to harmonize the human cultural values with nature and space.

Heritage architecture, with this, represents architectural products that hold heritage values that have a clear identity, recognized material goals through originality, accumulated experiences and investing the components of the era to achieve their continuity throughout the ages.

The concept of abstraction philosophy

Abstraction explains the process of reformulating reality artistically. It is the process of moving from simulating nature and the outside world to thinking and feeling the internal philosophical thought. This reality is translated using engineering forms to simplify natural forms and enable them workable and Installable from an engineering point of view (Richard, 1999, P xi-xii). The mind forms the masses with the help of latent human thought, and the abstract masses have been expressed sensibly and correctly understood by humankind (Ali, 1999, p34). Thus, abstraction is simplifying the forms and elements that exist in nature to create formative configurations that express single or multiple complex blocks that achieve formative complexity from a form featured by simplicity (Raafat, 1997, P298) as shown in “Fig. 1”.



“Figure 1” shows the thinking process that a figure goes through/ researchers

Abstraction is the process of separating initial objects from secondary, casual, and variable. It helps to move from the cumulative perceptual level to theoretical cognitive level, based on the realizing commons in terms of formation and constriction on concepts, principles, rules, laws, and theories (Hamdi,2009,P76).

Procedural definition of abstraction: It is the collection and integration of formal elements and expressive values, and moving away from the source of inspiration to discover multiple relationships and aesthetic values that meet to achieve formal integration through the values that the individual seeks to achieve.

The concept of abstraction in art and architecture

The concept of abstraction first appeared in the arts, the word (abstraction) was as old as art, it was found that art forms does not always of real indication, rather forms start from the (object: which is the realistic physical material) and from the (subject: which is unrealistic form of conjecture) (Al-Bahnasy, 1997, P 270). Art has been associated with abstraction in various aspects through the formal relations between the part and the whole, so that everything can be fused under the creative process. All arts cannot be art works unless they are abstract (Hamdi, 1998, P 59). Thus, the concept of abstraction in art can be realized through the realistic formation of elements that express perceived intellectual values of the various stages of time. Abstraction has been reflected in architecture, where the fundamentals of abstraction were related to nature and its view from interconnected geometric angles in the form of various rhythms, holding accumulated images of an intellectual stock exist in the mind of an individual. Man seeks to express various ideas using abstract forms and this is represented by abstraction, which aims to removes the reality and its connections (Attia, 2003, P 8).

Abstraction has emerged in Islamic architecture in an influential manner, so, the outcomes emphasized the architect’s separation from the direct interpretation of nature and objects and abstracted them from their fundamental form to create new formal images featured by aesthetic and spiritual and create the feeling of strength and extent. These images were formed in a coherent infinite manner, to reflect its strengths through

cohesion, bonding and union (D'Avannes, 2008, P37). In Islamic architecture, the architects adopted abstraction through the vision of the universe, existence and the essence of peace transcending tradition and expressing personal visions, they emphasized the abstraction of forms from their material values, unifying the style and highlighting the essence and value of the forms that suggest peace, to rise up the awareness of recipient by integration between the appearance and essence for reaching the absolute touch (Ahmad, et al 2008, p. 58). This trend was featured by reaching beauty through the unity of form within a basic engineering form; **thus abstraction is part of the spiritual and artistic heritage associated with it. It also continues generating multiple forms featured by diversity and achieves intellectual and formal continuity to contribute to the continuity of thought from past to present and then future.**

The abstract school has given great attention to the natural origin of objects and viewing them from an engineering angle, so things turn into abstract engineering shapes, i.e. just interrelated rhythmic pieces that do not have direct visual indications, rather they carry in their folds the summary of the stock that the architect went through. For this reason, the word abstraction represents the removal of all traces of Reality and its connections with it and reflects the values and the intellectual core of objects (Attia, 3003, P 76).

Ernst Haeckel concerned with the relationship of simple shapes with their surroundings, others followed this trend s Mondrian and the De Stijl group, they went towards abstraction as the method to approach the truth and return to the origins and beginnings. (Joseph,2008,P75).

The meaning of abstraction has emerged as the discovery of the public order or law behind objects, so that their values would appear and reveal their essence (Al-Basyouni, P 56). As for abstraction in the deconstructive trend, it depended the cultural ideas represented by the revolution, heritage abandonment and revolutionary ideas that appeared to affect architecture through abstracting basic engineering forms and constructing forms and works that exceeded the desires of society members and human needs to create architectural products that achieve an intellectual vision represented by a new formative configuration (Johannes, 2002, P 27).

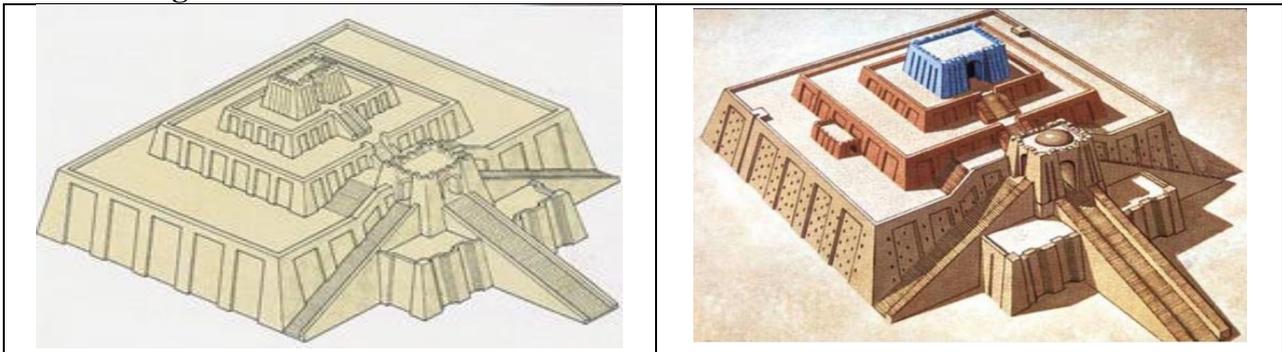
The effect of abstraction on the architects emerged in another way through the architectural products that hold aesthetic and spiritual values related to the human's belief and religious values. Forms featured by strength, synergy and extension overlapped in a coherent and infinite form have emerged to reflect the essence of thought and the value of existence and to overcome the tradition, to grant the recipient a reassurance, unity and interdependence. Therefore the result appeared as a unit integrates between the appearance and the underlying essence to try to reach integration, although the shape does not conform with the appearance, rather it identical the underlying essence. (Thuwaini, P 7-9).

The philosophy of abstraction appeared in architecture as it is in religious architecture in Iraq, where the ziggurats were used with their horizontal plane, which indicates stability and divine justice of God, and this was reflected in the square shape, the ziggurat up-gradient indicated the degrees of faith and transcendence (Okasha, 1994, P 55), as illustrated in "Fig. 2".

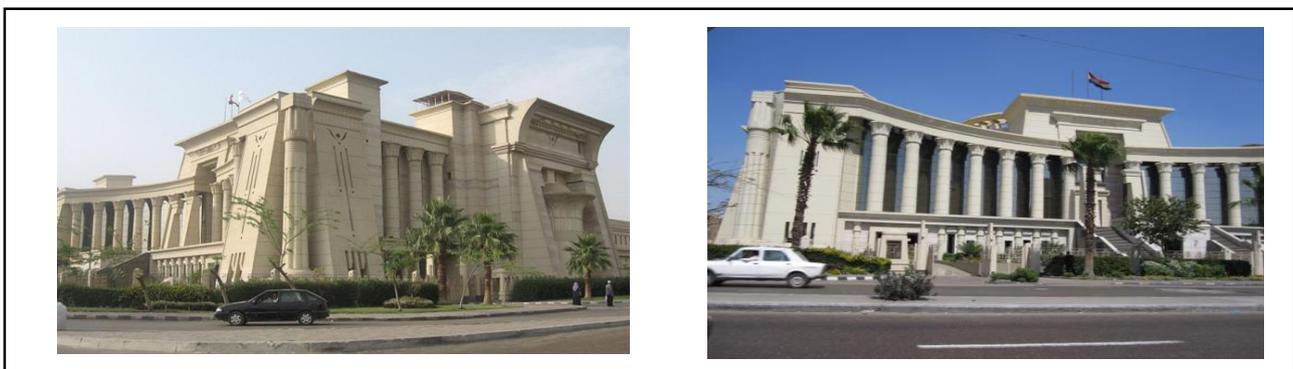
The abstraction was adopted in architecture by trying to simulate the history with contemporary buildings in the form of formative elements driven from the local heritage and are abstracted to be employed in local contemporary products to acquire the local or Islamic character. Thus we find that most architectural products do not represent architecture with design and environmental dimensions, rather they are more than attempts to compile formal items with a local heritage that acquired intrinsic values from its past and featured by contemporary to relate to the outcomes of that time and its local and environmental character (Haiba, 2011, P 2)

The adoption of the inheritance abstraction in architecture is reflected by the building of the Supreme Constitutional Court in Egypt, which is located on the Maadi Corniche designed by the architect Ahmed Mitw and the architect Ahmed Khaled. It represents a product of unique value in choosing the Pharaonic elements to represent the basis of design in that court and reflects the impression of highness and awe that suits a constitutional court examines the crucial issues affecting Egyptian society. The architects relied on pharaonic architectural elements but they abstracted it of details, formulated it with new formative images and employed a new method to generate a new product related to the cultural heritage with intellectual and formal continuity with past and present through the formal abstraction concept along with preserving the core and intellectual value of an item to contribute achieving the formal dialog between the sender and the recipient (Salim, 2014, P 46) as shown in "Fig 3". **Abstraction in architecture is that one that does not depict things as they appear in nature, rather it depends on formal aspects of subjective form-driven**

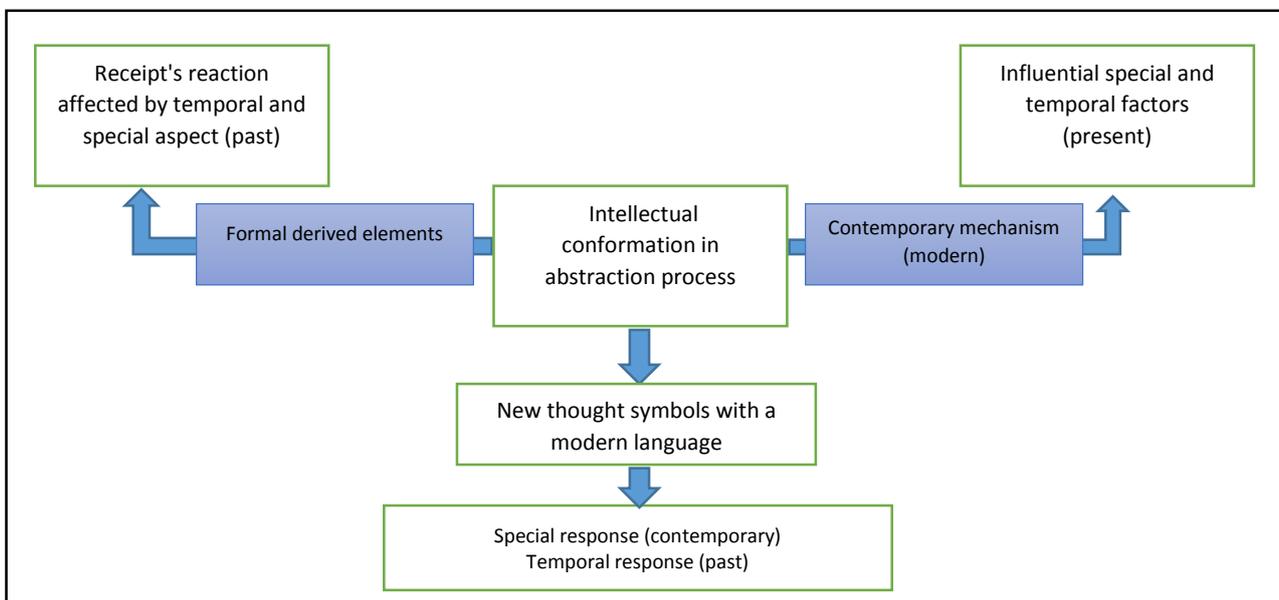
from existence, but their readings depend on the knowledge stock of the recipient, as they represent suggestive readings of reality instead of evoking the elements and vocabulary directly from reality, as shown in “Fig. 4”.



“Figure 2” Shows the horizontal chart of the zagora and its gradients upwards Source\
<http://aloushaa88.blogspot.com>



“Figure 3” Shows pharaonic elements in the facades of the Building of the Supreme Constitutional Court in Egypt
 Source\
https://ar.wikipedia.org/wiki/Supreme_Constitutional_Court_of_Egypt



“Figure 4” shows the relation of abstraction aspect in architecture between the architect (present) and the recipient (past) /researchers.

Contemporary architecture

It represents the renewed interaction between the architectural thought and the renewed growth of life; it is related to the dynamism of the total existence and to the civilized activity of the person based on daily life. As Hassan Fathi mentioned, "Architectural work, in order to be related to its time or contemporary, it must be integrated with the daily activity of a man, and it should be compatible with the present degree to which humans have reached in term of knowledge on all levels". Thus, we find that in order for the

architectural work to be contemporary, it must depend on several constants capable of facing the largest number of variables with the same efficiency and for a long period of time (Hanafi, 2014, P 56).

Contemporary architecture represents the stage of belonging between the building on the one hand and the society and the environment, on the other hand, to try to link contemporary trends with the diverse cultural heritage for emphasizing the idea of a contemporary local cultural identity (Salama, 2001, P 21)

Contemporary architecture calls for change, this was clarified by the writings and works of some architects as it is for the theoretician and architect Rifaat Al-Jadriji in his books (Al-Akhdar and the Crystal Palace) and (Taha Street and Hammersmith). A large section in these books has been devoted to studying and analyzing the concept of contemporary, he clarified that there is a permanent contradiction between the traditional local or contemporary form within one community and between the imported form or the intruder to this society.

He explained that this difference and variance are due to the perception of the individual or society to the outside world, and through that, people's privacy appears in its architectural products (Al-Jadriji, 1991, P 98).

The architectural product should interact with the era, and affect it and be affected by it. Abandoning contemporaneity in the architectural product means rebuilding copies that are similar to the buildings of the previous eras which are not compatible with the developments of the current era, and will cost these buildings a large part of their jobs, and start to turn into shallow.

The architectural significance of contemporary is represented in helping to develop architecture to serve the human being, through the use of modern materials, methods and techniques in architecture (without taking the expressive forms of imported concepts and ideas) (Mahmoud, 2008,P38). **The importance of the interaction between the architectural and contemporary outcome can be clarified, where it represents a power that influences and influenced by time, and it explains the role of contemporary architecture in meeting the requirements of society and providing its services.**

Contemporary architecture is defined as an idea that addresses all the variables of life related to past and present; it depends on a cumulative action connected to change to achieve continuity and development. Contemporary architecture is present every time and place because it is related to the thought of the individual and society. No change can be reached in contemporary architecture until after a period of time is passed over it and after its preoccupation by individuals, so it would become the language of the era at that time.

Contemporary architecture is reflected in the architectural products so that it is marked in memory with a work that may last for an extended period of time, it could have an influential role in the change of many individuals, **so contemporary architecture is defined as a structure of interrelated relations that evolve simultaneously from the presence of a variable that helps to develop and change it. Thus, this structure is involved in all fields to also contribute to achieve the change. So, the structure of contemporary architecture cannot be realized directly only after a period of time has passed. When it occupies a specific place, it would realize itself and uniqueness, then realizes that it is the spirit of the times during that elected era.** The most important items and indicators addressed by previous studies can be illustrated in table (1).

Seq.	Items	Descriptions
1	philosophical concepts	What are the ideas inspired by nature or from the urban and cultural heritage?
2	Relation with surroundings	A formal simulation with the surroundings and the nature of the mass assembly with the neighborhoods
3	Elements and relations	Studying the nature of the relationships between the elements in detail or abstractly
4	Intellectual and formal goal	Achieving the primary goal of architectural output (functional, communicative, simulation, ...)
5	The nature of relations	Studying the nature of bonding relations in the facades of buildings to know strength and contrast ...

6	Technological use	Adopting modern technology in architectural products in various forms.
7	The reflection of building function	The appearance of the job directly or indirectly, depending on the nature of the building
8	Environmental aspects	Achieving architectural products, the environmental aspects, which became the basis for the sustainability of production

The research problem and the goal

The research problem was a knowledge gap about the abstraction of contemporary heritage architectural values in local architecture. As for the aim of the research, it is to activate the role of the abstraction philosophy in the formal configurations for each item of traditional and contemporary architecture from an architectural elements aspect.

Practical study

The practical study is featured by studying and analyzing a group of international, Arab and local projects and then comparing them based on the items that were extracted from the previous studies.

The Paris Orchestra building for the architect Jean Nouvel

The building was designed by the architect Jean Nouvel and it was completed in 2015. The building is located in Park La Villette on the northeastern edge of Paris, called (Philharmonie de Paris). It consists of concert halls and exhibition spaces, educational services, training rooms, in addition to a restaurant and cafeterias. Philharmonie de Paris is considered a cultural institute devoted mainly to symphonic music. (<http://www.jeannouvel.com/en/projects/philharmonie-de-paris>.) The building consists of an external block that is featured by a front included a number of twists that reflected the nature of the inner space. These twists are made of aluminum material that expresses the non-physical waves represented by floating surfaces that represent sound reflections. This project is characterized by the presence of a metal mesh that makes the building non-visual penetrable during the day, while at night it is possible to penetrate the building visually. (<https://www.eneadesign.com/noticias/filarmonica-de-paris>). This is shown in “Fig. 5”.



“Figure 5” shows the building exterior mass at daytime and night time. source\
<https://www.designboom.com/architecture/philharmonie-de-paris-france>

We find that the architect at designing the building idea relied on non-physical waves, the process of implementing the idea came by adopting abstract formal elements that were employed in formal and functional formulas to serve the design from both sides, and to help the architect to follow the philosophy of abstraction in complex formal and functional formulas. The architect headed for achieving the privacy of building and its connection to place by investing the function of the building on formal and dynamic levels, through finding the visual communication of the building at night time and achieving functional isolation in daytime.

Marrakech Menara Airport Terminal (Terminal 3)

The building was designed by the architect Abdo Lahlou, its location in the city of Marrakech in the state of Morocco. The building was featured by its large height of about (18 m) and a large dome of (30 m) in height and (48 m) in diameter. It is considered the largest glass dome in Africa. The architect was inspired by the idea of the project from future aviation references as he translated it with dynamic engineering forms, and the cosmic signs were reflected by the lighting that radiates from the ball in a square equipped with luminous columns. As for the building facades, the architect relied on a formal, paper-based embodiment

made of steel material. The paper appeared in a corrugated and perforated form and seen as intelligence because it included technologies that adhere to the climate side of the place. (Arab Architects Awards, 2018, P 132-135).

The architect, in the heart of the terminal, worked to reduce natural light and rely on the steel sheet in the facade and other architectural elements that are present to filter the light and its reflection on the floors and ceilings in the form of decorative motifs, thus representing the skill of the traditional Moroccan industry in a modern way as shown in “fig. 6”.

It was found that the architect depended on a dialogue language between the building and the receiver through the formal elements used, the openings in the facade, the corrugated and perforated steel surface and the glass dome. This appeared in an abstracted philosophy images trying to show the traditional Moroccan elements indirectly and characterized by a modern spirit that accompanies the development and future technologies.



“Figure 6” shows the corrugated and perforated steel shell and the dome at the entrance to the project and dealing with lighting source\ <http://www.arabarchitectsawards.com>.

Iraqi Integrity Commission building in Baghdad

This building was designed by the Office of Scientific and Engineering Consulting at the University of Technology after they participated in the competition announced by the Prime Minister in 2013, and the design won first place among the participating offers.

This project is located in the green zone in Baghdad, near the Turkish embassy. The idea of designing the building was featured by relying on the functional aspect of the project and extrapolating items of Iraqi architecture (Baghdad alleys, Allys with pointed arches), deaf walls, the diversity of scenes at moving, the use of local elements (wood chunks) in modern urban forms, waterway (symbol of life), the nature of the relationship between mass and space, the middle courtyard) (Al-Sayegh, 2017, P 12) . In addition to the vicious vertical mass that represents the truth window of the integrity function. The architect sought to achieve spatial and temporal consistency by relying on technical developments so that the recipient participates in the interaction of mental memory and sudden intuition and relate it to global perceptions.

The nature of the project facades shows differs between the internal facades and the external facades. Where external fronts had an abstraction philosophy and an expressive power shown through the nature of used material as solid, hard, clay-treated concrete, when entering the building, the recipient's feeling differs as the interior differs with high transparency, representing the body's work by the force of law and the clarity of the approach used as shown in “Fig. 7”.



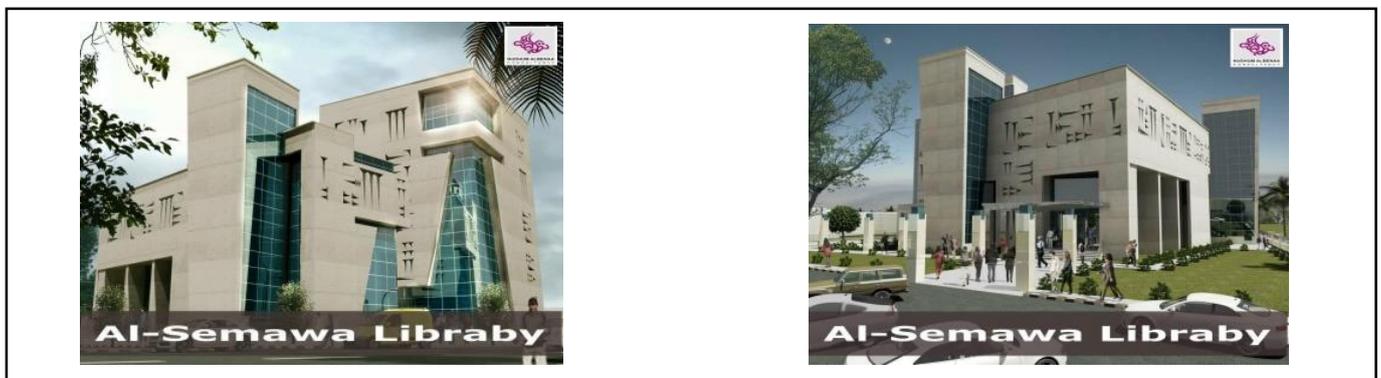
“Figure 7” Shows the block of the Building of the Iraqi Integrity Commission and the exterior of the building Source\ Al-Sayegh, Dr. Lahib, " Typical as a Strategy for Achieving The Identity Society in Contemporary Architecture" Doctoral Thesis, 2017,P112

It was found that the idea of designing the building depended on dealing with the heritage items in a contemporary language that relies on the formal and intellectual abstraction of the intellectual system. The architect has turned to the nature of the building function as the integrity commission and a governmental administrative building, so he sought to deal due to two levels, the first is analyzing the building function into abstracted intellectual aspects. The second level dealt with the transforming those intellectual concepts into formal elements driven from the items of local heritage architecture with contemporary images to keep pace with the spirit of the era and achieve the spatial belonging of the building to its presence in the city of Baghdad. This makes the connection in time and place with two related levels that achieves unity and transparency that the building function seeks to achieve.

The public library building in Semawa

The library was designed by the Building Systems Company; for the architect Safaa Al-Mimar, and the site of the library is in Semawa, one of the governorates of Iraq. The idea of the project was featured by relying on the revival of Iraqi civilization by investing the Sumerian symbols that revive the memory of the recipient with Iraqi civilization and emphasize the idea of learning and writing. The library function agreed with those Sumerian symbols in the form of abstracting symbols and showing them on the external library interfaces, to emphasize the importance of reading and writing and the continuity of their existence to Nowadays.

The building block consists of a cluster of blocks of different heights according to the project functions, and it was found that the project facades are featured by a modern language that simulates the Sumerian civilization of Iraq and this was reflected according to the nature of the Sumerian symbols. We find through the interfaces there is a compatibility between the Sumerian symbols and the facades of the library, as shown in “fig. 8” there is a visual overlap resulting from the abstraction of the Sumerian symbols with the elements of the building facades to create intellectual and formal continuity for the recipient, and to reflect the temporal and spatial levels of the building through a dialogue language with formal forms to achieve continuity and of the idea of a building as a reading and learning building.



“Figure 8” shows the interfaces of the Samawa Library and how to deal with Sumerian symbols source\ <http://www.nb-consultancy.com>

Comparing projects to the formal abstraction aspect

The concept of abstraction has a deep intellectual and philosophical aspect related to two levels in terms of to the project block. The first level is represented by the nature of the adopted philosophical idea that contributed greatly to the generation of a complex formative block featured by complexity, and the second level is the nature of the thought of abstract symbols, which was reflected by the formal elements that featured by fronts of architectural projects, and this will be achieved through table (1).

Seq.	Comparison subject	Abstraction in western architecture	Abstraction in Arab and local architecture
1	Philosophical aspects	Ideas inspired by different aspects of life are featured by simple,	It is inspired by the past of architecture, with a high intellectual content and

		non-complex thought that requires a high level of analysis.	abstraction that embodies the ideas of the past with expressive intellectual symbols with a specific meaning.
2	Relation with environment	Mass assembly is of an advanced level by manipulating shadow and light and using building materials that are contrasting with the surrounding landscape.	Mass assembly is featured by simple superposition, affected by local materials, and related to climatic aspects in various formulas, to show the mass formation in a comprehensive way.
3	Elements and relations	The elements and the relationships between them are very simple to get away from the formal details in their congratulation.	The nature of the elements and the ties between them are highly abstracted, so they relate to the many details in most of their designs.
4	Intellectual and formal aim	The goal of formation is to achieve the functional aspect and impose abstract geometric shapes characterized by formal simplicity	The goal is to distinguish through mass training to achieve the intellectual and formal communication of the formation by the recipient.
5	Relations type	They appear in clear, non-exaggerated linear relationships such as horizontal, vertical and curve lines to give the building a formal beauty.	They appear with complex relationships that tend to intersect to express the connection and the formal power to give a building the character of the past spirit with the elements of the present.
6	Technological use	The trend towards projecting technology in all fields of the project in terms of formality, functional and service aspects	Highlighting the technology side in a variety of formats, according to the project requirements, and striving to simulate the age within elements derived from the past.
7	Reversing the building function	It appears only directly in various fields, such as churches.	The functional aspect can only be determined directly in areas such as mosques.
8	Environmental aspects	Most buildings fulfill the environmental aspects of energy conservation and the environment.	Architectural products seek to go environmental aspects to gain leadership in design.

Conclusions:

1. Heritage architecture is an architectural product that holds the extraordinary and amazing value of the family, the accumulated experiences and the investment of the components of era to achieve their continuity throughout the ages.
2. The abstraction is defined as the group and integration of formal elements.

3. The abstraction in architecture is defined as the one that does not depict things as they appear in real life, rather depends on subjective formality elements of derived from existence, and their readings depends on the knowledge stock of the recipient, so they represent inspiring readings of reality instead of evoking elements and vocabularies directly from reality.
4. Contemporary architecture is a structure of interrelated relationships that evolves simultaneously from the presence of a variable that helps to develop and change them. This way, this structure is involved in all fields to contribute also to achieving the change, thus, the structure of contemporary architecture ideology can be realized directly only after a period of time has passed and its occupation of a certain space in order to achieve itself and its uniqueness.
5. The architectural products of western architecture, which depend abstraction is featured by moving towards simplicity, reduction and the use of the simplest abstract formal elements, and the reworking of the present in an artistic manner showing the intellectual capacity of the architect.
6. To translate the visual present, the western architecture products depended basic engineering forms and focused on the natural aesthetic elements surrounding the architectural productions to achieve a continuous and visual dialogue language between the interior and exterior.
7. The western products depended the use of technology in all design and service aspects, and achieved communication between the he interior and exterior through the connection with the environment.
8. The architectural productions of Arab and local architecture were characterized by abstraction with a deeper intellectual level that was not limited to the intellectual aspects of the blocks, but went towards detailing the fronts and involving them in the abstracted formal elements.
9. previously, the products of Arab and local architecture are directly related to the social, aesthetic and religious aspects, but nowadays these products are simulating the past using a contemporary abstract language to achieve the intellectual and formal connection, so, some of these products didn't achieve this connection while others did but on a deeper philosophical and intellectual level that can be understood only by the architectural elite.
10. Western, Arab and local architectural products seek to conserve energy and the environment
11. The Arab and local architectural products came in line with the technological development in certain design aspects and did not include the design as a whole to seek the achievement of communication with technology. As for the relationship between the interior and the exterior, it did not appear in a clear and prominent way, but it was featured by a partial appearance due to its impact on the nature of societal and cultural formations in the Arab and local areas.
12. Heritage values appeared in the local and Arab architecture in a high abstraction and overlapped method formed of simple engineering elements governed by complex relationships, because the mechanism of thinking about architecture for an architect is featured by a philosophical and intellectual depth of abstraction that adopt transferring of the initial image of heritage thought, rather studies a number of images of a certain thought, then it creates an intersection between them to derive abstract symbols that are reflected using contemporary architectural elements that simulate heritage intellectual symbols .

References:

- Ahmed** Belhadj and others,(2008), "Sufi Vision of Beauty, Its Cosmic Origins and Existential Dimensions", Published by al-Bashir Foundation for Private Education, Morocco.
- Ali** ,Ahmed Raafat,(1997)" Artistic Creativity in Architecture", Interconslt Research Center, Al-Ahram Press, Cairo.
- Ali**, W. (1999)," The Arab Contribution to Islamic Art: From the Seventh to the Fifteenth Centuries", Cairo: American University in Cairo Press.
- Arab** Architects Awards,(2018) First Edition, Lebanon, Beirut.
- Al-Bahnasy** ,Afif,(1997) "The Influence of Islamic Aesthetics in Modern Art", Arab Book House.
- Al-Jadriji**, Rifata,(1991),"Al-Akhidir Crystal Palace", Riad Al-Rais Books and Publishing, London.
- Al-Sayegh**, Lahib,(2017),"Typical as A Strategy for Achieving Identity Society in Contemporary Architecture" Ph.D., Department of Architecture, Technological University, Baghdad.
- D'Avennes**, P. (2008)," Islamic Art in Cairo: From the Seventh to the Eighteenth Centuries", Cairo: American University in Cairo.
- Attia**, Mohsen, P(2003),"New Horizons of Art" , The World of Writers, 2003, Cairo.

- Haiba**, Khaled Mahmoud,(2011), "Postmodern Architecture in Egypt", Published Research
- Hamdi Khamis**,(1998), "Artistic Taste and The Role of the Artist and The Listener", House of Knowledge.
- Hamdi**, Abir Mahmoud,(2009), "Abstraction in Contemporary Painting and Its Relationship to Spiritual Philosophy", Ph.D., Faculty of Fine Arts, Helwan University.
- Hanafi**, Dr. Hassan,(2014) " authenticity and contemporary ... In what sense?" article published, Al Etihad.
- Jelawy Boubacar**,(2016) "Heritage and Society: A Reading in Contemporary Arab Society", Published Article, Antiquities Magazine, Antiquities Institute, University of Algiers, Abu Qasim Saadallah, Issue 14.
- Johannes Etienne**,(2002)," Design and Form", translated by Sabri Mohammed Abdel Ghani, Hala Publishing and Distribution House, Cairo.
- Joseph**, Sahar Juma:" The effectiveness of abstract thought in achieving abstract function in the printed poster", Doctoral Thesis, Faculty of Art Education, Helwan University, 2008.
- Kloppen**, Ward,(1999)," Blueprints for an Ideal Society", UNESCO Mission, Cairo.
- Mine coins - make money**: http://bit.ly/money_crypto.
- Okasha Tharwat**,(1994)," Aesthetic Values in Islamic Architecture", Dar Al Shorouk, Cairo.
- Richard Padovan**,(2008)," Proportion: Science, Philosophy, Architecture", E&FN Spon, 1999, Routledge, New York.
- Salama**, Dr. Ashraf,(2001), "A Closer Look at Egyptian Architecture in the 1990s", City Journal, Cairo, Publisher, City Magazine, Issue 19.
- Thuwaini**,Ali,(2010) "Symbolism in Art and Architecture", Baghdad.
- Aloushaa88**, Zuqoura in Mesopotamia, available: <http://aloushaa88.blogspot.com>. [accessed 10 July 2019].
- Ahmad Badr**,(2010),"Supreme Constitutional Court of Egypt", available: https://ar.wikipedia.org/wiki:Supreme_Constitutional_Court_of_Egypt. [accessed 12 July 2019].
- AJN**, "Philharmonie de Paris", Paris, France, available: <http://www.jeannouvel.com/en/projects/philharmonie-de-paris>.
- Enea**, "La partitura Lottus en la Filarmónica de París", available: <https://www.eneadesign.com/noticias/filarmonica-de-paris>, [accessed 23 July 2019].
- The International Architecture Awards**, "Awarded Categories for International Architecture Awards", available: <https://www.internationalarchitectureawards.com>. [accessed 23 June 2019].
- Nudhum ALBena**, 2017, available: <https://www.nb-consultancy.com>. [accessed 21 July 2019].