Impact of Westernization on Architectural Type

Analytical Study of Transformations of Architecture in Kurdistan Region-Iraq (1917-2017)

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ABSTRACT

Westernization, as a global phenomenon, has had a profound impact on our conceptual environment in general and on architecture in particular because of its direct material reflection on the built environment. This study examines the impact of conceptual environment for this phenomenon on the transformation of type of Iraqi architecture in general and on the architecture of the Kurdistan Region in particular. One specific difficulty of the study was the lack of documentation and clarity regarding how Westernization impacted the degree and type of architectural transformations in the Kurdistan Region over a period spanning 100 years, defined between 1917 to 2017. The study concluded that there was a wide diversity and variation on the level of influence of Westernization on selected architectural examples of the study area within that period. This was mainly due to the variety of Western models adopted as formal and aesthetic references despite their diverse temporal and historical contexts.

KEYWORD: Westernization, Architectural Type, ˉOriginal Type, Formal Architectural Reference, Conservative Transformations in Type, Disruptive Transformations.

I. INTRODUCTION

Westernization is a very influential intellectual phenomenon with a clear impact on cultural, political and social contexts of largely fluid and vulnerable Middle Eastern societies in particular. It has become the inescapable frame of reference due to the wondrous fascination for the technological and scientific progress of the West in all fields. The effect of this phenomenon has been reflected on these societies by forcing significant structural changes on them and on their unique particularities and their cultural identity. Such fundamental and structural changes caused huge shifts and transformations not only materially but, more significantly, on their c and life-style. This change manifested itself very clearly on the way urban environments and architectural types transformed to emulate western models in planning as well as architecture and building technology. Consequently, the subject of Westernization per se has emerged as a major intellectual force in contemporary intellectual discourse, especially in the field of architectural theory in developing countries. However, despite the large number of writings about it, it remains essentially, as a phenomenon, clouded with confused concepts and overlapping philosophical ideas. Thus, it is extremely imperative to attempt to approach the understanding of this phenomenon differently and to study its effects in more depth and detail in order to define how it impacted and changed architectural type in the study area.

This study started by questioning the extent to which intellectual visions and techniques of Western architecture represented by Westernization have become a phenomenon in the transformation of basic architectural types in the study area and thus it was necessary to trace back and scrutinize its historical roots and emergence. The fundamental root cause of this cultural change on Middle Eastern countries was traced back to the end of the 19th century to the hegemony of Western colonialism on most of the Middle East. Its impact varied from country to another intensifying during the movements of independence from colonialism but continued its influence toward the end of the twentieth century and the beginning of the twenty-first century. The evolution of this problem and its impact on architecture and architectural type began to be apparent on contemporary Arab architecture since the early decades of the twentieth century and in Iraqi architecture, for example , the political situation represented by direct British occupation and colonial rule played a key role in alienating the intellectual, social and cultural environment of Iraqi society and, hence, manifested its impact on architecture from the beginning of the twentieth century and continued reaching a major threshold at recently as the beginning of the twenty-first century.

The architecture of the Kurdistan Region of Iraq is considered as a part of Iraqi architecture and consequently it was affected by the socio-political changes in the country which led to a radical shift from a traditional and conservative society to a new western-based life-style reflected physically by the adoption of dynamic but alien urban and architectural norms, standards and types. Thus, most cities in this region lost not only much of their historic cores but also their modern architectural character because they succumbed to new and global technologies and aesthetic ideals which totally disregarded local geographical and cultural contexts. It must be stressed that there has been very few, if any, scientific attempts to study such important and fundamental changes and transformations and in the fields of urbanism and architecture in particular. It is the aim of this paper, therefore, to study and analyses these structural changes and to define how they impacted architectural types in the region during the specified time framework.

II. THE CONCEPT OF WESTERNIZATION LINGUISTICALLY

Westernization is usually defined as the act of a person or country adopting or imitating the culture of the West (Europe and North America) rather than preserving the use of local traditional ideas and behavior. In the Oxford Dictionary it is defined as " to make an eastern country, person, etc.… more like one in the west, especially in ways of living and thinking, institutions, etc., and also defined as " an assimilation of Western culture; the social process of becoming familiar with or converting to the customs and practices of Western civilization. [1] Westernization in the context of this study, therefore, denotes to a type of adoption and assimilation of western cultural norms into Middle-Eastern societies, with particular emphasis on architecture.

III. The EMERGENCE OF WESTERNIZATION IN THARCHITECTURE OF THE MIDDLE EAST

Westernization of Middle-Eastern architecture and urbanism were the result of direct interaction with the West and the adoption of its global norms, standards and building technologies. This gradual submission to western cultural and aesthetic ideals and concomitant new materials such as glass and concrete led to an inevitable erosion, and later to a rejection, of traditional architectural and building techniques. Thus, traditional and vernacular building techniques neared extinction and became not only too expensive compared with so-called modern techniques but also too rare to find. Bricks, for example, which were invented some 5000 years ago in Mesopotamia (ancient Iraq) and gave it its buildings their essential material character and type, were largely replaced by concrete and cement blocks. Similarly, structural stone which was often quarried from local areas was replaced by a thin layer of facing stone often imported from abroad. [2] The adoption of Westernization in architecture coincided effectively with Western colonial domination of the Arab Middle East. [3] Western influences dominated Arab contemporary architecture through its advanced technology and new types of buildings necessary for the new lifestyle such as railway stations, airports, hospitals, cinemas and theatres. This architecture was not only influenced by the political and socio-economic changes but also by the enforcement of new legal and municipal planning regulations which heavily favored grid-iron land sub-division and a network of wide vehicular roads. [4]

The impact of Westernization on architecture has seriously affected the characteristics and identity of place often defined by its geo-climatic, social and cultural specificities, and transformed it into a kind of a standardized place defined by common and often uniform formal types found everywhere in the world and not distinguished at all by its own regional qualities.[4]. This can be clearly seen in Figure 1 where an example of office towers from Arab geographic regions towers look very similar to other different locations in the world. [5]

It is clear from above that the concept of Westernization in architecture, which started in the early decades of the 20th century, was the imitation and adoption of Western architectural ideas, aesthetics, and building technologies with the inevitable abandonment of earlier traditional ways because they became to be seen as too "old" and "obsolete".

Abu Dhabi -
UAE

Algeria

Hong Kong-
china

Chicago -
USA

Erbil-Iraq

Figuare 1 Similarity in the architectural formalities of the buildings of several countries, despite the differences in spatial characteristic

IV. THE CONCEPT OF TYPE

"A number of people or things having in common traits or characteristics that distinguish them as a group or class". [6] It also came in the sense of: a pattern, a class, or a work of things, all of which have something in common. [7] The type is not defined within a specific function, measure, shape, or color, and Argan described it as "a mental image that represents a set of formal relationships, characterized by ambiguity." and that " type is often associated with intellectual, social, and spatial constructs and defined as a set of formal relationships ". [8]

V. THE CONCEPT OF TYPE IN ARCHITECTURE

The concept of the type by the famous architectural thinker, Vitruvius, has emerged in his interpretation of the origins of architecture by referring to archetypes. For example, his emphasized that the dimensions of the human body represented an original type for Greek columns and referred to Roman mythology as an original type for Roman architecture.[9] In his thesis "Types and Vocabularies", Mitchell also discussed the concept of type according to its relation to both models and concepts: basic characteristics and incidental characteristics. It explains the concept of type by distinguishing the basic properties of the object "properties common to one-type models" and the properties of "properties that change from one model to another within the type", considering that they represent the constants called the essence of the type, as a result of "stripping out the basic characteristics that are similar to the members of a given class of objects".[10] In contrast, Harvard's ideas referred to the concept of type as a formal reservoir mechanism for architecture which may derive from many historical precedents and may use or combine several different forms but still fall under the same type. This is also emphasized by Aldo Rossi by saying that "a type cannot be defined specifically, but all architectural forms relate to a type". Examples of the independence of type from form is the diversity of forms which relate to one type, such as the openness of form to the interior. In fact, Ching went as far as defining five formal type categories: the linear, central, grid, clustered and radial. [11]

Gelernter emphasized the importance of formal types in spatial design. For example, formal type in Greek architecture are based on the forms of the basilica, patio, atrium and other which laid the foundations for many models of these types shared by many successive generations. Type does not appear abruptly or suddenly but evolves after a continuous process of experimentation and modification, and is not recognized as a type until after it has ceased to function. Type represents the dual relationship between history as a continuity of time and the heritage of social, cultural, popular and religious beliefs as indicated by collective consciousness. [12]

In conclusion, type is seen as a distinct feature or characteristic of a group or several objects including buildings, matters, or a set of morals, and evolves through a combination of rules and formal distinctive characteristics manifested in certain forms.

VI. TRANSFORMATION IN ARCHITECRAL TYPE DUE TO WESTERNIZATION

Transformation is a phenomenon that means every predictable change under changing circumstances dictated by reality in order to obtain a new form emerging from an older one. The word "Transformation" consists of two sections (Trans-Form) and relates to a number of possibilities for this change which could be either superficial or fundamental. [13] The continuous intellectual development of man and the dynamics of thought, driven by either the search for new elements and relationships within a formal structure, or through technological development which is also the product of thought, results in a shift in the identity of this type and a departure from its original form. Consequently, a partial or total transformation may occur depending on changing needs, ideas and technology.[14] In a study by Antoniadis he shows that the effects of transformation on form may fall into two categories: the first relates to the visual properties of form and its appearance ; the second describes how the constituent parts of form appear combined together and how they could be deconstructed and destroyed.[15] Therefore, there are two kinds of transformations on type: a conservative one and a destructive one which may be distinguished by the degree of conserving or departing from their original type form.

6.1 Conservative Transformations

These are the transformations which keep the type in a recognizable state and original source; successive changes and transformations may be made in the architectural type to improve its specification or modify the system by procedures but keeping its link with the original type. So the output at this level is to improve, develop, and refine what exists, and by focusing on the partial details of the formal system, such as, the shift in the functionality of architectural elements, from a utilitarian function to an aesthetic one. [13]. Figure 2.

Arches for aesthetic purposes only, Ministry of Awqaf/Endowment and Religious Affairs, Erbil, Kurdistan Region of Iraq	Arches with functional performance in the facade of Islamic buildings, Mustansiriya School, Baghdad, Iraq

Figure 2 Excessive output of the shift in functional elements

As mentioned earlier, the use of new building materials and technologies has become accepted by society as the most appropriate option for contemporary architecture which suited the requirements of modern life-style despite the fact that it represented a major departure from traditional architecture and disregard to the place. Thus, it became acceptable to use alien architectural elements borrowed from western sources and paste them superficially on building facades for visual effects rather than any structural or credible reason. Figure 3. In contrast, certain local historical elements may also be used superficially for visual considerations or simply to comply with certain local municipal requirements leading to, more often than not, to visual chaos and loss of architectural identity.[16] Figure 4.

Figure 3 Insertion of modern building materials in local architecture, building of agriculture, Dohuk, Kurdistan Region of Iraq	**Figure 4** Surface hybridization between elements of local and western architecture, Council of Ministers, Erbil, Kurdistan Region of Iraq

A transformation of an architectural type within this category may be in the formal relationships between the parts of the composition, for example, by converting some elements from the content of a particular site to another, i.e., by changing the relationship of the parts after re-fitting them in a new form.

However, these measures should be proportionate with the degree to which the form appears without any significant departure away from the original reference. It is therefore a process of renewal involving the conversion or re-arrangement of elements in a new form while preserving its link with the original type ant its principles and, thus, according to this approach, there is a new reference based on the original one. [17]

6.2 Disruptive Transformations

These are transformations which affect the structure of the form and called disruptive because the transformed form loses its ability to retain its links with the original architectural type and leads to the foundation of new and different rules. Examples of this category of transformation are Modernism, Post-Modernism and Deconstruction all of which projected new rules and deliberately caused major disruptive disconnection with the past. [17]

Thus, this transformation is associated with major leaps and jumps leading to radical changes and the emergence of new phenomena based on the rejection of previous ideas and forms, or the use of strong contrasting elements often causing confusion. For example, when historical Classic Greek and Roman models and types are copied literally and applied in a place that has no geographical or cultural link with them, whatsoever, it represents a major change and disruption within the prevailing architectural scene. [18] Figure 5.

Figure 5 Derivation from Western classical buildings (Roman and Greek),
American University of Duhok, Iraq

It is clear then that type is influenced and transformed formally by technological and socio-cultural influences especially those coming from culturally dominant Western societies. A new form of type emerges as a result of the different forms of types affecting it superficially or, alternatively, a new architectural type may emerge with no link with the original type and represents the disruptive transformation projecting new principles and assumptions while totally rejecting the old leading to the generation of new architecture with new customs and meanings. It follows that in order to identify and measure the amount of transformation of a particular type and to explore its formal development due to its cultural interaction, it is necessary to analyse the origin of forms in architecture (i.e., the formal reference of architectural type that expresses the frame of the architecture).

6.3 Theoretical Framework

The theoretical framework of this research is based on its main premise of defining the degree of transformation in the architectural type from its original architectural reference due to Westernization depends on the extent of change in the characteristics of the architectural type stemming from the specificity of the characteristics of its formal elements. Table (1) shows the proposed matrix for measuring the structure of the architectural type in the study area (Kurdistan Region of Iraq). The conceptual framework of the concept of Westernization and its impact on the transformation of architectural type makes it possible to formulate the procedural definition as follows:
Gradual or radical changes affecting the structure of architectural type is caused largely by Western cultural impact leading to its departure from its original contextual roots, and thus creates a western-type architecture which is largely alien to the place.

VII. THE FIELD STUDY

7.1 Kurdistan Region of Iraq (study area)

Table 1 Vocabulary related to aspects of westernization effect in architectural type

Shape principles and orders	Repetitions (Rhythms)		Exact repetitions
			Varied repetitions
	Scale		Human scale
			Inhuman scale
	Symmetry		Symmetrical
			Asymmetrical
	Ratio between solid-Hollow		Solid< Solid
			Solid > Solid
			Solid = Hollow
	Balance	Balanced	Formal balanced
			Visual balanced
			Unbalanced
	Form Orientation		Inward
			outward

Table 2 The architectural Samples elected in the Kurdistan region of Iraq according to the three period classifications

		The Formative Structure of the Architectural Type		
Elements Characteristic	Characteristic of shape	Regularity	Complete Regularity	
			Regular uncompleted	
			Irregularity	
	Elements function (surfaces & details)		Utility function	
			Construction function	
			Aesthetic function	
	Reference of Shape Details	Materials	Western	
			local	
		Other details in facades	Western	
			local	
Shape Relationships	Spatial Organization		Liner organization	
			Central organization	
			Grid organization	
			Radial organization	
			Clustered organization	
	Division	Wholly level	Surfaces	
			Levels (floors)	
		Partial level	main details (windows & doors)	
			Other details	
	Interference		Penetration	
			intersection	
	Rotation		For Masses	
			For Details	
	Interaction between Solid-Hollow	Solid-Hollow in the same level of the façade		
		deep-set Hollow in the façade		
		Prominent Hollow in the façade		

Kurdistan Region of Iraq is located in the north of the country and was part of the Ottoman Empire and became part of modern Iraq in 1921. At present it consists of three Provinces (Erbil, with the capital Erbil City, Sulaimaniya and Duhok). Historical studies confirm that architectural monuments and buildings within the Kurdistan Region of Iraq followed broadly Islamic architectural types and their formal characteristics. [19]

Before the British occupation of Iraq and the end of Ottoman control in 1917 Iraq (and Kurdistan) was a region largely isolated from the West, and therefore the process of cultural change took place at a very slow pace, but began to accelerate quickly after the fall of the Ottoman Empire. The 1920s witnessed new intellectual trends which did not exist in the past, and were reflected in the field of architecture when British architects working for the British Army, and later for the Iraqi Public Works Department, began to design and build numerous public buildings such as schools, hospitals, railways stations and airports. During the early1950s, Western architects and urban planners were invited by the Iraqi Development Board (Majlis al-Imar) including several world-famous names such as Frank Lloyd Write, Gropius and Le Corbusier, to design major projects in Baghdad. Moreover, numerous Iraqi architects and engineers who studied in Britain and the USA began to return after graduating in the mid-1930s and took up important official positions and played a major role in propagating western-style designs too. They were educated and trained to design buildings with western ideas and aesthetics echoing the prevailing so-called International Style and the Modern Movement. Similarly, local builders and contractors could not compete with western foreign companies who were technically much more experienced to execute large-scale projects quickly and more efficiently which resulted in the obsolescence and eventual loss of most traditional building skills. [20]

The military Coup of 1958 was one of the most important political events in modern Iraqi history which clearly influenced architecture and resulted in a marked increase in urbanization due to massive rural migration, infrastructural and major building projects by continuing the dependence on western firms who employed their architectural types and methods of construction. However, during the early 1960s several Iraqi architects started to experiment with a regionalist approach to architecture by returning to brickwork and by reinterpreting motifs from Iraq's extremely rich and versatile history. Architects such as Rifat Chadirji, Qahtan Awni and Muhammad Makiya, designed and built numerous public buildings which rejected western-style design and attempted to develop what was then called an "Iraqi School of Architecture". However, these interesting attempts did not last long and almost ceased by the early 1970s due to turbulent political events and frequent changes in governments. The nationalization of oil in 1972 led to a marked increase in Iraq's financial resources causing a significant jump in development and especially in the building sector but with continued adoption of western models for the built environment. [20].

The Gulf War of 1991 and the subsequent imposition of severe economic sanctions on the country badly affected the economy in general and led to its political, economic, intellectual and social exclusion from abroad. Self-rule of Kurdistan Region in 1991 did not lead to a surge in reconstruction projects Kurdish cities because funding was under the administration and control of the United Nations. Although the American-led invasion of Iraq in 2003 led to the collapse of the regime and destruction of much of the country's infrastructure it, nevertheless, caused fundamental changes in all aspects of Iraqi society and opened new possibilities and transformations including those in the field of architecture. [21]

It is beyond any doubt that, historically, architecture in the Kurdistan Region of Iraq belongs to, and has been consistent with, the formal characteristics and type of Islamic architecture since the advent of Islam in the mid-7th.century. This is clearly evident in the hundreds of architectural monuments which managed to survive in this region today. Consequently, Islamic architecture will be taken as the fundamental type reference for the purpose of this study. It is also clear that the beginnings of Westernization in this region can be detected since the 1920s and continues at present causing major shifts and structural transformations in Iraqi society and its socio-economic and cultural bases, including its impact on urban and architectural development.

The period of influence of Westernization on architectural type in the Kurdistan Region may be classified into three basic phases:

- **First Phase (A)**: begins from the end of World War I and British colonization of Iraq in 1917 until 1958 which marked the end of the Royal Era and its Development Board.

- **Second Phase (B)**: begins from 1958 which marks the start of the Republican Era.

- **Third Phase (C):** begins with 1991 which marks the start of Self-Rule in the Kurdistan Region and continues through 2003 when the US-led occupation of Iraq causing subsequent major changes on Iraqi society, the liberalization of the economy and a marked acceleration in the building sector.

A total of 15 research samples were selected from the study area (Erbil, Sulaimaniya, Duhok), which are single public buildings with multiple functions. Each of the five samples belongs to a specific period (A, B, C), as in Table 2.

7.2 Method of analysis adopted in the practical study:

The theoretical framework for this research that related of the impact of Westernization in architectural type transformation has set out the need to rely on geometric methods (the graphic analysis) in the study of architectural models, where these analyses provide the possibility of studying the physicist and visual aspect of the transformed architectural form.

This impact will be measured within two levels (plans and elevation level), by developing a special method for dealing with these two levels in geometric analysis.
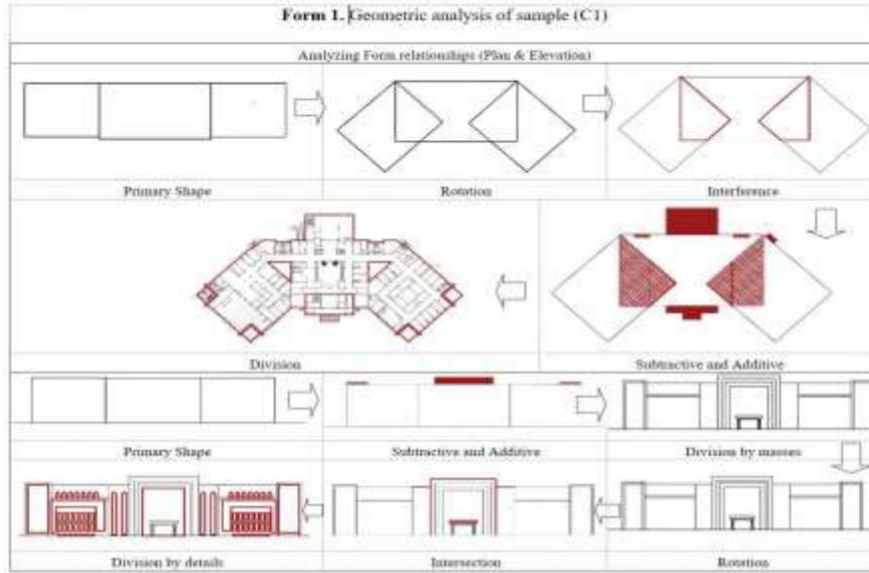Accordingly, the stages adopted in the conduct of the analysis of the architectural models elected are as follows:
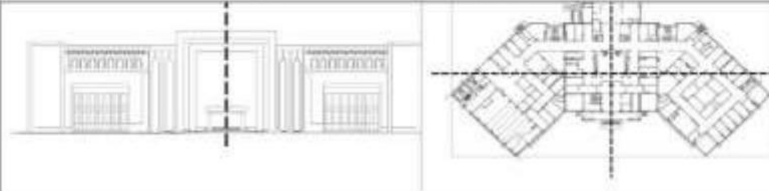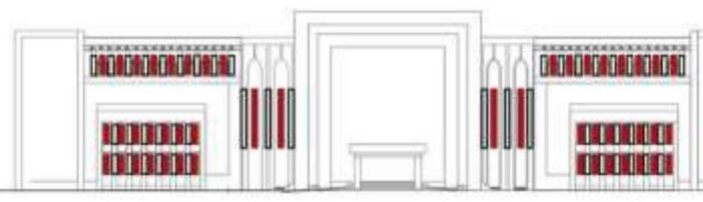(As on Form 3. which represents a sample of geometrical analysis)?

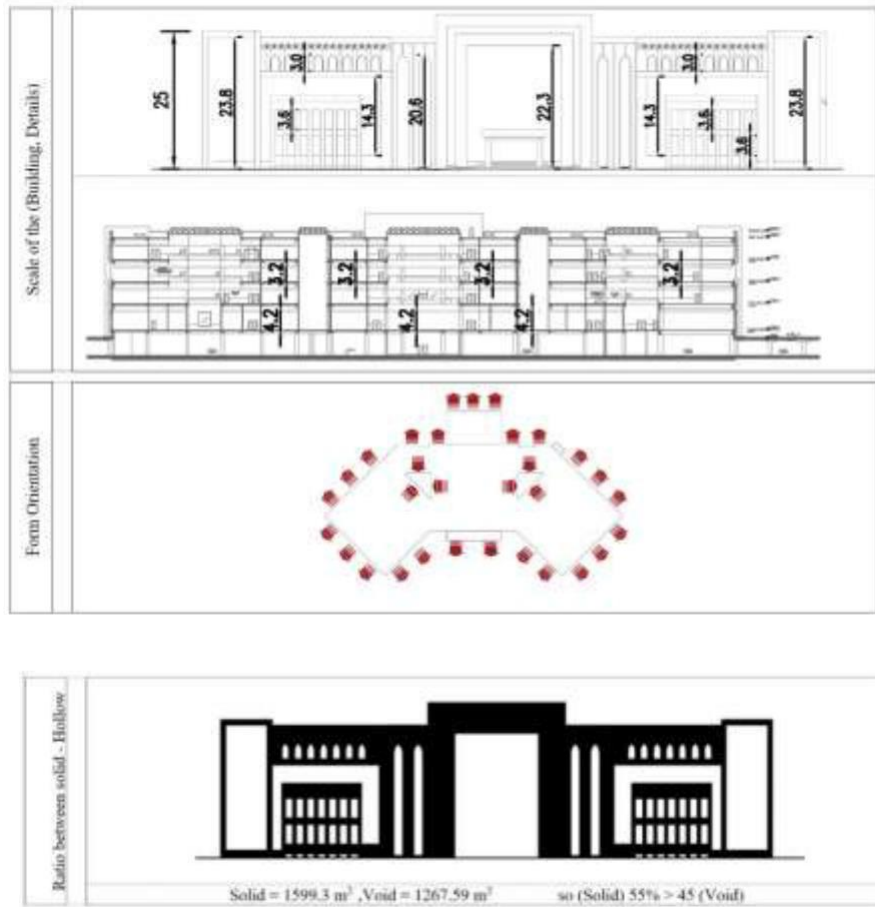**7.2.1 Analysis of the relationship of the shape and the characteristics of its elements consisting of:**

· Analyze the basic initial shapes of the configuration, which illustrate their main masses.
· Analysis of developments in the initial form through subtractions and additions.
Through these two analyses the regularity of the shape will be measured of the elected architectural models.
· Baseline and secondary element reference analysis of the elevations, through visual analysis of photographs and in comparison, with the models that reflect the architectural form reference in the study area.
· Analysis spatial organization of the shape in terms of being (linear, centralized, radial, cluster and grid).
· Analysis of the Division of the shape at the wholly level of façade surfaces and floors, or at the partial level through openings of windows, doors and other details
· Analysis of the Interference relationship between the parts of the configuration, in terms of being intersection or penetration.
· Analysis of the rotation relationship of the primary (Masses) and secondary parts (Details) of the configuration.

7.2.2 Analysing the principles of the form consisting of:

· The principle of rhythm and repetition by counting the number of repetitions on the elevation, so this measurement relates to the number of repetitions and the type of its (exact or varied repetition).
· The principle of scale, including the building scale (overall height of the façade), which is a quantitative variable based on the numerical value of the rise in the classification of the scale type (human, or inhumane)
· The principle of symmetry in terms of symmetrical or asymmetrical form.
· Analysis of the ratio between solid-Hollow, which is a quantitative variable, measured by reliance on the measurement and calculation of the solid to hollow ratio in the elevations of the architectural models elected.
· The principle of balance in terms of the balanced form whether it is a formal or visual balancing, or unbalanced equilibrium.
· Form Orientation Analysis in terms of the form opening (inward or outward).
After the geometrical analysis of all the architectural models elected within the three time periods, the vocabulary of the architectural type structure will be compared with those attributes derived from the shape reference in the study area (Islamic architecture type), to measure the amount of transformation in this type and each phase, which is the main objective of this study.

Form 1. Geometric analysis of sample (C1)

Solid = 1599.3 m³ , Void = 1267.59 m³   so (Solid) 55% > 45 (Void)

VIII.   RESULT

- Results relating to the type characteristics of the architectural models elected within the time phase (A) through the characteristics of the elements, relationships and principles that link them.
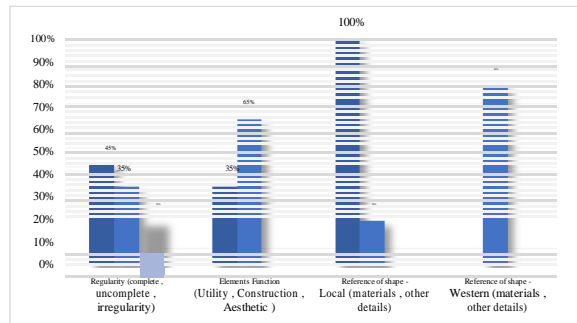

Chart 1 Percentage of characteristic of shape elements for architectural samples
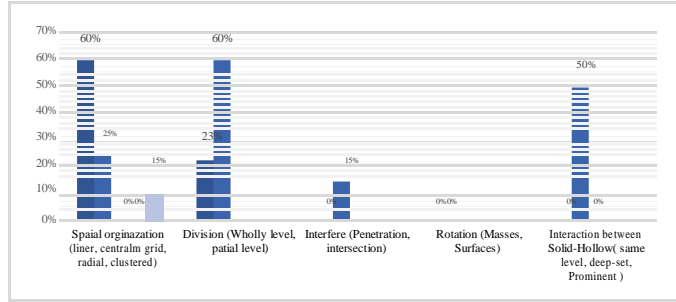(Period A)

Chart 2 Percentage of shape relationship for architectural samples (Period A)
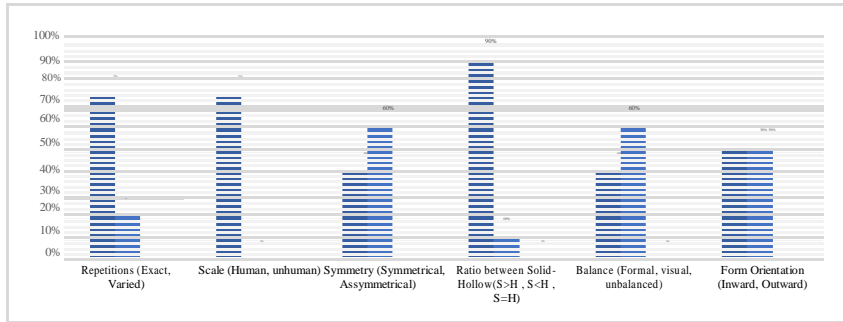

Chart 3 Percentage of shape principles for architectural samples (Period A)

- Results relating to the type characteristics of the architectural models elected within the time period (B) through the characteristics of the elements, relationships and principles that link them.

Chart 4 Percentage of characteristic of shape elements for architectural samples
(Phase B)

Chart 5 Percentage of shape relationship for architectural samples (Phase B)

Chart 6 Percentage of shape principles for architectural samples (Phase B)

▪ Results relating to the type characteristics of the architectural models elected within the time phase (C) through the characteristics of the elements, relationships and principles that link them.
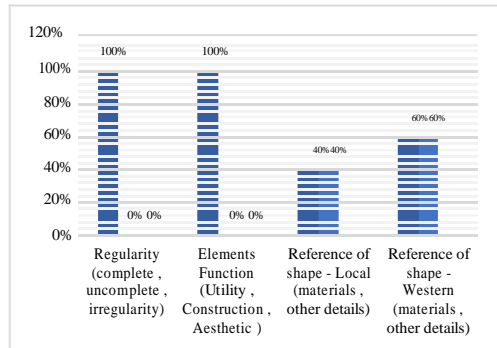

Chart 7 Percentage of characteristic of shape elements for architectural samples
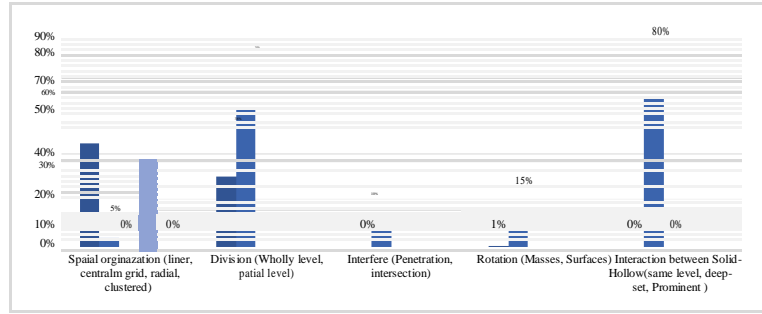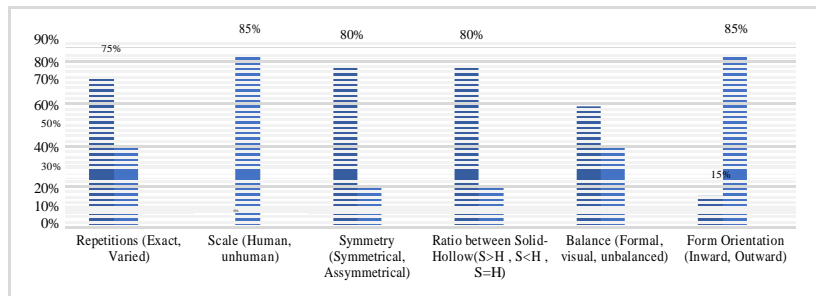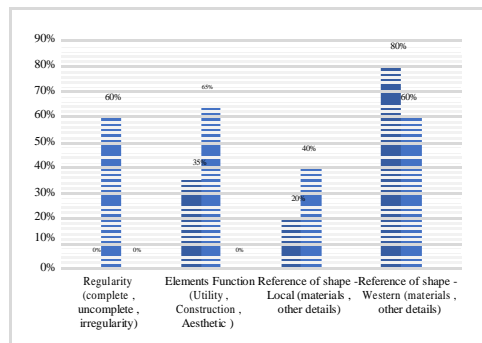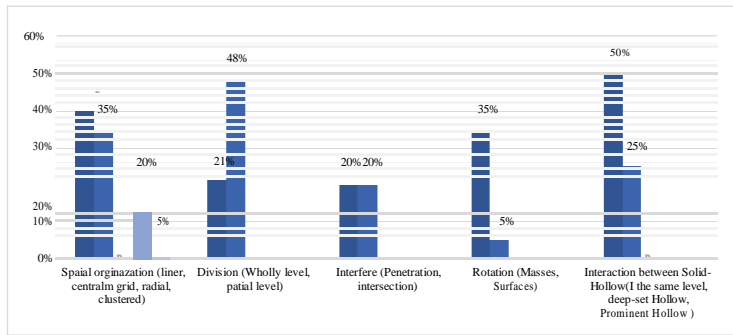(Phase C)

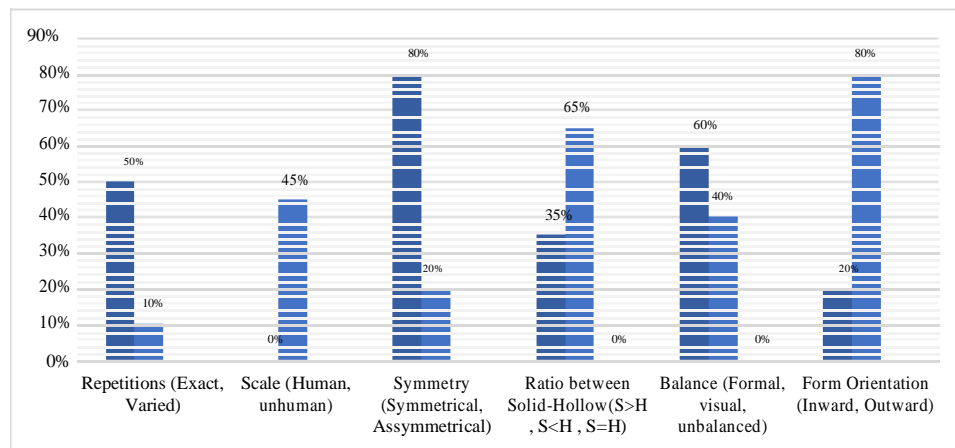**Chart 8** Percentage of shape relationship for architectural samples (Phase C)

Chart 9 Percentage of shape principles for architectural samples (Phase C)

IX.   CNCLUSION

The study, which analysed 15 samples from three phases over a period of a 100 years, revealed that there has been, and still is, a wide diversity and variation in the degree of influence of Westernization on the architectural type of selected samples in the study area and within the three-time phases. This resulted in several differences in the architectural output of these phases and on the formal characteristics of their architectural types in terms of degree and level of impact of Westernization. It may be summarized as follows:

▪
Architectural Samples from Phase A: Although this period witnessed direct Western impacts represented by the British Occupation of Iraq in 1917 and also the participation of numerous Western architects in the design of major buildings, the type of architecture within this phase was affected by Westernization only partially. Architectural forms were simple and appropriate, still using local building materials and traditional building systems, leading largely to a continuation of the use of formal elements and their utilitarian functions. The impact of Westernization on architecture are usually manifested in strong formal transformations leaning more towards abstraction with a rejection of decoration and elaboration of facades and an obvious shift towards fixed rhythm and asymmetrical forms. Thus, it may be concluded that Phase A witnessed a more conservative transformation in architectural type rather than a more disruptive one.

▪   Architectural Samples from Phase B : The effects of the Western " International Style" began to take hold on formal compositions during this phase as can be seen in a clear shift in architectural type through the transformation of its formal elements, principles and rules to varying extents. Transformation in scale, for example, was manifested in the construction of multi-story buildings and towers by using Western structural techniques and imported building materials.

Similarly, architectural designs and mass forms began to be oriented outwards instead of inwards by rejecting the principle of internal courtyard leading to facades which depend totally on the intensive use of external

windows and openings for day lighting and natural ventilation, or later by energy-consuming air-conditioning systems. However, as was mentioned earlier, there were some "Regionalist" attempts to reinterpret past historical models as design references for modern projects but they did not last and were essentially superficial dealing largely with facades rather than more fundamental and spatial elements.

▪   Architectural Samples from Phase C: The architectural output within this phase was, and still is, heavily influenced by Western models and lacked any clear architectural philosophy or direction resulting in chaos and visual confusion and reflecting the plethora of stylistic and architectural types prevalent in the West, and with total disregard to local or regional consideration such as climate and energy consumption. This confusion is clearly manifested in the borrowing of defunct and totally alien ancient classical European models, which is akin to the Revivalism Movement of the 19th. Century in Europe and North America, or mimicking equally confusing models from the Deconstructive Movement and applying them in Kurdistan Region. Therefore, Phase C could be described as unclear and ambiguous because of the overall confusion of most local architectural practitioners and the lack of any coherent design direction to follow. This "permissive" architectural phase may be construed as a surge of uncontrolled experimentation after the break with the two previous phases. Thus, the impact of Western architecture on the Kurdistan Region during this phase resulted in a marked disconnection of the prevalent architectural type with history and tradition. Consequently, it follows that such a phenomenon may be classified as disruptive transformation.

X.   RECOMMENDATION:

▪
The research recommends that the research and study centers in the Kurdistan region of Iraq should direct their efforts to develop local architectural and construction techniques in accordance with the local spatial environment of this area, which represented by materials and methods of construction and design standards appropriate to the geological and climatic nature of the place.

▪
The research recommends that there should be a scientific specialized institution regulating the architecture in the study area (Kurdistan Region of Iraq) through the enactment of laws and legislation based on the rigorous scientific studies of the building standards, stemming from the privacy of the place and expressing the architectural identity of the area.

▪
Research recommends creating awareness in society about the negative effects of the westernization and the importance of the local heritage expressing the architectural type through the establishment of open discussion seminars between the architects and society at all levels, raising the level of artistic taste of the community and activating their association with local architecture, As the community has the direct role of the effects of Westernization on architecture through the degree of acceptance of the Western product.

XI.   References

[1] Abdul Majeed and Husam al-Din Ali, "The Westernization Strategy toward the Islamic world", A M.SC thesis submitted to the Department of Political Science, Baghdad University, Iraq, pp. 9-11, 2002.

[2] Suad Bodemag, "The Architectural Discourse between Western and Islamic Thinking", Journal of the Arab Future, Centre for Arab Unity Studies, Beirut, Vol. 248, pp.120, 1998.

[3] Raed K. Arnaout, "Orientalism in Arab Architecture, the Problem of Building Thought and Identity", p.84, 2009.

[4] Raed K. Arnaout, "Orientalism in Arab Architecture, the Problem of Building Thought and Identity", p.114, 2009.

[5] Akeel Shikara, "The Expression of Architecture in the Information Age, and its Influence on the Concept of Identity", A M.SC thesis submitted to the Department of Architecture, Baghdad University, Iraq, p.123. 1998.

[6] Houghton Mifflin Company, "The American Heritage® Dictionary of the English Language, 4th Edition, 2003.

[7] Collins Essential English Dictionary 2nd Edition 2006 © Harper Collins Publishers, 2006.

[8] Argan and Guilio Carlo, "On Typology of Architecture, Architectural Design", Vol133, No 11/12, London, p.562, 1985.

[9] Ahmed A. Mohammed, "The Impact of Technology on the Patterns of the Arab -Islamic city", A M.SC thesis submitted to the Department of Architecture, Technology University, Iraq, p.17, 2008.

[10] Mitchell, William J., "Types and Vocabularies, the Logic of Architecture", MIT Press, Cambridge, p.80, 1992.

[11] Ahmed A. Mohammed, "The Impact of Technology on the Patterns of the Arab -Islamic city", A M.SC thesis submitted to the Department of Architecture, Technology University, Iraq, pp.39-41, 2008.

[12] Mark Gelernter, "Sources of Architectural Forms: A Critical History of Western Design Theory", Manchester University Press, p.14, 1995.

[13] Ahmed A. Mohammed, "The Impact of Technology on the Patterns of the Arab -Islamic city", A M.SC thesis submitted to the Department of Architecture, Technology University, Iraq, pp. 52-54, 2008.

[14] Siba albadrani, "The Transformation of Architectural Identity in the Urban Environment", A Ph.D. thesis submitted to the Department of Architecture, College of Engineering, University of Technology, Iraq, p.62, 2008.

[15] Anthony Antoniads, "Poetics of Architecture, Van Nastran Reinhold", New York, p.70, 1990.

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[16] http://www.bu.edu.eg/portal/uploads/Engineering,%20Shoubra/Architectural%20Engineering/679/publications/Mohamed%20Khairy%20Amin%20Hamed_PAPER_05.pdf

[17] Anwar S. R. Al-Qaraghuli, "Creative addition in contemporary architecture", A Ph. D. thesis submitted to the department of Architecture, College of Engineering, University of Technology, Iraq, p.92, 2008.

[18] Anwar S. R. Al-Qaraghuli, "Creative add>I,ktion in contemporary architecture", A Ph. D. thesis submitted to the department of Architecture, College of Engineering, University of Technology, Iraq, p.171, 2008.

[19] Aras I. K. Al-Seyany, "Architectural Elements and Decorative carvings in the Remaining Ottoman Monuments in The Kurdistan Region of Iraq (1700-1920 A.D)", A Ph. D. thesis Submitted to the Council of the college of Archaeology in Cairo University, p.93, 2014.

[20] Akeel Shikara, "The Expression of Architecture in the Information Age, and its Influence on the Concept of Identity", A M.SC thesis submitted to the Department of Architecture, Baghdad University, Iraq, pp.115-116, 1998.

[21] Nooraddin, Hoshyar, "Architectural Identity in an Era of Change, Developing Country Studies", Vol. 2, No.10, 2012.