The Phenomenon of Plagiarism along with Other Related Concepts in Islamic Architecture and Heritage Structures "A Comparative and Applied Study on Selected Models"

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Abstract:

The theme of this research is to highlight some of attempts have been made for achieving the concept, manifestations and evidences of the phenomenon of plagiarism, exaction and related meanings, which are emerged and prevailed in architectural and archaeological structures. In addition, the concept, manifestations and evidences of conversion, reuse and related meanings, which are reflected in some heritage structures. Thus, these structures will appear in another form and reflect a methodology other than the original idea, function and purpose. The illegal infringement of ideas or the so-called plagiarism is a manifestation of change in the parameters of truth, actual reality and original purpose. As it is an aspect of violation of the rights of others, also it is an indication of a claim or an illegitimate possession without the right of the owner and original holder of the right. The manifestations of the phenomenon of plagiarism and its equivalent in meaning appeared in heritage architecture through the phenomenon of exaction and re-attribution to someone other than the original founder. It is worth mentioning that there are two complementary aspects to the current study; the first common aspect is concept of the phenomenon of plagiarism combined with exaction, whilst the second common aspect was the concept of conversion along with reuse. This is why the models are chosen and applied to this study. The research methodology will be addressed by comparing those concepts to clarify differences and differentiation through an applied study on selected models of architectural and archaeological structures.

Keywords:

Phenomenon, Plagiarism, Modulation, Islamic Architecture, Heritage Structures

1. Introduction, Outline and Methodology of the study

This introduction outlines the objectives, importance problems and methodology of this study, where at the beginning of the 14th century A.D., it was the duty of the Governor of Cairo to improve the city and to repair any latent defect in those facilities ^[1-6]. Recently, the international conventions have to stress the issue of preserving the urban heritage in general and the heritage constructions which are especially historical characteristics and have the laws and regulations governing the heritage preservation processes have been enacted, and thus no changes are made in the design of archaeological structures or in their decorative value^[7-8], and provided that the conversion processes are carried out for the installations without any internal or external impact on the structural or architectural design and historical characteristics of these buildings, this with the need and necessity to protect their architectural entity, private archaeological nature, specific decorative value and their functional purposes^[9]. Therefore, many charters and laws are called to preserve monuments and heritage sites and

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protect them from plagiarism, exaction, distortion and tampering, also to equip them with the current conditions of the age requirements. According to the methodology of this study, there are many terms related to the idea and content of this research, the most important terms can be addressed as follows; Plagiarism, Exaction, Conversion and Reuse. By this study, these terms will be dealt with the causes or factors related to the concepts and manifestations of the phenomenon of plagiarism along with exaction and reuse along with conversion, which are emerged in architectural and archaeological structures that have a heritage character and a historical style and this should be done without any changes or renewals in the essence of these structures [10-12], however this could be done with some necessary reforms, but without renewals or changes added for the historical character, architectural style, artistic value, as well as for the functional purposes of those archaeological, historical and heritage structures. The reuse of those constructions must be in accordance with their original function that seems appropriate to their potential and their architectural design and geometrical shape without the need of making alterations that might change the essence and origin of heritage structures and their historical character, technical conditions and artistic values [2-3, 5-6, 10-12]. It is worth mentioning that many architects, such as Kevin Lynch (a) [13], Brent Brolin (b) [14], have called for the preservation of architectural elements with their characteristics and features, as they have value and character. A distinctive measure that reflects the style of an age or a certain period of time, as well as the need to take care of all the architectural, artistic and functional values of the structures in order to be a witness to their creation age and there is no change or without any aspect of plagiarism in architectural values of heritage constructions. It should be noted that there is a lecture carried out by Hassan Abd al-Wahhab (c) in the Egyptian Scientific Institute in the session of 28 Shaaban 1375 AH / April 9, 1956 about the movable and plagiarized monuments in Islamic architecture, where he stated that there were features of demolition, obliteration, confirmation, falsification and plagiarism appeared in Islamic architecture and cited what Al-Jaḥiz (d) said since the ninth century AD, where Al-Jaḥiz (d) mentioned in his work entitled Kitab Al-Hayawan or the Book of Animals (e) the following:" Kings would have obliterated the monuments of the ancestors in order to erase the names of their enemies. For this reason, they have destroyed cities and fortresses and so the situation was in the days of Ajam also in the days of ignorance and then in the time of Islam, where Uthman ibn Affan destroyed the silo of Ghamdan. In the same way, the Abbasid caliphs destroyed what the Umayyad caliphs built from cities and factories in Bilad al-Sham (f). Abdul Wahab (c) also mentioned what Abu Jaafar al-Mansur (g) did, where he made some attempts to destroy Iwan Kasri, but failed because of the strength of the building. He also mentioned what the Abbasid Caliph Al-Mahdi (h) did when he entered Al-Rawdah or the Holy Raudah in Al-Madina, almost in 169 AH / 785 AD, and when Al-Mahdi saw the name of Al-Walid ibn Abd al-Malik written in the embroidery of al-Harām Mosque, for this reason, Al-Mahdi insisted on erasing the name of Al-Walid and writing the name of the Al-Mahdi instead (c). As well as martyrdom of what did by the successors of al-Ma'mun in the Dome of the Rock in Jerusalem when they conducted extension in architecture in 216 AH / 831 AD, they erased the name of its founder, Abd al-Malik ibn Marwan, and put the name of al-Ma'mun instead, but they missed a change of recorded history in 72 AH / 691 AD. He also mentioned what Ahmad ibn Tulun (i) did to erase the name of the Caliph al-Mutawakkil aala Allah (j) from the Nilometer of Rawdah Island in Cairo (k), also what did the engineer of the Abbasid Caliph al-

Mutawakkil aala Allah (j), where in 245 AH/ 859 AD, he used the stones of Pharaonic temples of Heliopolis and the stones of Coptic churches in order to build pillars around the Nilometer of Rawdah Island (k), and also what was done by Engineer Badr al-Jamali, the Minister of the Caliph Al-Mustansir Billah, where Badr al-Jamali used the stones of the Pharaonic temples in Bab al-Nasr, Bab al-Futuh and the fences between them. This is in addition to An-Nasir Salah ad-Din Yusuf ibn Ayyub, who demolished the wall of the city of Ansina, Minya Governorate in Upper Egypt, also what Bahaa Al-Din Qaraqosh did when destroyed the stones of the pyramids in order to build a wall around Cairo and Al Fustat. There are also some manifestations of aggression, transport and reuse, as in the case of the Khangah of Baibars al-Jashankir in El-Gamaleya, Cairo, the mosque of Amir aUthman Katkhuda, known as Al-Kikhia mosque, bordering on the Old Opera Square, Cairo, the Qaaa of al-Dardir in Historic Cairo, Egypt and the Mosque of Amir Al-Maridani in Historic Cairo, Egypt, as well as some door shutters and movable doors (c). However, the current study differs in terms of the methodology of the analytical study and applied models. Also, the current study differs in the context and content of the research and how to deal with elements and models of the applied study. There is a study conducted by Mustafa Naguib (1) about the transfer of Islamic archaeological buildings in Cairo to preserve them in a suitable archaeological environment, a research published in Journal of the Faculty of Arts and Humanities, University of Minya, January 1997. This study dealt with the transfer, demolition and removal of Islamic monuments in Cairo to preserve them in a suitable condition and in a sound archaeological environment. There are many examples that have been addressed such as the transfer of the Zawiyah of al-Nasir Faraj ibn Barquq, known as Al-Deheisheh No. 203 in the area of Bab Zuweila, and this was in 811 AH / 1408 AD, the transfer of Sabil of al-Bazdar No. 27 in Historic Cairo, almost in 1050 AH / 1641 AD, and Sabil Al-Sit Saleha No.313, 1154 AH / 1741 AD. Naguib also discussed the expansion and organization of Historic Cairo. Furthermore, the appropriateness of the new environment for movable monuments, the architectural planning and modifications of these movable buildings (1), as well as the efforts of the Committee for the Conservation of Arab and Islamic Antiquities (m), where the Committee has made activities in the procedures for the transfer of Islamic monuments in Historic Cairo, in addition to the facsimile carried out for decorative elements and writings (m). However, the current study differs greatly from previous studies in the applied study through the models that have been dealt in Egypt and outside Egypt, as well as in the methodology of presentation, narration and elements of the subject of the study, also in the analytical content. It is worth mentioning that there are researchers carried out studies such as previous research papers, however they did not investigate the concept and manifestations of the phenomenon of plagiarism, exaction and conversion along with reuse in architectural and archaeological structures through comparative and applied study on selected models in Egypt and outside Egypt; the applied and comparative models in Egypt such as the Madrassa of Al-Nasir Muhammad, the Mosque of Al-Nasir Muhammad, the Khangah of Amir Shaykhu, the Mosque of al-Mu'ayyad Shaykh and the Mosque and Madrasa of Al-Suwaidi; the applied and comparative models outside Egypt such as the Dome of the Rock, the Great Mosque of Cordoba, the Great Mosque of Seville, the Square of Sultanahmet(Hippodrome of Constantinople), the Hammam of Hagia Sophia and the Cathedral of Hagia Sophia. It is worth mentioning that there are two complementary aspects to the current study; the first common

aspect is concept of the phenomenon of plagiarism combined with exaction, whilst the second common aspect was the concept of conversion along with reuse. This is why the models are chosen and applied to this study. Moreover, previous studies have not discussed the differentiation between concepts of plagiarism, exaction and conversion along with reuse. In addition, the current study will classify these terms and concepts into an idiomatic or linguistic classification and functional classification, these classifications are divided into three functional purposes as follows; functional purpose of the concept of reuse, functional purpose of the concept of rehabilitation or adaptive reuse according to purpose and functional purpose of the concept of integration or integrated reuse. Furthermore, the current study will discuss some terms associated with the concepts of conversion along with reuse and plagiarism along with exaction. This methodology for the current study has not been discussed in previous studies. Therefore, this study aims to discuss and identify the meaning, definition, concept and manifestations of the so-called plagiarism, exaction and conversion along with reuse in architectural and archaeological structures through comparative and applied study on selected models in Egypt and outside Egypt. The objectives of this study are to discuss, investigate and analyze the evidences and manifestations of the phenomenon of plagiarism and related concepts in architectural and archaeological structures through comparative and applied study on selected models in Egypt and outside Egypt. Moreover, this study aims to clarify the interactions between concept and manifestations of the phenomenon of plagiarism, exaction and related meanings, as well as to highlight the differentiation between them and the concept and manifestations of conversion along with reuse. This will be addressed through conceptual comparisons and applied study on selected models of architectural and archaeological structures. This will be evident through the methodology and structure of the study, which will serve as a discussion of the content of the study.

2. Methodology and themes of the study

2.1. Differentiation between the Concepts of Plagiarism along with Exaction and Conversion along with Reuse

The content of this study includes some linguistic vocabularies such as Plagiarism, Exaction, Conversion, and Reuse. All these terms revolve around themselves or move in a circle, where each one leads to another, this is when used and applied to architectural and archaeological structures. The concept of reuse requires conversion, as well the concept of plagiarism requires exaction and vice versa. If we have a heritage structure, the process of reuse needs to the procedures of conversion and so these terms are linked to each other; if we have a heritage structure and want to re-attribute it to another one instead of the original founder, this requires the procedures of conversion and then this heritage structure can be reused according to the innovative purpose. From the above mentioned, it is clear that these vocabularies are linked together because each of them requires the other. For the study methodology, it is required to differentiate between the linguistic definitions of plagiarism along with exaction and their equivalent in meaning and the definitions of conversion along with reuse and their equivalent in meaning. The so-called plagiarism [15] is a change in the parameters of truth, it is also an aspect of infringement of the rights of others likewise a manifestation of exaction and also a manifestation of attempts perform to impersonate functions with a view for changing the features of actual reality and change the functional purposes of heritage structures. Thus, the

alternative will serve another purpose is put forward for an immersed person or a bossy ruler. So, the political conflict for authority and regime, likewise the personal glory of some of the most important reasons for the phenomenon of plagiarism or change the facts and actual realities. Exaction [15] equals in meaning to excessive or unjust demand and unfair allegation that may refer to extortion of something and notifies a bossy act or an authoritarian performance of demanding and obtaining something from someone, claiming that this is a private property; it is also a violation of the right of someone or something. The concept of conversion or alteration in language includes founding of something that was not before at the same way as it became after the change, conversion or alteration [15], as it is considered as converting of something from one status or condition to another, this is the case when it is said: "I changed my house if I built it based on what it wasn't on" [16]. Through the linguistic definition, some thinkers were able to put a conventional definition, where it is defined as a social activity that often takes a form or manifestation of a social thought or behavior, which gradually become different from its old style and original nature, as it aims to modify or change the current social styles, which will lead to erase old character and original properties [16-17]. So, it should be noted that the social alteration occurs through cultural change and both of them require some changes are needed in society in general, thus there is a change in the outputs of civilization. The term use means using something for the first time, but the term reuse means using something for more than once by rehabilitation [15], as there is a term of adaptive reuse, which means reuse with the necessity of conformity of the archaeological structure with the modern function and epochal purpose [15], this should be occurred without any repulsion or conflict with the historical function and archaeological value of heritage constructions [12]. Thus, the meaning of the term reuse had become different from meaning of the term adaptive reuse, which means qualifying, alteration or rehabilitation of the function of heritage structures which had lost their original function with keeping in a good architectural and structural condition, as there are requirements to reuse the building according to innovative functional purpose in order to be adapted to the epochal requirements, but on the condition that heritage constructions are preserved and maintained^[18]. This often accompanied with the processes of reuse that includes some structural additions, alterations and spaces for the construction to be suitable for its innovative function. This helps in the processes of reuse along with conversion of heritage constructions and also maintains their harmony when merging with social and economic requirements of the city instead of being a closed archaeological structure [19]. This ensures the maintenance of these constructions in a practical way, but we should be aware of doing any alterations in order not to lose their heritage features, historical function and archaeological value. In Egypt, this happens with some archaeological structures such as; Sabils, Kuttabs, Baths or Hammams and Palaces to preserve them, and so as not to be deserted without any practical follow-up [20]. Another term is a reflective of the meaning of integrated reuse or the so-called integration reuse [15], this term implies a combination of reuse and between the concept of a compatible reuse adapted to reuse with the need of preservation the original function and basic purpose of heritage constructions, but it allows the addition of other functions adapted to the original function of the construction to achieve the concept of integrated and compatible functions [21]. From the above, it is clear that the concept of reuse may be through rehabilitation along with conversion of the building with its original function, for which it was established without

modify or change the features of its architectural qualities and its structural or geometrical systems. Also, the concept of reuse includes the possibility of making appropriate modification and reformat whether it is maintenance or renovation, but provided that the archaeological witness did not lose the functional purpose for which it was built for and also without any breach of the geometrical foundations to which the archaeological witness has been established or without any modification that may cause loss of originality value, historical and cultural significances [10-12, 18-19]. The concept of conversion along with reuse [15] includes certain actions that would qualify heritage constructions to do their function well or in a developed way according to modern requirements, furthermore this term has been used in the processes of conversion along with reuse, which are performed through the so-called ERP Projects, known as the Enterprise Resource Planning Systems of Population Distribution, which particularly performed to historical or heritage sites for their reuse functionally and for conversion technically, this in order to do basic function that had been lost as a result of their inappropriateness of the social requirements and modern developments, and the policy of conversion along with reuse must have a necessity of respecting the historical and heritage character, so some technical treatments are often conducted externally and internally, and the conversion along with reuse policies allow for doing some additions such as doing internal spaces and security and safety requirements for the construction to adapt to modern needs and epochal requirements, but provided that the external façades of the construction must remain as it is without making any changes or additions [21]. This may be on the concepts of conversion or re-attribution of a deteriorating situation that may occur within and outside the constructions and which no longer perform their original function and are no longer in their status is functionally qualified, and so there are sometimes some necessary additions such as electronic networks and access and exit control networks, fire-resistant networks, sound systems, security alarms and ventilation and heating equipment, including additions to some internal architectural elements such as furniture, curtains, floors, lighting and fixed decorative elements; but provided that the values must preserve their architectural and historical features, also aesthetic or artistic function as well as the functional aspect of the constructions through which they express the features of the past and their historical character, also their cultural and heritage values [20,22]. From the above, it can be said that the concept of conversion along with reuse of the building requires keeping the main or original functional purpose that should be adapted to the innovative functional purpose [19, 23]. Therefore, it can be noted that the concept of reuse of archaeological structures in general must be performed by making the necessary alterations and renovations, but it is required that no change be made to historical and archaeological features, architectural style and artistic features [10-12]. It should be noted that the concept of modernization or renovation is made through some changes that would restructure the heritage and historical constructions erected at the end of the 18th century and the beginning of the 19th century, which are often demolished for the construction of modern buildings, and this will change their functional purpose architecturally and artistically; as well as the alteration of the visual character for the whole area [10-12, 18-20]. From the above, it is clear how the concept of these terms differs, especially when they are used for heritage constructions, so that these terms of reuse and its equivalent in meaning used with architectural constructions, which may be classified to two types or categories as follows;

[1]Idiomatic, Terminological or linguistic classification, which revolves around three fields of reuse, compatible reuse, and adaptive reuse and integration reuse; each one has a linguistic concept indicating a functional purpose [18-23].

[2]Functional classification that deals with the functional purposes required of those linguistic terminologies, which differ in terms of the functional aspect and in the method of treatment and configuration style with the architectural constructions in terms of addition or deletion or elimination of the functional aspects of the architectural constructions [10-12, 18-20]. These classifications are divided into three functional purposes, which can be addressed as follows;

A. Functional purpose of the concept of reuse [10-12, 18, 20].

B. Functional purpose of the concept of rehabilitation or adaptive reuse according to purpose [10-12, 21, 22]

C. Functional purpose of the concept of integration or integrated reuse [10-12, 18-23].

2.2. Terms associated with the Concepts of Conversion along with Reuse and Plagiarism along with Exaction

There are some other terms associated with the concepts of reuse along with conversion and the phenomenon of plagiarism along with exaction. Methodologically, this study will begin with the term conversion which is required as an effective procedural method in order to execute the process of reuse. The concept of conversion^[15] refers to procedural techniques that are carried out by making functional changes to heritage constructions, where the original function will be replaced with another alternative function instead of the actual function of heritage construction, and this is done through doing radical changes for the construction such as spaces and extensions that are added internally or externally in order to adapt fulfill the modern requirements and to fulfill the innovative purposes [10, 20, 23-24]. There are some other terms associated with the concepts of this study such as renewal, renovation, regeneration, restoration, rejuvenation, revitalization and revival, which equal in meaning to the concepts of modernization, habilitation and conversion along with rehabilitation that are carried out through necessary modifications and procedural techniques in order to be appropriate for the requirements of modern times, this may be reflected in the policies of architectural and geometrical replacement [10-12, 18-20]. From the above, it is clear that there is an essential correlation between the meanings of reuse and the concepts of adaptation, modification and re-attribution, which are implemented through optimization and modernization procedures, as well as infrastructure development and provision of technical requirements in order to fit for heritage constructions and to perform their functional role in a complete way, but with the concern of functional purposes and original artistic values [10, 18-20, 22-23]. As for the concept of plagiarism; it means the illegal seizure of ideas or for functional purposes and their representation in another form or with a methodology other than the idea or the original functional purpose, the phenomenon of plagiarism is a manifestation of a change in the parameters of actual reality or the milestones of the truth and in the features of original purpose, as it is a manifestation of infringement of the right of others and also it is a manifestation of the violation of the right of others; so the phenomenon of plagiarism may indicate the appearance of an allegation or illegitimate possession of a person without recognition of the right of the owner and the original holder [15, 25-30]. On the other hand, there is the term exaction, which equals in meaning to excessive or unjust demand and unfair

allegation that may refer to extortion of something and notifies a bossy act or an authoritarian performance of demanding and obtaining something from someone, claiming that this is a private property [15, 25-30]. There has been a multiplicity of reasons for the phenomenon of plagiarism or change the parameters of truth or actual reality, the political conflict and the struggle for the authority and regime are of the most important reasons of plagiarism, as well as the personal glory of some of immersed persons or bossy rulers, in addition to personal and financial benefits. It should be noted that evidences of plagiarism, alteration, transformation and exaction had prevailed since the beginning of humanity [15, 25-30]. Evidences have emerged through the phenomenon of plagiarism, alteration, modification and exaction of a specific document or an archaeological evidence is valuable and important for achieving purpose or personal benefit or in order to fit current time requirements, which has been popularized and materialized by attributing a monument or a manuscript of a person who is not the original owner; or by replacing King's name with another as a result of political or religious conflict, also by erasing it completely, likewise by modifying the reckoning numbers. Therefore, there were some of plagiarism evidences represented in modifying, erasing and a partial or total removing for some information or for some architectural or artistic elements; this can be appeared through the process of reuse of heritage structures and by re-attributing to someone other than the original founder in order to achieve some purposes other than the original target.

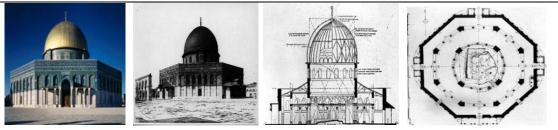
3. Evidences and Manifestations of the Phenomenon of Plagiarism along with Exaction and Conversion along with Reuse in Architectural and Archaeological Structures

There are some evidences and manifestations of plagiarism, exaction, conversion and reuse have represented and emerged in archaeological, historical and heritage structures. It is worth mentioning that if there is a need to reuse an archaeological structure, this requires an exaction that leads to plagiarism and both of them lead to procedural conversions in order to reuse archaeological, historical and heritage structures. The methodology of this study will depend on architectural and archaeological models or evidences that will be classified according to the importance of this evidence and how to serve and confirm the idea and content of this study. These concepts, evidences and manifestations can be addressed and applied to architectural and archaeological models as follows;

3.1. The Dome of the Rock

The evidences and manifestations of the phenomenon of plagiarism along with exaction and procedural conversions along with reuse in Islamic architecture have appeared clearly through the replacement of King's name with another as a result of a political and religious conflict and also emerged through erasing, changing or modifying numerical numbers, this can be evident through the Dome of the Rock [31-35], which built by the Umayyad Caliph Abd al-Malik ibn Marwan in 72 AH/691 AD in Jerusalem, Palestine (n) [36-40]. The evidences of the phenomenon of plagiarism emerged in the Dome of the Rock can be shown through the inscriptions of the Mosaic which found at the top of the arches that includes Quranic Verses and religious expressions; besides the foundational text which states the following phrase: "The Dome of the Rock is built by Abdullah al-Imam Al-Ma'mun, Amir al-Mu'minin in 72 AH", there we can note the replacement of the name of Abd al-Malik ibn Marwan with the

name of Al-Ma'mun, although the date of the establishment is still on its original situation. For this reason, it is clear and certain that Abd al-Malik ibn Marwan is the one who ordered to set up the Dome of the Rock in 72 AH ⁽ⁿ⁾ [31-40], and when the Abbasid Caliph Al-Ma'mun did some procedural conversions in order to reuse the Dome of the Rock and also he did modifications on the foundational text which registered on the Dome of the Rock, then he added and inscribed his name on the foundational text instead of the Umayyad Caliph, but fortunately he forgot to erase or change the date 72 AH, which was dated back to the era of the Umayyad Caliph Abd al-Malik ibn Marwan (Fig.1)



(Figure 1): The Design, Section and Elevation of the Dome of the Rock, Jerusalem, Palestine. After: The Creswell Archive, Department of Eastern Art, Ashmolean Museum, Oxford, on Website: http://www.ashmol.ox.ac.uk/ (Access date: 14/11/2017).

Through the previous model, it is clear that the so-called plagiarism is emerged as a manifestation of a change in the parameters of the truth, actual reality and original purpose, as it is an aspect of infringement of the rights of others; likewise it represents the concept of the so-called exaction, which also illustrates the manifestations of reuse along with conversion and exaction along with the phenomenon of plagiarism that is a manifestation of the violation of the rights of others, which may indicate an aspect of a claim or an illegitimate possession of a person without the right of the owner and the original holder of this right. The political conflict for authority and regime, as well as the personal glory are of the most important reasons for the phenomenon of plagiarism or change the facts and actual realities; the Dome of the Rock is a clear evidence of the phenomenon of plagiarism and also is a clear manifestation of reuse along with conversion and exaction along with plagiarism, which evidenced and re-attributed to someone other than their original founder and attempts to impersonate functions of enterprises with a view for changing the features of actual reality and also for altering the functional purposes of heritage construction, so that the alternative will serve another purpose differs from the original purpose or the basic target.

3.2. The Madrassa of Al-Nasir Muhammad

There are some manifestations that prove the change of facts and also evidences that reveal the phenomenon of plagiarism along with exaction and procedural conversions along with reuse had emerged and prevailed in the Madrassa of Al-Nasir Muhammad ^(o), which erected in the name of the Mamluk Sultan Al-Nasir Muhammad ibn Qalawun ^(o) [41-54]. This Madrassa is located in street of Al Muizz Li Din Allah in Islamic Cairo, and registered in the Islamic Antiquities with No. 44. It should be noted that the Mamluk Sultan Al-Adil Zayn-ad-Din Kitbugha Ben Abd-Allah Al-Mansuri ^(p) [55-57], who began to construct this Madrassa. Hassan Abd al-Wahhab pointed out that Sultan Kitbugha was the one who constructed this Madrassa and raised it high or elevated at his reign, this was according to the registered inscriptions or

foundational text on the facade almost in 695 AH/1295 AD (0-p) [41, 58]. Moreover, he constructed it on the ruins of an old bathroom or Hammam which previously existed in its current location, but when Sultan Al-Nasir Muhammad ibn Qalawun ruled Egypt for the second time, he deposed Sultan Kitbugha, and then Sultan Al-Nasir continued the construction of the Madrassa almost in 703 AH/1303 AD. Furthermore, he built a dome in it, and moved the remains of his mother's corpse in order to bury corpse into Madrassa, he also buried his brother Prince Anuk [41, 58-59]. Also, the most important features of the phenomenon of plagiarism are evident through the marble door with the Gothic style which was taken from the Church of Saint George in Acre, Sultan Al-Ashraf Khalil brought the marble door to Egypt, and then Sultan Kitbugha used that entrance in construction of the Madrassa. Thereafter, Sultan Al-Nasir built a square minaret over the entrance of the Madrassa, this minaret was full of many plaster decorations with its Andalusian style; these decorations are known as Dantilla [42-47, 49-54, 60]. It is worth mentioning that the foundational texts at this Madrassa didn't mention the name of Sultan Kitbugha, although there are remarks and indications for texts registered on the façade of the construction, which dated back to 695 AH/1295 AD (o-p) (Fig.2).



(Figure 2): The Madrasa of Sultan Al-Nasir Muhammad ibn Qalawun is originally due to the reign of Sultan Al-Adil Kitbugha. After: The Creswell Archive, Ashmolean Museum, Oxford, http://www.ashmol.ox.ac.uk/ (Access date: 14/11/2017).

Hassan Abd al-Wahhab (c) [41, 58] mentioned that when Al-Ashraf Khalil ibn Qalawun opened the city of Acre in 690 AH / 1290 AD, he moved a marble door that was part of the building of the Church of St. John. Kitbugha then used this marble door in the building of his Madrassa that is located in the area of Al-Nahasin, Cairo (Fig.2). This Madrassa was completed by Al-Nasir Muhammad ibn Qalawun, who removed the name of Kitbugha from the façade, then wrote his name in small letters, but Al-Nasir left the date 695 AH, where he was not in power at that time. Hassan Abd al-Wahhab (c) believes that Al-Nasir did so not for the purpose of plagiarism, but because he did not admit Kitbugha as king. Abd al-Wahhab (c) also stated that Al-Nasir did so with Baibars al-Jashankir, where Al-Nasir removed the titles that were written on the façade of the Khanqah of Baibars al-Jashankir, these epithets are Al-Malik Al-Muzaffar which preceded the name of Baibars al-Jashankir. Therefore, nicknames were erased, but Al-Nasir left only the name of Baibars al-Jashankir on the façade of the Khangah. In any case, the current study believes that the Madrassa of Al-Nasir Muhammad represents a manifestation of the violation of the rights of others, which may indicate an aspect of a claim or an illegitimate possession of a person without the right of the major owner or the original holder. In addition, the Madrassa of Al-Nasir Muhammad shows a clear evidence of the phenomenon of plagiarism, which also represents a clear manifestation of reuse along with conversion and exaction along with plagiarism, which evidenced and reattributed to someone other than the original founder. These attempts are to impersonate

functions of enterprises with a view for changing the features of actual reality and altering the functional purposes of this heritage construction.

3.3. The Mosque of Al-Nasir Muhammad

Regarding the evidences of the phenomenon of plagiarism represented in modifying, erasing and a partial or total removing for some information or for some architectural or artistic elements, which also appeared through the reuse of monuments and re-attribution to another one to achieve other purposes. Thus, there are some examples or models of Islamic constructions in Egypt, which are used or reused some architectural elements dated back to previous times or old ages, this is represented in Al-Nasir Muhammad Mosque in Citadel of Cairo (q) [61-66], and this Mosque was one of the Mamluk Mosques in Egypt and continued to be important during the Ottoman conquest. It is worth mentioning that the Pillars used or reused in construction were some of archaeological and architectural elements brought from older and previous constructions. This can be noticed from the capitals or crowns of pillars which were included the characteristics of the Pharaonic, Roman and Coptic styles, although the simplicity of the Mosque from the outside along with the inner decorations seemed to be wealthy with artistic accuracy, also distinguished with the variety and difference in artistic styles (q) [60-66] (Fig.3).



(Figure 3): Archaeological and artistic features of Mosque of Sultan al-Nasir Muhammad at the Citadel, Cairo, Egypt. After: The Creswell Archive, Ashmolean Museum, Oxford, http://www.ashmol.ox.ac.uk/ (Access date: 14/11/2017).

3.4. The Khanqah of Amir Shaykhu

Some of Islamic structures in Egypt had evidences of the phenomenon of plagiarism along with exaction and procedural conversions along with reuse of monuments and re-attribution to another person to achieve other purposes. These are represented in and through the Khanqah of Amir Shaykhu (r) [59, 62-63, 66, 67-70], which is located in the street of Saliba in Cairo and registered in the Islamic Antiquities with No. 152 which is almost dated back to the Mamluk era 756 AH/1355 AD. It can be noticed that the architrave of the entrance of the Khanqah (s) [71-72] was an old architectural element of a Pharaonic building that had Hieroglyphic inscriptions, which used or reused as a main architectural element of the architrave of the main entrance of the Khanqah of Amir Shaykhu (r-s) [59-60, 61-63, 66-70] (Fig.4).



(Figure 4): On the left side, the architrave of the main entrance and then the facade of the khanqah of Amir Shaykhu, Cairo. (By the researcher and After: The Creswell Archive, Ashmolean Museum, http://www.ashmol.ox.ac.uk/ (Access date: 17/4/2017)

3.5. The Mosque of al-Mu'ayyad Shaykh

The evidences of adaptive reuse [15, 21-22], which is a manifestation of the phenomenon of plagiarism along with exaction and procedural conversions along with reuse, which are appeared clearly in the Minaret of the Mosque of Sultan al-Mu'ayyad Shaykh (t) [49, 62-63, 73-75], which is located in Taht al-Rabaa area of Cairo. This Mosque dates back to the Mamluk era about 818 AH/1415 AD. It is worth mentioning that Bab Zwailah has been reused where the two minarets of the Mosque of al-Mu'ayyad Shaykh have been held on Bab Zwailah, although these minarets didn't hold on Bab Zwailah, they were reconstructed in the same position at the upper part of Bab Zwailah, in that case these minarets had unique architectural elements. Moreover, the door of the Madrassa of Sultan Hassan is also used or reused; this door has two wooden shutters are covered with Bronze which has been taken from the Madrassa of Sultan Hassan in order to reuse in the main entrance of the Mosque of al-Mu'ayyad Shaykh (t) [49, 62-63, 73-75].

3.6. The Mosque and Madrasa of Al-Suwaidi

The phenomenon of plagiarism along with exaction and procedural conversions along with reuse became clear through the architectural elements brought from older constructions, which can be seen in the Mosque and Madrasa of Al-Suwaidi (u) [76], which is located in the street of Al-Suwaidi in Cairo and registered in the Islamic Antiquities with No. 318. It was built about 834 AH/1430 AD by Badr Al-Din Hassan bin Suwaid, who lived at the time of Sultan Al-Ashraf Sayf-ad-Din Barsbay. The Mosque and Madrasa of Al-Suwaidi had evidences of the phenomenon of plagiarism, where there is a manifestation of reuse to some of the old architectural elements such as the pillars which include Hieroglyphic inscriptions, this is proof that these pillars were brought or imported from ancient archaeological constructions (Fig.5)



(Figure 5): Archaeological and artistic features of the Mosque and Madrasa of Al-Suwaidi, Cairo, Egypt, where the pillars include Hieroglyphic inscriptions. (By the researcher)

In addition to the previous examples in Egypt, Hassan Abd al-Wahhab(c) mentioned that there are some other models, including what are kept in museums, which illustrate the process of plagiarism and reuse of some elements dated back to previous times or old ages, where it has been reused in some Islamic architectural structures, such as two sills in the Zawiha of Ahmad bin Shaaban in Al-Azhar neighborhood, also the threshold of the Khanqah of Sultan Faraj ibn Barquq in the Mamluk Cemetery or Al-Qarafa in southeastern Cairo, Egypt, the threshold of the Mosque of Sabig Al-Din Mithgal or the Sabigiyya School, located in Darb Kormoz, El-Gamaleya, Cairo, as well the threshold of the Mosque of Agsungur, located in the area of Tabbana, Cairo. In addition to the threshold of Khayrbak Mosque which is a religious complex at Bab al-Wazir street, Islamic Cairo, Egypt. Also the threshold of the mosque of Al Malik al-Jokendar behind Al-Husayn Scene, Cairo, in addition to the threshold of the Mausoleum or Qubbat Hasan Sadaga, located in the street of Al Soufeya, Cairo, also there is an architrave deposited in the Mag'ad of Al-Ghuri, located in Al-Azhar Street, Cairo. In addition to two pieces taken from an old pillar with written ribs, which were used as a base and crown for a column in the Wakala of Qawsun, located in Bab El-Nasr, El-Gamaleya, Cairo. It should be noted that this old pillar with written ribs deposited in the Egyptian Museum after the demolition of the Wakala of Qawsun, also there is an old threshold used as a door sill in the Wakala of Oawsun. It is worth mentioning that there is an old column reused in Al-Turkmani Mosque in the street of Bab El Bahr, which is close to Bab El Shaaria, Cairo, Egypt; as well, there is an old threshold reused in Bab Al-Tawfig, Cairo, Egypt^(c). It is worth mentioning that these examples may indicate the concept of reuse, but may not reflect the first common aspect of this study, which discusses the concept of the phenomenon of plagiarism along with exaction or violation and infringement, in addition to it may not reflect the second combined side, which explains the concept of conversion along with reuse. Therefore, there are two complementary aspects to the current study; the first common aspect is concept of the phenomenon of plagiarism combined with exaction, where the second common aspect was the concept of conversion along with reuse. That is why the models are chosen and applied to the current study, these architectural and archaeological models explain both sides to the idea of this study, which emerged and in the Dome of the Rock, the Madrassa of Al-Nasir Muhammad, the Mosque of Al-Nasir Muhammad, the Khangah of Amir Shaykhu, the Mosque of al-Mu'ayyad Shaykh and the Mosque and Madrasa of Al-Suwaidi, as mentioned above in the current study.

3.7. The Great Mosque of Cordoba

There are some evidences of reconfiguration, procedural conversions along with reuse of heritage constructions, these procedural conversions are in order to adapt to modern purposes other than original purposes, and this is what happened in the Great Mosque of Cordoba (v) [77-83], which many Islamic Historians praise through its extent, architectural elements and wealthy artistic designs. It should be noted that there were remarks and gestures indicate that this site was an original site of a Roman temple for the God Janus or the so-called Ianus, and then it had turned into a Church by the Goths, almost in 572 AD. Later, it had turned into a Mosque under the rule of Abd al-Rahman I, almost in 756 AD (v) [77, 84]. After that, it had turned into a Cathedral of St. Maria with the overthrow of Al-Andalus by the King Ferdinand III, almost in 1236 AD; the King Ferdinand III was the one who issued an order to convert the

Mosque to the Cathedral, known as Cathedral of Santa Maria the Greater. From this time, the old architectural features and artistic values had changed step by step until the general character represented in the Gothic style [82-83] (Figs.6-7).



(Figure 6): Archaeological and artistic features of the Great Mosque of Cordoba. After: UNESCO, World Heritage Centre, Historic Centre of Cordoba on Website: http://www.unesco.org/ (Access date: 14/11/2017); and After: Lamprakos, 2016.



(Figure 7): On the left side, the Mihrab, Mosaics and Sanctuary of the Great Mosque of Cordoba. On the right side, the Portal of the Church of San Juan de Banos, erected in the Seventh Century. (After: Dodds, 1992)

3.8. The Great Mosque of Seville

The manifestations of reuse along with conversion and exaction along with the phenomenon of plagiarism are appeared clearly in the Great Mosque in Seville ^(w) [85-89], which built by the Judge Omar Ibn Adabbas, almost in 214 AH /829 AD by order of the Prince Abd ar-Rahman II, known as Abd ar-Rahman Al-Awsat, but when Seville toppled, the Mosque had turned into the Church of Saint Salvador. In 1671 AD, the Mosque was destroyed, collapsed and completely changed in its characteristics except for its minaret in order to reuse it to construct or definitely to rebuild the Church instead of the Mosque ^[85-89] (Fig.8).



(Figure 8): Archaeological and artistic features of the Mosque of Seville. (After; Zaimeche, 2005)

3.9. The Square of SultanAhmet (Hippodrome of Constantinople)

There is another evidence and manifestation of the phenomenon of plagiarism along with exaction and procedural conversions along with reuse, which materialized in the Square of SultanAhmet in Istanbul, the old name is the Hippodrome (x) [90-92] or the Roman Circus which was an wide open-air area to celebrate the social events and also it is used as sporting and social centre of Constantinople (y) [93-95], which was the capital city of the Roman Empire

between 330-1204AD, and the Byzantine Empire almost between 1261-1453AD. Later, it was used or reused as a capital city of the Ottoman Empire almost between 1453 -1923AD. Currently, the square of the Hippodrome of Constantinople is known as the Square of SultanAhmet (z) in Istanbul [95-97]. For decorating the square, there were four artifacts imported or brought from other constructions in order to reuse; these four artifacts are an Egyptian Obelisk, Serpent's Pillar, Memorial of Roman Emperor Constantine the Great, and German Fountain which was a gift of alliance from the German Emperor Wilhelm II, known as Kaiser Wilhelm to Sultan Abdulhamid II. All these monuments are still seen in the square of SultanAhmet (z) [96-99]. Therefore, it can be indicated that these monuments represent the manifestations of the phenomenon of plagiarism along with exaction and procedural conversions along with reuse, which incarnated in the oldest monument in Istanbul, including the Egyptian granite obelisk dated to the reign of King Thutmose III, in addition to the Serpent's pillar used as a statue of three serpents convoluted, now the heads of three serpents destroyed and lost. It is worth mentioning that there is a story is recorded on this pillar indicates that this bronze memorial was erected by the Persian soldiers after defeating the Greeks in a combat almost 5th century BC. Additionally, this pillar has been imported from the temple of Apollo in Delhi by the Roman Emperor Constantine the Great. With regard to the memorial of the Roman Emperor Constantine the Great, known as the marble block of the obelisk or the wall of the obelisk which the main constructor and the date of erecting are unknown, however, it was remade by Emperor Constantine VII, almost in 10th century, this in order to reuse as a base of the Egyptian obelisk that has been placed on the marble stone of Emperor Constantine the Great; the inscriptions indicate to the story of the rule of Emperors and the process of erecting the obelisk, these inscriptions have been engraved on the marble block during the reign of the Roman Emperor Theodosius [96-99] (Fig.9).



(Figure 9): The monuments located in the square of Hippodrome of Constantinople known as Square of SultanAhmet, Istanbul. (After: UNESCO, 2011; Hendrix, 1993; Safran, 1993)

3.10. The Hammam of Hagia Sophia

It is worth mentioning that the processes of reconfiguration along with the procedural conversions used for treating the constructions and the old areas in order to be adapted to the purposes or requirements of modern times; these constructions or old areas will be modified and converted or readjusted in an innovative form and purpose to reuse as an urban area. It can be allowed to remove some other constructions around the heritage site, this in order to preserve the historical character of heritage structures. Therefore, the implementers should be aware of architectural and geometrical foundations of the structure to safeguard and protect its cultural significances and historical features. Heritage structures should have architectural blocks according to geometrical designs related to the era of heritage structures construction, so the procedures of conversion and configuration along with reuse should depend on various

technical policies such as redevelopment, perfecting, mastering and maintenance. Thus, the implementers should take care of choosing ways, procedures and policies that are suitable in order to maintain the functional purposes and artistic values of heritage structures [10-12, 18-23]. Based on the above, there is an architectural and archaeological evidence clarifies the concepts and manifestations of the procedural conversions along with reuse and the phenomenon of plagiarism along with exaction, which represented and emerged in the shopping centers and their relation with functional purposes that relate to the economic aspects, which provide a great income such as what happened in some Bathrooms or the so-called Hammams (aa), for example what happened with the Hammam of Hagia Sophia [100-103], which built in the 16th Century by the architect Sinan Pasha in Istanbul, almost in 1556 AD during the epoch of Sultan Suleiman. This Hammam had many additions, extensions and changes until 1957, also there are spaces and expansions added to this Hammam until 2008. Finally, it had turned into a Commercial Shopping Centre (aa) [100-103] (Fig.10).



(Figure 10): The Hammam of Hagia Sophia was actively used until 1910, it has been closed for many years. Hagia Sophia Bath is one of the important architectural and archaeological models in Istanbul, which repaired in 1957-1958 and reused until 2008 as A Public Carpet Sales Store.

After: https://www.ayasofyahamami.com/en/index1.html (Access date: 15/2/2018)

3.11. The Cathedral of Hagia Sophia

The original functional purpose of architectural and archaeological structures is one of the effective factors for the procedural conversions along with reuse and exaction along with plagiarism. Sometimes, the functional purposes of the construction with its distinguished character represents a major cause for the processes of the phenomenon that is known as reuse along with conversion and exaction along with plagiarism, however, the competent authorities should adjust or adapt these structures in order to use or reuse them, this is with keeping or safeguarding their functional purposes which related to social side and doctrinal thought. The original functional value of the construction increases when it becomes a main part of customs, traditions and culture of the society and this may be a reason leads to achieve the procedures of reuse along with conversion and exaction along with plagiarism, which appeared clearly in the construction of Hagia Sophia in Istanbul [104-107]. The Cathedral of Hagia Sophia was constructed in the Byzantine era almost from 532 AD to 537 AD, it had its function for about 916 years, but it was turned into a Mosque after the Muslims conquered Istanbul almost in 1453 AD, this was under the leadership of Mehmed the Conqueror or Mehmed II. Whilst in 1935, the conversion decision has been made in order to modify and convert the Mosque into a Museum, and from this time, it became a cultural and touristic sanctuary. It is worth mentioning that there are some of the artistic and architectural characteristics of this structure represent a collection of the Byzantine architecture and the Ottoman art and decoration. Furthermore, the dome of Hagia Sophia is about 55 meters in height and its diameter is about 31.30 meters; it was built with about 106 pillars and there are

four Minarets added in different eras, which were some of the most important additions to the geometrical planning and architectural style for the Cathedral before converting it into a Mosque and then into a Museum [108-112] (Fig.11).



(Figure 11): The architectural features, developments and functional purposes of Hagia Sophia.

After: http://www.pbase.com/dosseman/istanbul_aya_sofia

http://www.pbase.com/dosseman/istanbul_aya_sofia&page=all (Access date: 16/2/2018)

4. Results of the study

- **4.1.** The study identified differences and differentiation between plagiarism, exaction, modulation, omission or abstraction, conversion, reuse and related meanings. In addition, the study classified these terms and concepts into an idiomatic or linguistic classification and functional classification, these classifications are divided into three functional purposes as follows; functional purpose of the concept of reuse, functional purpose of the concept of rehabilitation or adaptive reuse according to purpose and functional purpose of the concept of integration or integrated reuse. Furthermore, this study discussed some terms associated with the concepts of conversion along with reuse and plagiarism along with exaction.
- **4.2.** The content of this study includes some linguistic vocabularies like plagiarism, exaction, conversion, and reuse; all these terms revolve around themselves or move in a circle; each one leads to another, this is when used and applied to architectural and archaeological structures. The concept of reuse requires conversion; the concept of plagiarism requires exaction and vice versa. If we have a heritage structure, the process of reuse needs to the procedures of conversion and so these terms are linked to each other; if we have a heritage structure and want to re-attribute it to another one instead of the original founder, this requires the procedures of conversion and then this heritage structure can be reused according to the innovative purpose.
- **4.3.** From the study, it can be shown that there are a lot of evidences related to the concepts, purposes and manifestations of the phenomenon of plagiarism along with exaction and their equivalent in meaning, which emerged and prevailed in architectural and archaeological structures; besides the concepts and manifestations of conversion along with reuse and their equivalent in meaning, which are manifested in some heritage structures, where there is a variety of terms related to the idea of study linguistically and technically. The international decisions often control the processes of dealing with heritage constructions or those which have historical and heritage characters, this is in order to achieve the main purposes and objectives which are represented in maintenance or preserving the historical character, architectural style, geometrical design and artistic values for these structures.

4.4. A number of architectural and archeological models, more than ten evidences have been studied, which take into account to be comprehensive and historically different, and have been chronologically arranged. The idea of research has been applied to architectural and archaeological models from various Arab, Islamic and international countries as well. Thus, the research idea was applied to five different countries, namely Egypt, Palestine, Cordoba, Sevilla and Turkey. This has been applied to many architectural models such as the Madrassa of Al-Nasir Muhammad, the Mosque of Al-Nasir Muhammad, the Khanqah of Amir Shaykhu, the Mosque of al-Mu'ayyad Shaykh and the Mosque and Madrasa of Al-Suwaidi. The architectural models outside Egypt like the Dome of the Rock, the Great Mosque of Cordoba, the Great Mosque of Seville, the Square of Sultanahmet (Hippodrome of Constantinople), the Hammam of Hagia Sophia and the Cathedral of Hagia Sophia.

- **4.5.** The evidences and manifestations of the phenomenon of plagiarism along with exaction and the procedural conversions along with reuse in Islamic architecture have appeared clearly through the replacement of King's name with another as a result of a political and religious conflict and also emerged through erasing, changing or modifying numerical numbers, this can be evident through the Dome of the Rock, which built by the Umayyad Caliph Abd al-Malik ibn Marwan in 72 AH/691 AD, and when the Abbasid Caliph Al-Ma'mun renewed it and added some modifications, and then he replaced the name of the Umayyad Caliph from the foundational text with his name, this may be to achieve a personal glory.
- **4.6.** Through the Dome of the Rock, it is clear that the so-called plagiarism is emerged as a manifestation of a change in the parameters of the truth, actual reality and original purpose, as it is an aspect of infringement of the rights of others; likewise it represents the concept of the so-called exaction, which also illustrates the manifestations of reuse along with conversion and exaction along with the phenomenon of plagiarism that is a manifestation of the violation of the rights of others, which may indicate an aspect of a claim or an illegitimate possession of a person without the right of the owner and the original holder of this right. The political conflict for authority and regime, as well as the personal glory are of the most important reasons for the phenomenon of plagiarism or change the facts and actual realities, the Dome of the Rock is a clear evidence of the phenomenon of plagiarism and also is a clear manifestation of reuse along with conversion and exaction along with plagiarism, which evidenced and re-attributed to someone other than the original founder and attempts to impersonate functions of enterprises with a view for changing the features of actual reality and also for altering the functional purposes, where the alternative will serve another purpose differs from the original purpose or the basic target.
- **4.7.** From the study, there are a lot of evidences which prove the concept of change the facts and clarify the features of the phenomenon of plagiarism that represented through the Madrassa of Al-Nasir Muhammad ibn Qalawun. There are also other features of the phenomenon of plagiarism represented in modifying or erasing all or some of information and architectural or artistic elements, as it is seen through reuse of a monument and reattribution to another person to achieve other purposes, for example, the Islamic constructions in Egypt which reused architectural elements dated back to previous times such as the Mosque of the Mamluk Sultan Al-Nasir Muhammad ibn Qalawun, the Khanqah of Amir Shaykhu, the Mosque of al-Mu'ayyad Shaykh and the Mosque and Madrasa of Al-Suwaidi.

4.8. From this study, it is clear that there are evidences and manifestations of reuse along with conversion and exaction along with the phenomenon of plagiarism, which emerged and prevailed in heritage constructions to be adapted to other purposes; these evidences are represented in the Great Mosque of Cordoba, the Great Mosque in Seville, the Hammam of Hagia Sophia in Istanbul, also materialized in the Square of SultanAhmet in Istanbul or the old Hippodrome that is a social centre of Constantinople.

4.9. The original purpose of the architectural constructions is considered one of the effective factors of the processes of reconfiguration along with the procedural conversions used for treating the constructions and the old areas in order to be adapted to the purposes or requirements of modern times and so sometimes the functional purposes of heritage constructions impose their characteristic on the processes of rehabilitation along with conversion related to ideological and social aspects; where the original value increases to be a main part of customs, traditions and culture of the society and this may be a reason leads to achieve the procedures of reuse along with conversion and exaction along with plagiarism, which appeared clearly in the Hammam of Hagia Sophia in Istanbul and in the Cathedral of Hagia Sophia, which was reused and converted into a Mosque and then into a Museum.

5. Conclusion

There are interactions between linguistic definitions of reuse along with conversion in general and between change the parameters of truth or the so-called phenomenon of plagiarism associated with the concept of exaction in particular; alteration or change in language means doing something that hasn't been done in the same form, which has become after the alteration and it also represents something that hasn't been done before in the same way; as it also considers a transition or converting of something from one condition to another; this is the case when it is said: I changed my house, if I built it based on what it wasn't on. Through the linguistic definition, some intellectuals were able to find a standard definition which is represented in the social activity that take the form or the appearance of innovative social styles, this is after changing the original style or basic appearance and then obliterate all its old features. From this, we can work out that the social alteration happens through cultural alteration or through both of them which causes the alteration in the society in general. The content of this study includes some linguistic vocabularies such as Plagiarism, Exaction, Conversion, and Reuse; all these terms revolve around themselves or move in a circle, where each one leads to another, this is when used and applied to architectural and archaeological structures, where reuse requires conversion; plagiarism requires exaction and vice versa. If we have a heritage structure, the process of reuse needs to the procedures of conversion and so these terms are linked to each other; if we have a heritage structure and want to re-attribute it to another one instead of the original founder, this requires the procedures of conversion and then this heritage structure can be reused according to the innovative purpose, so it is clear that these vocabularies are linked together because each of them requires the other. There are some other terms associated with the content of this study, so it is clear that there is an essential correlation between the meanings of reuse and the concepts of qualification and reattribution through the technical procedures of modernization, improvement and infrastructure development, providing the necessary technical requirements in order to fit for heritage constructions and to perform their functional role in a complete way, but with the concern of

functional purposes and original artistic values. As for the concept of plagiarism, it means the illegal seizure of ideas or for functional purposes and their representation in another form or with a methodology other than the idea or the original functional purpose, the phenomenon of plagiarism is a manifestation of a change in the parameters of actual reality or the milestones of the truth and in the features of original purpose, as it is a manifestation of infringement of the right of others and also it is a manifestation of the violation of the right of others. So, the phenomenon of plagiarism may indicate the appearance of an allegation or illegitimate possession of a person without recognition of the right of the original owner. On the other hand, there is the term exaction, which equals in meaning to excessive or unjust demand and unfair allegation that may refer to extortion of something and notifies a bossy act or an authoritarian performance of demanding and obtaining something from someone, claiming that this is a private property. The evidences of plagiarism, alteration and exaction had prevailed since the beginning of humanity and have been popularized and materialized by attributing a monument or a manuscript of a person who is not the original owner or by replacing King's name with another as a result of political or religious conflict, also by erasing it completely, likewise by modifying the reckoning numbers. Therefore, there were some of plagiarism evidences represented in modifying, erasing and a partial or total removing for some information or for some architectural or artistic elements; this can be appeared through the process of reuse of heritage structures and by re-attributing to someone other than the original founder in order to achieve some purposes other than the original target. If there is a need to reuse an archaeological structure, this requires an exaction that leads to plagiarism and both of them lead to the procedural conversions in order to reuse it. The political conflict for authority and regime, as well as the personal glory are of the most important reasons for the phenomenon of plagiarism or change the facts and actual realities. The Dome of the Rock is a clear evidence of the phenomenon of plagiarism and also is a clear manifestation of reuse along with conversion and exaction along with plagiarism, which evidenced and re-attributed to someone other than the original founder and attempts to impersonate functions of enterprises with a view for changing the features of actual reality and also for altering the functional purposes, where the alternative will serve another purpose differs from the original purpose or the basic target. The evidences and manifestations of the phenomenon of plagiarism along with exaction and procedural conversions along with reuse in Islamic architecture have appeared clearly through the replacement of King's name with another as a result of a political and religious conflict and also emerged through erasing, changing or modifying numerical numbers, this can be evident through the Dome of the Rock, which built by the Umayyad Caliph Abd al-Malik ibn Marwan in 72 AH/691 AD, and when the Abbasid Caliph Al-Ma'mun renewed it and added some modifications, he erased the name of the Umayyad Caliph from the foundational text and his name replaced, this may be to achieve a personal glory. There are a lot of evidences which prove the concept of change the facts and clarify the features of the phenomenon of plagiarism that emerged through the Madrassa of Al-Nasir Muhammad ibn Qalawun. There are also other features of the phenomenon of plagiarism represented in modifying or erasing all or some of information and architectural or artistic elements, as it is seen through reuse a monument and reattribution to another person to achieve other purposes, for example, the Islamic constructions in Egypt which reused architectural elements date back to previous times or old ages such as the Mosque of the

Mamluk Sultan Al-Nasir Muhammad ibn Qalawun, also the Khangah of Amir Shaykhu. Furthermore, it is observed that the phenomenon of plagiarism and the concept of reuse became clear through the architectural elements, which brought from older constructions like the Mosque of al-Mu'ayyad Shaykh, the Mosque and Madrasa of Al-Suwaidi. There are evidences and manifestations of reuse along with conversion and exaction along with the phenomenon of plagiarism, which emerged and prevailed in heritage constructions to be adapted to other purposes, these evidences are represented in the Great Mosque of Cordoba, the Great Mosque in Seville, the Hammam of Hagia Sophia in Istanbul, also materialized in the Square of SultanAhmet in Istanbul, its old name is the Hippodrome or the Roman Circus that is a spacious open-air area to celebrate the social events, then reused as social centre of Constantinople which is currently known as the Square of SultanAhmet in Istanbul. The original purpose of the architectural constructions is considered one of the effective factors of the processes of reconfiguration along with the procedural conversions used for treating the constructions and the old areas in order to be adapted to the purposes or requirements of modern times and so sometimes the functional purposes of heritage constructions impose their characteristic on the processes of conversion along with reuse related to ideological and social aspects, where the original value increases to be a main part of customs, traditions and culture of the society, this may be a reason leads to achieve the procedures of reuse along with conversion and exaction along with plagiarism, which appeared clearly in the Hammam of Hagia Sophia in Istanbul and the Cathedral of Hagia Sophia, which was reused and converted into a Mosque and then into a Museum.

6. Endnotes

- [a] Kevin Andrew Lynch (1918-1984) is one of the most famous American city planners, He studied at Yale University in the United States of America, He received A bachelor's degree in Urban planning in 1947 and became a Professor of Urban and Architectural History in 1963. His most famous works include; Lynch, K. A., (1960). The Image of the City, Cambridge; Lynch, K. A., (1981). The Theory of Good City Form, Cambridge.
- **[b]** Brent, C. Brolin was born in 1940, and in 1962 He received a bachelor's degree from Yale University in the History of Art. In 1968, He received M.A. degree in Architecture from the Yale School of Architecture. He has many scientific works linking the old and modern architectural designs. His most famous works include: Brent, C.B., (2001). Architectural Ornament: Banishment and Return, New York; Brent, C.B., (2002). The Designer's Eye: Problem-Solving in Architectural Design, New York.
- [c] Abd al-Wahhab, H., (1956). Al'athar Almanqulah Walmuntahalah Fi Alaemarah Al'eslamyah, Bulletin de l'Institut d'Égypte, Vol. 38, Le Caire, pp. 243-283.
- [d] Al-Jaḥiz: His full name is Abu authman aamr ibn Baḥr al-Kinani al-Basri, born February 776, in Basra and died December 868/January 869, he was an Arab writer and author of literature and theology works, the origin of Al-Jaḥiz's nickname that he was boggle-eyes or popeyed. See: Iḥsan aabbas, (Ed.) (1993). Yāqūt, Irshād al-arīb ilá maarifat al-adīb, 7 Vols; (Vol.5, p. 2102), Dār al-Gharb al-Islāmī, Beirut; Peters, F.E., (1968). Aristotle and the Arabs, the Aristotleian Tradition in Islam, New York University Press, New York; Mattock, J. N.,

(1971). Review: Aristotle and the Arabs, the Aristotelian tradition in Islam by Peters, F.E., Bulletin of the School of Oriental and African Studies, Vol.34, Issue 1, London, pp.147–148.

- [e] Kitab Al-Hayawan is an encyclopedia consisting of seven volumes, describing more than 350 types of animals. In the 11th-century, Al-Khatib al-Baghdadi considered this work as a little more than a plagiarism of Aristotle's Kitab al-Hayawan, but the scholars have noticed that there was only a limited effect of Aristotelian in the work of Al-Jaḥiz. See: Peters, F.E., (1968). Aristotle and the Arabs, the Aristotelian Tradition in Islam, New York University Press, New York; Mattock, J. N., (1971). Review: Aristotle and the Arabs, the Aristotelian tradition in Islam by Peters, F.E., Bulletin of the School of Oriental and African Studies, Vol.34, Issue 1, London, pp.147–148; Zirkle, C., (1941). Natural Selection before the Origin of Species, Proceedings of the American Philosophical Society, Vol.84, Issue 1, pp. 71–123.
- [f] Al-Jaḥiz, Abu authman aamr ibn Baḥr al-Kinani al-Basri., (1384H/1965AD). Kitab Al-Hayawan: Book of Animals, Vol.1, Second edition, Moustafa Albabi Alhalaby Stationery and Press, Cairo, Egypt; Abd al-Wahhab, H., (1956). Alathar Almanqulah Walmuntahalah Fi Aleimarah Aleslamyah, Bulletin de l'Institut d'Égypte, Vol. 38, Le Caire, pp. 243-283.
- [g] Abu Jaafar aAbdallah ibn Muhammad al-Mansur, who was the second Caliph of the Abbasid Caliphate, born 714 AD and died 775 AD, aged 61, reigning from 136 AH to 158 AH /754 AD 775 AD (His rule from 10 June 754 to 6 October 775). See: Axworthy, M., (2008). A History of Iran; Empire of the Mind, Basic Books Press, USA; Robinson, F. (Ed.) (2010). The New Cambridge History of Islam, Vol.1: The Formation of the Islamic World, Sixth to Eleventh Centuries, Cambridge University Press, Cambridge.
- **[h]** Abu aAbdallah Muhammad ibn Abdallah al-Mansur al-Mahdi bi'llah, known as al-Mahdi, the third Abbasid Caliph who was born 745, died 785, and ruled from 775 to his death in 785. See: Lunde, P., and Stone, C., (1989). Al-Masudi: The Meadows of Gold: The Abbasids, translated by Paul Lunde and Caroline Stone, Kegan Paul Press, London and New York; Kennedy, H., (2004). The True Caliph of the Arabian Nights, History Today, Vol.54, Issue 9, pp.31-36.
- [i] Ahmad ibn Tulun, the founder of the Tulunid dynasty that ruled Egypt and Syria between 868 and 905, He was born September 835AD, died May 884AD; aged 48, and ruled from September 868 to May 884. See: Becker, C. H., (1987). Aḥmed ibn Tulun, In: Theodoor, M., (Ed.) Houtsma, Brill's First Encyclopaedia of Islam, 1913–1936, Vol. I, Brill Press, Leiden, pp. 190–191; Bianquis, Th., (1998). Autonomous Egypt from Ibn Tulun to Kafur, 868–969, In: Petry, C.F. (Ed.) Cambridge History of Egypt, Vol. 1, Islamic Egypt, 640–1517, Cambridge University Press, Cambridge, pp. 86-119.
- [j] Abu al-Faḍl Jaafar ibn Muḥammad al-Muataṣim bi'llah, known as al-Mutawakkil aAla Allah "He who relies on God", the 10th Caliph of the Abbasid Caliphate. He was born March 822AD, died December 861AD, and ruled from 847AD to 861AD. See: Kennedy, H., (1993). al-Mutawakkil aAla 'llah, In: Bosworth, C. E., Van Donzel, E., Heinrichs, W. P., &Pellat, Ch., (Eds.) The Encyclopaedia of Islam, Vol.VII, E. J. Brill Press, Leiden, pp.777-778; Kraemer, J.L., (Ed.) (1989). The History of al-Tabari, Vol.34, Incipient Decline: The Caliphates of al-

Wathiq, al-Mutawakkil and al-Muntasir, A.D. 841–863/A.H. 227–248, State University of New York Press, New York.

[k] The Nilometer of Rawdah Island or Geziret er-Rodah in Cairo is a structure for measuring the water level of the Nile River during the season of the annual flood, there were three basic types of Nilometers according to standardize in Egyptian cubits; the first is a vertical column, the second is a corridor scale of levels that lead down to the Nile River, the third is a deep well with a culvert channel. See: Friedman. Z., (2014) Nilometer, In: Selin H. (Ed.) Encyclopaedia of the History of Science, Technology, and Medicine in Non-Western Cultures, Springer, Dordrecht, pp.12-18; Ardagh, J.C. (1889). Nilometers, Proceedings of the Royal Geographical Society and Monthly Record of Geography, Vol.11, Issue 1, pp. 28-38; Bell, B., (1970). The oldest records of the Nile floods, The Geographical Journal, Vol.136, Issue 4, pp.569-573.

[I] Naguib, M., (1997). Naql Alaamayir Al'athariah Aleslamyah bi-Alqahirah Lilhefaz aalayha fi B'iah Atharyah Mola'imah, Journal of the Faculty of Arts and Humanities, University of Minya, January 1997, pp. 175-205.

[m] In December 188, the decision of Khedive Tawfiq was issued to establish the Committee for the Preservation of Arab Antiquities in 1269 AH / 1881 AD, this Committee was formed in 1882AD, it was responsible for the preservation of Islamic and Coptic monuments in Egypt, as a body within the Ministry of Awqaf, also it was established to preserve historical and archaeological sites that are subject to demolition and removal, this in order to transfer the Arab and Islamic monuments to suitable places and to preserve them from violation. The Committee's bulletins were originally published in French, as this was the official language of the Committee's reports and meetings. In 1895, the first Arabic report issued and the pluralities of the subsequent reports were published in Arabic from 1907 to 1915. For more details on the Committee and its work for numbering the Islamic monuments in Egypt see: El-Habashi, A., and Warner, N., (1998). Recording the Monuments of Cairo: An Introduction and Overview, Annales Islamologiques, Vol.32, pp. 81-99; See also: Naguib, M., (1997). Nagl Alaamayir Al'athariah Aleslamyah bi-Algahirah Lilhefaz aalayha fi B'iah Atharyah Mola'imah, Journal of the Faculty of Arts and Humanities, University of Minya, January 1997, pp. 175-205; The American Research Center in Egypt, Egyptian Antiquities Organization and The Getty Conservation Institute, (1993). Restoration and Conservation of Islamic Monuments in Egypt, The Jameel Center; The American University in Cairo, Egypt, pp.1-25; Gharib, R.Y., (2010). Revitalising Historic Cairo: Examining the Public Policy Formulation and Implementation, PhD thesis, University of Nottingham, United Kingdom.

[n] For more information about the Dome of the Rock see: Mintz, J., (2010). The Umayyad Dome of the Rock: A Historical Narrative through Architecture, California State University, USA, for Introduction see: pp. 4-10, for Historiography and Methodology see: pp.11-25, and for 'Abd al-Malik, Caliph, Statesman, and Patron see: pp. 62-76; Clark, G., (2012). The Dome of the Rock; the Historical, Political and Religious Motivations behind its Construction, M. A Thesis, Department of Art History University of Louisville, Kentucky, USA, pp. 46-50, 65-70; Ana Botchkareva, J., & Morgan, W., (2012). The Dome of the Rock, Publications of Department of Islamic Art, the Metropolitan Museum of Art, New York, pp.1-4; Schwartz,

Y., (2012). Abd al Malik ibn Marwan, Publications of International Department of Medieval Art and the Cloisters, the Metropolitan Museum of Art, New York, pp.1-2; Halsall, P., (Ed.) (2011). Jerusalem and its Holy Sites, in: Ibn Battuta: Travels in Asia and Africa 1325-1354, Center for Medieval Studies, Fordham University, New York, pp.55-65.

- [0] For more information about the Madrasa of Sultan Al-Nasir Muhammad ibn Qalawun which is originally due to the reign of Sultan Al-Adil Kitbugha see: Abd al-Wahhab, H., (1941). Asr al-Mamalik al-Bahriyya III, Majallat al-'Imara, Vol.37/38, pp. 291-300; Vermeulen, U., (1970). Some Remarks on a Rescript of an-Nasir Muhammad b. Qala'un on the Abolition of Taxes and the Nusayris (Mamlaka of Tripoli,717/1317), Periodical of Orientalia Lovaniensia, Vol. 1, pp.195-201; Meinecke, M., (1971). Das Mausoleum des Qala'un in Kairo: Untersuchungen zur Genese der mamlukischen Arkitektur Dekoration, MDAIK, Vol. 27, pp. 47-80; Meinecke, M., (1971). Mamlukische Marmordekorationen in der Osmanischen Türkei, MDAIK, Vol. 27, No. 2, pp.207-220; Creswell, K., (1978). Muslim Architecture of Egypt, Hacker Art Books, New York, pp.2-240, Figs.1-137, Pls.85–89a,111c, and 124d; Meinecke, M., (1988). Rückschlüsse auf die Form der seldschukischen Madrasa in Iran, Damaszener Mitteilungen, Vol.3, pp.185-202; Meinecke, M., (1992). Die Mamlukische Architektur in Ägypten und Syrien (648/1250 bis 923/1517), Vol. 2, Chronologische Liste der mamlukischen Baumassnahmen, Glückstadt, pp. 88-103,107-193; Speiser, Ph., (1994). Restaurierungsarbeiten an der al-Nasriyya Madrasa in Kairo, Zeitschrift der Deutschen Morgenländischen Gesellschaft Suppl.10, pp. 527-540, Pls.1-4, Figs. 1-2; Flood, F.B., (1997). Umayyad Survivals and Mamluk Revivals: Qalawunid Architecture and the Great Mosque of Damascus, Mugarnas: An Annual on the Visual Culture of the Islamic World, Edited by: Necipoglu, G., Vol. 14, E.J. Brill, Leiden, pp.57-79; Mayer, W., Nogara, G., and Speiser, Ph., (2001). Archäologische Untersuchungen und Restaurierungsarbeiten an der Madrasa des Sultan an-Nasir Muhammad, Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo/MDAIK, Vol.57, pp. 219-238, Pls. 32-37; Speiser, Ph., (2008). The Sultan al-Nāsir Muhammad Madrasah in Cairo: Restoration and Archaeological Investigation, Mamluk Studies Review, Vol. 12, Issue 2, the Middle East Documentation Center, the University of Chicago Press, pp.197-221.
- [p] For more information about the Madrasa of Sultan Al-Nasir Muhammad ibn Qalawun is originally related to the reign of Sultan Al-Adil Kitbugha see: Levanoni, A., (1995). A Turning Point in Mamluk History: The Third Reign of Al-Nāṣir Muḥammad ibn Qalāwūn (1310-1341), Brill Publishers, Leiden, pp.21, 158; Ben-Bassat, Y., (Ed.). (2017). Developing Perspectives in Mamluk History: Essays in Honor of Amalia Levanoni, Brill Publishers, Leiden, pp.60-68, 254,260,403; Al Asfour, M.S., (2018). The Mongol Mamluk Sultan Al Adel Kitbugha (694-702 Hij, 1294-1302 AD), World Journal of Islamic History and Civilization, Vol.8, Issue 1, pp.1-15.
- **[q]** For more information about the Mosque of Sultan al-Nasir Muhammad at the Citadel see: Watson, C., and Kay, H., (1886). The Mosque of Sultan Nasir Muhammad Ebn Kalaoun, in the Citadel of Cairo, Journal of the Royal Asiatic Society of Great Britain& Ireland, Vol.18, pp.477-482; Doris, B.A., (1985). Change in Function and Form of Mamluk Religious Institutions, Annales Islamologiques, Vol. 21, pp.73-93; Doris, B.A., (1989). Architecture of the Bahri Mamluks, In: Islamic Architecture in Cairo: An Introduction, E.J. Brill, Leiden, pp.

94-132; Yeomans, R., (2006). The Art and Architecture of Islamic Cairo, 1st Edition, Garnet Publishing Ltd., United Kingdom, pp.140-143; Doris, B.A., (2007). Cairo of the Mamluks: A History of the Architecture and Its Culture. I.B. Tauris & Co Ltd, London, pp.153-154, 173-177.

- [r] For more information about the Khanqah of Amir Shaykhu see: Al-Maqrizi, Taqi al-Din Abu al-'Abbas, (1998). Al Mawa'iz wa al-'i'tibar bi dhikr Al-khitat wa Al-'athar, Vol.4, Dar al kotob al ilmiyah Press, Beirut, Lebanon, pp.118-119; Mohamed, M.S., (1976). Masajid Misr Wawliawuha Alsalhwn, Vol.3, Al Ahram Presses, Cairo, Egypt, pp.259-265; Zaki, A., (1987). Mawsu'at Madinat Al-Qahira fi alf 'Amm, A Concise Encyclopaedia of the city of Cairo, the Anglo Egyptian Bookshop, Cairo, Egypt, pp.96-98; Doris, B.A., (1985). Change in Function and Form of Mamluk Religious Institutions, Annales Islamologiques, Vol. 21, pp.73-93; Little, D.B., (1991). The nature of khanqahs, ribats, and zawiyas under the Mamluks, In: Islamic studies presented to Charles P. Adams, Leiden, pp.91-105; Doris, B.A., (2007). Cairo of the Mamluks: A History of the Architecture and Its Culture, I.B. Tauris & Co Ltd, London, pp.46-47, 191-95; Doris, B.A., (2014). Between Quarry and Magic: The Selective Approach to Spolia in the Islamic Monuments of Egypt, In: Payne, A., (Ed.). Dalmatia and the Mediterranean Portable Archaeology and the Poetics of Influence, Brill, Leiden, pp.402-425.
- [s] For more about the meaning and significance of the Khanqah see: Esposito, J. L., (Ed.). (2003). Khanaqah, In: The Oxford Dictionary of Islam, Oxford University Press, Oxford; Esposito, J.L., Khanaqah, In: The Oxford Dictionary of Islam, Oxford Islamic Studies Online, http://www.oxfordislamicstudies.com/article/opr/t125/e1270 (Access date: 11/4/2017).
- [t] For the Mosque of Sultan al-Mu'ayyad Shaykh see: Doris, B.A., (1985). Change in Function and Form of Mamluk Religious Institutions, Annales Islamologiques Vol. 21, pp.73-93; Noiser, H., (1996). Al'eimarah al'islamiah fi Misr, 'asr Al-Ayyūbīyūn wal-Mamālīk, Zahraa El-Shark Press, Cairo, Egypt, pp.382-389, 394; Williams, C., (2002). Islamic Monuments in Cairo: The Practical Guide, American University in Cairo Press, Egypt, pp.143-144.
- [u] For more about the Mosque and Madrasa of Al-Suwaidi see: Mubarak, A., (1306Hijri). Al-Khitat Al-Tawfiqiyya, Vol.5, 1st Edition, Al Amiria Printing House, Cairo, Egypt, p.21.
- [v] For the Great Mosque of Cordoba see: Dodds, J.D., (1992). Al-Andalus, the Art of Islamic Spain, the Metropolitan Museum of Art, New York, pp.1-25; Khoury, N., (1996). The Meaning of the Great Mosque of Cordoba in the Tenth Century, Journal of Muqarnas, Vol.13, Brill, Leiden, pp.80-98; Lowney, Ch., (2006). A Vanished World: Muslims, Christians, and Jews in Medieval Spain, Oxford University Press, Oxford, pp.11-13; Aitana, G., (2014). The Muslim Struggle for Civil Rights in Spain, 1985–2010: Promoting Democracy through Islamic Engagement, Sussex Academic Press, United Kingdom, pp.137-138; Lamprakos, M., (2016). Memento Mauri: The Mosque-Cathedral of Cordoba, Aggregate Architectural History Collaborative Press, New York, pp.1-24.
- [w] For the Great Mosque of Seville see: Dolan, J.P., (1961). Medieval Christian tolerance and the Muslim world: The Muslim World, Vol 51, pp. 280-287; Irving, T.B., (1991). Dates, Names and Places: The end of Islamic Spain, Revue d'Histoire Maghrebine, Vol.61/62, pp 77-93; Kennedy, P.F., (1994). The Muslim sources of Dante? in The Arab influence in Medieval

Europe, Agius and R. Hitchcock, Ithaca Press, Greece, pp.63-82; Zaimeche, S., (2005). Seville, The Foundation for Science, Technology and Civilization (FSTC), Manchester, pp.1-39; Lowney, Ch., (2006). A Vanished World: Muslims, Christians, and Jews in Medieval Spain, Oxford University Press, Oxford, pp.11-13.

[x] For more about the Square of Sultanahmet or the so-called Hippodrome see: Guilland, R., (1948). The Hippodrome at Byzantium, Speculum Journal, Vol.23, Issue 4, pp. 676-682; Bassett, S. G., (1991). The Antiquities in the Hippodrome of Constantinople, Dumbarton Oaks Papers, Vol. 45, pp.87-96; Madden, T.F., (1992). The Serpent Column of Delphi in Constantinople, Placement, Purposes, and Mutilations, Byzantine and Modern Greek Studies, Vol. 16, pp.111-145.

[y]For more about the Centre of Constantinople see: Müller-Wiener, W., (1977). Bildlexikon zur Topographie Istanbuls: Byzantion, Konstantinupolis, Istanbul bis zum Beginn d. 17. Jh, Wasmuth Publisher, German, pp.28-29; Cyril, M., (1991). Constantinople, In: Alexander, K., (Ed.). The Oxford Dictionary of Byzantium, Oxford University Press, Oxford, pp.508-512; Harris, J., (2007). Constantinople, Capital of Byzantium, Continuum USA Press, New York, pp. 24-25.

[z] For more about the Square of SultanAhmet see: Ayyildiz, U., (2009). Istanbul, Net Turistik Yayinlar Press, Updated English edition, Istanbul, pp.22-25; UNESCO, (2011). International Organization for Conservation of Cultural Heritage(ICCROM), Report on the joint World Heritage Centre / ICOMOS mission of Istanbul, Ankara, pp.1-138; Hendrix, D., (1993). Constantinople and the Byzantine Legacy, The Creative Commons Global Affiliate Network, California, United States, Figs.1-4; Safran, L., (1993). Points of View: The Theodosian Obelisk Base in Context, Greek, Roman, and Byzantine Studies 34, Issue 4, pp.409-435.

[aa] The architectural culture of the Baths or Bathrooms, also known as Hammams, which were originated in the Umayyad era during the 7th- 8th Centuries, and the Ottomans were interested in construction and use of the baths on a large scale. For more information, see: Smolijaninovaite, K., (2007). A study on Historic Hamams in Istanbul, Changing Aspects of Cultural use and Architecture, M.A Thesis, Cottbus, Germany, pp.20-21; Inanici, M., (2014). Lighting Analysis of Hagia Sophia, Annuals of Hagia Sophia Museum No. 17, Istanbul, pp.167-168.

7. References

- [1] Abd al-Wahhab, H., (1957). Takhtit Alqahereh Watanzimiha mundh Nasha'atiha, Darannshr Press, Cairo.
- [2] Abdul-Sattar, M., (1988). Al Madinah Al'Islamiah, Al-Resalah Press, Kuwait.
- [3] Morris, J., (1972). History of Urban Form Prehistory to the Renaissance, London.
- [4] Frank, K., (1984). Die Stadt im Altertum, Verlag C.H. Beck Press, München.
- [5] Claude, Ch., (1990). Les Villes du Monde Arabes, Masson Press, Paris.
- [6] Van Assche, K., and Beunen, R., et.al., (2013). Co-evolutions of planning and design: Risks and benefits of design perspectives in planning systems, Journal of Planning Theory, Vol.12, Issue 2, pp.177-198.

[7] Jokilehto, J., (1998). The Context of the Venice Charter (1964), Journal of Conservation and Management of Archaeological Sites, Vol. 2, pp. 229-233.

- [8] The Venice Charter, (1964). International Charter for the Conservation and Restoration of Monuments and Sites, (Article 5) on: www.icomos.org (Access date: 16/1/2018).
- [9] Resolutions of the Symposium on the introduction of contemporary architecture into ancient groups of buildings, the 3rd ICOMOS General Assembly, Budapest, 30th June 1972, www.international.icomos.org (Access date: 16/1/2018).
- [10] Mohammed, A.M., (2006). Alt'amul Ma'a 'anaser Al'emarah Alddakhiliah fi Mashari' E'adet Tawzif Almabani dhat Alqimah, M.A. Thesis, Faculty of Engineering, Cairo University, Egypt.
- [11] Mahmmoud, G.A., (2013). Taqyim Albadaeil Ertibatan Belmuetayat fi e'adat Estekhdam Almabany al'athariah, derasah e'ilmiah taqyimmiah fi altarmim walsianah tatbiqaan 'ale ahd almabany al'athariah bimadinat Alqaherah, M.A. Thesis, Department of Restoration, Faculty of Archaeology, Cairo University, Egypt.
- [12] Ahmed, Z.A., (2008). Alma'yir Alfaniyah le'adet Tawzif Almabany Kamatahif Tatabiqan biestikhdam Alhasib Alaly, Unpublished PhD Thesis, Department of Architecture, Faculty of Engineering, Cairo University, Egypt.
- [13] Leonardo, M.V., (2004). Lynch, Kevin, In: Caves, W., (Ed.): Encyclopedia of the City, Routledge Press, London, pp.297-298.
- [14] https://www.brentcbrolin.com/ (Access date: 15/2/2018)
- [15] Harcourt, H. M., (Ed.) (2018): The American Heritage® Dictionary of the English Language, Fifth Edition copyright ©2018 by Houghton Mifflin Harcourt Publishing Company, USA https://ahdictionary.com/word/search.html?q=define (Access date: 10/1/2018).
- [16] Al-Jurjani, M.A., (1995). Ta'rīfāt, Dar El Kotob for Printing & Publishing, Cairo.
- [17] Academy of the Arabic Language, (2010). Al Mu'jam al-Waseet, Bab al-Ta'a and Bab al-Ghayn, Dar El Daawa for Printing & Publishing, Cairo.
- [18] Osman, D., (2009). A methodology for developing urban pathways of Historical districts in Egypt, PhD Thesis, Department of Architecture, Faculty of fine arts, Helwan University, Egypt.
- [19] Serageldin, I., (2002). Very Special Places: The Architecture and Economics of. Intervening in Historic Cities, World Bank Press, Washington DC, USA.
- [20] Abdeen, N., (2009). Reusing Historical buildings as a reference to Conservation, M.A. Thesis, Faculty of Engineering, Cairo University, Egypt.
- [21] Henehan, D., Woodson, D., & Culbert, S., (2004). Building Change-of-Use. Renovation, Adapting, and Altering Commercial, Institutional, and Industrial Properties, McGraw-Hill Press, New York.
- [22] Yung, E., & Edwin, H.W., (20120. Implementation challenges to the adaptive reuse of Heritage buildings: Towards the goals of sustainable, low carbon cities, Journal of Habitat International, Vol. 36, Issue 3, pp. 352-361.
- [23] Bernand, F., (1982). Conservation of Historic buildings, Butterworth and Co.LTD Press, England.

[24] Langston, C., Wong, F., et.al. (2007). Strategic assessment of building adaptive reuse opportunities in Hong Kong, Journal of Building and Environment, Vol.43, Issue 10, pp.1709-1718.

- [25] von Grunebaum, G., (1944). The Concept of Plagiarism in Arabic Theory, Journal of Near Eastern Studies, Vol.3, Issue 4, pp.234-253.
- [26] Lynch, J., (2002). The Perfectly Acceptable Practice of Literary Theft: Plagiarism, Copyright, and the Eighteenth Century, in Colonial Williamsburg, Journal of the Colonial Williamsburg Foundation, Vol.24, Issue 4, pp. 51-54.
- [27] Broome, M., (2004). Self-plagiarism: Oxymoron, fair use, or scientific misconduct? Nursing Outlook, Vol. 52, Issue 6, pp.273-274.
- [28] Sowden, C., (2005). Plagiarism and the Culture of Multilingual Students in Higher Education Abroad, ELT Journal, Vol. 59, Issue 2, pp. 226-233.
- [29] Martin, E., (2011). Culture and Unethical Conduct: Understanding the Impact of Individualism and Collectivism on Actual Plagiarism, Journal of Management Learning, Vol.43, Issue 3, pp. 261-273.
- [30] O'Connor, Z., (2015). Extreme plagiarism: The rise of the e-Idiot?' International Journal of Learning in Higher Education, Vol. 20, Issue1, pp.1-11.
- [31] Dov Goitein, S., (1950). The Historical Background of the Erection of the Dome of the Rock, Journal of the American Oriental Society/JAOS, Vol. 70, Issue. 2, pp. 104-108.
- [32] Grabar, O., (1959). The Umayyad Dome of the Rock in Jerusalem, Journal of Ars Orientalis, Vol. 3, pp.33-62.
- [33] Grabar, O., (1996). The Shape of the Holy: Early Islamic Jerusalem, Princeton University Press, Princeton.
- [34] Grabar, O., (2006). The Dome of the Rock, Harvard University Press, London.
- [35] Necipoğlu, G., (2008). The Dome of the Rock as Palimpsest: 'Abd al-Malik's Grand Narrative and Sultan Süleyman's Glosses, Journal of Muqarnas Vol. 25, pp. 17–105.
- [36] Mintz, J., (2010). The Umayyad Dome of the Rock: A Historical Narrative through Architecture, California State University, USA.
- [37] Clark, G., (2012). The Dome of the Rock: The Historical, Political and Religious Motivations behind its Construction, M.A Thesis, Department of Art History University of Louisville, Kentucky, USA.
- [38] Ana Botchkareva, J., & Morgan, W., (2012). The Dome of the Rock, Publications of Department of Islamic Art, the Metropolitan Museum of Art, New York.
- [39] Schwartz, Y., (2012). Abd al Malik ibn Marwan, Publications of International Department of Medieval Art and the Cloisters, the Metropolitan Museum of Art, New York.
- [40] Halsall, P., (Ed.). (2011). Jerusalem and its Holy Sites, in: Ibn Battuta: Travels in Asia and Africa 1325-1354, Center for Medieval Studies, Fordham University, New York.
- [41] Abd al-Wahhab, H., (1941). Asr al-Mamalik al-Bahriyya III, Majallat al-'Imara, Vol.37/38, pp.291-300.
- [42] Vermeulen, U., (1970). Some Remarks on a Rescript of an-Nasir Muhammad b. Qala'un on the Abolition of Taxes and the Nusayris (Mamlaka of Tripoli, 717/1317), Periodical of Orientalia Lovaniensia, Vol. 1, pp. 195-201.

[43] Donald, P.L., (1970). An Introduction to Mamluk Historiography: An Analysis of Arabic Annalistic and Biographical Sources for the Reign of an-Malik al-Nasir Muhammad ibn Qala'un, Vol. 2, Freiburger Islamstudien, Wiesbaden.

- [44] Meinecke, M., (1971). Das Mausoleum des Qala'un in Kairo: Untersuchungen zur Genese der mamlukischen Arkitektur Dekoration, MDAIK, Vol. 27, pp. 47-80.
- [45] Meinecke, M., (1971). Mamlukische Marmordekorationen in der Osmanischen Türkei, MDAIK, Vol. 27, No. 2, pp. 207-220.
- [46] Viktoria, M.B., (1977). Quellen zur Topographie und Baugeschichte in Kairo unter Sultan an-Nasir Muhammad b. Qala'un, Deutscher Orientalistentag, Vol.19, the Supplement III, No.1, Franz Steiner, Wiesbaden.
- [47] Creswell, K., (1978). Muslim Architecture of Egypt, Hacker Art Books, New York.
- [48] Meinecke, M., (1988). Rückschlüsse auf die Form der seldschukischen Madrasa in Iran, Damaszener Mitteilungen, Vol.3, pp.185-202.
- [49] Meinecke, M., (1992). Die Mamlukische Architektur in Ägypten und Syrien (648/1250 bis 923/1517), 2 Vols., Abhandlungen des Deutschen Archäologischen Instituts Kairo, Islamische Reihe, Verlag J. J. Augustin Publisher, Glückstadt.
- [50] Speiser, Ph., (1994). Restaurierungsarbeiten an der al-Nasriyya Madrasa in Kairo, Zeitschrift der Deutschen Morgenländischen Gesellschaft Suppl. 10, pp. 527-540, Pls.1–4, Figs. 1-2.
- [51] Rogers, M., (1996). Evidence for Mamluk-Mongol Relations 1260-1360, Colloque International sur l'histoire du Caire, 385-403, Ministry of Culture of the Arab Republic of Egypt, Cairo.
- [52] Flood, F.B., (1997). Umayyad Survivals and Mamluk Revivals: Qalawunid Architecture and the Great Mosque of Damascus, Muqarnas: An Annual on the Visual Culture of the Islamic World, Edited by: Necipoglu, G., Vol. 14, E.J. Brill, Leiden, pp.57-79.
- [53] Mayer, W., Nogara, G., and Speiser, Ph., (2001). Archäologische Untersuchungen und Restaurierungsarbeiten an der Madrasa des Sultan an-Nasir Muhammad, Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo/MDAIK, Vol.57, pp. 219-238, Pls. 32-37.
- [54] Speiser, Ph., (2008). The Sultan al-Nāṣir Muḥammad Madrasah in Cairo: Restoration and Archaeological Investigation, Mamluk Studies Review, Vol. 12, Issue 2, the Middle East Documentation Center, the University of Chicago Press, pp.197-221.
- [55] Levanoni, A., (1995). A Turning Point in Mamluk History: The Third Reign of Al-Nāṣir Muḥammad ibn Qalāwūn (1310-1341), Brill Publishers, Leiden.
- [56] Ben-Bassat, Y., (Ed.). (2017). Developing Perspectives in Mamluk History: Essays in Honor of Amalia Levanoni, Brill Publishers, Leiden.
- [57] Al Asfour, M.S., (2018). The Mongol Mamluk Sultan Al Adel Kitbugha (694-702 Hij, 1294-1302 AD), World Journal of Islamic History and Civilization, Vol.8, Issue 1, pp.1-15.
- [58] Abd al-Wahhab, H., (Without date). Bayin Al Athar Al-Islamiyyah, Cairo, Egypt.
- [59] Mohamed, M.S., (1976). Masajid Misr Wawliawuha Alsalhwn, Vol.3, Al Ahram Presses, Cairo, Egypt.
- [60] Ashmolean Museum, Department of Eastern Art, the Creswell Archive, Oxford, on: http://www.ashmol.ox.ac.uk/ (Access date: 14/11/2017).

[61] Watson, C., and Kay, H., (1886). The Mosque of Sultan Nasir Muhammad Ebn Kalaoun, in the Citadel of Cairo, Journal of the Royal Asiatic Society of Great Britain & Ireland, Vol. 18, pp.477-482.

- [62] Doris, B.A., (1985). Change in Function and Form of Mamluk Religious Institutions, Annales Islamologiques, Vol. 21, pp.73-93.
- [63] Doris, B.A., (1989). Islamic Architecture in Cairo, E.J. Brill, Leiden.
- [64] Nasser, R. O, (1995). The Citadel of Cairo: A new interpretation of royal Mamluk architecture, E.J. Brill, Leiden.
- [65] Yeomans, R., (2006). The Art and Architecture of Islamic Cairo, 1st Edition, Garnet Publishing Ltd., United Kingdom.
- [66] Doris, B.A., (2007). Cairo of the Mamluks: A History of the Architecture and Its Culture, I.B. Tauris & Co Ltd, London & New York.
- [67] Al-Maqrizi, Taqi al-Din Abu al-'Abbas, (1998). Al Mawa'iz wa al-'i'tibar bi dhikr Al-khitat wa Al-'athar, Vol.4, Dar al kotob al ilmiyah Press, Beirut, Lebanon.
- [68] Zaki, A., (1987). Mawsu'at Madinat Al-Qahira fi alf 'Amm, A Concise Encyclopaedia of the city of Cairo, the Anglo Egyptian Bookshop, Cairo, Egypt.
- [69] Little, D.B., (1991). The nature of khanqahs, ribats, and zawiyas under the Mamluks, In: Islamic Studies presented to Charles P. Adams, Leiden, pp.91-105.
- [70] Doris, B.A., (2014). Between Quarry and Magic: The Selective Approach to Spolia in the Islamic Monuments of Egypt, In: Payne, A., (Ed.). Dalmatia and the Mediterranean Portable Archaeology and the Poetics of Influence, Brill, Leiden, pp.402-425.
- [71] Esposito, J. L., (Ed.). (2003). Khanaqah, In: The Oxford Dictionary of Islam, Oxford University Press, Oxford.
- [72] Esposito, J.L., (2017) Khanaqah, In: The Oxford Dictionary of Islam, Oxford Islamic Studies Online, http://www.oxfordislamicstudies.com/article/opr/t125/e1270 (access date: 11/4/2017).
- [73] Swelim, T., (1986). The Complex of Sultan al-Mu'ayyad Shaykh at Bab Zuwayla, M.A. Thesis, American University in Cairo, Egypt.
- [74] Noiser, H., (1996). Al'emarah al'islamiah fi Misr, 'asr Al-Ayyūbīyūn wal-Mamālīk, Zahraa El-Shark Press, Cairo, Egypt.
- [75] Williams, C., (2002). Islamic Monuments in Cairo: The Practical Guide, American University in Cairo Press, Egypt.
- [76] Mubarak, A., (1306Hijri). Al-Khitat Al-Tawfiqiyya, Vol.5, 1st Edition, Al Amiria Printing House, Cairo, Egypt, p.21.
- [77] Dodds, J.D., (1992). Al-Andalus, the Art of Islamic Spain, the Metropolitan Museum of Art Press, New York.
- [78] Khoury, N., (1996). The Meaning of the Great Mosque of Cordoba in the Tenth Century, Journal of Muqarnas, Vol.13, Brill, Leiden, pp.80-98.
- [79] Lowney, Ch., (2006). A Vanished World: Muslims, Christians, and Jews in Medieval Spain, Oxford University Press, Oxford.
- [80] Bloom, J., and Blair, S., (Eds.). (2009). Cordoba, In: The Grove Encyclopedia of Islamic Art and Architecture, Oxford University Press, Oxford.
- [81] Rachel, K., (2007). A Comparison of the Great Mosque of Cordoba and Notre-Dame du Chartres, Boston College University Libraries, Boston.

[82] Aitana, G., (2014). The Muslim Struggle for Civil Rights in Spain, 1985–2010: Promoting Democracy through Islamic Engagement, Sussex Academic Press, United Kingdom.

- [83] Lamprakos, M., (2016). Memento Mauri: The Mosque-Cathedral of Cordoba, Aggregate Architectural History Collaborative Press, New York.
- [84] Safi, L., (1995). Leadership and Subordination: An Islamic Perspective, The American Journal of Islamic Social Sciences, Vol.12, Issue 2, pp.204-223.
- [85] Dolan, J.P., (1961). Medieval Christian tolerance and the Muslim world, Journal of the Muslim World, Vol. 51, pp. 280-287.
- [86] Hitti, P.K., (1962). Islam and the West: An Historical, Cultural survey, Princeton University Press, Princeton.
- [87] Irving, T.B., (1991). Dates, Names and Places: The end of Islamic Spain, Revue d'Histoire Maghrebine, Vol.61/62, pp 77-93.
- [88] Kennedy, P.F., (1994). The Muslim sources of Dante? in The Arab influence in Medieval Europe, Agius and R. Hitchcock, Ithaca Press, London.
- [89] Zaimeche, S., (2005). Seville, the Foundation for Science, Technology and Civilization (FSTC), Manchester.
- [90] Guilland, R., (1948). The Hippodrome at Byzantium, Speculum Journal, Vol.23, Issue 4, pp. 676-682.
- [91] Bassett, S. G., (1991). The Antiquities in the Hippodrome of Constantinople, Dumbarton Oaks Papers, Vol. 45, pp.87-96.
- [92] Madden, T.F., (1992). The Serpent Column of Delphi in Constantinople, Placement, Purposes, and Mutilations, Byzantine and Modern Greek Studies, Vol. 16, pp.111-145.
- [93] Müller-Wiener, W., (1977). Bildlexikon zur Topographie Istanbuls: Byzantion, Konstantinupolis, Istanbul bis zum Beginn d. 17. Jh, Wasmuth Publisher, German.
- [94] Cyril, M., (1991). Constantinople, In: Alexander, K., (Ed.). The Oxford Dictionary of Byzantium, Oxford University Press, Oxford.
- [95] Harris, J., (2007). Constantinople, Capital of Byzantium, Continuum USA Press, New York.
- [96] Ayyildiz, U., (2009). Istanbul, Net Turistik Yayinlar Press, Updated English edition, Istanbul.
- [97] UNESCO, (2011). International Organization for Conservation of Cultural Heritage (ICCROM), Report on the joint World Heritage Centre / ICOMOS mission of Istanbul, Ankara.
- [98] Hendrix, D., (1993). Constantinople and the Byzantine Legacy, The Creative Commons Global Affiliate Network, California, United States.
- [99] Safran, L., (1993). Points of View: The Theodosian Obelisk Base in Context, Greek, Roman, and Byzantine Studies 34, Issue 4, pp.409-435.
- [100]Smolijaninovaite, K., (2007). A study on Historic Hamams in Istanbul, Changing Aspects of Cultural use and Architecture, M.A Thesis, Cottbus, Germany.
- [101] Büyükdigan, I., (2003). A critical look at the new functions of Ottoman baths, Journal of Building and Environment, Science Direct, Elsevier Publishing, Vol.38, Issue 4, pp. 617-633.
- [102] Inanici, M., (2014). Lighting Analysis of Hagia Sophia, Annuals of Hagia Sophia Museum No. 17, Istanbul, pp.128-202.

[103] https://www.ayasofyahamami.com/tarihi ve mimari dokuhttp://www.ayasofyahamami.com/en/index1.html (Access date: 15/2/2018).

[104] Kramer, M., (1980). Egypt's Royal Archives, 1922-1952, American Research Center in Egypt Newsletter, Vol. 113, pp. 19-21.

[105] Conant, K., (1946). The First Dome of St. Sophia and Its Rebuilding, Bulletin of the Byzantine Institute of America, Boston, pp.71-78.

[106] Van Nice, R., (1965). Saint Sophia in Istanbul; An Architectural Survey, Dumbarton Oaks, Center for Byzantine Studies, Washington, DC.

[107] Mainstone, R., (2001). Hagia Sophia: Architecture, Structure and Liturgy of Justinian's Great Church, Thames and Hudson, New York.

[108] Jabi, W., & Potamianos, I., (2007). Geometry, Light, and Cosmology in the Church of Hagia Sophia, International Journal of Architectural Computing, Vol.5, Issue 2, pp.303-319.

[109] Cyril, M., (1985). Byzantine Architecture, History of World Architecture, 1st Edition, Rizzoli Publications, New York.

[110]Binns, J., (2002). An Introduction to the Christian Orthodox Churches, Cambridge University Press, Cambridge.

[111]Nelson, R., (2004). Hagia Sophia: 1850-1950: Holy Wisdom Modern Monument, 1st Edition, University of Chicago Press, Chicago.

[112]http://www.pbase.com/dosseman/istanbul_aya_sofia&page=all (Access date: 16/2/2018).

[113] Abd al-Wahhab, H., (1956). Alathar Almanqulah Walmuntahalah Fi Aleimarah Aleslamyah, Bulletin de l'Institut d'Égypte, Vol. 38, Le Caire, pp. 243-283.

[114] Iḥsan aabbas, (Ed.) (1993). Yāqūt, Irshād al-arīb ilá maarifat al-adīb, 7 Vols; (Vol.5, p. 2102), Dār al-Gharb al-Islāmī, Beirut.

[115] Peters, F.E., (1968). Aristotle and the Arabs, the Aristotelian Tradition in Islam, New York University Press, New York.

[116]Mattock, J. N., (1971). Review: Aristotle and the Arabs, the Aristotelian tradition in Islam by Peters, F.E., Bulletin of the School of Oriental and African Studies, Vol.34, Issue 1, London, pp.147–148.

[117] Zirkle, C., (1941). Natural Selection before the Origin of Species, Proceedings of the American Philosophical Society, Vol.84, Issue 1, pp. 71–123.

[118] Al-Jaḥiz, Abu authman aamr ibn Baḥr al-Kinani al-Basri., (1384H/1965AD). Kitab Al-Hayawan: Book of Animals, Vol.1, Second edition, Moustafa Albabi Alhalaby Stationery and Press, Cairo, Egypt.

[119] Axworthy, M., (2008). A History of Iran; Empire of the Mind, Basic Books Press, USA.

[120] Robinson, F. (Ed.). (2010). The New Cambridge History of Islam, Vol.1: The Formation of the Islamic World, Sixth to Eleventh Centuries, Cambridge University Press, Cambridge.

[121] Lunde, P., and Stone, C., (1989). Al-Masudi: The Meadows of Gold: The Abbasids, translated by Paul Lunde and Caroline Stone, Kegan Paul Press, London and New York.

[122] Kennedy, H., (2004). The True Caliph of the Arabian Nights, History Today, Vol.54, Issue 9, pp.31-36.

[123] Becker, C. H., (1987). Aḥmed ibn Tulun, In: Theodoor, M., (Ed.). Houtsma, Brill's First Encyclopaedia of Islam, 1913–1936, Vol. I, Brill Press, Leiden, pp. 190–191.

[124] Bianquis, Th., (1998). Autonomous Egypt from Ibn Tulun to Kafur, 868–969, In: Petry, C.F. (Ed.) Cambridge History of Egypt, Vol. 1, Islamic Egypt, 640–1517, Cambridge University Press, Cambridge, pp. 86-119.

- [125] Kennedy, H., (1993). al-Mutawakkil aAla 'llah, In: Bosworth, C. E., Van Donzel, E., Heinrichs, W. P., &Pellat, Ch., (Eds.) The Encyclopaedia of Islam, Vol.VII, E. J. Brill Press, Leiden, pp.777-778.
- [126] Kraemer, J.L., (Ed.) (1989). The History of al-Tabari, Vol.34, Incipient Decline: The Caliphates of al-Wathiq, al-Mutawakkil and al-Muntasir, A.D. 841–863/A.H. 227–248, State University of New York Press, New York.
- [127] Friedman. Z., (2014) Nilometer, In: Selin H. (Ed.) Encyclopaedia of the History of Science, Technology, and Medicine in Non-Western Cultures, Springer, Dordrecht, pp.12-18.
- [128] Ardagh, J.C. (1889). Nilometers, Proceedings of the Royal Geographical Society and Monthly Record of Geography, Vol.11, Issue 1, pp. 28-38.
- [129]Bell, B., (1970). The oldest records of the Nile floods, The Geographical Journal, Vol.136, Issue 4, pp.569-573.
- [130] Naguib, M., (1997). Naql Alaamayir Al'athariah Aleslamyah bi-Alqahirah Lilhefaz aalayha fi B'iah Atharyah Mola'imah, Journal of the Faculty of Arts and Humanities, University of Minya, January 1997, pp. 175-205.
- [131]El-Habashi, A., and Warner, N., (1998). Recording the Monuments of Cairo: an Introduction and Overview, Annales Islamologiques, Vol.32, pp. 81-99.
- [132] The American Research Center in Egypt, Egyptian Antiquities Organization and the Getty Conservation Institute, (1993). Restoration and Conservation of Islamic Monuments in Egypt, The Jameel Center; The American University in Cairo, Egypt, pp.1-25.
- [133] Gharib, R.Y., (2010). Revitalising Historic Cairo: Examining the Public Policy Formulation and Implementation, PhD thesis, University of Nottingham, United Kingdom.