

Reuse of Heritage Spolia in Iraq: A Historical Exploration

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Abstract

The practice of the reuse of 'Spolia' involves the extraction of architectural elements and materials from heritage buildings for relocation to other sites or structures. If employed, it provides unique opportunities to conserve valuable resources and foster sustainability in architectural conservation. Unfortunately, this is an issue often overlooked by most local institutions, private stakeholders, building industry practitioners and the conservationists. In this context, this paper examines the historical traditions of the reuse of Spolia in Iraq.

The research employs a descriptive analytical approach, with case studies as a method. Data is sourced from an examination of literature on the historical architecture of Iraq. It follows a periodization that spans from the ancient Mesopotamia to the contemporary era. Data is also obtained through onsite observations and interviews.

It concludes that in the pre-Islamic Iraq, the reuse of building materials predominantly served economic and utilitarian motives. Symbolic reuse of architectural elements has been more prominent during the Abbasid rule and the subsequent periods. The modern local practice of the reuse of Spolia not only prioritizes economic considerations but also emphasizes aesthetic values, intertwining with the emulation of local identity.

Keywords: Spolia, Mesopotamia, Abbasid architecture, Reuse of Fragments, Contemporary spolia.

Introduction

With the continuous increase of interest in the transition to a more sustainable environment, the issue of the reuse of built heritage has become more important than ever. In addition to the values of heritage of interest to society, these heritage buildings constitute an important asset in cities that have historical layers extending to the previous civilized eras. However, many heritage areas in most city centers or historical buildings are left to neglect and decay, and have become places unsuitable to live, because they lack many of the components of quality of life. Therefore, they face removal decisions in urban development projects. In this regard, interest has emerged in using materials and architectural elements obtained from the dilapidated places and reusing them in new buildings and environments. The intention is to reduce the remnants of demolition and removal. Indeed, they could be given a new extended life.

This is a practice known as the 'reuse of Spolia'. Although it has been widely known historically, it has recently become a subject of new studies and theorization for a wide spectrum of those concerned with sustainability of architectural heritage.

In Iraq, the reuse of Spolia has been abandoned, even though old centers of the main cities, dating back to the nineteenth century, heritage fragments and elements exist in places such as Baghdad, Mosul, Najaf and Basrah. They suffer the consequences lack of attention, which have led to a decrease in their numbers and often the disappearance of many of their architectural features and characteristics (Figure 1). It is recognized that, these elements, if properly reused, can become an asset for investing new life in many historic places and buildings.

In this context, the aim of this study is to draw attention to this issue locally, in order to keep pace with the global approach to heritage preservation and sustainability. Therefore, this paper investigates the employment of Spolia in heritage buildings throughout the history of Iraq. Its objectives are:

1. To identify the various manifestations of Spolia reuse within the historical context of Iraq, spanning different periods and civilizations.
2. To identify the forms of Spolia reuse in Iraq and their interpretations.
3. To establish the variety of the multifaceted interpretations underpinning Spolia reuse, ranging from utilitarian aspects to cultural and symbolic dimensions.

The research thus intends to contribute to heightened awareness, fostering a deeper appreciation of Spolia reuse as an indispensable facet of sustainable heritage preservation in Iraq. It outlines the way for Iraqi scholars and practitioners for future studies on this issue.



Fig. 1: Wooden elements in a dilapidated traditional Baghdadi house

Source: Authors, 2023

Theoretical Framework

The concept of spolia has its origins in ancient architectural practices and has been observed across various civilizations throughout history. The term ‘spolia’ is derived from Latin, meaning ‘spoils’ or ‘loot.’ The practice involves reusing materials or architectural elements from earlier structures in new constructions. The reasons for the reuse of spolia are many and are often influenced by practical, economic, symbolic, or cultural considerations.

The term ‘Spolia’ finds its roots in the lexicon of Greek and Roman antiquities, as documented in the work of Greek and Roman Antiquities (1890). Within this lexicon, four words have been commonly employed to denote spoils taken in wars: Praeda, Manubiae, Exuviae, and Spolia. While ‘praeda’ held the broadest meaning, encompassing plunder of every kind, Spolia specifically referred to armor and weapons that could be saved and displayed (Ramsay, 2006). According to Rabaça (2023), the Romans had a tradition of showcasing military booty, works of art, and even components of buildings seized from conquered territories in the cityscape of Rome and its public structures—an exhibition of the dominance of the Roman Empire. Spoils acquired through individual prowess were considered the rightful property of the victorious combatant, often exhibited prominently in their dwellings (Ramsay, 2006).

Rudolf (2019) notes that, as the transition from classical times to the medieval era unfolded, the term "Spolia" retained its classical military connotation of "things seized by force." However, in medieval texts, reused objects or materials have been assigned specific names such as 'columns,' 'marbles,' or 'sarcophagi.' Rudolf contends that the term 'Spolia' took on a new dimension as a descriptor for reused antiquities, a transformation attributed to antiquarian artists active in Rome around 1500. Consequently, 'Spolia' has undergone a semantic shift from its origin in the military domain to embrace the realms of art and architecture (Rudolf, 2019). This evolution in terminology reflects the expanding conceptual boundaries of Spolia, encompassing not only military acquisitions but also re-purposed elements of cultural and historical significance.

Interpretations of the Reuse of Spolia

The concept of the reuse of spolia has garnered scholarly attention, prompting various interpretations that span practical and conceptual realms throughout history. These interpretations encompass utilitarian, symbolic ideological, symbolic, religious and aesthetic dimensions.

Utilitarian and Economic Motives: One of the earliest and most tangible interpretations of the reuse of spolia lies in utilitarian and economic motives. Ancient civilizations such as Pharaonic Egypt engaged in the reuse of durable construction materials for economic reasons, reducing labor efforts in extraction and craftsmanship (Macaulay, 1975; Ali & Magdi, 2017). This practice extended into the early Christian period, where architectural elements from Roman classical buildings found new life in the churches (Underwood, 2019; Huberts, 2014; Hansen, 2015).

Symbolic and Ideological Motives: Brand (2010) examining Pharaonic architecture, for instance has found that architectural reuse served to erase monuments of former monarchs or honor their memory. Kings had aimed to harmonize with previous models, showcasing their achievements and surpassing ancestors, a crucial aspect of royal thought. Silva (2023) has highlighted the Pharaoh Amenemhat I's pyramid construction in Lisht, emphasizing the transfer of blocks to display the king's legitimacy at the start of a new Dynasty. Similarly, incorporation of spolia in Byzantium has conveyed political messages and has created new aesthetic values (Saradi, 1997). The reuse of materials in the Arch of Constantine¹ in Rome (Figure 2) has symbolized the triumph of Emperor Constantine over predecessors (Pensabene, 2017). Rosser (2014) has noted the deliberate adoption of Andalusian Spolia in Moroccan architecture during the eleventh and twelfth centuries, serving to legitimize rule and assert political authority in line with Islamic rule in Andalusia.

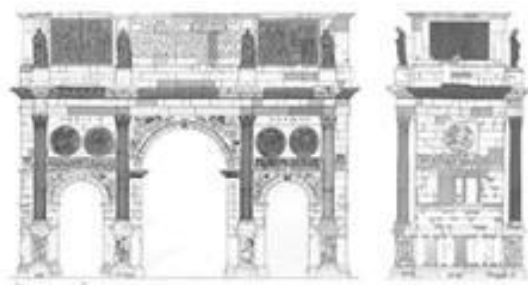


Fig. 2: The Arch of Constantine
Source: Pensabene, 2017

¹ Constantine is one of the most important figures who ruled in the Roman Empire, which left a deep impact on its history in particular and the history of Europe in general. He is considered one of the great emperors in the history of this country and is credited with recognizing Christianity as one of the existing religions in the empire. He is the first to build the city of Constantinople, which became the nucleus of the Byzantine Empire, which he opened in 315 AD.

Symbolic Religious Motive: Saradi (1997) notes a Christian reinterpretation of antique sculptures in churches, symbolizing the victory of Christianity over defeated paganism. St. Laurent (2022) interprets historical objects in Jerusalem's monuments during the VII century as symbolizing the integration of Judaism, Christianity and Islam.

Aesthetic Value and Craftsmanship Appreciation: Gutiérrez (2022) emphasizes the aesthetic value of the reuse of spolia, especially in Umayyad infrastructure construction, attributing it to aesthetic, religious, ideological reasons and political needs. The Friday Mosque in Cordoba serves as an example, where decorative and architectural materials have been reused for their particular characteristics, resembling Visigothic models (Gutiérrez, 2022).

Table 1: Types of Interpretations and Branches

Source: Author

Interpretation Type	Branches
Utilitarian and Economic	Economy in labor, Economy in effort and time, and obtaining durable materials.
Symbolic Ideological	Legitimacy of the new authority, Overcoming the previous rule, Continuation of previous heritage.
Symbolic Religious	Overcoming the previous religion, Tolerance and integration with other religions.
Aesthetic	Appreciation of the previous craft, Admiration for aesthetics

Review of Literature

Numerous local studies exist that explore the issues of the reuse of spolia. For example, Mafaz and Anwar (2019) emphasize the significance of adaptive reuse in preserving the values of heritage buildings for current and future generations. This involves a comprehensive process, encompassing the analysis of reuse potential, identification of design strategies, decision-making, and implementation of necessary changes. Furthermore, Abbas (2020) highlights the strategies such as creating buffer zones around the World Heritage sites, as present in the Erbil Citadel, for their role in adaptive reuse and revitalization. Mafaz and Anwar (2019) as well as Abbas (2020) have emphasized the importance of adaptive reuse in preserving the values of heritage buildings. However, they often provide holistic views, focusing on the adaptation of entire structures rather than shedding light on the intricate processes involved in reusing specific architectural elements. However, Mustafa (2022) points out that before deciding to reuse any building (especially historical buildings), it is necessary to study the physical and historical characteristics, social and cultural value, and site condition of that building, to make the right decision on the potentiality of reusing. He argues that adaptive reuse, as a pivotal phase following the conservation process for historical buildings, serves as a primary mechanism for retaining and preserving the inherent significance of the existing heritage fabric and architectural character. This transformative approach involves assigning a fresh purpose to these structures, ensuring their ongoing use. As Barakat and Goriel (2019) show, there arises a crucial need to formulate fundamental criteria and specific guidelines, establishing a framework for the judicious and respectful reuse of historic buildings.

In this context, Frangipane (2016) examines the contemporary development of reusing spolia. He asserts that the reuse of architectural elements is crucial for preserving material, technological, and cultural memory, playing a vital role in historical property conservation and promoting technological innovation. According to him, the adaptive reuse of architectural elements is seen as crucial for maintaining historical properties. On the contrary, Demicheli (2020) examines the current trends in the reuse of spolia. He emphasizes on preserving historical properties and fostering technological innovation, with a particular focus on cultural aspects. His research asserts that the reuse of architectural elements plays a crucial role in preserving historical properties and promoting technological innovations, with a focus on cultural aspects.

Frangipane (2016) and Demicheli (2020), both argue that the reuse of architectural elements not only safeguards historical properties but also stimulates technological innovations with a keen focus on cultural aspects. Kalakoski & Huuhka (2017) emphasize the transformative role of historic components, stating that they serve as "essential bridges between then and now," contributing to the overall value of the built environment. Brand explores how architectural reuse may occur to erase monuments of former monarchs or honor their memory by looking at Pharaonic architecture. He sheds light on the ideological and symbolic motives behind architectural reuse (Brand, 2010). On the other hand, Sarad discusses the incorporation of spolia in new architectural compositions in Byzantium and argues that this practice serves to convey specific political messages and create aesthetic values distinct from classical art (Saradi, 2014). Similarly, Rosser (2014) considers the spread of Andalusian spolia in Moroccan architecture during the eleventh and twelfth centuries. He suggests that this adoption was deliberate, aiming to legitimize rule and assert political authority as an extension of Islamic rule in Andalusia.

Mier (2012) also observes a growing interest among the contemporary architects in incorporating spolia into their designs. He introduces the concept of 'bricolage,' where spolia acts as components in works that combine different materials. This approach challenges standard aesthetic notions and is motivated by economic, environmental and aesthetic factors. In fact, Mier concludes that spolia reuse represents a connection to tradition and a means to bridge the gap created by modernity.

Interestingly, Alkildar and Alkhafaji (2020) discuss attempts to preserve national identity through architecture, emphasizing the challenges associated with rigid and immutable perceptions of heritage. While this passage doesn't explicitly mention the reuse of spolia, the concept of preserving national identity through architecture can be related to the broader discourse on the reuse of architectural elements, including spolia. They argue that any reuse of spolia which involves repurposing and integrating elements from earlier structures into new constructions can be seen as a dynamic approach to heritage. Unlike rigid and immutable forms, Spolia embraces change by incorporating historical fragments into contemporary designs. This method allows for a more fluid interpretation of national identity in architecture, emphasizing a connection with the past while adapting to present needs. In this context, Alkildar and Alkhafaji (2020) promote the idea that attempts to preserve national identity through architecture should consider flexible and adaptive approaches, such as the reuse of spolia, to avoid a static and unyielding perception of heritage. Moreover, Pederson (2022), an expert in cuneiform writing, notes the absence of precise studies related to the reuse of building materials in ancient times.

Nevertheless, despite the growing body of literature on adaptive reuse, there exists a noticeable gap in studies focusing specifically on item reuse within the context of architectural heritage preservation. There is no doubt that the existing studies provide valuable insights into adaptive reuse practices, but a more targeted investigation into the nuanced realms of 'item reuse' is essential for a comprehensive understanding. The need to understand item reuse becomes crucial as it constitutes a finer layer of detail within the broader adaptive reuse framework. It is accepted that elements such as columns, marbles and other architectural fragments possess historical and aesthetic significance, and their preservation and integration into new structures contribute uniquely to the continuity of architectural heritage. In the absence of dedicated studies on item reuse however, questions regarding the methodologies, decision-making processes, and the challenges associated with incorporating individual elements into contemporary designs remain unexplored.

It is to be noted that despite the growing body of literature on adaptive reuse, there is a conspicuous gap in studies that specifically delve into the nuances of item reuse within the broader realm of architectural heritage preservation. While adaptive reuse has gained substantial attention for its role in repurposing entire structures, the detailed examination of individual elements—ranging from decorative features to structural components—remains relatively unexplored.

In summary, while existing literature provides valuable insights into adaptive reuse and spolia, a distinct focus on item reuse is warranted. This review underscores the importance of addressing this gap and highlights the need for targeted research to comprehensively explore the intricate dynamics of spolia reuse in architectural heritage preservation.

Research Methodology

This research employs a case study method. It systematically identifies the different periods of the vast historical period of Iraq. Thus, the Iraqi history is identified in terms of pre-Islamic and post-Islamic eras, with further subdivisions informed by authoritative sources such as Alkarmly (1919), Baqir (1973) and Salman et al. (1982).

The research employs a number of data collection methods, specifically tailored to the unique characteristics of each case study within these delineated historical periods, as presented below:

The pre-Islamic period: It encompasses the epochs of Mesopotamian civilization and subsequent foreign rule. Drawing on the guidance of experts Pedersen and Van Ess, the data for cases within this period are obtained from an examination of archaeological site excavation reports. Translations of cuneiform tablets documenting construction activities from these eras also provide data.

The post-Islamic period: It comprises the Abbasid and subsequent Ottoman periods. The study draws upon an examination of documented cases of the reuse of spolia, referencing both historical accounts by Muslim scholars from the Abbasid era and the contemporary studies.

The twentieth century and beyond: It represents the contemporary phase. Several case studies of the reuse of spolia executed by Iraqi architects are identified. Data collection for these instances involve firsthand, on-site observations and discussions with people directly involved in the cases examined.

Findings

The reuse of spolia in Iraq unfolds across distinct historical eras, as outlined in the methodology section. This exploration encompasses key epochs, ranging from the ancient Mesopotamian period and the periods of foreign rule to the early and late Abbasid eras, extending into the Ottoman period up to the 20th century.

Reuse of Spolia in the Historical Eras of Iraq

According to Pederson (2022), in Mesopotamia, more valuable or less accessible materials have been taken from the existing buildings and have been subsequently reused. The materials have included doors and other objects of wood which could be reused constantly for longer period possible. Stones and good baked bricks have also been used. For an example, Pederson (2022) refers to the Processional Way in Babylon, where almost all of the top stone pavement has been removed and moved higher up with each new infilling of the street. The same has also been done for much (but not so complete) of the brick subgrade under the stones. Van Ess (2022) who is an expert in Mesopotamian archaeology, supports Pedersen's assertion that the reuse in Mesopotamia had included almost all building materials. Van Ass (2022) states that wood is quite often reused, but this reuse is difficult to be proven with archaeological methods. He further adds that the buildings are dismantled down to the foundation where the mud bricks are either dissolved and re-fabricated with the old material or reused without any change. The other building materials such as bitumen and reed may also probably have been used again and again till possible.

Construction Records

According to Roaf (1995), most Mesopotamian royal inscriptions have been deposited in the foundations or walls of buildings and have included descriptions of the activities of the royal building. They include interesting details of methods of construction like mixing scented

oils, resins, ghee, and honey into the mortar, or making the doors of cypress, cedar, juniper, or boxwood. However, these inscriptions do not refer to the reuse of old materials. On the contrary, rulers seemed always proud to report how they used the best craftsmanship and acquired the most valuable material no matter from wherever they came despite the hardships. Referring to the examples of Amorite King of Mari, Yakhdu-Lim (1820—1796 BC) and the Chaldean King of Babylon, Nebuchadnezzar II respectively: Yakhdu-Lim has erected the temple of his Lord Shamash for his well-being as a perfect construction in every aspect of craftsmanship, befitting his Godhead and has installed him in this magnificent abode (Roaf,1995).

“ . . To complete E-temenanki and Eur-me-imin-anki to the top . .
 . I mobilized [all] countries everywhere, each and every ruler [who] had been raised to prominence over all the people of the world [as one] loved by Marduk, from the upper sea to the lower [sea,] the [distant nations, the teeming people of the world, kings of remote mountains and far-flung islands in the midst of the upper and lower seas,and I imposed corvée-duty on the workforces to build E-temen-anki and E-ur-meimin-anki. The base of E-temen-anki and the base of E-ur-me-imin -anki I filled in to make a high terrace. ...I built their structures with bitumen and baked brick throughout. I completed them, making them gleam bright as the sun”

George,2008:160

Even during reconstruction, the primary emphasis has been on the introduction of new materials and efforts, accompanied by a sense of pride in preserving the temple. This sentiment is well illustrated in the writings of the Assyrian king Ashurnasirpal II [883-859 BCE] and the Neo-Babylonian king Nabonidus [555-539 BCE] respectively:

“At that time the temple of the goddess Ishtar of Nineveh, the old temple which Shamshi-Adad, king of Assyria, a prince who preceded me, had built-the temple had become dilapidated and fallen into ruin. with the wide understanding which the god Ea had granted to me, for the adornment of the heroic nature of the goddess Ishtar, my mistress: with regard to that temple, I delineated its area, dug out its foundation pit, rebuilt it from top to bottom, and completed it. I made it larger than before. The excellent [shrine] I built in a splendid fashion for the abode of the goddess Ishtar, my mistress”

Roaf,1995:431

“I searched for its old foundation; I dug down 18 cubits into the ground and Shamash, the lord of Ebabbara, the temple where his heart is pleased, revealed to me the foundation of Naram-Sin, son of Sargon, which no king before me had seen for 3200 years. I laid its brickwork on the foundation of Naram-Sin. son of Sargon. not protruding or receding an inch”

Roaf,1995:431

These passages describe the efforts of Mesopotamian Kings to reconstruct and renovate temples, particularly the E-temenanki and Eur-me-imin-anki, with a focus on the use of new materials and the expansion or preservation of the existing structures. In these instances, the emphasis is on the dedication to rebuilding and maintaining the temples rather than a deliberate intention for material reuse driven by ideology or symbolism, as seen in some Egyptian practices.

The first excerpt, by the George (2008), highlights the mobilization of rulers and workforces from various regions to complete the construction of E-temenanki and Eur-me-imin-anki. The King has imposed corvée-duty on the workforce and has used bitumen and baked brick throughout the structures, making them gleam bright as the sun.

The second set of inscriptions involves the Assyrian King Ashurnasirpal II (883-859 BCE) and the Neo Babylonian king Nabonidus (555-539 BCE). Ashurnasirpal II describes the rebuilding of the temple of the goddess Ishtar in Nineveh, emphasizing the expansion and splendid fashion in which he has constructed the shrine for the goddess. On the other hand, Nabonidus recounts searching for the old foundation of a temple associated with Naram-Sin, son of Sargon, and laying new brickwork on the ancient foundation without protruding or receding.

These inscriptions collectively suggest that Mesopotamian kings, while engaged in extensive reconstruction efforts, did not prioritize material reuse for ideological or symbolic reasons, distinguishing their practices from those of Egyptian kings who were known for reusing materials in the construction of their monuments. The Mesopotamian focus appears to be on the renewal and expansion of structures, demonstrating a commitment to the temples and the deities they housed.

Excavation Reports

The wealth of excavation reports detailing Mesopotamian building sites and their material specifics spans thousands of documents, reaching back to the early 20th century. Van Ess (2022) has highlighted the formidable challenge of thoroughly reviewing this extensive body of knowledge due to its time-consuming nature. Given these constraints, select evidence from excavation reports as illustrative examples of spolia instances in Mesopotamian architecture are presented below.

Table 2: Spolia instances in Mesopotamia Architecture
Source: Authors, 2023

Date & Location	Type of Spolia	Description	Interpretation	Source
Assyrian periods in Nineveh (Mosul) - Mound of Qoyunjuk	Reuse of glazed brick material	The Temple of Ishtar is identified as the likely source of the Assyrian materials. The bricks, initially employed by Assyrians to adorn external facades, were later spoliated in post-Assyrian structures.	The bricks found reuse as infill materials in post-Assyrian structures.	(Nadali, 2008)

This example encapsulates the approach of the research, offering a glimpse into specific cases of spolia within Mesopotamian architecture drawn from carefully selected excavation reports.

The evidence of material reuse in ancient Mesopotamia is presented below, organized chronologically based on the periods in which these practices occurred:

Assyrian Periods in Nineveh: During the Assyrian periods in Nineveh (Mosul), Campbell Thompson has conducted excavations on behalf of the British Museum from 1929 to 1932. Glazed Assyrian bricks have been discovered, likely originating from the Temple of Ishtar in the southeastern quarter of the mound of Qoyunjuk. These bricks, initially used for decorating external facades, have been found externally placed. Subsequently, after the Assyrian period, it is speculated that the walls have collapsed, and the bricks have been re-purposed as infill materials in the post-Assyrian structures. Alternatively, they might have been dismantled and transported to other locations, including the abandoned sanctuaries of Nabu and Ishtar (Nadali, 2008).

Assyrian methods of reuse: Among the Assyrians, metal has been a valuable material often inscribed with various construction texts. These metallic bodies, such as cast objects or metal sheets, have been coated with diverse items and have adorned the interiors of buildings. For instance, inscriptions have been engraved on wooden door frames, and coatings have been applied to the gatekeepers at the entrance of structures like the Apotropaic Gate (Novotny, 2018).

Repeated use of materials in successive Assyrian Periods: In later Assyrian periods, there is evidence of repeated material use. In a repurposed house, fireplaces have been constructed using parts of baked bricks taken from the courtyard pavements. This practice becomes particularly evident during the seventh phase of Assyrian history in 612 BCE (Kreppner, 2013).

Neo-Babylonian Period: In the Neo-Babylonian period, Pederson (2021) has highlighted the reuse of ancient pavement stones multiple times to raise the floor of the Ishtar Gate. Carved bricks from the archaeological remains have been also reused as building materials for the reconstruction of the Ishtar Gate in Babylon. Moreover, during the early Roman era, as the city lay mostly in ruins, people had started removing debris for the reuse of carved bricks from the ground and the internal parts of structures as building materials, creating a sea of ruins as a reminder of the previous civilization (Gries, 2023).

Undeniably, these instances show the varied approaches to material reuse throughout different epochs in Mesopotamian history, highlighting practical adaptations to construction requirements and resource availability.

Periods of Foreign Rule (539 BCE- 651 ACE)

The report of Van Ess (2022) on the German mission's work in the city of Uruk² sheds light on a temple dating back to either the Seleucid period (312 BCE - 63 BCE) or the Parthian period (late 2nd century BCE - 224 CE), both foreign rule epochs in Mesopotamia. These findings are intriguing since they unveil bricks adorned with sculpted faces resembling palm tree trunks or figures, commonly used in the earlier Mesopotamian periods for facade decoration. Notably, these bricks have been repurposed with their decorated faces positioned inward and plain backs facing outward, indicating a transfer from the neighboring structures. Their ornamentation seem inconsequential to the new users, suggesting spolia deployment driven by economic necessity rather than religious symbolism or aesthetic appreciation for the ancients, especially considering their different cultural origin (Figure 3).

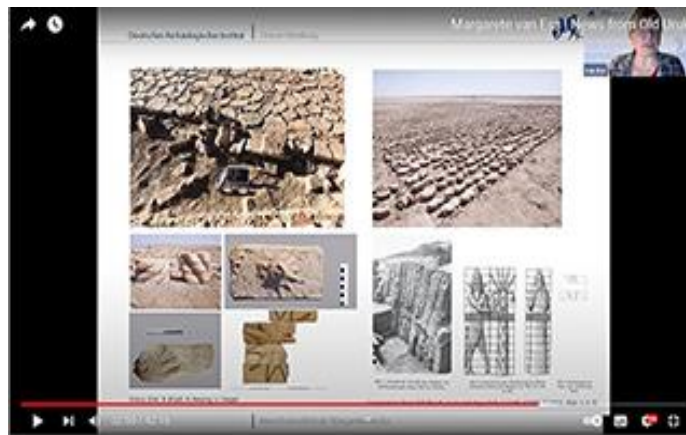


Fig. 3: Reused brick form

Source: Van Ess, 2021, screenshot from video at 32:50 minute

In Hatra (150 BCE - 150 CE), a kingdom contemporaneous with Parthian rule in Mesopotamia, evidence of stone spolia reuse in the city walls have emerged during the excavations. Notably, some stones, like the segmented cornice matching those used in Ekhandra, clearly indicate their reuse (Fortress Hatra, 1994). In Kish, excavations reveal the

² The report has been presented by Van Ess in an online presentation for the German Oriental Institute (The Institute for the Study of Ancient Cultures) and published on YouTube in 2021.

<https://www.youtube.com/watch?v=NQKBTfDgZJc>

reuse of carved bricks in the temple of Kish, identified through the inscriptions found on them. These bricks, distinct to Kish and absent in the pre-Sargonian era, have been discovered in a box measuring 31x114 cm³, each bearing the seal of Nebuchadnezzar son of Nabopolassar. Traces of bitumen on the bricks suggest prior placement in mortar on some walls before the removal (Watelin, 1934).

In summary, the evidence suggests that the use of spolia in pre-Islamic Mesopotamian periods have primarily involved the reuse of building materials, with challenges in effectively transferring architectural elements. The motivations behind these practices have been predominantly economic and practical, lacking a significant ideological dimension.

The Abbasid Period (750-1258)

The Abbasid Islamic period, which stands out as a flourishing epoch in Iraq's history, is marked by a surge in construction and urban development. However, there is limited consistent information about spolia reuse. However, some noteworthy accounts provide examples of the evolution of the concept, influenced by political ideologies. One narrative recount that the second Abbasid caliph, Abu Ja'far al-Mansur, contemplated dismantling the Iwan of Khosrow in Al-Mada' (Figure 4) to reuse its bricks in the construction of the circular city of Baghdad, the new capital of the caliphate. This account is found in Tabari's history, describing a consultation between al-Mansur and his Persian minister Khalid ibn Barmak:

" I do not recommend that, O Commander of the Faithful.' Al-Mansur asked, 'Why?' Khalid replied, 'Because it is a symbol among the symbols of Islam, and anyone who looks at it will be reminded that your predecessors refrained from demolishing it for worldly reasons, but only for religious considerations, and with this, O Commander of the Faithful, it was a prayer place for Ali Ibn Abi Talib, may God's prayers be upon him. Mansur said, No way, Khaled. You have only decided to incline to your non-Arab companions and he ordered the demolition of the palace."

<https://magazine.imn.iq/%D8%AA%D8%AD%D9%82%D9%8A%D9%82%D8>

However, when they assessed the cost of demolition and transportation, they found it to be more than the cost of new material. Al Mansure called for Khalid ibn Barmak and informed him about what was necessary for the demolition and transportation, and asked him for his opinion, and Khalid said "O Commander of the Faithful, I was recommending keeping it before you start, but now I advise that you demolish it now until it reaches its foundations, lest it be said that you have been unable to demolish it." Anyway Al- Mansur disregarded the advice and decided not to demolish it. Detailed in Tabari's history, the account underscores a clash between political symbolism and religious considerations. Despite initial reluctance due to religious symbolism, economic factors ultimately outweighed, revealing the emerging awareness of political and symbolic dimensions in demolition and material reuse (al-Tabari, nd).



Fig 4: Ruins of the Palace of Ctesiphon, Baghdad
Source: Nick Maroulis/Flickr

This incident illustrates the emergence of awareness regarding the political and symbolic dimensions in the processes of demolition and material reuse. It highlights the interplay between showcasing superiority over predecessors and the perceived inability to dismantle a structure. Moreover, it underscores the rise of a religious symbol, symbolizing the triumph of the divine creed upheld by the Muslims over polytheistic beliefs.

Likewise, Al-Khatib Al-Baghdadi also indicates that Abu Ja'far Al-Mansur removed the doors of the city of Wasit, which was associated with the Umayyad dynasty preceding the Abbasids, and transported them to his new city around Baghdad (Al-Baghdadi, ?). This action has been interpreted as a powerful declaration aimed at disabling what the previous dynasty had established in favor of the new dynasty (Saba, 2022). Another incident of the reuse of spolia in Mansur's Baghdad is also recorded by Al-Khatib. It is the relocation of the mihrab -prayer niche (Figure 5), and pulpit of Al-Mansur after the rebuilding and expansion of the Mosque of Al-Mansur by Harun al-Rashid and later during the reign of Caliph Al-Mu'tadid. The mihrab and pulpit have been moved to the new qibla wall during its expansion in the year 280 AH (Al-Khatib, ?).



Fig. 5: Al-Mansour's mihrab, the National Museum, Baghdad.

Source: Author, 2023

This action can be interpreted as confirmation of the extension of the Abbasid Caliphate and pride in the first creation of the city.

In a description of another Abbasid reuse of spolia that has occurred in the city of Samarra (762 CE) al-Mutawakkil, Brown (2022) shows that the basin discovered in the Dār al-Khilāfa (Figure 6) appears to have been carved during the Roman period from the stones extracted from the quarries at Aswan. From there, it has been probably transported as a labrum to a bathhouse in one of the major Roman cities. This could have been in Egypt itself or, perhaps more likely, one of the Levantine cities—requiring the heavy basin to be brought down the Nile and across the Mediterranean from a port such as Alexandria. According to Brown (2022), the Abbasid caliphs have acquired the basin or basins which have been removed from this bathhouse as spolia.

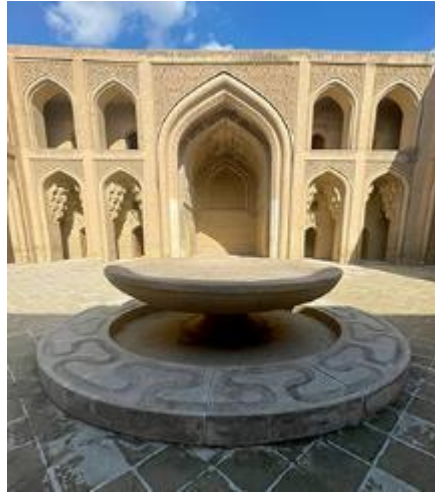


Fig. 6: The Basin in the Dār al-Khilāfa
Source: Author, 2023

Brown suggests the reasons why the Abbasid caliphs not only sought to acquire ancient stone basins but chose to install them inside their palaces and, possibly, at the center of one of the Caliphate's most important religious buildings—Samarra's Congregational Mosque. It is that these basins have been recognized as markers of prestige far beyond the Abbasid Iraq (Brown, 2022). In other words, the legitimization of their dynastic claim to power, and the reinforcement of the prestige and authority of their new capitals, has been a key concern that has signaled visual and material cues referencing the past, specifically associated with a renowned ruler known through the Quran. Its installation at Samarra has evoked not only the common heritage that has connected the Abbasid caliphs with a powerful ancient ruler but also has signaled the extent to which the Abbasids eclipsed the rulers of the past (Brown, 2022).

Another Spolia effect has been identified in Samarra. Although not a water feature *per se*, a parallel may also be drawn between the 'Cup of Pharaoh' and a uniquely Abbasid architectural feature mentioned in Brown (2022) and referenced to Ritter (2020). In the Dār al-Khilāfa at Samarra, it is probable that one of the rooms had a floor of blue-green glass tiles with regular raised, globular. Set in a white plaster bedding, these translucent tiles would have created a water-like effect—likely an allusion to a well-known legend relating to the King Solomon. Brown (2022) quotes Ritter and says "Hence a room with a glass floor in Abbasid palaces could connect the caliphal or princely owner with Suleyman, the powerful, religiously legitimate, universal king, and famous builder" (Ritter, 2020: ?).

Here, another type of motive for the reuse of spolia becomes apparent, which is the association with previous kings known for their power and greatness. Evoking these qualities in the new site through architectural elements is a notable aspect of spolia.

The Ottoman Rule (1534- 1917)

Literary sources in the Prophet Girgis Mosque in Mosul, which has been built during the Seljuk era around 300 A H indicate the presence of a mihrab located in the center of the mosque. It seems that this mihrab has been transferred from an old mosque to the Mosque of the Prophet George (Francis, 2017).

Another practice of spolia during the Abbasid period has been in the Al-Nuri Mosque in Mosul city. The main mihrab in the mosque has been the one that has been in the middle of the qibla wall, which has also been called the Shafi'i mihrab. It is the mihrab that has been in the wing designated for Al-Shafi'i prayer in the Winter Prayer House. This mihrab has been originally in the Umayyad Mosque, then the late Muhammad al-Nuri al-Qadiri- a well-known sheikh and religious scholar – has moved it to the al-Nuri Mosque when he has restored it in the year 1286 AH. / 1869 AD. The mihrab dates to the year 543 H/1148 AD as inscribed on its left side, with the name of its maker (Dawod Al Baghdadi). It has been erected within the

renovation works conducted in the Umayyad Mosque during the Atabeg or Zenigid reign on Mosul. This mihrab has been built from several pieces of blue marble. Plaster has been used as a bonding material between them, and its general shape has had three rectangles and the shape of their cavity has been semi-rectangular (Rashid & Hussein, 2017) (Figure 7). No interpretation is associated with this reuse of spolia. However, one could suggest an admiration of its craftsmanship and aesthetic value.

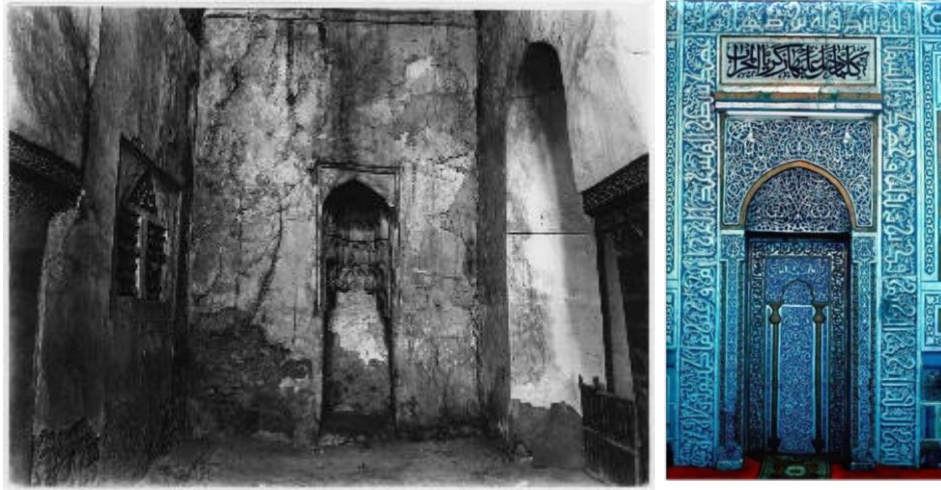


Fig. 7: The mihrab of the Al-Nuri Mosque, called (the Shafi'i mihrab)
Source: Rashid & Hussein, 2017

During the Ottoman era, significant spolia reuse initiatives have taken place, exemplified by many notable projects. One such instance has involved the dismantling of the walls of Baghdad under the Ottoman governor Wali. The bricks from these walls have been repurposed in the construction of the Qishla (soldier's barracks), the School of Industries, as well as various factories and schools in Baghdad (Francis, 2017). Another documented case in literature involves the utilization of the Babylonian bricks in the construction of a dam over a Euphrates tributary named Saddat Al-Hindiya in 1836 (Figure 8). According to Abbas Mohsen al-Jubouri, "in 1836, the governor of Baghdad, Ali Reda Pasha, and subsequently Muhammad Najib Pasha in 1842, constructed a dam on the Hindiyah branch to divert the Euphrates waters to Hilla. However, Abdul Karim Nader Pasha, who assumed the governorship in 1849, erected a dam using large quantities of bricks transported from the ruins of Babylon" (ND).

However, Hassan Al-Wazni highlights that the Hindiyah Dam holds significant historical importance as one of the oldest irrigation projects of Iraq, dating back to 1886 AD. He notes that the dam has been designed by the French Engineer Shaun Derfer at the behest of the Ottoman government. Its name originates from an Indian man named Muhammad Shah Al-Hindi, who has donated funds to dig a river channel supplying water to the city of Najaf, seeking spiritual merit. To construct the dam, Derfer has proposed utilizing a million bricks sourced from the antiquities of Babylon. In fact, he has meticulously detailed all the aspects of the project, including technical and financial procedures, and the necessary materials like stones and bricks. These materials have been transported from Hit or the ruins of Babylon to the dam site. Al-Wazni also highlights that the construction materials have comprised a mixture of lime, brick and ash (Saeed, 2023).



Fig. 8: Sadd Al-Hindiya
Source: Hikmat Al-Ayashi, 2023.

Indeed, during the Ottoman period, practices like the reuse of materials (Spolia) reflect a lack of concern for the archaeological sites. Economic needs have taken precedence over the other considerations in the practice of utilizing materials from the earlier structures.

The Ottoman era also witnessed another reuse of spolia. This is the mihrab of the Al-Khasaki Mosque in Baghdad. Most Arab and foreign historians believe that this mihrab has been originally the mihrab of the Al-Mansour Mosque in Baghdad mentioned previously and shown in the Figure 5, which has been relocated in the expansions of the mosque. Al-Qusiri (1981) mentions that scholars think that the mihrab has been moved in the seventeenth century to the Al-Khasaki Mosque. However, she argues that the Al-Mansour Mosque in this century has disappeared and thus the mihrab may have been moved to another mosque before it was transferred to the Al-Khasaki Mosque. It may have also been preserved in one of the other mosques or preserved in some Abbasid palace before Al-Khasaki ordered its transfer to his mosque. In fact, there is nothing in the historical sources that indicates the exact location where the mihrab has been found, nor do we have any evidence of the presence of this mihrab in one of the mosques of Baghdad before it appeared in the Al-Khasaki Mosque (Al-Qusayri, 1981). For the interpretation of this spolia reuse, one could suggest appreciation of the aesthetics and craft mastery, since the mihrab has not been related to Round Baghdad's Mosque until it was studied by the historians in the twentieth century.

Twentieth Century and Beyond

Very few local instances of any reuse of spolia have occurred in the modern period. Notably, two instances in Baghdad exemplify the incorporation of these traditional elements from the nineteenth-century Baghdadi houses. In the first case, wooden elements have been integrated into the external design of a commercial building in the Adhamiya area (Nada Building, 1989) (Figure 9). Particularly noteworthy is the use of the prominent traditional wooden column, locally known as "the Dalag," positioned at the corner of the building. Moreover, wooden windows reconstructed from the "Shanasheel," have enhanced the architect's emphasis on local identity. Al-Chalabi (2023), suggests that this approach has sought to uphold the context of the place and preserve the essence of the original traditional Baghdad architecture.

The second example is a café and hall called "Dar Al-Taraqji for Art and Heritage" (Figure 10). An interview was conducted personally with the owner of Dar Al-Atargi Café, with a purpose to understand the rationale behind the reuse of heritage elements and their sources. His response indicated that the reuse of these elements aimed at preserving local identity and imbibe a heritage aesthetic value. Some architectural elements that have been reused include columns, wooden capitals, doors and furniture pieces such as chairs and tables. These items have been obtained from the old, demolished houses in Baghdad.

According to the café owner, who personally supervised the selection of these used items from the local and regional markets, they had the motivation to appreciate their aesthetic and artistic values (interview with the café owner). The spolia constitutes the whole building with no appearance for any modern elements. This is a literal architectural statement of the 19th century Baghdad.

In this case, an additional illustration of the reuse of spolia is found in a Basra rest house (Figure 12), where the wooden shishul has been re-purposed. According to Professor Mohammed Al-Jalabi (University of Baghdad, July 2022) wooden elements have been reused in a house façade. This practice underscores the continued appreciation for the aesthetic and cultural significance of historical elements, offering a unique perspective on architectural continuity in the twentieth century and beyond.



Fig. 9: Nada Building - Al-Adhamiya – Baghdad (left & middle)
Traditional Baghdadi wooden column in 19th century traditional houses (right)



Fig. 10: Dār Al-Aṭraqjī for Art and Heritage, Baghdad
Source: Author, 2023



Fig. 11: A commercial building in Baghdad by architect Majid Hadi
Source: Al-Chalabi, 2022



Fig. 12: A rest house in Basra with the wooden shishul

Source: Author, 2022

Conclusion

This paper thus concludes that Spolia have been consistently used in many historical buildings in the past in Iraq.

Ancient Mesopotamia (3500-539 BCE): The reuse of spolia in ancient Mesopotamia has been characterized by the utilization of valuable or less accessible materials from the existing buildings. Elements such as wood, stones, and baked bricks have been frequently reused. Examples include the Processional Way in Babylon. Construction records from the Mesopotamian Royal Inscriptions emphasize the use of high-quality craftsmanship and valuable materials, with little evidence of intentional material reuse.

Periods of Foreign Rule (539 BCE- 651 ACE): During the periods of foreign rule, such as the Seleucid and Parthian periods, evidence suggests a pragmatic reuse of spolia, emphasizing the economic necessity rather than aesthetic or symbolic considerations. Examples from Hatra and Kish show the reuse of stones and bricks in the city walls and temple constructions.

The Abbasid Period (750-1258): The Abbasid era introduces a more nuanced approach to the reuse of spolia, influenced by political and symbolic considerations. Instances like the contemplated dismantling of the Iwan of Khosrow highlight a shift in the awareness regarding the political and symbolic dimensions of material reuse. Spolia has been used to reinforce the dynastic claims to power and connect with past rulers, as seen in the reuse of the mihrab and the pulpit in Mansur's Baghdad. The relocation of the basin in the Dār al-Khilāfa at Samarra and the glass-tiled floor in the Congregational Mosque reflect an intentional association with the past kings and legends.

The Ottoman Rule (1534- 1917): During this period, the reuse of spolia has been driven by economic needs, as seen in the demolition of the walls of Baghdad for the construction projects. Noteworthy examples include the use of Babylonian bricks in the construction of the Hindiyah Dam.

Twentieth Century and Beyond: Modern examples in Baghdad showcase rare instances of the reuse spolia, emphasizing the preservation of local identity and appreciation for aesthetic and artistic values. Architectural projects, such as the Nada Building and Dar Al-Taraqji, use the traditional elements from the 19th-century Baghdadi houses. These modern examples demonstrate a shift towards appreciating the aesthetic and cultural values of the reuse of spolia.

The practice of spolia reuse has evolved over time, reflecting changes in political, economic, and cultural contexts. From utilitarian considerations in the ancient Mesopotamia to symbolic and aesthetic motivations in later periods, spolia has become a dynamic element in architectural practices, mirroring the priorities and values of each era. Outcomes of this study can be summarized as follows.

Table 3: The reuse of spolia and their interpretations

Source: Authors, 2023

Factor	Interpretation of spolia reuse
Symbolism of Power Shifts	The transfer of power from one culture to another is often represented by Spolia reuse, symbolizing dominance and triumph over predecessors. Within the same culture, it tends to express continuity, legitimacy, and an extended identity.
Ideological Interpretations	Ancient historical Spolia seized material for ideological purposes, while contemporary practices focus on peaceful approaches, respecting material ownership and employing it in expressive architectural visions
Environmental Influence on Ancient Mesopotamia	prevalent use in clay ancient Mesopotamian construction has limited the reuse of spolia for decorative elements due to the potential damage. Durable materials like baked brick, stone, and wood have been primarily reused for economic motives
Economic Motives in Different Periods	Economic and utilitarian motives have dominated the reuse of spolia in various historical periods in Iraq. While ancient Mesopotamian kings have showed no evidence of ideological motivations, the early Abbasid period has marked an evolution, reflecting the dynasty's need to establish influence and symbolize Islamic triumph.
Local Modern Examples	Rare but the notable use of spolia in modern Iraq highlights the potential for a local market focused on traditional XIX century architectural elements. Raising awareness and planning are crucial for realizing the economic potential of the reuse of spolia in the contemporary society.

In conclusion, this research faces limitations due to the continuous discoveries in the Mesopotamian archaeological sites. The findings remain inconclusive within the scope of previously revealed information, with the possibility of change pending the discovery of new instances of the use of spolia in Mesopotamian sites. Moreover, ongoing excavations in Islamic archaeological sites, such as the Pilgrims' Palace in Wasit and the Abbasid city of Samarra, pose challenges. Furthermore, the reconstruction of Mosul, post-ISIS destruction, may lead to the relocation and repurposing of architectural elements, contributing to the continued practice of utilizing spolia in Iraq.

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