We are IntechOpen, the world’s leading publisher of Open Access books
Built by scientists, for scientists

6,600
Open access books available

177,000
International authors and editors

195M
Downloads

154
Countries delivered to

TOP 1%
Our authors are among the most cited scientists

12.2%
Contributors from top 500 universities

WEB OF SCIENCE™
Selection of our books indexed in the Book Citation Index in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.
For more information visit www.intechopen.com
Abstract

In Graeco-Roman Egypt, rulers shared the tradition of rebuilding structures. A great deal of attention was paid to conservation to preserve the characteristics associated with these buildings as perceived by the Egyptians. Conservation programming was implemented to achieve different political, economic, and cultural objectives. In this chapter, we examine the concept of conserving architectural heritage at that time by employing historical methods to study the historical environment of that era. We also use descriptive methods to study the conservation program applied by the rulers then. This is followed by an analytical study of the historical and archaeological specifics, and finally, a deductive method is used to indicate the outcomes and key findings. Moreover, the chapter outlines a theory for reviving the past through architectural heritage conservation in an analogous way to Graeco-Roman Egypt. Finally, the chapter ends with the main finding that reconstruction as a means of architectural conservation was a strategy perused in Graeco-Roman Egypt to serve political rather than cultural or religious goals. In addition, compared with contemporary reconstruction projects, the concepts are totally different. Architectural conservation today is primarily linked to cultural purposes and the desire to preserve the past rather than achieve political goals.

Keywords: Graeco-roman, reconstruction, Egypt, conservation, heritage

1. Introduction

It has become increasingly important to conserve heritage not only for tangible legacy but also for intangible legacy in our modern world. Conservation is defined according to UNESCO as “the operations which together are intended to prolong the life of an object by forestalling damage or remedying deterioration [1]”. The principal aim of conserving architectural heritage accordingly is “to maintain the physical and cultural characteristics of the object to ensure that its value is not diminished and that it will outlive our limited time span [2]”. Thus, conservation operations are primarily concerned with preventing the loss or damage of architectural heritage through
preventative and remedial actions [3]. Heritage conservation emphasizes that the context or setting of an early building is part of its significance. This significance of a building may be diminished if its early context is taken away [4].

In this chapter, we will travel to ancient times to explore another perspective on architectural heritage conservation, specifically Graeco-Roman Egypt, where the primary aim was to preserve the ancient setting and traditional significance of the buildings. It was different in terms of goals and applications. The goals were not focused on preserving cultural heritage or traditions, nor were the standards and criteria for conservation the same as today. These practices had more to do with maintaining the authority of the kings and rulers over the people. Thus, in Egypt, conserving cultural heritage had political and perhaps economic implications rather than cultural ones. What are the reasons beyond these goals? How did they achieve these goals through cultural heritage conservation? Further, it is also crucial to investigate the possibility of a modern version of the same concept. There are two more questions that may arise in this context: Can the same concepts of conserving cultural heritage be applied today? Are the goals the same? Do they follow the same standards and procedures as Graeco-Roman Egypt? As we discuss these conditions in Graeco-Roman Egypt and measure their impact on our modern lives, the next few paragraphs of this chapter will attempt to answer these questions.

2. Methodology

To find proper answers to the above-mentioned questions, we must sail back to ancient Egypt and study its history using the historical methods in order to get a complete picture of all the circumstances of the Ptolemaic and Roman rulers. As we sail deeper into the past using the historical methods, exploring the political and cultural concepts of the rulers, understanding why they pursued the policy of architectural conservation of the ancient Egyptian temples. To be able to fulfill this goal, it was important to look further back in the past to Pharaonic Egypt, when Egypt was ruled by ancient Egyptian pharaohs and not foreigners. This step is so important for this type of study to point out the true significance of the Egyptian temples and that they did not only play a religious role, but social and political roles as well. Then the study moves forward to explore the Graeco-Roman period in Egypt, distinguishing between the nature of the two eras and their rulers: the Ptolemaic and Roman. At this point, the chapter indicates in brief the history of Ptolemaic how religion was of a great priority to the population and thus conserving temples was in a way or another an essential medium for the foreign Ptolemaic ruler to gain the hearts of his Egyptian people. Then, we move forward using the same historical methods to see how the Roman emperors (as rulers of Egypt in the Roman period) used the same way the Ptolemies had. This is done by explaining how they used the same administrative and religious policy as their predecessors and thus followed their footsteps regarding architectural conservation of the Egyptian temples, whether by restoration, preservation, or reconstruction.

The following step used in the methodology of this chapter is the descriptive methods. It is so important after declaring the main historical points of the era which this chapter talks about (the Graeco-Roman) to utilize the descriptive methods to describe and designate the different monuments and ancient temples which are the actual evidence and tangible proof of the care and attention paid by the rulers.
of Graeco-Roman to have a program of architectural conservation. In this part of the study, we go through the description in detail of the reconstruction of the main Egyptian temples during the Graeco-Roman period, including the temples of Dendera, Esna, Edfu, Kom Ombo, and Philae (Figure 1). Further, the descriptive methods are also used to indicate other restoration works done to Egyptian temples during the same period in different parts of Egypt in prominent cult centers like Memphis and Heliopolis.

The next step is to use the analytical methods. It is a crucial point in this study as it is the method that will be used to reach the answers already asked at the beginning of the chapter. The analytical methods are applied here through analyzing two parts: first, the historical background of Egypt during the Graeco-Roman period, politically, socially, and religiously. Second, the archeological evidence which is well indicated by the great monuments and temples remaining from the Graeco-Roman Period. Following the analytical methods in this study is particularly pertinent to comprehend how and why architectural conservation was of a high priority for the rulers of Egypt at that time, their real targets, and the types of conservation they favored.

Finally comes the deductive methods as the last methodology used in this chapter by which the answers to the questions in the introduction and the key findings can be reached.

Figure 1.
3. Egypt under the Ptolemaic and Roman rules

The Graeco-Roman period in Egypt is divided into two eras: the Ptolemaic and the Roman. The first starts with the invasion of Alexander the Great to Egypt in 332 B.C. The Egyptians looked at Alexander not as a conqueror, but as a savior. This is due to the fact that the Egyptians had long considered the Greeks their ally, who had aided them long in their struggle against the Persians who were ruling Egypt then. Alexander was keen to prove to the Egyptians that he was not a conqueror to assure their loyalty and accept him as their ruler. He adopted the traditional Egyptian protocol of the Egyptian pharaohs. He started this protocol by visiting the city of Heliopolis, the cult center of the great Egyptian god Re, the god of the sun. He then moved to the city of Memphis, the capital of Egypt at that time where he had himself crowned as an Egyptian pharaoh along the same ancient Egyptian traditions. Moreover, Alexander paid a great attention to show his respect to the Egyptian divinities. He made offerings to the Egyptian gods, especially the god Apis in the temple of Ptah at Memphis. As a result, Alexander the Great was cheerfully accepted by the Egyptians as their pharaoh who saved them from the unmerciful Persians. Alexander decided to visit the temple of Amun (that was also known as Zeus-Amun) at Siwa Oasis in the Western Desert of Egypt in order to inspire the famous oracle of this god. He had certain aims when he decided to do that: First, to assure his rule in Egypt by proving that he was a descendant of the Egyptian gods following the Egyptian traditions of the pharaohs. Second, to prove to the world that the great god Zeus-Amun was supporting him in his ambition to control the world under his rule. Third, to pursue the same policy of the Greek heroes like Hercules and Perseus, who were said to have had inspired the oracle of Zeus-Amun in Siwa before setting out for their labors. It was on his journey to visit the temple via the coastal way did Alexander decide to found the new city of Alexandria [5].

With the death of Alexander the Great in 323 B.C, a new age called the “Hellenistic Age” started which synchronized the rule of the Ptolemaic Dynasty. After Alexander's death, his generals decided to divide the empire into satrapies (states) under the highest-ranking generals and the royal guards of Alexander. Ptolemy, son of Lagos, was allotted the satrapy of Egypt. He is Ptolemy I Soter, the “savior”, and the founder of the Ptolemaic Dynasty in Egypt. To assume the title of “king” in 306 B.C, he decided to follow the example of Alexander and had himself crowned as a pharaoh in the temple of Ptah in Memphis. The following year 305 B.C [5] was counted in Egyptian Demotic documents as the first year of Ptolemy’s kingship. Ptolemy at first kept Memphis as a capital during his satrapy. In 311 B.C., he moved his residence to Alexandria, the new capital of Egypt [6]. Ptolemy I was succeeded by fourteen Ptolemies whose rule ended with the death of Cleopatra VII and her son Ptolemy XV Caesarion in 30 BC [7].

There must have been certain impacts on the Egyptian population from different perspectives because of the transition from the Pharaonic to the Ptolemaic Dynasty. Different Egyptian cities, particularly in Upper Egypt, where most ancient Egyptian pharaohs originated, regarded the Ptolemaic kings as foreigners. The Ptolemaic kings succeeding the throne were symbols of Egyptian-Greek society, and they represented it in great harmony. They adopted the traditional Egyptian customs and titles and were represented as Pharaohs on the walls of Egyptian temples in order to legitimize their rule [6]. Hence, the Ptolemies to obtain political control over Egypt perused this policy, being depicted as pharaohs.
in sculpture and temple decorations and were represented as pharaohs, which is a tradition that Alexander the Great himself had started. Good examples of the typical Pharaonic Egyptian scenes adopted by the Ptolemies are: “the king smiting enemies” (Figure 2), “purification of the crowned king” (Figure 3), and “foundation of the temple [8]”, besides the common offering scenes (Figure 4). At the same time, they kept to have their Greek image, so they were also portrayed on coins as Greek kings wearing a Greek diadem [9].

The second era of the Graeco-Roman period is the Roman which starts in 30 B.C. after the death of Cleopatra VII when the Roman Command Octavian (who later became a Roman emperor and assumed the title of August) took control over Egypt and annexed it as a province to the Roman empire. Octavian on entering Alexandria gave a speech to the Alexandrians in Greek, in which he assured his respect to Alexander the Great and presented himself as the successor of the pharaohs. He also paid homage to the body of Alexander and placed a golden crown on his head [10]. For the Egyptians, Augustus was the pharaoh [11]. They granted him the traditional titles and sacredness of their pharaohs. He appointed a Praefectus Aegypti the

Figure 2.
The Ptolemaic king is smiting the enemy in front of the god Horus, Temple of Edfu.

Figure 3.
The Ptolemaic king purified by the Egyptian gods that and Horus, Temple of Kom Ombo.
“Roman ruler of Egypt” and deputy of the emperor who held the military authority to command the Roman legions in Egypt [12]. Augustus beside the Annona (annual tribute paid to Rome) also imposed a poll tax known as Laographia obligatory on all the Egyptians [13]. This situation lasted till the division of the Roman Empire into two, when Egypt became subjected to the eastern empire, the Byzantine and ruled by Byzantine emperors [14].

Most of the administration system remained in the Roman period the same as it had been in the Ptolemaic period, except some a few modifications [15]. Like the Ptolemies, the Roman emperors were regarded as pharaohs and were represented on the walls of the temples wearing the traditional Egyptian royal costumes and crowns and holding the same Egyptian royal emblems and insignia with their names inscribed inside cartouches like Egyptian pharaohs [16]. The Romans came at the top of the society, followed by the Greeks and then the Jews. The last class of the society was the Egyptian peasants and artisans, who could not join the army and paid the full poll tax. Despite that, the Egyptians during the Roman period retained their traditions. They spoke their language and worshiped the Egyptian gods [17]. The Alexandrian triad (consisting of Serapis, Isis, and Harpocrates), however, had a great influence in the Roman period. Besides the national cults, there were imperial cults for the emperors who were deified by special priests in Alexandria, and statues were made in their honor in the temples [18].

4. Program of architectural conservation of Egyptian temples

The king according to the ancient Egyptians was the living god on earth who played the role of a mediator between the common people and the divine power of the gods in the heavens. Therefore, the Egyptian king, the pharaoh was divine, regarded as the living image of the god Horus ruling on earth. Horus was the falcon-headed god that represented kingship in heaven. The pharaoh had to hold a Horus name as one of his four
principal royal titles. This concept of kingship was basic throughout the ancient history from prehistoric times up to the Roman period. When the Ptolemies rose to the throne of Egypt, they retained the same royal traditions and adopted many aspects of Egyptian political structures and social order to legitimize their rule as a key to strengthening their control over the country and the Egyptian population. Observing and accepting the Egyptian gods and divinities was the shortest way to the hearts of the Egyptians, confirming their rule as successors of the Egyptian pharaohs and not as foreign rulers.

Temples remained the focal point of social, economic, and cultural life, in the traditional Egyptian style. The Ptolemaic rule, therefore, is characterized by a rigorous program of temple construction and conservation, including the completion of projects left over from previous times, restoration of many older or neglected structures, and reconstruction of others. Additionally, the Ptolemaic kings generally aimed at conserving the Egyptian temples by adhering to the Egyptian traditional architectural styles and motives to preserve the traditional meanings inherited from the Pharaonic period. The Ptolemaic rulers to emphasize the same concept of being sons of gods, they created the Mammisi or the birth-houses (Figure 5), which were so common in temples complexes in Graeco-Roman Egypt in order to associate a local child divinity with that of the Ptolemaic king [9].

The Roman emperors were not far from the same concept the Ptolemaic kings had adopted. Their commitment to protecting Egyptian traditions and cultural heritage was reflected in their preservation of Egyptian temples, which embodied the architectural heritage. They followed the same guiding steps of the Ptolemies and were keen to complete their architectural works in the Egyptian temples. Like the Ptolemaic rulers, the Roman emperors used the conservation of the architectural heritage program in temples to gain legitimization in the eyes of the Egyptians in order to be able to rise to the Egyptian throne, emphasizing the same concept of being successors of the Egyptian pharaohs rather than being foreign rulers.

Throughout the Graeco-Roman period, based on the previously declared political and cultural concepts, many temple sites all over Egypt witnessed a large program of architectural conservation. The conservation works were done mainly through restoration and reconstruction. Among the conserved sites that still stand today as a witness of the great conservation works undertaken during the Graeco-Roman period are the great temples of Dendera, Esna, Edfu, Kom-Ombo, and Philae (Figures 1, 6-11), where the Ptolemaic kings and Roman emperors are
depicted on the walls as Egyptian pharaohs performing the traditional Egyptian rituals in front of traditional Egyptian divinities and accompanied by Egyptian hieroglyphic signs along with the cartouches enclosing their names transcribed into a hieroglyph. They all reconstructed over much older temples on the same sites following the previous traditional Egyptian plans. Clearly, the ancient Egyptian priests did not give much thought to the origins of the new rulers on the throne; they were more concerned about preserving their religious and cultural traditions, divinities, and rituals [8].

4.1 Temple of Dendera

The city of Dendera lies on the western bank of the Nile, about 74 km north of the city of Luxor. It was the capital of the sixth nome of Upper Egypt. The cow goddess Hathor who was identified with the Greek goddess Aphrodite was the principal divinity of the temple of Dendera (Figure 6). The existing building of the temple dates back to the Graeco-Roman period [19]. However, the temple had Pharaonic roots dating back to the Old Kingdom [20]. The first temple was built by king Khufu (ca. 2551–2528 B.C.) of the fourth dynasty and restored later by the king Pepi I (ca. 2289–2255 B.C.) of the sixth dynasty, whose name is inscribed in one of the underground crypts. The temple was reconstructed later by Thutmose III (ca. 1479–1425 B.C.) in the eighteenth dynasty [21].

It was under Ptolemaic rule and particularly from the time of Ptolemy VIII Euergetes II (170–116 B.C.) that the temple gained more attention and witnessed great conservation and reconstruction works. The standing body of the great temple of Hathor itself is dated to the 16th of July 54 B.C., in the time of Ptolemy XII Auletes (80–54 B.C.). Cleopatra VII (51–30 B.C.), the last ruler of the Ptolemaic Dynasty, who completed the reconstruction of the temple also has a marvelous scene in bas-relief with her son Caesarion on the outer rear wall of the temple represented in pure Egyptian style (Figure 7). The reconstruction works and decoration of the temple were completed in the Roman period, specifically in the reign of the emperor Tiberius (14–37 A.D.). This is proved by a Greek inscription of dedication on the upper edge of the cornice of the great hypostyle hall. In other words, the renovation of the existing temple structure was finished in the year 34 A.D. The decoration of the temple continued by the successive Roman emperors Caligula (37–41 A.D.), Claudius (41–54 A.D.), and Nero (54–68 A.D.). The northern gateway shows scenes of the Roman emperors Domitian (81–96 A.D.), Nerva (96–98 A.D.), and Trajan (98–117 A.D.) [22]. As is evident, the whole temple was designed and decorated in Egyptian style.
as the goal was to preserve cultural heritage (in this case the religion and rituals) through architectural conservation.

### 4.2 Temple of Esna

The city of Esna lies on the western bank of the Nile, about 50 km to the south of the city of Luxor. Today only the great hypostyle hall of the temple still stands (Figure 8). The temple was mainly dedicated to the ram-headed god Khnum, the creator ram god, who created beings on his potter’s wheel, along with other divinities, especially Neith represented as a lady, Tefnut and Menhit as lioness goddesses [23]. The structure of the standing part of the temple is dated to the Ptolemaic period and its decoration to the Roman. However, the original temple dates back at least to the eighteenth Pharaonic dynasty, specifically the reign of Thutmose II (ca. 1492–1479 B.C.) as the jamb of the gateway shows. This means that like that of Dendera the temple of Esna was reconstructed in the Graeco-Roman period. The oldest Ptolemy’s name found on the walls of this temple is that of Ptolemy III Euergetes I (246–221 B.C.), who is represented on the rear side wall of the temple accompanied by a pet lion while he is smiting his enemies. Ptolemy VI Philometor (180–145 B.C.),
whose name is inscribed on the rear wall of the hypostyle hall along with the names of Ptolemy VIII, Eurgetes II, and his wife Cleopatra II. The work was resumed in the Roman times when the temple was completed and decorated [24]. Therefore, the scenes and titles on the walls bear the names of Roman emperors; mainly Claudius (41–54 AD), Nero (56–68 AD), Vespasian (69–79 AD), Domitian (81–96 AD), Trajan (98–117 AD), Hadrian (117–138 AD), Antoninus Pius (138–161 AD), Commodus (161–180 AD), Severus (193–211 AD), Caracalla (211–217 AD), and Decius (249–251 AD). It is obvious that the largest portion of the existing temple is dated from the Roman period. However, the style is totally Egyptian to strengthen the Egyptian tradition and preserve the Egyptian cultural heritage by reconstructing the temple along the Egyptian style [25].

4.3 Temple of Edfu

Edfu is a city that lies between the two cities of Esna and Aswan, about 100 km to the south of the city of Luxor. In the Græco-Roman period, it was the capital of the second nome of Upper Egypt. The temple of Edfu was dedicated to the chief falcon god Horus Behedety (meaning Horus of Edfu), who was identified with the Greek god Apollo [26] (Figure 9). The temple of Edfu is the best-preserved Egyptian temple. In addition, it reflects with its artistic and architectural features the styles of art and architecture in Ptolemaic Egypt. The texts on the outer face of the girdle wall indicate that this building was raised in the Ptolemaic period on the plan of the original Pharaonic temple that had been designed by Imhotep, the vizier and architect of the king Djoser from the third dynasty (ca. 2630–2611 B.C.) [27]. In addition, the base of a pylon which dates to the Ramesside period, specifically of Ramses III (ca. 1184–1153 B.C.) from the twentieth dynasty, was revealed east of the temple. The oldest crypts of the temple date back to the eighteenth dynasty [28]. This indicates that parts of the original Pharaonic temple were restored during Ptolemaic time, while others were reconstructed thoroughly during the same period.

The existing body of the temple was a reconstruction that started in the time of Ptolemy III, Euergetes I in 237 B.C as the foundation text on one of the outer walls indicates [25] The building was completed in 212 B.C. under the reign of Ptolemy IV Philopator (222–205 B.C). The first hypostyle hall was constructed in the time.
of Ptolemy VIII, Euregetes II, while the pylon, the forecourt, and the enclosure wall were built during the time of Ptolemy IX Soter II (116–80 B.C.) and Ptolemy X Alexander I (107–88 B.C.), but the decoration was finished in 57 B.C. under Ptolemy XII Auletes, father of Cleopatra VII, the last Ptolemaic ruler. This means that the temple took about 180 years to be completed. This is due to the several interruptions caused by the troubles of revolutions that rose against the Ptolemies from time to time [29]. Like the previously mentioned two temples, the whole temple of Edfu was reconstructed in the Ptolemaic period, but on the same Egyptian traditional style and architecture to claim the inheritance of the Egyptian throne by conserving Egyptian architectural traditions.

4.4 Temple of Kom-Ombo

The ancient town of Kom Ombo lies on a small mount, which rises to about 18 m above the level of the plain. It is located on the eastern bank of the Nile at about 42 km north of the city of Aswan and 165 km south of the city of Luxor. It was only in the Graeco-roman period that this town gained its importance when it became the capital of a separate nome called Orembite. The temple of Kom Ombo is unique in the fact that it is a double temple dedicated to the cults of two principal opponent deities, namely Horus the falcon god and Sobek the crocodile god (Figure 10). Various fragments on the site indicate that the existing temple was constructed on another one dated to the Pharaonic times of the Middle and New Kingdoms. The site of the temple also contains traces of additions that had been made to the temple in the New Kingdom from the eighteenth and nineteenth dynasties. The temple was reconstructed in the Ptolemaic period under Ptolemy VI Philometer in 181 B.C. However, most of the reconstruction works were made during the reign of Ptolemy VIII Euregetes II. The work was then suspended and continued later under Ptolemy XII. However, other additions and decorations were undertaken later under the Roman emperor Tiberius. The scenes and inscriptions on the walls of the temple also bear the names of other Roman emperors, who must have had works in the temple like that of Domitian [23], Geta, Caracalla, and Macrinus. This means that the reconstruction and decoration of the temple took about 400 years to be completed. Despite the special characteristic of this temple as a double temple and the long time it took to be
reconstructed, it witnessed different ears and political changes. It retained the same Egyptian traditional style in all its parts in such great harmony.

4.5 Temples of Philae

Philae is a tiny island in the Nile lying at the first cataract, about 5 km from north to south and 1.50 km from east to west. On the island of Philae rise a number of Egyptian temples and constructions dating from different periods. The oldest known monument on this island is an altar built by king Taharqa (ca. 690–664 B.C.) of the twenty-fifth dynasty. However, the earliest still standing building on the island was erected by king Nectanebo II (610–595 B.C.), of the thirtieth dynasty. The importance of the island of Philae grew when it became the cult center of the goddess Isis at least from the twenty-sixth dynasty. It was during the Graeco-Roman period that the island witnessed its greatest glory as the goddess Isis that resided on Philae at that time received one of the greatest cults, not only in Egypt but in the Graeco-Roman as well. The cult of Isis remained on this island till the sixth century A.D. when the temple was officially closed, long after announcing Christianity as the official religion in the Roman Empire. Under the command of Theodorous in 577 A.D. parts of the temples of Philae were converted into churches. Due to the construction of the High Dam in 1960, the island and the temples were threatened by the complete disappearance under the Nile waters. To solve this, the Egyptian government made an appeal to the organization of UNESCO to save the monuments. The temples were dismantled and rebuilt on another nearby island called Agilika. The new island of Philae was officially opened to the public in 1980 [19].

The island of Philae is famous for the great temple of Isis (Figure 11), which was started by Ptolemy II Philadelphos (285–246 B.C.) and finished by Ptolemy III Euergetes I (246–221 B.C.), while the decoration was resumed in later periods. Preceding the pylon are two red granite statues representing two lions dating from the Roman period [30] (Figure 12). Behind these two lions once stood two red granite
obelisks erected by Ptolemy VIII Euregetes II and his wife Cleopatra III. The decoration of the pylon continued during the reigns of Ptolemy VI and XII. Columns in the hypostyle hall of the Isis temple built under Ptolemy VI [23]. A lot of restoration, additional and decorative works were undertaken under the Roman emperors from the time of Tiberius through to the reign of Diocletian at the end of the third century A.D [31]. Like the previous temples, these of Phila were also constructed by Ptolemaic kings and decorated by Roman emperors along the same traditional lines and style, to preserve Egyptian architectural tradition as evidence of being descendants of Egyptian pharaohs.

4.6 Other conservation and reconstruction works in Graeco-Roman Egypt

Temples played a major role in royal success throughout ancient Egyptian history. They were rich and powerful institutions that owned areas of land, exempted from taxes, and given privileges [25]. The Egyptian traditions greatly influenced society during the Graeco-Roman period. The Greeks and later the Romans who lived in Egypt worshiped Egyptian deities as manifestations of Greek and Roman divinities. Thus, Greek gods and goddesses were identified with Egyptian counterparts. For example, at Edfu the Greeks worshiped Horus as Apollo and at Akhmim, and they worshiped the Egyptian god of fertility Min as the Greek god of woods Pan [9]. Nevertheless, following the role model of Alexander the Great, the Ptolemies adopted Egyptian traditions and culture. They were great conservators and restorers and undertook great projects to retain the cultural and religious heritage of the pharaohs. This strategy of the rulers in the Ptolemaic period was adopted during the Roman period as well. The Roman emperors paid great attention to conserve the Egyptian religious heritage on the previously mentioned important temples and others by completing buildings and decorating temples that had been reconstructed during the Ptolemaic Period. Like the Ptolemaic kings, the Roman emperors were represented in the traditional Egyptian kings wearing the same costumes and doing the same rituals before the Egyptian divinities.

The restoration and reconstruction programs were not limited to the five mentioned sites, but also included other important religious sites and cult centers that had received great prestige in Pharaonic Egypt. Memphis, which once had been the capital...
of Egypt before Alexandria, the cult center of the god Ptah, kept on having great religious influence. In Graeco-Roman period, it was the second capital. The Ptolemaic rulers were crowned in the Memphite Ptah temple as a tradition like the Egyptian pharaohs had before [31] and gained great priestly prestige as they gave in return privileges to the temples and priest. [9] Heromopolis Magna (modern Ashmunein) (Figure 1) was a cult center of Thoth, the god of wisdom. A Hellenistic-style temple was reconstructed during the Graeco-Roman period there to be dedicated to Thoth on the remains of the Pharaonic temple, where a few evidence indicate the existence of parts from the time of Amenhotep III in the eighteenth dynasty [32]. Thebes remained the cult center of the great god Amun-Re. His temples at Karnak, Madinet Habu, and Luxor witnessed important restoration, reconstruction, and additions as parts of the conservation program of the great Egyptian temples process in the Graeco-Roman period [33]. Other religious regions all over Egypt witnessed the same strategy of conserving Egyptian temples either by restoration or by reconstruction including the temples dedicated to local gods of the oases (Siwa, Bahariya, Dakhla, and Kharga) in the Western Desert [34] and in Upper Egypt in the cities of Fayum, Armant, Coptos, Medamud, Tod, and Akhmim, and Nubia (Figure 1).

5. Reconstruction as a mean of architectural heritage conservation

The term conservation refers to all the activities carried out to ensure the preservation of a place's historical, architectural, esthetic, and/or cultural significance. This can include maintenance, restoration, reconstruction, or combining more than one process together [35]. Reconstruction, as the word implies, refers to the process of rebuilding or reproduction. It is simply “evocation, restoration or replication of a previous form” and “the purpose of reconstruction is to maintain and reveal the significance of cultural heritage” [36]. Reconstruction is generally understood in architecture to be a process by which architects reproduce past buildings visually. In this context, it can refer to work executed either with modern or old materials, or a mix of both. In this work, dismembered or destroyed elements, or parts thereof, are rebuilt. Hence, reconstruction mainly aims to restore a place as close as possible to its earlier state, including the former appearance of the historical structure, architectural monuments, or parts of structures that have been severely damaged, demolished, or greatly altered, and brings them back to life.

The history of mankind is filled with examples of reconstruction as a method of conservation. Up to the middle of the nineteenth century, restoration involved repairing buildings and structures [37]. It was during World War I that the idea of undertaking a conservation operation to completely rebuild a destroyed architectural work came to light. People bitterly felt their losses when historic urban areas were destroyed, especially when it came to the sense of cultural identity that was associated with familiar surroundings. Following the World War II, when dozens of historic towns were destroyed, much rebuilding was required [38].

During the Second International Congress of Architects and Technicians of Historic Monuments in Venice in 1964, the Venice Charter for the Conservation and Restoration of Monuments and Sites was adopted. Later, the ICOMOS Charter was adopted as the founding ethical document at its establishment in Poland the following year (1965). The Venice Charter was also used as a reference point for cultural World Heritage Sites when the World Heritage Committee met for its first session in 1977. As a matter of principle, the Charter favored the conservation and restoration of
monuments and sites and strongly opposed reconstruction work then. Accordingly, Anastylosis, or the reassembling of existing but broken parts, was the only procedure permitted. A broader perspective was provided in 1983 by the Operational Guidelines for the Implementation of the World Heritage Convention. In light of that, a certain number of requirements had to be met before any reconstruction could take place, such as cultural properties must meet a standard of authenticity in design, materials, workmanship, and setting. The Committee stressed that reconstruction should only take place on the basis of detailed and complete documentation about the original and not based on conjecture [39]. Reconstruction of buildings is also addressed in the Operational Guidelines for the Implementation of the World Heritage Convention in 1983 as follows: “In relation to authenticity, the reconstruction of archaeological remains or historic buildings or districts is justifiable only in exceptional circumstances. Reconstruction is acceptable only on the basis of complete and detailed documentation and to no extent on conjecture”. The revised version (1999) of the Burra Charter of Australia ICOMOS, states Article 1.8. Reconstruction means returning a place to a known earlier state and is distinguished from restoration by the introduction of new material into the fabric. Article 20.1. Reconstruction is appropriate only where a place is incomplete through damage or alteration, and only where there is sufficient evidence to reproduce an earlier state of the fabric. In rare cases, reconstruction may also be appropriate as part of a use or practice that retains the cultural significance of the place. 20.2. Reconstruction should be identifiable on close inspection or through additional interpretation [39].

In spite of the fact that reconstruction may prove to be an appropriate strategy of conserving architectural heritage, its effectiveness is doubtful when it is used to improve the appearance of heritage sites, unless it is based on accurate archeological and architectural documentation or evidence. It might be justified under certain circumstances, such as to protect the monument from floods or pollution threats, or any catastrophe [40]. Reconstructions of ancient buildings that are in a ruinous state or have been lost to time typically involve detailed restorations and restitution [41]. As such, the reconstruction process is about increasing the importance of the meanings and the values the contemporary building carries rather than the physical fabric of the historic architecture itself. It is the stories and cultural heritage connected with historic places that are of greater importance as long as the reconstructed building is compatible with cultural heritage of the place [42]. Therefore, it is necessary for a reconstruction process to reflect on the relationship between invention and memory and not necessarily require recreating something exactly as it was in the past [43].

Reconstruction is also seen as a process of renovating or regenerating the social and economic conditions of an area that has been abandoned for an extended period of time. In this case, it involves an attempt to remember something in one's mind, as well as establishing one's identity once more [39]. As a result, restoring historical buildings reflects a community's social and political context. It is only the beginning of the process to ensure the reconstruction is authentic (using traditional techniques, materials, and original plans [44]. Unlike restoration, reconstruction primarily restores the functional qualities of a building without altering its appearance [38]. Reconstruction is not just a matter of restoring or repairing. In essence, it is the protection of one's own past. Nonetheless, the decision to rebuild a historically significant building is always motivated by the desire to preserve it permanently for future generations. Reconstruction in other words is a significant tool for conserving, stabilizing, and preserving the heritage for the present and the future [40].
6. Example of modern reconstruction of a Graeco-Roman period building in Egypt

Alexandria’s modern Bibliotheca Alexandrina (the Great Library of Alexandria) can be considered a magnificent example of the reconstruction of one of the most prominent Graeco-Roman buildings in ancient Egyptian history. The ancient city of Alexandria was the center of science and knowledge in the ancient world. It was founded under the command of Alexander the Great when he invaded Egypt in 332 B.C. His successors, the Ptolemies, aimed to make Alexandria the center of Hellenistic culture in the ancient world. As the founder of the Ptolemaic Dynasty, Ptolemy I was planning to establish a scholarly library annexed to the Museion which would function like a scholarly academy for intellectuals and scientists [45].

In the Graeco-Roman times, the library was located in the royal headquarter of the city, where also the Museion, the great scientific edifice lay. In order to establish the Museion and the library, Ptolemy I entrusted them to Demetrius of Phaleron, who was interested in the philosophy of Aristotle and had been the ruler of Athens for about ten years until he was banished in 307 BC. In addition to being one of the earliest public libraries in the world, the Great Library of Alexandria was also the largest. It contained a large collection of books, papyri rolls, and original manuscripts collected from Egyptian temples. According to Strabo—the great Roman historian who visited Egypt at the end of the first century B.C.—it consisted of a park, a hypostyle hall, and a great construction for holding assemblies. It contained a large number of volumes and papyri rolls. The Ptolemaic rulers paid great attention to provide it with original manuscripts collected from the Egyptian temples. The library contained then between 400.000 and 700.000 papyrus rolls dealing with all fields of science. It was sadly struck by a terrible tragedy during the Alexandrian War of 48 BC. A dramatic fire destroyed it. It was restored and reconstructed in several times over history until it was completely destroyed and forgotten.

In 2002, the newly built library of Alexandria was officially opened. The project of establishing and reviving the library was supported by UNESCO. Unfortunately, the modern library is not located exactly where the ancient one was, but close to it on the shore of the Mediterranean Sea in Alexandria. The idea of revitalizing this old library dates back to 1974 when Alexandria University appointed a committee to select a plot for its newly constructed building. Construction works on the complex began in 1995, and it was inaugurated on October 16, 2002. It is built near the sea with an area of about 80.000 m². It is designed by a Norwegian architectural company Snohetta, whose design was selected through an anonymous international competition held in 1989. The structure has an inclined cylinder form emerging from the ground with a sun disk shape roof imitating the sun rays shining over the Mediterranean. The outer wall of the structure is covered with granite panels bearing characters and alphabets from ancient and modern languages. To play the same ancient role as a cultural and science center of excellence, the library embraces in addition to specialized libraries and archives, and it houses a number of institutes, research centers, libraries, museums, and permanent exhibitions.

In contrast to the ancient library, the modern one was not reconstructed along the same lines. In spite of its reconstruction to serve the ancient purpose of being a world intellectual and cultural center, this structure has a contemporary design that is substantially different from its ancient counterpart. Therefore, the current Bibliotheca Alexandrina is an outstanding example of the theory of how reconstruction is used primarily as a means of preserving a heritage’s significance and quintessence rather
than its appearance. To put it another way, the goal here is primarily cultural rather than political in reviving the Graeco-Roman tradition.

In comparing the current reconstruction of the Graeco-Roman Bibliotheca Alexandrina with the reconstruction undertaken by the Ptolemaic and Roman emperors during the Graeco-Roman period in Egypt, it is clear that they differ in two critical aspects: Firstly, the approaches pursued, and secondly, the reconstruction's role as a means of architectural conservation. With respect to the first difference, in modern concepts, the heritage core and cultural significance (in some cases) are more valued than the appearance of a renovated historic structure. However, in the case of the reconstruction of Egyptian temples in the Graeco-Roman period, appearance played a significant role along with traditional significance. Alternatively, in the second difference, the purpose of reconstruction is largely to conserve and retrain the culture of localities. By contrast, the Ptolemaic and Roman emperors were more interested in conserving Egyptian temples built along the same lines as in Pharaonic Egypt. They also emphasized representations of deities and royal scenes out of political aspirations rather than cultural ones. In other words, they pursued a cultural approach to achieve their political goals rather than the cultural ones.

7. Conclusions

It has become apparent that reconstruction has been used for architectural conservation since the early ages in various parts of the world as a means of architectural and cultural heritage conservation, specifically during the Graeco-Roman period in Egypt. Over the course of history, reconstruction has primarily been intended to preserve cultural heritage.

However, the preservation of architectural and cultural heritage was primarily carried out to serve the political goals of the Graeco-Roman rulers. In order to preserve the architectural heritage represented in the Egyptian temples, the Ptolemaic kings and the Roman emperors adopted a conservationist approach. Their apparent goal was to pass on the Egyptian cultural and religious legacy, but their primary objective was actually quite different. The foreign rulers followed this policy in order to placate the populace and legitimize their rule by relying on the Egyptian faith.

Architectural conservation thus in the Graeco-Roman period served as political propaganda for the rulers in order to gain acceptance as legitimate successors to the Egyptian pharaohs. The strategy involved architectural restoration and reconstruction. In addition to this, the walls of the temples were painted with the same Egyptian reliefs and scenes. They were carved and decorated in the same ancient Egyptian style and with Pharaonic royal and religious themes. Consequently, they continued to formalize the legitimacy of these rulers in a way that fit the Egyptian political and religious heritage then.

There has been a long and continuing debate among heritage institutions and scholars regarding reconstruction as a means of preserving cultural heritage. This debate includes the criteria that should be incorporated into the process of reconstruction. Reconstruction, however, as an approach to conserving architectural heritage, today has totally different principles and goals than it did in ancient times, particularly the Graeco-Roman Egypt. In the modern world, the main objective is to preserve culture and history. It is aimed at revitalizing the identity and authenticity of the place by reviving its significant past. This is well illustrated by the example of the reconstruction of the Great Library of Alexandria from the Graeco-Roman period. The main
goal here is to retain the same intellectual and scientific role played by the library in Graeco-Roman times or in other words to revive the cultural glory of the city. Thus, the answers to the questions mentioned in the introduction of the chapter about the purposes of architectural conservation in Graeco-Roman Egypt, and where the same concepts are applied today with the same goals. A small comparison between the Graeco-Roman period and modern times shows that although the approach and the concept of using reconstruction as a method of conserving architectural heritage in the two cases are quite similar, the goals on the other hand are different. In modern times, the goal focuses more on preserving culture as it pertains to history, heritage, identity, and authenticity. In the case of the Graeco-Roman period in Egypt, however, it was evidently done to preserve ancient Egyptian religious heritage to eventually achieve political goals.

Author details
Marwa Elkady1,2
1 Department of History, Seattle University, Seattle, Washington, U.S.A
2 Former Department of Tourist Guiding, Alexandria University, Alexandria, Egypt
*Address all correspondence to: elkady.marwa@yahoo.com

IntechOpen
© 2023 The Author(s). Licensee IntechOpen. This chapter is distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.
References


[18] Venit MS. Referencing Isis in Hellenistic and Roman Egypt. in Isis on


[38] Jokilehto J. Reconstruction in the world heritage. Rome: European Association for Architectural Education; 2013. p. 5-13


