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# DISCOVERY OF HELLENISTIC TEMPLE AT UMM QEIS SITE GADARA IN NORTHERN JORDAN: FIRST RESULTS

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## ABSTRACT

The research was aimed at providing the most important finds and presenting the results of the archaeological excavations at Umm Qeis season 2016. Prior to the excavations, topographical and stratigraphical investigations were carried out of the temple. The excavation revealed a Hellenistic temple, based on the archaeological data collected and materials analysis during the different seasons. The data collected include pottery sherds, structural remains, glass, and metal objects. Detailed recording and documentation, such as a plan, cross sections, and drawings, has been done. The latter excavations helped to uncover evidence relating to all the areas from the Hellenistic to the Roman period, but specifically focused on Hellenistic temple, because this is the most complete of the *Distyle* in antis temples found at the site, despite being one of the oldest.

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**KEYWORDS:** Temple, Architecture, Hellenistic, plan, Documentation, Materials, Umm Qeis.

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## 1. INTRODUCTION

For The unique geographical location of Umm Qeis and its vicinity to Yarmouk River and Sea of Galilee gave the city its unique significance. The nature and characteristics of the city distinguish it from other Decapolis cites. The site is located 120 kilometers to the north of the capital, Amman, in the northern part of Irbid district (Figure 1).

Most of the architectural remains discovered on the site date back to the Roman period. The city is characterized by an organized plan consisting of two streets, one of which is a large, east-to-west street known as Decumanus. This street divides the city into two main sections: the north and south, while the other street, Cardo, intersects with the Decumanus at a right angle (Weber, 1990: 25).

The city, like other Roman cities, included a public forum on the western edge of the Acropolis, re-used in the Byzantine period through the construction of several churches (Guinee and Mulder, 1992) and other civil and religious architectural structures built on both main and secondary streets. The city's streets are tiled and equipped with a water and drainage system consisting of deep water channels and tunnels for most parts of the city (Guinee et al., 1996). The study focused on clarifying the nature of the settlement patterns on the site and the function of the architectural structures, some of which were discovered in the previous excavation seasons. Due to the incomplete excavation work in these seasons,

the excavation work was carried out in Z4 to explain the functions of previously revealed buildings and platforms (Shiyab and Al-Shorman, 2015) (Figure 2).

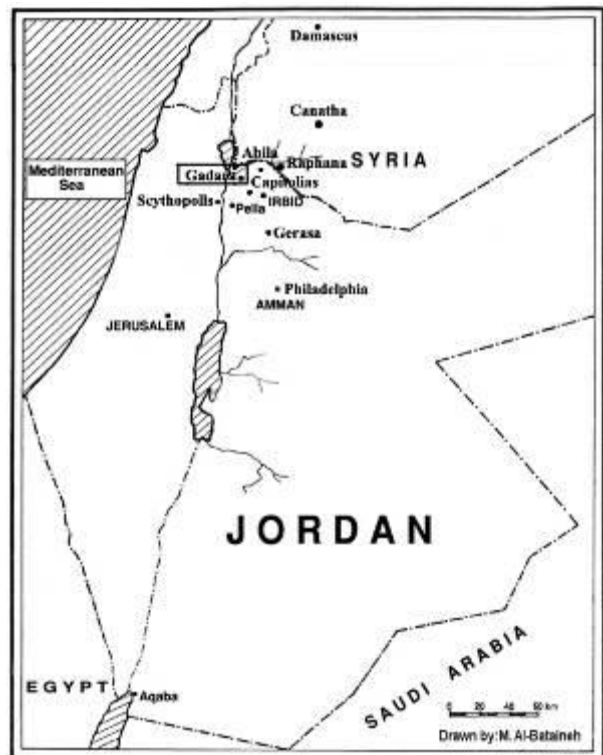


Figure 1. Location map for Umm Qeis and other Decapolis cities.

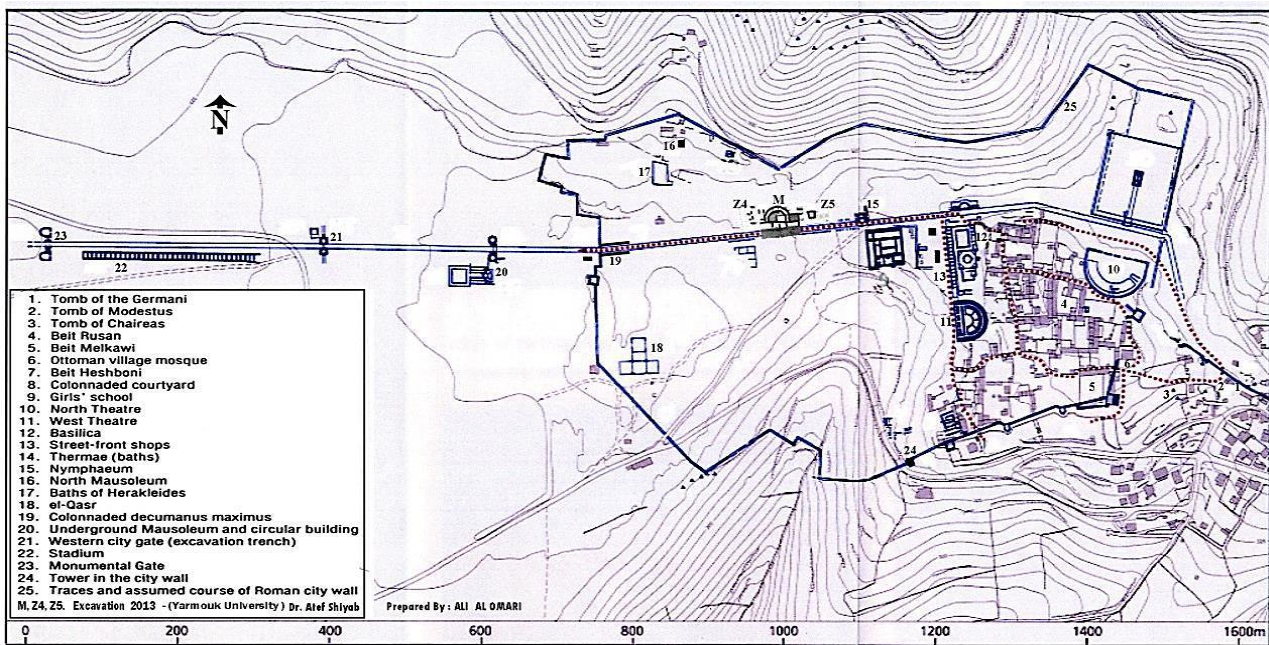


Figure 2. General layout for the city.

## 2. PREVIOUS WORKS IN THE PROJECT AREA

The investigations of Umm Qeis area may already have started in 1890, where Schumacher carried out the first archaeological excavation at Umm Qeis and he mentioned that Alexander Gianos had occupied the city of Gadara and destroyed it (Schumacher, 1890: 45-82).

Starting in 1930 under the umbrella of department of antiquities, archaeological missions began their excavations in the city. However, these activities and studies, with the exception of the work done by Junee and Mulder, did not address temple issues (1992). They reported that the area located in the western part of the Acropolis that was surrounded by pillars is a part of a Roman temple, which was reused in the Byzantine period through the construction of many churches (Guinee et al., 1996; Guniee and Mulder, 1992).

In 2013, the archaeological team, which was under the supervision of Atef al-Shiyab, began to conduct their excavation on the site, in the two areas adjacent to the east-west Decumanus Road, Z4, which lies east of Area M, and Z5, which lies west of Area M. As a result of that season, different pottery fragments was found dating back to the Islamic, Byzantine, and Roman periods. Architectural structures on Decumanus Street were also discovered, in addition to water channels and a drainage system (Shiyab and Al-Shorman, 2015).

In season 2014, the primary focus was similar to that of the previous season. Excavation work was completed for the unfinished squares by Atef al-Shiyab, in addition to the excavation of new squares in the area (Figure 3, Figure 4). New residential remains dating back to the Roman period were recovered through the opening of new squares in areas M and Z5. In area M the structural remains have mosaic floors dating back to the Byzantine and Islamic periods (Shiyab, 2015).

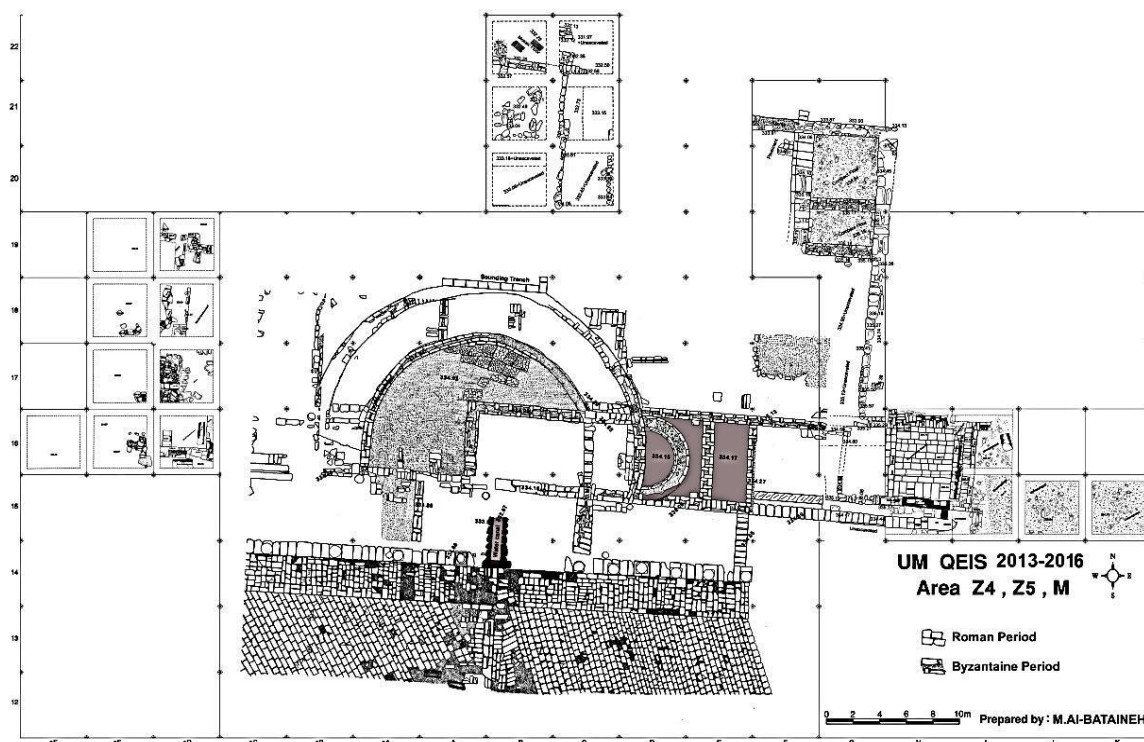


Figure 3. The excavated squares in the city.

Season 2015, in the second half of the season, work was shifted to the area of the preserved remains, a platform which was visible beneath excavation dumps. The area was cleared of debris and the uncovered walls and features were mapped and recorded in order to prepare detailed investigations in

the forthcoming season. The large stones and platform belonged to a sizable building whose function and significance were not confirmed (Shiyab, 2016). Additionally, the work on finds from earlier seasons was continued.

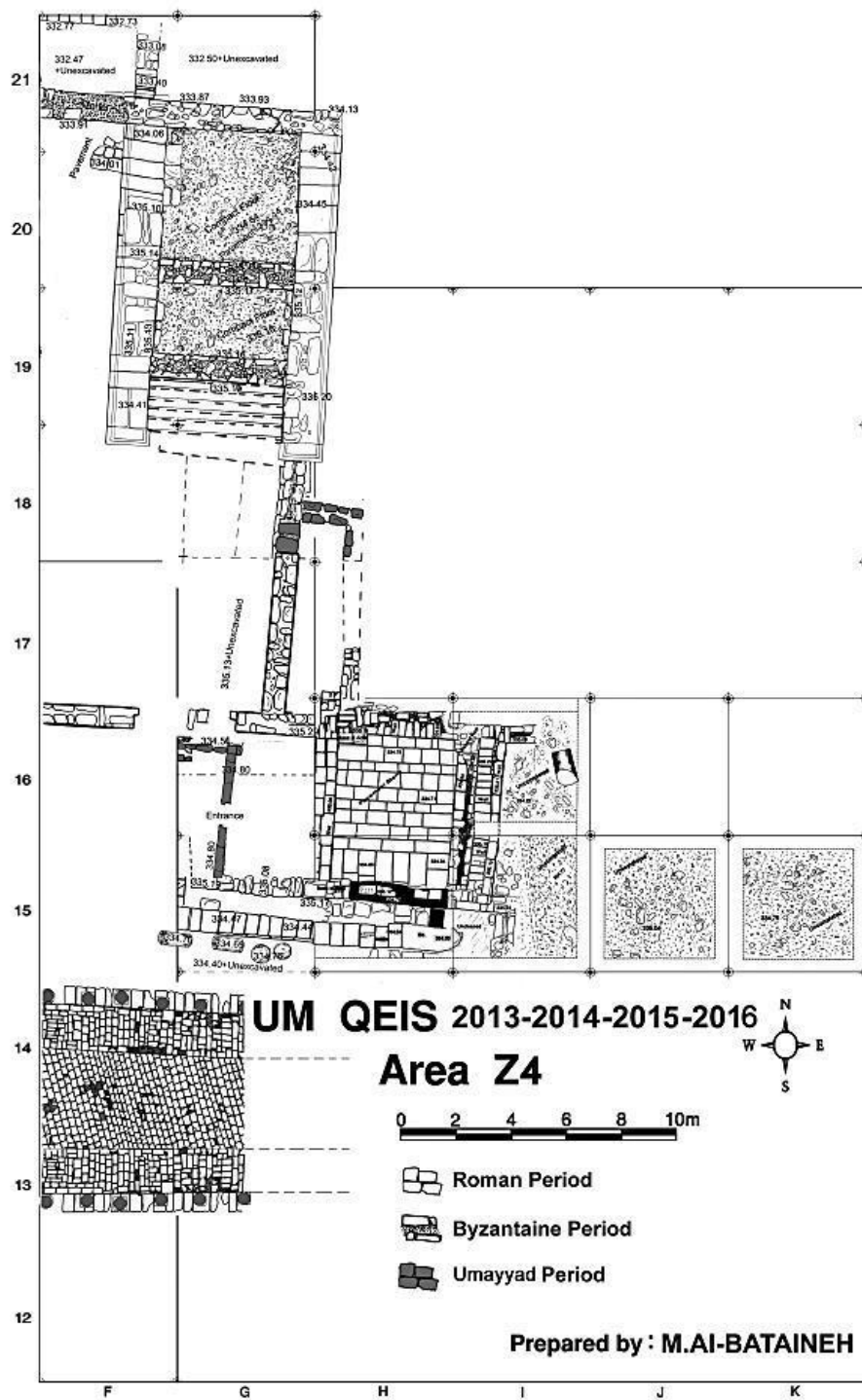


Figure 4. Plan for the different sections of the temple.

In season 2016, the excavation continued in some of the squares that were previously excavated, (13), in addition to opening new squares in the same areas. Excavation was carried out by digging in the previous squares, as per the grid system (G-16, G-17, G-18, G-19, G-20, F-19, F-20, F-21) New (H-18, H-19, H-

20) archaeological investigations and the completion of the excavation of area Z4 to the east of area M have provided additional evidence to confirm the identification of the building. Further work was continued beneath Islamic and Roman strata, ending by a Hellenistic strata. The dating and functional analy-

sis of the artifacts were used to confirm the dating of the structure, but will also assist in defining the social and economic standing of the occupants (as shown in Figure 5). Studying the archaeological finds of the squares in (Z4), revealed a close associa-

tion between the finds and the archaeological monuments in these squares; the eastern wall in square H-20 appeared in square G-20-locus no 3)) during the previous season.



Figure 5. Hellenistic ceramic sherds and mortar.

The uncovered wall was built of medium-limestone and is oriented from north to south. It extends along the G21 and extends in squares (G17, G18, and G19).

Finishing works in G20 revealed a new floor that has the same level as the floor in square G19; both floors are made of irregular stones. This indicates that these two floors date back to the same phase. Continuing to dig to reach the foundations of these walls and the original strata will allow us to identify their history on the basis of archaeological evidence.

Complete works in squares revealed another wall, oriented north to south and connected to the walls in squares (G20, G18, F19, F21, and F19). An additional wall was recorded that also had a north to south orientation. This wall disappeared into the north and south sections, suggesting that it continues in both directions. The wall consisted of a single stone row but on both sides of it, stones were discovered that probably belonged to it. The most prominent elements of the above-mentioned squares are clear walls that belong to a platform of the upper, limestone walls. The lower pillars and foundations are constructed of basalt stones, depending on the method of construction and the stones used. Many

pottery fragments, especially those blended with mortar, Mortar) were used in the installation of the foundation stones. This level was dated to the Hellenistic period (Figure 6).



Figure 6. Pottery sherds blended with mortar.

### 3. TEMPLE CHARACTERISTICS

The excavation revealed that the temple dimensions were 8 meters by 13 meters, which covers around 104 square meters (Figure 7).

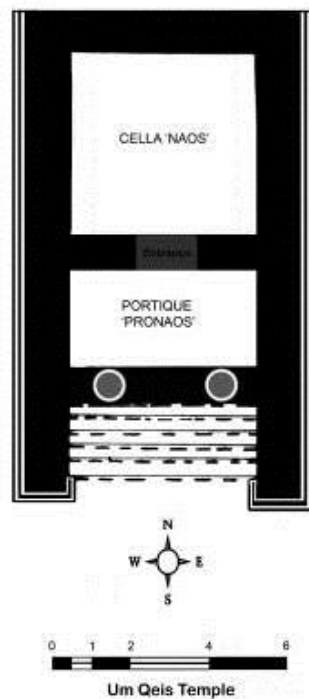


Figure 7. The Temple's general plan.

The temple was built on a masonry base (*crepidoma*), which was elevated above the surrounding ground. The base usually consists of three layers. The topmost step is the "stylobate," the area where the temple and the pillars are built and elevated about 52 cm. The second and third layers, which are located under this base, are the foundations and usually consist of stone and are linked to each other by a strong mortar. The base of the two platforms is called the "stereobate." The height of these two bases is about 77 cm. The total platform height is about 129 cm above the foundation level. The thickness of the wall, which is oriented from north to south, is about 140 cm, while east to west walls are about 100 cm wide. Excavations at the western side of the temple revealed a corridor covered with stone tiles, which are present around the entire temple. This paved corridor was used for worshipers in their religious and rituals practice (as shown in Figure 8), in addition to different Ionic columns found in front of and around the temple. These columns were probably used in the construction of the main entrance of the temple, which consists of two columns called the

Pro-Naos. Two Ionic capitals made of basalt were found in the front of the entrance (as shown in Figure 9). Several decorated stones, which were used in the decoration of the temple, were found. Two types of stone, basalt stone, which was available in the area and used in the construction of the platform base, and limestone, which was used for the temple walls (Figure 10).



Figure 8. Paved corridor in Temple.

One of the most valuable finds was the altar. It was made of basalt and found in front of the entrance, which indicates the rituals and religious ac-

tivity around the temple (Figure 11). During earlier excavation seasons, different tiles were found that were probably used in the roofing of the temple.

This specific plan is influenced by the architect of ancient Greek temples, called the *Distyle* in Antis Temple. This plan is similar to some of the schemes mentioned by Vitruvius, who classified the temples according to the order of columns in the front façade

(Vitruvius, 1960, 75). The temple is similar to the layout of the Greek temples in their early stages, which consisted of colonnaded entrance the (Pro-Naos) and the Holy of Holies (Naos). In the later stages, rear parts and side columns were added, which was seen in the temple of Athens Polyas in Brin (Onians, 1979: 119).



Figure 9. Parts of Ionic order columns.



Figure 10. Stones which were used in decoration.



*Figure 11. The altar made of basalt which were used in ritual and religious activity.*

#### 4. TEMPLE SECTIONS

There were three main sections of the temple, which was built in the Hellenistic period and these sections are listed below.

##### 4.1. *pro Naos*

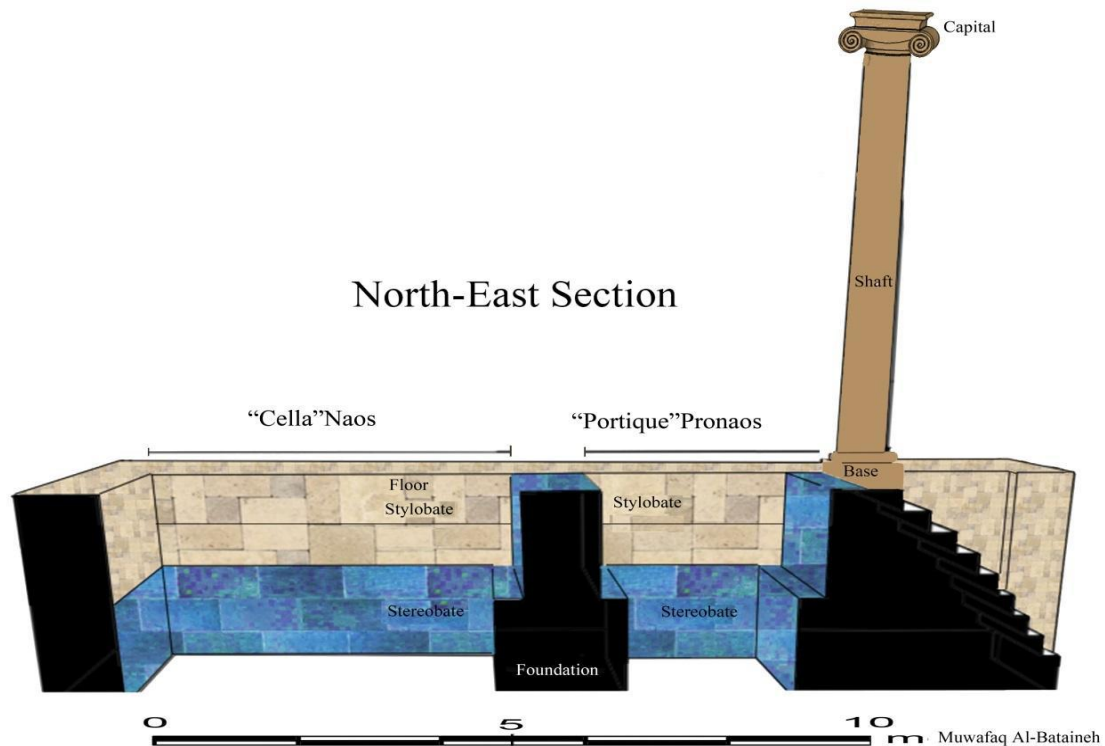
In the Roman period they used the term Portique, which is an open vestibule or portico in front of the

naos with two Ionic order columns made of basalt, located in front of the two sides of the main entrance (Figure 12). A stairway composed of five steps, which were 2.9 m in length, 1.24 m in height, and 5 m in width, was located on the southern side of the temple and lead to pro Naos. This stairway is characterized by its width, which is smaller than the façade width (Figure 13).



*Figure 12. The main sections of the temple.*





**Figure 13.** A cross section for temple elements.

#### 4.2. Naos

It is a rectangular hall with dimensions of 4.8 m (5 x 5 m), about 24 square meters (Figure 14). It was also called Cella in the Roman period and was used for religious and rituals activity. This hall was the most special and important part of the temple. In the middle of the hall stood the shrine with the statue of the god. According to the presence of many water systems, such as circular step-like ponds and water channels which lead to the Heraclius bath, and their vicinity to the nymphets, it's possible that this temple was dedicated to Poseidon, the God of Water, in all its forms. Worship of this god occurred in the presence of many Roman water installations near the temple.

#### 4.3. The holy courtyard

This was a large, open, unroofed courtyard with dimensions of 9 m x 10 m. It lies in the south in front of the main entrance (Figure 14). It had a transitional purpose, serving as an interface between the outside world and the sanctified regions deeper within the temple. The level of this courtyard is lower than the level of the podium. Lowering the ground of the courtyard maintains the temple's location on the highest ground level. This will highlight the holiness of the place and this was a characteristic for temple construction during that time. Additionally, it's possible that the architect considered making it easy for the public to enter through the main street. As a result of continuing to excavate near the temple, a new tiled room has been revealed which was built on top of this area during the Roman period.

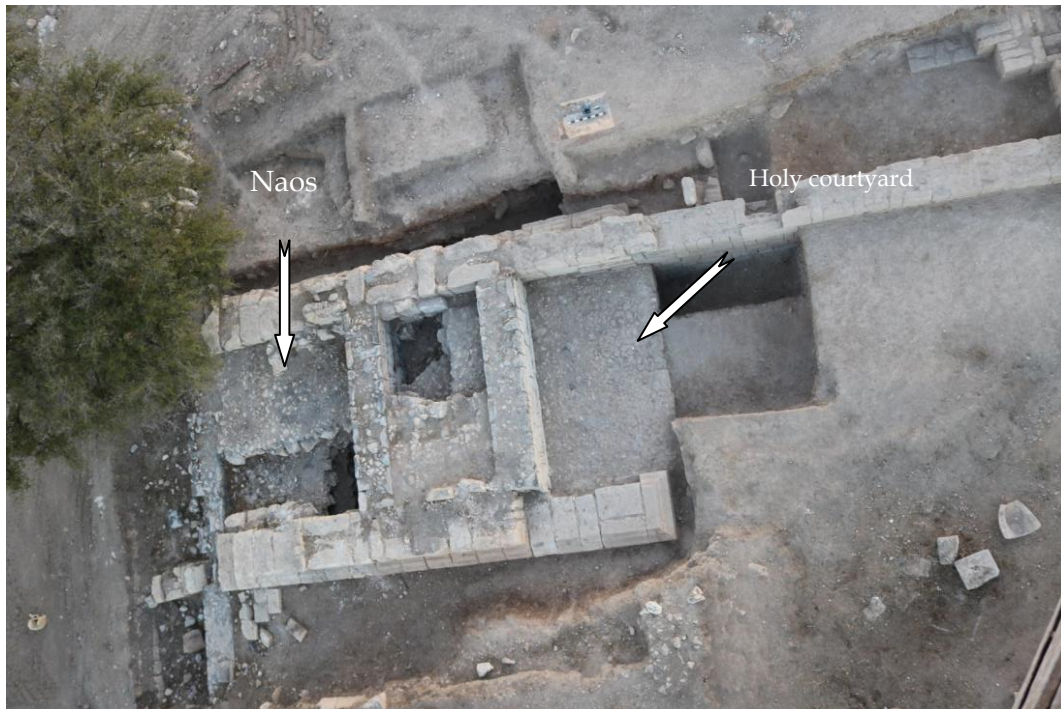


Figure 14. Temple inner sections.

## 5. A COMPARATIVE STUDY WITH OTHER HELLENISTIC TEMPLES

After the detailed study of the architectural remains and completion of drawings and documentation of the uncovered temple, it has been concluded that our temple belongs to *Distyle* in Antis Temple forms. This temple is similar in terms of the layout and design to many of the Greek temple schemes that were constructed in ancient Greece and the countries that condemned this civilization. This form was designed using a simple plan and consists of the entrance, Pro-Naos, and the room of the Holy of Holiness (Naos). The layout of Um Qais temple is similar to that of Athens' (Woodward, 2012, 32-33) (as shown in Figure 15), and the Torun scheme, designed in the form of a gallery between two side walls (Cambitoglou, 2002). Another example in Greece is the so-called Treasuries at Olympia, a collection of buildings in the form of a small temple. Furthermore, the Sikyon (Oikos I), Syracuse (Oikos II), Byzantium (Oikos IV), Cyrenian (Oikos VI), Selinous (Oikos IX), and the Megaran (Oikos XI) treasuries at Olympia all utilized widths of 6.3 m (Mallwitz 1972: 167, 170, 173, 174; De Angelis 2003: 158). Like-

wise, the treasuries of Olympia all appear to have been constructed using the Doric order and utilizing the di-style in antis plan (After Scott 2010: 206) (Figure 16).

It's worth mentioning that Hellenistic temples in their early stages (6th-5th century BC) in Greece were constructed with the *Holy of Holiness* and *pro-Naos* and the *Naos*. In the later stages (early 4th century BC) and due the increasing number of worshippers, several other sections of these temples were added to the front and rear façades. Examples include the temple of the goddess, Athens, in the city of Asus, which contains a baptized gallery that surrounded the temple on all four sides (Woodward, 2012, 165, the temple of the goddess, Demeter, in the city of Lepron (Waldstein and Washington, 1891, 15: Plate XX), the temple of the god, Apollo, built by the Athenians in the same city during the late 6th and early 5th centuries BC (Ralf von den Hoff 2009: 98, the temple of the goddess of law and justice in the Greek city of Ramnus (Miles 1992: 152;), (Vitruvius, 1914: ch.IV, 115), and lastly, the Greek temple discovered in the city of Ai Khanoum in Afghanistan (Hannestad and Potts 1990: 99).

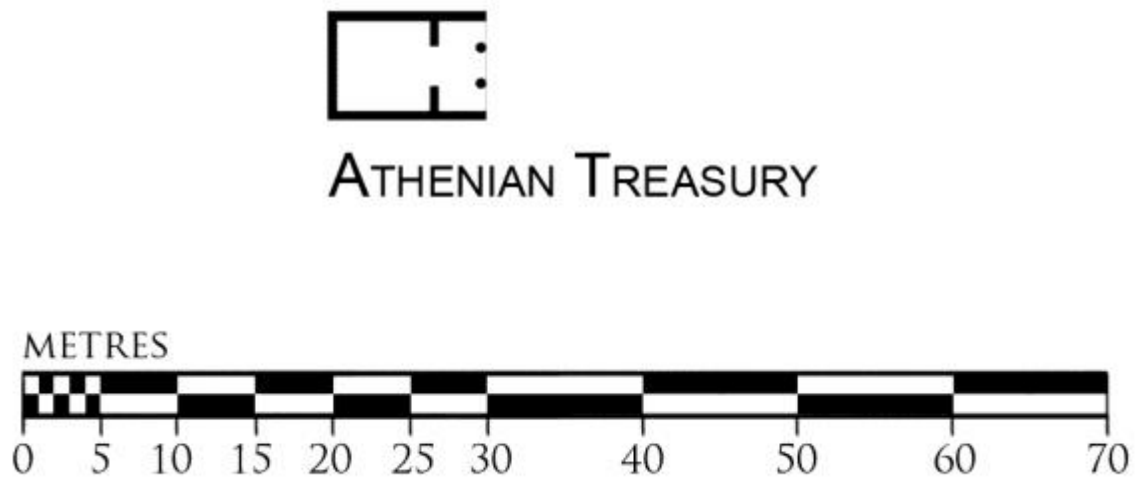


Figure 15. The Athenian treasury (After Boersma 1970: 204, 243; Tomlinson 1983: Figure 11; Miles 1998: 41; Goette 2001: 218).

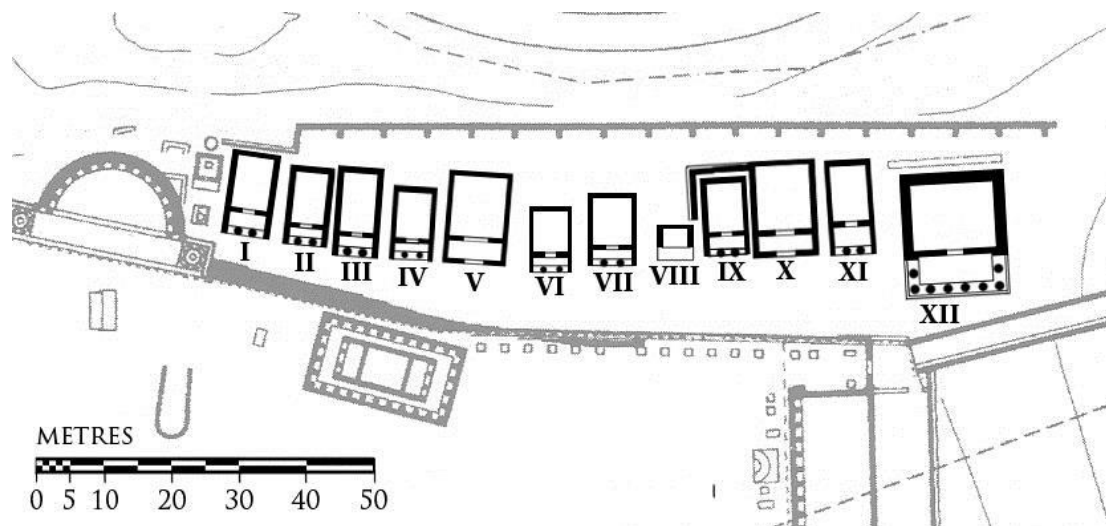


Figure 16. The treasuries of Olympia, eleven treasuries stand in a line overlooking the altar of Zeus and the end of the stadium (After Scott 2010: 206).

## 6. RESULTS

This study adds a new discovery that reflects the sequence, types of Hellenistic settlement, and Architecture at Um Qais. Based on the archaeological finds, and defined architectural form of the temple, we conclude that the temple was constructed in the Hellenistic period and has been rebuilt and reused through Roman, Byzantine, and Islamic periods. Detailed study of the architectural plan revealed that it belonged to a form of temples with a specific hall-

way, *Distyle* in Antis Temple, which dates back to the early Hellenistic period.

This discovery is considered an important find for the periphery of ancient Hellenic World in Jordan in particular. New interpretation and functional relation between the study area and the rest of Um Qais and other Decapolis cities is expected.

Future works in phase 2, will focus on the study and reconstructing of the architectural elements of the temple.

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