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# The Heart-Shaped Corner Pillars in Graeco-Roman Egypt

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**Abstract**

The architectural elements of the ancient structures of Graeco-Roman Egypt are discussed stylistically and chronologically. These elements shed light on the hybridized arts of these structures in the Graeco-Roman Period. These architectural elements were adorned with various ornaments and motifs for they are considered the code through which architecture communicates with the public intellectually via the characteristics of these distinct architectural styles. One of these ancient architectural and decorative elements is the heart-shaped corner pillars.

This article highlights the significance of the heart-shaped corner pillars in Graeco-Roman architecture in Egypt. Asia Minor was the birthplace of heart-shaped corner pillars, which were utilised for both structural and ornamental purposes and eventually made their way across the Mediterranean. Meanwhile, Egypt was under Ptolemaic authority and a hub for commerce caravans, both of which contributed to the country's widespread adoption of Hellenistic design elements.

The study highlights the chronology of heart-shaped pillars in the religious, funeral, public, and private houses of Egypt in Graeco-Roman Period. These included various structures in Alexandria and other Graeco-Roman polis. In addition, it sheds light on the use of heart-shaped corner pillars as a classical architectural and decorative element in the Greco-Roman Period. In order to piece together the history of the heart-shaped corner pillars in Graeco-Roman Egypt, this study analyses the architectural features of corner pillars to establish a stylistic and historical context.

## Introduction

The heart-shaped corner pillar was a kind of pillars that was constituted in three different ways: two half columns settled to a pillared square; a monolithic block; two-column portions side by side at ninety degrees and applied to a peristyle or colonnaded space. In addition to their decorative function, heart-shaped corner pillars can have a static function, mainly at the treatment of re-entrant angles of the arcades. It can be said that the transition from the column to the heart-shaped corner pillar cannot be formed easily without an intermediate phase.[1]

This new form of pillar was called the heart-shaped corner pillar or the cordiform pier. It was one of the most prominent features of Hellenistic innovations, although it was not so

[1] Dell'Acqua 2013: 1139.

common during the Hellenistic Period.[2] The L-shaped Doric harbour stoa at Miletos (Fig. 2), built in the late fourth century BC, is the most well-known example of the heart-shaped corner pillar.[3] Also, it was a common architectural feature in Asia Minor and Alexandria, but such an architectural element was not accepted in Old Greece.[4] Internal angles in Ionic and Doric colonnades benefited from the heart-shaped corner pillar because it allowed the Ionic capital to be displayed in a different way than usual, with a single volution on opposite faces and at the end of the cushion under the architrave on either side of the angle.[5]

The half column is immediately close to the heart-shaped corner pillar. It was first used in Akragas in 480 BC[6] in L-shaped or *ad alae stoas*, employing columns and Doric frieze as architects had to solve the problems of the re-entrant angles and the greater weight caused at the corner columns. This made them modify the width of the colonnaded courts to reach aesthetic balance considering that the weight on the corner pillar is about three times the weight supported by a normal column. They viewed that the heart-shaped corner pillar would improve the statics and solve the treatment of re-entrant angles.[7]

In the provinces of the Mediterranean region, the heart-shaped corner pillar became an increasing architectural feature. It spread significantly in many areas including the Aegean islands, mainland Greece, Italy, Egypt, Nabataea, and Syria.[8] It seemed that the decorative function of these pillars was secondary at first. However, in Roman times, when the Corinthian order dominated and the *Kalathoi* of the capitals acquired rich and processed forms, the heart-shaped corner pillar became more accepted decorative element as they displayed a kind of baroque juxtaposition of two half-Corinthian capitals (Fig. 1) ..[9]

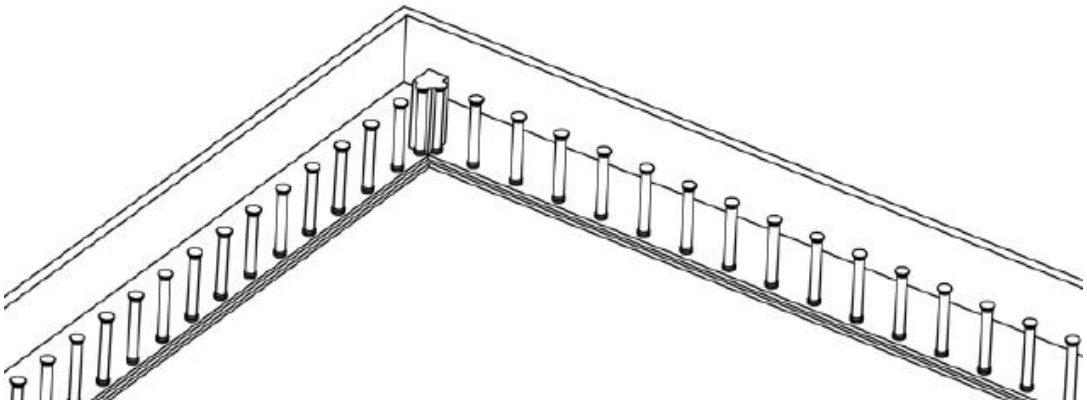

**Figure (1): The position of the heart-shaped angle pillar at the corners (Dell'Acqua 2012:25).**

Although L-shaped and *ad alae* arcaded structures were built before the Hellenistic Period, the heart-shaped corner pillar were introduced to Asia Minor in the late fourth century

[2] Coulton 1964: 279.
[3] Winter 2006: 20.
[4] Büsing 1970: 52.
[5] Winter 2006: 21.
[6] Krischen 1942: 1-19.
[7] Coulton 1966:137.
[8] Königs 1993: 380.
[9] Dell'acqua 2013: 1137.

BC. The oldest known evidence was found in a structure called the Harbour *Stoa* of Miletus (Fig. 2) .[10]

Many other buildings in Asia Minor from the close of the third and the rise of the second centuries BC also had the distinctive heart-shaped corner pillar. These included the tetragonal *agora* of Ephesus, the shrine of the dynastic cult at Pergamon, in the courtyard and in the cult chamber[11], the North Market at Miletus[12] and the Southern Portico of the Priene *agora.*[13] In addition, these pillars can be seen in other theatrical buildings such as peristyle at Lindos,[14] *agorai* of Herakleia at Latmos,[15] *agora* and *pritaneion* of Magnesia at Meander[16]; the Doric Nymphaeum at Sagalassos and the *agora* of Aphrodisia that dates back to the second century AD.[17]

**Figure (2): The Heart-Shaped Corner Pillar at Miletos, Harbour Stoa, (Winter 2006: 377).**

In the Aegean islands and in the Hellenic provinces the use of the normal square pillars or entire columns was a common architectural phenomenon due to their larger diameter[18]. In the late fourth century BC, the heart-shaped corner pillar was used on the second floor of the Harbour *Stoa* at Perachora[19]. In the Harbour Shrine at Kos, heart-shaped pillar was found at the corners of the arcades surrounding the courtyard[20], as well as the arcades enclosing the gymnasium of Sicyon[21]. In addition, there was one block devoid of context comes from

[10] Büsing 1970: 57.
[11] Schwarzer 2011: 114-5.
[12] Gerkan 1922: 23.
[13] Königs 1993: 381.
[14] Blinkenberg: 1960: 417-423.
[15] Wulzinger 1941: 22-33.
[16] Coulton 1966: 139-140.
[17] Waelkens 1993: 43-54.
[18] Dell'Acqua 2013: 1139.
[19] Coulton 1966: 139-141.
[20] Rocco 2009: 599-612.
[21] Delorme 1960: 99-102.

Olympia.[22] Concerning the heart-shaped corner pillar in Africa, it was used as a decorative element more than for its static function to affirm the Corinthian order.[23]

The heart-shaped pillar can also be found in the synagogue in Terracoms and Nazareth as they were found in the northern transverse colonnade.[24] Meyers argued that the heart-shaped corner pillar was related to the use of the space at the north end of the structure to help support a gallery.[25] The heart-shaped corner pillar may denote the existence of a transverse colonnade.[26]

Coulton argued that the decorative effect was enhanced by drawing inspiration from known examples of Corinthian heart-shaped corner pillars. They were not like regular columns, but they strengthened the corners and carried the frieze around the angle without enlarge the ranges of corners or get rid of the triglyph.[27] The parapet's assembly was facilitated as well. The heart-shaped corner pillars were used in the interior corners of agora *stoas* and domestic peristyles to distribute the weight of the columns and the Doric frieze elements more evenly.[28]

Since the heart-shaped corner pillars served both aesthetic and functional purposes, they were subsequently used in the Ionic and Corinthian orders in addition to the Doric. Most surviving examples date back to the last years of the fourth century BC.[29]

There are some archaeological structures in Asia where the Doric and Corinthian orders were utilized. It is noted that the Ionic orders are used very rarely as the Tuscanic pillars is attested only in one Templar building in Qalaat Faqra, at Faraya mountains in Lebanon, where capitals of this type were used in the colonnade in front of the temple and courtyard.[30]

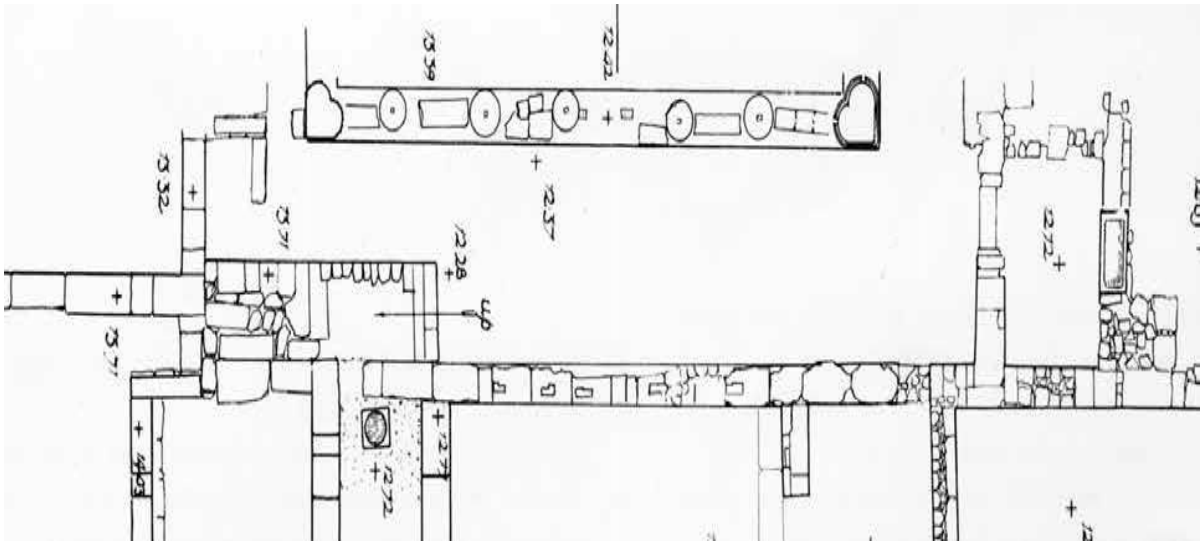

**Figure (3): Northern Side plan specifics for the House of Paulus**

**(Kraeling 1962, plan XVI).**

[22] Büsing 1970: 61.
[23] Dell'acqua 2013: 1137.
[24] Segal 2020: 24.
[25] Meyers 1995: 36.
[26] Delorme 1960: 99-102.
[27] Coulton 1966:137.
[28] Coulton 1966:140.
[29] Winter 2006: 24.
[30] Haddad 2012: 17.

The great Tomb S 201 in Cyrene, Libya, features Ionic quarter-columns that block the antae, while the antae in Tomb N171 in the same city date to the third century BC and are blocked by Doric columns (Fig. 3).[31] The northern market at Miltos and Magnesia, both built in the third and second century BC, feature such columns. Later, at the palazzo delle Colonne of Ptolemais[32], paired half-columns were employed to form support with a heart-shaped corner pillar.

Moreover, the Nabatean royal residence of Malichos I in Beidha near Petra included a colonnaded hall with heart-shaped corner pillars adorned with Corinthian capitals.[33]The Doric capitals were also used in the private houses in Cyprus, based on examples from Kourion and Paphos. In the corners, they topped heart-shaped pillars, while along the walls, Attic bases of two *tori* and without plinths supported columns topped with simplified Corinthian capitals. It seems that these examples date back to the second century AD.[34]

The Nabataean architecture such as the temple of *Kh* adopted the heart-shaped corner pillar from Alexandrian architecture that used these pillars since the third century BC. Example of these heart-shaped corner pillars can be seen in the tomb of Stanley Bey in Alexandria,[35] where fragments of these pillars were utilized. They were hypothesized to be of a Cyrenaic origin from the Cyrenaic shutter,[36] while Perkins considered it as a Punic element.[37] Similar pillars are found in tomb 1 of the Moustafa Kamel Necropolis which testifies to the transposition of the motif of peristyle to the funerary architecture.[38] Other examples can be found other tombs such as the so-called temple of Arsinoe Zephyritis,[39] the underground tomb of Miniet el Basal[40], the Taposiris Magna and Oxyrhynchus,[41] They were also used in public structures such as the Ptolemaic hall at Tebtynis and Akoris,[42] the arcades of the *Serapion*, and the houses at Marina el-Alamin.[43] Many archaeological evidences were uncovered in the vicinity of the royal palaces at Alexandria, some included heart-shaped corner pillars. Some of them have Corinthian capitals and pilasters coverings. These artefacts, according to Adrinai, date back to the late Ptolemaic and early Roman eras.[44]

Mckenzie argued that these remains belong to a certain structure based on their shapes and architectural style.[45] In the Roman Period, Alexandria contributed to the spread of these pillars to the extent that they were used in the Nabataean centres and the Meroe Kingdom that adopted their patterns from the Hellenistic structures of Alexandria.[46] As Egypt was a Greco-Roman province, the heart-shaped corner pillars were used in different structures that can be clarified as follows:

[31] Coulton 1966:142.
[32] Haddad 2012: 23.
[33] Schmied 2000: 489.
[34] Dell'acqua 2013: 1137.
[35] Arnold 1999: 151.
[36] Stucchi 1975: 311.
[37] Perkins 1979: 32.
[38] Török 1976: 118-122.
[39] Adriani 1966: 77.
[40] Pensabene 1990: 127.
[41] Adriani 1933: 35.
[42] Lauter 1999: 135.
[43] McKenzie 2007: 195.
[44] Adriani 1933: 35.
[45] McKenzie 2007: 191.
[46] Haddad 2012: 23.

**1-Temples**

1.1 The Serapeum of Alexandria

The Serapeum of Alexandria underwent many restorations and innovations in the Greco-Roman Period. The arches of the temple were loaded on two massive pillars with heart-shaped shafts, much like those in the small Temple of Zaphruim.[47] In this temple, there is a double column at the entrance to the Acropolis, the single area is divided by four similar sides and the colonnaded court, they are uncovered, is located in the middle. In addition, the stoas follow the plan of the court, and it is divided by similar columns in size. Moreover, each stoa faces the other, and the heart-shaped corner pillars separated each stoa from the next.[48]

**1.2. Zaphruim**

The heart-shaped corner pillars can also be found in the small temple of Arsinoe-Aphrodite (Fig. 4) in Alexandria. They are utilized in the four corners of the temple and the roof that rested on four massive pillars. Generally, the plan of the temple looked like a peristyle structure, a squared pillared plan presenting an alignment of the columns with identical half-engaged barrels. The bases of these pillars were the same as those of the neighbour columns.[49] Like the tombs of Mostafa Kamel, the corners at the western side were protruded mouldings that differed from those of the bases of the normal columns. The ledge continued up the pillars' upper portion, eventually coming to end with a low-relief flat pillar.[50]

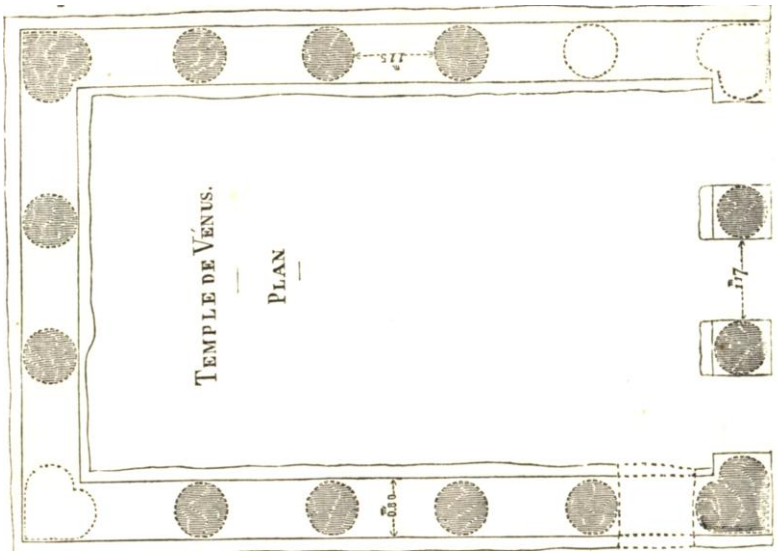


**Figure (4): The plan of the Arsinoe Zephyritis Temple (Ceccaldi 1869: 270).**

Two heart-shaped corner pillars have disappeared, the one to the right of the entrance and the other on the left. The first four columns on the right are destroyed. The others are more or less broken except the fourth that is located to the right as it still preserves half of its capital. It is ca. 5 m. high, which may denote the height of all other pillars. As for its diameter at the base, it was 75 cm, from their base to a height of 55cm. The columns were painted with white

[47] Ceccaldi 1869: 267.
[48] Mckenzie 2004: 105.
[49] Breccia 1922: 343.
[50] Abdo 2019: 347.

pilaster, the upper half of the columns had sharp-edged grooves that adorn the barrel, which flares out at its top to receive an abacus or square tympanum on which the capitals rested.[51]

The heart shaped corner pillars are formed like a heart, and their bases are identical to the rest of the columns. The projected shapes of the pillars' inner corners and outer sides are distinct from those of the bases of half-columns. The engaged low-relief flat pilaster manifested the continuation of the ledge into the upper portion of the pillars. Half-columns and the other heart-shaped corner pillars share the same moulding as the Doric half-capitals, which is how they are connected. The half-capitals with their protruding pillars are topped with these mouldings.[52]

**2-Tombs**

**2.1. Mostafa Kamel**

The heart-shaped corner pillar can be found in the open courtyard of Mostafa Kamel tombs; a sizeable courtyard of which ten chambers come out (fig. 5). The courtyard featured a Doric peristyle. It has sixteen sided columns 4 by 4 of simple grooved, plastered columns with smooth lower parts. The heart-shaped corner pillars demarcate the four corners of the courtyard.[53]

**Figure (5): The heart shaped corner pillars at the tombs of Mostafa Kamel (Author).**

The bases of these pillars were the same as those of the neighbour columns. The corners at the western side consisted of protruded mouldings that differed from the bases of the normal columns. An engaged low-relief flat pilaster is indicated by the continuation of the ledge into the upper part of the pillars.[54]

[51] Ceccaldi 1869: 269.
[52] Ceccaldi 1869: 270.
[53] Abdo 2019: 354.
[54] Breccia 1922: 313.

The *tori* appear to have been used in the formation of the pilaster bases, the pilaster shaft, and the pillars behind the tripartite entrance as a whole. The two half-columns and the remaining portion of the heart-shaped corner pillar were all connected by Doric half-capitals.[55]

The protruding pillar appeared to be leaning against the back of the half capitals. Thin and flat cavettos represent the half capitals in the astragal of the upper shaft, which also features two thin fasciae in lieu of the *anuli* and a somewhat higher one in place of the *echinus*. After going through this procedure, the typical structure of the Doric capital was drastically altered due to the touching of four bands. The abacus on top of them has flat faces and measures 36 centimetres on each side. The base measures 53 by 52 centimetres, and the groove on the southeast pillar measures 9 centimetres. On the opposite side of the pillar, one can see the same element.[56]

### 2.2. The Tomb of Stanely

The structure's four corners included heart-shaped pillars that were incorporated into the peristyle, which was a Doric peristyle with six columns, each of which stood five metres tall and had a diameter of eighty centimetres.[57] All of the columns were fluted, except for the heart-shaped ones, which were smooth all the way down. Each corner of the pillars is elevated approximately 15 centimetres above ground level by a stylobate step that rests on a limestone mass. Stanely and Mostafa Kamel's peristyles are conceptually identical, yet their dimensions and column counts are very different. A Doric peristyle, or a central courtyard with branching off burial chambers flagged by rock-cut grooves partially filled with collected earth, can be considered to have been present in the Stanely tomb. Hypogea evidence suggests a contemporary construction from the third to second centuries BC was located close to the Mostafa Kamel tomb.[58]

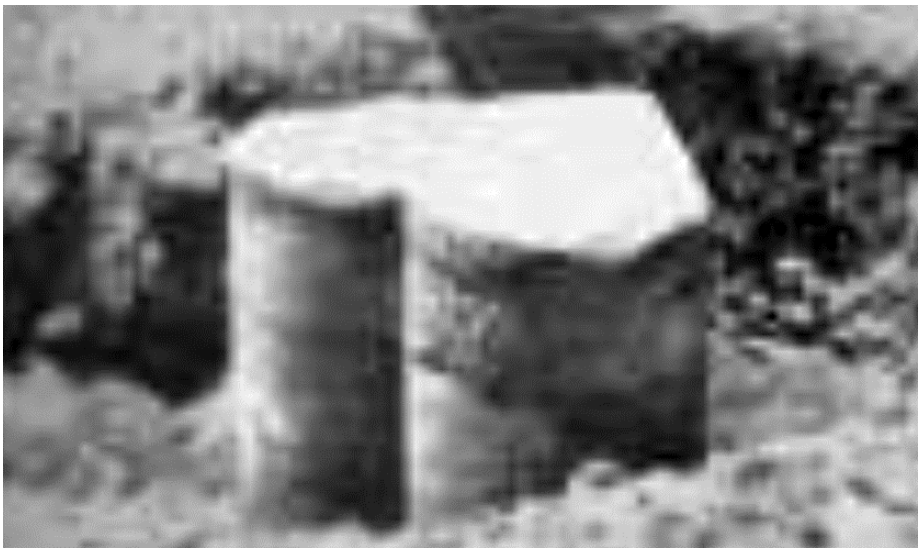

**Figure (6): The heart shaped corner pillar at Oxyrhynchus (Breccia 1922: 337).**

[55] Dell'acqua 2013: 1137.
[56] Königs 1993: 381.
[57] Breccia 1922: 337.
[58] Abdo 2019: 357.

Based on the archaeological remains, the heart-shaped corner pillars were utilized in a tomb at Oxyrhynchus, as a half column was uncovered at the site (Fig. 6).[59]

## 3. Public Structures

### 3.1 The depenteria at Tebtunis:

There are four heart-shaped corner pillars (Fig. 7), with Doric capitals in the colonnaded depenteria at Tebtunis. Also at a distance of 1.23 m along the walls, there are rows of columns with simplified Corinthian capitals. The actual half pillars and the columns rested on *stylobates* that were 1.8 m from the outer colonnade. The colonnade consisted of four columns on the north-south sides and only two columns on the west side. The corners of the depenteria included four heart-shaped pillars.[60]

**Figure (7): The Ptolemaic Hall at Tebtunis (Author).**

Unlike the heart-shaped corner pillars, these had no plinths but featured reduced Corinthian capitals and Attic bases of Roman Ionic order columns that had two tori. The third columns on the south and north sides now house the bottom halves of the pillars under study, while the top halves remain dispersed throughout the depenteria[61].

These pillars had *Attic* bases with Doric capitals. One of the half-capitals had large vertical grooves cut into the rear so that it faced the west wall of the depenteria, and the other half-capital faced the next set of columns along the north colonnaded side. The base of Corinthian capitals share this similar design element. These notches indicate that the colonnaded depenteria is in either the Doric or Corinthian style. They were installed onto

[59] Breccia 1922: 337.
[60] Rondot 2004: 152.
[61] Bagnnal & Davoloi 2011: 119.

walls or into curtain rods and wooden perforated screen fittings. Just on the southwest corner, where a heart-shaped half-base rests on a heart-shaped half-capital. [62]

### 3.2. The depenteria at Akoris

Spread out around the south-east side of the structure are the heart-shaped corner pillars. The lower shaft of the column was cut away to reveal the Attic base (Fig. 8). This included a spherical astragal and fillet, and it was supported by two listels that were separated by merely an incision. The bases were distinguished by a broad scotia that was elevated over the lower torus.[63]

**Figure (8): The heart-shaped Corner pillar at Akoris (Author).**

The column bases were standard, even on the heart-shaped corner pillar. The mouldings stick out at the pillar's internal angle and its outer face. Therefore, they are different from the half-column bases. The ledge continued into the pillar's upper section, serving as a signal of an active low-relief flat pilaster. Two blocks form the bases (see Fig. 9).[64]

[62] Rondot 2004: 152.
[63] Kawanishi 1981-1988: 76.
[64] Kawanishi 1981-1988: 76.

**Figure (9): The torso of the heart-shaped corner pillar at Akoris (Author).**

The north-western pillars were not cut corner to corner, but rather at one of the half bases, hence this block held the pillars' very apexes. The pillar in the other corner was likewise cut so that it could be seen as two separate sides.[65]

## 4-Houses

### 4.1. The Houses at Marina el Alamin

The houses at Marina el Alamin have distinctive wall facades that face the porticoes (Fig. 10). They had heart-shaped corner pillars and little interrupted pediments with arches. It can be said that these pillars were used to ornament the elite's houses in Marina el Alamin, as they enjoyed luxurious economic conditions. These pillars were used in the wealthy peristyle houses, especially they were colonnaded.[66]

[65] مسعود ٢٠١٩: ٢٤.

[66] Czerner 2011: 131.

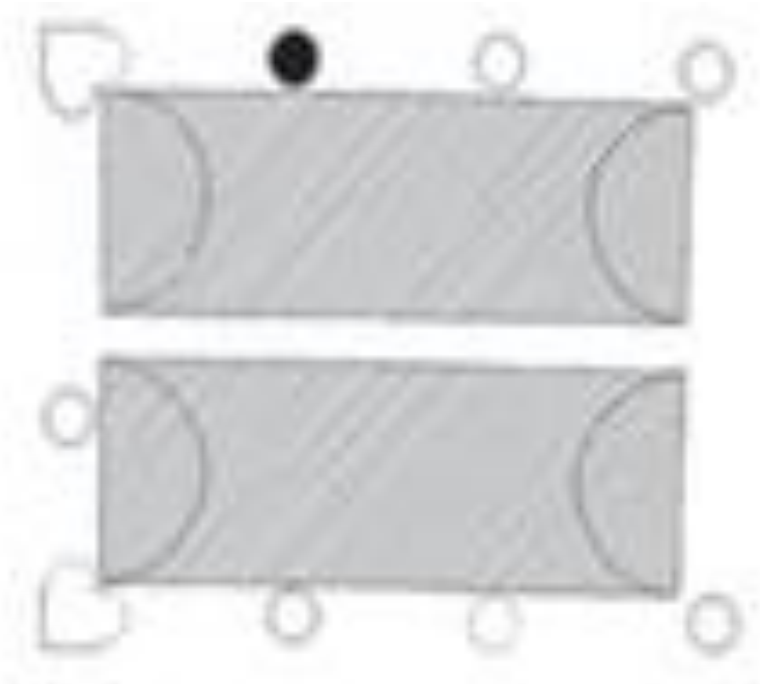

**Figure (10): The plan of house H1 at Marina el-Alamin (Czerner 2011: 132).**

Marina included many houses designed around a peristyle; three sides of each house included a portico, while the fourth, or major, side was relatively short and resembled the open side of a *tablinium*. The use of heart-shaped pillars confirmed the widespread use of the then architectural illusionism. Columns made up the peristyle of House H1 as the only structure with a corner pillar in the shape of a heart there.[67]

The portico colonnades were introduced by the heart-shaped columns that also served as decorative cornerstones. Some columns and the heart-shaped corner pillars in this housee actually originate from other porticoes, but their shapes are quite similar. Importantly, in the corners of two adjoining porticoes, bases with an Attic profile and heart-shaped corner pillars were employed.[68] This means restoring at least three porticos of a peristyle that has been damaged. In addition to the two bases, there were three sections of heart-shaped shafts that lacked capitals. Both the freestanding column and the engaged column had a 30. 5-centimeter-wide shaft, and their 11-centimeter-tall bases lacked plinths.[69]

### 4.2. The Houses at Kellis

The pillars under study are found in the architecture of Kellis in a house of a noble family. These pillars were transferred to a church in the early Byzantian Period that was called the east church (Fig. 11). The house had a peristyle like the houses of the elites in Alexandria. In this structure, the heart-shaped and triple-corner columns were used at the same time and at the same place. It can be said that the triple-corner columns developed in phase later than the heart-shaped corner pillar.[70]

[67] Pensabene 2019: 12.
[68] Czerner 2011: 131.
[69] Czerner 2011: 132.
[70] Bowen 1983: 20.

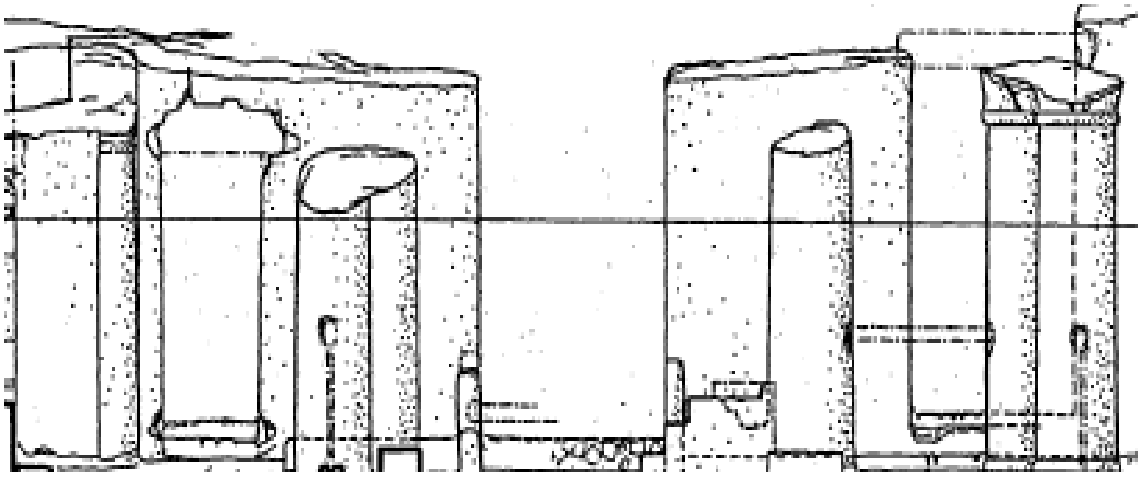

**Figure (11): The heart shaped corner pillars in the houses at Kellis (Bowen 1983: 19).**

The columns are supported by pedestals topped by torus structures. A total of six 67 cm wide mud bricks were used to create each column. The surviving 50 cm of the original capital features a torus shape covered by plaster that is flared out at the corners to evoke palm fronds. Each of the four sides also features a bas-relief frond design.[71]

Deficient capital is survived, but we can estimate that the shafts of the triple-cornered columns are 2.5 m high from the base of the lower torus. The east-west colonnades had taller single columns. Although there is not a single standing column left, the total height can be estimated from the broken pillars. The total height of the columns with their capitals was more than 4.5 metres. Several fragments of palm beams and moulding, likely from the capitals, were discovered among the rubble, indicating that these were used to span the columns rather than arches. Triple-cornered columns appear to be taller than single columns, suggesting the possible existence of a second story above the return aisle.[72]

The heart-shaped pillars were also present in the houses of Taposiris Magna, a house that has a portico, the section of the double columns at the angles being shaped as a heart-shaped pillar. Based on the architectural decorative elements, the house is datable to the Hellenistic Period.[73] The two elite houses in Dakhla Oasis at Amheida and Ain el-Gedida witnessed the use of heart-shaped corner pillar at an elite's house. Colonnade bases, square bases, and the bottom courses of a few columns were uncovered during the excavation. Two heart-shaped pillars stand at the easternmost extremity of the north and south colonnades in this column.[74]

[71] Hope 1995: 55.
[72] Krautheimer 1981: 47.
[73] Breccia 1922: 343.
[74] Aravecchia 2020: 226.

**Appendix:**

| Place | Date | Number of columns | Kind of structure |
|---|---|---|---|
| Alexandria | III/II BC | Fragments | The royal villas and they have existed in Kom-el shokaf |
| Alexandria | III BC | Four pillars at the four corners | Zephrum |
| Alexandria | III BC | Two pillars at the sides of the entrance | Necropolis Miniet el Basal |
| Alexandria | III BC | Two pillars at the sides of the entrance | Arcades of *Serapeion* |
| Alexandria | III/II BC | Fragments | The royal villas and they have existed in Kom-el shokaf |
| Taposiris Magna | Hellenistic Period | Two pillars at the sides of the entrance | Tomb |
| Oxyrhynchus | Hellenistic Period | Only uncovered half columns | Tomb |
| Tebtunis | end III/beginning II BC | Four pillars at the four corners | Depentria |
| Akoris | Hellenistic Period | Four pillars at the four corners | Depentria |
| Amheida | Hellenistic Period | Only uncovered half columns | A house |
| Ain el Gedida | Hellenistic Period | | |
| Alexandria | late IV AD | Four pillars at the four corners | The tomb 1 Mostafa Kamel necropolis |

According to the chronology study, the first version of the heart-shaped corner pillar was introduced to Alexandria, Egypt's capital city, at the end of the fourth century BC, but the majority of other polis only experienced the new architectural phenomenon in the third and second centuries BC.

**Conclusion:**

Heart-shaped corner pillars normally stood at junctions of colonnades around the interiors of peristyle courtyards or halls. They were known also as the cordiform pillars or the double columns. They were initially utilised during the end of the fourth and beginning of the third century. Due to the fact that Egypt was a Graeco-Roman province, there was a certain amount of intercultural impact which was visible in the innovation of new architectural patterns in various polis, such as the heart-shaped corner pillars.

The main function of these pillars was to be a solution for the re-entrant angles of the peristyle structures or the colonnaded courts. Some religious, public and domestic structures in lower and middle Egypt were decorated with heart-shaped corner pillars to reflect the luxuriousness in the elites' houses. In Marina el-Alamin, one can see examples of these houses. The Ionic, Corinthian, and Doric settings were all thought to have shared the decorative purpose of the heart-shaped corner pillar. These pillars were different in size and material. The majority of them were curved out of red granite, like the fragment at Kom el-shukafa (Fig. 11), but in Tebtunis and Akoris, they were carved out of the local white limestone.

**(Figure 11): One of the uncovered heart-shaped base pillar at Kom el-shukafa (Author).**

The house at Kellis displayed the heart-shaped and triple-corner columns dating back to the same time and at the same place. It can be said that the triple-corner columns developed in a phase later than the heart-shaped corner pillar.

The heart-shaped corner pillars were not used in architecture of the Dynastic Period, as there is no single evidence in the temples, tombs, or domestic architecture dating to the same era. Based on the uncovered examples, it can be said that the heart-shaped corner pillars as an architectural and decoration phenomenon was introduced to the Egyptian architecture in the Ptolemaic Period not only in religious or funeral structures but also in public and domestic structures.

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# دعامات الأركان التي اخذت شكل القلب بمصر اليونانية الرومانية

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**معلومات المقالة**

**الكلمات المفتاحية**
الإسكندرية؛
اوكسرنيخوس؛
دعامات؛ قلب؛
العمارة؛ الزخرفية.

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**الملخص**

تتناول هذه المقالة دعامات الأركان التي أخذت شكل قلب في عمارة مصر اليونانية والرومانية، حيث تم تطوير دعامات الأركان التي أخذت شكل قلب في آسيا الصغرى لحل مشكلات تداخل الزوايا الركنية المعمارية الجديدة، وقد وجدت كوظائف معمارية وزخرفية منتشرة بين دول البحر الأبيض المتوسط.

تمت دراسة العناصر المعمارية في مصر القديمة بطريقة أثرية وتسلسل زمني عن طريق تسلط الضوء على التزاوج الفني لهذه المباني في العصريين اليوناني والروماني، وقد تم تزيين هذه العناصر المعمارية بزخارف مختلفة لأنها تعتبر رمزاً تتواصل من خلاله العمارة مع الجمهور فكرياً عبر خصائص هذه الأساليب المعمارية المتميزة أحد هذه العناصر المعمارية والزخرفية القديمة هي دعامات الأركان التي أخذت شكل قلب. كانت مصر تحت حكم البطالمة ونقطة تجمع للقوافل التجارية، مما ساعد على انتشار التأثير المعماري الهلنستي في العديد من المباني في جميع أنحاء مصر. بالإضافة إلى ذلك، يسلط الضوء على استخدام دعامات الأركان التي أخذت شكل قلب كعنصر معماري وزخرفي كلاسيكي في الفترة اليونانية الرومانية.

تم تحليل العناصر المعمارية لأعمدة الركن هنا من أجل توفير إطار وترتيب زمني يساهم في اعادة بناء تاريخ دعامات الأركان التي أخذت شكل قلب في مصر اليونانية الرومانية. انتشر طراز الدعامات التي على شكل قلب إلى حد ما في العمارة الهلنستية والرومانية في أكثر من ولاية رومانية لاسيما شرق المتوسط والإسكندرية وشمال إفريقيا لكن من المحتمل أن يكون أصل طراز الدعامات على شكل قلب هو شرق العالم اليوناني وتحديداً آسيا الصغرى حيث عثر على العديد بها وعثر على أول نموذج لهذا الطراز من الدعامات.