# THE HEXAGONAL BASIN AT KOMANA: A PRELIMINARY ARCHITECTURAL STUDY

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**Recieved:** 22.02.2010, **Final Text:** 17.05.2010

**Keywords:** Komana; Tokat, Asia Minor; Roman Period; Byzantine Period; archaeology; hexagonal; basilica; basin; pool.

- 1. In a recent publication on the institution of "sacred prostitution" we are warned by S.L. Budin on the possible misinterpretations of the activities that took place during rituals (Budin, 2008).
- 2. Strabo's statement regarding the resemblance of Komana to Corinth is significant in several ways. First of all, it indicates the scale of the sanctuary including the rituals, related activities and visitor profile. Secondly, such a resemblance may also be present in the physical environment which would mean that the sanctuary of Komana was likewise adorned by monumental architecture suitable for the kinds of activities conducted during festivals. This phenomenon was discussed elsewhere by Erciyas (2009, 291).

#### INTRODUCTION

Komana, 9 km northeast of modern day Tokat in the ancient Kingdom of Mithradates of the Hellenistic period, is mostly known from 19th century travellers' accounts, and the ancient author Strabo's *Geography*. However no proper archaeological investigation has been carried out until 2004. Between 2004 and 2008, a team from the Graduate Program in Settlement Archaeology at the Middle East Technical University, led by B. Erciyas, conducted extensive and intensive surveys, geophysical prospection, archival study as well as an architectural study at a possibly Roman or Byzantine structure within the urban boundaries of the ancient site. The exact function of this hexagonal structure could not be identified, however the terracotta water pipes reaching into the walls and the water outlets on its floor suggested a function related to water. The construction, plan, architectural details as well as its function will be discussed in this article.

#### **KOMANA**

## History

Komana was described as a temple-state dedicated to the goddess Ma by Strabo. It had an independent political structure under an esteemed priest and 6000 temple-slaves cultivated the land around the temple (Strabo 12.3.34). It was both a religious and a trade centre, because a bi-annual festival was organized at the sanctuary during when people from all around gathered for rituals and trade. Visitors were provided with ample services including sacred prostitution (1), and Strabo likened Komana to Corinth in this respect (Strabo 12.3.36) (2). This kind of an organization must have required special buildings related to cultic activity and entertainment during the festivals. It is very difficult at the moment to imagine the urban structure at Komana because of the alluvial and erosional deposition at the site, but large scale buildings must have been



**Figure 1.** Komana, Hamamtepe, view from the south.



**Figure 2.** An aerial view of the hexagonal basin.

present as suggested by large blocks that were discovered during the surveys (Erciyas, 2007).

Komana was a significant religious centre especially during the Hellenistic period under the Mithradatic kings. The land belonged to the temple domain and expanded throughout its history. After Komana came under the Roman Empire, Pompey made Komana a principality (Magie 1950, 371; Wilson 1960, 229). Either Caesar or Antony was responsible for the further expansion of its territory. Komana's territory became as large as the *civitates* of the province under Octavian. Komana was annexed to Pontus Galaticus in 34/35 (*IGR* III, 105; Waddington et al. 1904, 109). The area finally became an imperial domain during the reign of Maurice Tiberius (A.D. 582-602).

The city became known as both Hierocaesareia and Komana by the reign of Titus, and possibly even earlier (*IGR* III 105, 106). Christianity must have quickened the decline of the temple at Komana. The surrounding land was assigned to Daximon (modern-day Tokat), a smaller but more centrally located town in the plain of Daximonitis. The recent excavations have suggested that habitation continued at Komana well into the reign of the Danishmends.

#### **Explorations**

Komana was identified and described by Hamilton (1842), Hogarth and Munro (1893), Anderson (1903) and Cumonts (1906) as a mound rising on a natural hill next to the River Iris (Yeşilırmak), 9 km from modern day town of Tokat, ancient Daximon (Figure 1). The identification largely depended on three architraves from a Roman period temple at Komana found next to this hill (Hamamtepe) (Remy, 1990, 521; SEG, XLII, 339). Other strong evidence for the location was the presence of architectural blocks with Greek inscriptions once used in a Roman period bridge crossing the Iris, now embedded in a concrete water regulator (Ramsay, 1882, 153; IGR III, no: 106). In his Ph.D. Thesis, Wilson (1960) compiled information on Komana and the smaller settlements around the site among the other Classical sites of Bithynia, Paphlagonia and Pontus based on travellers' accounts. Marek (1993, 2003) has published two volumes on the Roman rule in Bithynia and Pontus. Although Komana is included in these studies in only a general way, the volumes have been beneficial in understanding the regions in the renewed system of administration introduced by the Romans. Recently in her master's thesis, Sökmen (2005) has closely studied the temple-state status of Komana together with Zela questioning the administrative, economic and social structure of these two sanctuaries. Yet, Strabo, Appian, Cassius Dio and even Procopius still remain among the main sources of information on Komana and many other sites of the Pontic region.

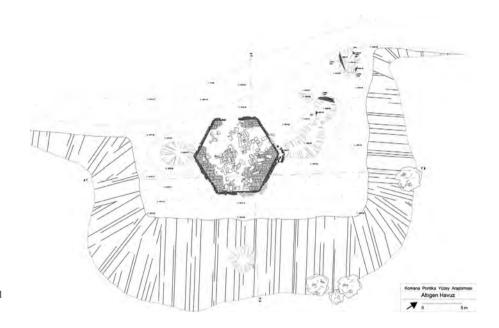
The surveys conducted between 2004 and 2008 have contributed greatly to studies in the region (Erciyas 2009; 2008; 2007; Erciyas and Sökmen 2009). The boundaries of the settlement were determined during the survey and geomorphological study. The ruins were observed to have spread in an area of 2km in diameter and the central focus was identified as the Hamamtepe hill. The team also concluded that the hill possibly contained the sanctuary to Ma, the principal goddess of Komana. Today, there are remains of a large wall surrounding the hill, and lines of walls on top of it which belonged to the final phase of the hill. Hamamtepe measures approximately 250 by 250 meters. A secondary hill to its west also contains archaeological remains.

Archaeological excavations began at Hamamtepe in 2009 and instantly revealed the Late Byzantine and Danishmendid occupation at the site. Remains of workshops or kitchens indicate a lively economy and a thick circumference wall, a necessity of defense. Excavations will continue on Hamamtepe in 2010.

#### THE BASIN

## **Physical Description**

A hexagonal water basin at Komana was discovered on the fertile plains to the northwest of the Gözova/Omala valley, where the terrain slopes upwards in terraces towards the west. (**Figure 2**) There is a roughly



**Figure 3.** Situational plan of the hexagonal basin (illustration by Ahmet Çinici).



**Figure 4.** Plan of the hexagonal basin (illustration by Ahmet Çinici).

trapezoidal smaller terrace on one of these successive terraces forming a projection in NW-SE direction. The rapid ascent of this trapezoidal terrace measures approximately four meters from the plain. The parallel edges of the trapezoid extend in NW-SE direction and the longer of these edges is approximately 21 metres whereas the shorter one measures approximately 10 metres. Perpendicular to the SE of these edges lies the 30 metres long edge of the trapezoidal terrace. A hexagonal basin was built into this trapezoidal terrace and closer to the south-western shorter edge (**Figure 3**). The structure was levelled so that its upper edge at the NW side remains below the level of the sloping surface while the corresponding upper edge at the SE side rises above it. According to the inhabitants of the nearest village, Bula, this basin was still functioning as a pool for irrigation until mid 1950s when a landslide destroyed its infrastructure.



Figure 5. Floor and wall blocks of the basin.

The side walls of the structure measure 521 cm, 527 cm, 519 cm, 529 cm, 526 cm, 529 cm in length and 106 cm, 105 cm, 115 cm, 104 cm, 107 cm, 104 cm in height respectively beginning with the northern side in clockwise direction, which makes it capable of holding approximately 75 m³ of water (**Figure 4**).

The state of preservation is quite good, especially in four of the six walls which lack only a few building blocks; yet, the remaining two walls still preserve more than half of their building blocks *in situ* allowing a plausible reconstruction. However, there are shifts between the stone courses and bends in the wall lines. The preservation of the visible floor blocks is also good, though most of the floor surface remains invisible under the fallen stone blocks and infill soil (**Figure 5**).

The structure is made entirely of stone blocks with superb workmanship. Three courses of cut stone comprise each of the six side walls. Rubble stones exposed behind the missing stone blocks of the side walls suggest that there is a rubble infill behind the facing blocks. An interesting feature was exposed in the illicit excavation pit around the northern corner of the basin. Here, a course of large, shapeless rubble stones surround this corner from outside, which seems to be a later addition, probably intended as a repair to reinforce the structure. It is only this part of the basin where mortar is visible, which supports the idea that this is a later addition. A piece of terracotta pipe is also exposed in this illicit excavation pit. A series of smaller illicit pits lie further to the north, in which other fragments of terracotta pipes are still visible. On the basis of these fragments it is possible to estimate a water supply line from the north, but whether this is the only line or not, requires further field work. Partially exposed rubble walls and a marble block in these pits suggest further walls or structures around, which is also supported by the large number of fallen blocks inside the basin. There are a large number of fallen blocks inside the basin, probably more than necessary to fill in the missing parts of the preserved walls. Moreover, some of these fallen blocks have different dimensions and workmanship which suggest that they were part of a superstructure. Other evidence suggesting a superstructure is the form of one of the blocks on the upper course of the eastern side wall, which is also one of the largest of all. Its top surface makes a vertical recess of about 5 cm, suggesting that another block, probably of a superstructure, once fitted that recess.

#### Classification of Blocks

Stone blocks of the hexagonal basin were divided into subgroups for further investigation. Their form and place within the overall structure and function have been the basis of this classification. Numbers of each group were given where possible. Moreover, the surface treatments of the stone blocks were classified into three as rough, medium and fine.

Rough surface denotes a very roughly shaped and mostly undressed block surface, probably intended to face the rubble infill and to remain invisible. Fine surface denotes a surface with the finest dressing of all the blocks with clear-cut edges, apparently intended for the exposure of the parts considered most important. Medium surface denotes the surfaces with treatments varying between rough and fine surfaces. Surface dressings of the blocks have been indicated on the plan where possible, since they are considered to be important clues in reconstructing the form and function of the basin.





**Figure 6.** The north and northeast walls of the basin.

**Figure 7.** One of the drainage holes in the basin.

## a) Wall Blocks

Blocks of the side walls form the largest group. They are rectangular in shape and vary greatly in size. Though their heights are approx. 30 cm, their lengths vary between 40 cm and 130 cm. Their widths also vary between 20 and 50 cm. They have medium treatment on the front faces and, as visible on the fallen blocks, rough rear faces. These blocks get rougher and narrower towards the rear to make the fit between the front faces of the blocks as close as possible. These blocks do not have clamp holes. (**Figure 6**).

## b) Paving Blocks

Paving blocks constitute the second largest group of blocks. They are much smaller and thinner than the blocks of the walls. Their thicknesses are around 20-25 cm as observed on the few removed paving blocks, and their medium front surfaces vary from around 20x25 cm to 50x80 cm. Their rear surfaces are rough like the blocks of the walls, but they do not get narrower towards the rear. Though they are mostly rectangular, there are also triangular paving blocks cut to fit the edges and corners of the hexagonal structure. Similarly, no clamp holes or other constructional marks are visible on these blocks.

There are three blocks in the floor of the structure with drainage holes (**Figure 7**). One of these is adjacent to the northern wall and the other is adjacent to the western wall with circular drainage holes of 10 and 9 cm in diameter, respectively. Another paving block with a drainage hole was observed adjacent to the SE wall in previous seasons, but currently remains under fallen stones and soil infill.

#### c) Blocks of Significance

Corner blocks are few in number but are rather distinctive. They are located in the corners of middle courses of the side walls. Five of these blocks are in situ, and the sixth one is missing. Their front sides were cut in a V-shape to fit the corners of the basin. Their faces are also medium dressed and they must have been primarily used to structurally reinforce the corners of the basin.

There are also a number of stone blocks with mostly one, sometimes more of their faces finely dressed. They are rectangular, vary in size and have clamp holes on their fine surfaces. None of these blocks are in situ, supporting the idea of a superstructure.

There is another group of blocks none of which are in situ. These blocks are also rectangular and their average dimensions are roughly the same as larger blocks of the walls. However, their distinctive feature is a triangular







**Figure 8.** One of the blocks with a triangular projection at one corner.

**Figure 9.** An example of a block with a carved channel

Figure 10. The floor block with a graffiti.

projection of a few centimetres at one of their corners. It is difficult to speculate about the function or location of these blocks, but they seem to indicate a superstructure as well (**Figure 8**).

Also among the fallen blocks inside the basin are a number of blocks with holes and water channels, possibly belonging to a now destroyed fountain (**Figure 9**).

A floor block with an inscription in the western corner of the basin should also be noted. It is the only re-used block of the basin and was probably cut to fit the floor since the two lines of inscription (TEPTI and  $\Delta$ IOYX) on it do not seem meaningful (**Figure 10**).

Rubble stones and clay pipes are also among the architectural elements of the hexagonal basin.

#### **EVALUATION**

The hexagonal basin at Komana presents a number of significant challenges in terms of its architectural form, date and topographical location. On the other hand, the structure appears to be a great source of information for the archaeology and architecture of the central Black Sea region as well as the Classical period in general. The study of such a remain has certain limitations and thus the conclusions have to be rather tentative. Nevertheless, a preliminary publication is vital for its documentation and the dissemination of the information available since the exposed structure is now under constant threat of disintegration. The evaluation of the evidence follows in two sections:

Firstly, a more contextual approach will be applied to question the location of the basin within the urban context as well as the larger landscape. In this section, the architectural elements and interpretations regarding its function will also be discussed in the light of the relevant archaeological and geophysical data. In the second part, similar examples from different parts of the Mediterranean will be introduced in order to elucidate the function and date of the building.





Figure 11. The valley in which Komana is

Figure 12. Hamamtepe from the north.

## An Evaluation of the Physical Attributes of the Basin Within Its Architectural And Archaeological Context

a) Location In and Interaction with the Landscape

The hexagonal basin at Komana is situated on the northern slope of the Gözova Valley. Gözova Valley extends in the NE–SW direction and the mountains flanking the valley rise in a steep slope to more than 1700 m above sea level (**Figure 11**). Along the bottom of the valley, at approximately 600 m above sea level flows the River Iris (Yeşilırmak today). The alluvia deposited by the River Iris form fertile arable lands and support a rich flora in the valley. A dense tree cover flanking the river on both banks in a thin strip becomes less dense further away from the river towards the mountain tops and intermingles with maquis. Geophysical survey indicates a high rate of alluvial deposition in the valley. Except for this, the climate, vegetation and morphology of the valley appear to have been similar to now. Agriculture and animal husbandry are the main economic activity today, as must have been also in antiquity.

The hexagonal basin at Komana occupies a south facing terrace within this pastoral landscape on the southern slope of the mountains to the north of the River Iris. The terrace is situated approx. 800m from the river basin and rises approx. 70 m above the river. This location provides a commanding view over the river basin below and also keeps the visual contact with Hamamtepe, which would have been the centre of attraction in this landscape with the Temple of Ma (**Figure 12**). Thus, a favourable view would have been present for anyone standing on the terrace of the basin, with the river valley viewed through the trees covering the foreground, with Hamamtepe and the Temple of Ma further away in the middle ground and the mountains to the south of the river as a lively background.

The south facing location of the terrace made it an ideal place in terms of the benefit from the sun. This position would have provided the opportunity to enjoy the winter sun as long as possible whereas a shady place by the basin would have provided an excellent leisurely space in hot summer days with the breeze from the valley. Possible agricultural activity around the structure may indicate some kind of an association with agriculture. Still, the monumentality of this basin more likely suggests a public or at least a more visible context.

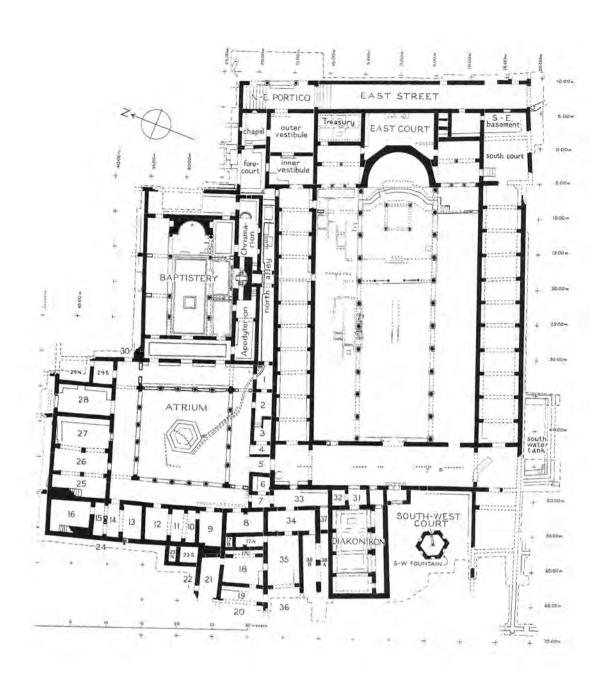
b) Built Environment Around the Structure and Its Urban Context

No other ancient architectural remain is visible in situ today in the immediate vicinity of the basin; however, there is abundant evidence suggesting that the structure was not a free standing building but was part of a built environment.

First of all, the elaborate workmanship and unusual hexagonal shape of the structure suggest that it was intended to be visually appealing. It would have been absurd to construct such a visually appealing structure far away from view. A solely functional building, such as an irrigation reservoir in the middle of agricultural fields that would have been out of sight, would have been unlikely considering this apparent intention of visual emphasis. Auditory aspects of the water accommodated within the structure would have functioned as an element of joy. A possible fountain or perhaps a cascade of water might have been used to create sound effects, which would have introduced an auditory aspect addressing those around the structure. Such an arrangement with the combination of visual and auditory elements in a still and tranquil landscape would have been impressive. Thus, it is very reasonable to anticipate an architectural context around the structure that attracted and accommodated people.

The high number of architectural elements found in and around the structure and in the nearby village supports the idea of a built environment in the vicinity of the water structure. Some of the illicit pits also contain architectural pieces. Most of these pieces have the same characteristics with the building blocks of the basin. Hence, there is evidence of abundant building materials to support a superstructure over the hexagonal structure as well as a building complex around it.

The architectural context around the basin indicated by this material evidence gives clues when its location, with respect to the wider urban context is considered. The built environment around the hexagonal basin seems to have been located close to the outer boundary of the urban context, in the sense that it was located further away from the river and Hamamtepe, both of which must have been the main centres of population during the Hellenistic and Roman period. Hamamtepe is considered to have been the religious centre of the area with a large religious population; and hence, a large number of buildings including religious buildings and private dwellings in addition to the temple of Ma must have been located around Hamamtepe. The immediate vicinity of the River Iris would have formed another focus for a dense built environment with its proximity to Hamamtepe and the water source together with the presence of available flat lands in the valley bottom for buildings. Thus, it is reasonable to imagine the location of the hexagonal structure as a kind of a marginal place at or close to the boundary of the urban context. However, this marginal location by no means suggests a marginal population as inferred from the elaborateness of the hexagonal structure. Also the visual contact with Hamamtepe and the River Iris indicates that the architectural context around the hexagonal structure maintained a connection with the urban context around Hamamtepe. These inferences heavily depend on the possible dating of the basin to the Roman period. However, the interpretation regarding the significance of the location would differ if this building was part of the Byzantine settlement at Komana, in which case the centre of the town may have shifted from near the river to the terraces with the Temple of Ma having lost its significance or completely destroyed.



**Figure 13.** The plan of the Basilica at Kourion, Cyprus (Megaw 2007, Fig.1.Z).

In that case, the basin may even have been in the middle of the Byzantine settlement.

## c) Functional Context

Water pipes leading to and from the hexagonal structure, drainage outlets in the floor blocks and the fact that the structure held water until recently, without doubt, associate the structure with water. Yet, we are not on firm grounds to speculate about the nature of this association - a basin, a pond, a fountain, a reservoir, even a bath? The capacity of the structure may be a good clue. Provided that there are no more stone courses on top of the walls preserved today, the water capacity of the structure is calculated to be 75 cubic meters, which is not sufficient for a reservoir at the urban scale. However, this does not rule out the possibility of a domestic reservoir. On

the other hand, the hexagonal shape and construction quality makes the structure more likely to have been a public building. Thus, a structure with a visual emphasis, such as a pond or a fountain, seems more probable. Fallen stone blocks inside the basin with holes and water channels support the idea that the structure must have incorporated at least a fountain. In contrast, there is no trace of material evidence supporting the idea of a public or private bath, though it is not impossible that the hexagonal structure might have been incorporated within a bathing establishment.

## d) Archaeological Finds and Geophysical Prospection

The ancient landscape at Komana is rather ambiguous because geomorphological processes in the area have largely concealed the archaeological remains and thus, their relationship to the landscape. During the survey it was very difficult to identify architectural remnants. Pottery that dominated the surface of mostly farmland dated to the Late Antique period with the exception of some concentrations of Bronze Age, Iron Age and Roman period pottery at limited locations. This handicap was present while attempting a contextual interpretation of the basin. Pieces of terracotta pipes were collected confirming a complex water system. In order to overcome this difficulty, a geophysical prospection was conducted in 2006 on the farmland below the terrace of the basin to the south / southeast. The aim of this work was to determine whether the basin was part of a larger complex. The magnetometer and electrical resistivity surveys in a limited area (60m by 80m) confirmed a wall forming the rectangular terrace around the basin and revealed a large empty space to the east (Erciyas 2009, 307). Remains of a possible structure were detected around the centre of the surveyed area towards the southeast of the basin. Two parallel lines approximately 4 m thick each seem to be connected by another on the southwest. These lines may indicate the collapsed walls of a U-shaped structure. These results have to be confirmed through excavation beginning in 2010.

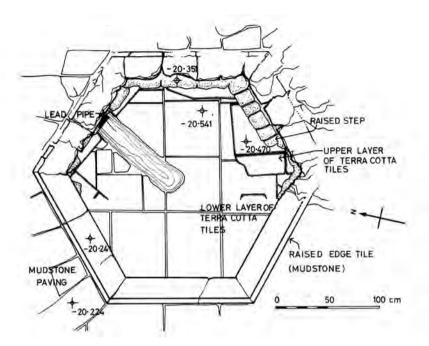
In sum, the archaeological and geophysical evidence is rather incomplete and has hardly any contribution to our understanding of the structural and archaeological context as well as its date.

#### Comparanda

The literature survey on hexagonal water structures proved unsatisfactory in general, not only because of the few examples found but also because of the limited information regarding these structures. Nevertheless, they will be presented here with the hope that they might help us understand the architectural context of the basin at Komana and propose a date.

Two best examples come from an Episcopal Precinct at Kourion, Cyprus. The excavations held at the site on and off between 1930s and 1960, and between 1974 and 1979 revealed a large Basilical Complex with a Baptistery and a Diakonikon (Megaw, 2007, xxi-xxii) (Figure 13). In this complex, there are two hexagonal water structures (Megaw, 2007, Fig.1.Z).

One of these is in the southwest court of the Basilica and is referred to as a cistern dating to the Christian layout of the precinct (Megaw, 2007, 16). The cistern is smaller than the basin at Komana, each side measuring approximately 2m. The Basilica was a Roman secular structure which later became a Christian basilica as the seat of the bishops of Kourion after the earthquakes of the 4th century (Megaw, 2007, 17). A water tank was present already in the 4<sup>th</sup> century complex (Megaw, 2007, 349).



**Figure 14.** The plan of the hexagonal pool in the courtyard of the East Church at Pella, Jordan (McNicoll et.al., 1982, Fig.25).

The second hexagonal structure from the same complex has been called a basin or a *phiale* (3) and is in the Atrium on the west side of the Baptistery (Megaw, 2007, 125). This shallow basin was the central feature of the open court. Terracotta pipes carried water into the basin from under a paving. The bottom of the *phiale* was covered by a partially destroyed mosaic built of black and white tesserae. While this structure is larger than the cistern, it is still smaller than the Komana example with each side measuring approximately 3 m. The discovery of this *phiale* suggested to Megaw that one of the the main entrances to the complex might have been through this atrium (Megaw, 2007, 126). The *phiale* belonged to the Christian atrium and was the successor of a small square basin dating to the 4th century (Megaw, 2007, 348). The courtyard was in use until the 8th century (Megaw, 2007, 126).

A hexagonal pool in a similar context is seen at Pella, Jordan in the courtyard of the East Church (McNicoll et.al., 1982, 118, Fig.25) (**Figure 14**). Just like the examples at Kourion, the pool constitutes the most interesting feature of the atrium of this later 5th and perhaps the first quarter of the 6<sup>th</sup> century church (McNicoll et.al. 1992, 160). The pool measures 2.6m corner to corner and is 30 cm deep (McNicoll et.al., 1982, 117). The atrium and the church were built simultaneously.

These three basins/hexagonal water structures are rather well defined in terms of their location within large Christian complexes, and in terms of their function as a *phiale*, pool and a cistern in open courtyards. The photographs and notes indicate that they were built of large cut blocks including corner blocks (as in the *phiale* from Kourion) similar to those at the basin at Komana.

There are two other but more problematic examples which may be compared to the basin at Komana. The first one is a pool in the Roman Baths at El Kef, Tunisia. No scholarly reference could be found for this example but there is a photograph on the World Wide Web.

**<sup>3.</sup>** Phiale here was used by Megaw to suggest a nymphaeum, an enclosed fountain.

At Kourion, there seems to be a third hexagonal pool in the Roman Baths but unfortunately apart from photographs on the World Wide Web and casual references to it such as "This hexagonal swimming basin, measuring 9.25 m in diameter and 1.5 m in depth formed the cold bath or *frigidarium* of the north-eastern complex of the Kourion public baths (AD 200-365)" (http://www.exclusively-cyprus.com/photos/061010.htm) on popular internet sites, the authors could not reach scholarly discussion regarding this pool.

These two examples may indicate that hexagonal pools were also used in the Roman Period as parts of the bath buildings, however such an inference certainly requires further knowledge of the named structures.

#### **CONCLUSION**

Architectural discoveries, similar to archaeological ones, are puzzling when out of context. The hexagonal basin at Komana is an unusual example of monumental architecture which survived without the related buildings in its vicinity. Therefore, it has been a difficult task to present the structure and evaluate its architectural and archaeological significance both in time and space. In spite of the limitations, a meticulous examination of the basin in terms of its architectural form, construction, position within the landscape, possible dating and comparison with similar examples is beneficial. Some of the conclusions are below:

The basin is situated on a commanding area regardless of its date. However, if it is dated to the Roman period based on its superb workmanship, i.e. the fine tool marks, the clamps, surface treatments etc., then we can speak of a favourable view of the river valley through the trees covering the foreground, with Hamamtepe, the site of the Temple of Ma, and the centre of the Roman settlement further away in the middle ground as well as the mountains to the south of the river. Alternatively, if the basin dated to the Byzantine period depending on the comparanda presented above, then it can be concluded that the basin was possibly in the re-located centre of Komana but still had a commanding view of the river valley, this time enjoying a more predominant focus.

The hexagonal form of the basin is peculiar since no other examples could be found in Asia Minor. Most of the examples derive from the southern Mediterranean, i.e. Cyprus, Jordan and Tunisia, and the strongest comparanda date to the Byzantine period. Therefore, the basin can more securely be dated to the Byzantine period and may have been part of a Christian basilica. In that case, the basin would have functioned as a pool in the atrium of a large public building.

It is also likely that the basin may have been used in multiple periods like the examples from Kourion and Pella, since such structures with the specific function of providing water, tend to survive longer. The oral history suggested that the basin was in use until the 1950s when a landslide broke the infra-structure.

When the basin was first discovered in 2004, many interpretations seemed plausible. The rural landscape immediately brought to mind a wealthy Roman villa with a pond in its atrium in which case the combination of visual and auditory aspects would have been focal. The earthquake fault lines crossing the valley brought about the possibility of warm water sources in the area which would have made a superb location for a bath. The presence of a Middle Byzantine period church (Erciyas, 2009, 308)

4. Cult practices including water are common in the Hittites, ancient Greeks, Celts, Romans and parallelism between cults and locations have been suggested by scholars. (Haas, 1994, 880, 909; Burkert, 1985, 115-6) Berndt-Ersöz also investigated such paralellism between Hittite spring cult and Phrygian cults (Berndt-Ersöz, 2006, 147).

and the Late Antique archaeological discoveries in the near vicinity imply a settlement concentration on these NW terraces during the Byzantine period and thus the possibility of a Christian complex. The well spread modern irrigation pools even lead us to imagine a monumental irrigation pool marking the territory of Roman Komana emphasizing the new dominant power. Only one of these interpretations now seems probable at the end of our research effort: a pool in a Christian Basilica, although this is not certain. Moreover, if this pool had any sacred role or function, it would not be wrong to suggest that the sacredness of this pool could have been established in earlier periods since it is not uncommon to find sacred fountains, springs, pools continuing their function through the centuries (4). In addition, Komana was a sacred site and attempts to relate the sanctuary and the site to the Hittite period and the goddess Ma to Hittite deities have been made (Çapar 1995; Casabonne, 2009). Although they remain speculative because of the nature of the evidence, the idea of a continuous sacredness at the site is attractive.

Finally, the necessity to conduct archaeological excavations in order to understand this basin within its architectural and archaeological context emerged as the strongest conclusion, however this preliminary presentation and discussion of the structure demonstrate the potential of this unusual structure for the archaeology of Komana. It has also enabled the authors to construct a research strategy for the future.

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Alındı: 22.02.2010, Son Metin: 17.05.2010

Anahtar Sözcükler: Komana; Tokat, Asia Minor (Küçük Asya); Roma Dönemi; Bizans Dönemi; arkeoloji; altıgen; basilika; su yapısı; havuz.

## KOMANA'DAKİ ALTIGEN SU YAPISI: MİMARİ ACISINDAN BİR ÖN ARASTIRMA

Orta Doğu Teknik Üniversitesi Yerleşim Arkeolojisi Lisansüstü Programı'ndan B. Erciyas başkanlığındaki bir ekip, 2004 ve 2008 yılları arasında, Hellenistik Dönem'de Mithradates Krallığı topraklarında kalan, günümüzde ise Tokat'ın 9 km kuzey doğusunda yer alan Komana'da kapsamlı ve yoğun araştırmalar yapmışlardır. Çalışmalar sırasında, tarlalar arasında ikizkenar yamuk biçimindeki bir terasta yer alan, altıgen bir su yapısı bulunmuştur. Bu yapının işlevi kesin olarak tanımlanamamış olmakla birlikte, duvarlarına bağlanan toprak borular ve tabanındaki su giderleri yapının suyla ilişkili bir işleve sahip olduğunu akla getirmektedir. Bu makalede su yapısının inşası, planı, mimari ve arkeolojik bağlamı, işlevi ve tarihi ayrıntılı olarak irdelenmektedir. Komana'daki altıgen su yapısı mimari biçimi, tarihi ve topografik konumu ile ilgili olarak önemli sorunsallar sunmaktadır. Ancak yapı, aynı zamanda Orta Karadeniz Bölgesi'nin yanı sıra genel olarak Klasik Dönem arkeolojisi ve mimarlığı hakkında da önemli bir bilgi kaynağıdır. Böyle bir yapı üzerine yapılacak çalışılmanın belirli sınırlamaları vardır ve bu nedenle sonuçların geçici olması kaçınılmazdır. Bununla beraber, eldeki bilginin paylaşılması ve belgelenmesi için bir ön yayın, arazi sürekli bir yok olma tehditi altında olduğundan, yaşamsal önemdedir.

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