

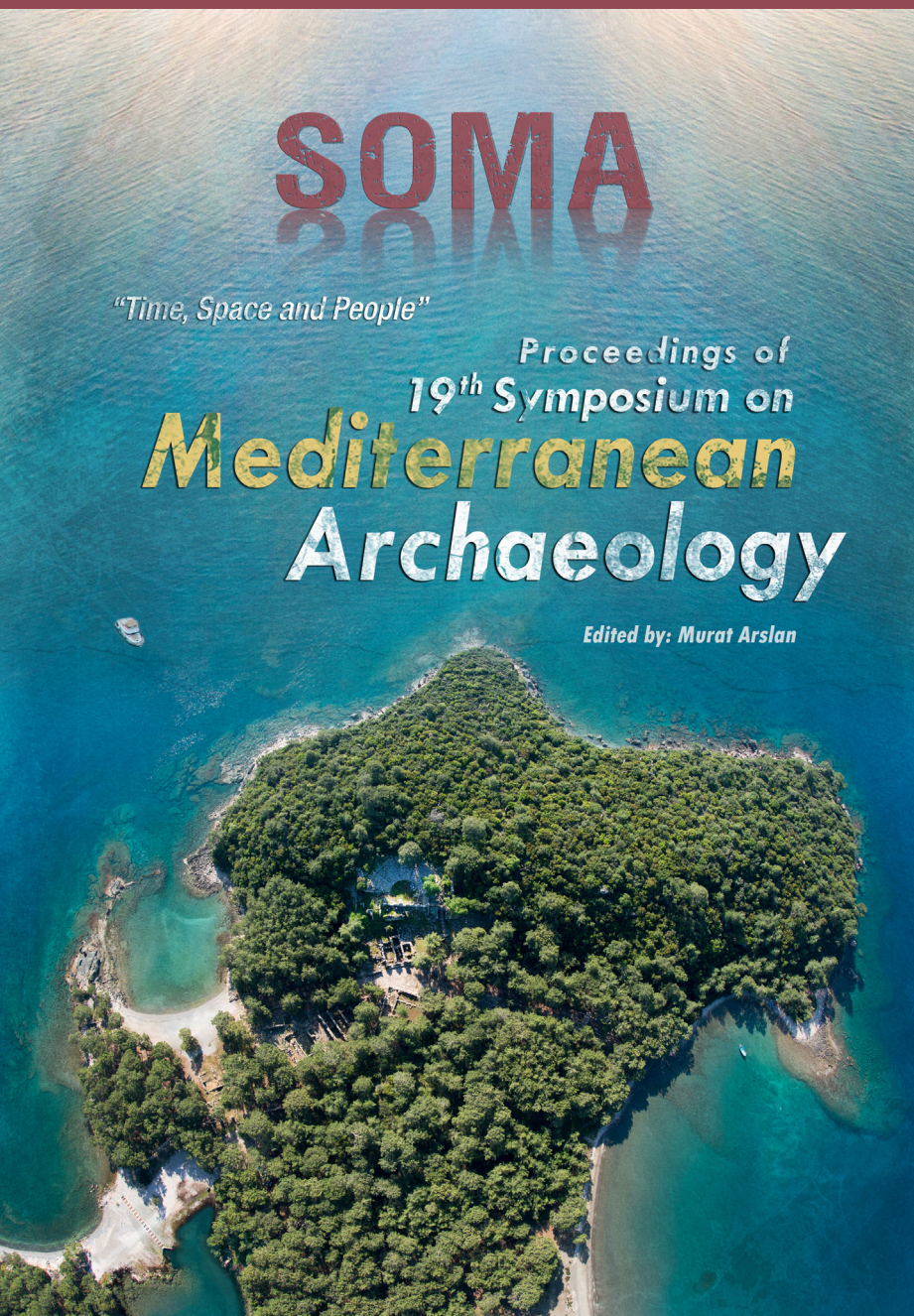
SOMA 2015

Time, Space and People

Proceedings of the 19th Symposium
on Mediterranean Archaeology

edited by

Murat Arslan



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"Time, Space and People"

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19th Symposium on
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Archaeology

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ARCHAEOPRESS PUBLISHING LTD

Gordon House
276 Banbury Road
Oxford OX2 7ED

www.archaeopress.com

ISBN 978 1 78491 851 4
ISBN 978 1 78491 852 1 (e-Pdf)

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Proceedings Book of the 19th Symposium on Mediterranean Archaeology

“Time, Space and People”

Symposium Aims and Goals

The nineteenth annual meeting of the Symposium on Mediterranean Archaeology (SOMA) was held in Kemer/Antalya (Turkey) from the 12th to the 14th of November 2015. As it has been in the past, this symposium will continue to provide an important opportunity for scholars and researchers to come together and discuss their works in a friendly and supportive atmosphere. Our spectrum is growing wider due to the increased importance and knowledge of interdisciplinary works in today’s scientific era.

Sempozyumun Amacı

Akdeniz Arkeolojisi Sempozyumu’nun (SOMA) on dokuzuncu buluşması 12-14 Kasım 2015 tarihleri arasında Kemer, Antalya’da (Türkiye) gerçekleşmiştir. Geçmişte olduğu gibi, bu sempozyum akademisyenler ve araştırmacıların bir araya gelmesi ve çalışmalarını dostane ve destekleyici bir atmosfer içerisinde tartışmaları açısından önemli bir fırsat sağlamaya devam edecektir. Bugünün bilimsel çağında disiplinlerarası çalışmaların artan önemi ve bilgisine bağlı olarak vizyonumuz genişlemektedir.

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REPRESENTATIONS OF ANIMALS ON SO-CALLED NEO-HITTITE SEALS

NEO-HİTİT OLARAK ADLANDIRILAN MÜHÜRLERDE HAYVAN BETİMLEMELERİ

AGATA KUBALA *

Abstract: Among the decorative motifs engraved on seals produced in the territory of the so-called Neo-Hittite Kingdoms there are representations of animals. They are depicted singly or in groups consisted of two or more representatives of the same or of different species. Animals are often accompanied by filling motifs. Images of single animals, horned quadrupeds, lions and an ostrich appear in stamp seals with hammer-like and fist-shaped handles. Lions also appear in group scenes where they are accompanied by a recumbent or striding goat, birds of prey and a scorpion. Group scenes also contain images of horned quadrupeds and big birds of prey with lowered heads seated at their backs and representations of erect goats placed on either side of a tree. Another combination of animals is a cow suckling its calf. Not all iconographic motifs appearing on Neo-Hittite seals are a continuation of Hittite traditions in seal engraving. Neo-Hittite artists also made use of the rich artistic *oeuvre* of their Syrian, Hurrian and Assyrian neighbours. The combination of decorative motifs borrowed from different cultures within one seal is a consequence of the mixed ethnic composition of the inhabitants of the Neo-Hittite states for whom these seals were made.

Keywords: Neo-Hittite • Stamp Seals • Engraved Decoration • Images of Animals • Borrowing of Motifs

Öz: Neo-Hitit Krallığı olarak adlandırılan sınırdan üretilen mühürler üzerine kazınmış dekoratif motifler arasında hayvan tasvirleri vardır. Bunlar tek başına veya aynı ya da farklı türlerin iki ya da daha fazla tasvirlerinden oluşan gruplarda tasvir edilmektedir. Bu hayvanlar sıklıkla dolgu motifleri ile birlikte tasvir edilmiştir. Tekli hayvan figürleri, boynuzlu dört ayaklılar, aslanlar ve devekuşları, çekiç ve yumruk şeklindeki kollarıyla damga mühürlerde görünür. Aslanlar da yan yatan ya da yürüyen bir keçi, yırtıcı kuşlar ve bir akrebin eşlik ettiği grup sahnelerinde görünür. Grup sahneleri, boynuzlu dört ayaklılar ve ağacın her iki tarafında yer almış ayakta duran keçilerin tasvirleri ile sırtlarında oturan başı öne eğimli yırtıcı büyük kuşları da içerir. Hayvanların diğer kombinasyonu ise ineğin buzağısını emzirmesidir. Sadece Neo-Hitit mühürlerinde görünen tüm ikonografik motifler mühürlerin Hitit oymacılık geleneğinin bir devamı değildir. Ayrıca Neo-Hitit sanatçıları da onların Suriyeli, Hurrili ve Asurlu komşularının zengin sanatsal çalışmalarını kullanmışlardır. Bir nesne üzerinde farklı kültürlerden alıntı yapan dekoratif motiflerin gözlemlenebilir birleşimi, bu mühürlerin yapıldığı Neo-Hitit eyalet sakinlerinin karışık etnik birleşiminin etkisidir.

Anahtar Kelimeler: Neo-Hitit • Damga Mühür • Oyuma Dekorasyon • Hayvan Figürleri • Motif Alıntıları

Amongst the variety of decorative motifs engraved on seals produced in the territory of the so-called Neo-Hittite kingdoms in south-eastern Anatolia and northern Syria there are representations of animals in different poses¹. These are depicted singly or in groups consisted of two or more representatives of the same or different species usually accompanied by filling motifs. The primary sources of artistic inspiration for these motifs are found in Hittite art, which seems in this case to be the logical source of origin. However, other than Hittite prototypes for these motifs can also be noted, a consequence of the political situation, as well as social relations within the vast territory occupied by the Neo-Hittite states.

Images of single animals appear on stamp seals with hammer-like or fist-shaped handles where

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¹ The article presented here concerns only an aspect of the issue of iconography of the so-called Neo-Hittite seals. A dissertation discussing all the iconographic motifs on these seals see Kubala 2015.

the latter is a variant of the former, originating from Syria². I have found five such objects. In three cases we have horned quadrupeds (Figs. 1-3), two goats and a gazelle, on seals in the Ashmolean Museum. On one seal there is a lion (Fig. 4). One, now in the National Library in Paris, carries a running ostrich (Fig. 5).



Fig. 1



Fig. 2



Fig. 3

One of the goats is presented as recumbent (Fig. 1) while the two remaining animals stand quietly facing right (Fig. 2) or left (Fig. 3). Elements placed before the mouths of these animals may be interpreted as branches or small bushes, two of them already stripped of their leaves. They represent the typical food for these herbivores, which they eat in nature. Prototypes of goats standing before a bush or a small tree can be found primarily in Hittite glyptic. The stamp seal in the form of a button found at Hattusa and dating from the 13th century B.C.³ serves as an example. The scene depicted strongly resembles the decoration of the seal with the image of a gazelle (Fig. 3), one can even observe the same filling motif, a six-pointed star, placed above the animals' body. Analogies for the depictions on two other seals with images of standing and recumbent goats may also be found in Hittite glyptic art⁴.

Before a carnivorous predatory animal, a lion (Fig. 4), facing right with in front of its open mouth, is a head of a horned quadruped. Images of lions with slender bodies, massive necks and raised tails are known from both Hittite and Neo-Hittite reliefs⁵. However, neither Hittite nor Neo-Hittite art offer us images of lions in combination with the head of a horned animal. However, images of a horned quadruped's head placed near an open lion's mouth are known from an Anatolian cylinder seals found at Kaneš⁶ and from Hurrian glyptic art, as an impression from a cylinder seal found at Nuzi (Kerkuk) show (Popko 1992, Fig. 27 in the middle).



Fig. 4

Another seal is decorated with the depiction of a running ostrich (Fig. 5). This motif is undoubtedly of Assyrian origin. As Donald Matthews (1990, 104) has recognized, the classical form of this big bird is restricted to the reign of Tukulti-Ninurta I. Such a form of ostrich is visible on two cylinder seals found at Tell Fakhariyah dated to the reign of this Assyrian king⁷. The ostrich on this seal

² Hogarth 1920, 22.

³ Neve 1993, fig. 80.

⁴ cf. respectively Neve 1993, fig. 162; Güterbock 1967, fig. 37.

⁵ cf. Akurgal 1962, fig. 137 at the top.

⁶ Collon 2005, 188 Cat. no. 899.

⁷ cf. Matthews 1990, figs 397-398.

very much resembles its Assyrian prototypes, so, despite some differences (for instance two wings visible on our seal and only one usually carved on the Assyrian prototypes, an ostrich accompanied by its young and attacked by a hero on Assyrian objects), Middle Assyrian ostrich scenes found on cylinder seals dating from the 12th century B.C. it can be assumed, formed the model for this Neo-Hittite depiction.



Fig. 5



Fig. 6



Fig. 7

One of the already presented seals, today in the collection of the Biblical Institute of the University of Fribourg, carries the image of a striding lion (cf. Fig. 4). In the other Neo-Hittite seals these predators also appear in group scenes combined with animals of different species. In such scenes the lions are usually accompanied by goats, birds of prey and a scorpion. Images of these animals occur on six stamp seals, five with hammer-like handles, the sixth is a scaraboid. On two seals, today in the Ashmolean Museum and in the National Museum of Aleppo (Figs. 6 and 7 respectively) lions are accompanied by one or two birds with widely spread wings. In both cases the birds are placed above the lion. Birds depicted on the first seal (Fig. 6) are very well depicted, with particular attention paid to the details, the feathers of their wings and tails are very clearly marked. Their curved, large beaks show they are birds of prey, presumably eagles or hawks. The crouching lion has a big head with widely open mouth, a thick, short neck, a massive body and a raised tail. Its forepaws are stretched out and its hind paws are beneath its body. The pose of the lion shown on the second seal (Fig. 7) is the same, although it has a more elongated body. The bird of prey which accompanies it is more schematic in its representation and it faces downwards and presumably it depicts the moment of its attack upon the crouching lion below it.

Images of lions with big heads, widely open mouths and stocky bodies are very well known from Hittite and Neo-Hittite art. As examples taken from Hittite imperial art the images of two lions guarding the entrance to the Upper City at Hattuša (the so-called Lion Gate) can serve as examples. Most of known Neo-Hittite monuments of this type are lions' images made, such as Hittite examples, partly in sculpture, partly in relief, pairs on either side of an entrance or serving as statue bases⁸. In the latter case they are usually depicted standing or striding, although Neo-Hittite statue or column bases in the form of crouching lions with open mouths and stretched out forepaws are also known⁹.

Spread-winged birds, mainly eagles, placed singly or in pairs above crouching animals are frequent motifs on Hittite stamp seals from the Old Hittite period¹⁰. Among the representations of the

⁸ cf. Akurgal 1962, figs. 109, 127, 132, 136.

⁹ cf. Bossert 1942, fig. 873.

¹⁰ cf. Bittel 1976, 95 and fig. 79.

animals attacked, these are usually hares, gazelles and goats, but lions also appear¹¹. In Neo-Hittite orthostat reliefs a lion and a spread-winged bird of prey appear together only in hunting scenes. A good example is the decoration engraved on an orthostat from the palace of Kapara at Guzana (Tell Halaf) dating from the second half of the 9th century B.C.¹². The Hittites used birds of prey for hunting as J. Vorys Canby (2002, 161-202) proved, although hunting scenes with the participation of people are not known from the Hittite art. However, birds of prey attacking animals were quite popular in Hittite glyptic as is indicated above. Neo-Hittite reliefs showing hunt scenes seem to confirm that the custom of hunting with birds of prey survived long into the Neo-Hittite period. Therefore, it is possible that scenes engraved on both these seals (cf. Figs. 6 and 7) depict, as in the case of Hittite seals, the most important fragment of this type of hunting. However, for the pose of the downward facing bird (cf. Fig. 7) other than Hittite prototypes should be indicated, with better analogies to be found on Assyrian reliefs and glyptic art¹³.



Fig. 8



Fig. 9



Fig. 10

Lions also appear on three other Neo-Hittite seals with hammer-like handles, where they are accompanied not only by birds of prey but also by goats (Figs. 8, 9 and 10). On two seals today in the Ashmolean Museum and the Louvre Museum (Figs. 8 and 9 respectively) very similar scenes were carved. The same animals placed in almost identical poses may be seen and noticeable differences are insignificant. Hittite and Neo-Hittite reliefs do not provide us with examples of such an animal arrangement placed within one decorative field, although crouching goats, striding stockily built lions and spread-winged birds of prey are popular decorative motifs in both cultures. The scene depicted on the third object, now in the Ashmolean Museum (Fig. 10), is more complex. Over the recumbent goat two erect rampant lions may be seen. Behind the lion placed on the right-hand side a seated bird is visible, while behind the predator on the left-hand side the figure of a scorpion is carved. The whole scene is topped by an image of a down-turned hare. A good analogy for the main motif of the rampant lions and the recumbent goat may be found in Assyrian glyptic art. A very similar scene is depicted on a Middle-Assyrian cylinder seal¹⁴ where the two lions have an almost identical pose and the shape of curved back big horns of the goat very strongly resembles the horns of the quadruped on this seal. Erect large lions with widely open mouths also call to mind Assyrian hunting scenes known both from orthostats¹⁵ and from glyptic art¹⁶. However, the motif of an erect

¹¹ Beran 1967, fig. 69.

¹² Orthmann 1971, fig. 11b.

¹³ cf. i.e. Matthews 1990, fig. 292; Collon, 2005 fig. 287.

¹⁴ cf. Matthews 1990, fig. 380.

¹⁵ Parrot 1961, fig. 64.

¹⁶ cf. Wiseman – Forman 1958, fig. 62.

attacking lion appeared considerably earlier in Mesopotamian art and it may already be observed on Early Dynastic cylinder seals. Behind the lion on the left-hand side there is a big bird, most probably a bird of prey. It is however very hard to recognize its species, for the seal's decoration is slightly damaged in this area. It could be an eagle, for images of these birds in similar position are known from Hittite art and even Anatolian art in the period preceding the birth of the Hittite state. A vessel in the shape of a bird of prey dating from the 19th century B.C. was found at Kaneš¹⁷. A big bird seated on a man's outspread hand appears on a scene decorating one side of a Hittite hammer seal dating from the 16th century B.C.¹⁸ from Tarsus. Seated birds of prey were also depicted on Neo-Hittite orthostats in hunting scenes. A scene decorating an orthostat found at Karatepe may serve as an example, where the style of engraving shows a clear Aramaean influence. On its upper part are depicted two birds of prey and between them a bagged down-turned hare¹⁹. The scene engraved on the discussed seal is topped by a hare positioned in the same way, near the bird, before its head. The last element of the scene is a scorpion shown behind the lion on the right-hand side of the decorative field. Images of this crustacean already appeared in the art of the Near East in the 4th millennium B.C. Scorpions also occur in Kassite *kudurru*, where they are symbols of goddess Išhara, worshipped in Syria and Mesopotamia from the 3rd millennium onwards²⁰. In the 2nd millennium B.C. she was worshipped in southeastern Anatolia and in northern Syria in the Hurrian pantheon²¹. This goddess was also held in high regard by the Hittites. Images of scorpions are known from Syrian glyptic art forming a very popular motif in the 2nd millennium B.C. These venomous creatures depicted on Syrian seals seem to be the best analogies for the scorpion depicted on this seal. Very similar depictions of scorpions appear on two North Syrian seals, dated to the 14th century B.C.²² found at Alalakh.

A scorpion and a lion also appear together on another Neo-Hittite seal in the shape of a scaraboid found at Hama, today in the National Museum of Aleppo (Fig. 11). For the image of a scorpion the same North Syrian prototypes may be proposed. The standing lion clearly refers with its massive compact body to the Hittite depictions of these predatory animals, especially in sculpture or in combination a sculpture and a relief. The lion was also made very similar to the predator shown on the already discussed seal from the Ashmolean Museum (cf. Figs. 6 and 11). There are undoubted analogies in the manner of treatment of both predatory animals as Marie-Louise Buhl and P.J. Riis (1990, 88) recognized. Common elements clearly observable in the appearance of lions engraved on the both seals may indicate Hama as the place of origin of the seal from the Ashmolean Museum (cf. Fig. 6) which was acquired and is said to be from Sidon²³.



Fig. 11

Two other stamp seals, presently in the Ashmolean Museum (Fig. 12) and the Durham University Oriental Museum (Fig. 13), are decorated with images of horned animals and birds of prey seat-

¹⁷ Canby 2002, fig. 14.

¹⁸ Canby 2002, fig. 3.

¹⁹ cf. Akurgal 1962, fig. 146.

²⁰ Black – Green 1992, 182.

²¹ Black – Green 1992, 90.

²² Collon 1982, fig. 96.

²³ Buchanan Mooney 1988, 35.

ed on their backs. The horned quadrupeds are a recumbent bull and a striding goat. The bird of prey is the same in both cases. It is a large vulture with a lowered head. Images of recumbent and striding goats with birds seated on their rumps are known from the 2nd millennium B.C.²⁴ in Syrian glyptic art. On one such object, now in the Vorderasiatisches Museum at Berlin²⁵ has a scene very similar to the depiction on the seal presented here as figure 13. A particularly clear resemblance joins these images of birds seated on recumbent animals' rumps. Other common elements are the presence of a branch placed in front of a horned quadruped and a filling motif in the form of a crescent on both these seals. However, the best analogies for the discussed scene, especially for the version depicted on the seal in figure 12 come from Hittite glyptic art. One of the stamp seals found at Hattusa carries a scene resembling this depiction. On the rump of a crouching goat, a bird of prey is seated²⁶.



Fig. 12



Fig. 13



Fig. 14

A recumbent bull also appear on another Neo-Hittite seal from Hama, today in the National Museum at Copenhagen, but on this object it is accompanied not by a bird of prey, but by a scorpion (Fig. 14). Clear similarities between the horned animals on both seals can be observed (cf. Figs. 12 and 14), noticeable firstly is the shape of a small head with a big ear and curved forward large horn. Both animals are also similarly shaped, with somewhat elongated bodies with very slim legs beneath. Images of bulls are known from Hittite art as early as the Old Hittite period and particularly often appear in Hittite glyptic art²⁷. On stamp seals discovered at Hattusa bulls are usually depicted standing or striding, but there are also examples of images of crouching bulls with their legs folded beneath their body. Particularly interesting is the depiction decorating a stamp seal in the Louvre Museum²⁸ where a crouching bull raises one of its legs, defending itself against an assailant, which in this case is a lion. This depiction is in my opinion a very good analogy for the poses of the bulls depicted on both the discussed seals. Clear similarities may also be observed in the shape of their bodies and legs. However, the heads of the bulls depicted on Hittite seals are made in a different manner. They are usually large and crowned with a pair of curved inside small horns. Much better analogies for the shape of our bulls' horns may be found in Assyrian relief and glyptic art. The heads of bulls in Assyrian art²⁹, in profile, are crowned with one visible large horn, curved in exactly the same manner as can be observed on both of these Neo-Hittite seals. Some animals shown on Assyrian reliefs have the front of their necks covered with short horizontally arranged lines, as have the bulls on our seals. Bulls depicted in profile with one visible curved forward horn also occur on Neo-Hittite

²⁴ cf. Delaporte 1923, pl. 103, figs 1 and 3.

²⁵ cf. Jakob-Rost 1975, pl. 7, fig. 112.

²⁶ cf. Boehmer – Güterbock 1987, pl. V, fig. 50.

²⁷ cf. Güterbock 1967, figs. 1, 12, 67 and 81-84.

²⁸ cf. Delaporte 1923, pl. 100, figs 9a-b.

²⁹ cf. Matthews 1990, figs. 334 and 360.

orthostats. However, the shape of their heads and presumably of their horns is, as is the case with the bulls depicted on both the discussed seals, the effect of Assyrian influence which is noticeable in Neo-Hittite art from as early as the middle of the 9th century B.C.³⁰

Marie Louise Buhl and P. J. Riis (1990, 89) discussing the seal presented here as figure 11 in their publication concerning the finds from Hama dated to the Iron Age quoted the seal found in the same site, decorated with an image of a cow suckling its calf (Fig. 15) as an analogy for the depiction on it of a horned animal and in the style of its carving. Indeed, a comparison of horned animals from both seals shows clear similarities, especially in the shapes of their heads with the characteristically curved big horn. As was mentioned earlier, for these elements I assume Assyrian prototypes. Stylistic comparisons also let me describe the manner of carving of the horned quadrupeds on both seals as being very similar in the essential details, such as their heads, bodies and legs, although the cited body parts are more proportional to each other for the depiction of the cow, here figure 14. However, the reason for this may be its later date of its production.



Fig. 15



Fig. 16

The aforementioned scene with a cow feeding its calf decorating the scaraboid-shaped seal (Fig. 15) found at Hama and currently stored in the National Museum at Aleppo provides another combination of animals that appear on Neo-Hittite seals. Such a scene also occurs on another stamp seal in the form of an oval bead bought by Earl Percy during one of his trips to the Near East³¹, today in the Durham University Oriental Museum (Fig. 16). On the seal from Hama (Fig. 15) two quadrupeds are accompanied by a large bird of prey, most probably a vulture, seated on the cow's back. P. J. Riis (1948, 158) recognized it as a feline, but I cannot agree with this. The explanation for this slightly damaged element as a bird of prey, provided by H. Ingholt (1940, 101), I consider to be much more convincing. Moreover, it corresponds well with the depictions of such birds occurring on the already discussed Neo-Hittite seals³².

An old Mesopotamian motif of an animal suckling its young, particularly popular in Syria, was not rare in the art of the eastern Mediterranean in antiquity. It appears on seals originated in different ages from the Djemdet Nasr period onwards³³. A version of the motif, in which a suckling animal does not turn its head back, as it does on both discussed objects (Figs. 15 and 16), appears on Syrian stamp seals³⁴. Images of animals suckling their young are also known from Hittite art as early as the Old Hittite period. A suckling animal is usually a chamois, not a cow, but its pose with outstretched forelegs as well as a pose of fed young, crouching with its legs under its body, lifted head and raised tail, are very similar to those of the animals depicted on both seals. A good example is a

³⁰ cf. Bossert 1942, figs. 832 and 943-944; Genge 1979, fig. 13.

³¹ Lambert 1979, 32.

³² cf. above and figs. 12 and 13.

³³ Boehmer – Güterbock 1987, 26.

³⁴ cf. e.g. Jakob-Rost 1975, pl. 7, fig. 123; Keel-Leu 1991, fig. 59.

scene decorating a stamp seal found at Hattusa and dated to the Old Hittite period³⁵. The Hittite version of the discussed scene also contains the image of a bird of prey sticking its beak in the adult animal's neck. However, it should be noted that the depiction of a cow as a suckling animal does not appear on Hittite seals. It is typical of Mesopotamian cylinder seals³⁶, we can also find it on Syrian stamp seals³⁷. The shapes of the heads and horns of both full-grown animals also follow Mesopotamian, and to be more precise, Assyrian, prototypes.

The above discussed main scene depicted on the Durham University Oriental Museum seal (Fig. 16) is accompanied by a very interesting filling motif resembling a rosette. It consists of seven dots surrounding a central element of the same shape and size. Almost identically shaped rosettes occur on North Syrian cylinder seals, dated to the 14th or 13th century B.C. from Alalakh³⁸. It is therefore very probable that rosettes appearing in North Syrian cylinders from the second part of the second millennium B.C. served as prototypes for the filling motif decorating this seal. The North Syrian images of rosettes could be based on earlier Mitannian depictions of this motif. The reason for this being the coexistence of Syrians and Hurrians in the same territory in the second half of the second millennium B.C. in Northern Syria. On Mitannian seals the six smaller dots surrounding the larger one form a version of *sibittu*, "the Group of Seven" which refers to the group of seven planets, stars, gods or demons³⁹. The number of surrounding dots in the rosettes recorded on North Syrian cylinders change, however, they may also have meant *sibitti*, although in some cases incorrectly depicted. Then, the North Syrian version of this symbol was copied by the carver of this Neo-Hittite seal (Fig. 16). This seal also bears a hieroglyphic inscription containing the name of the goddess Kubaba engraved on the opposite side⁴⁰. The combination of *sibittu* and the name of one of the most important Neo-Hittite deities on one seal is of particular interest. It could have been intended to strengthen the magical-protective value of the seal, which most probably also served as an amulet. Stamp seals, unlike cylinders, have always had, as far as we can tell, an amuletic value⁴¹.

The last decorative motif with the use of animals to be discussed consists of two erect goats one on either side of a tree. Their forelegs touch the tree's trunk. Such a scene occurs in two stamp seals from the Ashmolean Museum. One of them had its handle in the form of a human fist (Fig. 17). The handle of the second object (Fig. 18) is unique. It takes the form of a demon's head with two faces in the front and at the back of it, topped by a loop.

The motif of an erect goat touching a tree with its forelegs is well known from the Mesopotamian art⁴². Images of similarly posed erect goats and a highly stylized "tree of life" between them are known from Mitannian glyptic where they were a popular motif. Comparative material is also provided by Neo-Hittite orthostats. Erect goats standing on either side of a tree or a big bush are engraved on one of the orthostats found at Sam'al⁴³. Another orthostat found at Tell Halaf may also be

³⁵ cf. Boehmer – Güterbock 1987, pl. V, fig. 52.

³⁶ cf. Wiseman – Forman 1958, fig. 78.

³⁷ cf. Jakob-Rost 1975, pl. 7, fig. 123.

³⁸ cf. Collon 1982, figs. 104 and 105.

³⁹ cf. Brinkman *et al.* 1984, 231.

⁴⁰ cf. Lambert 1979, 32 Cat. no. 106.

⁴¹ Collon 2005, 108.

⁴² cf. e.g. Parrot 1961, 257 fig. 328B.

⁴³ cf. Bossert 1942, fig. 938.

quoted in this place as a good analogy for the discussed scene⁴⁴. The poses of the animals depicted on the aforementioned Neo-Hittite orthostats clearly resemble those of the goats shown on both discussed seals. Mesopotamian art provides us with prototypes for trees flanked by goats. Very similarly shaped palm trees appear on Middle- and Neo-Assyrian cylinders⁴⁵.



Fig. 17



Fig. 18

The decorative field of the last presented seal (Fig. 18) is surrounded by a border consisting of diagonal short lines. Prototypes of such a border are unquestionably found in the Hittite glyptic where it appears in many stamp seals⁴⁶.

The artistic work of the small political entities that arose from the collapse of the Hittite empire are termed Neo-Hittite art emphasizing its connections with the art of the Hittites. However, Hittite art and culture were not the only sources of inspiration for Neo-Hittite artists. They also used single motifs or even whole decorative patterns worked out by Mesopotamian (Hurrian and Assyrian) and by Syrian craftsmen. Neo-Hittite glyptic art reflects the same directions in borrowing, but on a much larger scale which is clearly observable in scenes containing the depictions of animals. Neo-Hittite states were political and cultural heirs of the Hittite Empire. It is obvious that analogies for the whole scenes and separate motifs may be found in Hittite art. However, the engravers of Neo-Hittite seals, as well as artists carving orthostat slabs also made use of the rich artistic *oeuvre* of their Syrian, Hurrian and Assyrian neighbours. The borrowing of iconographic details

reached much larger proportions in the case of Neo-Hittite seals, which is apparent when we consider the representations of animals which are only one of the themes occurring on the objects belonging to this category. Amongst the discussed borrowed depictions of animals are those that do not appear within the repertory of decorative motifs on Neo-Hittite orthostats. Examples that can be mentioned include the images of scorpions based upon Hurrian-Syrian prototypes, and the motif of a cow suckling its young, which show Syrian-Hittite influence. Apart from these, typical of Neo-Hittite seals is the combination of decorative motifs or separate details borrowed from different cultures on one decorated object (for example, a lion and a scorpion). This was a consequence of the mixed ethnic composition of the inhabitants of the Neo-Hittite states, for whom the seals under discussion were intended. The territory occupied by the Neo-Hittite states were, as Trevor Bryce has observed, “*multi-ethnic and multi-cultural in their composition*”, not inhabited solely by the Luwians. The region was home to a number of language groups and the inhabitants of these states were cosmopolitan also in the sense of being subject to foreign influences, as the material culture of those archaeologically investigated Neo-Hittite cities clearly shows.

⁴⁴ cf. von Oppenheim 1931 pl. 24, fig. b.

⁴⁵ cf. e.g. Matthews 1990, figs. 511 and 515; Collon 2005, fig. 773.

⁴⁶ cf. e.g. Delaporte 1923, pl. 100, figs. 7b and 20b-c; Neve 1993, fig. 80.

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BRONZE AGE STONE ANCHORS BY THE CILICIA COAST, TURKEY / 2015

KİLİKYA SAHİLİNDEKİ BRONZ ÇAĞ TAŞ ÇAPALARI, TÜRKİYE / 2015

ALPER ZAFER *

AHMET ASLAN **

Abstract: The underwater archaeology department at Selçuk University conducts underwater archaeology surveys off the coast of ancient Cilicia, Pamphilia and Lycia in the Eastern Mediterranean. During the survey in 2015 off the Cilician and Antalyan coastlines, several stone anchors, the lead or stone stocks of wooden anchors and also iron anchors dating from different periods were discovered, amongst other finds. This presentation reports on the five one holed and five three-holed stone anchors, of different shapes and sizes that were found off the coast of the Provinces of Antalya and Mersin in the course of this 2015 underwater survey.

Keywords: Anchors • Stone Anchors • Anchor Hole • Mediterranean

Öz: Selçuk Üniversitesi sualtı arkeoloji bölümü, bugün Doğu Akdeniz'de yeralan antik Kilikia, Pamphylia ve Lykia bölge sahillerinin sualtı arkeoloji araştırmalarını yürütmektedir. 2015 yılı Kilikia ve Antalya sahilleri araştırmaları sırasında, pekçok taş çapalar, ahşap çapaların kurşun veya taş maddeleri ve hatta farklı dönemlere tarihlenen demir çapalar diğer buluntular arasında yer almaktadır. Bu çalışma, oyunca beş tek-delikli ve beş üç-delikli farklı şekillerde ve ölçülerde olan taş çapalar içermektedir. Bu çapalar, 2015 sualtı araştırmaları sırasında Antalya ve Mersin bölgelerinin sahillerinde bulunmuşlardır.

Anahtar Kelimeler: Çapalar • Taş Çapalar • Çapa Deliği • Akdeniz

Introduction

Selçuk University's underwater archaeology department conducts underwater archaeology surveys in the regions of ancient Cilicia, Pamphilia and Lycia in the Eastern Mediterranean. In the course of these surveys off the Mediterranean Coast underwater exploration was undertaken in different areas and at varying depths and much archaeological material was discovered, with the important material documented through drawings and photographs. In the course of this survey, several stone anchors, the lead or stone stocks of the wooden anchors and also iron anchors from different periods were discovered, among other finds. During this survey five examples of one holed and five examples of three-holed stone anchors of different shapes and sizes were found off the coastline of Antalya and Mersin (Fig. 1).

Single Hole and Multi Hole Anchors from Antalya

In 2015, two three holed stone anchors were found in the vicinity of Gazipaşa in the Antalya coastal survey (GAD 4, GAD 5). In addition, a single hole and two three holed stone anchors were identified by Kaş/Kovanlı Island (KKA 14, KKA 29, KKA 30) (Fig. 2, Table 1).

Anchor number GAD 4 was found at a depth of 14 meters. This anchor with an elongated rectangular form has slightly rounded edges. Anchor number GAD 5 was found at a depth of 15 meters. This anchor is rectangular shaped with a slightly rounded top. Its rope hole is quite large. Anchor number KKA 14 was found at a depth of 16 meters, which is of a different in shape to the other anchor finds and may have been used a weight.

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Fig. 1 Single Hole/Multi-Holed Anchors from the Coast of Antalya/Mersin 2015

Anchor number KKA 29 was found at a depth of 22 meters. Anchor number KKA 30 was found near KKA 29, and was also discovered at a depth of 22 meters. It has a small body with a conical top section and is of a rectangular form. The anchors were generally found at a depth of between 14 and 22 meters off the Antalya coastline. Their forms are rectangular, and the edges rounded. The rope and teeth hole sizes are the same in the composite anchors. Similar examples were found in Cilicia¹, Cyprus², Ugarit,³ and off the coast of Israel⁴.

Single Hole and Multi Hole Anchors from Mersin/Silifke

In 2015, surveys off the Mersin/Silifke coastline concentrated on Aphrodisias-Tisan and Dana Island. During the Dana Island surveys, one three holed stone anchor (DAG 3) to the South and a single hole stone anchor (DAD 16) to the east were discovered and during the survey conducted in the West bay of the Aphrodisias-Tisan Peninsula, two single hole anchors (SAT 35, SAT 36) and one composite stone anchor (SAT 8) were found (Fig. 3, Table 2).

Anchor number DAG 3 was found at a depth of 19 meters. This anchor is long, rectangular shaped with rounded edges. It has two circular tooth holes and a larger rope hole.

¹ Evrin *et al.* 2002, 256-257; 2007 fig. 39/36; Öviz 2012, 121 fig. 6-7; 2014, 16 fig. 4; 19 fig. FGB31.

² Green 1971, 172-173 fig. 31A-31B.

³ Mccaslin 1980, 46-47 fig. 28/2.

⁴ Frost 1970, 382-383; 1985; 1991; Galili *et al.* 1994, 105-106; Shalev 2014, 8 fig. 10.

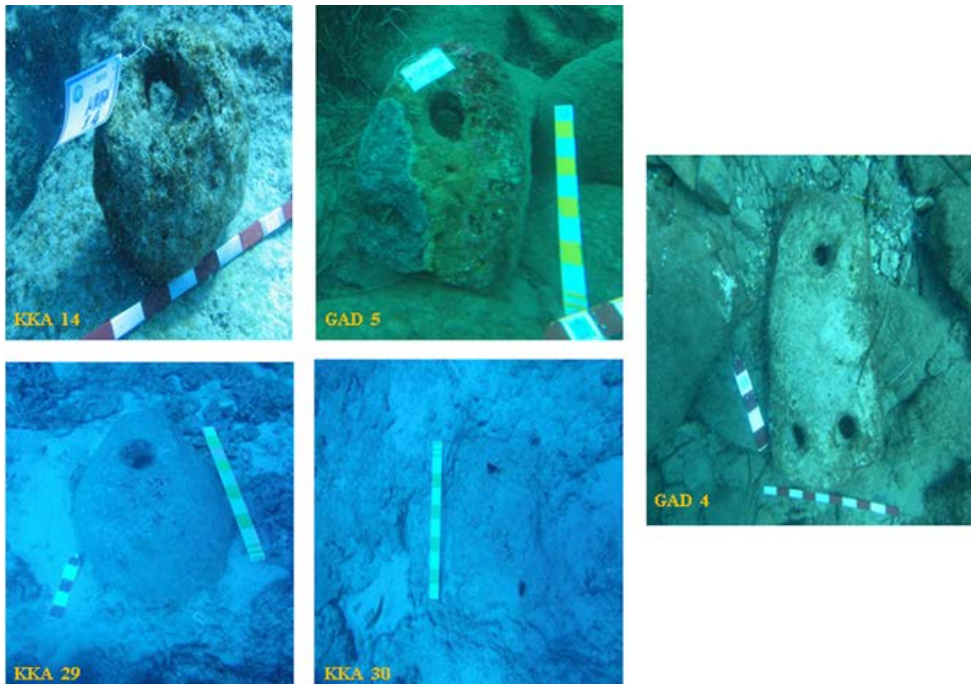


Fig. 2 Single and Multi Holed Stone Anchors found off the Coast of Antalya in 2015

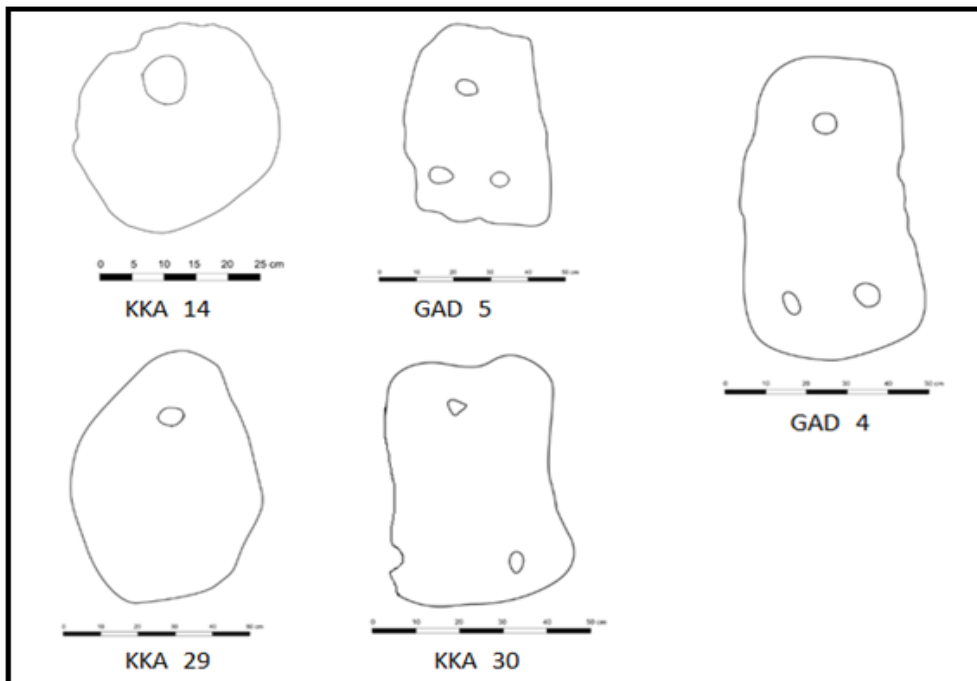


Table 1 Single and Multi Holed Stone Anchors found off Antalya in 2015

Anchor number DAD 16 was found at a depth of 19 meters. Anchor number SAT 8 was found at a depth of 10 meters. This anchor is long, rectangular shaped with rounded edges, with two circular tooth holes and one larger rope hole in the anchor. Anchor number SAT 35 was found at a depth of 10 meters. These anchors have rounded edges and stocky triangular or rectangular bodies. Anchor number SAT 36 was found at a depth of 11 meters.

The anchors off the Mersin coast were found at a depth of 10 to 19 meters. Their forms are triangular, rectangular and oval. The anchors' rope hole size is large.

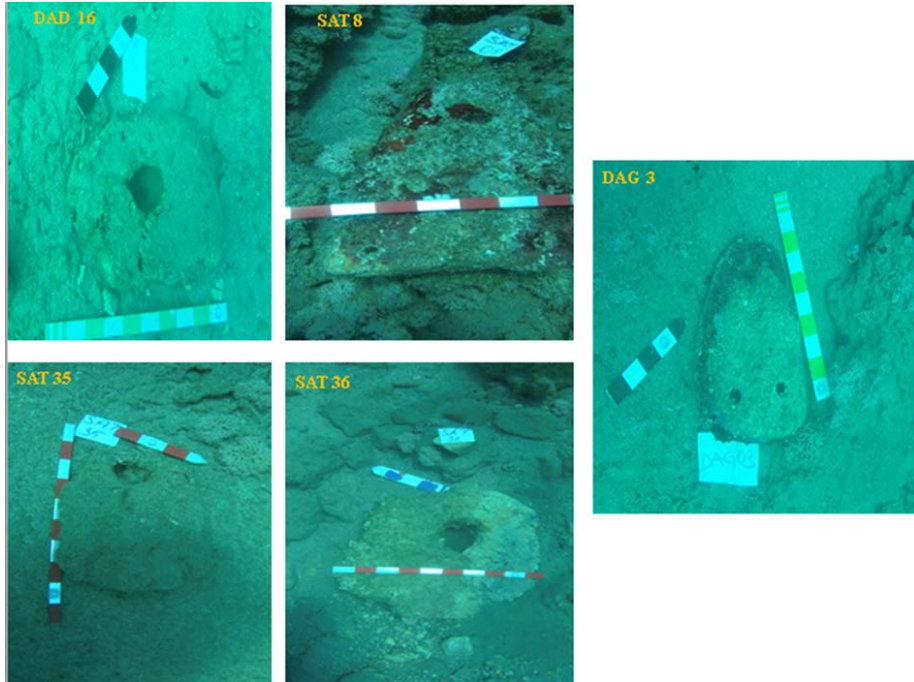


Fig. 3 Single and Multi Hole Stone Anchors found off the Coast of Mersin/Silifke in 2015

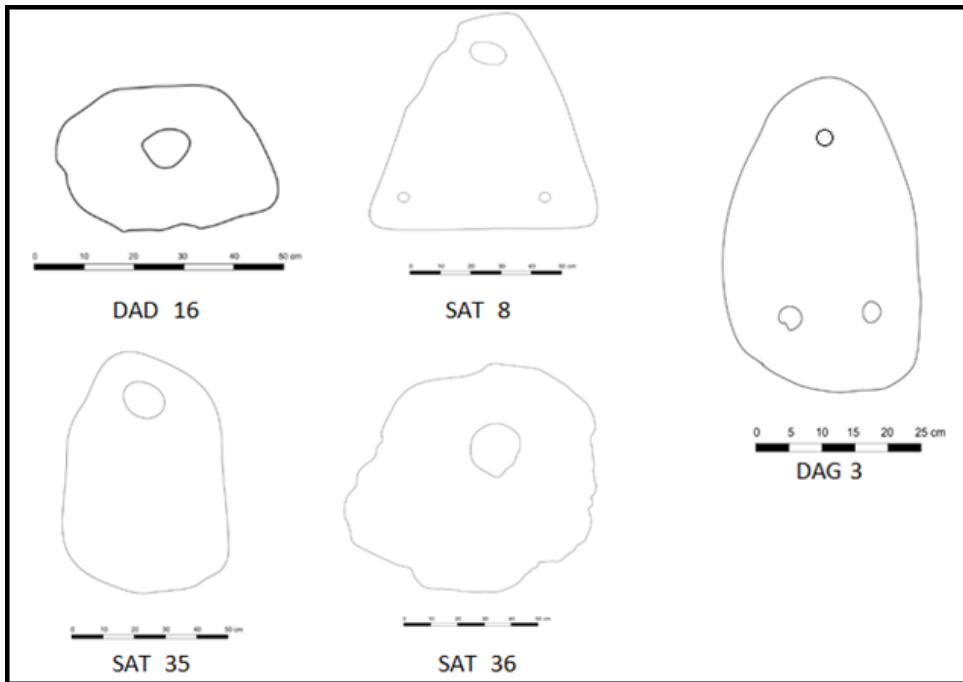


Table 2 Single and Multi Hole Stone Anchors found off the Coast of Mersin/Silifke in 2015

Similar examples in terms of shape and size were found off the Cilicia coast⁵, Cape Andreas in Cyprus, Ayios Philos⁶, from Ugarit's main harbour of Minet el Beida and around the Temple of Baal⁷.

Conclusion

Cultural contact between different civilizations increased through marine activities. As a result of these interactions, social, cultural and economic dynamics increased in Mediterranean settlements. The most important remaining evidence of this contact are the anchors of the ships that conveyed the materials of different cultures.

These anchors found during research in 2015 off the coasts of Antalya and Mersin, have similarities with the types of anchors found within the Mediterranean basin and they show the coasts of Antalya and Mersin were used as anchorage areas in the Bronze Age.

⁵ Evrin *et al.* 2002, 256-257; Evrin *et al.* 2007 fig. 39/36; Öviz 2012, 121 fig. 6-7; 2014, 16 fig. 4; 19 fig. FGB31.

⁶ Green 1971, 171 fig. 31A; Mccaslin 1980 fig. 15/123.

⁷ Frost 1969, 241, 245 Table 1:11.

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RECONSTRUCTION OF THE LOST GREAT TEMPLES OF IONIA
IONIA'NIN KAYIP BÜYÜK TAPINAKLARININ REKONSTRÜKSİYONU

AHMET DENKER*

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Abstract: The Ionic order of architecture reached its culmination with the construction of the four great Ionic Temples on the Eastern coast of the Aegean Sea. These were the fruits of the great temple-building epoch that began with the building of the Great Temple of Hera at Samos in the first half of the 6th century B.C. This period had passed by the end of the 5th century B.C; but the recurrence of destruction, of fires caused by arsonists, rioters and invaders required the reconstruction of these structures. In this paper, the history of their construction, reconstruction and destruction are related. The exceptional architects who had defined and clarified the style and the principles of construction, together with the superstructures they created are studied from the accounts by ancient writers, fragments in museums and the surviving insitu evidence. Finally, their 3D reconstructions are realized so far as is been possible.

Keywords: Reconstructing the Past • Experiencing the Past • Temples of Ionia • 3D Computer Graphics • Virtual Reality

Öz: İon mimari düzeni, Ege Denizi'nin doğu kıyısındaki dört büyük İon tapınak binası ile doruk noktasına ulaşmıştır. Bunlar MÖ VI. yüzyılın ilk yarısında Samos'taki Büyük Hera Tapınağı'nın inşası ile başlayan büyük tapınak inşası çağının meyveleriydi. Bu dönem MÖ V. yüzyılın sonunda sona ermiştir, ama kundakçıların, isyancıların ve işgalcilerin neden olduğu yangınların yıkımının tekrarlanması, yapıların yeniden inşasını gerektirdi. Bu makalede, onların konstrüksiyonu, rekonstrüksiyonu ve tahribat tarihi izlenir. Oluşturulan üst yapılarla birlikte konstrüksiyon ilkelerini ve stillerini tanımlayan ve açıklayan olağanüstü mimarlar, antik yazarların tarifleri, müzedeki parçalar ve ayakta kalan sütunlar yardımıyla incelenmiştir. Sonuç olarak, bunların 3D rekonstrüksiyonu mümkün olabildiğince gerçekleştirilmiştir.

Anahtar Kelimeler: Geçmişin Rekonstrüksiyonu • Geçmiş yaşamak • İonia Tapınakları • 3D Bilgisayar Grafikleri • Sanal Gerçeklik

Introduction

The four greatest Ionic temples in the world stood within the same geographical region (Fig. 1). Three of these were built on or near the Aegean coast of Asia Minor, while the other was constructed on an island separated by only a narrow strait from this same coastline. Together they revealed an elegance and supremacy in architecture which is difficult to find surpassed by any architectural achievement in any other part of the world. These were the Temple of Hera on Samos, the Temple of Artemis at Ephesus, the Temple of Apollo at Didyma and the Temple of Artemis at Sardis.

Colossal temples in the Ionic order were built in the Archaic period when the Ionians were at the peak of their golden age. The earliest of these was the Temple of Hera on Samos (The Heraion). This temple Herodotos compares with the labyrinth of Egypt and the temple at Ephesus in its extent and magnificence and states that it was the largest he had seen. The temple at Ephesus which was seen by Herodotos was the Archaic Artemision, the second of the four great temples. This building was

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Fig. 1 Aegean coast of Asia Minor and Locations of the Four Great Ionic Temples

burned on the night Alexander was born (356 B.C.). It was to be rebuilt, yet more splendid and grand, the Classical Artemision. It was acknowledged one of the seven wonders of the ancient world. It is intriguing to think whether Herodotus would have changed his opinion had he lived after the time of Alexander and seen the last form that the Artemision took. According to some, the third temple in Didyma (the Didymaion) excelled both the Heraion and the Artemision, and it was with the fourth temple, at Sardis that the antiquated Doric order was put into the shade.

The designer of the Heraion was Theodoros (together with Rhoikos). The Archaic temple at Ephesus was also designed by Theodoros (together with Kherisiphron and Metagenes). The architect of the classical temple at Ephesus was Paionios he was also the architect of the temple at Didyma. With this line of continuity from temple to temple the Ionic order emerged and evolved along the eastern coast of Aegean Sea into an architectural style whose grace and magnificence continues to fascinate its beholder. These four colossal dipteral buildings all shared a common destiny, all destroyed by fire. New buildings were constructed to replace the old ones. In each case the newer buildings were designed on a colossal scale because the older buildings had been colossal. Their lines were determined by the lines of the former temple.

The Heraion and the Artemision were stripped bare to the level of the foundations, the Didymaion and the Temple of Artemis at Sardis had been left with a few columns standing (Fig. 2). Anyone who today stands before the excavation areas of these temples finds it very difficult to reconstruct in his mind a picture of these buildings. But by comparison and analogies between the general schemes of these temples indirect evidence can be obtained which leads to their reliable reconstruction.

The aim of this paper is twofold. Firstly, it sets out to bring a formal and unified approach to these four great Ionic temples. Secondly, it attempts to reconstruct them as if they were standing unharmed in their original state. In vividly exhibiting how these ruined buildings once looked; this work of reconstruction can be equally instructive in clarifying how such buildings couldn't have looked.



Hera Temple of Samos



Artemis Temple of Ephesus



Apollo Temple of Didyma



Artemis Temple of Sardis

Fig. 2 *Temple of Hera on Samos, Temple of Artemis at Ephesus, Temple of Apollo at Didyma, Temple of Artemis at Sardis*

The First of the Great Ionic Temples: The Great Temple of Hera

The Great Temple of Hera at Samos (Heraion) was the first example of the Great Ionic temples. It was a colossal dipteral temple, described by Herodotus as the largest he was acquainted with. Built shortly before the middle of the sixth century B.C. (*ca.* 570-560 B.C.), the Heraion is dated a decade or two earlier than the Temple of Artemis at Ephesus, the Artemision. It is widely accepted that this temple, together with the Ephesian Artemision, established the pattern for the Ionic order which would be employed in subsequent years.

Cut-off by only a narrow strait from Asia Minor, the Island of Samos was the home of the Greek Ionian citizens of one of the richest and most powerful states in the 6th century B.C. When the thriving community of Samos decided to build a sanctuary of greater monumentality, to befit their goddess Hera, the task was given to two great masters, Theodoros and Rhoikos. They dared to construct a temple of gigantic proportions, the largest ever executed in the Greek world and in accomplishing this task they laid the foundations for the architecture of the Great Ionic Temples which would be constructed at Ephesus, Didyma and Sardis.

Comparison of the sanctuaries which had been built at the same location, dedicated to Hera, according to mythology born on Samos, provides us with a better grasp of the magnitude of the 6th century temple (Theodoros Temple). The Theodoros Temple showed a vast increase in proportions although the difference which this temple brought to Greek temple architecture was not confined only to matters of size. The former buildings were known as *Hekatompedons*, meaning 'hundred-footers'. They were all built out of wood and mud brick, with the trunks of large trees used as columns. The Theodoros Temple was constructed from stone.

The Theodoros Temple is credited with "firsts" - the first gigantic sanctuary in the Greek world-

the first huge stone temple - the first Ionic monument of colossal size- the first dipteral temple, why it is often termed Dipteral 1. While its architects had to face problems more difficult than they had ever tackled before. How could firm foundations be laid on ground to support so heavy a load? The problem was exacerbated by the ground itself, which was a marsh.

The architects, as well as the building, must be taken into account in order to better understand how this unusual project came about and developed. Who were these architects who dared to construct a temple more immense than anyone had built before, in a material nobody had used so extensively and with problems of engineering that nobody had solved before?

Theodoros and Rhoikos were named in the *Ten Books on Architecture* by Vitruvius as the architects of the Heraion of Samos. The list of their credited achievements is wide. These two versatile masters commanded the fields of art, architecture and engineering. They are also mentioned in the works of Pliny, Pausians and Herodotos. Some of the works on which their fame rests¹ are:

1. Invention of a new technique for casting life-size sculptured statues in bronze.
2. Invention of a new technique for modeling in clay (mentioned by Pliny).
3. A Large bronze vase placed in the Temple of Hera.
4. A silver vase at Delphi made by Theodoros (mentioned by Herodotos)
5. A seal made for Polykrates, Tyrant of Samos.
6. A great silver vase made by Theodoros for Kroesos.
7. A bronze statue made by Rhoikos for Ephesus (mentioned by Pausians).
8. Theodoros invented a device for securing a straight line.
9. Theodoros invented a lathe to automate the production of the Heraion's limestone column drums.
10. Theodoros is also credited with diverting the course of the Imbrasus River to establish the platform upon which the Heraion was constructed.

Diverting the river Imbraus was an extraordinary feat of both mathematics and engineering. Theodoros shared this epoch with Pythagoras and acquired his mathematical skills from the Samian school of Mathematics. Theodoros's skills as an architect combined with skills in both engineering and mathematics enabled him to divert the Imbrasus River.

Through Theodoros' project land was reclaimed to set the platform of 105 by 52.5 meters. This platform was three times the size of its predecessor. The wooden columns of the earlier constructions were replaced by stone columns. The column heights attained were almost three times the height of the contemporary Doric columns (about 18 meters). They stood on bases which consisted of two members. The lower part is the drum which slightly curves inside, the upper part is a torus with a convex profile. Both parts were horizontally fluted with different patterns on every base. Standing on these distinctive Samian bases, the colossal columns surrounded the cella in a double row. The double row of surrounding columns had not been executed before.

The capitals were of wood and no trace today survives of these capitals, a consequence of the fact that they were made of wood. The 'advanced woodworking' technique of the Samian masters gave the Ionic capital its distinctive form.

The canonical form of the Ionic capital obtained its characteristic shape on Samos and this form became established after its adoption for the Temple of Artemis at Ephesus. Other monumental

¹ Murray 1901; Hahn 2001.

temples like the Temple of Apollo at Didyma and the Temple of Artemis at Sardis followed this example.

This marvellous temple, the first of Ionia's great temples was destroyed by fire. The cause of the fire was reported by Pausanias as the Persians. But from the suggested date of the remains of 538 B.C., it is more likely to be caused by the internal disturbances which brought Polykrates to power, rather than in the course of the Persian Wars². Polykrates began a new temple right after he came to power, the Polykrates Temple or Dipteros II, but it was never finished.

The construction of the Heraion of Samos marked the beginning of the great temple building epoch in the Ionic world and was the creation of two exceptional men. Of these two, Theodoros was also the first of the ancient master builders to write a prose treatise on architecture, lost, but which was cited from by Vitruvius. He earned a unique fame and position that encouraged the rival Ionian cities to enlist his services. Theodoros was invited to Ephesus by the Ephesians to construct the second of the sequence of great Ionic temples.

The Sentinel of the Ionic Temples: The Temple of Artemis at Ephesus

Being almost directly across from Samos on the Aegean coast of Asia Minor, the Ephesians did not like to stay in the shade of the Samians. Ephesus rivaled Samos by starting the construction of the second of the great Ionic temples. They invited Khersiphron and his son Metagenes from Crete and Theodoros from Samos to be the architects. With the involvement of Theodoros, principles of style and construction of Ionic dipterals which were first worked out in the Heraion were then modified and refined. Theodoros together with Khersiphron and Metagenes, one or two decades after the Heraion, took the great Archaic age of creativity to its zenith, producing another Ionic dipteral temple of colossal size: The Archaic Artemision. This temple gave the Ionic style such classical character, distinction and aesthetics that it put the Doric order in the shade. In many ways, the Archaic Artemision was a continuation of the Heraion, but in every aspect, it was both more lavish and mature.

The Archaic Artemision in its magnificence and beauty stood from 550 to 356 B.C., a source of admiration and inspiration. 'The archaic Artemision' writes Jenkins, 'until its destruction in 356 B.C., stood sentinel over a grand tradition, and its particular form of the Ionic order was to be the one most commonly imitated³'. The first source of information is Herodotos, from whom we learn that Kroesus (king of Lydia) was the central personality in the creation of the Archaic temple. It was known to Vitruvius, whose book provides information about the size, number and heights of the columns etc. Another primary literary source of information is Pliny, who had seen the later temple.

Just as Ephesus rivaled Samos, in the same spirit of rivalry, Khersiphron and Metagenes also wrote and made public their prose treatise. According to Hahn (2001) the motivation for writing these prose treatises stemmed primarily from claiming victory in this monumental achievement. They had every reason to entertain the emotions of a victor, since they had managed to erect the largest building in the Greek world. It was also the first monument to be built entirely from marble. Having compiled an account of their work Theodoros, Khersiphron and Metagenes began a tradition of writing architectural treatises which continued down through the Hellenistic period. Deinokrates of Ephesus wrote on the later temple.

² Dinsmoor 1950.

³ Jenkins 2006.

It is much to be regretted that neither of these treatises has survived to the present day. However, these were known to Vitruvius. Our knowledge of this temple primarily comes from Vitruvius whose information must have derived from these treatises that probably included a description of the building, in terms of its size, number of columns etc. Another source of information was Pliny who had seen the later (Classical) temple.

The temple was discovered by the English Engineer John Turtle Wood (1877) in 1869 after 6 years of efforts. In his excavations the remnants of two temples, not one, were found: both the Archaic Artemision and the Classical Artemision. The Classical Temple was erected upon the foundations of the older one. Pliny had stated that the Artemision (probably he meant the later temple) had 127 columns with 36 of them standing on sculptured drums decorated with carved reliefs. Pliny also stated these decorated columns (*columnae caelatae*) were on the front (west side) of the Temple. Fragments of these *columnae caelatae* were unearthed by Wood. One of them has been restored and is today in the British Museum, London.

Although the Archaic Artemision lay beneath the Hellenistic construction it has been possible to reconstruct it with some certainty. As with the other two Artemisions of Asia Minor, the Temple of Artemis at Sardis and Hermogenes' Temple of Artemis at Magnesia-on-the-Meander, the temple's principal facade was orientated towards the West.

The Hellenistic Temple was erected as a late classical structure over the Archaic ground plan. It was the Ionian architect Paionios together with Deinokrates (or Demetrios) who took up the task of completing the Classical temple.

The Temple of Apollo at Didyma

Paionios together with the native Daphnis were the architects of the Classical Temple of Apollo at Didyma. As with the previous examples, the Archaic temple also burned, it was burnt by Dareios in 494 B.C. The construction of the Classical temple probably began around 313 B.C., after Alexander the Great had regained independence for the Ionian Cities. Paionios drew the plans of the Didymaion to rival the Artemision. With this work Paionios would be perfecting the work he began in Ephesus. Having the same approximate dimensions, it has the characteristics of the previous temple of Artemis at Ephesus. It is the third hypaethral and dipteral temple. The number of ascertained points of resemblance between this temple and the previous ones is a consequence of the direct descent of information and experience from master to master and from the example passed from the construction of one temple to the next temple. The known differences seem to be the improvements made upon the older temple. The Didymaion was designed as a Late Classical structure, but it subsequently passed through all the stages of Hellenistic execution. This was the first and only decastyle structure among the great Ionic temples.

Enough remains have survived from this temple to make its reconstruction quite certain. The temple was remarkable for its size—163 ft (49.6 m) in the front, and 366 ft (111.55 m) in length. It stood upon a 3.4 m high platform with a flight of 7 steps. 120 columns were employed, each over 64 ft (19.5 m) height, the tallest in the Greek world. The Naiskos was exposed to the sky. The cult statue of Apollo was returned by Seleukos I, King of Syria around 300 B.C.

The Temple of Artemis at Sardis

The fourth of the great Ionic temples was the temple of Artemis at Sardis. It is the second of the greatest Ionic temples after the Didymaion to have survived to the present day. Due to its well-

preserved details its reconstruction can be made with a reasonable degree of certainty. Two of the columns still stand with their capitals. One of the architrave blocks has survived intact and three capitals were discovered during the excavations of Butler (1925).

The two capitals furnished the two standing columns are A and B. The others denoted by the letters C, D, E, F and G. Capital C was removed to the Metropolitan Museum of New York, the others remain. With large volutes and egg-and-tongue on the echinus, they reflect the Classical and even carry traces of Archaic style. The temple had 8 columns at both ends, and 20 along the sides. The stylobate is 45.51 m by 97.94 m. Although in its size and outer appearance it resembles the other three great dipterals, it differs from them in having no inner colonnades on the sides.

Results and Conclusions

The rendered images from the 3D-reconstruction of the four great Ionic Temples are given in figs. 2-6. With the advent of computer graphics, it has been possible to reconstruct them as if they are standing unharmed and in their original state today. In showing vividly how ruined buildings once looked; reconstruction work can be equally instructive in establishing how such buildings could not have looked. 3D Computer Graphics, through technological innovations, offers the ability for 'reconstructing the past' beyond those originally imagined. Considering that the disappearance of these temples is an impoverishment of the intellectual wealth of all nations, the use of this capacity of 3D computer graphics for reconstructing and re-experiencing them calls for our careful consideration.



Fig. 3 *Temple of Hera at Samos*

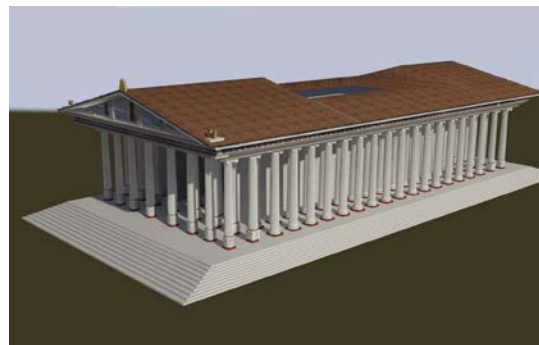


Fig. 4 *Temple of Artemis at Ephesus*



Fig. 5 *Temple of Apollo at Didyma*



Fig. 6 *Temple of Artemis at Sardis*

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CONDITORIA FRUGUM OCCULTA: A COMPARISON OF SUBSISTENCE STRATEGIES IN
ABORIGINAL NORTH AMERICA AND IRON AGE IBERIA

CONDITORIA FRUGUM OCCULTA: YERLİ KUZHEY AMERİKA'DAKİ GEÇİM
STRATEJİLERİNİN KARŞILAŞTIRILMASI VE DEMİRÇAĞI İBERİA'SI

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Abstract: In a paper published in 1988, Warren R. DeBoer criticized the interpretative conventions that very often, following his own words, misrepresent the ecological and social function of subterranean storage. By means of a critical review of the ethnohistoric and archaeological sources, DeBoer suggested that the extended use of storage pits should be regarded as a symptom of either seasonally abandoned settlements or of resistance to new and potentially oppressive sociopolitical orders. DeBoer's investigation, however, is restricted to aboriginal eastern North America. Similarly, in a geographical area comprising most of the Catalan coastal depression and pre-coastal plains, storage pits are also one of the more common archaeological features dating between the fourth and first centuries B.C. Nonetheless, no one has yet attempted a historical and macro-economic analysis of grain production in the Western Mediterranean, or tried to ascertain what was the impact of the Roman presence and how did this new interaction affected grain production and storage in the area. As a result, their interpretation still remains lacunose. In the following paper I shall explore the global implications of the diagnosis developed by DeBoer by looking specifically at the archaeological evidence from Iron Age Iberia.

Keywords: Grain Storage • Storage Pits • Iron Age Iberia • Subsistence Strategies • Pax Romana

Öz: 1988'de yayınlanan bir makalede, Warren R. DeBoer, çok sık ifade ettiği yeraltı depolamasının ekolojik ve sosyal fonksiyonunu yanlış tanıtan yorumsal eğilimleri eleştirdi. Ethnohistorik ve arkeolojik kaynakların eleştirel bir inceleme yoluyla DeBoer, depolama çukurlarının genişletilmiş kullanımının, ya mevsimsel terk edilmiş yerleşim belirtisi ya da yeni ve potansiyel baskıcı politik düzenlere karşı direnç olarak kabul edilmesini önermiştir. Fakat DeBoer'in araştırması, Yerli Kuzey Amerika'nın doğusu ile sınırlıdır. Aynı şekilde, Katalonya kıyı girintisinin ve ön kıyı ovalarının çoğunu kapsayan coğrafi alanda, depolama çukurları MÖ. IV. ve I. yüzyıl arasına tarihlenen oldukça yaygın arkeolojik özelliklerden birisidir. Yine de Batı Akdeniz'de tahıl üretiminin tarihsel ve makroekonomik analizi henüz çalışılmadı ya da Roma varlığının etkisinin ne olduğu ve bu yeni etkileşimin alanda üretim ve depolamayı nasıl etkilediğini anlamaya çalışılmadı. Sonuç olarak, onların yorumlaması hala eksik kalır. Aşağıdaki yazıda, DeBoer tarafından geliştirilen tanının evrensel sonuçlarını Demir Çağı İberia'sından arkeolojik örnekte özel olarak inceleyerek açıklamaya çalışacağım.

Anahtar Kelimeler: Tahıl Depolama • Depolama Çukurları • Demir Çağı İberia'sı • Geçim Stratejileri • Pax Romana

Introduction: The Roman Agronomists

Any archaeological study of underground storage pits in the Mediterranean basin and mainland Europe starts with a reference to the ancient narratives of the Roman agronomists Varro, Columella and Pliny the Elder, considered the principal authorities on the subject in antiquity. These confirm

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The research leading to these results has received funding from the Spanish Ministry of Education, within the Ayudas para la Formación de Profesorado Universitario (FPU) funding scheme.

that under certain conditions grain may be effectively stored underground. Varro, the earliest author among the three to mention these silos, pointed out the geographical spread of these silos in Thrace, Cappadocia and Hither Spain. He also noted the maximum duration of the grain stored in them, as well as some technicalities about the hermetic nature of this storage facility (*Rust.* 1. 57). Columella commented that in drier climates storing grain in underground pits can be done successfully, since it protects the grain from damage by weevils and similar vermin (*Rust.* 1. 6. 9). Finally, Pliny the Elder in his *Natural History* offered a very similar account to that of Varro (*HN* 18. 73. 306). These three accounts, despite being the most cited ancient narratives, do not provide much information as to why this storage method was used in preference to others.

In a paper published in 1988, Warren R. DeBoer questioned the interpretative conventions that very often, following his own words, ‘misrepresent the ecological and social function of subterranean storage’ (Deboer 1988, 1). He summarized the methodological literature on subterranean storage in terms of several questions: (a) under what environmental conditions is subterranean storage technically feasible; (b) what are the most likely formal properties (e.g., size and shape) of storage pits vis-à-vis other subterranean receptacles with different functions; (c) what taphonomic factors might alter these formal properties; (d) what is the relationship between pit “fill” and original pit function; and (e) how might pits be reliably assigned to units of contemporaneity?¹. As a result, very often the debate is restricted to technicalities that unsurprisingly demonstrate that the subterranean storage of grain is indeed feasible, as recorded in the literary testimonies cited above. In my opinion, the constant reproduction of these narratives, along with the lack of a thorough survey of both historical and ethnographic evidence, has become the source of many misinterpretations. Therefore, a methodological turn is necessary. In this regard, DeBoer’s methodological approach represents an important step towards a better understanding of subterranean storage and its social and political implications.

Underground Grain Storage in North-East Iberia: A Misunderstood Phenomenon

In a geographical area comprising most of the Catalan coastal depression and pre-coastal plains, storage pits are one of the more common archaeological features dating from between the fourth and first centuries B.C. During the construction of a new railway track in 1929 across the north-west slope of Montjuïc hill, Barcelona, several large storage pits were cut through by a trench. Serra-Ràfols, chief of the Barcelona Archaeological Commission, carried out a very short excavation in 1946, during which eight pits were identified, only four of them were excavated. According to the excavation diary², these silos, of unprecedented size at that time, did not contain much archaeological information, apart from a few pottery shards and an iron chariot wheel. All the same, this allowed Serra-Ràfols to publish posthumously in 1974 a short paper, *Las relaciones comerciales entre Iberia y Grecia durante la Segunda Edad del Hierro*, in which he attributed a strictly economic and market-oriented interpretation to the use of these storage locales, based upon their gigantic size, and associated these structures as forming a part of a colonial trade network, specially aimed at a Greek market. Following this explanation, he raised the following question: ‘*Si en el siglo IV, por lo menos, ya existía organizado en esta forma, en el nordeste de la Península, el comercio de granos, ¿es posible pensar que ya en él intervenían los griegos y que eran sus naves las que cargaban este producto para*

¹ DeBoer 1988, 3

² Fons Josep de C. Serra i Ràfols – Arxiu Institut d’Estudis Catalans.

*transportarlo ya sea a la lejana Grecia, ya a la próxima Massalia, que podía ser la intermediaria a través de la cual llegasen a Iberia las manufacturas griegas?*³.

This same interpretation made in 1974 by Serra-Ràfols has been almost unanimously adopted by modern scholars, who apply this interpretation to other silo fields. Therefore, it has traditionally been assumed that grain production in this region was high enough to be considered a resource suitable for export⁴. The execution of large infrastructure projects during the last few decades in north-east Spain has facilitated the identification of some of these storage pits –in most cases referred to as a ‘*silo field*’ when they appear in a group-, in particular those that are not associated with an important settlement. The widespread presence of storage pits in the archaeological record in Iron Age Iberia has limited their study to simplistic assertions, such as that the Iberians in north-east Spain and southern France traditionally stored their grain surplus in underground pits; this surplus, according to this explanation, would be preserved for exchange purposes. A limited number of studies, also based upon a very small number of singular and exceptional silo fields, have certainly facilitated the popularity of this market-oriented interpretation.

According to this same explanation, the development of underground storage would reflect the trading demands of the Iberians. Thus, one should look at Dominique Garcia’s *Observations sur la production et le commerce des céréales en Languedoc méditerranéen durant l’Age du Fer* (1987), as the most recent influence on the study of silos in the Iron Age Mediterranean, especially in the Gulf of Lion and the Catalan coast. Dominique Garcia carried out a thorough survey of all types of storage in Languedoc, and how these are distributed throughout the different sites. In his conclusions, Garcia explicitly acknowledged the relationship between subterranean grain storage and commerce: ‘*Ainsi donc le phénomène de stockage et l’intensification du commerce massaliote à partir de la seconde moitié du Ve siècle avant J.-C. semblent liés: cette donnée est au moins commune à la Catalogne, au Languedoc et à la Provence*’⁵. This suggestion, however, does not address one of the most essential aspects in order to fully understand the archaeological record: the variability over time and space.

Ethnographic and Historical Observations

The *Germania* of Tacitus and the *Bellum Africanum* are two examples of the many ancient literary instances where references to subterranean storage are found. Tacitus in his *Germania* indicated that it was common practice among the German peoples to store grain underground, in order to protect it from the winter cold and also to hide it away from the enemy in case of a hostile incursion: ‘*It is also their custom to open up underground pits and to load them on top with a great deal of dung; these serve as shelter from the winter weather and as storage for produce, since places of that sort temper the rigour of the cold; and if at some point enemies invade, everything exposed is devastated, but what is hidden and buried is either not known to exist or eludes by the very fact that it must be sought*’ (Germ. 16. 3)⁶. Also the *Bellum Africanum*, attributed both to Caesar and to Hirtius, insists on this aspect of underground storage as it offers protection not only against bacteria, but also from requisition by hostile men since it is a storage device difficult to track down: ‘*There is in Africa a custom among the natives whereby both in the open fields and in practically all their farm buildings they have a secret un-*

³ Serra-Ràfols 1974, 221.

⁴ cf. Garcia 1987; Asensio *et al.* 2002.

⁵ Garcia 1987, 97.

⁶ Translation by J.B. Rives 1999.

derground vault for the storage of corn, the main motive for this provision being wars and the sudden appearance of an enemy' (Bell. Afr. 65)⁷.

Other historical and ethnographic accounts from later periods, belonging to different chronological and geographical contexts, emphasize the use of underground storage as a means of defence against human, not biological, danger⁸. Warren R. DeBoer referred to three testimonies related to subterranean storage for the plains and woodlands of North America, belonging to the seventeenth, eighteenth and nineteenth centuries⁹. These three accounts also indicate the importance of concealment in order to protect surplus. In the 1696 French campaign against the Onondaga, Frontenac complained that it took two days for the finding and '*digging up the caches, or hidden stores of food, and destroying their contents*'¹⁰. In the eighteenth century, Charlevoix observed that the Miami, '*when they are obliged to be away from home for any time, or when they apprehend some irruption of the enemy, [...] make great concealments under the ground*'¹¹. Farther west and later in the nineteenth century, Bradbury remarked: '*the nations of the Missouri always liable to be surprised and plundered by the Teton villains, annually conceal a quantity of corn, beans, etc. after harvest in holes in the ground, which are artfully covered up*'¹².

Without regard to specific details, DeBoer adopted the security reasons made explicit in a number of ethnographic reports in order to review the storage evidence in Eastern North America. For the purposes of this paper, of particular interest are those instances in which underground storage is associated with the establishment of new and potentially oppressive sociopolitical orders. In relation to the late prehistory of the American Bottom (IL.), DeBoer argued that the variability in the use of subterranean storage in suburban Cahokia might be a manifestation of an ever-increasing regional hegemony of Cahokia. Therefore, according to DeBoer, this new circumstance did '*not require concealment from pilfering strangers during episodes of settlement abandonment, but they might encourage concealment from tribute demands emanating from a new kind of enemy, presumably in the form of elites based at Cahokia itself*'¹³. From there DeBoer (1988, 14) deduced the following: '*Rather than a marker of institutionalized social inequality, subterranean storage is more likely to be a powerful signal of resistance to a new social order*'. Concealment of grain surplus from a new (and potentially oppressive) sociopolitical order is also attested in other regions. For example, the ethnographer and explorer W. Thomson (1880, 90) surveyed Palestine when these pits were still in use, and he reported in 1880 the following: '*I saw people storing away grain in cisterns far out in the open country between Aleppo and Hamath, and they did this to hide it from the government tax-gatherers*'. This strategy has also been attested in Ancient Thrace, one of the regions where according to Varro people used to store their produce in underground silos. Ammianus Marcellinus (31. 6. 5-6), who wrote in the fourth century, is quite explicit on this aspect: '*They [the Goths] approved the counsel of the king [Frigitern] ... and advancing cautiously they spread over every quarter of Thrace, while their prisoners or those who surrendered to them pointed out the rich villages, especially those in which it was said that*

⁷ The Loeb Classical Library editions were used for the Latin translations in this paper unless otherwise stated.

⁸ Fenton 1983.

⁹ All three cited in DeBoer 1988, 1-2.

¹⁰ Parkman 1966, 413.

¹¹ Kinietz 1965, 174.

¹² Krause 1972, 41.

¹³ DeBoer 1988, 10.

abundant supplies of food were to be found. ...there were not a few who were expert in following out veins of gold, and who could no longer endure the heavy burden of taxes; these were welcomed with the glad consent of all, and rendered great service to the same, as they wandered through strange places, by pointing out hidden stores of grain [conditoria frugum occulta], and the secret refuges and hiding-places of the inhabitants’.

Interpreting the Archaeological Evidence

The chronological distribution of the use of storage pits in Iron Age Iberia reveals an extended use of this storage strategy between the fifth and the first centuries B.C., with an absolute and unprecedented predominance during the second century (cf. Figs. 1 and 2).

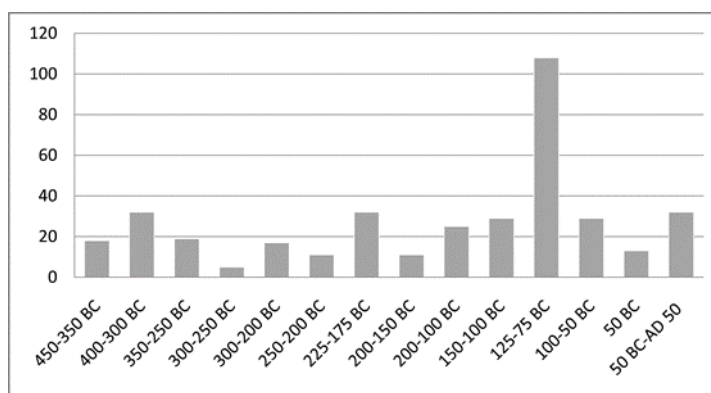


Fig. 1 Chronological distribution of settlements where storage pits have been documented

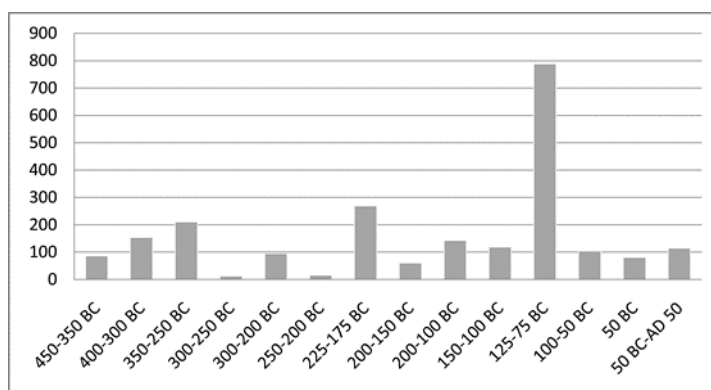


Fig. 2 Chronological distribution of storage pits

Needless to say, the concealment of food and the security reasons have been omitted in most archaeological studies concerning underground storage in Iron Age Iberia. The association during the second century B.C. of the expansion in the use of underground storage with the emergence of a new sociopolitical order, however, has been suggested before, but this expansion has often been misinterpreted as an intensification of agricultural activities in order to meet Rome's grain requirements: '*... nous pensons que l'on peut assez raisonnablement envisager, en basin audois, la possibilité d'une incitation à une production excédentaire et d'une collecte de céréales, destinées au commerce ou aux besoins militaires, pendant les décennies qui ont précédé et suivi la création de la Province*'¹⁴. This

¹⁴ Rancoule 1992, 79.

presumed intensification of agricultural activities, based on the existence of these pits, has also been tied to the introduction of taxation by Rome: ‘... *el fet que les comunitats sotmeses a Roma paguessin un tribut anava acompanyat d’un increment de la producció agrícola, i això es constata amb el creixement espectacular del nombre de camps de sitges i per una major dispersió dels nuclis d’emmagatzematge*’¹⁵. This explanation, however, runs the risk of conflating subterranean storage with storage in general, as Warren R. DeBoer would put it. Besides, this interpretation contradicts the ethnohistoric evidence.

The military insecurity, which goes beyond the second century BC in North-East Spain and Southern Gaul, was followed and even magnified by the emergence of a new and potentially oppressive sociopolitical order during the second century BC. A few literary instances demonstrate that Rome’s food requisitioning policy, very often illustrated by Cato’s proclamation in 195 BC, was (un-surprisingly) opposed by the local communities. Cicero in his speech on behalf of Marcus Fonteius, who had been *praetor* of the Narbonensis province in the years 75 to 73 BC and accused of corrupt practices during his tenure, devotes much of his speech to defending what seems to have been Rome’s common practices in the past, declaring that ‘... our opponents are the men who met these requisitions with the utmost reluctance’ (*Font.* 6.16-17). Such demands are previously detailed: ‘... he requisitioned large troops of cavalry to serve in the wars then being waged all over the world by the people of Rome, large sums of money to provide these with pay, and enormous quantities of corn to enable us to carry on the war in Spain’ (*Font.* 6.12-13). These practices are confirmed by Livy (43.2)¹⁶, who reported the dispatch of a Spanish embassy in 171 BC, in which they complained about oppressive requisitions carried out by the *praetor* Lucius Canuleius: ‘Next some representatives from several peoples of the two Spanish provinces were brought before the Senate. They complained about the greed and arrogance of Roman officials; on bended knee they begged the Senate not to let Rome’s own allies be robbed and persecuted more scandalously than its enemies’. In this scenario, subterranean storage could be reasonably viewed as a concealment strategy in response to Rome’s requisitioning policy. Relatedly, the consolidation of Roman control in the region during the first century BC, may have actually resulted in the gradual abandonment of storage pits. Silos in Iberia reappear in Late Antiquity, and they are found in Iberia especially during the Middle Age. As a primary hypothesis, one could effectively draw an association between the abandonment of underground storage in Iberia and the consolidation of the *Pax Romana*.

Conclusions: A Response to Risk and Uncertainty

Beginning at the fifth century BC, there was an increase in the level of the social, political and economic complexity in North-East Iberia, especially at the turn of the fourth and third centuries BC. Consequently, as some have suggested, a state of endemic warfare emerged. The fortification of settlements, for example, is very often interpreted as a testimony of this¹⁷. All the historical and ethnographic records on the spread and general use of storage pits might suggest that the substantial increase of these silo fields might also be the result of an increased instability in the region. Besides, the instability generated in the western Mediterranean from 264 BC and the uninterrupted military presence in Iberia during the second half of the third century BC and throughout the second centu-

¹⁵ Gebellí 2007.

¹⁶ Translated by J. D. Chaplin 2007.

¹⁷ Sanmartí *et al.* 2006.

ry BC, did certainly increase this instability and uncertainty. This argument is also strengthened by the chronological and spatial distribution of silo fields. Therefore, rather than an index of increasing trade, extensive silo fields in this area could have originated as a result of the necessity of the local communities to secure their subsistence during a very unstable period and does not by itself signify an intensification of agricultural activities. At the same time, this new approach should allow us to reconsider the role of storage pits as evidence to study the economy of the Iberian communities, and more specifically grain production.

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A NEW WAY OF DRINKING:
THE DISTRIBUTION OF THE KRATER FORM IN THE NORTH-LUCANIAN DISTRICT
*İÇMENİN YENİ BİR YOLU: KUZEY LYCANIA BÖLGESİ'NDE KRATER FORMUNUN
YAYILIMI*

MICHELE SCALICI*

Abstract: In the Archaic period banquet services are widely found in the luxurious assemblages in tombs. On the inner side of Southern Italy, the main pot of the set is the so-called *cantaroide*, probably used in the consumption of a locally produced alcoholic beverage. Unlike in other parts of Italy, in the North-Lucanian area the spread of the krater shape is rare. Furthermore, kraters were produced by local workshops only in the 5th century B.C. The present paper aims to analyze the distribution of the krater shape in the North-Lucanian area in order to compare this data with that from other areas of Southern Italy, in the attempt to cast some light on the causes of this phenomenon and to outline the possible places of production.

Keywords: Krater • North-Lucanian • Wine • South Italian Pottery • Indigenous Culture

Öz: Arkaik Dönem'de, ziyafet servisi, lüks mezar topluluklarında yaygındır. Güney İtalya'nın iç kısımlarında, serinin ana kabı muhtemelen yerel olarak üretilen alkollü bir içecek tüketimi için kullanılan cantaroide olarak adlandırılır. İtalya'nın diğer diğer bölümlerinden farklı olarak Kuzey Lucania bölgesinde krater şeklinin yaygın olması nadirdir. Dahası kraterler sadece MÖ V. yüzyılda yerel atölyeler tarafından üretilmiştir. Bu makale, Güney İtalya'nın diğer bölgeleri ile verileri karşılaştırmak için, üretimi mümkün kılan yerleri belirtmek ve bu olgunun nedenlerine ışık tutmak ve üretimi mümkün kılan yerleri belirtmek çabası içinde, Kuzey Lukania bölgesindeki krater şeklinin yayılmasını analiz etmek amacındadır.

Anahtar Kelimeler: Krater • Kuzey Lycania • Şarap • Güney İtalya Çömleği • Yerli Kültür

The spread of wine and the vessels employed in its consumption are attested in Southern Italy from ancient times¹. From an archaeological point of view we have today only the vessels employed for drinking².

In the North-Lucanian district the imports of pottery that can definitely related to the consumption of wine are found from the second half of the 7th century B.C. onwards (Fig. 1). These are the cups and *kotylai* found amongst the goods in the richest graves. Were the fillet-cup or the red painted-cup produced in the Greek colonies of the shores, Taranto and Sibari in particular, or were they imported from Greece as uncommon examples of Corinthian pottery or Ionic cups of the oldest type³? During the 6th century B.C. the distribution of these cups is widespread: amongst the goods of almost every grave there are present Ionic cups of the B2 type produced in the Greek colonies, from Metaponto and Poseidonia in particular, sometimes with more than one copy⁴.

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I wish to thank F. Hook for support and help with the English translation.

¹ Brun 2009.

² Sourisseau 2009.

³ Vullo 2009; 2012.

⁴ Ferreri – Vullo 2013, 108.

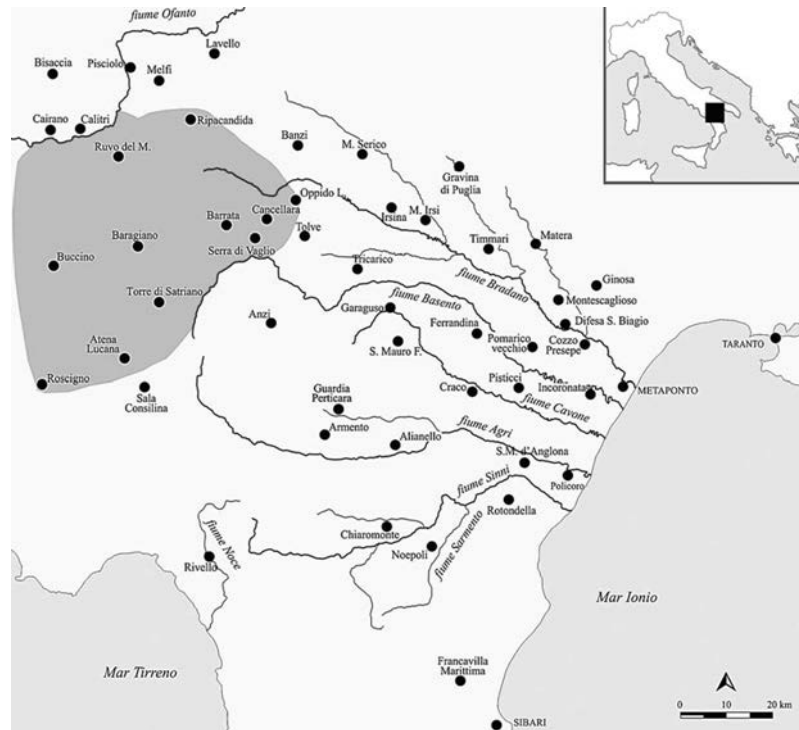


Fig. 1 South Italy, in Gray the North-Lucanian District (After Osanna and Vullo 2013)

Alongside the Greek productions of this period there is a spread of Etruscan objects: the precious Rodianoinochoai in bronze and, confined to the W sector of the North-Lucanian district, kantharoi of bucchero ware⁵. The period between 550 and 500 B.C. has the largest influx of imports from Greece: the richest tombs and the residences of leaders exhibit objects of Attic production. It extends from the simple and elegant Kassel-cups, band-cups and lip-cups, the eye-cups and the cup-skyphoi, to the large parade cups⁶. Alongside the absolutely overwhelming drinking forms, there are the occasionally attested forms for pouring and for containing beverage, also made of metal. The krater shape is really uncommon: today the most ancient known is an Attic black-figure krater (Fig. 2), dated to 530-520 B.C., found in the so-called anaktoron of Torre di Satriano⁷.

The krater form appears amongst grave goods only from 520 to 500 B.C. The most ancient examples of the krater form in the North-Lucanian district come from Vaglio: 7 pseudo-columns kraters, closer to Greeks models, dating from the end of the 6th and 5th centuries B.C. found in rich tombs⁸. This type of krater is usually partially painted in black, with a short-neck and an ornamental panel on the shoulder with Greek type motifs (Fig. 5). They are considered to be of local production but they seem entirely unrelated to the known sub-geometric North-Lucanian ware. Instead they seem to be imitations made of Greek prototypes: very important is the decoration on the rim, typical of Corinthian kraters; it is possible that they may have been manufactured by Greeks who had moved to inland sites. Only one krater was found in each burial. In 6 cases in the tombs of adult

⁵ Bottini – Tagliente 1993; Scalici 2013a, 22-24.

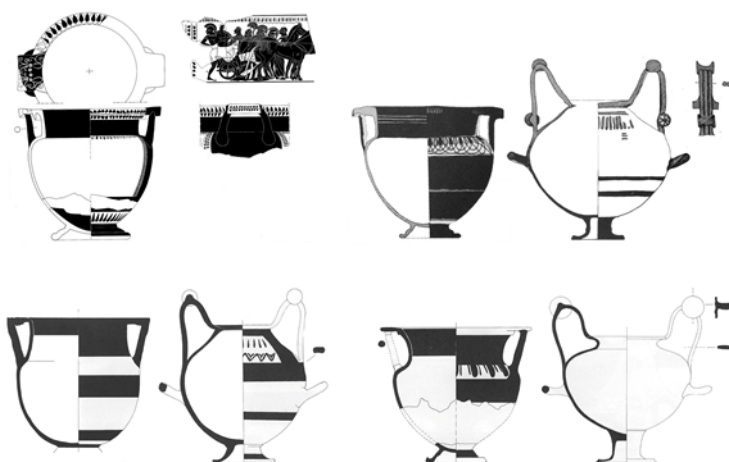
⁶ Russo 2009; Ferreri – Vullo 2013, 108-110.

⁷ Ferreri – Vullo 2013, 109.

⁸ Bottini – Setari 2003, 90.

males characterized as warriors with the presence of offensive weapons and armor parts (shields, helmets, belts, equine harnesses) and, in one case, the krater was found in a burial of a female child⁹.

Torre di Satriano



Ruvo del Monte



Ripacandida



Fig. 2 *Kraters from North-Lucanian Sites*

(Adapted from Bottini 1981; Holloway 1970; Osanna and Vullo 2013; Roca 1994; Setari 1998-1999)

From the *Torre di Satriano* site 4 kraters are known, from tombs dating from the first half of the 5th century B.C. (Fig. 2). These are of the column type, decorated with bands or a central panel with Greek motifs¹⁰. They have only been found in male burials, always in association with a *nestoris*, a local vase probably used for a local wine or beer¹¹. The krater from tomb 31, more similar to the *Vaglio* forms, may have been manufactured by craftsmen of Greek culture (Fig. 2); the other two kraters appear to be of local manufacture. A fifth krater, from a later tomb, shows an evolution in the type¹². A

⁹ Bottini – Setari 2003, 34, no 74.

¹⁰ Holloway 1970, 52 no 42, T 7, figs. 97; 56, no 58, T 8, fig. 104; 59-60, no 75, T 9, fig. 110; Roca 1994, 120, no 4, T 31.

¹¹ Colivicchi 2004; Scalici 2013b.

¹² Colangelo 2009, 16 fig. 9, T 33.

pseudo-column krater dated to the first half of the 5th century B.C. is also attested in a funerary assemblage from the *Roscigno* site¹³.

At the *Ruvo del Monte* site the most ancient examples of the krater form date from the period between the late 6th and early 5th century B.C. These are two pseudo-column kraters strongly linked to local sub-geometric production. They have a very particular form with a globular body, short-neck and out-turned rim with a plate attachment joined to the handles. They are painted in the so-called *Ruvo II* decoration system¹⁴: the tomb 31 krater has broken lines as the main motif in the central panel and a net-pattern on the handles (Fig. 3); while that from tomb 115 carries a simple ornamentation with just bands and groups of lines (Fig. 2); both have extra checkerboard motifs on top of the handles. They are attested in single examples: in one case, tomb 115, in a male burial in combination with a *nestoris*. Fragments of a third example were found in one sector of the necropolis next to tomb 115. From *Ruvo del Monte* also comes a great volute-krater (Fig. 2), probably produced in Taranto, from a rich male burial dating from the half of the 5th century B.C. in combination with 8 *nestorides*¹⁵. Finally an Attic krater, dating from the half of the 5th century, came from tomb 154.

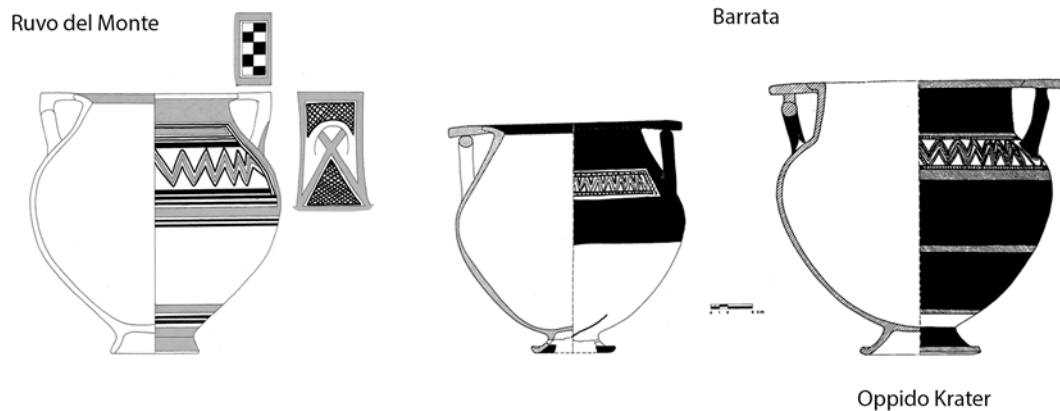


Fig. 3 Kraters from North-Lucanian Sites (Adapted from Mutino 2006)

At the site of *Ripacandida* the krater form is attested from a slightly late period than other North-Lucanian sites, from the first half of the 5th century B.C.¹⁶. They are locally produced pseudo-column kraters, decorated in the sub-geometric style (Fig. 2). They are attested as single examples in both male and female burials. This type of krater is also attested at *Ruvo* (T 140). A krater from a more recent burial (T 59), from the second half of the 5th, is partially painted in black and has an ornamental panel with Greek type motifs (Fig. 2).

From the *Barrata* site came two pseudo-column kraters with a broken lines pattern panel. The older came from a burial of an adult (T 12) dating probably from the first half of the 5th century B.C. and it is very close to the two kraters of *Ruvo del Monte* (Fig. 3). The more recent chronology proposed by Sabrina Mutino (2006, 35; 68-70) was just based upon the comparison with Oppido type kraters, which generally have a slightly later chronology. The second, sporadic, appears slightly later¹⁷.

¹³ Greco 1996, 93 no 38.4.

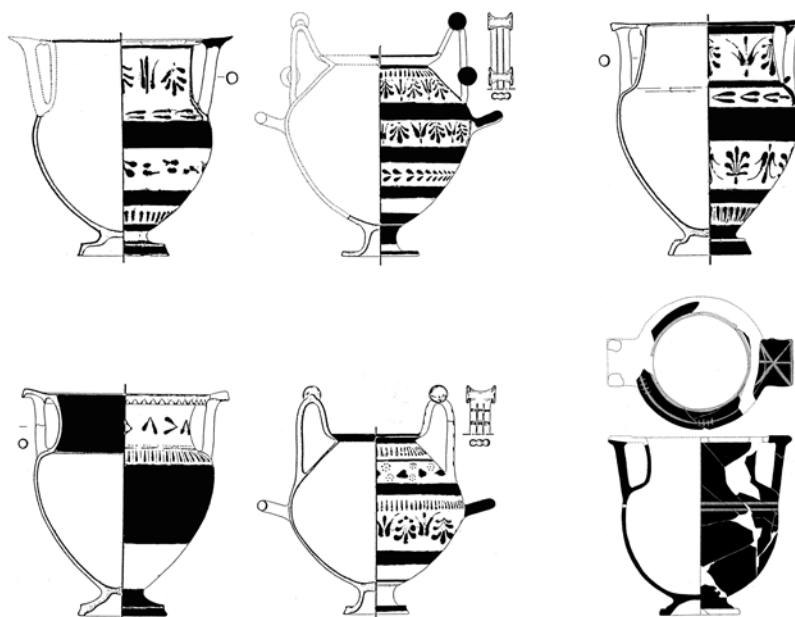
¹⁴ Scalici 2013b, 37-39 fig. 4.

¹⁵ Bottini 1981, 253 no 201, T 24, fig. 59.

¹⁶ Setari 1998-1999, 74.

¹⁷ Mutino 2006, 72.

Buccino



Ruvo del Monte



Fig. 4 Kraters from North-Lucanian Sites

(Adapted from Bottini 1981; 1985; Collina 1985-1988; Osanna and Vullo 2013; Pica 1992)

In *Oppido Lucano*, probably dating from the first half of the 5th century B.C., there spread a kind of locally produced krater that seems to be derived from the type present at *Ruvo* and *Barrata* at the beginning of the 5th century¹⁸. It is a large vase with trumpet foot, short-neck, plain rim, plates joined to the pseudo-column's handles, less attested is the type without plates (Fig. 3). The body is painted in black except for the lower side and the panel on the shoulder is decorated with red and black broken lines; another model has two decorated panels with a wavy line on the shoulder and the neck. There is always one krater in every tomb, generally in adult male burials, except in one case where there were two examples¹⁹. Kraters similar to these were also found in the neighboring sites of *Cancellara*²⁰, *Tolve*²¹ and *Vaglio*²².

¹⁸ Lissi-Caronna 1990-1991, 233 fn. 91.

¹⁹ Lissi-Caronna 1980, 184 nos 6-7, T 50, figs. 86, 89-90.

²⁰ Fabbricotti 1976, 332-333 no 5, T 1, fig. 5.

²¹ Pica 1992, 134-135 T 7.

²² Greco 1982, 73, 86 T 2, fig. 13.

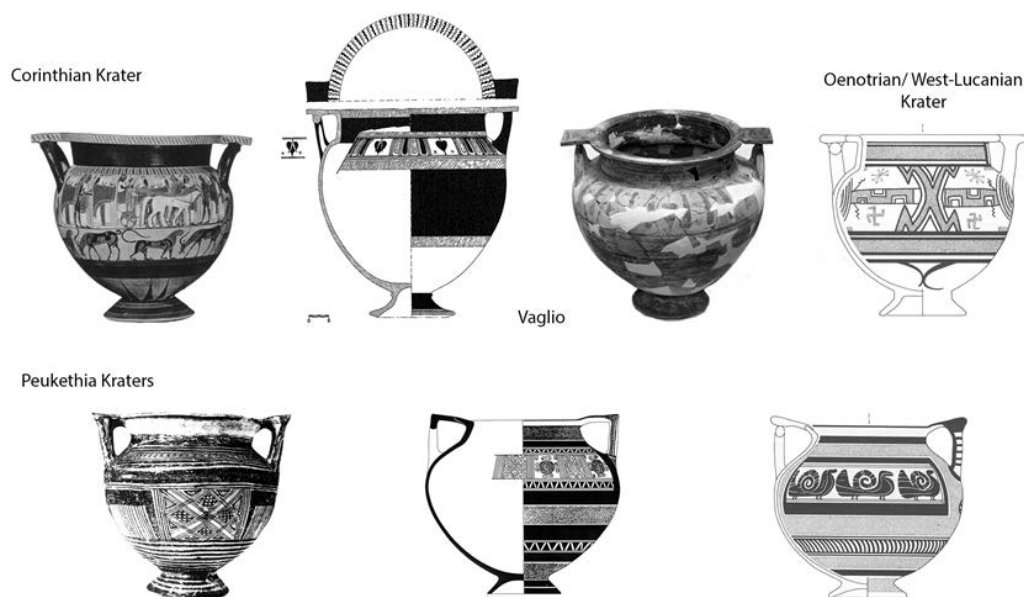


Fig. 5 *The Corinthian Kraters and its Imitations*
 (Adapted from Bottini and Setari 2003; De Juliis 1995; Yntema 1990)

After the first half of the 5th century the krater appears to have been widespread throughout the North-Lucanian district. At *Buccino* some examples were found in association with *nestorides* (Fig. 4) with stripes decoration with a Greek type motif²³. From *Ruvo del Monte* there is evidence of column or pseudo-column kraters (Fig. 4), painted in black with partial overpainting in red, or with a panel decorated with Greek type motifs²⁴. There is always only one krater to every tomb, associated with mid-level grave goods that never have the *nestoris*. In the same period, in the richest burials of the necropolis, there are kalyx and bell-kraters of Proto-Lucanian production (Fig. 4) attributed to the Painters of Pisticci and Policoro, in association with local *nestorides* painted in the *Ruvo III* decorative system²⁵. Similar kraters (Fig. 4) are also attested from *Vaglio*, T 68, Painter of Pisticci²⁶, and from *Tolve*, T 1, loc. Gambarara, attributed to the workshop of the painter of Pisticci²⁷.

To summarize, the krater form appeared in the North-Lucanian district very late, in the last quarter of the 6th century B.C. In the beginning imports are very rare, they are mainly local products that rework Corinthian prototypes (Fig. 5), or rework the early Attic type that imitated the Corinthian, as can be seen from the shape of body, the shape of the handles and from the typical decoration reproduced on the krater of tomb 101 of *Vaglio* (Fig. 5). Corinthian kraters are not attested in the North-Lucanian district, but we know of some examples from the sites of Basilicata and from S. E. Puglia²⁸. During the 6th century B.C. it was the model for the making of a local krater type also found among other ethnic groups of Southern Italy (Fig. 5): at the sites of Peukethia²⁹, in the valley

²³ Collina 1985-1988.

²⁴ Bottini 1981, 266 no 315; Scalici 2009, 46 fig. 7.

²⁵ Bottini 1985.

²⁶ Greco 2013, 310.

²⁷ Pica 1992, 140.

²⁸ Togninelli 2004, 102-103, 139-141, tav. XXI; Trombetti 2009.

²⁹ De Juliis 1995, 31.

of the Bradano River³⁰ and the Enotria³¹. The kraters from *Vaglio* (Fig. 5) and *Satriano* (Fig. 2) are more related to the Greek prototypes, while those from *Ruvo* are related to the local matt-painted production from the rim shape and the ornamentation (Figs. 2, 3). This type of krater may have formed the prototype for the *Oppido* type (Fig. 3). Between the end of the 6th and the first quarter of the 5th century they are not very common: found in the richest men tombs, except for the child burial of *Vaglio*, tomb 102, in a single example, often in association with the *nestoris*. From the decades around the first half of the 5th century the number of production workshops for kraters increases (*Ripacandida*, *Oppido*, *Ruvo* and *Buccino*) and the form is more commonly attested, almost always by a single example, and often no longer associated with the *nestoris*. Imports are very limited until the second half of the 5th century when kraters of Proto-Lucanian production begin to be found in the richest burials (Fig. 4).

The shape of *oinochoe*, another vessel type associated with the consumption of wine, has diffusion across the North-Lucanian district that does not differ from the diffusion of the krater shape. Despite very few known examples imported from Greek or Etruscan areas, several copies were produced locally in the second half of the 6th century and are decorated with subgeometric motifs, or more often coated with brown paint to reproduce a metallic surface (Fig. 6). The site of *Torre di Satriano* stands out for this particular production where many *oinochoai* with bifid handle painted in brown³² have been found. The vessels to drink from however, are very common, both in male and female graves, and were still imported.

Therefore, why did the krater spread so late and not in quantity? Why is it almost never imported but almost always locally produced? To explain the phenomenon we can propose three different reasons. According to the first hypothesis, the answer may have commercial reasons: as the cups are easily transported because they are small and can be arranged in a pile; *oinochoai* and kraters are more fragile and may break during transport overland on carts. A comparison for this might be the poor circulation of closed shapes produced in ARS in comparison to the great production of dishes and cups³³.

The second is a social reason, linked to the consumption of wine: the krater began to spread from the end of the 6th century amongst the local elite, but the practice of the symposium would only become accepted during the 5th century B.C. Therefore, until that period, the consumption of wine would have occurred in a different way.

The third is a symbolic reason, partially complementary with the second reason. Until the beginning of the 5th century B.C., Greek cups would not have had the exclusive function of being the container suitable for wine consumption but would also have been charged with a high symbolic value³⁴. They may have been used during a ceremony that sealed a pact with the leader who was able to acquire luxurious goods and redistribute them to the clan members. One of these redistributed goods could have been Greek wine. In this sense, the krater would be a prerogative of only the chief, who strengthened his leadership through rituals ceremonies, creating a bond with the participants³⁵. This bond could be renewed or not at the death of the leader himself.

³⁰ Yntema 1990, 184.

³¹ Yntema 1990, 133-135.

³² Scalici 2013c.

³³ Bonifay 2004, 155-210.

³⁴ Dietler 2001; 2005.

³⁵ Osanna 2013, 124, 130-135.

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CHANGES AND DEVELOPMENTS IN BURIAL CUSTOMS: TRACING THE CIVIC ELITE
IN WESTERN ANATOLIA

GÖMÜ GELENEKLERİNDEKİ DEĞİŞİKLİKLER VE GELİŞMELER: BATI ANADOLU'DA
ŞEHİRLİ ELİT KİŞİNİN BIRAKTIĞI İZ

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Abstract: Funerary architecture in western Anatolia reflects the cultural, religious and social life habits of various ethnicities, indicating the development of older religious ideas and beliefs. In the Hellenistic period certain changes in the burial cult appeared, which are traceable in material culture and also attested by written sources. Especially important was the role played by the Eastern Greek poleis, where the new diversity of civic culture occurred. Numerous epigraphic evidence attest to the rewarding of certain members of society in a spectacular way, which could be related to the transformation of the hero cult or to the resumption of the ancestor cult. It is expected that modification to older practices was permitted by political and constitutional changes in the polis, the tradition of establishing heroes and praising certain members of Greek society or local customs at the same time. The varied types of tombs correspond to the wide range of burial rites, as well, the varied ethnic composition of western Anatolia. Cremated remains, frequently placed in the same tomb as inhumations, suggest that both rites could be practiced within the same family.

Keywords: Civic Elite • Dynastic • Honorific Decree • Memorial • Tomb

Öz: Batı Anadolu'da cenaze mimarisi, daha eski dini fikirlerin ve inanışların gelişimini vurgulayan çeşitli halkların kültürel, dini ve sosyal yaşamındaki alışkanlıklarını yansıtır. Hellenistik Dönem'de materyal kültür kalıntılarında izlenebilen ve yazılı kaynaklarla da desteklenen gömü kültüründeki belirli değişiklikler görünür. Elit kültürün yeni oluştuğu Doğu Hellen kentleri tarafından oynanan rol özellikle önemlidir. Birçok epigrafik kanıt, şaşırtıcı bir şekilde toplumun bazı üyelerinin ödüllendirmesini kanıtlar, ki bunlar kahraman kült dönüşümü ya da ata kültürünü sürdürme ile ilgili olabilir. Daha eski uygulamaların değişikliği, siyasi ya da anayasal değişiklikler tarafından, kahramanları saptayan ve Hellen toplumunun veya aynı zamanda yerel vergi ödeyen belirli üyelerini öven gelenek tarafından izin verilmesi beklenmiştir. Çeşitli mezar tipleri, batı Anadolu'nun geniş etnik yapısının yanı sıra cenaze törenlerinin büyük çeşitliliğine karşılık gelir. Sık sık aynı mezarda inhumasyon olarak da yer alan kremasyon kalıntıları, aynı aile içerisinde her iki ritüelin de uygulanabildiğini ortaya koyar.

Anahtar Kelimeler: Şehirli Elit Vatandaş • Hanedan • Onurlandırma Kararı • Anıt • Mezar

Cultural interaction between the East Greeks and local ethnicities in western Anatolia is attested from the Late Bronze Age onwards, as strong links between them are not merely limited to the political context but also emphasized from archaeological evidence. Anatolian tradition certainly contributed to changes in burial rites within Greek communities. Numerous funerary monuments, inspired by varied architectural structures, persisted in the form of the archaeological remains in this area. Their owners were citizens of the poleis as much as of local ethnicities, living in close cultural symbiosis with Greek centres and developing distinctive concepts and styles of funerary

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VEGA 2/0146/18.

architecture¹. Modified and renewed, the Greek and the Anatolian traditions were still in use as indicated by grave monuments, continued in the subsequent period and make the identification of the owners of these tombs more difficult. It is important to identify the diverse meanings of monuments, connected with beliefs, customs and social stratification. In this case mutual interference between Greek and the non-Greek settlements can certainly be supposed. Archaeological evidence is complemented by multiple epigraphic testimony relating to the public life within both Greek and mixed communities.

Except for the sepulchral inscriptions, the most relevant information is provided by honorific and memorial decrees and inscriptions, indicating awards for individuals post mortem or even during their own life time. The location of those inscriptions on the walls of public buildings or in temple temenoi (Sinuri, Mylasa or Labraunda) was also significant. The veneration of dead family members was closely connected with ascribed social rank and prestige. The precise identity of the recipients of the cult, venerated as heroes, the development and transformation of this process has been debated, while the term *hērōs* in itself poses a complex task of definition. The civic statement and ideology of notables and the prominent, and later also ordinary individuals, come into prominence over a wide range of activities. It could be regarded as the local reflection of the multiplicity of meaning and of ideological statements in post-Classical art and culture. Changes of perception and in customs concerning funerary habits, are visible through the strong emphasis on ritual dining and pointing to the higher social status of the deceased. Hellenistic honorific portrait-monuments, plentiful, judging from the available evidence, could be closely related to the development of private hero cults. The recipients of statue honours were deserving individuals and the practice of setting up statues was part of further developing the manner of honouring, and more generally of developing civic culture².

Building temple-like grave monuments, the designation of the deceased by various terms indicating a semidivine character or venerating individuals whose deeds were considered extremely important for society, are actions taken that refer to a clearly defined perception. Further modification of the earlier hero cult, understood as ancestral veneration in the context of the polis, took a place. In this case the cult of the dead, tomb or ancestor cult and hero cult are partially overlapping. With the changing meaning of public life in the Hellenistic age individuals were seeking for adoration by way of honours, tributes and even divinization. Archaeological and epigraphic material from various localities suggest that changes within burial rites, with an emphasis on sacrificing of the *thysia* type and consuming, took a place. Already in the peak of the Classical period, the term *hērōs* was used in the sense of decedent in Greek speaking areas, including in Ionia and its colonies. This Panhellenic phenomenon with the aspect of the worshipping of heroised ancestors, manifested in magnificent funerary monuments, was adopted by local ruling dynasties in the fourth century B.C. Scholars nowadays agree that the term *hērōs* attested on the Hellenistic grave stelai did not mean simply decedent, as a sign of the devaluation of hero-cults after the Classical period, but it seems that this individual was in some way considered as special and being distinct from the ordinary dead³.

An attempt to emphasise certain members of the polis can be observed from the beginning of

¹ Henry 2013, 89.

² Ma 2013, 8-34.

³ Ekroth 2007, 102.

the Archaic period. Further depiction and even heroisation of citizens is rooted in post-Classical communities, where the legitimizing of state power and promoting a shared awareness took a place. Of particular significance were the Greek cities of western Anatolia, where the honorification of citizens happened during their own life-time. The close connection of the hero cult and public affairs is presumable since poleis were becoming established in their essential elements. Erecting public memorials was also characteristic of local communities in Lycia and Caria. Such tradition could contribute to the development of the ruler cult, even enhanced by the numerous poleis and koina in this area. The process of honorification can be reconstructed from written sources, epigraphic material and the abundant presence of honorific statues, preserved mostly in pieces. Citizens of the Greek cities after the Classical age still used religion to construct their cultural identities and political experiences, while many of the features of traditional polis religion survived in a modified way. The presence of independent Greek cities and local dynasties subordinated to central rule was characteristic of the whole of south-western Anatolia. Its political history in the third century B.C. was complicated, consisting mainly of struggles between Seleucids and Ptolemies, whose main interest was focused upon the Greek cities⁴.

The Seleucids, regarding themselves as the successors of Alexander, had adopted his policy, according to which the liberty of the cities depended upon the will of the governing king. Consequently, the bestowal of freedom and other privileges was an act which was unilateral and revocable, and which had to be confirmed by every new king on his accession. The preeminence of Greek customs and the domination of the Greek political elite was concentrated mostly in the urban areas. Two primary changes in the Hellenistic period should be mentioned: members of the local ruling dynasties became notable euergetai of numerous poleis and many wealthy individuals, performing public service for the benefit of polis, were honoured in very spectacular ways⁵.

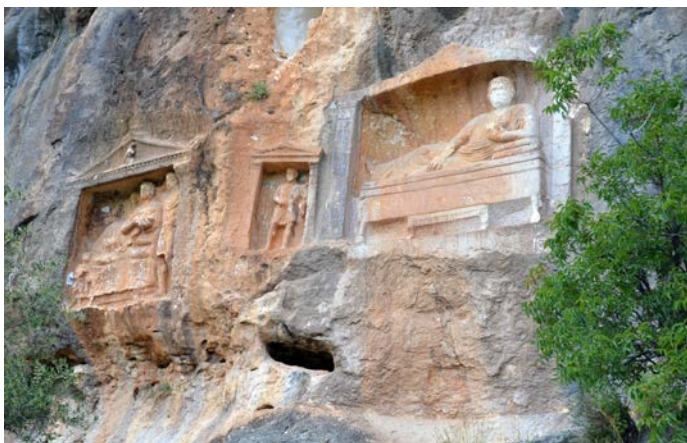


Fig. 1 *Monuments Carved to the Memory of Deceased at Adamkalyar, Cilicia* (Photo: Erik Hrnčiarik)

Important contributions may be seen in new kinds of social and political organizations, which has become known as regimes of the notables⁶. A fundamental change in political culture can be recognized in the previous period, since the position of the civic elite in the Hellenistic period did not differ essentially from the Late Classical one⁷. Epigraphic documentation indicates that boule and demos were still deciding on the kind of issues that had been on the agenda centuries earlier⁸. However, the spirit

of isonomia had been replaced by emphasis upon rank and hierarchy, attested also by portrait statues

⁴ Reger 2007, 460-483.

⁵ Hands 1968, 62-65.

⁶ Robert 1984, 35-45.

⁷ Habicht 2005, 93-100.

⁸ van Nijf – Alston 2011, 1-27.

and numerous inscriptions that recorded the names and deeds of the trusty citizens (Fig. 1).

As a result of the turbulent political events, the East Greek cities looked for guardians of traditional civic values, even if granting honours at first highlighted kings or royal officials. The tradition of valuing to a large extent certain individuals was not foreign to the numerous poleis in western Anatolia, especially in the case of close co-existence with local communities. These poleis, often organized into *amfiktyonia* or *koina*, were commonly respected due to their ancient existence⁹. The Hellenization of the Seleucid empire was achieved through the establishment of new cities according to the Greek model or promoting Greek as an official language¹⁰, but autochthonous cultural continuity was presumably maintained in various areas. The East Greek cities contributed to the development of euergetism on a large scale, as a financial base for the building programme and activities of social life. It is important to notice certain modification, when the king, his family or royal officers became important euergetai for individual poleis, followed by rich individuals¹¹. Hekatomnids were already known as such donators, which led Caria into a quick integration with the later hellenized world. Further promotion of the Greek culture can be seen through establishing and the restoration of cities and civic institutions in the third and the second century B.C. However, the Greek urban planning, with the basic units of the polis, spread in Caria much later than the other aspects of material culture.

New cities were rebuilt according to the Greek model with public buildings, forming the key features of a polis, even if autonomy was formally subordinated to the king. Numerous *koina* obtained the title of polis, including Laodikeia, Seleukeia (Tralleis), Apollonia, Tabai, Aphrodisias, Stratonikeia, Antiokheia (Alabanda), Alexandria (Alinda), Amyzon, Plarasa, Antiokheia on the Meander, Stratonikeia or Attuda¹². Naming the cities after royal family members (Antiokheia, Stratonikeia, Nysa) was part of the dynastic propaganda, but the establishing of new cities in this manner was no innovation (Isoc. *Phil.* 120). The significance of the traditional ideas of polis and community life continued, manifested through an increase of individual family orientation within the society. Generous epigraphic material includes decreets, copies of previous decreets or honorific inscriptions referring not only to members of the ruling dynasty, but also to notables, politicians or civic euergetai. A tendency to highlight a deceased individual in the form of a supernatural figure, resembling the idea of *h  r  s*, may be seen as a result of the traditional way of life in the Greek polis as much as from local traditions. Effort made to obtain heroic status post mortem is visible in the development of funerary architecture, especially through the construction of monumental built tombs and also from the numerous epigraphic evidence. Within the East Greek poleis also the origin of the *tituli memoriales* could be sought.

Despite Greek cultural dominance and the political situation, the Carians kept their ethnic consciousness although much weakened. They were able to retain their number in the population, but lost the main marker of own identity, language and script, and took many features from Greek culture. Some of the cult activities related to burials, such as blood offerings for daimones, are attested only in connection with those of local ethnicity. They usually appeared in the areas of the traditional Carian settlements such as Halikarnassos, Mylasa or Stratonikeia¹³. The polis remained one of the basic units, but older political formations, in part, like leagues and confederations, continued in

⁹ Herda 2013, 472.

¹⁰ Shipley 2000, 271-325.

¹¹ Reger 2007, 472-483.

¹² Marchese 1989, 112.

¹³ Kearsley – Evans 2001, 147-53.

their existence. In the epigraphic record there are mentioned various, local and communal and political organisations together with relevant information concerning their relations. Information concerning the second Carian federation, known as the Khrysaorik League, are attested from the third century B.C. The exact date of its establishment is not known, however, a decree found in Labraunda dated to 267 B.C. confirms the activities of league in that time¹⁴. Another document proving the existence of the Khrysaorik League is an honorific decree for Ar[isto]nides, son of Aristeides from Stratonikeia, which was found in the temple of Hekate in Lagina and is dated to the second century B.C.¹⁵.

The sanctuary in Labraunda, dedicated to Zeus Labraundos, obtained a rather independent political and economical status. At the end of the second century B.C. lands around Mylasa belonged to this temple, which granted the estates on lease to the Mylasians. There are numerous decrees known from Sinuri, Olymos, Hydai and Labraunda involving income from long-term leases¹⁶. In addition to the confederations throughout Caria, there also existed a number of local political organizations known from the preserved copies of decrees: for example of Koroandeis¹⁷, Plataseis¹⁸ or of the syngeneia of the Pelekos settlement¹⁹. Their recorded activities only concerned the internal matters of individual cities. The co-existence of multiple social groups with various legal rights and ethnicity was traditional in western Anatolia, reflected also in the varied burial rites and tomb monuments. Cities of the dead were formed by ideology and reflected community organization, where the prominent position and noteworthy forms of tomb were reserved for people of power and for wealthy citizens. The private hero cult focusing on the individual was in part introduced by euegretai and by the wealthy citizens, using the model of the dynasts, and step by step spread within society. Archaeological evidence associates such beliefs and practices with the cult of the dead or the tomb cult, while it is hard to distinguish between them. Ancestor worship and the hero cult have much in common, as reflecting ideas and perception concerning the past of humans (Fig. 2).



Fig. 2 Round Funerary Altars- Bomoi with Taeniae, Grape and Fruit Garland, Bucranion. Archaeological Museums in Side, Muğla and Aydın (Photo: Lucia Novakova)

¹⁴ Bean 1989, 26.

¹⁵ Şahin 2003, 1-7.

¹⁶ Dignas 2000, 117-126.

¹⁷ Hornblower 1982, 368.

¹⁸ Crampa 1972, 42.

¹⁹ Robert 1945, 48.

Both Greek and local customs resulted in the construction of temple-like grave monuments. Their predecessors can be found within the monuments of local dynasties deliberately referring to both monumental profane and sacral architecture. The importance of public life was irreplaceable, as is attested by much epigraphic evidence in south-western Anatolia, where a large number of Greek and Hellenized cities existed next to each other. The Hero cult can be understood as a modification of the older ancestor cult in this region, which, considering the developed social organization and political events in the Hellenistic period, obtained an almost entirely ideological character. It is expected that the resumption of older practices was allowed through political and constitutional changes in the polis, the tradition of establishing heroes and of praising certain members of Greek society and/or local customs at the same time. Funerary inscriptions from south-western Anatolia provide various terms designating the deceased. One of them is *hērōs*, used by Greek speaking societies in the sense of the deceased from the Classical period onwards.

Whether such nomenclature was seen formally in the Hellenistic period, as the appellation of the dead, or as the recipient of cult activities, is matter of discussion. Heroic honours first obtained for persons significant in public life and a similar pattern was soon followed by those citizens who claimed the supernatural character of their ancestors. The emphasized need to praise the role of the individual began to develop in parallel with the loss of the political and cultural orientation of the traditional polis. At this time a change in the understanding of the tomb may be seen in western Anatolia, as the abode of the deceased also became a place designed for large scale official worship. The expansion of such activity however, resulted in a reduction of its importance, allowing a further transformation in subsequent periods. The long-term presence of the Greeks and native ethnicities in western Anatolia had an impact upon the close connection between art and political propaganda, which was undertaken in the Hellenistic age. The area was certainly not marginal in the Greek world, from at the latest the Classical period. Except for the erected memorial monuments, reflecting a patriotic stance, civil affiliation or state independency in the case of the poleis, or the legitimacy of the ruling power in the case of local dynasts, it was the adoration of semi-divine figures, following on from the ancestor cult, that are most visible in the material culture.

In the Hellenistic period the depiction of individual, instead of community, in the form of statue or altar frequently appeared. The tradition of rewarding people of power within city-states was common in western Anatolia, presumably reflecting the enhancement in emphasis following the cult of the ruler. Together with the disappearing political meaning of the Classical polis, an effort made to emphasize the supremacy of political concepts (*Polis*, *Demos*, *Eirene*, *Demokratia*, *Agathe Tykhe*), together with the veneration of those who helped to maintain traditional values, can be seen in various public and cultural spheres. The individual character of the ruler or the state representative appeared in a prominent place, standing, in iconography, between the divine and human spheres, likewise the personifications of communities or of political concepts in the preceding period. In particular the Eastern mediterranean poleis were irreplaceable through awarding *euergetai* during their life time and, although formally, they legitimized state power in this manner. On the other hand, cities demonstrated their seeming autonomy. Diverse and changing, the public was accustomed to similar kinds of scenes and of the connection of public welfare with individuals. A model of the Hellenistic rulers and the civic elite was followed by common individuals, who attributed to their ancestors divine features.

Burial continuity and the maintenance of local elements still remained, as occurrence of heroa, unlike the other prevailing funerary monuments, situated right in or close to urban structures.

Sepulchral temenoi seem to be separated from the civic landscape as their sacral character demanded separation from the world of the living. Above ground tombs and burials may be explained through the maintenance of native tradition as well as from the inspiration of foreign custom, both on a broad geographical and chronological scale. Especially noteworthy is the proximity



Fig. 3 *Temple Tomb from North Necropolis of Hierapolis, Dated Back to the First Century A.D. (Photo: Lucia Novakova)*

of Carian and the Lycian material culture, which is becoming increasingly apparent in current scholar works. It is reflected in similar types of funerary buildings, the importance of dynastic monuments, the long-term tradition of heroa or their modification due to foreign stimuli according to their own particular needs. Epigraphic evidence, the presence of altars, an iconography of built or rock-cut tombs in south-western Anatolia in the Hellenistic period suggests more emphasis on cult activities linked to ritual dining. The

direct connection of banqueting and burial space is possible to see in the case of the rebuilt, so called Π-shaped tomb in Labraunda, where offering and ritual dining took place²⁰. This extensive rebuilding activity corresponded to the changes in burial rites and is attested by other buildings of a similar shape (Teke Kale, Ancinköy)²¹. Later, in particular during the Roman period, gods and heroes may have drifted apart, which can be related to a broader extension and to a decline in the religious significance of the hero cult at the same time (Fig. 3).

Intramural burials are closely related to the honorific monuments and inscriptions erected in public space and the number of which had significantly increased since the Late Classical period. Scholars have begun to agree that poleis were vibrant, at least until the advent of Rome²². The erecting of a statue portraying the honoured person was less often, but always appearing an honour and, if a family or friends, or various associations or unions wanted to honour an individual by erecting his statue in a public place, the agreement of the polis was required²³. This was also the case when the honoured one was deceased. In western Anatolia there was a strong tradition of carrying statues of the deceased, mostly the members of the ruling dynasties, but also politically active citizens or intellectuals, who were often festooned or anointed, in the belief that they could help or even heal the sick²⁴. In parallel, and in the absence of royal masters over the Hellenistic cities, statuary honours continued to be employed for Roman officials, often statuefied alongside the family members²⁵. Honorific statues and inscriptions were located in prominent public places such

²⁰ Henry 2013, 71-85

²¹ Henry 2011, 150-159.

²² van Nijf 2012, 47-95.

²³ French 1946, 101-104.

²⁴ Pekáry 1997, 229-235.

²⁵ Ma 2013, 193-215.

as: agora, gymnasium, theatre or in temple temenoi, along via sacra or at the nearby the temple. An honorific decree from Lagina preserved on a statue base informs about the erection of the statues of the brothers Menekles and Epainetos, a kind of honour obtained by Epainetos post mortem. The statues were standing most probably upon a special, in this case reserved platform, near to the propylon of the Hekate temple²⁶.

Even greater honours, in the form of a bronze statue and golden wreath, were granted to a priest serving in the sanctuary of Zeus Panamaros during his lifetime: “...So than also the Panamareis may be seen to render appropriate honours to excellent man, the koinon decided: to praise Leon, son of Chrysaor son of Zoilos son of Polyperchon and to crown him with a gold crown for his virtue and his piety; to grant to him and his descendants citizenship and a share in everything the Panamareis have a share in, to erect a bronze statue of him, in whichever place he wishes, and to inscribe it as follows: the koinon of the Panamareis honours Leon, son of Chrysaor son of Zoilos son of Polyperchos, after his priesthood, with praise, a gold crown, and a bronze statue, for his virtue and piety. To inscribe this decree on a stone stele and to set it up in the sanctuary of Zeus Karios in the most prominent place, the money for the forementioned is to come from a promised contribution. So that the entire demos may know what has been decided by the koinon of the Panamareis, a man will be elected. The elected person is to deliver this decree and upon arrival at the boule and demos he is to set out the things decided by the koinon. Elected was Kallimedes son of Polyarches”²⁷.

Erecting a statue with the effigy of the honoured person in a public area was one of the supreme honours received by citizen. The heroic aspect is shown by the terms indicating the statue themselves. The term andrias (ἀνδριάς) denoted besides the statue of deity also the statue of a mortal after death²⁸. The lifesize statue known as agalma (ἄγαλμα) very often appeared in the religious sphere as portraying the deity, but also as an effigy of the heroised ruler and, finally of the individual²⁹. From the late Hellenistic period onwards marble honorific statues (ἄγαλμα) for a human being, often with a cultic connotation or in the context of cultic honours for an euergetes, appeared in this area³⁰. The recipient of statue honours were deserving individuals as foreign euergetai (kings, royal officials, powerful officers of external powers) or local citizens (military officers, or politicians, statesmen, advocates, magistrates, or generous donors). Statues were erected in the vicinity of a temple or at strategically important public places. Enclosed tombs, or individual gravestones in some cases, could serve as places of civic veneration³¹. The oldest honorific decrees and inscriptions concerned members of the ruling dynasties or prominent leaders who possessed considerable wealth and financial resources. At the same time the civic elite (εὐεργέται, ἄνδρες φιλότιμοι), performing public service for the benefit of the polis, was honoured³² (Fig. 4).

Some honorific inscriptions and decrees were engraved on the walls of public buildings, including temple temenoi. Hybrid inscriptions, combining the features of the honorific inscriptions and epitaphs, began to appear in Caria during the Hellenistic period. They have been found at

²⁶ Şahin 1987, 85-6; Van Bremen 2003, 17-19.

²⁷ Van Bremen 2004, 207-244.

²⁸ Robert 1962, 203.

²⁹ Koonce 1988, 108-10.

³⁰ Ma 2013, 20-25.

³¹ Buckler – Robinson 1913, 36-7; Pekáry 1997, 227-244.

³² Hands 1968, 62-65.

Aphrodisias, Stratonikeia, Alabanda, Kaunos or Mobolla³³. Some of them with a simple expression “honoured, rewarded” (ἐτείμησεν), suggest that the deceased citizen obtained extraordinary status within the society. Honorific decrees and inscriptions were very often placed in the temple temenoi:

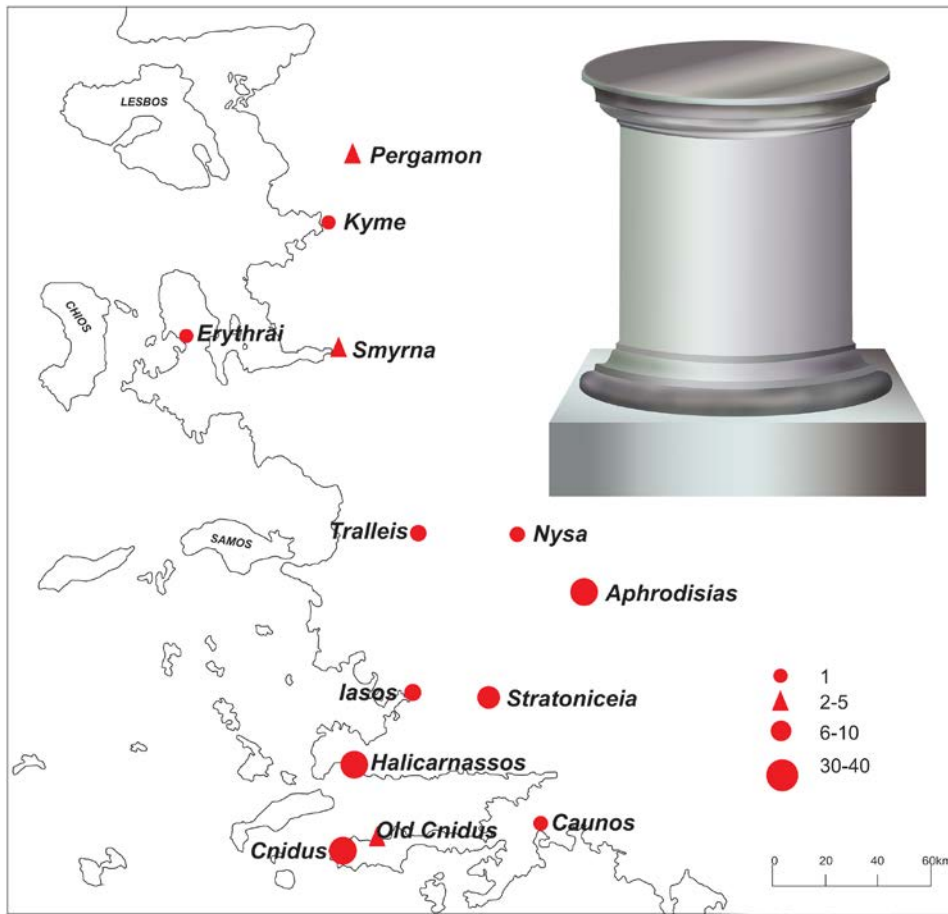


Fig. 4 Distribution of the Hellenistic Funeral Altars in Western Anatolia (after Berges 1986, fig.2)

those from Labraunda and Sinuri represent the largest group of such epigraphic evidence from the Hellenistic period³⁴. Their preparation was a duty of elected officials, in Caria chiefly neopoiai, who provided for the displaying of the decrees and inscriptions in the area of sanctuaries and on the walls of public buildings at the agora. An example is the honorific inscription and epitaph for Chrysaor from Lobolda, found in Stratonikeia³⁵. A marble stele was built into the northern part of bouleterion. Under the first inscription stating: “People in honour of Khrysaor of Lobolda, the son of Theaitetos, a good man who carried out many great deeds for the benefit of the polis”, there was carved another text: “The people let buried Khrysaor of Lobolda, son of Theaitetos, man of many good and right deeds for the sake of people”. This epitaph was located on the wall of a public building probably due to the fact that Chrysaor died shortly after the carving of the first inscription. If he was dead in the time the first inscription was carved, it would have been written: “people honoured and let buried

³³ Laumonier 1958, 176.

³⁴ Williamson 2004, 148-155.

³⁵ Şahin 2005, 56-59.

Khrysaor...” (Ὁ δῆμος ἐτίμησεν καὶ ἔθαψεν Χρυσάορα...).

Honorific decrees (ψήφισμα) are differentiated by their formal structure from honorific inscriptions, engraved upon the request of relatives at their own cost. In some cases they were erected near the tomb or were directly connected by epitaphs. Decrees usually consisted of invocation (θεοί, θεός, ἀγαθὴ τύχει), the dating formula based on the eponymous officials, in Caria usually prytaneis or stefanoforoι³⁶, the naming of the official initiator (εἶπεν, εἶπον), the introductory formula or preamble, the wording of the honorific decision, the regulations regarding the design and inscription placement (the decree is to be rewritten on the stone - ἀνάγραψαι εἰς στήλην λιθίνην...³⁷.

Honorific inscriptions had diverging structures, but often referred to the official statement, with the phrase “*people reward*” (Ὁ δῆμος ἐτίμησεν), suggesting an honorific decree, which need not to be preserved in material form. Statues pedestals, the bases of columns or stele were often employed as the carriers of such inscriptions. The copies of the same decree could be engraved in various places at the same time. In some decrees exhibited on the walls of various public buildings the exact number of copies of the same inscription was recorded³⁸ (Fig. 5).



Fig. 5 *Honorary Inscriptions at Phaselis* (Photo: Lucia Novakova)

other biographical information⁴¹. The expression “*people honoured and let to be buried*” (ὁ δῆμος ἐτίμησεν καὶ ἔθαψεν) or simply “*people let to be buried*” (ὁ δῆμος θάψεν) meant that the deceased received the honour of a public burial (ταφὴ δεμοσία). It is possible that the deceased received the status of a heroised person in this way.⁴² Awarded and widely recognized people in the Hellenistic period were usually well known persons that were publicly active, becoming euergetai (εὐεργέται, ἄνδρες φιλότιμοι) or performing public service for the benefit of polis⁴³. Among them belonged principally citizens who had defended the community’s interests, as military officers, or as

Honorific decrees and inscriptions often resembled so called consolation or memorial decrees (ψεφίσματα παραμυθητικά, tituli memoriales), common in the Roman period³⁹. Appearing already in Hellenistic Caria⁴⁰, their structure reminded of honorific decrees and inscriptions. *Tituli memoriales* ordered a funeral at public expense, and provided the tributes appointed to the deceased with

³⁶ Fabiani 2010, 476.

³⁷ Friedermann 1993, 18-26.

³⁸ Rosen 1987, 277-292.

³⁹ McLean 2002, 216.

⁴⁰ Robert 1944, 229-231.

⁴¹ Rosen 1987, 277-292.

⁴² Laumonier 1958, 176.

⁴³ Hands 1968, 62-65.

politicians, statesmen, advocates, magistrates, or generous donors and lenders. Much more rarely were poets or victorious athletes honoured, even within their own communities. Stelai could be adorned with a relief decoration in the shape of a wreath, while the crowning itself was one of the possible honours. The wreaths, in the form of a painting, in reliefs or of plant branches, formed a part of the tomb decoration.

Public honours and rewards might take different forms as the declaration associated with an honouring recorded, the gifting by wreaths, the erecting of statues, organizing festivals, obtaining prominent seats during agones or in liturgy remission. Certain awards could be received after death or were performed at the grave monument, such as erecting a statue, setting up an altar, organizing sacrifice or crowning with an honorific wreath. In many inscriptions the information concerning the honorific crowning was stated (στεφάνοι αὐτόν). The public declaration and praise, usually associated with the act of giving a wreath, was performed on special occasions, like artistic and sport agones or at religious celebrations. In some cases honorific crowning was performed annually (*SIG* 752. 50.46; *IG* 12/5. 599), since laying the wreaths at the grave was attested as a public act⁴⁴. Wreaths were made of various material, including golden twigs or leaves, of which the exact value was usually listed in a decree or inscription. The private ceremony at the tomb could remind of honours received during the lifetime. Archeological and epigraphic finds suggest that the deceased was an addressee of the cult activities. Sacrifices, whether mentioned in written sources, attested by archaeological evidence or artistically depicted on the tomb facades do not necessarily mean that a recipient was attributed heroic status.

The development of hero-worship of such persons was connected with the tomb cult directed towards the recently deceased or to ancestors, offered posthumous tributes by the family members. Some suggest that grave offerings as an act of veneration could be used formally, without



Fig. 6 *Intramural Heroon at Termessos* (Photo: Lucia Novakova)

anticipated adoration, already by the end of the Hellenistic period, as well as in Roman times⁴⁵. A burial in the centre of a town was the customary way to honour a person whose life and deeds were perceived as being especially important to the local society. Similar tendencies are still visible in the case of numerous Lycian settlements in the Classical period, understood as a time of increasing social, political and economic complexity, or in Greek cities in subsequent periods as well. Members of communities might claim supernatural character for their ancestors or simply stress the excellence and venerable status of

their family members. The broader extension of this phenomenon eventually resulted in the decline of its public importance. Hellenistic sepulchral monuments in Caria have often been destroyed in the course of modern urbanisation and cannot be always found in their original condition (Fig. 6).

⁴⁴ McLean 2002, 261.

⁴⁵ Cormack 2004, 22.

Epigraphic finds provide more detailed information about the burial rites and mortuary practices. Amongst the documents showing the semi-divine status of the deceased belong not only the epitaphs and also honorific or condolence decrees and inscriptions of a religious character, referring to the funerary rituals connecting the hero cult to various cult activities. A copy of the honorific decree for the fallen citizens of Alabanda was preserved in the temple temenos of the Apollo sanctuary at Delphoi. The deceased, referred to as “*good men*” (ἄνδρες ἀγαθοί) were immortalized through a memorial of three statues, dated to the end of the second and beginning of the first century B.C.⁴⁶. Further honorification of citizens, as sponsors, important officials or talented sportsmen and artists, took a place within the Greek cities in the second and the first century B.C. In some cases the honours were granted just during the lifetime, unlike the other decrees, where a long-term veneration even in the case of death can be presumed. Public burials are frequently mentioned on the funerary altars from Stratonikeia and from its near area⁴⁷.

Memorials of wealthy members of society and euergetai of Greek poleis became more and more common and popular in the Late Hellenistic period. These monuments can be seen as the partial and smaller scale inspiration of the building programme of local dynasties. Certain similarities can be traced between various types of arts on the Greek mainland, bearing message concerning public life, awareness, affiliation or of the legitimacy of the ruling power. This tradition continued throughout antiquity over a wide geographical sphere. The strong bond between the hometown and the tombs of the ancestors is recurrent in both epigraphic and literary sources at the latest from the Classical period onwards. The tomb was of particular importance to define the native place of the individual and his ancestors and in the local aspects of the hero cult this is possible to observe through the architectural signs of individual structures, as well as through epigraphic documents and from the archaeological context. The continuity of chosen types of burial and maintaining local elements also continued in the Hellenistic period, even if the Carian language and culture assimilated into the Greek.

⁴⁶ Habicht 1999, 19-20.

⁴⁷ Varinlioglu 1988, 100-111.

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THE USE OF WRITING IN A FUNERARY CONTEXT IN CLASSICAL AND HELLENISTIC THRACE

KLASİK VE HELLENİSTİK DÖNEM TRAKYASINDAKİ MEZAR BULUNTULARINDA YAZININ KULLANIMI

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BARBORA WEISSOVÁ**

Abstract: This paper brings together known epigraphic evidence from funerary contexts in coastal and inland Thrace dated to the Classical and Hellenistic periods. It presents various types of inscriptions and discusses the main differences in their character. The epigraphic material is divided by the nature of the inscribed object and its role in the funerary rite into the following three groups: inscriptions on grave markers, on grave goods and inside the grave on architectural elements. The analysed material reveals rather diverse approaches to writing and to its use in funeral practice in the coastal and the inland Thrace, evidenced by different spatial patterns for all three groups. The diversity of epigraphic evidence might be explained as a result of a different socio-economic structure in these areas, partially causing the limited cultural exchange between the Greeks settled on the coast and the inland inhabited by the Thracians.

Keywords: Inscriptions • Thrace • Hellenisation • Funerary Context • Thracian Aristocracy

Öz: Bu makale, Klasik ve Hellenistik dönemlere tarihlenen iç ve kıyı Trakya'daki cenaze metinlerinden bilinen epigrafik kanıtı biraraya getirir. Farklı tip yazıtları sunar ve karakterlerdeki ana farklılıkları tartışır. Epigrafik malzeme, yazılı objenin ve rolünün doğası ile ve aşağıdaki üç bölüme ayrılır. Bunlar; mezar taşları üzerindeki yazılar, mezar eşyaları üzerindeki ve mimari özellikteki mezar içindkiler şeklinde sınıflandırılabilir. Çözümlenen malzeme, her üç gruptaki farklı konomsal modeller ile kanıtlanan kıyı ve iç Trakya'da yer alan cenaze uygulamasındaki kullanımı ve yazımı için oldukça farklı yaklaşımlar ortaya koyar. Epigrafik malzemenin yoğunluğu, kıyıda yerleşen Hellenler ve Traklar tarafından iskan edilen iç kısım arasında bu bölgelerdeki kısmen sınırlı kültürel değişikliğe neden olan farklı sosyo-ekonomik yapının sonucu olarak açıklanabilir.

Anahtar Kelimeler: Yazıtlar • Trakya • Hellenizasyon • Mezar Buluntusu • Trakya Aristokrasisi

Greek Colonisation of Thrace and Funerary Practice

Coastal Thrace was colonised by Greeks during the Archaic period. Among other things, the colonisers certainly brought with them their language, religion and funerary habits¹.

The archaeological evidence shows that mutual economic contact with the Thracian hinterland started immediately after colonisation and continued during the Classical period². One would expect that penetration into the interior of Thrace, either via mutual contacts with the local population or via internal colonisation, would have impacted upon the customs of the local inhabitants, including their funeral rites.

Funerary practice in the Greek colonies of Thrace was not uniform but rather varied between the colonies³. Nevertheless, it is possible to indicate one common characteristic; the inhabitants of the

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¹ Isaac 1986, 279-292; Petrova 2015, 153-161.

² e. g., Archibald 1998, 94-150; Ilieva 2007, 221; Tiverios 2008, 124-129.

³ Damyanov 2012, 62.

Greek colonies on the Black Sea coast and in the Northern Aegean were using inscribed funerary *stelae* to mark their graves. These grave markers started to appear in the 6th century B.C. close to the colonies and their character and appearance were very similar, if not identical⁴. Because of the onomastics employed and the textual affiliation with particular ethnic or social groups, the habit of erecting funerary *stelae* was limited, predominantly, if not exclusively, to the Greek population.

Research Area and its Spatio-Temporal Boundaries

The boundaries of Thrace were already fluid and ill-defined in antiquity, and the borders of the current research area are a compromise between natural geographic borders and a result of modern debate. The latest scholarly consensus describes the area of Thrace as delimited by its natural landscape borders: the *Istros* River (Danube) in the North, the *Pontos Euxinos* (Black Sea) coast in the East, the Aegean and Propontic coast in the South and the *Strymon* (Struma) River in the West⁵. This is the geographic definition of Thrace used in this analysis.

The chronological span of the present study covers published inscriptions dating from the 6th to the 1st century B.C. written in the Greek alphabet and language. The analytical basis for this study is an epigraphic database created for the ‘*Hellenisation of Ancient Thrace*’ project (henceforth HAT), at Charles University in Prague⁶. The HAT dataset combines all major corpora of Greek inscriptions from S.E. Thrace, modern day Bulgaria, Greece and Turkey⁷ and inscriptions published in *SEG* until 2010 (volume LX). In October 2015 the HAT database contained over 4500 items, of which 718 fall within the limits described in terms of time and context.

Funerary Stelae

The oldest evidence from Thrace of the use of writing in funerary rites comes from the *necropoleis* of the Greek colonies on the coast. These *necropoleis* are situated outside the city-walls, along the main roads leading out of the town. The majority of preserved material dates from the Classical period onwards⁸. During archaeological excavations at *necropoleis* around the Greek colonies, various burial practices often occurred within the same necropolis: cremation and inhumation as well as relatively simple flat graves next to elaborate stone and earthen constructions⁹. The simple graves were built from blocks of stones, tiles, or had the form of a pit; the *periboloi* or tumular burials were of considerably more sophisticated construction¹⁰. The grave goods typically consisted of imported Greek pottery (of Attic or Ionian origin), imported as well as locally produced transport amphorae, local imitations of Greek pottery, Hellenistic terracotta figurines, and in the case of rich graves, also jewellery, funerary crowns, metal objects and tools (e.g., *strigils*), glass beads, and small glass vessels. Some of the funerary goods may have been inscribed, usually only with individual letters pointing to the owner of the object.

Hierarchies within the *necropoleis* were typical for the Black Sea region: the majority of graves contained burial offerings of little value, but a few rich examples existed, in most cases covered by

⁴ Petrova 2015, 153-161.

⁵ e.g., Archibald 2010, 326-327; Bouzek – Graninger 2015, 14-15.

⁶ Janouchova 2014.

⁷ Mihailov 1956-1997; Loukopoulou *et al.* 2005; Krauss 1980; Sayar 1998; Lajtar 2000.

⁸ Panayotova 2007, 85-126.

⁹ Damyanov 2012, 35-62.

¹⁰ Damyanov 2011, 87-90.

mounds. We incline to the opinion that this mortuary variability within these complexes reflects the social status of the deceased rather than ethnicity¹¹.

Nevertheless, judging from the characteristics and outer appearance of the grave markers employed, they exhibit strong ties to the Greek mother cities. As gauged from the analysis of Margarit Damyanov (2012, 62), a unifying and ‘normative’ burial practice that was common to the population of Greek colonies on the Western Black Sea coast is missing. The *necropoleis* are considered to serve the Greek populations of their nearby cities, but as far as the archaeological record is concerned, no direct relationship between the type of burial and the ethnic group has been proven to be a decisive factor in determining ethnicity¹². The direct evidence of ethnic affiliations of the *necropoleis* and the Greek population comes from funerary inscriptions found at the *necropoleis* and from the onomastics employed in these inscriptions.

Analysis of the Epigraphic Evidence

The HAT database contains 666 funerary markers (*stelae*) dated from the 6th to the 1st century B.C. For details concerning their exact numbers and their source see Table 1. The first epigraphic grave markers started appearing in the 6th century B.C. during the Greek colonisation of the Northern Aegean and the Black Sea region (*IG Bulg* 1(2) 404 from *Apollonia Pontica*, dated to the 6th c. B.C.; *I Aeg Thr* 30 from *Abdera*, dated to mid. 6th c. B.C.; *Perinthos-Herakleia* 69, from *Perinthos*, dated to 535-515 B.C.)¹³.

Table 1. Overview of Inscribed Funerary Markers and Their Respective Sources

Data Source	Number of Inscriptions (6 th to 1 st c. BC)
<i>I Aeg Thr</i>	169
<i>IG Bulg</i> 1(2)	140
<i>IG Bulg</i> 3.1	1
<i>IG Bulg</i> 5	14
<i>I Byz</i>	208
<i>I Sestos</i>	1
<i>I Perinthos</i>	6
Various sources (<i>SEG</i> XLVI-LX; Gyuzelev 2002, 2005, 2013; Manov 2006; Velkov 2005; Mitrev 2011)	127

The appearance and the overall character is very similar, if not identical, to the funerary monuments from the rest of the Greek speaking world, and was likely produced by Greeks settled in Thrace¹⁴. The grave markers from Thrace mostly have the form of a simple standing *stèle* or *naiskos* made of marble, sometimes decorated with relief and letters painted in red ochre, originally stand-

¹¹ Panayotova 2007, 101; Damyanov 2007, 1-36.

¹² Jones 1997, 128-129.

¹³ For most markers the original archaeological context is missing. For these, we had to identify their function mostly from the meaning of the texts and the vocabulary used, or by comparing them to similar monuments from the Greek speaking world.

¹⁴ Kurtz – Boardman 1971, 84-86, 123-126; Panayotova 2007, 108; Sourvinou-Inwood 1996, 279; Oakley 2004, 191-214.

ing on top or near the graves¹⁵.

The texts of the inscriptions create a fairly homogenous group of funerary monuments. These texts mostly contain short identifications of the deceased, in the form of a personal name, his or her closest kin, and occasionally their relationship. The deceased individual is represented by his/her personal name in the nominative case, and parent or partner in the genitive case. The personal names are mostly of Greek origin (Ionian and Doric), with only a few exceptions showing mixing with the population bearing Thracian names (less than 2%). In 3% of inscriptions mention is made of the geographic origin of the deceased, indicating mostly the Greek cities in Asia Minor and the Aegean (*Kyzikos, Paros, Abdera, Amphipolis, Athens, Aegina*). An example on a *stèle* from *Apollonia Pontica* mentions *Parthenios, son of Metrodoros, from Kyzikos*¹⁶.

The spatial distribution of funerary *stelae* is chiefly limited to the *chora* of Greek colonies on the coast (Fig. 1). Most of the *stelae* were found in a narrow strip along the coasts, with the maximal distance inland not exceeding 30 km (98%). Clusters were identified around *Byzantion* (213), *Apollonia Pontica* (171), *Stryme* (57), *Mesambria* (56), *Maroneia* (50), *Abdera* (39), *Odessos* (26) and *Zone* (23). Up to ten *stelae* come from coastal Greek cities: *Perinthos* (8), *Selymbria* (7), *Dionysopolis* (3) and *Sestos* (1).

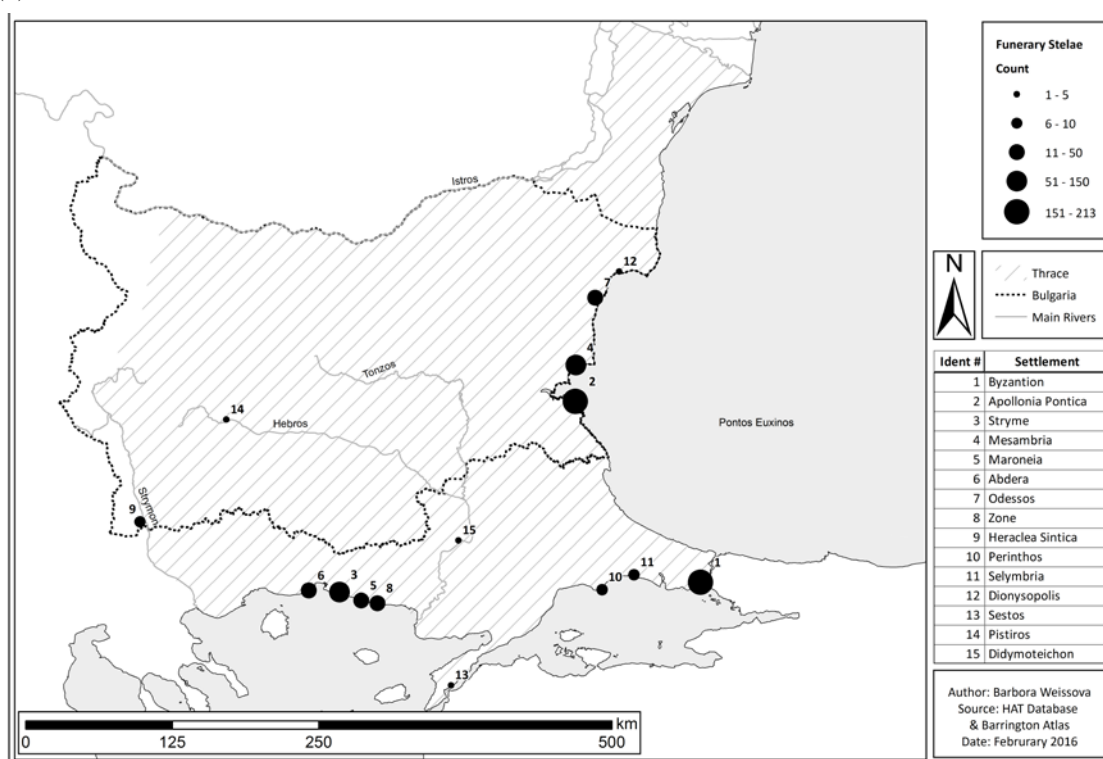


Fig. 1 Spatial Distribution of Funerary Stelae in Thrace During the Classic and Hellenistic Period

The remaining 2% of inscriptions were located in centres situated along the main rivers: ten inscriptions came from the hinterland of *Heraclea Sintica* in S.W. Bulgaria (on the *Strymon* River), one inscription from *Pistiros* in central Bulgaria (on the *Hebrus* River) and one inscription from *Didy-*

¹⁵ e.g., Gyuzelev 2002; 2005; 2013; Velkov 2005; Petrova 2015.

¹⁶ Gyuzelev 2013, 121 no 15 from the 4th century B.C.

moteichon in Northern Greece (on the *Tonzos* River). All these three locations were known to have been permanently or temporarily inhabited by Greek communities: *Heraclea Sintica* is situated on the border between Macedonia and Thrace and a Greek speaking population has been attested since Hellenism¹⁷. *Pistiros* situated in central Bulgaria was the settlement inhabited by a mixed Graeco-Thracian population and its primary function was to secure the commercial exchange between the Thracian hinterland and the Greek colonies on the coast¹⁸. The discussed inscriptions can be interpreted as funerary as well as dedicatory, but the owner 'Dionysios, son of *Diotrephes*' (IG Bulg 3.1 1067), was clearly a member of the Greek speaking community. The inscription (I AegThr 465) found at *Didymoteichon* belonged to *Apollonios* from Babylon and it was dedicated by *Apollonios*' brother *Agathon*, both clearly Greek names, possibly belonging to Greeks mercenaries temporarily residing in Thrace during the 3rd century B.C.

To summarise, during the Classical and Hellenistic periods, the habit of erecting funerary *stelae* was limited solely to the Greek speaking communities, chiefly situated on the coasts, with a few exceptions in inland Thrace. However, as indicated by the funerary context, these settlements formed rather isolated islands in Thracian territory and these customs were not adopted and adapted by the Thracian society of the Classical and Hellenistic periods.

Inscriptions on Grave Goods

The utilisation of writing was not restricted only to markers located outside the grave (*stelae*), but also on inscribed objects within the grave context. The deposited objects could have been inscribed during their life-cycles as everyday objects (secondary deposition, unrelated to the funerary rite), or they could have been carved solely for the act of the funeral, as an object to be used in the afterlife by the deceased (primary deposition, directly connected with the funerary rite). From textual analysis we can sometimes distinguish between these two categories based upon the terminology used and typical *formulae* and thus relate the object to its function in the funeral rite as a primary or secondary deposit.

The majority of inscribed funeral goods were found in the territory of Thrace in the context of burial mounds dating between the 5th and the 3rd century B.C.¹⁹. The sepulchres are referred to as of a 'warrior', or 'elite burials' due to the presence of rich grave goods, often containing armour and precious objects that only the local aristocracy could afford.

Analysis of the Epigraphic Evidence

The 46 texts analysed are all Greek and written on silver or golden vessels (39), jewellery (2), signet rings (2) military equipment (1) or pottery (2); for details see Table 2. The texts are usually very short and simple, consisting of individual letters or personal names in the genitive. Their function was to either mark the value/contents of the object or to mark ownership/authorship. The texts are divided into groups according to the character of the inscriptions.

The first group contains simple inscriptions, consisting mostly of a few sets of letters that probably denominate the actual content of the vessel, its value, or that are interpreted as dedications, e.g., two silver vessels from *Golyama Kosmatka* in the Kazanlak valley. The archaeological context of *Golyama Kosmatka* is dated to the late 4th - early 3rd century B.C. and is associated with the Thracian

¹⁷ Nankov 2015, 8-16, 26.

¹⁸ Domaradzka 2005, 25.

¹⁹ Archibald 1998, 151-196; Loukopoulou 2008, 139-140; Dana 2015, 250-251.

ruler *Seuthes III.*, who also built his residence in the nearby *Seuthopolis*²⁰. The inscriptions found on the silver vessels determine their value and weight at approximately 212 and 250 grams, and of their ownership by *Seuthes*²¹. Another typical example is the silver vase from *Konsoulova Mogila* in the Kazanlak valley²² inscribed with the set of letters ‘PKΣN Δ’.

Table 2. List of Inscribed Grave Goods

No	Inscription ID	Findspot	Archaeological context	Date	Type	Technique	Location	Text (SEG, PHI)
1	SEG 37: 618,24	Agighiol	burial mound	unknown	ownership	pointillé	silver bowl	Κοτυς ἐξ Βεο.
2	SEG 37: 618,19	Alexandrovo, Lovech	unknown	450 - 341 BC	ownership	pointillé	silver bowl	Κοτυος ἐγ Γηιστων. Κοτυ.
3	SEG 29: 661	Anchialos	burial mound	100 - 0 BC	unknown	unknown	jewellery, earring	ΛΗΧΗΣ3 ΚΗΠΡΟ Υ.
4	SEG 47: 1061,2	Bashova mogila, Duvanlii	burial mound	500 - 400 BC	unknown	unknown	golden ring	ΗΥC ΜΕΙΗΝΑ I
5	SEG 45: 835,c	Bashova Mogila, Duvanlii	burial mound	500 - 400 BC	uncertain	incised	gold-en/silver rhyton	ΔΑΔΑΛΕ ΜΕ
6	SEG 45: 835,b	Bashova Mogila, Duvanlii	burial mound	500 - 400 BC	uncertain	incised	silver cup	ΔΑΔΑΛΕ ΜΕ
7	SEG 45: 835,d	Bashova Mogila, Duvanlii	burial mound	500 - 400 BC	uncertain	incised	silver cup	ΔΑΔΑΛΕ ΜΕ
8	SEG 45: 835,a	Bashova Mogila, Duvanlii	burial mound	500 - 400 BC	uncertain	incised	silver phiale	ΔΑΔΑΛΕ ΜΕ
9	<i>Arkheologia</i> 35, 1993, 31-42	Bochot, Pleven	unknown	200 - 0 BC	unknown	unknown	silver vessel	ΠΑΣΤΡΟ ΚΟΥ
10	SEG 37: 618,21	Borovo, Ruse	unknown	450 - 341 BC	ownership	pointillé	gold/silver vessel	Κοτυος ἐξ Βεο.
11	SEG 37: 618,22	Borovo, Ruse	unknown	450 - 341 BC	ownership	pointillé	gold-en/silver jug	Κοτυος ἐ<ξ> Βεο.

²⁰ Kitov 2005, 39-54.

²¹ SEG 55: 776, 1-2; Kitov 2005, 39-54; Manov 2006, 27-34; Dimitrova 2015, 194-200.

²² Kitov – Theodossiev 1995, 317-336.

12	SEG 37: 618,20	Borovo, Ruse	unknown	450 - 341 BC	owner- ship	pointillé	gold- en/silver rhyton	Κοττος ἐξ Βεο.
13	SEG 37: 618,23	Branichevo	unknown	450 - 341 BC	owner- ship	pointillé	silver bowl	Τηρης Ἀματοκου παδρῦ η.
14	SEG 47: 1061,5	Duvanlii	burial mound	500 - 400 BC	uncertain	un- known	Attic hy- dria	κομός, κόας
15	SEG 46: 871	Duvanlii	burial mound	500 - 540 BC	owner- ship	un- known	golden ring	Σκυθοδόκ ο.
16	SEG 55: 776,2	Golyama Kosmatka	burial mound	340 - 295 BC	value	pointillé	silver oinochoe	Σεΐθου ὀλκή τετραδρα χια αλεξανδρε ια ΔΙΙΙ, Σεΐθου ὀλκή τετραδρα χια ΙΔ † †
17	SEG 55: 776,1	Golyama Kosmatka	burial mound	340 - 295 BC	value	pointillé	silver phiale	Σεΐθου, ὀλκή τετράδρα χια Ἀλεξάνδρ εια ΔΙΙΙ
18	SEG 55: 776,3	Golyama Kosmatka, Kazanlak	burial mound	340 - 295 BC	owner- ship	pointillé	bronze helmet	Σεΐθου
19	Kitov, Theo- dossiev 1995, 317-336	Konsoulova Mogila	burial mound	500 - 350 BC	contents?	un- known	silver ves- sel	ΡΚΣΝ Δ
20	SEG 47: 1061,4	Kukuva mogila, Dunvanlii	burial mound	500 - 400 BC	owner- ship / arti- san signa- ture	graffiti	clay plate	Ἰππόμαχ[ο]ς
21	SEG 55: 742	Leshnikova Mogila	burial mound	450 - 400 BC	owner- ship?	pointillé	silver phiale	Δυντασσ Ξελασσ? / Δυντας Ζελας
22	SEG 37: 618,17a	Moghilan- ska mogila, Vratsa	burial mound	450 - 341 BC	owner- ship	pointillé	silver bowl	Κοττος ἐ<γ> Βεου.

23	SEG 37: 618,17b	Moghilanska mogila, Vratsa	burial mound	450 - 341 BC	ownership	pointillé	silver bowl	Κοττος ἐ<γ> Βεου.
24	SEG 57: 1016, Archibald 1998, 318	Pan- agyurishte	unknown	unknown	contents ?	unknown	golden bowl	ΗΡΑΔΔΔ ΓΤΤΗ
25	SEG 57: 1016, Archibald 1998, 328	Pan- agyurishte	unknown	unknown	dedication	pointillé	golden/silver rhyton	ΑΘΗΝΑ, ΑΛΕΞΑΝ ΔΡΟΣ, ΗΕΡΑ, ΑΦΡΟΔΙ ΤΗ, Φ
26	SEG 37: 618,18	Pleven	unknown	450 - 341 BC	ownership	pointillé	silver phiale	Κοττος ἐγ Γειστων
27	SEG 37: 618,1	Rogozen	unknown	450 - 341 BC	ownership	pointillé	silver phiale	Σατοκο.
28	SEG 37: 618,2	Rogozen	unknown	450 - 341 BC	uncertain	pointillé/incised	silver phiale	Διδυκαμο Αύγή· ΔΗΛΑΔ Η
29	SEG 37: 618,3	Rogozen	unknown	450 - 341 BC	ownership	pointillé/incised	silver phiale	Κοττος ἐξ Αργισκης. Χ Δ
30	SEG 37: 618,4	Rogozen	unknown	450 - 341 BC	ownership	pointillé	silver phiale	Κοττος ἐξ Αργισκης
31	SEG 37: 618,5	Rogozen	unknown	450 - 341 BC	ownership	pointillé	silver phiale	Κοττος ἐξ Ηργισκης.
32	SEG 37:618,6	Rogozen	unknown	450 - 341 BC	ownership	pointillé	silver phiale	Κοττος ἐξ Απρο.
33	SEG 37: 618,7	Rogozen	unknown	450 - 341 BC	ownership	pointillé	silver phiale	ἐξ Απρο Κοττος.
34	SEG 37: 618,8	Rogozen	unknown	450 - 341 BC	ownership	pointillé	silver phiale	Κοττος ἐξ Βεο.
35	SEG 37: 618,9	Rogozen	unknown	450 - 341 BC	ownership	pointillé/incised	silver phiale	Κοττος ἐξ Βεο. Κατ ο. ΓΟΕΦ.
36	SEG 37: 618,10	Rogozen	unknown	450 - 341 BC	ownership	pointillé	silver phiale	Κοττος ἐγ Βεο· Δισλοιας ἐποίησε.
37	SEG 37: 618,11	Rogozen	unknown	450 - 341 BC	ownership	pointillé	silver phiale	Κοττος ἐκ Γειστων.
38	SEG 37: 618,12	Rogozen	unknown	450 - 341 BC	ownership	pointillé/incised	silver phiale	Κοττος ἐγ Γηιστων.

						d		Κοτυ.
39	SEG 37: 618,13	Rogozen	unknown	450 - 341 BC	ownership	pointillé/incised	silver phiale	Κοτυος ἐξ Σαυθαβ< α>ς. Η · Η.
40	SEG 37: 618,14	Rogozen	unknown	450 - 341 BC	ownership	pointillé	silver phiale	Κοτυς Ἀπόλ- λωνος παίς.
41	SEG 37:618,15	Rogozen	unknown	450 - 341 BC	ownership	pointillé/incised	silver phiale	Κερσεβλε πτο ἐξ Εργισκης. ΠΠΤΤΤ.
42	SEG 37:618,16	Rogozen	unknown	450 - 341 BC	ownership	incised	silver vessel	Σαιτοκο Σαλλα Μα(?)ρτα ς ν Η. ΣΙΦΙ. / Σαιτοκόσ μα ἀνήσταση .
43	SEG 59:759	Sinemorets, Tsarevo	burial mound	300 - 200 BC	ownership / artisan signature	unknown	golden diadem	Δημήτρι ο ς ἐποίσεν· Κορτοζο υντος
44	SEG 46:851	unknown, Kazanlak	burial mound	400 - 300 BC	contents	unknown	silver kylix	ΚΥΛΙΚΙΑ Δ
45	SEG 56:828	Naip	burial mound	4th c. BC	ownership	unknown	silver jug	ΤΕΡΡΕΩ
46	Agre 2011	Malomirovo	burial mound	4th c. BC	uncertain	unknown	silver rhyton	ΑΙΣ

Similarly, amphorae stamps and tile workshop marks can be found in the Black Sea *necropoleis* as well as in the inland ‘*élite*’ graves²³. These marks were not primarily intended for the funerary context, but they served to identify the object for everyday activities such as trade. Therefore, the text written on them has no direct relation to the funerary rite itself, but rather to the person of the grave owner.

The second group of inscriptions are ownership inscriptions, inscribed in gold and silver metalware, associated with Thracian aristocratic leaders. The representative example of the first group is the inscribed bronze helmet with the personal name in the genitive, translated as ‘*belonging to Seuthes*’ found at *Golyama Kosmatka* in the Kazanlak valley²⁴. Another instance comes from *Leshni-*

²³ Tzochev 2015, 413-421.

²⁴ SEG 55: 776.3; Manov 2006, 27-34; Dimitrova 2015, 167-173.

kova Mogila from the Kazanlak valley where an inscribed silver *phiale* was found, possibly containing the owner's name of Thracian origin²⁵. Recent finds from a tumulus at Naip from the Propontic coast include a silver jug uncovered in the tomb chamber with the text '(To) Teres'²⁶, dated to the late 4th century B.C. The personal name *Teres* has been suggested by Delemen tentatively, but not definitively to be associated with *Teres*, son of *Kersebleptes*, and a member of the Thracian/Odrysian aristocracy. Finds from the 4th century burial mound at Malomirovo, near Elhovo in S.E. Bulgaria, indicate an aristocratic owner of the grave²⁷. The inscribed silver rhyton bears only three letters ΑΙΣ. We are uncertain whether it signified ownership or the content, but the inscribed object was made of precious material and was most probably used in the course of feasting activities during the owner's lifetime/funeral, deposited in the grave as his possession after its owner had died.

The inscribed metalware is almost identical with finds from other places in Thrace, presumably coming from the territory of the Odrysians, such as Agighiogol, Alexandrovo, Borovo, Branichevo, Duvanli, Dragodan, Kazanlak, Malomirovo, Rogozen, Vratsa and Naip²⁸. The texts mention the personal names of the Odrysian aristocracy: *Kotys*, *Kersebleptes*, *Satokos*, *Teres* and *Amatokos*, e.g., SEG 37: 618.10 with the text '(To) *Kotys* from *Beos*, made by *Disloias*'. The origin of the person or object was in 50% of cases represented by geographical terms, these most probably signifying locations in S. E. Thrace: *Ergiske*, *Apros*, *Beos*, *Sauthaba*. As suggested by Archibald (1998, 225) and Loukopoulou (2008, 139-167) these inscribed vessels may represent gifts from other Thracian dynasts to the Odrysian leaders (*Kotys*, *Teres*, *Kersebleptes* etc.) or the tax duty paid by subjects to the Odrysian ruler, serving as luxury items and also as markers of social standing among the community, placing their owner in the upper tiers of society and securing them personal prestige²⁹.

The spatial distribution of the inscribed objects found in funerary contexts (Fig. 2) are chiefly concentrated in the territory of the Thracian interior. The inscribed vessels found on the coast come from the rich aristocratic graves in Naip (SEG 56: 828) in *Propontis*, Sinemorets (SEG 59: 759) and Anchialos (SEG 29: 661) on the Black Sea coast. The archaeological interpretations of all three sites, however, confirm very strong similarities with the contexts of the other '*aristocratic graves*'³⁰, mostly found in the territory allegedly inhabited and ruled by the Odrysians. Accordingly, the attribution of metalware to Odrysian elites explains its wide dispersion in the Thracian inland and its lack of in the *chora* of Greek colonies in Thrace located along the coast.

However, only a small part of the metalware found was inscribed, showing the act of writing was rather sporadic and had more of a symbolic value than a utilitarian one. The available contexts suggest that writing was used only for specific purposes and only by a limited group of people; namely the Odrysian elites. To date, there is no evidence the Greek population practiced similar habits and thus, from the surviving evidence, this phenomenon was limited to the upper parts of the Thracian society.

²⁵ SEG 55: 742; Kitov 1995, 19-21; Dana 2015, 247.

²⁶ SEG 56: 828; Delemen 2006, 261.

²⁷ Agre 2011, 210-215.

²⁸ For an overview Mihailov 1987, 5-19; Archibald 1998, 318-335.

²⁹ Whitley 1991, 354-361; Bliege-Bird – Smith 2005, 221-222, 233-234.

³⁰ Delemen 2006, 267-268; Agre 2009, 21-26.

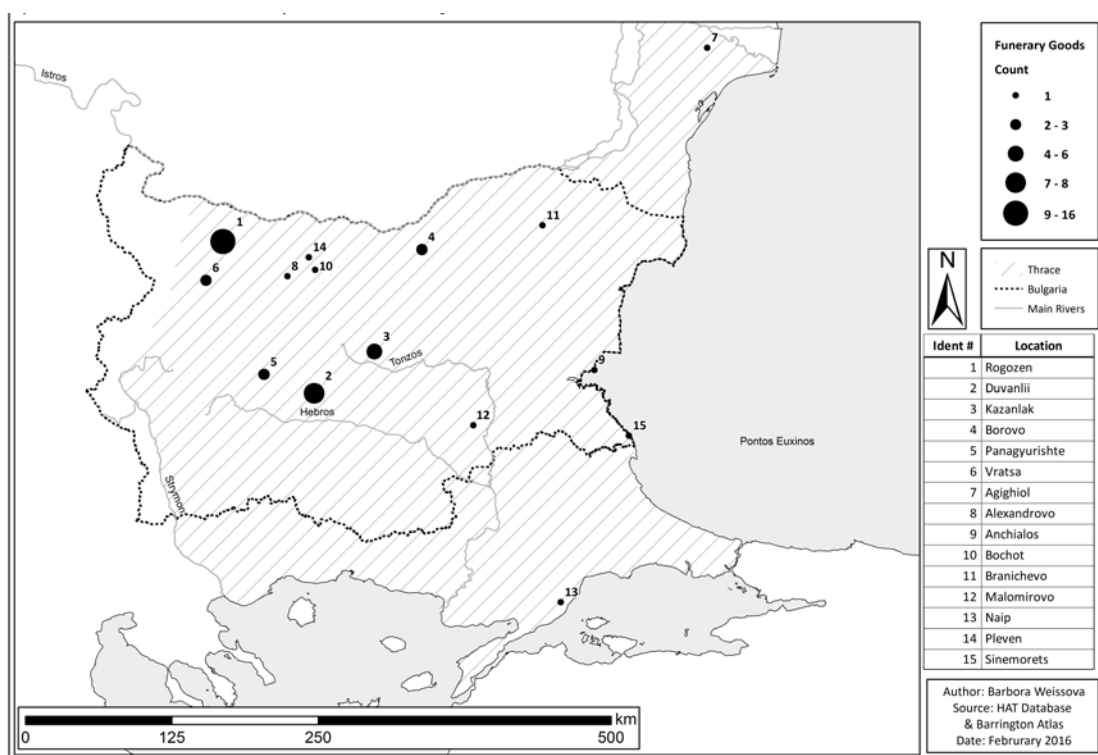


Fig. 2 Spatial Distribution of Inscribed Funerary Goods in Thrace during the Classic and Hellenistic Period

Inscriptions in Graves

The third group are inscriptions carved into the architectural elements of the tomb itself. The texts of these inscriptions have clear connections to the funerary rite, unlike inscribed movable objects deposited in the grave during the funeral, described in the previous group. The inscriptions carved in the architecture of the grave served specifically the funeral ritual, or were meant for the afterlife of the deceased. As such, these architectural inscriptions specifically have informative value for our understanding of the ritual. The inscriptions in the interior of the graves were probably meant to be seen during the course of the funeral, lasting over several days, when the aristocracy was allowed to enter the monument, as was mentioned by Herodotus (V.8) in his description of Thracian rites.

Analysis of the Epigraphic Evidence

There are only six known inscriptions from the interior of graves. They were carved into the surface of the grave architecture; see Table 3. These simple inscriptions can be interpreted as the personal names of the deceased, indicating the ownership or the authorship of the objects.

The first example is the inscription from Smyadovo in N.E. Bulgaria (SEG 52: 712; Dana 2015, 246-247) interpreted as 'Gonimaseze, the wife of Seuthes' or as recently suggested by Dana 'Gonimase, Seuthes' wife, (still) lives!'. The inscription was carved into the stone lintel of the burial chamber and has been dated to the 4th century B.C. The tomb most probably belonged to members of the Thracian aristocracy, due to its elaborate architecture and rich funerary goods³¹. Atanasov and Nedelchev (2002, 553-554) point out that the inscription on a lintel may have functioned in a simi-

³¹ Atanasov – Nedelchev, 2002, 550-557.

lar manner to funerary *stelae*, but the audience was limited to only those people who were allowed to enter the grave, as these inscriptions were not publically accessible.

Another example is the wall graffito of ‘*Kozimases, of a good origin*’ or ‘*Kozimases, a good (painter)*’ from the *Roshava Chuka* mound in Alexandrovo, dating from the 4th - 3rd century B.C.³². The inscription was located near a pictorial graffito representing the head of a young man; maybe *Kozimases* himself. The same name appeared on the wall fresco inside the royal grave in Kazanlak, in the ‘valley of Thracian kings’³³, dated to the 3rd century B.C. The text mentions the owner of the grave ‘*Rhoigos, son of Seuthes*’ and possibly the artist’s signature ‘*painted by Kozimases*’. Whether we accept the theory that *Kozimases* was a painter or not, he was probably working for Thracian aristocrats or he himself belonged to the aristocracy.

The last inscription with a text of uncertain meaning (‘KAΘAΘA’) was incised into the wall painting of a rich burial chamber tomb at Naip dated to the 4th century B.C.³⁴ together with a representation of a ship. Moreover, the inscribed silver jug with dedication to *Teres* was found in the burial chamber (*supra*, second group on the grave goods). Delemen (2006, 267) associates the tomb with a Thracian/Odryian aristocrat, not necessarily with the ruler *Teres*.

Table 3. List of Inscribed Architectural Parts of the Grave

No	Inscription ID	Find-spot	Archaeological context	Date	Type	Technique	Location	Text (SEG, PHI)
1	SEG 52:712	Smyadovo	Élite Burial mound	4th c. BC	ownership	carved	lintel stone	Γονιμασήζη Σεύθ(ο)υ γυνή
2	SEG 54:628	Alexandrovo	Élite Burial mound	4th/3rd c. BC	ownership/authorship	graffiti	wall painting	Κοζιμασης χρηστός
3	SEG 58:703	Kazanlak	Élite Burial mound	3rd c. BC	ownership/authorship	dipinti	wall painting	Σεύθου Ροιγος Κοζιμασης ἐξωγράφησε ν
4	SEG 56:827bis	Naip	Élite Burial mound	4th c. BC	uncertain ?	graffiti	wall painting	KAΘAΘA
5	IG Bulg 2 776bis	Jankovo, Kolarovgrad	Élite Burial mound	5th/3rd c. BC	uncertain ?	carved	marble block	A
6	SEG 46:852	Kupinovo	Burial mound	4th/3rd c. BC	uncertain ?	carved	boulder stone	Σκιάς

³² SEG 54: 628; Sharankov 2005, 29-35; Dana 2015, 250.

³³ SEG 58: 703; Boshnakov 2008, 5-9; Dana 2015, 250.

³⁴ SEG 56: 827 bis; Delemen 2006, 256.

The inscriptions on the architectural parts of the grave come mostly from the Thracian hinterland and from the *Propontis* (Fig. 3), the area inhabited by the Odrysians during the 4th and 3rd century B.C. Analogous examples are missing from the Black Sea coast and from the Aegean, with the exception of Naip, as is similarly the case with the inscribed metalware.

The texts inscribed in the architectural parts of the funerary mounds were most probably connected to the Thracian aristocracy, those who ordered the building of such monuments. The texts are all dated to the 4th – 3rd century B.C. and their function is linked with the owner of the grave or with the artist working for the owner. The texts were restricted to a small group of people, who could enter the burial chamber, and consequently those who were able to understand them. As far as the six occurrences of such inscriptions that have been found, the habit of inscribing the interior of the burial chamber was rare and cannot be considered a cultural norm or trend, even when trying to understand the Thracian aristocrats.

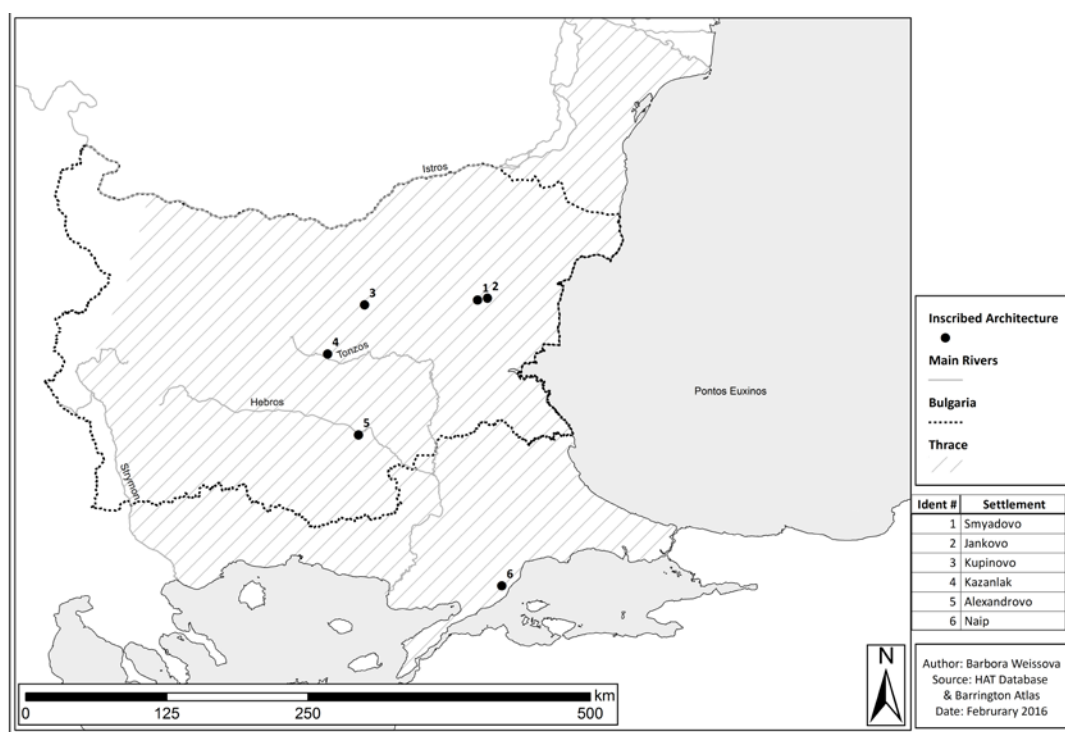


Fig. 3 *Spatial Distribution of Inscribed Architectural Parts of Graves in Thrace during the Classical and Hellenistic Period*

Conclusion and Discussion

Based upon the analysis of the available epigraphic data we propose that the role and use of writing in the funerary rite mirrors the different socio-cultural organisation within the social realms of the Greek colonies and the interior of Thrace. The society of Classical and Hellenistic Thrace was rather conservative and did not often cross the boundaries of their respective communities. The differences in the use of writing during the funerary practice suggest the Greek settlers and the local Thracian population maintained different customs, without any clearly traceable interactions.

The use and spatial dispersion of funerary grave markers (*stelae*) can be seen as one of the distinctive signs of Greek culture, as it was not adopted by the Thracian population in the Classical and

Hellenistic periods. The grave markers are documented only in the context of Greek speaking communities, notably from the Greek colonies along the Aegean coast, the Black Sea coast and the *Propontis*, and only rarely from Greek contexts in the hinterland. The onomastic record from these grave markers shows they were predominantly used by the Greek population: Thracian names appeared only rarely in the analysed texts. The character of associated graves and *necropoleis* demonstrates that various segments of society were represented, with the only distinction in the nature of the grave goods and in the relative costs of the burials.

The known instances of funerary epigraphic evidence from inland Thrace suggest that only the upper rungs of society were interested in writing and even so they used it only occasionally and for different purposes than for marking the grave for the public. The examples of inscribed funerary goods and inscribed architectural parts of the burial chamber commonly come from rich contexts associated with the Thracian aristocracy, namely with the Odrysians, who were evidently able to discern the added value in writing.

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TWO GRAVES FROM THE ISAURIA REGION: A ROCK SARCOPHAGUS AND A ROCK OSTOTHEK

ISAURIA BÖLGESİ'NDEN İKİ MEZAR: KAYADAN OYMA SARKOPHAGOS VE KAYADAN OYMA OSTOTHEK

ERDENER PEHLİVAN *

ASUMAN BALDIRAN **

Abstract: The region of Isauria, bounded by the regions of Cilicia, Pamphylia, Lykia, Psidia and Lycaonia attracts attention from the role it played in interactions, both north-south and east-west. Due to its role in this interaction, the existence of necropolis elements exhibiting different cultural features can be observed. The first subject studied is a multi-stage rock ostothek that was found in 2013 in the antique settlement of Dibektaş located to the south of Suğla Lake (Lake Trogitis) in the course of the surface surveys that have been conducted by the authors in this region since 2005. The second subject of study is a multi-stage rock sarcophagus found in 2015 in the course of this same surface survey. When a review of the literature was made relating to this rock ostothek, it was found to have been described as a Phrygian multiple-stage sacred place. However, new data continued to be collected, concerning the evaluation of this structure as a sarcophagus, presenting a different argumentation. A rock sarcophagus with a multi-stage form which was found on the borders of Karacaardıç Village provides evidence to support this hypothesis.

Keywords: Isauria • Ostothek • Sarcophagus • Necropolis • Burial • Sacred Place

Öz: Kilikia, Pamphylia, Lykia, Pisidia ve Lykaonia bölgelerine sınır olan Isauria Bölgesi, kuzey-güney, doğu-batı ile etkileşim içinde oynadığı rol ile dikkat çekmektedir. Bu etkileşim rolü sayesinde, farklı kültürel özelliklerle nekropolis unsurlarının varlığı da görülebilmektedir. Çalışılan ilk konu, 2005 yılından beri bölgede yazarlar tarafından gerçekleştirilen yüzey araştırmaları sırasında, Suğla Gölü'nün (Trogitis) güneyinde yer alan antik Dibektaş yerleşkesinde 2013'te bulunan çok katlı kaya oyma ostothektir. Çalışmanın ikinci konusu ise, aynı yüzey araştırmasındaki 2015'te bulunan çok katlı kaya oyma sarkofagostur. Bu kaya ostotheki ile ilişkili literatür incelemesi yapıldığında, çok katlı Frig kutsal alanı olarak tanımlandığı görülmüştür. Ancak, farklı bir argüman sunarak sarkofagos olarak bu yapının değerlendirmesini içeren yeni bilgi toplanmaya devam etmiştir. Karacaardıç Köyü sınırlarında bulunan çok katlı formlu kaya sarkofagosu bu hipotezi desteklemek için kullanılır.

Anahtar Kelimeler: Isauria • Ostothek • Sarkofagos • Nekropolis • Gömü • Kutsal Yer

Introduction

The first surviving written information concerning the antique settlement of Isaura, the capital of the Isauria region, is in the "Bibliotheca Historika" by Diodoros¹. The information in it is related to the Macedonian, Alexander the Great's expedition to the Orient. Employed as the name of the region, it is first found as Isaurike in Strabon². Moreover, Strabon identifies Isauria as inside the borders of Lykaonia Region³. Another antique writer Plinius describes the Isauria Region as the lower

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¹ Diod. XVIII. 22.

² Strab. XII. 6. c. 569.

³ Strab. XII. 6. c. 568.

part of mountainous Cilicia and relates that Isaura comprises Clibanus, the Lalasis settlements and the area from Homonods' Country (the Suğla Lake basin) to Anemurium (Anamur) ⁴. Ptolemaios, in the 2nd century A.D. indicates the northern border of the region began from Lystra (Hatunsaray) ⁵. Under the Roman Empire, in the reign of Diocletianus (284-305 A.D.) it is known that the borders of the Isauria region, which was divided into 12 territories, expanded to reach the Mediterranean Sea ⁶. In this case, considering the settlement of Isaura as a center, the region of Isauria can be defined as extending to the Taurus Mountains in the south, to the Suğla Lake Basin in the west, in north to Lystra which was accepted as the beginning of the Konya plain and, in the east, to Cappadocia, to the east of Derbe.

In this region in 2013 the Dibektaş rock ostothek and in 2015 the Karacaardıç rock sarcophagus were investigated during the course of the surface survey that have been conducted by Prof. Dr. Asuman Baldiran since 2005. These settlements are located in the surroundings of Lake Trogitis, within what is described as Isaura's lower region. The first object of study, the rock sarcophagus, is 22 km southeast of Lake Trogitis, inside the borders of Karacaardıç Village, 4 km from the county center of Bozkır. The other, the rock ostothek is 20 km south of Lake Trogitis in the highland settlement of Dibektaş, 15 km from the county center of Ahırlı on the northern side of the Taurus Mountains. The straight-line distance between these two settlements is 22 km (Fig. 1).



Fig. 1 Map of the Research Area

The Karacaardıç Rock Sarcophagus and its General Condition

As this sarcophagus has suffered extensive damage, it is hard to obtain information from its current status. This sarcophagus was carved from the limestone rock on the top of a two stepped podium. Under the first step there is a section which provides a horizontal profile, probably at stereobate lev-

⁴ Plin. *nat.* V. 94.

⁵ Ptolem. V. 4. 3.

⁶ Amm. Marc. XIV. 3. 14; 82.

el. It can be stated that this section was under the level of the euthynteria, at the time of its construction. There are pilaster pillars and above them a kyma reversa profile (reverse) was carved. Since the front long side of the sarcophagus has suffered extensive damage, there is no remaining visible details of the ornament. On the short side of the sarcophagus this profile continues. Above this profile, representing the door to Hades, a figurative carving relating to the cult of the dead attracts attention. In contrast to the plain door, the ornamented profiles show this door is of type 6 according to the door typology described by Ali Yalçın Tavukçu⁷. This permits us to date the sarcophagus to the years 180-200 A.D. The lower profile of the sarcophagus, although it is not as long as type 7, is like type 7, according to the typology provided by Veli Köse⁸ (Figs. 2, 3, 4).



Fig. 2 Karacaardıç Rock Sarcophagus Long Side



Fig. 3 Karacaardıç Rock Sarcophagus Short Side



Fig. 4 Karacaardıç Rock Sarcophagus View of Base

Dibektaş- The Two Stepped Rock Monument and its General Condition⁹

Literature Review: Archeological studies by Juthner and his team in this region date from 1902¹⁰. In 1935 Swoboda¹¹ and in 1968 Bean and Mitford made research in this region but they do not provide record of this stepped monument¹². Bahar made a status assessment about the monument in his

⁷ Tavukçu 1996, 126.

⁸ Köse 2005, 44-45 fig. 12.

⁹ The monument named Dibektaş 1 and Dibektaş 2 by K. L. Zoroğlu (Zoroğlu 1994, 302).

¹⁰ Juthner *et al.* 1903, 18-25.

¹¹ Swoboda *et al.* 1935, 60-61.

¹² Bean – Mitford 1970, 113-116 fig. 83-85.

studies¹³. Based upon the Kybele relief found in the highland, Bahar indicated this monument was constructed under Phrygian influence¹⁴. From the evaluation of similar featured stepped monuments, he stated that it might have been constructed in the 6th century B.C. In addition, he comments upon the offering hollow in the monument and that the Medusa relief is dated later than the date of the offering hollow¹⁵. Brief information concerning this monument was provided in publications in previous years by Baldiran and Sögüt¹⁶. Yılmaz, French, Zoroğlu and Bahar stated as a result of their joint research, that this monument could be a temple related to the cult of Kybele¹⁷. While speaking about the rock altars of Anatolia and in surrounding cultures, Tamsu connects the Dibektaşu monument with the Phrygian rock monuments¹⁸. Büyüközer, from a different perspective, describes it as a rock ostothek¹⁹.

The rock ostothek found in the Dibektaşu settlement is of smoothed and trimmed rocks within a natural rocky area. During our surface survey conducted at 2013, there were three different monuments located. One is at the lower elevation and two are at an upper elevation. The lower one is named Dibektaşu-1 by Zoroğlu. Based upon photographs in “Cilicia Tracheia in the Iron Age: The Khilakku Problem” by Zoroğlu, a three stepped monument is recorded²⁰. The monuments upper side has a smoothed surface. An offering hollow (for libation) is visible on this surface.

Zoroğlu, by considering them as one, named the other two monuments located at the upper elevation, Dibektaşu-2²¹. However, as they are carved on the same rock but are two different monument we should name them Dibektaşu-2a and Dibektaşu-2b. The reason for this is that the height of these monuments is different from each other and there is an un-carved space between them (Fig. 5). It is stated in different sources that the Dibektaşu-1 monument was constructed before the Dibektaşu-2a and Dibektaşu-2b, and it has similarities with the Phrygian Altars in Anatolia²² (Figs. 5, 6, 8).

The main subject, the Dibektaşu-2a stepped monument consists of 4 steps above the euthynteria level. Above the 4th step there is a rectangle block which is largely damaged. In our examination, it was found that this block has been almost destroyed. However, Zoroğlu defined this block as a basin. He mentioned the Medusa relief which is on the front facade of the basin²³. When the semi-ovoid form around the relief is examined, it may be considered as a garland²⁴ as it has typical garland form and expanding sagging in the middle and lower parts and constriction in the hanging part. Yet neither the basin nor the relief is extant. A kyma reversa profile is found under the basin. This profile is also similar to type 7 of Veli Köse’s typology, but is not as long²⁵ (Figs. 9, 12).

¹³ Bahar 1991, 44; 1996, 72-73 fig. 18; 1999, 16-17 lev. 45.

¹⁴ Zoroğlu supports this view (Zoroğlu 1994, 302-303).

¹⁵ Bahar 1999, 16-18 lev. 44-45.

¹⁶ Baldiran – Sögüt 2002, 51-52; Baldiran 2006, 11-12 fig. 11; Baldiran – Sögüt 2010, 261-262.

¹⁷ Yılmaz 2005, 99.

¹⁸ Tamsu 2008, 441; Tamsu-Polat 2010, 210.

¹⁹ Büyüközer 2015, 425.

²⁰ Zoroğlu 1994, 308 pl. 27. 1. 2.

²¹ Zoroğlu 1994, 302-303.

²² Zoroğlu 1994, 305; Tamsu 2008, 441.

²³ Zoroğlu 1994, 302.

²⁴ Büyüközer 2015, 426.

²⁵ Köse 2005, 44-45 fig. 12.



Fig. 5 *Dibehtaşı Rock Monuments General View (I-IIa - IIb)*

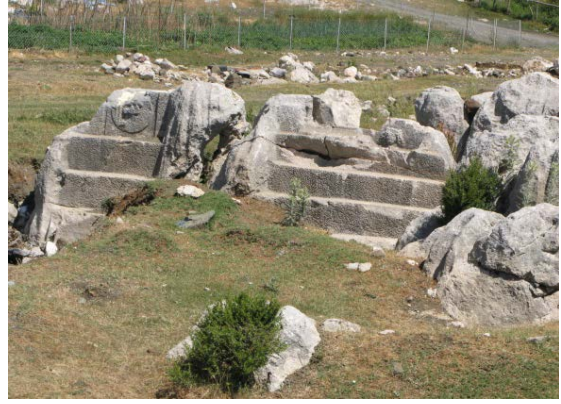


Fig. 6 *Dibehtaşı Rock Monuments (IIa - IIb)*



Fig. 7 *Head of Medusa*



Fig. 8 *Dibehtaşı Rock Monument (IIa)*



Fig. 9 *Profile of the Kyma Reversa*

Examining the current state on the east side of basin there is another medusa relief. With its plump face, the medusa's curly and straggly hair is conspicuous. Zoroğlu states that there are two lion protoms located bottom left and bottom right of the Medusa²⁶. In the examination made in 2013, these protoms were found to be broken (Fig. 7).

When compared with the photos in Cilicia Tracheia in the Iron Age: The Khilakku Problem by

²⁶ Zoroğlu 1994, 302.

Zoroğlu in 1994²⁷ and our photos in 2013, it seems unlikely that the rectangle basin has been damaged from any natural causes. Probably, it was damaged in the course of some illegal hunting for treasure (Figs. 5, 6, 8, 12).



Fig. 10 *Dibektaşlı Rock Monument (IIb)*



Fig. 11 *Dibektaşlı Rock Monument (IIb)*

The monument named Dibektaşlı-2b is located on the same rock outcrop as Dibektaşlı-2a, at its west end. This monument has a flat, rectangle platform created above the three steps. On the south side of this platform, on a panel there is a cavalry figure depicted on a shield. The horse is carved on its back feet, rearing up. Yet, as a result of the destruction of the monument we have no indication of the horseman's position. From our examination of this monument, no hollow was detected on the surface (Figs. 10, 11).



Fig. 12. *Dibektaşlı IIa (Zoroğlu 1994, Plt. 27. 2. 1)*

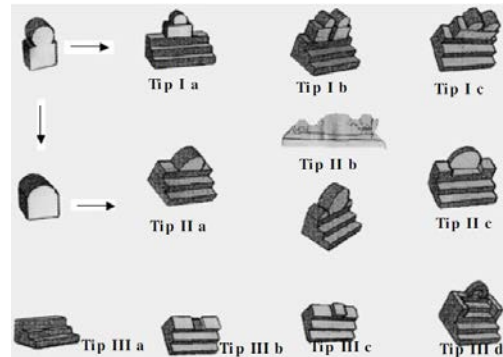


Fig. 13. *Typologies of Rock Altars (Tamsu-Polat 2010, 216, Fig. 2)*

Conclusions

The Dibektaşlı-2 monument, which has been repeatedly related to the Cult of Kybele by previous

²⁷ Zoroğlu 1994, 308 pl. 27. 1. 1, pl. 27. 1. 2, pl. 27. 2. 1.

researchers, is termed a rock altar²⁸. That an absolute typology has been used may lead researchers to be mistaken, as on this monument there are reliefs relating to the underworld, Hades, Medusa and garland. The evidence carried by this monument has been largely destroyed and this leads us to be circumspect in statements concerning it. In Zoroğlu's publication a rectangle basin above the monument is mentioned. However, in the published photograph the ostothek's urn is not to be seen²⁹. According to our data, even though there is no urn to be seen, the medusa and garland like objects carved on the monument indicate this construction was connected to a burial cult. In addition, amongst the artifacts found and published by Baldıran from research conducted in and around Beyşehir, a monument of a similar appearance was there termed a grave monument³⁰.

Yet the offering hollow located in the south of the monument leads one to revise the remarks made about this monument. In addition, as on Dibektaş-2b, that there is no urn space on the surface, which leads one to wonder if the Dibektaş-2a monument was of the same form or not, because from the evidence presented in the photos in the literature review we can state an urn is not to be seen. As an example of Phrygian art degenerated, the Dibektaş-2a monument, located in the Dibektaş highland on the southern border of the Phrygia³¹ could be a metamorphosed form of Type III-c in Tamsu-Polat's rock altar typology³² (Fig. 13). In this case, although not as yet to be stated as certain, it comes to mind that this monument was probably firstly planned as a stepped Phrygian sacred place, and then, subsequently it may have been altered, to form a necropolis structure.

From all the information, when we evaluate both structures, the evidence of the pillow inside the basin and the Hades door out of the basin, makes us certain concerning the function of the Karaardıç rock sarcophagus. However, we need more secure and precise data to term the Dibektaş-2 monument a rock ostothek, yet, it would not be wrong to state that it is a structure connected to the cult of the dead.

²⁸ Bahar 1999, 16-18 lev. 45; Baldıran – Söğüt 2002, 51-52; Yılmaz 2005, 99; Baldıran 2006, 11-12 fig. 11; Tamsu 2008, 441; Baldıran – Söğüt 2010, 261-262; Tamsu-Polat 2010, 210.

²⁹ Zoroğlu 1994, 301-305, lev. 27. 1. 1-2, 27. 2. 1.

³⁰ Baldıran 2009, 21-22, 69 fig. 17.

³¹ Zoroğlu 1994, 303.

³² Tamsu 2010, 216 fig. 2.

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THE UNDERWATER STUDY OF MAGYDOS HARBOUR

MAGYDOS LIMANI SUALTI ÇALIŞMASI

KENAN BEŞALTI*

Abstract: Ships often followed coastlines in the period from antiquity to the use of the compass. This was frequently the case for reasons of trade, ship size and access to water supply. It can be thought that this practice caused a denser pattern of coastal settlements and the greater use of harbours with this quantity of coastal traffic. The structures of a harbour, which can be evaluated as a complex, have been physically destroyed over the course of time, through earthquakes, coastal change and human interventions and today we have what has remained underwater. Only parts of the harbor of the ancient city of Magydos, one of the most important coastal settlements of Pamphylia, due to the above mentioned problems, remains underwater today with the remains onshore subjected to repeated modern interventions. However, underwater investigations were undertaken in 2013 to establish the parts remaining underwater of this important harbour and some important discoveries were made.

Keywords: Magydos • Karpuzkaldıran • Pamphylia • Ancient Harbours • Breakwater • Underwater • Archaeology

Öz: Antikçağlardan pusulanın kullanımına kadar geçen sürede gemiler kıyıları takip ediyordu. Bu, çoğunlukla; ticaretin, gemi boyutunun ve su kaynağının neden olduğu durumdu. Kıyı trafik miktarı ile limanların daha fazla kullanımı ve daha sık kıyı yerleşimlerine yol açmış olduğu düşünülebilir. Bir kompleks olarak değerlendirilebilen liman direkleri fiziksel olarak, zamanla depremler, kıyı değişiklikleri, insan müdahaleleri ve de bugün hala su altında kalan şeyleri yok etti. Pamphylia'nın en önemli kıyı yerleşimlerinden birisi olan Magydos antik kent limanı, yukarıdaki problemlerden dolayı bugün sualtında kısmen kalmıştır. Sahildeki bölümü ise modern müdahalelere maruz kalmıştır. Zira, sualtı araştırmaları, bu önemli limanın sualtında kalan kısmının tespit etmek için 2013'te girişildi ve bazı önemli keşifler yapıldı.

Anahtar Kelimeler: Magydos • Karpuzkaldıran • Pamphylia • Antik Limanlar • Dalgakıran • Sualtı • Arkeoloji

The Mediterranean shores of Anatolia formed a passage way joining the East to the West for seamen who sailed ships than could not easily face difficult sea conditions because the technologies of building ship was very weak in antiquity. Most of the ships which travelled in the Mediterranean at that time were small cargo ships which made the trip along the coastline¹. Many harbour cities were built on the Anatolia coastline along the route followed by these ships. Harbours were one of the areas which experienced the most direct interaction between cultures and they were necessary loading and unloading places for goods, in providing the daily needs of large populations. The ancient city of Magydos, situated at the border of Muratpaşa in Antalya and today largely within the area of the Karpuzkaldıran Military Camp, was an important harbour city of the period.

Information about the city survives in the ancient historical sources. The earliest information

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¹ Casson 2002, 138. See also contra Casson (1974), at D. L. Davis, *Commercial Navigation in the Greek and Roman World*. Unpublished Doctoral Dissertation, The University of Texas. Austin 2009, viii, 'My research concludes that both coastal and open-sea sailing were matters of routine in the commercial sector, that commercial seafarers did indeed sail at night and employ the stars to deduce navigational information, that winter sailing was a widespread practice, and that crews employed navigational strategies to weather storms, usually successfully'.

from this record states: "...and if you go up (to the North), you meet the city and Harbour of Phaselis (it is a gulf) and the city of Idyros, Lyrnateia island, Olbia, the rivers of Magydos and Katarraktes, the city of Perge and the temple of Artemis" which belongs to the work of Pseudo-Skylaks, which includes some information dating from the 4th century B.C.² In addition, although Strabon, who gave information about the region, mentions both the Katarraktes River and the Kestros River in his *Geographica* (XIV.4), he relates nothing about Magydos, between these two rivers. This presents another problem, as we have record of this city from Ptolemaios and it is also recorded in the *Stadiasmus Maris Magni*³. The Ancient City of Magydos which minted coins under its own name from the 2nd century B.C.⁴ was one of the six important cities of Pamphylia. These six important cities were Magydos, Attelia, Sillyon, Aspendos, Perge and Side⁵.

Captain Francis Beaufort, visited the city's ruins in 1811, listed the remains. He mentioned the harbour, an aquaduct⁶, a quay, a stoa and an agora⁷. A study was made by the Museum of Antalya in the 1970's. In this study, the remains of ancient city were indicated and it records that there were public baths, aquaducts, the remains of the city wall, the remains of a depot and other remains of building. It was agreed that it is necessary to protect the remains of the ancient city, including all these visible remains in 1977, and the 1st degree archaeological site boundaries were determined in 2008⁸. The remains of the ancient city, at present are situated within the facilities of the Ministry of National Defense.

A stone inscription was found in the excavation of the Saint Ioannes Church in 1976. After studying it, it was understood to concern the Customs Law of Roman province of Asia. In this inscription the harbour of Magydos was named as an official customs harbour together with harbours of Attelia, Aspendos, Perge, Phaselis and Side⁹.

Purpose

The aim of this study was to conduct an underwater survey of the harbour of Magydos, a ancient city whose name is recorded in both ancient and modern sources and to evaluate the results of this survey. The fact that no underwater research has been conducted in the area to date made this research.

Method

In 2013, dives were conducted in the area with the permission of the Ministry of Culture, by Dr. Hakan Öniz and his team from Selçuk University. The aim of these dives was to determine the remaining parts underwater of the harbour of Magydos. With this aim, one ship, one sonar scanner boat and scuba equipment was used. In addition, equipment such as an underwater camera, measures, drawing board and an arrow direction were used. Dives were conducted by at least two divers using the "U searching Method¹⁰". The coordinates which were taken as UTM 6 degree ED datum were applied to digital maps with the help of floats on the surface.

² Arslan 2012, 251.

³ Adak – Atvur 1999, 65.

⁴ Adak – Atvur 1999, 59.

⁵ Demirtaş 2014, 235.

⁶ Beaufort 2002, 139.

⁷ Hellenkemper – Hild 2004, 702.

⁸ Regional Council of Protection of Cultural and Natural Monuments: dated, 27.03.2008, no 2279.

⁹ Takmer 2013, 143.

¹⁰ Öniz – Başgelen 2009, 95.

Evidence

In the course of these dives, firstly, the remains of two breakwaters belonging to the Magydos Harbour were found. One was about 220 meters long and the other about 340 meters in length. It was found that the large stone blocks which had been employed in the construction of these breakwaters had been destroyed or were eroded and damaged. It was further understood that these breakwaters constructed with large stone blocks were tied together with the rock outcrops on the seabed, designed to anchor these man-made constructions in place (Fig. 1). When the remains of these breakwaters were followed underwater, it was found that the entrance to Magydos harbour faced west. The pieces of amphoras which were found in dives in the area show the harbour was employed for commercial purposes (Fig. 2). In addition, pieces of clay waterpipe were found in dives (Fig. 3). The city of Magydos is 1 kilometer from the Katarraktes River to the West and 10 kilometers from the Kestros River to the East and there are also the remains of an aquaduct. From this location and these remains, it can be suggested that in antiquity fresh water was taken by means of aquaducts from the Kestros and Katarraktes Rivers and this fresh water was supplied through clay pipes to the ships in the harbour.

Captain Francis Beaufort walked around the ruins of the city and he mentioned the pieces of columns which he saw in the city. There are the remains of a building on the promontory to the South of the city but these building remains have largely been destroyed. From observation, these walls are thick and there is almost no passage between them. There are no other remains around this building, which was constructed upon hard rock. Further, this building is far away from the other remains of the city. There is the possibility that these building remains on this promontory are the surviving remains of the lighthouse of Magydos Harbour.

Conclusions

The coastline between eastern Antalya and Syria, upon which Magydos stands, was in antiquity generally more 50 cm above the current sea level, unlike the coastline to the west of Antalya. The reason for this difference along this coastline is the 6000 years old vertical regional earthquakes (that result in seismic alteration to the elevation above sea level of the coastline)¹¹. The city is known to have experienced earthquakes at various times. Magydos and its harbour can have been affected from the numerous earthquakes in this region, including those between the years 141-144 A.D.¹².

The only antique source we could obtain providing some technical information relating to harbour construction was the study “*De Architectura*”, written by Vitruvius in the 1st century B.C.. In the XII. book, there is some technical information concerning the topographical selection of locations for breakwater and for shipyards and the correct mixture of mortar to be used to produce strong mortar for underwater construction *etc.*¹³.

The port at Magydos has largely the characteristics of an artificial harbour. Although it was created, benefitting from a mainland port, it can be said that the capacity of the harbour, because of the artificial breakwaters, extended over an area of approximately 77000 square-meters, which is quite large. In consequence, we calculate that the capacity of Magydos Harbour and suggest that 42 commercial

¹¹ Fouache *et al.* 1999, 94.

¹² Karagöz 2005, 38.

¹³ Aslan 2011, 22.



Fig. 1

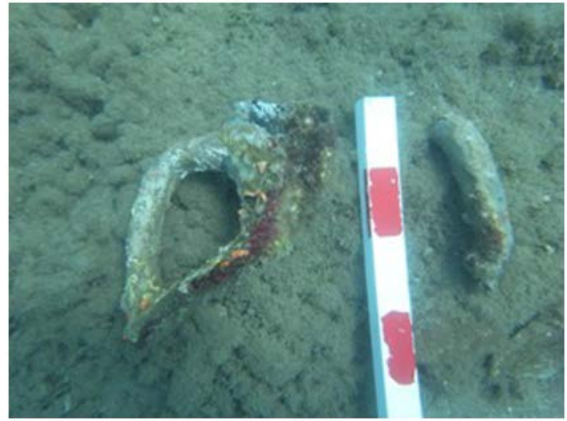


Fig. 2



Fig. 3

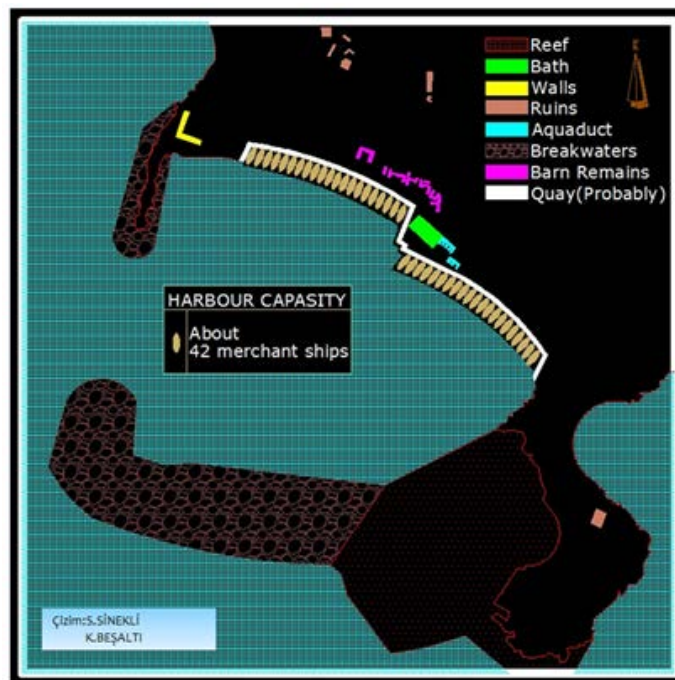


Fig. 4

vessels of an average size could harbour at Magydos at the same time (Fig. 4). Also, 50 warships of the trireme type could be in to the harbour at the same time.

An artificial harbour of this size should date from an earlier period than Attelia but it seems possible that a new large harbour was built so close, after the harbour of Attelia had been built¹⁴. The ruins of structures such as baths, fountains, warehouses, etc. which are understood to have existed on the coast by the harbour indicate this harbour was quite active and had a large volume of maritime traffic. It is not therefore surprising that such a large scale port was a regional harbour. Despite the above, this research was insufficient to fully understand the history of Magydos and its harbour. If more extensive studies were to be conducted, both on the land and underwater, then this harbour-city could be more fully understood.

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¹⁴ Bean 1997, 34.

THE ROMANS AND SALT. NOTES ON ITS PRODUCTION AND TRADE

ROMALILAR VE TUZ. ÜRÜN VE TİCARETİ ÜZERİNE NOTLAR

MATEUSZ ŻMUDZIŃSKI*

Abstract: The author shows the great importance of salt to the Romans. It was not only used for the seasoning of dishes. Great quantities were needed for human consumption, for livestock and for the preservation of meat and fish. Salt was used in various kinds of production and the production of salt is estimated at several million tons per year. Reference is made to the specific methods of salt extraction employed in the Roman state.

Keywords: Roman • Salt • Production • Trade

Öz: Yazar tuzun Romalılar için son derece önemli olduğunu ortaya koymaktadır. Tuz, sadece yemeği tatlandırmak amacıyla kullanılmamıştır. Büyük bir çoğunluğu da tüketim, hayvancılık ve etlerin korunması için gereklidir. Çeşitli üretim türlerinde kullanılırdı. Tuzun yılda birkaç milyon ton olacak şekilde üretildiği tahmin edilmektedir. Bu makale, Roma Devleti'nin özgün tuz çıkarma metodlarına değinmektedir.

Anahtar Kelimeler: Roma • Tuz • Üretim • Ticaret

In the attempt to understand the methods of Roman salt extraction and use we have both the surviving written sources and a variety of archaeological evidence. The first group includes the description of salt mines, information concerning the organisation of the work and the related surviving inscriptions¹. Sometimes these sources provide informations not available from archaeology. From these sources we know about organisation of the work, of the leasing of salt deposit and about people connected with mining it. From the archaeological sources we have evidence from mines, of the tools employed and the workshops². In antiquity they knew various



Fig. 1 Salt on a meadow in Turda (Ancient Potaissa) in Romania

methods of collecting salt: from the surface soil deposits (fig. 1), from open-air mines (fig. 2), from deep shaft mines (fig. 3), of the exploitation of underground salt water (brine evaporation) and salt production from the evaporation of sea water³. Among tools employed we can identify wooden bars, shovels, and pickaxes, baskets, buckets, and the equipment utilised for evaporation of brine to produce salt. A question is what was new in the process of salt extraction in the Roman Empire? Roman miners used oil lamps in underground mines. Roman society made laws governed mining and economic life and organised a system of leasing. This way they organised the exploitation of salt deposits,

mines and even the entire mining center with the middle class (equitae) making big business from working salt, with some businesses needing large quantities of salt (for production of garum etc). Aims in the production of salt were to provide sufficient for: the salting food to give it a nice taste, for

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¹ eg. *CIL* III 1363 = *IDR* III 3 119; III 3 349; IV 248; *AE* 1937 014.

² Żmudziński 2007, 106-112.

³ Wollmann 1996, 405-409.

the preserving of meat and fish, for animal husbandry, for the manufacture of fish sauces and salt was even employed to prevent oil lamps from smoking. It is important to ask how much salt the Romans needed? When we try to measure production for only human consumption we have to think that about 1 million people lived in Rome⁴. Each adult needs about 2 kg of salt per year.



Fig. 2 Salt-Lake in Turda



Fig. 3 Roman Mine Shaft in a Deep Salt Mine in Turda

Consequently two million kg of salt per year was required just for the inhabitants of the capital of the empire. In addition a further one million people living around the Mediterranean Sea required another two million kg of salt per year. For simply the human consumption of salt not less than four million kg of salt was required every year. Further salt is required in animal husbandry and one sheep requires about the same quantity of salt per year as an adult, about two kg per year⁵. We do not know how many sheep the Romans raised per year, but we can be sure that Romans had hundreds of thousands of them. They can stay grazing for many months in mountains, but they all need some salt intake. If we think about all these shepherds-farmers producing mutton, milk and wool we must also regard them as a large group of people buying salt for their animals. Each product connected with wool, the production of mohair, sheepskins, felt cloths and even dice was linked to the production of salt. Goats also need salt. We can imagine not only big herds, but also a lot of small farms with some goats or sheep. Roman farmers also kept cattle and cows and oxen need about 30 kg of salt per year. If we think about drinking milk, eating cheese or beef or veal, the production of leather bottles, shoes or leather clothing, these are connected to the production of salt. The Romans used oxen to plow, and in respect to their salt requirement, we need to think about the thousands of animals kept in barns for plowing the fields across a great Empire. Nor can we forget about the above mentioned production of salsamenta and garum which was a big business and today we still find amphorae pieces connected with these businesses. Their numer and the excavated workshops show that production of these sauses was on a near industrial scale. With the distribution of product and commerce it is worthwhile remembering that each town, village and Roman legion needed salt. In the context of commerce in the Roman Empire, in the Danubian region the main commercial route for the transmission of materials and goods was a river as was likewise the case in other parts of Imperium, along the Rhine or the Nile. Good example is provided by the ancient town Potaissa (modern Turda) in Dacia Superior, where we find open-air salt mines and deep salt mines with shafts and in this same town there is a river harbour. Salt from there was delivered along Danube river to Carnuntum and to other Roman army camps on a border of the Empire. Probably there was a similar situation by the Alps. We can think of the transport of salt from region of modern Salzburg

⁴ Ziółkowski 2005, 52-53.

⁵ Ziółkowski 2005, 52.

along the course of the Danube. Salt was also sold abroad to Barbaricum. It seems probable that some salt was also transported north along the Amber Road. Some Roman salt was transported in Africa across the Sahara. We can think of the transport of sea salt from the salt rich to the salt poor across the Mediterranean and other seas. It was a vital product, essential for both people and animals. It was a vital product employed in both the production and the preservation of food. Salt mining and the trading and commerce in salt were profitable businesses⁶ and we can think in antiquity that some large fortunes were based upon it. Although we can be sure that not every Roman had even a single piece of gold in a year, it was the case that all had to buy some salt. Salt was an important branch of mining and of the Roman economy.

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⁶ Cary – Scullard 2001, 251-256.

THE USE OF THE UNITY GAME ENGINE IN THE RECONSTRUCTION OF AN ARCHEOLOGICAL SITE

BİR ARKEOLOJİK SİT ALANININ REKONSTRÜKSİYONUNDAKİ BÜTÜNLEŞTİRİCİ OYUN MOTORU TANITIMI

BAKİ KOYUNCU*

ALPER GÖKÇE**

PEJMAN PANAHI***

Abstract: A Roman temple, the Temple of Augustus, is reconstructed in real time by using virtual reality techniques and programming. The temple in ruins in its present form is considered. Animation techniques are introduced during the reconstruction. The temple is raised to its ancient form at slow speed in the virtual world on the computer monitor. Special animation effects of movements together with lighting and rendering are introduced during the reconstruction. The Unity Game Engine and advanced motion characteristics are applied in animation to provide movements in and around the virtual temple.

Keywords: 3D Modelling • Unity • Augustus Temple • Animation

Öz: Bir Roma Tapınağı olan Augustus Tapınağı, programlama ve gerçek sanal teknikleri kullanarak gerçek zamanda yeniden yapılmıştır. Mevcut formunda kalıntılar içinde yer alan tapınak dikkate alınır. Animasyon teknikleri rekonstrüksiyon sırasında gösterilmiştir. Tapınak, bilgisayar ekranındaki gerçek dünyada yavaş hızda eski formuna getirilir. Işık ve canlandırma ile birlikte animasyon efekt hareketleri rekonstrüksiyon sırasında gösterilir. Bütünleştirici oyun makinesi ve gelişmiş hareket özellikleri gerçek tapınak çevresinde ve içindeki hareketleri sağlamak için animasyonda uygulanmıştır.

Anahtar Kelimeler: 3D Modelleme • Bütünleştirici • Augustus Tapınağı • Animasyon

Introduction

The temple of Augustus is located in Ankara, the capital city of Turkey. It was constructed in antiquity around the year 25 B.C. The temple was used as a Christian church by the Byzantines in the Middle Ages. Today it is in ruins and the remains of the temple are considered a historical site (Figs.1-2).



Fig. 1 Ruins of the Temple of Augustus today



Fig. 2. Model of today's Temple of Augustus

In this study the reconstruction of the temple of Augustus in virtual reality is carried out. A game engine, unity, is introduced in the process to generate motion within virtual reality. Recreating a his-

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torical site in virtual reality requires keeping its historical shape, size and characteristics as digital data to represent it in its exact format. This is an important goal in reconstruction of the ruins that are neglected such as the Augustus Temple.

Historical information about the temple can be stored as digital data in databases. This database can be preserved for future generations.

With the help of computer graphics, historical objects can be displayed with full details. Object details which can not be seen by the untrained eye can be focused in on and explained to an ordinary viewer.

Visual effects can be seen much easier through using digital data for museums that house historical objects. These effects can even be presented through a web site and with the help of web applications, the historical content of museums can become better known.

Inter-museum communication also becomes possible without replicating artifacts in each museum. All museums can be connected to a network and all the data held in databases can be seen in a website. These new ideas may in the near future change the understanding of museums.

Initially, a powerful graphics tool is required for displaying 3D models in the reconstruction process. Game engines are very capable of such tasks. A 3D modelling tool is needed to create the object model to be displayed in the game engine environment. Secondly a programming environment is also needed to combine the modelling and the game engines.

Game engines are powerful and cheap tools to create a virtual reality environment. The cost of reconstruction and the presentation of an historical object or a site can be radically reduced. 3D models which are generated for reconstruction can easily be archived for future use.

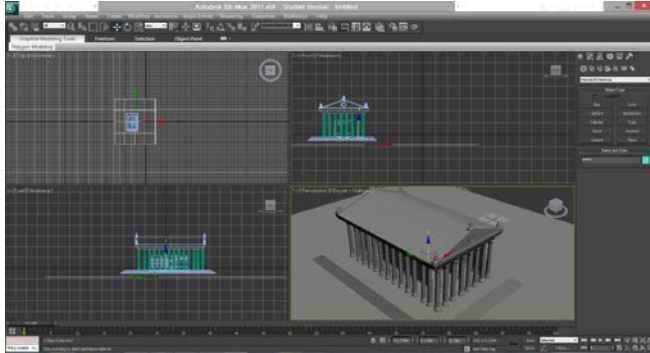


Fig. 3. *The 3dsmax Modelling Environment*

Increasing power of the game engines can allow the end product, the model, to be replicated and updated. Online distribution of the end product makes access to these historical models by more people possible.

In this study, 3dsmax is used as modelling tool because of its low price and distribution capabilities. Unity 3d is preferred as the game engine in this study. C# is chosen as the programming language

due to Unity 3d's support for this language. The development environment of monodevelop is used for the same reason. Figure 3 shows the modelling environment¹.

Theory

Presentation of an historical site in virtual reality through using software techniques is similar to developing computer games. In game development, the combination of artists, game players, sound designers and programmers, collaborate to create a 3D model of the game and finally the game itself in virtual media.

The workload of a computer game project can be defined as design and technical development.

¹ [http://docs.unity3d.com\(General unity definition\);](http://docs.unity3d.com(General%20unity%20definition);) <http://wiki.unity3d.com;> <http://www.autodesk.com.tr/products/3ds-max/overview>.

Since the Game Engine is used to create the project in this study, the workload and steps taken to create its virtual environment are similar.

The initial step is careful planning. Planning of the historical site must be carefully considered at the beginning. Poor planning may cause serious loss of time in development time and the results may become unpleasant. Planning steps involve the following, to determine:

- a) Animation techniques which will be used in the presentation,
- b) Features of the camera and system mechanics,
- c) Visual effects which will be used to create these animations and features.

Once these points are considered, the modelling needs to be planned. These needs can change according to landscape planning or because of the desired type of presentation.

Partial models which are needed to reconstruct the site model can be listed so that modelling process can go on smoothly. Software tools which will be used must be selected. During the selection, the experience of the team and their specific needs should be thoroughly considered. The selection of the tools for the modelling of historical objects must be done by considering their future use.

The first basic model should consist only of the vertex, surface and Uv data.

Texturing should be considered after the basic modelling such that any changes to the model without altering surface data would not matter because of the stored Uv data. However the artistic appearance of the texturing must be considered carefully.

The ready to use model at the end of the basic model step should be modified for specific needs which are determined in the planning process. For example the polygon count can be reduced by deleting non visible surfaces or prop models can be constructed and landscaping can be done by obtaining the model and textures.

The programming step can be executed with ease after all the modelling work is completed. This kind of programming can be classified under two main classes. These are, shader programming, and programming of presentation mechanics.

Shader programming is necessary to create visual effects which will be used in the presentation. Different kind of materials will be created for the 3dModel and the ground work for creating animations using these visual effects will be completed.

Presentation mechanics, on the other hand, involves the timing of animations, the camera positions and the pass between these camera positions and control mechanisms.

If the programming is done correctly, camera systems and visual effects can be treated as new tools to create the object. A new design work can be started with the created new tools very easily.

In case of inefficiency, or if visual insufficiencies are observed in the finished project, the designer can return to the planning step and change the animation type or model.

Testing and undesirable software bug clearing of the finished project are crucial in any project. After the project steps are completed in this part, the testing and cleaning of the bugs are carried out before the project finish.

A work flow chart of the reconstruction project is presented in Figure 4.

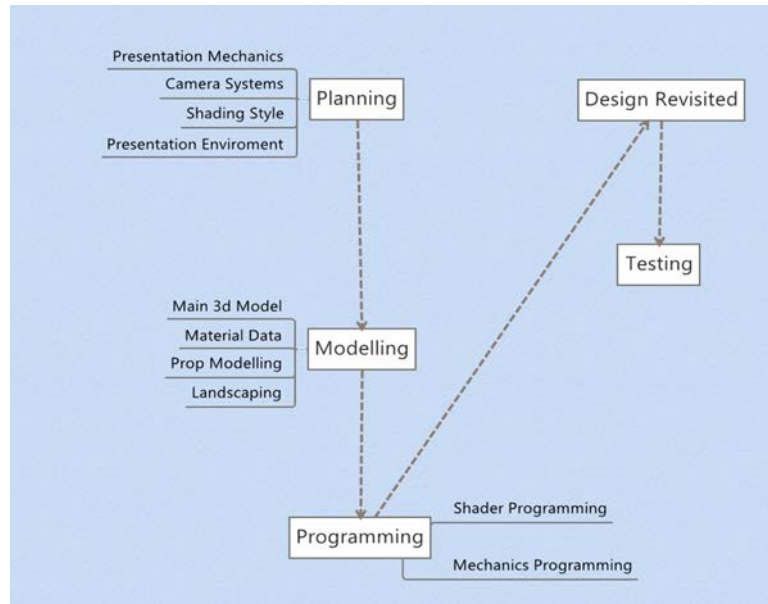


Fig. 4 Flow Chart for Work on the Reconstruction Project

Construction

In the planning phase of the project it was decided that the Augustus Temple should be presented in its both present and past state. This decision requires an animation style with motion to connect these two states.

Two animation types are considered. Disappear animation and Tween animation among multiple animation styles.

Disappear animation is an animation type where all the pieces belonging to the Augustus Temple's past state are presented in transparent materials. This past state slowly disappears and the ruined state of Augustus Temple appears.

Tween animation is an animation type where the model is cut into pieces and pieces fall off one by one, converting the complete temple into its ruined present or past state.

Presentation mechanics consists of an Orbit Camera and a First person camera. An animation sequence to pass between them was decided for use in this study.

Solid model is a single colored 3D shape which is modeled with the help of an appropriate computer program. Solid models have no texture or defined Uv channels. A solid model is the first step in modelling any shape. The solid model of the Augustus Temple is shown in Figures 5 and 6.

The Augustus Temple in both its ruined present state and past complete state is modeled by using 3dsMax. With the help of this program an FBX file that holds information about vertex positions, surfaces and normals is initially created.

Uv mapping is a process to create the proper coordination data between the PNG file that holds texture information and the solid model. This data is read through the game engine to decide which surface is going to be painted in which color. Hence, the UV maps for the Augustus Temple files are constructed and related paints are carried out in this project².

² Sellers – Wright 2013.



Fig. 5. *Solid Model of the Original State of the Temple of Augustus*



Fig. 6. *Solid Model of Today's Ruins of the Temple of Augustus*

Mapping is a method to achieve complex visuals by using simple models to improve performance. By creating bump maps with models that have high polygon count and apply them to the low resolution models, complexity in visuals is achieved. In this project, Bump maps are also created for the temple model and the resultant low resolution model is obtained³.

Hence, the basic model is constructed after the completion of these steps and it is stored for future references. At this stage, no database or network is constructed and only the shape and texture information is stored (Fig. 6).

Once the modelling procedure is completed, the model is modified with two distinct features of animation. The columns are broken down into many pieces for tween animation and the model is broken down into two pieces for disappear animation.

Pieces created for disappear animation have two different material data to manage, transparency and disappearing animation. These two material data can be seen in Figure 7 and 8⁴.

The breaking process for tween animation involves many small pieces. However for disappear animation, pieces from old and new states are carefully distinguished from each other so that when the pieces disappear only the old state should remain. Additionally, props are used for landscape modelling. See Figure 9. Disappear animation is made by breaking the model into two pieces. One piece is the old ruined state and the other state is the reconstructed new state. Animation is made possible by assigning transparent material for the new state and a vector value which represents the world point.

Circular distance is considered from this vector value. Any pixels reside in this circular distance are clipped as the game object which holds the position data moving from one point to another. In this way, pieces of the new state are made to disappear to give the old ruined state. See Figure 10 for disappearing animation.

Inbetween (Tween) animations are used to reduce the workload of keyframe animation by reducing the animation problem to mathematical functions rather than keyframes. These mathematical functions are called easing functions⁵.

³ Lengyel 2012; Sellers – Wright 2013.

⁴ http://http.developer.nvidia.com/CgTutorial/cg_tutorial_frontmatter.html (ReflectionCube Mapping); <http://www.roxlu.com/2014/037/openglrim-shader> (Rim Lighting); Srikanth *et al.* 2014.

⁵ http://en.wikipedia.org/wiki/Computer_animation (Mesh Deformation Tween).

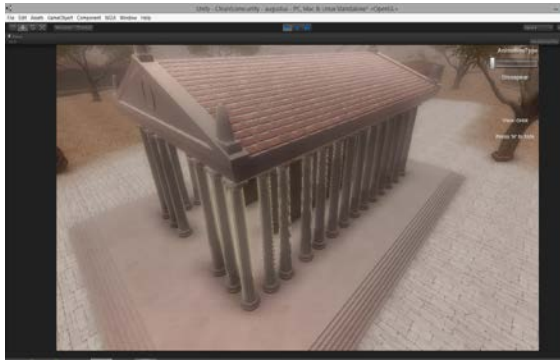


Fig. 7 Basic Model after Texturing, Bump Mapping and Shading are Completed

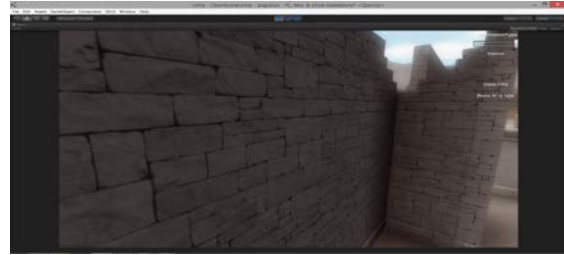


Fig. 8. Wall Texture Without Any Effects

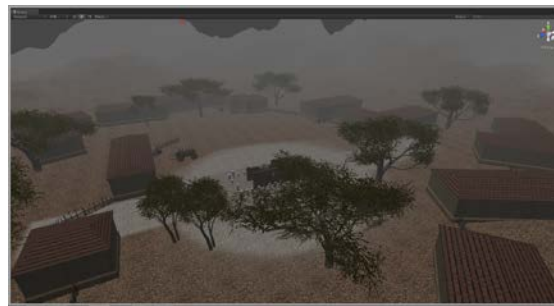


Fig. 9 Landscape Scenes

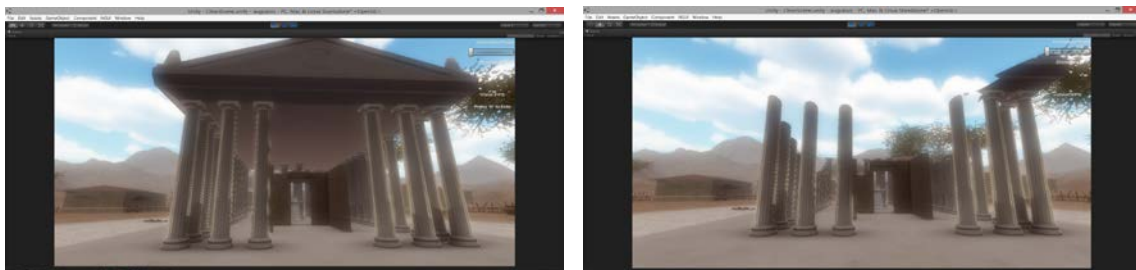


Fig. 10. Disappearing Animation

Easing functions take two parameters, namely animation duration and elapsed time. A value is chosen between 0 and 1.0 which represents the beginning of an animation. 1 represents the ending. Generally, if an Easing function has a start point of 0 and the end point of 1, it can be used for animation. Any mathematical function which intercepts the beginning and end points of an animation can be used as an Easing function. This makes the tween animation very flexible.

Tweening function takes the beginning and ending values, the animation duration and time, as inputs for any value which it will modify. Its output is the interpolation of the values between beginning and ending values at a certain input time. As time increases in small steps, a smooth animation is created. Hence, a tween function can be represented as;

$$\frac{(\text{endingvalue} - \text{beginningvalue}) * (\text{time} / \text{animationduration})}{1} + (\text{beginningvalue})$$

when time equals to 0, output is beginning value and when time equals to animation duration, output is ending value. Mathematical function, used in this study, is a sinusoidal tweening function defined by the following equation;

$$\text{StartValue} + \frac{\text{Change In Value}}{2} * [\text{Math.cos}(\text{Math.PI} * \text{t} / \text{AnimationDuration}) - 1]$$

Tween animation with sinusoidal tweening function is shown in Figure 11.



Fig. 11 Tween Animation from the Old to the New State

Tween animation is used for tweening every piece of the Augustus Temple to its original position. Each temple piece tweens individually. These individuals are cumulated under columns in programming hierarchy and columns are controlled by the software upper class. This tree of hierarchy makes possible many pieces to tween synchronously. To choose between these animations a user interface is programmed as seen in Figure 12.

The presentation mechanics used in this study are listed in two classes. First person Camera (fpc) and Orbit camera classes.

A classical fpc camera consists of two parts: body and camera. The body handles horizontal rotation with tracking mouse movement and the camera handles vertical rotation of the view.

Input walking mechanics are handled with 4 keyboards for front, back, right and left motion. A classical fpc controller is predefined in any modern game engine. The Orbit camera, on the other hand, uses orbital coordinates to handle view position. The camera positions, (x,y,z), can be defined by following equations;

$$\text{eyeX} = \text{pickObjX} + \text{radius} * \cos(\text{phi}) * \sin(\text{theta});$$

$$\text{eyeY} = \text{pickObjY} + \text{radius} * \sin(\text{phi}) * \sin(\text{theta});$$

$$\text{eyeZ} = \text{pickObjZ} + \text{radius} * \cos(\text{theta});$$

These equations handle the camera position while camera looks straight to the temple with the

⁶ <http://robertpenner.com/easing/>

aid of the mouse by changing phi and theta values in the equations.

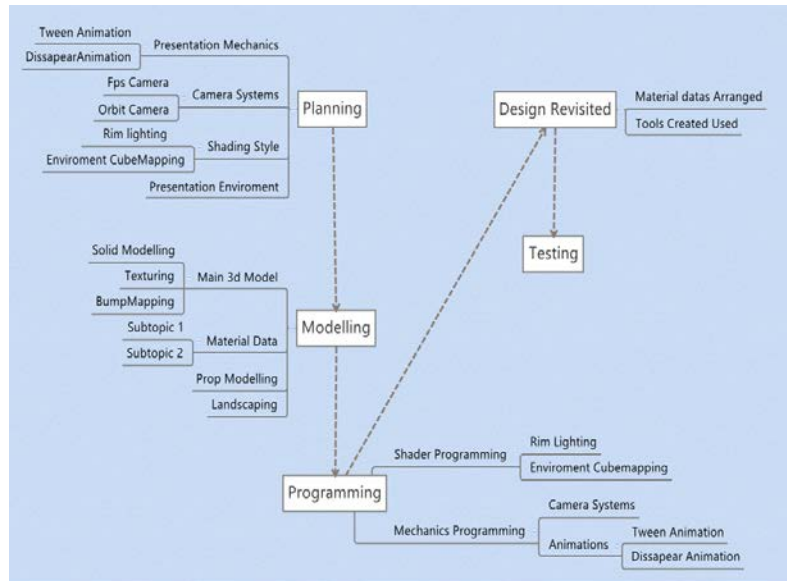


Fig. 12. *The User Interface for the Final Reconstruction*

Discussion

Modelling, animation and visual effects are implemented successfully in the reconstruction of the temple in virtual media. Tween animation and Disappear animation was successfully implemented by using the unity game engine.

One of the biggest problems encountered in this study was the shadow problem of transparent materials. Shadow mapping in the 3d environment is done by raycasting of the light. Transparent materials cannot act like standard diffuse materials and intercept these rays.

Originally, they are designed to pass the light to a certain degree. But this causes several problems with broken down transparent pieces of the temple. The pieces cannot generate shadows synchronous with the animation. Initially, partial shadows are generated. But the resultant view was unpleasant. Since the transparency concept is abused for disappear animation dynamic shadows are omitted in this study.

There is another animation type that is not included here. The model is sliced and expanded in this animation with the aid of specialised shader reconstruction. But this method proved to be visually unpleasant and inefficient.

The reconstruction of the Augustus Temple shows game engines are very much capable of visualizing historical sites. In addition to the methods deployed in this study, the game engine can also be used in other similar applications, not just in developing games.

Conclusion

The main purpose of this study was to reconstruct and present archeological and historical places through using the computer graphics technology provided by game engines. Game engines are really powerful tools to represent complex data. This fact alone is a proof that they can be used for different applications and purposes not just in developing games. This study can provide museums with a way to open their doors through the virtual media to millions of visitors from all over the world.

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MARINA EL ALAMEIN: A HIGHLY MYSTERIOUS, MULTICULTURAL TOWN?

MARINA EL ALAMEIN: OLDUKÇA GİZEMLİ, ÇOK KÜLTÜRLÜ BİR KENT Mİ?

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Abstract: Marina el Alamein, a small town flourishing in the first centuries A.D., is situated one hundred kilometers west of Alexandria. The city, which was near the road leading from Alexandria to Marsa Martuh (ancient Paretorium), was also in regular contact with other Mediterranean centers. A unique way of urban planning, not applied in other cities in the region, is undoubtedly worthy of special attention. Moreover the burial practices seem to be a reflection or reminiscence of the old customs brought to Marina el Alamein by new settlers who had chosen this part of Egypt as their new homeland. The question is, from where did these settlers originate. The answer to this question can be found not only through analysing the small artifacts discovered during fieldwork, but also through looking for analogies for the architecture of the town. On the basis of these observations it can be postulated that the architecture of Marina el Alamein was the reflection of the traditions brought to Egypt from other parts of the Eastern Mediterranean region. All of the material discovered in Marina el Alamein on the northern coast of Egypt, indicates that the settlement and community of Marina el Alamein was of a multi-cultural or multi-ethnic character.

Keywords: Urban Planning • Town • Pillar Tombs • Houses • Trade Exchange • Rock Cut Tombs

Öz: MS I. yüzyılda gelişen küçük bir kasaba olan Marina el Alamein, İskenderiye'nin yüz kilometre batısında konuşlanmaktaydı. İskenderiye'den Marsa Martuh'a (antik Paretorium) giden yolun yakınında olan kent de diğer Akdeniz merkezleri ile düzenli iletişim içerisinde olmuştur. Bu bölgedeki diğer kentlerde uygulanmayan kentsel planlamanın tek yolu, şüphesiz özel dikkate layıktır. Dahası, defin uygulamaları, yeni vatan olarak Mısır'ın Marina el Alamein bölümünü seçen yeni yerleşimciler tarafından bu bölgeye getirilen eski geleneklerin hatırası ya da yansıması olarak görünür. Soru şu, bu yerleşenler köken olarak kimlerdi. Bu soruya cevap sadece saha çalışması sırasında bulunan küçük eserlerin analizleri ile değil, ayrıca şehrin mimarisi için benzerliklere bakarak da bulunabilir. Bu gözlemler temelinde, Marina el Alamein'in mimarisinin Doğu Akdeniz Bölgesi'nin diğer yerlerinden Mısır'a getirilen geleneklerin yansıması olduğu varsayılabilir. Marina el Alamein'de bulunan tüm materyaller Mısır'ın kuzey kıyısında, Marina el Alamein halkının ve yerleşiminin çok kültürlü veya çok ırklı karaktere sahip olduğunu gösterir.

Anahtar Kelimeler: Kent Planlaması • Şehir • Dikme Mezarlar • Evler • Ticari Mübadele • Kaya Mezarları

Marina el Alamein is an archaeological site on the Mediterranean Sea coastline of Egypt, about one hundred kilometers to the west of Alexandria. Generally, the remains of this small town are dated to the Greek-Roman period. The site was recognized for the first time in 1985 during the construction of a large tourist resort. Due to the direct intervention of the SCA authorities, Wiktor Andrzej Daszewski began to excavate the ruins of the ancient town in 1986. At the start, it was essential to run a rescue project which very quickly showed the importance of the already discovered remains.

In the face of unfavourable circumstances, the crucial aim of the excavations was to determine the limits of the ancient town. Due to the rescue character of this archaeological activity, the devastation of the site was quickly stopped and, in addition, the investors were required to change the plans of the Marina el Alamein resort development. Almost the whole of the area of the ancient

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town is now protected by the SCA authorities.

The still unsolved problem in research concerning the Marina el Alamein site is what was its name in antiquity. Daszewski, due to analysis of the ancient sources and testimonies, indicated two possibilities that need to be taken into consideration¹. According to his interpretation, the ruins of Marina el Alamein can be recognized as the remains of the ancient settlement of Antiphrae or of Leukaspis. Both propositions seem to be adequate, but, without explicit epigraphic evidence from the site, confirmation is impossible and this hypothesis should be treated only as a scientific postulate.

If we take a close look at the aerial photograph of the town, it is still possible to see and analyze its overall shape. Generally, the city layout, which is partly recognizable from archaeological research and from the shape of the terrain, leads to the supposition that the town had the shape of a triangle or a wedge without a tip, which is disappearing near the settlement's eastern border (Fig. 1). It cannot be excluded that the town's urban planning was influenced by the natural line of the seashore. Moreover, the southern limits of the ancient city are formed artificially due to the modern motorway, which probably destroyed the southern part of the Marina el Alamein necropolis imposing the shape of the settlement in that area. Today, it is only possible to confirm that the necropolis is widely spread over an area extending one and half kilometers in an east-west direction along the modern highway connecting Alexandria with Marsa Matruh (ancient Paretorium). It can certainly be concluded that the southern limits of the town were defined by a natural *gebel* structure, nowadays almost fully exploited.

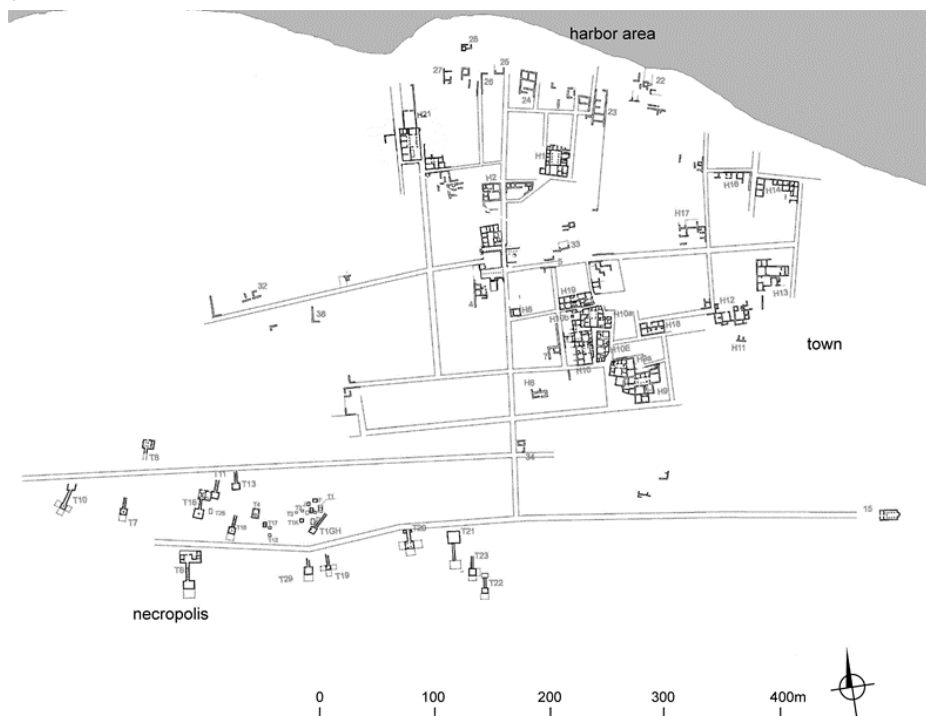


Fig. 1 General Plan of the Site, According to Medeksza, Bąkowska, Czerner, Zambrzycki 2010

¹ Daszewski 1995a, 14-16.

In general the territory of the settlement can be divided into three main zones. The northern part of the town was a harbor zone, with a port and landing piers where ships approaching the city could dock. Unfortunately, most of the port installations were destroyed in the modern process of investment and construction in the building of a modern marina. The harbor structures are badly destroyed and almost entirely invisible, except in some places where it remains possible to reconstruct the areas where landing piers could be located.

Analyzing the topography of the site from the start of the archaeological activity in the field, it is possible to identify the location of the ancient port: the area running along the modern seashore, resembling the shape of a dock with a relatively straight line of possible landing piers. The general plan of the port can be reconstructed as a structure rectangular in layout.

It cannot be excluded, however, that yet another port could have been situated west of the central part of the site. The shape of the deposits accumulated in that part of the seashore it seems did not accumulate there naturally and all the factors indicate a western dock could have been located there.

The central part of the town, which was developed on the first terrace raised above sea level, was occupied by dwelling quarters. The architectural remains are spread widely in an east-west direction, similar to the necropolis, but did not extend over as large an area as the burial area to the south of the inhabited districts. At first glance, it is noted that the dwelling quarters did not form a regular pattern of *insulae*, but rather, a chaotic concentration of residential complexes spread over the settlement area. This irregular organization of space seems to be a relic of the internal space arrangement more characteristic of a village than even of a small town. Even though Marina never was a city *sensu stricto*, this fact did not play any significant role in the architecture and the quality of the settlement and its housing. The street network, at first glance, seems to also resemble the village in its pattern, rather than the street arrangement typical of a purely urban settlement. Evidently, for some reasons the *hippodamous* urban planning system was not applied here. The question arises as to if this street system was connected with the fact that no city ever functioned here, or, if other factors played an additional role? Additional factors seem quite possible here; the climate especially could have been a reason why the hippodamous grid plan was not employed. The strong and cold winds in winter and hot and dry winds during the summer one can suppose determined the sections of straight short streets in Marina el Alamein. In both seasons inclement weather made life



Fig. 2 Tolos Bathhouse, Central Part of the Complex
(Photo by K. Jakubiak)

very difficult, so the streets were designed in a way that limited the wind factors as much as possible.

From the present state of our knowledge, the central and the most representative part of the settlement was formed and arranged around a large two-bath complex situated in the heart of the town². The northern part of that complex is closed by a relatively large bathhouse, with a *tolos* structure being the central element of the building (Fig. 2). The other bath building with a basilica completing the bath structure from the

² Daszewski 2011, 424-429; Medeksza *et al.* 2011, 109-118.

east, closed the southern part of the complex. Between these two structures there was a large open air courtyard, square in shape and paved with lime flagstones, which from a formal point of view functioned rather like a palestra. The layout of this structure and its finish formed a public area easily accessed by the dwellers of Marina el Alamein (Fig. 3). South east from the bathhouse complex, two dwelling units were uncovered.



Fig. 3 *Central Courtyard of the Bath Complex – Palestra* (Photo by K. Jakubiak)



Fig. 4 *House H 10* (Photo by K. Jakubiak)

of the houses. In the case of house H 10a and its layout, it resembles a square with numerous rooms situated on both sides of the courtyard. House H 10 has a rectangular shape with spacious and important rooms situated along the western side of the courtyard.

It needs to be added that a much smaller, almost modest, dwelling H 19 was constructed behind house H 10a⁴. Only a narrow street separated these buildings from each other. The much more limited access to the dwelling can be understood to be a reflection of the varied material status of the inhabitants of Marina el Alamein.

In the area in the northern part of the town several houses were designed as two-story constructions. The most monumental and most splendid example of that kind of architecture is the house H 1⁵. This building has a central peristyle courtyard surrounded by a number of rooms of different sizes. The remaining traces of the staircase confirmed the supposition that the house had a second floor. The remains of staircases were also discovered in two other buildings: H 21 and the recently discov-

³ Medeksza 1999, 57-62; Medeksza *et al.* 2005, 109-110.

⁴ Medeksza 2002, 89-92; Medeksza *et al.* 2003, 89.

⁵ Medeksza *et al.* 2004, 93-96; 2008, 71-73; 2012, 81-84.

Dwelling complex H 9 consists of two irregular buildings with internal courtyards forming a relatively small city quarter. In the vicinity of those two houses at least two streets were planned and functioning. Both of these structures consist of a dozen rooms, each different in size and character.

On the other side of a narrow street the next dwelling complex, H 10 formed larger architectural quarter, or rather a patchwork of four houses³ (Fig. 4). Three of these were attached to each another but the fourth house was built as a separate structure. Two out of the three attached buildings were entirely excavated. The last building, situated in the western part of the complex was only in part cleaned. Any further exploration in that part was pointless as this structure had been badly damaged. Two other houses, even though each of them had different plan from the morphological point of view, were almost the same. The most characteristic elements were the longitudinal peristyle courtyards, the central and most representative parts

ered dwelling H 41⁶ (Fig. 5). In the vicinity of these houses other dwellings, even those partly recognized, were much more modest, which once again confirms that within the same districts there were very wealthy households functioning next to households inhabiting relatively modest architectural structures. It needs to be underlined, however, that even the examples of so called modest dwellings were well built and examples of good quality architecture.

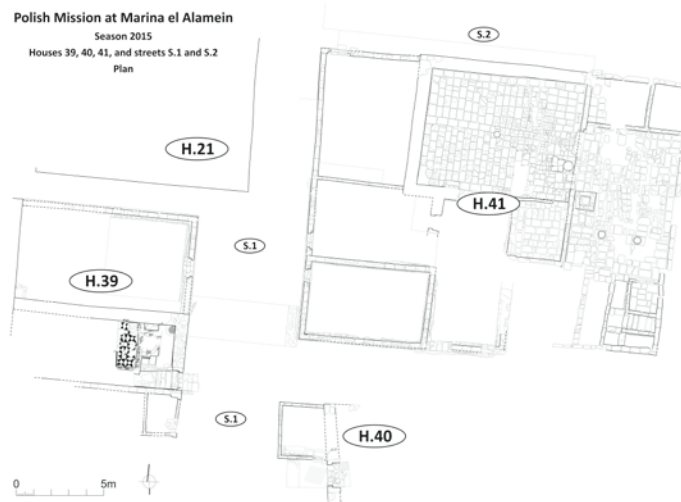


Fig. 5 House H 41 and its Vicinity, Drawn by S. Maślak, M. Wardzyńska

The proximity of houses varying in size and wealth near to each other seems to confirm that there was no serious difference between the houses except in their size and individual design. It seems most probable that the houses occupied by the poor population of the town were located in the eastern part of the settlement. Some remnants of compacted clay or mud brick constructions remain visible there.

The houses discovered at Marina el Alamein are similar to the dwellings dating from the Hellenistic period discovered in the eastern part of the Mediterranean. In particular the houses discovered on Delos and at Olynthus resemble the buildings uncovered at Marina el Alamein. Certainly, Olynthus was older than the structures discovered in Egypt, but from the formal and morphological point of view the houses these are very similar to each other. The House of Comedians, the House with a Fountain⁷ and the Houses of Dionysus⁸, as well as the arched cistern⁹, are very similar structures to those from Marina. Generally, almost all of the dwelling structures discovered in the so-called villa section of Olynthus seem to have been designed according the same architectural principles that were also applied in Marina el Alamein. The only difference is that at Olynthus the houses were constructed on a *hippodamus* grid plan of the city district system, which was not in use in the Marina el Alamein urban layout. The houses from Delos also resembled the dwelling structures discovered in Marina el Alamein. The buildings situated next to each other, known as a House of Tritons and a House of Comedians, are very good examples of architectural structures with central courtyards very similar to those constructed and functioning in el Alamein. On other sites, such as Priene for example, similar houses dating from the Hellenistic period have been excavated. At Priene,

⁶ Medeksza 2001, 72-74; 2002, 92-103; Medeksza *et al.* 2003, 89-96; Jakubiak 2016; Jakubiak (in-print).

⁷ Bruneau 1972 fig. 83.

⁸ Chamonard 1906 pl. 10.

⁹ Tsakirgis 1990 fig. 7.

House 33 deserves our particular attention since it is reasonably similar to the already mentioned buildings from Marina el Alamein¹⁰.

The southernmost part of Marina el Alamein, as mentioned above, was occupied by a large necropolis, which can be dated to the period between the late 2nd century B.C. and the 3rd and 4th centuries A.D. During the course of excavations nearly 50 tombs were recognized and excavated¹¹. The burial ground was not homogenous in its types, several types of the graves and tombs were identified during this research. The typology of the tombs reflects the chronological advance of the grave structures in Marina el Alamein, as well as the differentiation by social structure of the members of the local community.

The simplest and relatively ancient burial structures were situated in the central part of the necropolis complex. The representative type of the tombs was characterized by an East-West orientation and of rather small sizes. The graves were formed in the shape of a trench about 2 meters long, 0.6 – 0.7 meters wide and cut down into the bedrock to a depth of 0.5 – 0.6 meters. They were covered by flat, limestone slabs. In one case (tomb G 13), the cover was shaped into a gabled roof made from two limestone slabs. Additionally, these graves were then covered by a kind of *tumulus* made of sand and stones rectangular in shape. This type of grave included a single inhumation without grave goods. No trace of any process leading to the preservation of the human remains was noted. In the field it can be observed that these simple graves are located close to each other, forming a group of two, three or four. It is possible that this way of arranging the area of the early necropolis was the consequence of the practice of burying the members of a community or even a family close to each another¹².

The graves that remain the most distinctive in Marina el- Alamein's landscape are the so called pillar-tombs, which can be divided into two subtypes: those with simple, square stepped bases and decorative finials and those having additional cube-like boxes under the bases and finials. All of these pillar-type tombs were used for inhumations with small grave goods: *unguentaria* and small glass bottles or flasks. This set of grave monuments dates from the 1st century A. D. Further, in front of the grave there are the remains of small altars and the traces of ashes, which may suggest some kind of funeral cult and of offerings made to the ancestors¹³.

The first subtype's finials are reconstructed in two ways: as a tall pillar or column, or as a decorated sarcophagus with a gabled roof. To this type of burial monuments certainly belong tombs T 1K, T 1B and T 1C, which was added to the southern side of T 1B burial after its completion. The characteristic feature of these graves are oblong pits cut in the bedrock and the practice of concealing the oldest burials under limestone slabs. The tomb, built over the pit grave, contained two chambers placed in an East-West orientation. The northern one, with mostly single body remains, was closed permanently after its construction and the interment, but the southern one remained accessible through the stone slab for later burial use. The visible, lower part of the tombs, containing the chambers, was a three or four-step base supporting the pillar or sarcophagus finial.

Tomb T 1B, already mentioned, was decorated with a square in cross, 4.5 meters tall pillar, decorated with corner pilasters, whose capitals are characteristic of the Marina el-Alamein site *Nabataean type* style. Above was placed a simple entablature with an elegant cornice. The pillar was topped by the two-step pedestal. Probably, the whole monument was crowned with a statue, but no remains

¹⁰ Winter 2006, 420.

¹¹ Daszewski 2011, 435.

¹² Daszewski 2011, 435-437.

¹³ Daszewski 2011, 440.

can confirm this surmise¹⁴.

Tomb T 1K is very similar in its construction to the already described tomb T 1B. Its pillar final is, however, 5.30 meters tall, with the crown consisting of a *Nabatean type* capital, a simple architrave, cornice and a three-stepped pedestal¹⁵. The noteworthy element of this tomb is a small niche located in the middle of the pillar, showing the banquet scene. The frame of the representation of the funeral ceremony is formed of jambs on its sides and a *tympanon*. The *tympanon* is decorated with *palmete* on its three corners. A person in the scene is resting on his left arm, lying on the bed with high, turned legs. The whole scene is typical of Hellenistic funeral representations.

Returning to the description of the cube-box-like pillar tombs, the distinguishing feature of those monuments was the structure under the stepped base. That square in layout construction contained two or three *loculi* with the size ranging approximately from 1.85m to 2.10 m in length, 0.4 m – 0.7 m in width and 0.9 m – 1.10 m high with an East-West orientation. The *loculi* were closed by limestone slabs, sometimes decorated in relief.

A representation of that subtype can be found in tomb T 12, located on the western edge of that part of the necropolis. An almost 7 meters tall pillar tomb is crowned with a *Nabatean type* capital and a two-step pedestal which is crowned with the statue of Horus in falcon form, wearing the double Pharaonic crown¹⁶.

Two other unique burial monuments were located, like those presented above, in the central part of necropolis: T 1C and T 30. The first can be linked to the pillar-type tombs, because of its peculiar location. The tomb was added to the southern side of grave T 1B, providing a solution to the lack of space in the older structure. Similar to other pillar tombs, the stepped base was constructed above the two, East-West oriented chambers. The most surprising is the monument erected on the base, in the form of a sarcophagus built of ashlar. The gabled roof was probably decorated with *palmete* at each corner¹⁷ (Fig. 6).



Fig. 6 *Pillar tombs* (Photo by M. Wardzyńska)

On the other hand, tomb T 17 can be assigned to the cube-box-like tombs. Dated to the 1st century A.D., it was used until the 3rd century A.D., as evidenced by the pottery remains. The lower part

¹⁴ Dobrowolski 1992, 41-42.

¹⁵ Medeksza *et al.* 2005, 112-113.

¹⁶ Daszewski 1995b, 31-33.

¹⁷ Dobrowolski 1992, 42-43.

of the monument consists of two *loculi*, oriented East-West, like the whole structure. Between them a base was constructed from relatively large stone blocks. Upon this centrally situated construction, a monument was raised, sarcophagus in form, with a gabled roof. The Eastern facade is ornamented with two pillars situated nearly at the corners. They supported the architrave and the tympanum, which crowned the whole decoration (Fig. 7)



Fig. 7 Tomb T 17 (Photo by M. Wardzyńska)

Those various types and the general shape of the tombs recorded in Marina el-Alamein have analogies or rather similarities to those identified among the tombs and graveyards of Lycia. Some remains of pillar tombs were discovered in Xanthos, Sidyma, Arsada, Pinara and Apollonia. The sarcophagus type monuments, on the other hand, are known from Telmessos¹⁸. Also some pillar tombs from northern Syria such as the Tomb of Isodorus (A.D. 152) at Sit ar-Rum, the Tomb of Aemilius Redinus (A.D. 195) at Qatura, of Alexandros at Sarmada, can shed some light on the possible inspiration for the Marina tombs¹⁹. Generally, the origins of this funerary architecture can be found in the Royal Necropolis at Amrit, where some elements applied to the tomb constructions might have been the prototypes of later funeral constructions.

There was no decoration on the back of the monument. The slabs covering the upper part of the *loculi* created a kind of pedestal on both sides of the sarcophagus²⁰.

These two examples of funeral monuments in the form of sarcophagi are the only ones known at the Marina el-Alamein necropolis and, what is more, actually the only ones from Egypt that are known to date.

Other similarly dated burial structures were the so-called box graves, which belong to the category of non-decorative burial structures. The best recognized and known is tomb T 30 that could be dated to the 1st/2nd century A.D. due to the artifacts discovered. The grave was rebuilt twice and, in consequence, the total number of *loculi* inside was six. Initially, only three East-West oriented *loculi* were intended, located within a square structure with the front side facing the east. The first extension for two *loculi* was built on the north side of the grave. These were also East-West oriented, but the last, added on the western side was the exception, with its North-South orientation. All the

¹⁸ Schweyer 2002; Akşit 2014.

¹⁹ Ball 2007, 363.

²⁰ Czerner *et al.* 2014, 64-67; Zambrzycki *et al.* 2014, 80.

tombs were closed by limestone slabs and additional stone pieces. In the closest tomb area a few altars were found. The oldest dating from the 1st century A.D. was situated in front of the east facade, with the others located in front of the extended parts. The most interesting and surprising element was the discovery of a statue of a woman, carved from one piece of a limestone block. That figure was probably a finishing touch to the burial architectural structure reconstructed as a *naos*. What needs to be mentioned is that she is the only non-divine representation of a woman that is known from Marina el-Alamein²¹.

The last and the most elaborated burial structures, which reached the peak of the tomb development process, were the *hypogaeae* - constructions which were cut into the bedrock or *gebel*. This type of sepulcher appeared in the late 1st century B.C. and became prevalent during 1st century A.D. The main feature of these structures was their North-South orientation with the entrance on the northern side. These tombs had a long descending, vaulted or flat-roofed staircase - *dromoi* leading to a large, open courtyard, cut deep into the rock (six or seven meters). On its central part the remains of altars were discovered. At ground level, just above the courtyard, a quite high wall was erected for protection from the wind-blown sand. The open courtyard provided the possibility to access additional large chambers with numerous *loculi* which were mostly cut perpendicular into the chambers' walls. The chambers were added as required, not immediately at the beginning of the construction. *Loculi* were closed with limestone slabs or shrouds hung on pins; eventually they were left unclosed. What is important is that a number of human remains in this type of grave were mummified. In the chambers with *loculi* there were also small altars. In that area the remains of pottery were also found, which suggests the existence of funeral cults in addition to the separate burial ceremony. However, the *hypogaeae* type burials in Marina el-Alamein were divergent primarily in

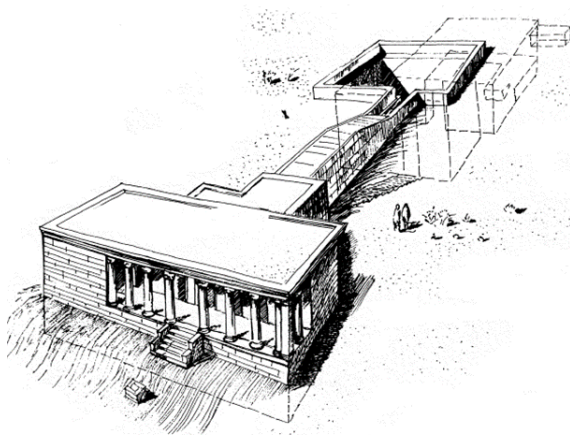


Fig. 8 Tomb T21, According to Daszewski 2011

terms of the above-ground part of the complex – the entrance. Based upon that criteria two subtypes can be distinguished: *hypogaeae* with a kiosk or *vestibule* in front of the entrance to the *dromoi* and, *hypogaeae* which are preceded by a more sophisticated structure resembling a mausoleum²².

To that second group belongs, among the others, tomb T 21, which is peculiar because of the state of preservation of its above ground part. The mausoleum, which is how this kind of structure was described by W. A. Daszewski, of a size of about 190 m², is dated to the 1st or 2nd century A.D., but the funeral complex was in use throughout the next two centuries (Fig. 8). The whole structure faces north. Access was provided

through the columned portico to the banquet hall which was furnished with two stone benches between which, the poor remains of three emblems were found. Other architectural decoration was on the façade: an entablature with dentils supported by circular in cross-section columns with

²¹ Daszewski *et al.* 2005, 75-80.

²² Daszewski 2011, 441-443.

Nabatean-type capitals. Further, the structure contained rooms domestic in character, like the kitchen and the latrine as well as the cistern in its southern part²³. On the main axis of the mausoleum there was the entrance to the burial part of the complex, which did not differ from other graves of this type in its main features.

Tomb T 29 is the example of a *hypogeum* grave where, contrary to the mausoleum building, the entrance to the *dromoi* was pierced through the kiosk from the north side. That small structure was probably decorated, similar to the other monuments of the necropolis, with two pillars that could support the architrave or a simple entablature. Unfortunately, the remains are too scanty for a proper reconstruction²⁴.

However, the described examples and main features of this type of funeral structure provide the opportunity to search for some analogies. From the morphological point of view, these rock-cut funerary structures were similar to those known for instance from Alexandria; especially from the Mustafa Pasha and Anfusi necropolis. Some similarities can be observed in the architectural elements, such as: long *dromoi*, an open courtyard with an altar situated in the middle of it and a few *loculi*. The Marina el Alamein *hepogae* tombs could be useful in the attempt to reconstruct the above ground elements of burial structures recorded in Alexandria's necropolis²⁵.

Doubtless the character of the burial tradition recorded through the Marina el Alamein necropolis was dual in origin. Typical of the Greek and Hellenistic tradition, the burial ceremony with banquet halls and the funeral cult found there were reflected in sacrifices. On the other hand, the inhumations, especially those connected with mummification, are typical of Egyptian funerary practice and ideas on the afterlife.

The burial structures containing courts and altars or offering tables seem to be the reflection of the Egyptian tomb tradition known from the late Pharaonic period (8th – 6th c. B.C.), observed in Western Thebes in Assasif. Those graves had the triple function, also as places where human remains could be preserved for the afterlife in the Netherworld. Moreover, the ancestors' funeral cult had an important place. Last but not least, the culture continuity's in its aspect of protection should be kept in mind.

Funerary practices, as it is commonly known, are the best markers of the origins of the people who were buried in the Marina el Alamein necropolis. Moreover, some elements, being a part of the funeral decorations or goods deposited by the dead person's side also reflect, in some aspects, the religious practices or faith.

Taking into consideration the decorative elements, at first glance the Egyptian elements are very easily recognizable. For instance, on the limestone slab closing one of the *loculi* in tomb T 1D there is a representation of Agathos Daimon carved on its face. This representation of a snake is not particularly canonical in form. Some elements, such as a double Egyptian crown, were not added. It seems to be the confirmation that religious iconography was not applied here in its canonical form, which can be the reflection of understanding and appreciating the religion in a somewhat more open minded way. Also, representations of Horus were discovered in two cases. The first representation came from another limestone slab closing a *loculus* in tomb T 29. Here also the representation is distant from the characteristic Egyptian artistic canon. A bird wearing a double Egyptian

²³ Daszewski *et al.* 2005, 81-86.

²⁴ Daszewski 2003, 51-53.

²⁵ Daszewski 1994, 51-69.

crown is carved in the frontal position which goes beyond the Egyptian conservative design convention. The second Horus representation originally decorated the top of the pillar tomb T 12. The falcon statue was sculptured from a piece of limestone. With such finish given to this pillar tomb, no doubt it belonged to one of the most beautiful tombs ever explored in the necropolis.

Other aspects of religious or cultic activities are hardly recognized, since no temple to date has been discovered at Marina el Alamein. The architectural structures which can be identified as the remains of the buildings where religious ceremonies or practices were conducted when the town flourished are the banqueting halls. Several such constructions were exposed during the course of the excavations. Banquet halls were attached to house complexes H 9, H 10 and H 21²⁶. Our special attention was drawn to the banquet hall attached to house H 21. That ceremonial hall was open towards the north with three doorways leading to its interior, a large stone bank was attached to the eastern wall and an *adricula* forming the central element situated on the main axis opposite the entrance to the building. The house H 21 was attached to the banquet hall. Both of these buildings formed a kind of sacral complex. Originally, this building was an ordinary house in that part of the town. During the time when it functioned however, in the area of the central courtyard a commemorative monument dedicated to Commodus was erected²⁷. That rearrangement dramatically changed the function of this architectural structure. It cannot be confirmed that the whole house was not used as a dwelling after this rearrangement, but this seems to be highly probable.

The second place where certain religious ceremonies were likely to be practiced was discovered in the south-western corner of the palestra. There, near the entrance to the palestra area from the western part of the settlement, a small square structure was brought to light. It is impossible to guess exactly which deities would have been worshipped there and any reconstruction of cultic practice is likewise impossible.

To date the last area discovered which was used for cultic purposes was recorded inside house H 41²⁸. Near the eastern wall of the courtyard a small sacral space was arranged. It is highly possible that it was devoted to the guardian, to the domestic deities protecting the house and family. Also, only here have the traces of cultic practices survived manifested through a deposit of ashes, the bases for altars and some pieces of pottery which were the part of the offerings sacrificed on the altar.

Also the town functioning process is untidily associated with the economic aspects and evidence of trade exchange recorded in the course of the excavations. The best marker confirming interrelations with other parts of the Mediterranean zone are the artifacts which were brought or imported directly to Marina el Alamein. The best finds providing some information to analyze during the excavations is the pottery material, commonly discovered in field work. According to the different categories of pottery analysis, it can be confirmed that goods were imported from almost the entire Mediterranean area. The tableware, except for those which were manufactured locally, was transported to Marina el Alamein from Cyprus, Asia Minor and Crete. The oil lamps recorded were brought from Crete, Cyprus, Greece and Italy. The amphorae were the best markers of trade and the exchange of goods since these were only used as containers for transport. Storage jars and amphorae transported liquids and fragile trade goods coming from Tunisia, Tripolitania, Cos, Asia Minor, Syria and Lebanon.

As far as we can confirm, the population of the town originally came from different regions in

²⁶ Daszewski 2011, 429-434.

²⁷ Czerner 2005, 126-30; Czerner – Medeksza 2010, 96-112.

²⁸ Jakubiak 2016.

the eastern part of the Mediterranean. The most important elements which provide the possibility of identification of the origins of the Marina el Alamein dwellers are the architecture, the tomb structures and, in some cases, smaller artifacts such as pottery, glass and oil lamps. The influence, or rather the presence of the dwellings with their architecture, inspired or deeply rooted in the Greek world rather than in Egyptian tradition, is not accidental. It seems most probable that the type of dwelling, its architectural tradition was applied here by the settlers who arrived in Egypt from Greece, Cyprus or Asia Minor. The same observation can be confirmed on the basis of an analysis of the funeral structures. Here also similar reflections concerning the origins of the citizens of Marina el Alamein can be confirmed. However, not all of the people who lived in the town were immigrants from the eastern part of Mediterranean Sea. Taking into account the funerary practices and some decorative elements employed in the finishing of the tombs, it can be said that Egyptians also formed a relatively important element of the town's community. In other words, this small town which flourished here was a rich settlement, whose prosperity had been built with a multi-cultural and multi-ethnic community, which consisted mainly of traders, merchants and sailors looking for their chance in trade on the Egyptian Mediterranean coast. The location of the town on one of the most frequented maritime trade routes effectively helped not only to raise the material status of the citizens but also the town as an urban organism.

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DAILY LIFE IN THE FRAMEWORK OF TIME AND PLACE IN THE MOSAIC PAVEMENTS
OF THE CHURCHES OF TRANSJORDAN

*TRANSÜRDÜN KİLİSELERİNİN BASAMAKLARINDAKİ YER VE ZAMAN ÇERÇEVESİNDE
GÜNLÜK YAŞAM*

Lihi HABAS*

Abstract: The unique feature of the mosaics of Transjordan is the combination of narrative depictions of daily life and personifications symbolizing the dimension of time and place. The dimension of place is represented by Ge, Thalassa, Abyssos, Ketos and personification of the river. The dimension of time is represented by the seasons and the months of the year. These personifications derive from a classical model of late antiquity, which continued into the Byzantine period and is characterized by a frontal, severe depiction. The mythological context of the personifications gradually faded in favor of allegories with symbolic significance. The introduction of genre scenes into the church may be explained in terms of their decorative value and the fact that they reflected the common agricultural activities of the region. However, they convey an additional implicit message: the abundance of fish, fruits, vegetables and animals expressed the bounty and generosity of God. The genre scenes in the church were understood as an image of the world or the cosmos. The use of personifications reflected Christian ideas about the universe. These ideas were expressed by the Church Fathers and by Christian authors, and in the Byzantine period the craftsmen gave them visual expression in these mosaic pavements.

Keywords: Churches of Transjordan • Ge • Thalassa • Abyssos • Ketos • Genre Scenes

Öz: Transürdün'deki mozaiklerin tek özelliği, zaman ve mekân boyutunu sembolize eden teşhisleri ve günlük yaşamın anlatı tasvirlerinin birleşimidir. Yerin uzanımları Ge, Thalassa, Abyssos, Ketos ve nehrin kişileştirilmesi tarafından tasvir edilir. Zamanın uzanımı ise mevsimler ve yılın ayları tarafından betimlenir. Personifikasyon, Doğu Roma Dönemi'nde devam eden ve cepheden sert betimi olan Geç Klasik Dönem'den kaynaklanır. Personifikasyonun mitolojik metni gitgide sembolik öneme sahip bir kinaye lehine soluklaştırılır. Tür sahnelerinin kiliseye girişi, dekoratif değeri açısından ve bölgedeki ortak tarım faaliyetlerini yansıtılmaları olarak açıklanabilir. Ancak, ek olarak kesin mesaj iletirler: Balık, meyve, sebze ve hayvan bolluğu, Tanrı'nın lütuf ve cömertliğini ifade eder. Kilisedeki tür sahneleri kosmos'un ya da dünyanın bir imajı olarak anlaşıldı. Personifikasyon kullanımı, evren hakkında Hristiyan fikirleri yansıttı. Bu fikirler, Kilise babaları ve Hıristiyan yazarlar tarafından ifade edildi ve Doğu Roma Dönemi'nde sanatkarlar mozaik basamaklarında onları görsel ifade olarak vermiştir.

Anahtar Kelimeler: Transürdün Kiliseleri • Ge • Thalassa • Abyssos • Ketos • Tür Sahneleri

Introduction

The mosaic pavements of churches in Transjordan (Provincia Arabia and the neighbouring territories of Provincia Palaestina Secunda and Tertia) contain representations of a variety of agricultural activities such as ploughing, the harvesting of grain, grapes, olives and fruit, wine-making, and the transportation of fruit; pastoral scenes; diverse hunting scenes (predators and birds); fishing and marine transport; and caravans of camels, the leading of exotic animals and the training of animals. Most of these activities were common in daily life and in art throughout the Mediterranean basin in antiquity and in the Byzantine period. Caravans of camels and the leading of exotic animals especi-

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ally reflect the local lifestyle, and occur mainly in the mosaics of churches located on the desert margins. One example is a mosaic discovered in the Church of the Holy Martyrs Lot and Procopius (557 A.D.) at Khirbat al-Mukhayyat. Here, different agricultural activities are depicted in the vine scroll carpet of the nave: hunting a lion and a bear, a pastoral scene, and grape harvesting, transportation, and wine-making scenes. In addition, fishing and marine transportation scenes appear on an inter-columnar panel¹. Another example is the floor of the diakonikon – the Old Baptistery (530/1 A.D.) at Mount Nebo, with hunting scenes, pastoral episodes, camel caravans, and exotic animals being led amongst trees and shrubs².

In many of the churches of Transjordan, the mosaic compositions combine depictions of daily life with personifications symbolizing the dimensions of time and place. Place is represented by ΓΗ - Ge (the earth), ΘΑΛΑΣΣΑ - Thalassa (the sea), ΩΚΕΑΝΟΣ - Oceanos (the ocean), ΑΒΥΣΣΟΣ - Abyssos (the abyss), ΚΗΤΟΣ - Ketos (the sea monster), rivers, and the rivers of Paradise. Time is represented by the months, the seasons, and foliate masks. In some cases the compositions include daily life within the framework of both place and time. The personifications are depicted in anthropomorphic female or male form, in accord with the Hellenistic-Roman tradition, but in the Byzantine style. A careful examination of the wide range of church mosaics shows the motifs were not scattered randomly over the surface of the floor, and that there was indeed a preconceived decorative plan, which the artists related to the allotted space, its size, and its place inside the building.

Therefore, this article will focus on the iconographic program, worked on by the artists in advance, and on the research question of why secular topics such as genre depictions were introduced onto the floors of churches and chapels, and whether there was any symbolic significance to the episodes from daily life within the framework of time and place, or should they be seen as decorative embellishments taken from the repertoire common at the end of antiquity³.

Daily Life with Personifications Symbolizing Place

Ge - Personification of the Earth and Karpoforoi

Ge – the personification of the earth - appears in seven churches and chapels, alone or with other personifications, on the bema, in the nave and in the aisles, incorporated in vegetal and geometric arrays, and also as an independent motif. Ge is depicted as a frontal, feminine figure, decorated with jewellery: earrings hanging from her ear lobes, a pearl necklace around her neck, and bracelets on her wrists. On her head is a wreath, and her outstretched arms hold the edges of her cloak, laden with fruit. She is often accompanied by two young καρφόροι/οι (karpoforoi), and occasionally by putti, presenting her with an offering in the form of baskets of fruit.

The personification of Earth, with or without karpoforoi, appears in a number of churches. In the mosaic floor of the bema of the Church of Bishop Isaiah (559 A.D.) at Gerasa, Ge appears in a diagonal vegetal composition, between trees and animals. She is depicted as a seated woman, holding the edges of her mantle and receiving an offering from youths bearing baskets laden with fruit⁴.

Daily life appears with Ge in the Upper Chapel of the Priest John (565 A.D.) at Khirbat al-

¹ Piccirillo 1993a, 164-165 figs. 201-207, 209, 213, 215.

² Piccirillo 1998, 276-277 figs. 12-13, 23-40.

³ The figures courtesy of Michele Piccirillo (SBF) and ACOR, Amman. My deepest gratitude for pictures and cooperation.

⁴ Clark 1986, 303-307 fig. 6, pl. II:3; Piccirillo 1993a, 38, 294 figs. 561, 566.

Mukhayyat (Fig. 1). Ge is set in a carpet of acanthus scrolls, in a symmetrical three-scroll array. She is shown in the centre, accompanied by karpoforoi - youths offering her a basket of fruit (Fig. 2). Her



Fig. 1 Daily Life with Ge. Upper Chapel of the Priest John (A.D. 565) at Khirbat al-Mukhayyat



Fig. 2 Ge Accompanied by Karpoforoi. Upper Chapel of the Priest John (A.D. 565) at Khirbat al-Mukhayyat

image derives from a classical model of late antiquity, which continued into the Byzantine period but in a new style, characterized by a severe, frontal depiction. She is identified by an inscription,

adorned with jewels, and appears as a bust clasping the edges of her mantle, which is laden with fruit expressing the generosity of Mother Earth. In addition to the standard wreath of fruits, she has the mural crown typical of Tyche. Everyday life appears in the depictions of the hunting of a bear and a lioness, a shepherd chasing away a boar, and a dog guarding a sheep – which belong to the pastoral cycle, and a woman carrying a basket of fruit on her shoulder, apparently on the way to market to sell her wares⁵.

An exceptional depiction of Ge can be seen in the north hall dedicated to Saint Varus (687 A.D.) in the church at Khilda in Philadelphia-Amman Area, where she is shown as a complete frontal figure in orans pose, holding flowers, with a crown on her head, set in a medallion and identified by name, without any depiction of any agricultural tasks. Another difference is the context in which the personification is set: Ge is positioned on the axis of the nave and bema, on which there are registers, one above the other, depicting trees, Ge, a goblet and amphora, accompanied by pairs of animals in heraldic array, hint at the symbolic nature of the array⁶.

In a number of churches the karpoforoi - gift bearers - appear as individual motifs, metamorphosed into donors identified by name, without Ge. In the Church of Saints Cosmas and Damianus (533 A.D.) at Gerasa, the donors are identified by name, and appear bringing offerings, and they are positioned at the eastern end of the nave, which is decorated with a geometric design populated with animals and still-lives. Kalloeonistus is holding a basket of fruit (Fig. 3), and John son of Astricius carries a fruit basket on his shoulder⁷ (Fig. 4).



Fig. 3 Kalloeonistus as Karpoforos. Church of Saints Cosmas and Damianus (A.D. 533) at Gerasa

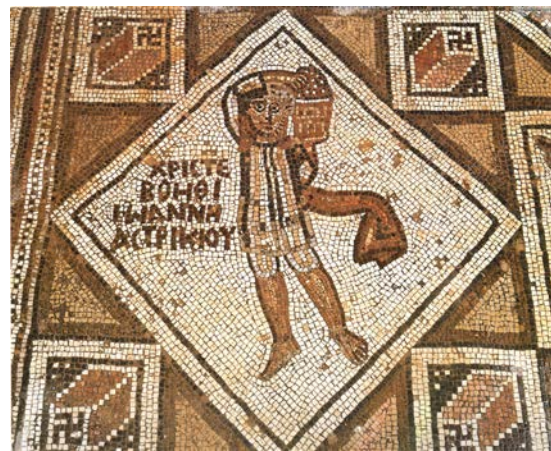


Fig. 4 John son of Astricius as Karpoforos. Church of Saints Cosmas and Damianus (A.D. 533) at Gerasa

At the Church of the Lions (574 or 589 A.D.) at Umm al-Rasas, those bringing offerings appear both in the frame and on the carpet of the nave. Between the pomegranate trees in the frame are the donors identified by name, such as Paul, son of Kassianus (Fig. 5). Despite the iconoclastic damage, it is possible to discern the rich cloaks and tunics, and the fruit-laden baskets carried on the people's shoulders. Another figure carrying a basket of fruit on his shoulder and holding a stick also appears

⁵ Piccirillo 1993a, 38, 40, 174 figs. 218-220, 223-227, 229-230, 233; 1998, 351-353 figs. 204-205, 209, 211-219; Salter – Bagatti 1949, 49-55 fig. 4, pl. 9: 1-2, 10: 2, 4-5, 11:1-2, 12:1-2.

⁶ el-Najjar – Sa'id 1994, 550-556 fig. 1 photos 2-4, 7.

⁷ Crowfoot 1931, 25-26, pl. X; Biebel 1938, 331-332, pl. LXXIII; Piccirillo 1993a, 288-289 figs. 510-512, 535, 539.

in the acanthus scroll carpet of the nave. Depictions of the bringing of offerings appear alongside the genre scenes⁸ (Fig. 6).



Fig. 5 *Paul son of Kassianus as Karpoforos. Church of the Lions (A.D. 574 or 589) at Umm al-Rasas*



Fig. 6 *Anonymous Karpoforos. Church of the Lions (A.D. 574 or 589) at Umm al-Rasas*

Despite the destruction, in the carpet and border it is possible to identify hunting episodes, a shepherd playing the flute to his flock from the pastoral cycle, wine production from the grape harvest cycle, ploughing and olive-picking, alongside the depictions of churches and the dedicatory inscriptions of the donors (Fig. 7).

Thalassa, Abyssos, Rivers, Four Rivers of Paradise, and Ge

Sometimes scenes of everyday life are combined with personifications of the sea, the rivers, and the earth. This composition has been found in two churches at Umm al-Rasas. The mosaic floors of the two churches were apparently laid by the same group of artists, and both were severely damaged by iconoclasts. Despite the iconoclastic destruction, it is possible to identify and reconstruct the original depictions. In the Church of Bishop Sergius (587/8 A.D.), everyday life is framed on one side by the personification of the earth, and on the other by the personification of the abyss, while at the four corners of the frame are personifications of the rivers⁹ (Fig. 7). At the western end of the nave, Ge is depicted reclining, full-length, with fruit along the edges of her cloak, and a wreath of fruit on her head (Fig. 8). She is accompanied by karpoforoi, in the form of two little putti bringing offerings: one bears a basket with sheaves of wheat, and the other has a basket of fruit¹⁰.

In parallel, at the eastern end of the carpet is a depiction of Abyssos (the personification of the abyss) holding an oar, and by her head is her name, ABYC. She is accompanied by Κήτοι (the sea monsters) in the form of hybrid figures, the lower part of their bodies a curved tail¹¹ (Fig. 9). In the four corners of the frame are four personifications of the rivers. The river personifications in the churches of Umm al-Rasas are visually interpreted in a unique way as male busts holding a reed or cornucopia, with vine tendrils sprouting from the jug and cornucopia, instead of the water that usually flows from them¹² (Fig. 10).

⁸ Baumann 1999, 103-114; Piccirillo 1992, 211-225 fotos 42-43; 1993a, 236 figs. 378-379.

⁹ Piccirillo 1993a, 234-235 figs. 365, 369; 1994, 122-134 figs. 2-3.

¹⁰ Piccirillo 1993a fig. 368; 1994 figs. 13-14

¹¹ Piccirillo 1993a fig. 366; 1994 figs. 6, 11, 16.

¹² Piccirillo 1993a figs. 332, 366; 1994 figs. 6, 7-9, 21.

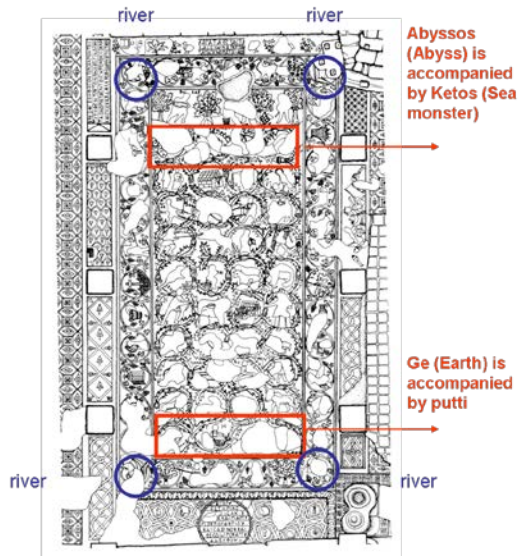


Fig. 7 Church of Bishop Sergius (A.D. 587/8) at Umm al-Rasas (Plan: L. Habas)



Fig. 8 Ge. Church of Bishop Sergius (A.D. 587/8) at Umm al-Rasas



Fig. 9 Abyssos Accompanied by Ketos. Church of Bishop Sergius (A.D. 587/8) at Umm al-Rasas



Fig. 10 River Personifications. Church of Bishop Sergius (A.D. 587/8) at Umm al-Rasas



Fig. 11 *Abyssos, Ketos and River Personifications. Church of the River Dedicated to Saint Sergius (Second Half of the 6th Century A.D.) at Umm al-Rasas*

This schema appears again in the Church of the River dedicated to Saint Sergius (second half of the 6th century A.D.) at Umm al-Rasas (Fig. 11). On the eastern side of the carpet of acanthus scrolls are depictions of Abyssos (the abyss), accompanied by Ketos (the sea monster) holding an oar. River personifications are placed at the corners of the carpet border, in the form of full-length masculine figures, cloaks revealing their chest, shoulder and right arm, grasping a reed, and seated on an inverted jug. Out of the jug come intertwined vine tendrils, instead of the water which is usual in classical models; this unique depiction

led Baumann to identify these personifications with the seasons of the year, and not with rivers. The vine scrolls are populated with depictions of a horse tethered by a rope to a vine, an oriental figure holding a bear tied to a rope, which has been identified as a bear trainer or an episode belonging to the big hunt (*venatio*), and other animals¹³ (Fig. 12). The western side of the nave has not been preserved, but it is reasonable to assume that it depicted Ge accompanied by *karpoforoi*.



Fig. 12 *Personification of the River, Bear Trainer, and a Horse. Church of the River Dedicated to Saint Sergius (Second Half of the 6th Century A.D.) at Umm al-Rasas*

At the Church of the Priest Wa'il (586 A.D.) at Umm al-Rasas, a unique and ambiguous depiction was found, and its identification as depicting personifications of the rivers is in dispute. The personifications appear in a panel inset in the southern row of piers (Fig. 13), in which four female busts are depicted between illustrations of towns. They are wearing cloaks, their long hair flows over their shoulders, and in their left hand they hold horns of plenty from which water flows¹⁴. Piccirillo identified the female figures as seasons of the year, and drew a parallel with Winter with a mural crown (*corona muralis*) in the mosaic floor of the Hippolytus Hall at Madaba. In his opinion, the

¹³ Bujard et al. 1992, 295-296 fig. 1, pl. II:1; Piccirillo 1993a, 240-241 figs. 389-390, 392, 394-395; Baumann 1999, 117-128.

¹⁴ Piccirillo 1993a, 242-243 figs. 396-397, 400; 1993b, 322-332 figs. 45-47; Baumann 1999, 131-138.

mural crown has been replaced here by the depiction of towns between the women¹⁵. However, the seasons of the year at the Hippolytus Hall each hold characteristic attributes, while at the Church of the Priest Wa'il, the personifications hold horns of plenty with flowing water. Either way, it appears that at the churches of Umm al-Rasas a unique visual interpretation has been given to the river personifications.



Fig. 13 *River Personifications (?)*. Church of the Priest Wa'il (A.D. 586) at Umm al-Rasas



Fig. 14 *River Personifications*. Church of the Sunna' Family (Mid-6th Century A.D.) at Madaba

Two river personifications have been preserved at the corners of the border in the Church of the Sunna' Family (mid-6th century A.D.) at Madaba, which suffered severe iconoclastic damage (Fig. 14). In one corner part of a personification has survived, showing a reclining, semi-naked youth. His head is crown by a wreath of reeds, and he holds a reed in his hand. Of the other corner, only a reed, running water (?), and two fish remain, and a fragment of an inscription. It is not clear if what is depicted are the personification of rivers, or the rivers of Paradise, as identified by Piccirillo and Denton. The border has depictions of animals and a variety of hunting scenes¹⁶ (animal and bird hunting).

In the Church of Saint Paul (second half of the 6th century A.D.) at Umm al-Rasas (Fig. 15), a bust of Ge appears in the middle of the nave, between the personifications of the four rivers of Paradise: Ghion, Fison, Euphrates and Tigris, giving an eschatological meaning to the mosaic, which

¹⁵ Piccirillo 1993a, 66 figs. 3, 14.

¹⁶ Piccirillo 1991, 518-519; 1993c, 283-290 fig. 4, fotos 11-13; Piccirillo – Denton 1996, 34; Maguire 1999, pls. IV, VI.

includes an animal, a deacon, a fruit picker, and other genre scenes in the adjacent panels¹⁷.



Fig. 15 *Ge between the Rivers of Paradise*. Church of Saint Paul (Second Half of the 6th Century A.D.) at Umm al-Rasas

Scenes of Daily Life with Personifications Symbolizing Place and Time

Ge, Seasons and Foliate Masks

Sometimes, daily life is shown within the framework of both place and time. Place is represented by Ge, and time is represented by the seasons and by foliate masks, as in the Church of Saint George (535/6 A.D.) at Khirbat al-Mukhayyat (Fig. 16). The personification of the earth is at the eastern end of the nave, the seasons are in the eastern and western borders, and there are two foliate masks in the

¹⁷ Piccirillo 1997, 382-392, Pianta I fig. 5, fotos 27-29; Baumann 1999, 139-141; Maguire 1999, pl. IV.

corners of the border. A bust of Ge, identified by name, is depicted frontally, arms extended to the sides, holding fruit in the edges of her outspread cloak, and accompanied by barefoot youths wearing short tunics and cloaks, offering her baskets of fruit (Fig. 17). The border has depictions of the

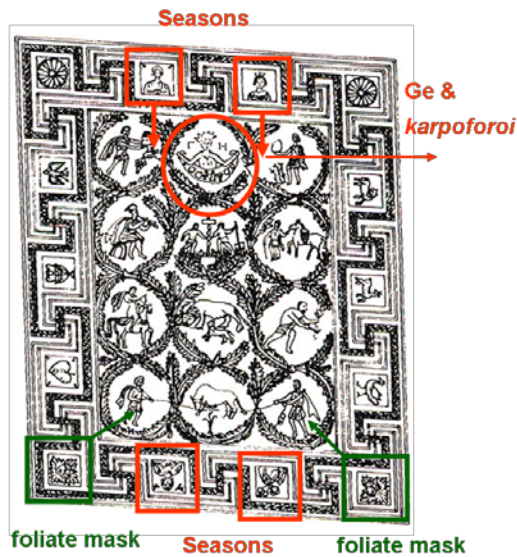


Fig. 16 *Ge with Seasons and Foliate Masks. Church of Saint George (A.D. 535/6) at Khirbat al-Mukhayyat*

four seasons as female busts adorned with jewelry. Summer wears Tyche's mural crown and has wheat sheaves on her head. Autumn is identified by olive leaves, and the horn of plenty indicates Spring (Fig. 18). In two corners of the border there are foliate masks with moustache and beard, which are related to the changing seasons (Fig. 19). Among the personifications of place and time, there are many scenes from daily life: harvesting sheaves of corn, a bull captured by a lasso, a lioness hunting, and episodes from the grape-harvest cycle¹⁸ (Fig. 20).

The personifications of the seasons are a common motif in the mosaics of Transjordan, with a long tradition dating back to the Roman period, as in the depiction of ΘΕΡΟΘC (Summer), crowned with sheaves of grain and with



Fig. 17 *Ge Accompanied by Karpoforoi. Church of Saint George (A.D. 535/6) at Khirbat al-Mukhayyat*
sickle in hand, in the Mosaic of the Muses and Poet (3rd century A.D.) at Gerasa¹⁹.

In the Byzantine period, the seasons are depicted both in churches and in private houses, generally in the corners of the vegetal border of the nave, where they are placed diagonally facing into the carpet. Each of the seasons is depicted as a frontal female bust, wearing costly earrings, sometimes identified by an inscription and sometimes by her dress and typical attributes. In some cases they wear a mural crown (*corona muralis*).

¹⁸ Saller – Bagatti 1949, 69-73 fig. 8, pls. 22: 3, 23: 2-3, 24-25, 27; Piccirillo 1993a, 38, 178 figs. 244-245, 249, 251; 1998, 323-327 figs. 116-117, 123-133, 137-149.

¹⁹ Kraeling 1938, 351-352, pl. LXXXV: a; Piccirillo 1993a, 20, 282-283 figs. 503, 516, 520.



Fig. 18 Spring. Church of Saint George (A.D. 535/6) at Khirbat al-Mukhayyat



Fig. 19 Foliate Mask. Church of Saint George (A.D. 535/6) at Khirbat al-Mukhayyat



Fig. 20 Personifications of Place and Time with Daily Life Scenes. Church of Saint George (A.D. 535/6) at Khirbat al-Mukhayyat

The Hippolytus Hall (6th century A.D.) at Madaba, used for civic purposes, was decorated with the Greek tragedies of Aphrodite and Adonis, and Phaedra and Hippolytus. Hunting scenes are depicted in the acanthus scrolls of the border (Fig. 21). The four seasons are depicted as a Tyche wearing a mural crown. Summer holds a sheaf of corn (Fig. 22). Winter holds a cornucopia of flowing water (Fig. 23). Spring holds a cornucopia of fruit (Fig. 24), and Autumn's cornucopia overflows

with flowers²⁰ (Fig. 25). In the other Madaba mosaics the seasons lack identifying attributes, as in the Hall of the Seasons discovered under the house of the Qsar family (Fig. 26), where the acanthus scrolls of the frame are populated with birds, baskets laden with fruit, and goblets²¹. Of the Church of Saints Peter and Paul (540? A.D.) at Gerasa, only the inscription identifying Summer (ΘΕΡΙΝΗ) and the remains of sheaves of wheat on the eastern side of the frame and the front of the bema have survived²².



Fig. 21 Hippolytus Hall (6th Century A.D.) at Madaba



Fig. 22 Summer. Hippolytus Hall (6th Century A.D.) at Madaba



Fig. 23 Winter. Hippolytus Hall (6th Century A.D.) at Madaba

²⁰ Piccirillo 1982, 386-393, Pianta III-IV, fotos 28-40, 51a; 1993a, 66 figs. 3, 11, 12-15, 26-28.

²¹ Piccirillo 1986, 326-327, fotos 19-26; 1993a, 39, 76 figs. 35, 41-42.

²² Biebel 1938, 333-336 pl. LXXV: b; Welles 1938, inscr. 329.



Fig. 24 Spring. Hippolytus Hall (6th Century A.D.) at Madaba



Fig. 25 Autumn. Hippolytus Hall (6th Century A.D.) at Madaba



Fig. 26 Seasons. Qsar Family House at Madaba

Earth, Seasons, Ocean, and Wisdom

In the southern aisle of the church near the Temple of the Winged Lions (mid-6th century A.D.) at Petra, the seasons of the year appear together with genre scenes and other personifications. Of XIMEPINH – Winter, only the name has been preserved. It is depicted together with Ge, putti and a fisherman, in a fishing scene that belongs to the world of water (Fig. 27). EAPINH – the personification of Peace – is Spring, holding a basket or bowl of flowers and wearing a wreath of flowers, depicted together with the personification of ΩΚΕΑΝΟΣ – the Ocean, in the form of a male figure holding an oar and a miniature ship, his left leg resting on a small dolphin. He is a bearded god with white hair and beard, two lobster claws emerging like horns from his head. This panel also has a depiction of a fowler hunting birds (Fig. 28). ΘΕΡΕΠΙΝΗ – Summer – is shown in three-quarters height, a scythe in her right hand and branches with fruit in her left. She appears together with the personification of ΣΟΦΙΑ – Wisdom, and a fisherman holding a fish (Fig. 29). ΦΘΙΝΟΠΩΡΙΝΗ – Autumn – is surrounded by animals of the land, sea and air²³ (Fig. 30). The artists at Petra chose to combine the personifications and the labours in a unique and contrasting manner - earth with fishing, sea alongside bird hunting. The personifications are surrounded by the animals of the land, birds of the air, and fish of the sea, and in this way, the creatures of the earth, sky and sea are brought together²⁴.

²³ Waliszewski 2001, 247, 251-252, 255-257 pls. on pp. 307, 309, 318-323.

²⁴ Habas 2005, I: 276.



Fig. 27 Winter, Ge, Putti and a Fisherman. The Church at Petra (mid-6th Century A.D.) (after: Waliszewski 2001, Plate on p. 318)

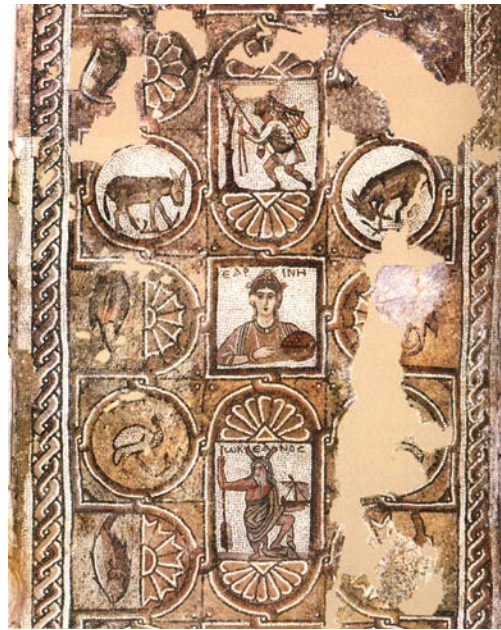


Fig. 28 Spring, Ocean, and a Fowler. The Church at Petra (Mid-6th Century AD) (after: Waliszewski 2001, Plate on p. 319)



Fig. 29 Summer, Wisdom, and a Fisherman. The Church at Petra (Mid-6th Century A.D.) (after: Waliszewski 2001, Plate on p. 320)



Fig. 30 Autumn. The Church at Petra (Mid-6th Century A.D.) (after: Waliszewski 2001, Plate on p. 321)

Thalassa (sea) and Foliate Masks

ΘΑΛΑΣΣΑ – Thalassa, the personification of the sea appears only once, in the nave of the Church of the Apostles (578 A.D.) at Madaba (Fig. 31). She is identified by name, and appears in the centre of the carpet, set as a frontal bust in a medallion, her right hand raised to her breast and her left hand grasping



Fig. 31 *Thalassa (Sea)*. Church of the Apostles (578 A.D.) at Madaba

young, one slender, the other plump²⁶ (Fig. 33).



Fig. 32 *Thalassa (Sea) and Daily Life*. Church of the Apostles (578 A.D.) at Madaba



Fig. 33 *Foliate Masks*. Church of the Apostles (578 A.D.) at Madaba

The motif of foliate masks at the corners of the frame is common in the churches of Transjordan. They are set on a diagonal, facing the centre of the carpet, and are depicted as both old and young figures. The elderly masks have a stern expression, their faces are elongated, and acanthus leaves form their hair and beards. The young masks have smooth, chubby faces. Different interpretations have been given to the foliate masks: as a vegetal head, indicating the seasons of the year, and as creatures originating in the classic ocean and sea gods, or from theatre masks²⁷. In the Roman mosaics of North

²⁵ Saller – Bagatti 1949, 179-180; Noth 1968, 133-135.

²⁶ Lux 1968, 109-115, Taff. 14:a, 16-19, 29, 30:b-32; Piccirillo 1993a, 38, 106 figs. 78-86, 93, 95.

²⁷ Habas 2005, I, 184-185 and reference therein.



Fig. 34 Church of the Deacon Thomas (First Half of the 6th Century A.D.) in 'Uyan Musa Valley



Fig. 35 Foliate Masks. Church of the Deacon Thomas (First Half of the 6th Century A.D.) in 'Uyan Musa Valley



Fig. 36 Foliate Mask. Chapel of Suwayfiyah (6th Century A.D.), Philadelphia-Amman Area

Africa, small wings have been added to the head and they have been understood as indicating the four points of the compass²⁸. In my view, the vegetal form, the elderly image alongside the young, and the position at the corners of the frame hint at nature's cycle, the changing seasons, of withering and revival. They should thus be seen as a parallel motif to the four seasons. An entire mosaic was discovered at the Church of the Deacon Thomas (First half of the 6th century A.D.) in 'Uyan Musa Valley (Fig. 34), with a pair of elderly and a pair of young foliate masks at the corners of the frame (Fig. 35). They face depictions of episodes from everyday life in the carpet: hunting scenes, and the grape and fruit harvest cycle²⁹. A pair of elderly foliate masks has survived in the Church of the Holy Martyrs (al-Khadir) (second half – end of the 6th century A.D.) at Madaba, together with scenes of everyday life³⁰. A young head with a chubby face has been uncovered in the floor of the chapel of Suwayfiyah (6th century A.D.) west of Philadelphia-Amman, with acanthus leaves forming hair, moustache and beard (Fig. 36). He faces a carpet in which there are depictions of the transporting grapes, a camel, and grazing scenes³¹ (Fig. 37).

Daily Life with the Months of the Year

Genre scenes are also combined with the months of the year. The images of the months appear to their full height or as busts, accompanied by identifying inscriptions, and engaged in the agricultural labours characteristic of each season. Most of the names of the months are taken from the Macedo-

²⁸ Gauckler 1910, 185 no. 560; 1914, no. 560.

²⁹ Piccirillo 1993a, 187 figs. 252-258, 261-263, 265-268; 1998, 332-341 figs. 150-151, 154-185, 189.

³⁰ Lux 1967, 168-182, Taff. 26:a, 27:a-b, 29-34; Piccirillo 1993a, 129-131 figs. 142-143, 146-157.

³¹ van Elderen 1970, 25-27 figs. pls. I-II; Piccirillo 1993a, 264 figs. 452, 469-475.



Fig. 37 *Chapel of Suwayfyah (6th Century A.D.), Philadelphia-Amman Area*

consul, facing the front and wearing a long tunic with a wide sash (*tunica laticlavia*) and a *pallium*. He holds perhaps a small pitcher and a caduceus, associated with winter and indicating rain. Ἀρτεμ[ίσκος], May, holds a typical flower of that month, and the remains of the month Π[ερίτιος], February, might have depicted the Falconer and the Falcon, as well as the figure personifying Λῶος, August. Genre scenes appear among the months, and again in an acanthus scroll frame surrounding the carpet and in populated vine scrolls on the *bema*. The appearance of genre scenes together with the personifications of the months is understandable, since the labours of the agricultural seasons parallel the themes of the months in both their meanings and depictions³².

At Gerasa, the personifications of the months were also exposed in the southwest chapel of the cathedral (second quarter – half of the 6th century). Two square panels divided into twelve squares containing depictions of the months were incorporated into a carpet of populated vine scrolls. These were completely destroyed by iconoclasts, but the busts and their names in Greek beside them follow the Calendar of Antioch. The upper part depicts January to June; beside the figures were flowers, and in the last square possibly a sheaf of wheat. Practically nothing has remained of the depiction of the other half of the year. The square of Dios, November, depicts a small object that might be identified as a low stool or footstool³³. In the Church of Saint John the Baptist (531 A.D.), the months are incorporated into the frame of perspective meanders and squares surrounding the car-

nian calendar. The months are depicted in two arrangements—either in a carpet divided into squares or octagons, or in a circle divided into radial sections. Unfortunately, all these floors have only survived in fragmentary form.

The first arrangement was discovered in three churches in Gerasa, and possibly also in Rihab. The depictions are quite fragmentary from the ravages of time and iconoclastic damage. The best-preserved depiction was exposed in the Chapel of Elias, Maria, and Soreg at Gerasa, where the months are incorporated into the composition of geometric interlacing nets and identified by names taken from the Macedonian calendar. Only five of them can be identified with certainty: Γαρπίεος, September, a youth holding a grape cluster and a basket full of grapes resting on his shoulder. Ὑπερβερετέ[ος], October, which is destroyed, perhaps represents a bird hunter. Δίος, November, is possibly planting seeds. Αὐδο[νῆος], January, is depicted as a young

³² Saller – Bagatti 1949, 269-289 pls. 46-48, 50: 3-4, 51: 3-4; Piccirillo 1993a, 39, 296 fig. 571.

³³ Biebel 1938, 312-313 pl. LIX: a; Piccirillo 1993a, 284 figs. 527-528, 531.

pet. The mosaic was destroyed by iconoclasts, but three busts identified by inscriptions above their heads have been reconstructed, Πά[νημ]ος, Λῶ[ος], and Γορπιαῖος. The four seasons or heavenly winds were apparently at the corners³⁴.

The carpet of interlacing octagons in the nave of the Church of Saint Mary (533; 582/3 A.D.) at Rihab might have depicted the months or labours. The figurative depictions were completely destroyed by iconoclasts, and only a few letters and work tools remain, such as sickle, hammer, shovel and saw³⁵.

The calendar in the mosaic from El-Djem in North Africa is a good illustration for the destroyed mosaics in our region. There, the months are designed as emblems incorporated into a network of squares, and personified by male figures, together with the seasons depicted to their full height, portraying genre scenes and the religious celebrations held each month³⁶. Depictions of the months in the Byzantine churches in the Holy Land are close in spirit to models from Late Antiquity and the early Byzantine period, but they avoid cultic scenes, which were common in Roman calendars. Instead, the only motifs that remained were animals, fruit, and the work tools corresponding to the seasonal agricultural labours and way of life³⁷.

The Church of Saints Cosmas and Damianus (623/4 A.D.) at Khirbet Dariya, has an outer circle decorated with acanthus scrolls populated with genre scenes. The inner circle is divided into sixteen radial sections containing figures that were destroyed by iconoclasts; some of the inscriptions have been preserved. The centre of the composition contains a geometric circle³⁸. Hamarneh was the first to note that the circle contains a depiction of the months and seasons, and Di Segni, despite the poor quality of the floor, was able to decipher some of the inscriptions and identify them as Macedonian months running clockwise in the order of the four seasons. Their sequence represents the Syro-Macedonian Calendar of Antioch, in which the year began in autumn, and the old Aramaic month of Tishri received the Seleucid name Hyperberetaion, or the Julian name October, and so on. Autumn corresponded to October, November and December (Hyperberetaios, Dios and Apellaios); Winter corresponded to January, February and March (Audynaïos, Peritios and Dystros); Spring corresponded to April, May and June (Xanthikos, Artemisios and Daisios); and Summer to July, August and September (Panemos, Loos and Gorpiaios)³⁹.

The Christian Cosmic Perceptions

The incorporation of scenes from daily life in the temporal and spatial dimensions in the churches comes from Late Roman art. We should mention here that the sixth-century ekphrasis of John of Gaza contains an allegorical description of the cosmos, known as the *Tabula Mundi*, which adorned the winter bathhouse in Gaza. In it the author offers a commentary on the cosmic order through personifications such as Helios, Selene, the seasons, the earth, the ocean, thunder, and rain. The entire composition was populated by many personifications relating to cosmic symbolism. The cosmological depiction with pagan personifications was 'Christianized' through placing a cross in its

³⁴ Crowfoot 1931 pl. VI: b; Biebel 1938, 324-329, pl. LXVI: b; Piccirillo 1993a, 23 fig. 535.

³⁵ Piccirillo 1980a, 336-337, photos 37-40; 1980b, 154, pl. XCVII:1-2; 1993a, 311 figs. 622-624.

³⁶ Dunbabin 1978, 111, 260 pl. XXXVIII fig. 99.

³⁷ Habas 2005, I, 293; 2012, 508.

³⁸ Karasneh 1997, 28-30, 33-34 figs. 12-13, 15-18; Michel 2001, 135-137 fig. 82; Habas 2012, 508-509 fig. 12.

³⁹ Hamarneh 2003, 286-287; Piccirillo 2005, 389.

My deepest gratitude to Dr Di Segni for her help in deciphering the inscriptions.

centre⁴⁰.

The appearance of genre scenes in the spatial and temporal dimensions also has profound symbolic meaning, based upon the theological notions expressed in the writings of the Church Fathers, such as Clement of Alexandria (XX. 4. 9. 11) and Augustine (*de Ord.* II. 42; P.L. II, col. 1014), who perceived the church building itself as being a reflection of the cosmos. This concept is mentioned by the late fifth-century mystical theologian Pseudo-Dionysius Areopagite. His *Areopagica* convinced Syrian theologians in the East in the 6th century, and the idea that the church symbolizes God and the cosmos became a central theme in Maximus the Confessor's *Mystagogia* (580–662 A.D.), even though he does not mention any specific architectural element in addition to the bema and the nave (Ps.-Dion. *Ar.; de Cael. Hier.; Max. Con. Mys.*, I–II; P. G. XIC, cols. 664–705). These notions were developed in the Syrian hymn composed in the 7th century in honour of the Cathedral of Edessa, in which the church symbolized the Holy Spirit, the Trinity, salvation, and the cosmic order⁴¹.

Mortals working the land and shepherds and hunters brought together by cosmic forces and elements of the calendar are part of this cyclical phenomenon. The location of the seasons at the corners of the carpet and of the Earth, Abyss, and Sea in the centre or at the edges has a symbolic significance that creates a cosmic plan⁴². Clement of Alexandria (XX. 4. 9. 11) wrote about Christianity's perception of the seasons as Providence: *'The earth teems according to his will at its proper seasons, and puts forth food in full abundance.... The seasons of spring, summer, autumn and winter give place to one another in peace.... All things did the great Creator and Master of the universe ordain to be in peace and accord...'* Augustine (*de Ord.*, II. 42; P. L. II, col. 1014) used the seasonal cycle to prove the existence of the Divine order of the universe. John Chrysostom, for his part, drew a connection between the unchanging regularity of the seasons and the annual Christian festivals: *'As it is in the changing of the seasons and the sun, one time of year follows the other, so the church takes always one feast after the other and leads us from one to the other'* (Ioh. Chrys. *de sanc. Pentec.* 2.1; P.G. L, col. 463).

Saller and Bagatti maintain that the depiction of man's agricultural labours in churches, the forces of nature, and man's place in nature express his part in God's work. Spiritual life and earthly life are one⁴³. These notions are based upon a sermon by Theodoretus, the fifth-century bishop of Cyrrhus in Syria, who spoke of God creating the universe, watching over it, overseeing the heavenly and earthly orders, and bestowing fertility on the soil and wisdom on mankind in order that man should become one with nature. He praises the man who cooperates with the work of the Creation and who accommodates himself to God's overall plan (Theod. Cyrrh.; P. G. LXXXIII, cols. 483, 555–774). John Chrysostom (P. G. XLVII, col. 429, LIII, cols. 33, 77, LV, col. 479, LVIII, col. 638) and Isidore of Pelusium (*Epist.* V; P.G. LXXVIII, cols. 1381–1382), in the 4th and 5th centuries, also expressed this idea, while the inscriptions in the churches in the Holy Land constantly repeat this idea.

Conclusion

In conclusion, representations of mortals engaged in farming, herding and hunting are combined

⁴⁰ Ioh. Gazae *Ekphr.* (trans. Friedländer) 1912, 135-224, Taf. I; Kraemer 1920.

⁴¹ The hymn is preserved in manuscript dated to the 13th century. Codex Vaticanus Syriacus, 95, fol. 49–50 (trans. Dupont-Sommer 1947, 29-39).

⁴² Habas 2012.

⁴³ Saller – Bagatti 1949, 88-89; Bagatti 1957, 148, 151-152; 1963:101-102.

with personifications of time, space and the cosmic phenomena of the calendar, with an emphasis on the central role of man. The introduction of genre scenes into the church was indeed a reflection of the local agricultural activities but they convey an additional implicit message: the abundant fish, fruits, vegetables and animals express the bounty and generosity of God, and the offerings made to him from his gifts. The humans, while representing this world, play a part in the cosmic plan in which the yearly cycle takes place under Divine care, and which demonstrates the existence of a Divine order in the universe. These ideas which were expressed by the Church Fathers and by Christian authors, were given visual expression in the Byzantine period by the artists of these mosaic pavements.

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AN EXAMPLE OF THE LIVES OF THE PROPHETS IN ILLUSTRATED MANUSCRIPTS:
CAMI'U'T-TAVARIKH (EDINBURGH LIB., OR. MS. 20)

RESİMLİ EL YAZMALARINDA PEYGAMBERLERİN YAŞAMININ BİR ÖRNEĞİ:
CAMI'U'T-TEVARİH (EDİNBURGH KÜTÜPHANESİ., OR. MS. 20)

COŞKUN ÖZDEMİR *

Abstract: The “Cami'u't Tevarikh” written and illustrated as a World History, in Tabriz when it was the centre of Iran and Azerbaijan in the reign of Mahmud Ghazan Khan (1271-1304) the seventh ruler of the Ilkhanid state (1256-1335) is divided into parts: Mongol history, History of the Prophets and the history of various cultures. The Jami 'al-tawarikh is a valuable book illustrated with miniatures, written by the physician, writer and historian Reşid üd din Hamedani (1247 - 1318) with the patronage of Ghazan Khan (1271-1304), containing all the records up to his lifetime. There are various pictorial styles employed within this copy of Edinburgh University Library (ed. In. Lib. Or. Ms. 20) prepared with an Arabic text by the scribes and artists brought from various regions to Tabriz. In this paper, the Ilkhanid period illustrated book (Cami'üt Tevarih) of Reşidüddin Fazlullah Hamedani (2013), written in the year M. 1306 and its miniatures relating to the History of the Prophets are examined. The aim is to answer such as questions as: what happened within Ilkhanid Miniatures? What are the main lines of development of early Islamic Miniatures? What are the sources for the style of miniature employed in the History of the Prophets' section of the Cami'üt Tevarih?

Keywords: History of Prophets • Early Surviving Islamic Miniatures • Mahmud Ghazan Khan • Ilkhanid Period • Reshid-ud'din Hamedani

Öz: İlhanlı devletinin yedinci hükümdarı olan Mahmud Gazan Han devrinde Azerbaycan ve İran'ın merkezi olan Tebriz'de dünya tarihi olarak kaleme alınan ve minyatürlerle tasvir edilen “Cami'u't- Tevarih” şu bölümlere ayrılır: Moğol tarihi, Peygamberler tarihi ve çeşitli kültürlerin tarihi. Hekim, yazar ve tarihçi Reşid-üd'din Hemedâni (1247-1318) tarafından Gazan Han'ın (1271-1304) himayesinde onun hayatına dair tüm kayıtları kullanarak yazılmış olan Cami'u't-Tevarih minyatürlerle resmedilmiş değerli bir kitaptır. Çeşitli bölgelerden getirilen sanatçı ve katipler tarafından Arapça metinle birlikte hazırlanan Edinburg Üniversitesi'nin (ed. In. Lib. Or. Ms. 20) bu kopyasının kullanıldığı çeşitli resimli stiller vardır. Bu yazıda, 1306'da yazılmış ve peygamberler tarihi ile ilişkili minyatürlerini içeren Reşidüddin Fazlullah Hamedani'nin, İlhanlı Dönemi resimli kitabı (Cami'üt Tevarih) incelenmektedir. Amaç şunun gibi sorulara cevap bulmaktır: İlhanlı minyatürlerine ne oldu? Erken İslami minyatürlerin gelişiminin ana hatları nelerdir? Cami'u't-Tevarih'in Peygamberlerin Tarihi bölümünde işlenen minyatür stili için kaynaklar nelerdir?

Anahtar Kelimeler: Peygamberler Tarihi • Kurtulan Erken İslami Minyatürler • Mahmud Gazan Han • İlhanlı Dönemi • Reşidüddin Fazlullah-ı Hemedâni

Introduction

An overall assessment is given concerning the miniatures relating to the History of the Prophets in a manuscript with miniatures, the *Cami'u't-Tevarikh*, written in 1306 and which is today in the Edinburgh University Library, Or. Ms. 20. As far as is known, there are four copies of the *Cami'u't-Tevarikh* that were copied in this same period. Of these four copies, that dated 1306 measures 41.5 × 34.2 cm and consists of 151 pages, written in Arabic in Naskh script. Differences can be observed in the script in this copy written by several scribes from various geographies. The Cami'üt-Tevarih is

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a valuable book made during the protectorate of Mahmud Gazan, that contains historical records from the time of the Prophet Adam to the period of Reşidüddin Hamedani (1247 – 1318) the author of this work, who was a doctor, a writer and a historian¹.

In Taberi's *Ta'riḫ al-Rusūl wa al-Mulūk*, History of Prophets and Kings, there are 50 Prophets whose names are recorded in the Psalms, the Torah, the Bible and the Quran which are recorded in the same style as is related in the History of the Prophets². However, in the part dealing with the History of the Prophets in this Edinburgh University Library copy of the *Cami'ü't-Tewarikh* it illustrates only some of these Prophets. The stories concerning them depicted in the miniatures are mentioned in the text and both the style of the miniatures and an analysis of the iconography was made.

The earliest depictions of the Prophet of Islam in miniatures surviving today were painted in Konya in the mid 13th century in the work entitled *Varka and Gülşah*³. Questions are discussed such as, what is the content of the miniature? What are the foundations of the Islamic paintings from the earliest surviving examples and what are the sources of the pictorial style employed in the miniatures depicting the Prophets in the *Cami'üt-Tevahir*.

We face several methods to enable us to address the psychological aspects of the depictions in these miniatures. Hegel said each picture has a psychological aspect, however, the spirit must penetrate into the emotions to make this psychological aspect influence the iconography⁴. The analysis by Ettinghausen has shown that the art of painting of the İlkanid period was strongly connected to representations on 12th century metal work and to the sculpture of the Sassanians. Ettinghausen's opinion that the iconography employed in the pictorial art of The İlkanid was not easy to understand became more widely accepted when it was realised that elements from the iconographies of Byzantine, Chinese and Islamic art were combined. Panofsky's statement that "*iconography is one of the main factors to affect the painting*" indicates how suitable it is to describe iconographic sources in research⁵.

Miniatures Relating to the Prophets

- a) The Annunciation to Mary (Fig. 1)
- b) Jonah and The Fish (Fig. 2)
- c) Moses on Mount Sinai with Seventy Selected Person (Fig. 3)
- d) The Drowning of Pharaoh in the Red Sea (Fig. 4)
- e) The Finding of the Baby Moses (Fig. 5)
- f) The Prophet Abraham Cast into the Fire (Fig. 6)
- g) The Prophet Salih Produces a Camel (Fig. 7)
- h) Karun is Swallowed by the Earth (Fig. 8)
- i) The Ashab-al Kahf (The Seven Sleepers in the Cave) (Fig. 9)
- j) The Birth of the Prophet Mohammad (Fig. 10)
- k) The Moving into position of the Black Stone (Hajar-ul-Aswad) (Fig. 11)
- l) The Prophet Moses and Uj (Fig. 12)

¹ Günaltay 1937, 167; Sümer 1961; Gray – Rice 1976; Fazl-Allah 1976; Göksu – Güneş 2010, 26.

² El Taberi 2007; And 2008.

³ İnal 1963, 167; Sümer 1973, 2-3; Allen 1985, 123.

⁴ Cho 2008.

⁵ Arnold 1965; Ettinghausen 1955; Panofsky 2012, 45.

- m) The Prophet Mohammad and the Archangel Gabriel (Fig. 13)
- n) The Prophet Mohammad on Buraq (Fig. 14)
- o) The Prophet Daud and The Governor of the Israilites (Fig. 15)
- p) The Prophet Mohammad, Abu Bekr and the Goat-herd (Fig. 16)
- q) The Prophet Yusha bin Nuun (Fig. 17)
- r) The Elderly Priest Bahīrā's encounter with the Prophet Mohammed (Fig. 18)
- s) The Prophet Jirjis (Saint George) (Fig. 19)
- t) The Prophet Irmiya or Uzeyr (Jeremiyah) and his Donkey (Fig. 20)
- u) Alexander in The Fog (Fig. 21)

Composition, Time and Space

Under the heading of History, there are separate subgroups, entitled: Historical Events, Mythology, and stories from the Bible, Torah and the Quran. Nearly the same iconography or compositional scheme began to be employed for each of these various matters. In this case, the situations that influenced the composition become visible⁶. The various artists who worked together on the miniatures of the *Cami'u't-Tewarikh* modeled various compositional prototypes. In this way, despite their different subjects, almost the same style of composition was employed (Fig.1).

It is seen that there are no other composition factors apart from the one that was intended to be described in the manuscript where a horizontal composition was employed on a vertical paper. The setting is decided and the scene is depicted, taking into account what is related in the story. This setting can be an interior space, on a hill or in a desert. For instance, (Fig. 3) a figure on a mount is depicted in the miniature entitled "Moses on Mount Sinai". In the miniature entitled "Yuşa bin Nuun" (Fig. 17), a perception of interior space was formed. The composition, which could be divided into a maximum of three parts, depending upon the diversity of the depicted event, is quite successful in the array of the figures (Fig. 18). Although in the *Cami'u't-Tewarikh* the hero of the event was generally painted in the centre of the composition, in the composition describing Hz. Jirjis (Fig. 18) the hero of the event -Hz. Jirjis- was included on the far-left in the painting. We find the scene where the slave was taken to the King in the *Cami'u't-Tewarikh* quite often, so we see that they exactly reflect the prototype of the scene where the story of the Hz. Jirjis was depicted. The composition in the miniature depicting the Prophet Davud was painted just within a perception of space because the officials approach the Prophet Davud from the right, which we could regard as the entrance of the place. Just in the place where they enter, the space finishes and nature figures appear. Here, the scene is cut from the right and the left as if both interior and outdoor space were put into the frame of a photograph. We find many scenes like this in the *Cami'u't-Tewarikh*. The most spectacular of them is the scene of the Casting of the Prophet Abraham into the Fire (Fig. 6). The catapult that is placed in the centre in this scene was presented in detail. Abraham is looking out of the composition and he is in the flames, half of which are cut by the frame, as if he were isolated from the scene.

The scene of the "Prophet Mohammed and Gabriel" (Fig. 13) is formed by means of a central composition arrangement. The figures are not cut by the frame and both figures are placed in equal spaces within a split scene. When we compare the previous scene with this one, in the former (Fig. 6) just the centre of the plot is depicted and the cutting of the other parts by the frame is accepted. However, in this scene (Fig. 13) both sides are fitted into the frame. In the scene where the time per-

⁶ Allen 1985, 128.

ception is not processed, a mountainous region is preferred as the pictorial space. In some miniatures, space perception is not often approached but in some other miniatures it is emphasized. For instance in the depiction of the Prophet Mohammad's "Miraj" (Fig. 14), the representation of place appears in details such as the ovality of the world, the horizon line and the clouds.

The Uc that covers the composition is entirely depicted in an adverse way and the Prophet Moses and the figure of the sun were drawn in the remainder of the space as much as they fit in. It is thought that drawing the figure larger than the composition resulted from the artist's desire to make the figure more fantastic.

Motif and Figure

A rare motif in the Cami'u't-Tewarikh Prophet scenes is the depiction of "Alexander in the Fog" (Fig. 21). Here, a largish lion motif was embroidered on a flamboyant shield. The fearsomeness of the lion who seemed ready to attack was tried to be reflected on the shield. The popularity of 3rd to 7th c. A.D. Sassanian art at that time can be considered as a culture that influenced the use of this motif. Besides, if there was a Mongol influence, a dragon could have been depicted instead of a lion⁷.

Human figures have a quite monotonous development. However, this prototype monotony is inversely proportional to the artist's mastery. Dress folds, gestures and facial expressions were drawn in a quite a realistic manner. In the scene of "Karun Sinking into the Earth" (Fig. 8), the fear of Karun and his friends is written all over their faces. Not only the dressed human figures but also the naked and semi-nude human figures are also successfully depicted in this same way. Taking into account the conditions of that period, we find the figures successful, since they were in conformity with the event that was the subject of the depiction. For example, in the scene of "Yunus and the Fish" (Fig. 2), the fact that Yunus is totally exhausted can be understood from the depiction of his face and his body. Actually, a sturdy human figure here would conflict with the scene represented. Another human figure is depicted in the scene of the semi-nude Prophet Jirjis (Fig. 19). The Prophet Jirjis is depicted with chains around his neck and his sorrows and the pains he has experienced are understood from the expression on his and his projecting ribs. Although the belly of today's human being is so clear, a human's ribs come to the fore when the person is thin. Arnold stated that the Indian and the Persian artists may have drawn these scenes because they were more successful than the others⁸.

In some of the human figures the turban, which was the sign of Arabian tribes, is in the foreground while the crown and their usual kalpacs are realised in Mongol style in some of the other depictions of human figures. We see the details of the beards in the figures as being white and bushy and black and thin. In the scene of "The Annunciation to Mary" (Fig. 1), the figures are of Byzantine origin, so it is clearly understood that they are different from the others.

The figure that the artists working for Reşidüddin seem to have been uncertain and irresolute about was how to depict the figure of an angel. In the original examples of "The Annunciation to Mary" scene, the angel figure is winged and has the form of a woman. However, in the scene in the Cami'u't-Tewarikh, we see a tall and curly haired man figure in a blue dress. When the Prophet was ascending in the Miraj (Fig. 14), the winged angel was a female figure. And in another scene (Fig. 18), we see the angel depicted as a child figure hanging down from the cloud.

⁷ Arnold 1965, 130.

⁸ Arnold 1965, 130.

The fish that was drawn to a large scale in the miniature depicting the story of the Prophet Yunus was a finned and small sea fish with a skin of scales which was drawn oversized in this scene to create the perception of a whale. The fish is depicted in reverse motion curling its tail.

A horse figure that was successfully drawn was widely used in the compositions. The hairs of the horse figures which were drawn without moving away from the horse's anatomy were successfully repeated. As a steed for riding, Burak was derived from the horse but with a human's torso and head rather than a horse's neck and head. There is a crown with Central Asia influence on the head of Burak whose hands are carrying a book. In the miniature that depicts the Prophet Moses Crossing the Red Sea (Fig. 4), the horses in the water were drawn as if they were struggling to survive. This differs from the other scenes in terms both of the emotion depicted and in the quality of the drawing.

We were surprised to see the figure of a donkey because there are not many examples of it. The donkey of the Prophet İrmiya-Üzeyir (Fig. 20) is lying, half skeleton, half flesh. From this depiction we experience the feelings of the donkey in trying to stand up. Another animal that seems to be a riding figure is the camel (Figs. 17, 18), depicted in the miniatures of stories relating to the Prophet Mohammed, with the unloaded camels depicted in a kneeling position, with the camels with saddles on their backs successfully drawn, and that of the Prophet Salih which was depicted in the colour of the rock and in a really realistic manner.

The "UC" figure which is semi-nude, dressed in blue and with an orange ribbon is depicted in an exaggerated fashion, drawn in the form of a human. The face of the giant was similar to the face of the Prophet Moses and it was damaged. I think it was the fact that the face of the giant resembled the depicted face of the Prophet Moses that was not tolerated and it was this resemblance between them that can be understood as being the reason why the depiction of the "UC" figure was damaged.

The Colour and the Setting

In the setting of the scenes of the prophets, generally a matt earth colour was used and it was arranged plain. The architectural element of the walls seem to be of bricks (Fig. 15) and stones (Fig. 11). The arch ornament that was prepared delicately was given in a blue tone and some of the columns were arranged in blue and the others in brown. If we suppose that the blue colour were commonly used, it can be considered that they used the colour blue according to the composition. In those scenes with colour scheme ranging from yellow to blue, great people were described in blue and its tones (Figs. 4, 7, 8, 15, 17). However, in those scenes with a depiction of the Prophet Mohammed, blue was not preferred. Generally in these figures, on a dress in a brown tone, a blue cover was preferred. When we think that lapis lazuli blue is a sacred colour in Christianity, it can be seen that these depictions were influenced by Byzantine painting concerning the tone of the colour employed⁹. We can see that the richness of colour is found only in those scenes relating to the Prophet Mohammed (Figs. 10, 11). Orange colour was only used as a belt in the scene of "*Moses and UC*" and "*Alexander in the Fog*". Also, it appears as a pillow and sometimes as a ribbon colour in the throne scenes. That is; orange was not a colour that was generally preferred. The colour green is less common than brown and the most commonly used colour is blue. Blue is in the depiction of the seas and for column ornaments and it is enhanced through the application of white (Figs. 4, 5, 2).

The fact that the scenes were plain, yellow and brown earth-toned, allowed for their activation through the use of the colour blue. Sometimes a colour was effective in activating the composition

⁹ Allen 1985, 127.

and sometimes the objects that were the components of the setting led the activation. As in the scene where Karun was swallowed by the earth, we see some of the goods used in interior spaces were drawn to prevent monotony. The situation is the same in the scene of Yuşa bin Nuun. While Prophet Yuşa is kissing the skirt of Moses, a barbecue and a coffee table are seen in the foreground. In both of these depictions of interior space the objects were drawn employing their authentic colours.

The deconstructed objects of nature were generally used in the setting more than natural figures. The tree with fruits in the scene of Psalmist can be shown as an example of this. It is seen that only the colour of the Ka'bah which was originally drawn was used in the scenes where black colour was not so much preferred. As D. T. Rice stated, in the composition which is filled without making it colourless, it can be thought that the silver colour was used in those parts near white and grey because he said, white was only used to give brightness and emphasis to a view¹⁰.

Conclusion

The subject of this study was the miniatures depicting stories from the History of the Prophets in an illuminated manuscript version written in 1306 of the *Cami'ü't-Tewarikh*, today in the Edinburgh University Library, Or. Ms. 20. The manuscript that in total contains 7 parts, had an important influence on Islamic art, from the miniatures of scenes depicting the Prophets, as from the other series of scenes. The stories of the Prophet Davud were added to the studied category as well as those Prophets who are mentioned in the Torah, the Bible and the Quran. The strong influence of Byzantine art is visible, for example in the scene of, "The Annunciation to Mary" which was directly copied in the Byzantine style (San Marco). According to Allen, in the miniature of the scene depicting the Crossing of the Red Sea, the menologies of Basil the Second were influential. It is emphasized that the scene that was created by 1000 A.D., had the same style of composition and the same iconography. Not only the influence of Byzantine art, but also of that from India, from Mongol and from Seljuk art is reworked and reused¹¹.

The artists of Reşidüddin, the greatest wealth of the Rab-1 Reşidi did not draw any other figures apart from those recorded in each story because they prioritised the content of these stories when they were creating these composition. The artists generally utilised a horizontal composition and they created quite a lot of works in the same style, so the similarity between the scenes was both inevitable and intentional. The similarity in composition, colour and setting are realised from the greeting scenes to the scenes with two figures. When compared to the depictions in the manuscript of *Varka and Gülşah*, a development in the perception of perspective can be observed. Instead of motionless figures, the figures were depicted as trying to explain something by means of the gestures and the facial expressions depicted. The background to the scenes was left empty of colour where the tones of the earth colours like yellow and brown were widely used.

Cami'ü't-Tewarikh, which is one of the most important sources for research today as in its own period, had quite a large influence upon the art of the Ottoman miniature. Despite the availability of knowledge today, the whole of the *Cami'ü't-Tewarikh* is yet to be translated and to date wide ranging research on its miniatures has not been undertaken. This study deals with the representation, the reflection of the stories of the Prophets in the painted miniatures, which is only one harbour in this ocean.

¹⁰ Rice 1976, 124.

¹¹ Allen 1985, 128.



Fig. 1 The Annunciation to Mary

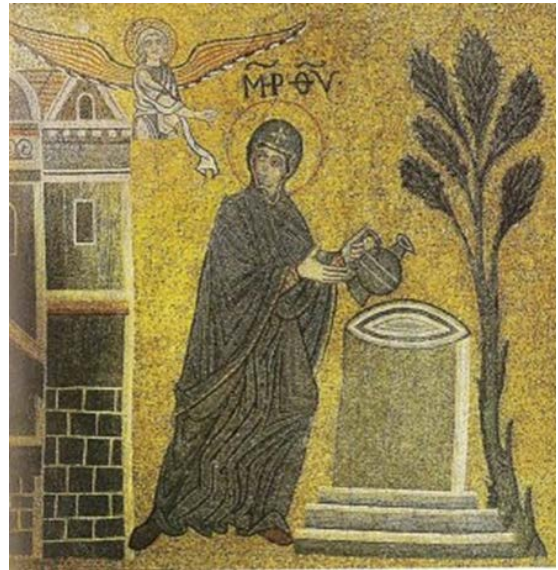


Fig. 2 The Annunciation, San Marco Transept (10th century)



Fig. 3. Jonah and the Whale



Fig. 4. Moses on Mount Sinai with Seventy Selected Person



Fig. 9. Karun Swallowed by the Earth



Fig. 10. The Ashab-al Kahf (Friends in the Cave)



Fig. 11. The Birth of the Prophet Muhammad



Fig. 12. Moving the Black Stone (Hajar-ul-Aswad)



Fig. 13. Moses and Uj



Fig. 14. The Prophet Mohammad and Gabriel



Fig. 15. The Prophet Mohammad Buraq



Fig. 16. Daud and The Governor of Israilities



Fig. 17. The Prophet Mohammad, Abu Bekr and a Goatherd



Fig. 18. Yuşa Bin Nuun



Fig. 19. Priest Bahira and the Prophet. Mohammed in his youth



Fig. 20. The Prophet Jirjis (Saint George)



Fig. 21. Irmiya or Zeyyr (Jeremiyah) and his Donkey



Fig. 22. Alexander in the Fog

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DOCUMENTS IN THE PRIME MINISTERIAL OTTOMAN ARCHIVES: CONCERNING
THE SEAL BOXES (KOZAKLAR) AND CASES SENT TO THE KING OF POLAND IN
INTERNATIONAL DIPLOMACY

*BAŞBAKANLIK OSMANLI ARŞİVINDEKİ BELGELER: MÜHÜR KUTULARI (KOZAKLAR)
VE ULUSLARARASI DİPLOMASİDE POLONYA KRALINA GÖNDERİLEN KUTULAR*

ZEYNEP EMEL EKİM*

Abstract: Round seal boxes called “kozak” were attached in the name of the Sultan (*name-i-hümayun*) to the letters of the Ottoman Empire were sent to foreign states or treaties made with foreign countries. Apart from their historical value, these are important in the history of Ottoman art from the point of view of material and craftsmanship. Inside the “kozak” which was attached to the document case by a ribbon was red sealing wax melted and stamped with the seal of the appropriate authority to whom it was to be sent. The Ottoman Court jeweller would be commissioned to make such “kozak” using gold, silver and precious stones. “Kozak” on the treaties between the Ottoman State and other countries are on exhibition at the Prime Ministerial Ottoman Archives. At the same time, documents concerning commissions for such “kozaklar” for letters written to the King of Poland and which are of importance in the history of Ottoman art are to be found there.

Keywords: Kozaklar • Name-i- Hümayun • Treaty • Diplomacy • Prime Ministerial Ottoman Archives

Öz: “Kozak” olarak adlandırılan yuvarlak mühür kutuları, yabancı ülkelerle yapılan anlaşmalar ya da yabancı devletlere gönderilen Osmanlı Devleti’nin mektuplarına Sultan (name-i hümayun) adına atfedilir. Tarihsel değeri dışında, işçilik ve malzeme bakımından Osmanlı sanat tarihinde oldukça önemlidir. Kurdele ile belge kutusuna tutturulan Kozak’ın içinde, eritilmiş ve gönderilecek kişiye uygun yetki mührü ile damgalanmış kırmızı mühürlü mum vardır. Divan-ı Hümayun, altın, gümüş ve değerli taşlar kullanarak bu tür kozakları yapmak için görevlendirilirdi. Osmanlı Devleti ve diğer ülkeler arasındaki anlaşmalar üzerindeki kozaklar Başbakanlık Osmanlı Arşivlerinde sergilenmektedir. Aynı zamanda, Polonya kralına yazılmış mektuplar böylesi “kozaklar” için komisyonları ilgilendiren ve Osmanlı sanat tarihinde önem taşıyan belgeler orada bulunur.

Anahtar Kelimeler: Kozaklar • Name-i Hümayun • Anlaşma • Diploması • Başbakanlık Osmanlı Arşivleri

A flat round seal box made of silver or gold would be attached by a gilded cord to the covers in which diplomatic letters and international treaties (*muahedename*) of the Sultan and kings were placed. This cord would be stitched to the document or threaded through a hole made in the central page, thus acting as a safeguard preventing any changes being made to the text of the document. The free ends of this cord would be knotted and attached to the seal box by two holes in the side through which the two ends of the cord would be passed. The two loose ends of the gilded cord would again be knotted and end in tassels. Wax or a special waxy substance would be poured into the seal box and stamped on the top with the seal of the state or authority which had written and the document dispatched. Sometimes, the document would also be stamped in this way (Fig. 1).

The cover of this box would be made of either silver or gold and engraved or embossed with the same seal as the one inside or sometimes with a different state emblem. The cover would sometimes be removable or, so it would not get lost, would be screwed onto the bull.

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Fig. 1 An Example of a Muâhedenâmeler from the Osmanlı Archive: Commercial treaty signed between the Ottoman Empire and Russia on 30 April 1846 in Baltalimanı İstanbul (Yılmaz et al. 2000)



Fig. 2 An Example of a Muâhedenâmeler from the Osmanlı Archive: Telegraph treaty signed between the Ottoman Empire and Austria on 21 January 1857 in İstanbul (Yılmaz et al. 2000)

The same materials and way in which the seal box was prepared and attached to the document by a cord were used by every country, apart from a few slight differences. For example, the colour of the wax pressed into the seal box might differ from country to country. The seal box and the diplomatic document sent with it demonstrated the majesty of the sender, as well as the measure of respect given to the recipient.

The Seal Boxes (Kozak) in Ottoman Diplomacy

In Ottoman diplomacy, this seal box was known as a *kozak* or *kozalak*. The materials employed were gold, silver, tooth or bone. Differences in the materials employed can be seen to be in accord with the authority to whom it was sent. In Ottoman diplomacy, a *kozak* was attached to letters of state (*name-i hümayunlar*), to treaties (*muaheadenameler*), to pacts (*ahidnameler*) and to official invitations.

Seal Boxes for Letters (Name-i Hümayunlar)

A *kozak* would be attached to the pages of official letters sent by the Sultan (*name-i hümayun*) and to treaties (*muaheadenameler*) by a thick silken cord stitched into the protective cover of the document¹. On his accession to the Ottoman throne, the new Sultan would send word of this to friendly and neighbouring countries through a letter delivered by an ambassador². Official letters would be sent in the name of the Ottoman State to the separate states, dependent or semi-dependent on the sultan. *Name-i Hümayun*, that is letters written to the heads of independent states and sent by the sultan were quite formal. Thus, *Name-i Hümayun* were prepared by the central bureau or Secretariat of the Sultan and written in formal diplomatic language. After being ratified by the Chief Clerk, a *tuğra* would be drawn on the document and the document would be sent to the Sultan, while a copy was retained in the official records³. The texts of these letters were usually written in black ink in *divani* script.

In Ottoman times, additions to the letters were stamped with the sultan's seal impressed into the red sealing wax called “*şem-i sürh*” contained in the seal box, which had been dripped onto them. In

¹ Sertoğlu 1958.

² Uzunçarşılı 1988.

³ Cebecioğlu et al. 2013.

later years instead of the sultan's seal, the state emblem and the sultan's tuğra (signature) were employed. The state emblem would be finely crafted on the cover of the seal box (Fig. 2).

The seal box and a writing set, consisting of pen, paper and stationery materials, would be prepared by the private secretary⁴. The private secretary would provide the chief court jeweller with the gold or silver chosen from which to make the seal box. Apart from the stationery materials, the pouch or wrappings of canvas, satin or wax cloth in which the letter would be kept protected when it was dispatched were provided by the Khazinehdar-bashi⁵. My research in the Prime Ministerial Ottoman Archives revealed documents presented to the Chief of the Treasury or the Kapucubaşı (*Admiral-in-Chief*) from the Grand Vizier's office which showed that orders were given for a seal box (in gold or silver) and a brocade pouch needed for the letter to be sent from the Sultan to the King of Poland. These documents are as follows:

To the Khazinehdar-bashi (Fig. 3): Give silver pouch for the imperial letter and golden seal box with other materials to the King of Poland.

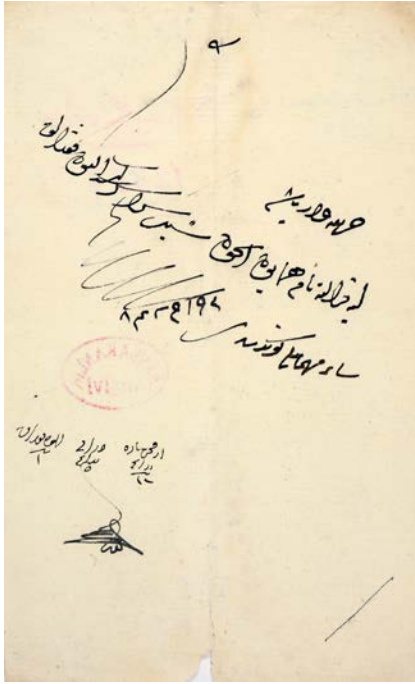


Fig. 3 Prime Ministerial Ottoman Archives, Document No, Ae. Mehmed IV, 12387

15 May 1770 (Fi 19 M. [1]184)

Foreign Currency one and half drachmas, five drachmas, Golden Seal box one piece to the Khazinehdar-bashi Agha (Fig. 4): Give one piece of pouch made of silk for the letter to be sent by the sultan to the Polish king this time.

25 May 1777 (Fi 17 R. [1]191)

To the Kapucubaşı Agha (Fig. 5): Give one golden seal box for the ornamentation of the letter of introduction to be written by the Office of the Grand Viziership for the imperial letter (letter of the

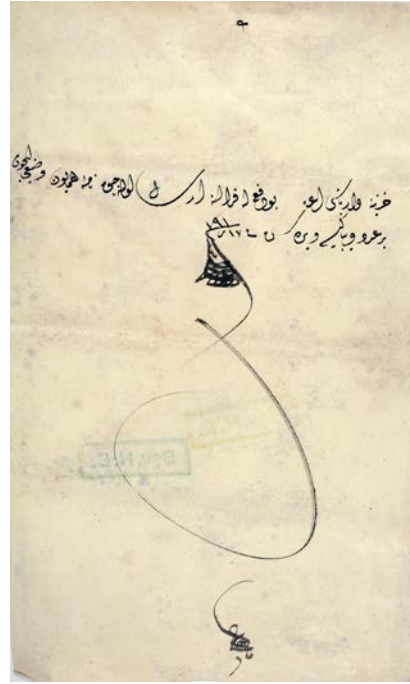


Fig. 4 Prime Ministerial Ottoman Archives, Document No, C.Hr. 8733

⁴ Somer *et al.* 1997.

⁵ Kütükoğlu 1994.

sultan) addressing the King of Poland and the Polish ambassador, who will return home, and the Polish people, and one piece of silver seal box for the letter to be sent to the cancelliers from the Office of the Grand Viziership.

5 March 1778 (Fi 5 S. [1]192)

To the Kapucubaşı Agha (Fig. 6): Give only one golden seal box which had previously been decided to be two, for the letter to be sent to the Polish king from the Office of the Grand Viziership.

18 March 1778 (Fi 18 S. [1]192)

The Khazinehdar-bashi Agha (Treasurer-in-chief), who is responsible for foreign treasury expenditures, or the Kapucubaşı Agha (Admiral-in-Chief) was commanded to order the materials that would be sent to the Grand Hetman of the Polish Crown (Hetman Wielki Koronny). In this case the seal box sent with the letter was made of silver as it was not from the Sultan himself. The documents that I have found in the Archives that correspond with this subject are as follows:

To the Khazinehdar-bashi Agha (Fig. 7): Give one red satin pouch and one yellow veil made of silk and for the letter to be sent to the Grand Hetman of the Polish Crown (Hetman Wielki Koronny) from the Office of the Grand Viziership.

5 March 1763 (Fi 19 Ş. [1]176)

They shall be recorded on the relevant unit.

The Divan's tezkire (an official book) regarding the delivery of the materials requested for the letter sent by the Office of the Grand Viziership for the fulfilment of important duties. 5 March 1763

One piece yellow silk veil, one piece red satin. We respectfully submit the required permit to be granted for the abovementioned materials to be recorded in that they have been supplied.

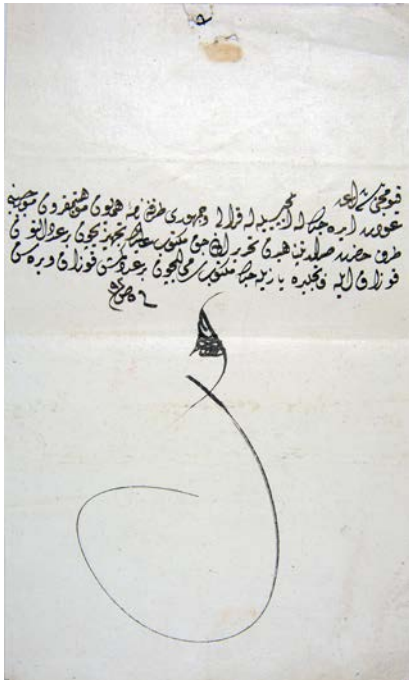


Fig. 5 Prime Ministerial Ottoman Archives, Document No, Ae. Abdülhamid I, 4567



Fig. 6 Prime Ministerial Ottoman Archives, Document No, C.Hr. 8974

To the Kapucubaşı (Fig. 8): Give one silver seal box for the letter to be sent to the Grand Hetman of the Polish Crown (Hetman Wielki Koronny) from the Office of the Grand Viziership, which is in return for the advice regarding the delivery of the letter of the Sultan to the King of Prussia by Ahmet Efendi, civil servant.

31 January 1778 (Fi 2 M. 1192)

To the Kapucubaşı Agha (Fig. 9): Give one silver seal box for the letter to be sent to the Grand Hetman of the Polish Crown (Hetman Wielki Koronny) from the Office of the Grand Viziership.

21 March 1778 (Fi 21 S. 1192)

Letters to the Chief Secretary of the Kingdom of Poland were usually written on large sheets of paper called İstanbul paper⁶.

Another particular speciality of Ottoman-Turkish documents is that they were written in Turkish. Documents written in other languages (Slav, Hungarian, Polish etc.) were ratified with a tughra (Sultan's signature) or symbol⁷.

The kind of pouch for the official letter and the material (gold or silver) used for the seal box differed according to which country and in what period the document was sent as well as to whether it came in the name of the Sultan or that of the Grand Vizier. Moreover, the style or form of the text varied in accord with which country or ruler it was sent to. For example, the phrases "kıdvetü'l-ümerai'l-izami'l İseviyye" used in letters to the Polish and French kings show the form of address given to the foremost leaders and administrators of Christian people⁸. The pouches in which letters sent to some states were put, were made of a valuable material known as 'seraser' (brocade) woven with gold, silver or silk thread. The mouth of the pouch was tied with a gilded cord the free ends of which, just as on the treaties, were passed through opposite holes on the seal box before sealing wax was poured onto them and stamped with a seal. The King of Poland was amongst the rulers of those countries to whom imperial letters were sent in a brocade bag and with a gold seal box as my research into the documents in the Prime Ministerial Archives shows.

I would like to describe a copy of an imperial letter sent in 1760 during the reign of Mustafa III and the translation thereof is as follows:

Order of the Grand Vizier (Fig. 10): Draft of the imperial letter written to reply to the letter sent by the King of Poland through ambassadors for the congratulation of the accession to the throne of the Sultan. It shall be recorded.

[Following the sentences of prayer] Respectfully note, when the letter is delivered to your party by our party, that your letter which addresses your loyalty to the law and ongoing peace between the King of Poland, who is our neighbour and extends his greetings for my accession to the throne, and the Polish people and us, and which has been delivered by Kont Bonoski de Podos Boroski Pojpo Antonyo, who is guide of the Grand Duchy of Lithuania and Timurid people and deputy general-in-chief of the Kingdom and carrier of the white eagle and appointed as ambassador by the elders of Polish State, and whose original and translated copy has been submitted to our authority by Ragıb Mehmed Pasha, Grand Vizier and my absolute deputy, in accord with the ancient tradition of our state,

⁶ Gökbilgin 1979.

⁷ Orhonlu 1970.

⁸ Gökbilgin 1979.

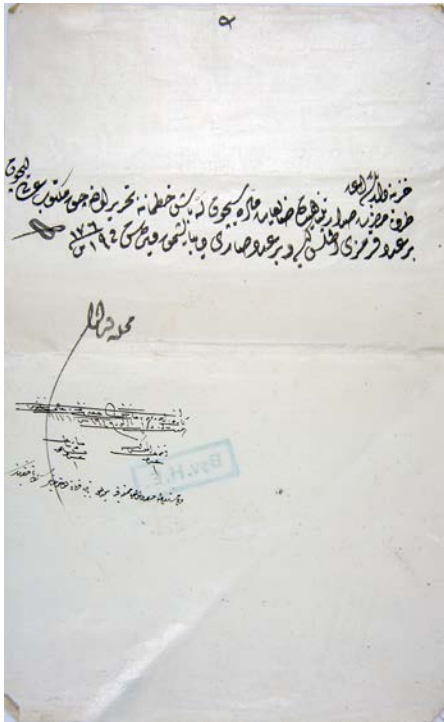


Fig. 7 Prime Ministerial Ottoman Archives Document No, C.Hr. 8258



Fig. 8 Prime Ministerial Ottoman Archives, Document No, C.Dh. 16847

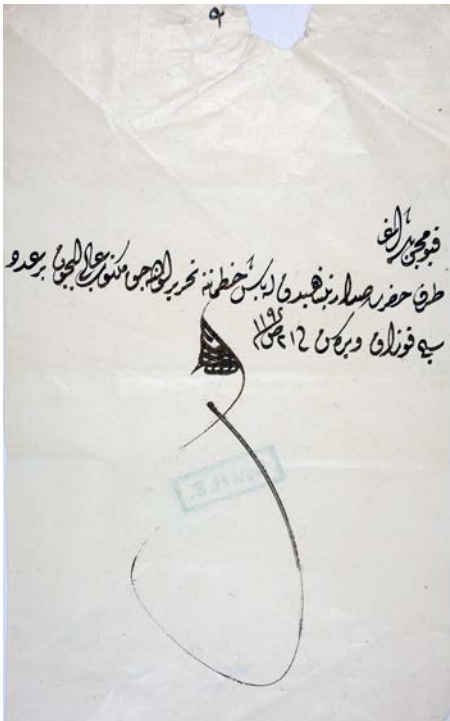


Fig. 9 Prime Ministerial Ottoman Archives, Document No, C.Hr. 8973



Fig. 10 Prime Ministerial Ottoman Archives, Document No, Ae. Mustafa III, 29396

and that we are Sultan Mustafa Han, son of Sultan Ghazi Ahmed Khan, son of Sultan Mehmed Khan, Khan son of Khan, Sultan son of Sultan, who are the sultans that are servants and rulers and justice granters of Mecca-i Mukarrama and Medina Munawwarah and Jerusalem-i-Sharif, favourite of the whole Ummah, and İstanbul, the most beautiful one of the possessions, and of Adana and Bursa, and Damascus, a corner of the heaven, and Egypt, memento of ancient centuries, and all of Arabia and Africa and Bereka and Kirvan and Aleppo and Iraqi Arabia and Iran and Basra and Lahsa and Deylaman and Ar-Raqqah and Mosul and Shahrizor and Diyarbekir and Dulkadir and Erzurum and Sivas and Adana and Karaman and Van and Maghreb and Habesh and Tunis and Tripoli and Cyprus and Rhodes and Crete and the Morea, and the states and coasts of the Mediterranean and Black Sea and Algeria and Anatolia and Rumelia and particularly Baghdad and the Dârü's-selam and all of Georgia and Greece and Terek and Tatarstan and Cherakise and Kabarday and Georgia and Desht-i Qipchaq and all the harbours in those regions pertaining to the Eyâlât-ı Tatar and Kefe and the tribes nearby and Bosnia and Belgrade Castle of Ottoman Jihad and the Serbian government and their castles and Albania and the whole of Wallachia and Moldavia and the castles nearby and many other caistles which are not hereby mentioned. It was verbally and in writing stated in detail that the aforementioned ambassador submitted and delivered your epistle in accord with the rules of protocol after having been permitted by our party and was then honoured as well as that your party was specified to be wholehearted in respect to the alliance of both nations and be willing with respect to the stability of our neighbourhood and the continuation of peace with our state under the previous connections and circumstances in the summary of your epistle which had been previously sent through an embassy with regard to the congratulations upon my accession to the throne and then sent through Mehmed, who returned home. Our party is aware of your well-intentioned approaches. Thus, your ambassador wrote this epistle after having again gained our compliment and trust and it was sent by your ambassador one more time. Be sure that our party is going to comply with the current peace conditions in the most attentive manner as long as your party comply with the given conditions when our letter is delivered to you.

5-15 June 1760 (Evâhir-i L. 1173)

This letter which was the imperative of the Grand Vizier was recorded with the order of the Grand Vizier, and the original thereof was sent to the King of Poland with the Sultan's tughra. In the letter, there is a section prepared under the name of 'erkan' which contains differing opinions. The Grand Vizier's order and emblem are placed in the upper right-hand corner. After the initial prayer are the sultan's titles and attributes, together with his imperial authority and sovereignty. The letter places emphasis on the peace and friendship between the two nations and expresses a desire that peaceful and lawful efforts for this to continue will be maintained. This letter written in response to the Polish King's congratulations on the Sultan's accession exalts the King with expressions of honour and praises of his loyalty. Moreover, it mentions the complimentary and trustful reception of Count Bonoski de Podos Boroski Pojpo Antonio, bearer of the Order of the White Eagle, appointed as the esteemed ambassador of the Polish Sate and commanded to deliver by hand the Polish king's letter. It can be seen that politeness and protocol were punctiliously observed on both sides.

In 1768, Poland was exposed to assaults from Czarist Russia, and the Czar's army entered Poland. While all Europe remained unresponsive against this incident, the Ottoman troops bravely came to the aid of oppressed Poland. Sultan Mustafa III declared war on Russia to protest the inva-

sion of Poland by Russian troops⁹.

Seal Boxes Used on Official Invitations

On invitations sent by the Ottoman State for occasions such as Girding the Sword of Sovereignty, visits to the Holy Mantle, the start of the Procession to Mecca and Medina, promotion appointment banquets, festival celebrations and mourning prayers (*mevlid-i şerif*), a “şir-mahi kozak” was used. A şir-mahi kozak, was more valuable than a solid kozak, though in both of them, tooth was the material used (walrus or sea-lion tusk). The term “kozak-ı sade” was used for seal boxes made of unadorned bone. As these were cheap, they were preferred to pouches for salary payments¹⁰. Again for official invitations like letters sent in the name of the Sultan, the materials and workmanship of the seal box and pouch varied according to the rank of the recipient (the pouch itself might be made of brocade, canvas or leather; the kozak of bone or tooth). The invitation itself would be written on İstanbul paper; in general a şir-mahi kozak would be attached, sealed with red sealing wax and the invitation sent to the invited guest¹¹.

Seal Boxes for Treaties

With the proclamation of Tanzimat in the Ottoman Empire, treaties began to be recorded in a ledger. The outer covers of such ledgers were made of velvet and the inner of silk. Sometimes a gold emblem of state was embroidered in gold on the outer cover. It is seen that while treaty record books in the Ottoman Empire were bound in claret red or red velvet, other countries chose to use dark blue, black or green velvet as well. Parchment was generally used for the pages of the treaty record books. After Tanzimat, these records and the seal boxes were covered in a leather hile while the inner covers of the records were made of velvet or silk and the books were preserved in special bags.

Treaties with foreign countries found in the Prime Ministerial Ottoman Archives have gold or silver seal boxes. The oval ones are 11.5 cm wide and 13.5 cm long; the circular ones have a diameter of 14 cm¹². The diameter of the seal boxes indicate changes in accordance with the status of the receiving country and the period.

Some countries spread wax or some gummy substance and place and stamp a paper with the seal of the country on the last page of the document (*hatime*) through using, instead of a seal box, a gilded cord which passes through the back of the document, and the two ends are joined under the conclusion on the aforementioned page¹³.

The treaties in the Prime Ministerial Ottoman Archives are those sent to the Ottoman State. A portion of those to have been sent by the Ottoman State have a place in these archives. A mistake in the text or the outbreak of war was among the reasons for their not having been sent. Also to be found in the archives are seals for stamping the wax and their protective boxes. Today some of this important collection is displayed in the gallery of the Prime Ministerial Ottoman Archives.

To sum up, the seal boxes which attract the most attention in international diplomacy, not only display formal features but also have a function in preventing any damage or alteration to the doc-

⁹ Toros 1983.

¹⁰ Can 2001.

¹¹ Kütükoğlu 1994

¹² Bozkurt 2002.

¹³ Yılmaz *et al.* 2000.

ument. The subject of the studies comprised all the decoration of the silver or golden boxes where the seal is put in respect to seal boxes, the value of which increases according to the position to which they were sent, the colours of the seal, the stamps inserted on the seal, the tasselled elegant cords tied with the seal box and the styles of preparation of the documents that are tied with the cords.

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THE DEVELOPMENT OF WOODCUT PRINTING IN ANATOLIA AND A COMPARISON OF COMPOSITIONAL CHARACTERISTICS

ANADOLU'DA AĞAÇ BASKI BOYAMANIN GELİŞİMİ VE KARAKTER YAPISININ KARŞILAŞTIRILMASI

BERNA ÇAĞLAR ERYURT*

Abstract: The transfer of pattern through woodcut printing blocks is a printing technique that began with the use of simple stamps and seals on ceramic pottery. The wood-block made through carving away those parts of the wood that will not be printed is a method used for printing fabrics in Anatolia. Patterning fabric in this way is termed “Yazma” in Anatolia, “Block Printing”, “Zeugdruck”, “L’Estampage” in western publications. The motifs used are shaped by the culture of the society. Accordingly, the frequently employed pattern of animal figures may reflect the culture of hunt and hunting. The most important characteristics of the trees selected for production on blocks are those that are more durable and are more easily shaped. Dye selection is also very important in transferring permanently the pattern on the blocks onto the surface of the fabric. Although synthetic dyes are preferred nowadays, natural “root” dyes derived from flowers, leaves, bark, wood or roots were formerly used. As far as is known, the oldest extant “Yazma” examples were produced in Anatolia from the 16th century onwards. The patterns in these examples are geometric and stylized plant motifs, as well as animal figure compositions. The compositions are generally developed from the center outwards. However, the pattern, composition and colour characteristics vary from region to region. In this study, the compositions from various regions in Anatolia that were made from woodcut block prints are compared to show their similarities and differences.

Keywords: Woodblock Printing • Natural-Chemical Dyes • Printing Fabrics • Yazma • Traditional Motifs

Öz: Ağaç baskı boyama kalıplarıyla aktarımı yoluyla desen, seramik çömlekleri üzerindeki mühürler ve basit damgaların kullanımı ile başlayan bir baskı tekniğidir. Baskılanmayacak olan ahşap parçalardan oyularak elde edilen ağaç kalıplar, Anadolu'daki baskı kumaşlar için kullanılan bir metottur. Bu tipteki kumaş deseni Anadolu'da “Yazma”, batı yayınlarında “El Boyaması”, “Tekstil Boyama”, “Estampaj/Damgalama” olarak adlandırılır. Kullanılan motifler toplumun kültürü ile şekillenir. Buna göre çok sık kullanılan hayvan figürlü desen, av ve avcılık kültürünü yansıtabilir. Kalıpların üretimi için seçilen ağaçların en önemli karakteristik özelliği daha dayanıklı ve daha kolay şekil almalarıdır. Kumaş yüzeyine kalıplardaki deseni kalıcı olarak aktarmada boya seçimi, oldukça da önemlidir. Sentetik boyalar bugünlerde tercih edilmesine rağmen, çiçeklerden, yapraklardan, ağaç kabuğundan, ağaçtan veya köklerden çıkarılan doğal kök boya önceden kullanılmıştı. Bildiğimiz kadarıyla, çok eski kaybolmayan “Yazma” örnekleri Anadolu'da 16. yüzyıl ve sonrasında üretildi. Örneklerdeki desenler geometriktir ve hayvan figürlü yapılarının yanı sıra bitki figürleri ile de stilize edilir. Yapılar, genellikle merkezden dışarı doğru geliştirilir. Ancak, desen, yapı ve renk özellikleri bölgeden bölgeye değişir. Bu çalışmada, ağaç baskı boyamadan elde edilen Anadolu'daki çeşitli bölgelerdeki yapılar, benzerlikleri ve farklılıklarını göstermek üzere karşılaştırılacaktır

Anahtar Kelimeler: Ağaç Kalıp boyama • Doğal-Kimyasal Boya • Boyalı kumaşlar • Yazma • Geleneksel Motifler

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Introduction

Having been developed to meet natural needs, handicrafts provide things that document that which makes the production of one society with artistic values over the course of time, different from the production made by other societies. They may also be defined as activities that are built upon personal knowledge and skills and are conducted either in workshops or homes following tradition, which are valid for centuries. Developed through undergoing changes in line with the surrounding conditions, the handicrafts are defined as “traditional” on the grounds that they come to reflect the cultural attributes of the societies in which they flourished. Therefore, Traditional Turkish Handicrafts can be considered to form a rich spectrum composed of the different cultural backgrounds of the many civilizations that have inhabited Anatolia.

It can be said that many crafts within the spectrum of Traditional Turkish Handicraft, including but not limited to block printing, carpet weaving, rug weaving, leatherworking, coppersmithing, ceramic works and pottery, stonemasonry and metal working, tile making, woodworking, and felt making reflect the cultural identity of the inhabitants of Turkey.

Printing from wood-blocks is a relief printing technique similar to engraving/wood engraving, in which the sections of the pattern transferred to the wood or wood section which are not intended to be printed are removed through carving away, leaving behind the relief that takes the colour. It is known that wood block printing has been used as a method in fabric printing for a very long time¹.

The Art of Wood Printing

The Historical Development of the Art of Wood Printing

Although there is no definite information in respect to when printing made from a wood relief carving first began, it is known that there used to be printing on clay in Mesopotamia, and seals in China throughcarved wooden matrixes. The aforementioned technique was first used in Anatolia by the Hittites. Turkish tribes living in the Central Asia between 1000 B.C. and 100 A.D. used animal figures in fabric designs and these figures reflected hunting and the culture of hunting².

The “Seal” formed matrixes that were found in archaeological explorations in 1964 provide us with useful information in respect to the history and first manifestations of block printing (Fig. 1). The seal formed stamps suggest that the Hittites most probably knew the matrix printing technique in about 1600 B.C.³.

Herodotus (2002, 109) recorded block printing was used in Central Asia around the Caspian Sea:

“Many and all manner of nations dwell in the Caucasus, and the most of them live on the fruits of the wild wood. Here, it is said, are trees growing leaves that men crush and mix with water and use for the painting of figures on their clothing; these figures cannot be washed out, but last as long as the wool, as if they had been woven into it from the first”.

¹ Gençaydın 1987, 27.

² Gökaydın 1990, 190.

³ Kaya 1988, 44.

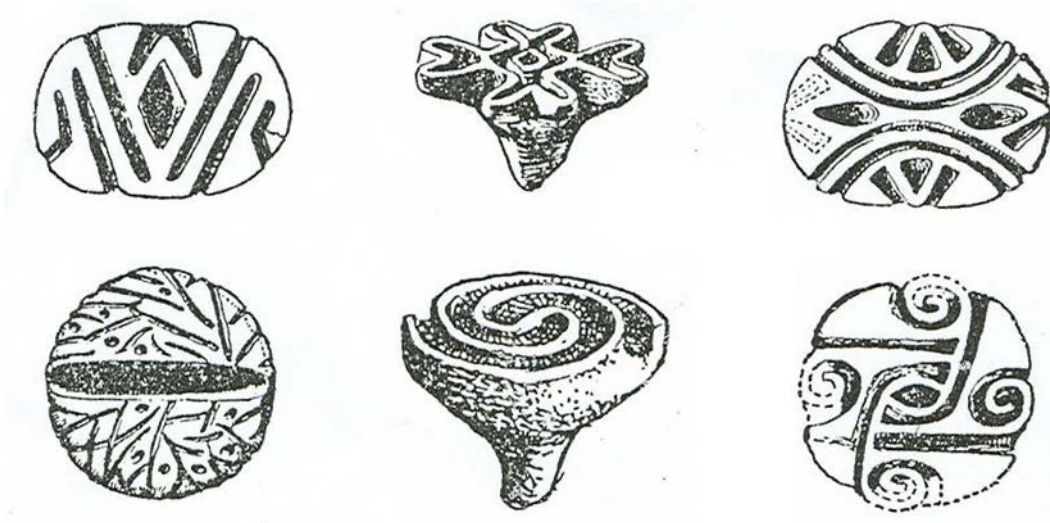


Fig. 1

The Chinese block printed samples are closely related to those in Anatolia in respect to the intended purpose. For instance, the designs as used in Anatolia in quilt covers or bundles were also used in China for these same purposes. Chinese designs are marked with a sense of totality over the surface. Mostly birds, Phoenix, flowers, and fruit patterns were used (Fig. 2). The features of Iranian block printing in respect to their composition and design is the fact that the printing covers the surface of the fabric almost entirely without leaving any spaces. The commodiousness and free compositions as found in Anatolian block printing are not found on Iranian block printing (Fig. 3). The patterns of lion, eagle, peacock, pigeon, and deer were figures depicted in Iranian block printing. Traditionally the most frequently occurring patterns in Indian block printing are fruits, flowers, plants, and birds⁴.

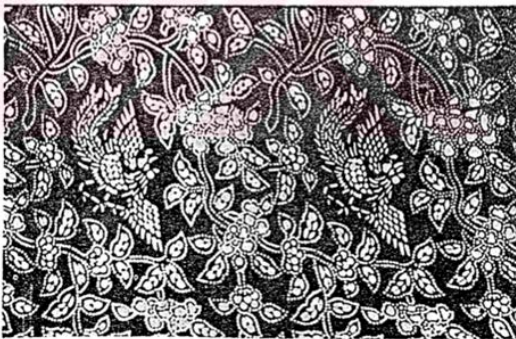


Fig. 2



Fig. 3

The first known developments in Europe in respect to wood printing technique began in the Lower Rhine region between the 11th and 12th centuries (Fig. 4). Such printed fabrics were found in the southern and northern regions of the Rhine River known along the trade route. It was found that these block printed fabrics were in particular employed in the interior decoration of monasteries⁵.

The oldest Turkish block printing specimens date from the 16th century. Having flourished es-

⁴ Kaya 1988, 35-37.

⁵ Kaya 1988, 22.

pecially in Tokat, Kastamonu, Bartın, Gaziantep, and Diyarbakır throughout Anatolia, block printing



Fig. 4

reached its climax in Ottoman İstanbul in the 17th century. The best examples of İstanbul block printing date from the 16th, 17th, and 18th centuries, when the best examples of Turkish block printing and fabric printing were produced by the İstanbul block printing craftsmen. The oldest information regarding them is found in a miniature of the, “*Fabric Printing Artisans*” depicting the parade during the circumcision feast of *Sehzade* Mehmet IV, at İbrahim Pasha Palace during the reign of Sultan Murad III (1574-1579). Furthermore, the manuscript entitled the “*Sürname*” records the fabric printing artisans dealing with manual printing on flat fabrics giving them colorful forms. The fabrics used by the palace included golden or silver patterns together with with dye prints⁶.

It is known that after the First World War block printing partially lost the significant place it had during the Ottoman period. This technique lost its value due to the abolition of the abaya and the veil, and through industrialization. While there were 125 block printing workshops before the World War I, today this number is very low⁷.

The fundamental resources for block printing and wood printing matrixes are related to the cities of Tokat, Kastamonu, and İstanbul, where block printing was the most prevalent. It is known that especially towards the end of the 19th century, there were also printing workshops in Izmir province and in its surroundings and that the art of block printing was actively practiced.

The Types of Trees employed in the Production of Wooden Printing Matrixes

The types of trees used in the production of wooden printing matrixes are the wood from the Linden, the Pear, the Hornbeam, and the Yellow pine.

Block printing is best performed through using matrixes made from Linden trees grown in well-watered places. The wood of the Linden tree is very suitable for preparing matrixes due to the fact that it is soft and easy-to-carve, and the wood is from a durable tree species with a good paint adherence. No unintended cracks and splits are found in this wood during its carving. The linden wood must not be snagged, split, or wet. Kiln-dried wood is preferred. The dry wood is soft and suitable for carving. It is very important to consider the direction of the wood grain of the cut pieces during the whipsawing of the logs of timber. The trees for the matrixes should be cut so as to keep the grain perpendicular. This should be taken into consideration since it will facilitate carving. Otherwise, it is know, carving the matrix will prove impossible⁸.

Tools Used in the Preparation of the carved Wooden Printing Matrixes

According to Türker (1996, 15), the tools utilized in the preparation of wooden printing matrixes(blocks) include: carving knives, chisels, drills, clamps, saws, rasps, graters, planes, cramp frames, a sharpening stone, and sandpapers.

⁶ Türker 1996, 2.

⁷ Gökaydın 1990, 191.

⁸ Türker 1996, 13.

The Dyes applied to the Wooden Printing Blocks and the Types of Fabrics Printed

Fabrics

In the beginning, block printing was applied to very thinly woven cotton muslin, a kind of organza. Originating from Bursa, these fabrics were called *mermerşahi* (book muslin). Over time this industry disappeared. Today, block printing is applied to thin cotton fabrics called tülent (book muslin) which is produced by textile factories in Adana, Uşak, and Denizli. Canvas, a thicker kind of fabric, is used for tablecloths. Using book muslin, calico, and canvas provide good good results in fabric printing. Such good results cannot be obtained with other types of fabric⁹.

Dyes

Natural Dyes

Natural dyes are also called madder. They are made from various parts of plants including flowers, leaves, bark, wood, or roots. These plants can be grass, saplings, thorn, or moss¹⁰.

The colours frequently occur in natural dyes include, indigo yellow, light yellow, lemon yellow, scarlet, green, grass-green, purple, *asumani* (light blue), baby blue, *narenci* (orange), violet, straw color, red, light red, dark red, brown, dark brown, and black etc. In the old Turkish arts metallic dyes were also employed together with plant dyes and a variety of colours were obtained by making use of metallic compounds¹¹.

Chemical dyes

These are artificial and inexpensive dyes.

- a. **Aniline Dyes (Synthetic, artificial organic dyes):** These dyes are produced today through the distillation of coal and tar.
- b. **Alizarine Dye:** This is a kind of madder. Subsequently it was artificially produced in Europe. It was frequently used in block printing in the 19th and 20th centuries¹².

The Compositional Features of Wooden Block Prints

The Ottomans conformed to the traditions in Seljuk art, the previous civilization in Anatolia and they did not prefer the complex forms and patterns of the East Roman (Byzantine) decorative arts. After the conquest of İstanbul, Ottoman art found meaning and attained success. The Ottoman decorative artisans, with a deep understanding of art, transferred the traditional forms into the various branches of crafts in a harmonious way.

The understanding of the abolition of the depiction of human and animal figures as is said to be required by Islam is said to be the primary factor in the Turkish decorative arts developing towards stylization and arouses interest. Thus the designers searched for new patterns of decoration through further expanding their imagination¹³.

Although the surface compositions of the designs employed in Turkish block printing vary with

⁹ Türker 1996, 5.

¹⁰ Türker 1996, 46.

¹¹ Kaya 1988, 55.

¹² Türker 1996, 46.

¹³ Kaya 1988, 70.

the intended uses, commodiousness and a degree of fluency is dominant in all compositions. In all the surfaces, patterns are freely scattered so as not to strain eyes. The patterns used in block printing are various kinds of flowers and leaves. Although the deer, the peacock, the dove, and passer patterns were also used, the majority of the compositions were composed from flowers¹⁴.

The compositional characteristics of wooden printing matrixes used in Anatolia can be summarized as follows: according to Türker (1996, 25):

“A natural narration style is dominant in the patterns of compositions in Central Anatolia. Natural patterns were transferred onto the matrixes without losing any of their characteristics. Cherries and apples, flowers, and leaves in regions rich with fruits are the most frequently occurring patterns in block printing compositions. In general dark color is dominant in compositions. Dark red, maroon, eggplant purple, dark brown and black colors were used”.

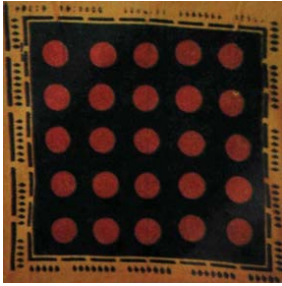


Fig. 5



Fig. 6



Fig. 7

In Central Anatolia, circular patterns fill in the surface entirely. The composition extend in an outward direction with a central pattern and consecutive patterns encircling the central one. The corner and edges are printed with border patters with designs complementing the composition (Fig. 5).

The characteristic aspect of the block prints of the Black Sea region in respect to pattern and composition is that the compositions in general start with a central pattern and develop outwards to obtain a circular form. The compositions are generally completed through placing animal figures and geometric elements from the center at the edges (Fig. 6). The animal style as inherited from Central Asia and transferred to Anatolia remains in use in the block prints of the Black Sea Region. The compositions of Black Sea block prints mostly included figures representing the deer, the horse, the bird, and the cockrel. On the coast of the Black Sea one can find compositions including flower patterns and these are generally composed of large flowers placed on a black or a white background¹⁵.

It can be seen that the variation in the trees, flowers, and leaves, together with the change in the climate conditions on the coastline of the region have influenced the craft of wood block printing.

The fabric employed in the wood block prints of South Eastern Anatolia differ from the other regions in terms of its quality, as in this region the wooden block printed patterns are applied to silk fabrics (Fig. 7). The colors of the prints taken from the wooden block of this region are mainly in

¹⁴ Kaya 1988, 75.

¹⁵ Kaya 1988, 78-80.

black, red, and yellow¹⁶.

The most prominent characteristic of this region is the technique employed in block printing as the tie-dyeing technique is applied subsequent to the block printing on silk fabrics to attain a different appearance. In this technique, the sections intended for the composition are tied in line in a specific system. The tied sections are plunged into dye containers consecutively. Upon completion of all of these procedures, the tied sections are untied and the patterns of the composition appear with a colorful distribution of colors over the fabric.

In the region of Eastern Anatolia, compositions that expand from center out towards edges are used, with the figures of animal figures and plant patterns the most preferred of designs. Animal patterns depicting deer, a bird, and a partridge are used together with the figure of a flower, leaf and a branch. Human figures also occur in the artworks produced by the Armenian and Assyrian masters¹⁷.



Fig. 8

The fact that İstanbul was then the capital of the Ottoman State contributed in the taste of the block printing artisans in the Marmara Region by allowing them interaction between the various different artistic styles. In this way the art of block printing received inspiration from the designs and compositions of other classical and folk art genres. Patterns similar to Turkish handicraft designs and tile ornamentations are also found employed in wood block printing on textiles. Tulip and carnation patterns which were mostly used in the design of tile decorations were also employed in wooden block printing in various ways (Fig. 8).

In İstanbul wood block-printing, the products of Bogaziçi-Kandilli, Yeniköy, and Üsküdar districts produce the most lively and typical examples of this folk art in respect to design and composition. In these examples, flowers are generally ornamented with leaves and either placed on a branch as a group, or scattered over the entire surface of the fabric. Mostly symmetrical compositions are found, with corner patterns included in these compositions, which are often placed commodiously and at intervals¹⁸.

The reason why the block printing workshops were located especially in such districts as Kandilli, Üsküdar, and Yeniköy is that these are close to the sea, which was where the printed fabrics were washed with sea water to ensure the better permanence of dye on the fabric.

The art of wood block printing in the Aegean Region was mainly carried out by the minorities due to the commercial concessions provided to them in the late Ottoman period. Although not as active as the centers in regions of Central Anatolia and the Marmara, a rich period of productivity occurred in the last years of the 19th century. It is suggested that the wooden printing matrixes employed had no regionally characteristic features and that matrixes that had been brought from İstanbul and Central Anatolia were employed.

Conclusions

The wood block printed art in Anatolia has many common features even though there are differen-

¹⁶ Kaya 1988, 53-54.

¹⁷ Öz 2006, 61.

¹⁸ Kaya 1988, 81.

ces amongst the regions. There are minor differences between the patterns and colour combinations. While in one region the print is made upon a light surfaces, it is found that a dark surface is preferred in another. When the pattern and composition characteristics are analyzed, it is found that the motifs selected from nature are common to almost all regions. In the coastal regions, due to their different climate and rich flora, plant motifs are frequently employed. In addition, in Eastern Anatolia where the partridge hunt is held, animal figures like partridges are printed and the people who go hunting bring these clothes with them.

In the compositions of Anatolian block printed cloth easiness and a fluent order is predominant. The motifs are placed on the surface with certain interspaces with these compositions expanding outwards from the centre.

Today, workshops printing cloth employing the traditional methods have decreased in number, and with the use of serigraphic printing, the hand carved wooden block printed textile lost its popularity. The cheapness and the speed of serigraphic printing compared to woodblock printing, led the old workshops to use the new technologies to survive; and this resulted in the traditional art of printing on textiles with carved wooden blocks to become to a great extent, extinct.

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FROM ANTIQUITY TO THE 20TH CENTURY: CEDAR TRANSPORTATION IN THE REGION OF FINIKE

ANTİKÇAĞDAN 20. YÜZYILA: FİNİKE BÖLGESİ'NDEKİ SEDİR TAŞIMACILIĞI

OKAY SÜTÇÜOĞLU *

Abstract: The district of Finike has high plateaus full of valuable, quality cedar forest. From antiquity until the 20th century a maritime trade in cedar timber was conducted from this region. Timber felled in the high mountains of this region was transported to the Mediterranean in part via mountain roads and largely by means of the Arychandos Stream. We know the Turkish residents of the region of Lycia worked in this trade from the 16th century, if not earlier. Today the people living and working as lumberjacks in this area are known as Woodsmen Turkmen (Tahtacı Turkmen). According to the elders of these communities, it is clear that the woodsmen of this region systematically transported lumber to the Mediterranean until the 1940's. According to these accounts, it took approximately one week to fell and transport via land or water the felled trees to the Mediterranean Sea. In the last stage of transportation, motor operated wooden boats were used to pull the timber from the mouth of the river to the waiting cargo ship. In 2015, during an underwater scuba diving expedition conducted by our team, we discovered a sunken wooden vessel that we think was one of the boats employed to transport the felled timber out to the cargo ships. The harvest and maritime trade in cedar timber from the region of Finike was a topic for writers in antiquity and for travelers in recent years. This find combined with testimony from the last generation of people living in the Finike region with first-hand knowledge of this skill, together with a comprehensive assessment of the subject should aid our understanding of the past.

Keywords: Cedar Transportation • River Transportation • Shipwreck • Finike

Öz: Finike ilçesi, değerli, kaliteli sedir ormanları ile dolu yüksek platoya sahiptir. Antikçağdan 20. yüzyıla kadar sedir kerestesi deniz ticareti bu bölgeden yapıldı. Bu bölgenin yüksek dağlarından toplanan kereste, büyük ölçüde Arykandos Akarsuyu aracılığı ile ve kısmen dağ yolları ile Akdeniz'e taşınmıştır. Lykia Bölgesi'ndeki Türk sakinleri bu ticarete 16. yüzyıldan itibaren, daha erken değil, çalıştı. Bugün bu bölgede oduncu olarak çalışan ve yaşayan halk Orman adam Türkleri (Tahtacı Türkleri) olarak bilinirler. Bu toplumun yaşlılarına göre, bu bölgenin tahtacılarının, sistematik olarak 1940'lara kadar Akdeniz'e kereste taşıdıkları açıktır. Bu hesaplara göre, Akdeniz'e kesilen ağaçların kesimi ve taşınması kara ya da su yoluyla yaklaşık bir hafta sürdü. Taşımanın son aşamasında, motorla çalışan ahşap tekneler, nehrin ağzından bekleyen kargo gemisine kereste çekmek için kullanıldı. 2015 yılında, ekibimiz tarafından yapılan sualtı dalış seferi sırasında, kargo gemilerine kesilmiş keresteleri taşımak için kullanılan teknelerden biri olduğunu düşündüğümüz batık ahşap bir gemi bulduk. Finike yöresinden sedir kerestesi hakkında hasat ve deniz ticareti antikçağdaki yazarlar için ve son yıllardaki gezginler için bir konu oldu. Finike yöresindeki becerinin ilk elden bilgisi ile yaşayan son nesil halktan tanıklıkla birleşen bulgu, konuyla ilgili kapsamlı bir değerlendirme ile birlikte, geçmiş anlamamızda yardımcı olacaktır.

Anahtar Kelimeler: Sedir Taşımacılığı • Nehir Taşımacılığı • Gemi Enkazı • Finike

Historical Geography

The Finike Region is rich in cedar forest and has both suitable rivers and the coastline for the maritime trade in timber. It is understood that the transportation and trade in cedar timber has been a

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constant in the region from antiquity into the 20th century. In this study, following a topographical description of the area, the transportation system employed in the area, the last employees and the tools utilised are introduced. All of the ancient settlements and cities of this area, where timber obtained from the cedar forests were loaded onto ships, were certainly directly or indirectly related to this trade. This relationship should be differentiated throughout history according to the local or community changes in these settlements. From the historical-geographical record the noteworthy points described below are located within this physical geography (Fig. 1).



Fig. 1 Map indicating the Historical Geography and Topography of the Finike Region (Kuban 2012)

Finike, its Settlements and Port

Today Finike, a small town in Antalya province, has a modern port and natural bays that can also function as ports. In historical sources the name 'Phoenician/Phoinikos' was used for the river used for the cedar trade¹. In antiquity, this was one of the areas due to its suitable conditions often utilised in marine trade. However, the active period of the city and the port begins in the Middle Ages and according to Güçlü, who has undertaken wide research on Finike and its harbour, in particular from the Middle Ages into the Modern period, Finike might have become a settlement known by its current name in the 10th century. In parallel with this change, and recognising it, the existing Diocese at Limyra was moved to Finike². In this same period, the Turkmen arrived in the region and

¹ Adak 2002, 62.

² Güçlü 2011, 415.

began to live with the Rum population³. Güçlü's study primarily focused upon information concerning the Turkmen presence. Geographical, coastal and harbor structures and information concerning the financial conditions in the region date from this same period and a clear statement as to whether Finike had a port structure or not, is available neither in his study, nor in any other source. The above-mentioned evidence is so uncertain that we do not have a certain idea as to if the port was an actual harbor or was a simple boat yard. There are three points that this evidence presents that we can confirm today:

İskele/Pier

Today; the 'İskele' settlement, a quarter of Finike and meaning a pier, is a name which was used with the same meaning in the available sources concerning Finike dating from the Medieval into 20th century. The 'Karacay River', which flows alongside it to reach the sea, comes to the surface further north. This is the river from which the naval and transport vessels anchored in the Finike bay obtained their freshwater requirements and entered it in small boats to collect or bring their small loads, rather than to collect timber. The 'İskele Quarter' has close to the Finike fortress a highway which also extends to the ancient city of Arykanda and to the northern settlements from the west of the plains. In consequence, this point provides the most suitable place for the transfer goods to the ships, except for the timber coming from the North. The river employed for timber transportation was the Arykandos River which is further to the east and passes through the cedar forests. It is important that these two shipping points are not confused. Spratt, who travelled the region in 1842, termed this location the 'Finike village' and he also mentioned Christians and local merchants living in a few houses, and Tahtacı Turkmens living in a dozen tents⁴. Aside from their basic production, their actual source of income was the wood and timber business⁵. The bakery, which was constructed to supply the need for bread and ship biscuits for the Ottoman fleet was also located here⁶. From this information, we can state that the İskele Quarter was the origin of today's Finike town, and which has a small river boat yard which plays an important role between Elmalı/Amelas, Arykanda and the sea trade. In addition, a detailed study will provide clear information concerning the İskele quarter and river boat yard, but this information may well not cover the cedar trade. The region relating to the cedar trade is described below.

Gökliman Bay

Another important point for Finike is Gökliman (Fig. 2). It is a natural anchoring area nearby, lying to the west of Finike. Gökliman has a suitable position, being a perfect bay protected against the North and West winds. It provides width and depth for numerous ships to anchor. The 16th century Ottoman admiral and cartographer Piri Reis indicated this location as a port⁷, while in earlier medieval sources it is also recorded as 'Pisa Bay'. While mentioning the 'Pirates from Pisa', the same sources also warn that Italian sailors should not be permitted to anchor here⁸. According to the record provided by Captain Beaufort, Gökliman was an important location even into the 19th

³ Erdem 2006, 247; Güçlü 2011, 417.

⁴ Spratt – Forbes 2008, 144.

⁵ Güçlü 2011, 441.

⁶ Spratt – Forbes 2008, 144.

⁷ Piri Reis 2002, 86.

⁸ Güçlü 2011, 419.

century as it was close to Finike, so that needs such as fresh water and wood were easily met⁹. The sea



Fig. 2 Finike Coast and Gökliman Bay from Google Earth and the 16th c. Map of this Coast Drawn by Piri Reis (2002)

off Finike is only during the summer months a natural location for naval and merchant ships to anchor. All kinds of naval and merchant ships must have used of this bay, but the Gökliman Bay provides a better sheltered position; for pirates to conceal themselves and their facilities, as also for naval vessels to wait for a long time, and for ships of heavy tonnage to anchor in shelter. Another reason

why Gökliman is of particular importance is that there is another bay, which is located on the opposite side of the bay, which is named Andrea Doria Bay.

Göksu River

The point where the Göksu River inside the modern Finike settlements connects to the sea was an empty area between Mediterranean in the south and the plains of Finike, which were a marsh in the north until the 20th century. The seaside consisted of sand and gravel, while the plain side comprised a small lake and marsh¹⁰. However, it was an important area in which to conduct the shipping of timber. This river is fed from two main sources. The Arykandos River, starting from nearly 30 km to the North, flows into the Mediterranean after merging with the Limyros River from Limyra the city in the East, springing from an area close to Finike. In the ancient sources, this combined river was sometimes named the 'Phoinikos', the 'Limyros' and also the 'Arykandos'. The multiple names given to the same river resulted in a degree of confusion in the sources¹¹. What we know for sure is that cedar transportation was conducted on the Arykandos River and that the River Limyros, emerging from Limyra, had nothing to do with this process. Consequently in accord with this understanding, 'we will use the name 'Arykandos' for the river which was used to convey the timber' in this paper. Relations concerning the Limyros River and the situation of Limyra city are given here. Where the Arykandos River reaches the Mediterranean, there is today the Forest Management Directorate building which from its location can be understood as being a continuation of the former timber control point tradition, which had been in this location since the Ottoman period.

Limyra Ancient City

The ancient city of Limyra was established 4 km North East of Finike in the foothills where the mountains and plains meet. The fact that the Limyros River comes to the surface and makes its way to the sea must have been an important factor in site selection. (*Details concerning geological analysis*

⁹ Beaufort 2002, 32.

¹⁰ Beaufort 2002, 31; Spratt – Forbes 2008, 147.

¹¹ Adak 2002, 17-53.

and the Limyros Rivers' potential will not be discussed in this article) The borders of Limyra cover the portion of the Arykandos River in the low lying plain area and therefore, cedar shipping and its role in the trade of Limyra has no place in this study. Although modern researcher's opinions such as, 'Finike village may be the harbor of Limyra'; this information may have been valid from before the Medieval Period¹². We noted above that the settlement at Limyra in the Medieval Period began to diminish, and Finike rose into prominence.

Arykanda Ancient City

The ancient city of Arykanda is located between Finike – Elmalı, between the Mediterranean and the cedar forests. The Arykandos River and the city name are undoubtedly related. The city was able to control the rivers and cedar forests and was able to gain a large amount of money from the cedar trade. C. Bayburtluoğlu, who spent much of his academic career in the excavation of this city, states from reports in ancient sources that the people from Arykanda were quite mischievous, but also rich, and suggests that the cedar trade was the reason for this wealth¹³.

The cedar forests located within the borders of Arykanda naturally required a community to conduct forestry work, as also merchants to participate in the timber trade. Although we can find no detailed information on the subject of the Arykanda city settlements at present, we know that families arrived in Lycia even from distant areas to obtain cedar timber. An inscription recorded on a rock within the research area emphasizes that two brothers from the Balkans worked in the cedar business in the 2nd century B.C.¹⁴. The Turkmen nomads began arriving in the region in the Medieval Period, must have also have initially impeded and then became involved in this business as they began to co-habit with the longstanding population. We know that a Turkmen community settled here, who would continue this business from the 16th century onwards, and whose main livelihood was working in the forest.

Gökbük Village and the Tahtacis

Gökbük Village beside the Arykandos River is located 20 km to the north of Finike, exactly halfway between the Mediterranean and the cedar forests. Today, a particular Turkish community lives in this village, a community known as 'Tahtacis'. These Turkmen tribes, migrated from Asia and earned their livelihood solely from working in the forest, and they were able to preserve their language and traditions living in the forest and near water. In the 13th century, these communities were known as 'Woods Men'¹⁵. Once permanent settlement became popular in the Ottoman Period and this community produced the wood required for construction, their names were recorded as 'Tahtacı'. The longstanding residents of the region would have continued to work in cedar lumber production and shipping, or were indirectly involved. From the statements of the Tahtacis, it seems that when their ancestors came here they lived with the local population for a long time. The areas where the Tahtacis lived are in the forests facing the Mediterranean and on the Aegean coasts of Turkey and their choice to settle in Gökbük village was not accidental, rather was a considered purposeful choice of site. They have their own working methods in forestry, and have their own terminology concerning such things as wood and timber production (Fig. 3). The last elderly individuals

¹² Beaufort 2002, 33.

¹³ Bayburtluoğlu 2003, 33-142.

¹⁴ Falcon 2012, 3.

¹⁵ Baykara 2004, 146.

of this community described in detail the last cedar and timber transport, which took place in 1946 and which utilised the Arykandos River as follows:

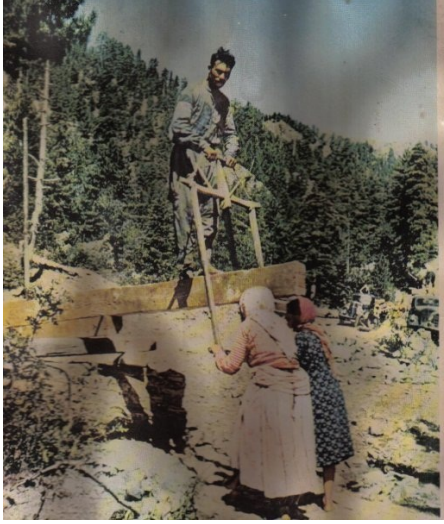


Fig. 3 *A Tahtaci Family Sawing Timber*
(Okay Sütçüoğlu Archive)

Transport System

They went up during summer to prepare the cedar timber-logs from cutting the cedar trees until winter reached the high mountains and they pulled the timber by horse and mule to a point close to the Arykandos River. Varying demand and the carrying capacity of the transport animals determined the lengths of these timbers. However, their extreme sizes were measured in certain standards such as, 15x18 cm (guline), 20x30 cm. (denklik), 20x40 cm. (lata), 40x40 cm. (lata biribli), 20x20 cm. (denklik biribli) with variable names and sizes. They had to master the production of all of these and they had special cutting saws, axes to remove the bark and the transport equipment. According to their statements, the 'Mule' and the 'Ox' played a key role in the transport of cedar, and therefore they showed particular attention to

the mules. In consequence of this vital role played by these animals, humorous sentences were added to the anonymous folk music songs, such as 'a mule's death is more painful than the death of housewives'. The hardest part of the work was to move the timber, dragged by mules and oxen via paths and hills, to a point by the river side. At this point, the timbers were stacked in piles ready to launch into the river when, in the spring months, with the snow melt, the level of the river water would rise (Fig. 4).



Fig. 4 *Rolling a Stack of Logs into River*
(Okay Sütçüoğlu Archive)



Fig. 5 *Logs flowing down the River*
(Okay Sütçüoğlu Archive)

In the spring; when the air warmed up, the snow melted and with it the increase in flow of water in the river, the timbers were rolled into the river and accompany them in their journey began. The Arykandos River has a steep and difficult profile, from the starting point to the plains is a distance of 30 km (Fig. 5). At this stage, with the transport of timbers by the river it was essential to have intensive co-ordinated work and control. In particular the Gökbük Canyon (Dar/Narrows) was the most difficult part on the route of the timber to the sea. Timbers floating down the river would become

clustered together or stuck, one over the other, as they moved. For this reason, 20-30 people were standing in the river at certain intervals and directing and disengaging the timbers to prevent any blockage being caused. The person who directed the last timber, was running and coming back to join the queue and this synchronized activity continued until the evening, and then they had a break before it became dark to eat, get warm, have rest and sleep. A set, called a 'Dolgun/Stack' was formed in front of the timbers in the river by putting the timbers together to form a cross. At this point, where the night was spent, there were guards checking the fire and the 'dolgun' at the same time. According to the flow of water and the conditions, the same resting points along the course of the river were repeatedly used. Therefore, we can make a detailed study of one of these resting points. This resting point along the river is known as 'Koyun İni/the Cave of the Sheep' and is located at the starting point of the canyon which has the harshest conditions. This location must have been preferred as it has broad caves and flat platforms under the natural rocks. Both sides of the river provide extremely convenient opportunities to stop the moving logs, due to the rock surfaces facing each other. There are a number of petroglyphs and a few Greek terms are carved on the walls of the caves, in the places where people overnighted on their way down the river to the sea. When we compare these symbols; which are in difficult situations, with the Central Asia examples, we can find very close relations¹⁶ (Fig. 6). Combining Greek together with Asiatic symbols indicates a specific Turkish community. This community, known as 'Karaman', spoke in Turkish and wrote in the Greek alphabet¹⁷. This program of petroglyphs includes many symbols. These include some symbols connected with devices employed in the production of cedar timber (Figs. 6-7). Therefore we can say that these petroglyphs were made by workers during the transport of cedar timber downriver.

After the exit from the canyon the lowland area begins and in these areas the first audit of the timber was conducted. Officers from the Forest Organization counted and marked the logs here. The reason for this census being held before the timber reached the sea was because the sale of timbers was not possible in any illegal ways in the canyon, and it could only be sold once it was removed from the plain side of the river. This counting was repeated in the same way at the last point on the shore and the workers were charged for any missing logs. However, the salary of the workers was not paid by the number of the timbers but by day, and they hardly earned their living from this income. Towards the end of the 19th and in the 20th century, contractors ran these facilities, which is how some of the wealthy families in Finike became a part of this work.

From the first control point to the last one near the sea, it made the work easier for the field to be flat and for the water to slow down. The last point, where the timbers were stopped and stacked, was located a hundred meters from the shore. On the shore was the last checkpoint following the load and the cottage employed by the Forestry Ministry staff. Today right at this point, is where the building of the modern Forestry Agency is located. Cargo ships waiting in Gökliman or in Finike Bay for loading would come to a point near to the river mouth to obtain a load, anchoring in the open sea in order not to ground in the shallow waters. Timbers held in the river were taken to the cargo ships waiting in the open sea by some single engined or sculled boats, and these loads of timber were carried onboard with the aid of the ship's crane. At this stage, the timbers were carried in stacks for the crane to lift them. In addition, the villagers also described in detail the way boats entered the river. According to their description, an engined boat with a wooden body, 12-13 meters

¹⁶ Somuncuoğlu 2008, 57.

¹⁷ Sertkaya 2004, 20.



Fig. 6 Petroglyphs on the Canyon Wall (Okay Sütçüoğlu Archive)



Fig. 7 Some Examples of Forestry Equipment (Okay Sütçüoğlu Archive)

in length, 4-5 meters in width was used for this work and, in 1946 it caused the death of a villager who became stuck between the boats and the timbers.

Gökliman Wreck

In the course of a Mediterranean underwater research survey conducted by the Selcuk I. Research Ship of Selcuk University Underwater Archaeology Department in the summer of 2015, a wreck was identified in Gökliman¹⁸. The wreck lies at a depth of 12 meters and is part of a wooden boat with its keel and frame remaining sufficiently visible to be identified. The wreck, partly buried in sand, was measured and found to be 12-15 meters in length, 4-5 meters in width and 1 meter in height (Fig. 8). A possible axle part, in addition to various bronze nails offer indications that the wreck may be that of an engined wooden boat working in 1946 (Fig. 9). From the measurement of this wreck, it is evident it cannot have been a warship, a merchant or a fishing vessel. Although Finike has a suitable sea for fishing, it did not have a population living from fishing at the beginning of the 20th century. Likewise, during this period Finike did not have agricultural production or consumption that could have resulted in maritime trade from these agricultural activities¹⁹. It can be suggested that this vessel most probably was obtained for a single purpose, to facilitate the transfer of cedar timber from the river out to the ships waiting to load timber in the open sea.



Fig. 8 *The Gökliman Wreck*
(Okay Sütçüoğlu Archive)

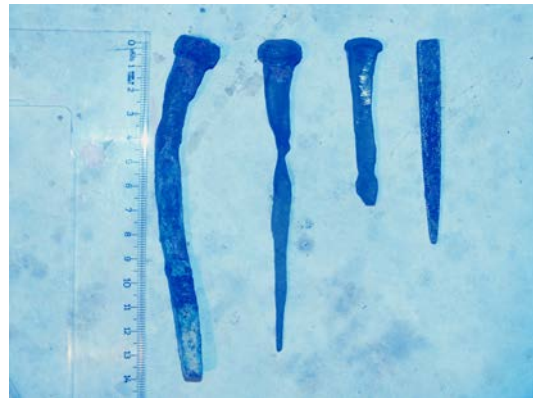


Fig. 9 *Some Nails from the Wreck*
(Okay Sütçüoğlu Archive)

Conclusions

From antiquity into the 20th century, information concerning the cedar timber which was obtained from high altitude cedar forests and moved to the distant Mediterranean, shows it was moved along the course of rivers. At least for Lycia, concerning the details of this work there is an explanation. The statements of recent witnesses and a wreck found by Oniz and the crew have provided us with detailed information concerning how the transportation of this timber was conducted. It is understood that the communities who mastered this work have their own traditions and terminologies, they developed the appropriate settlements and living conditions, developed a systematic timber transportation system employing the river, and that merchants designed special boats to make the connection between the river and the sea, or that they were purchased and used for this work. The detailed re-examination of the location of the stands of cedar timbers in respect to the geology,

¹⁸ H. Öniz, Western Mediterranean Underwater Research Project, 2015.

¹⁹ Güçlü 2007, 232.

climate changes, the existing land routes and waterways, re-surveying-scanning the anchorage areas near to the stream and the river mouth, focusing upon the traditions and experiences of the settled communities in the region, may present us with invaluable information in the clarification of the related activities that were conducted in this region in antiquity.

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CONSERVATION OF FURNITURE BELONGING TO ATATÜRK DURING THE WAR OF
INDEPENDENCE IN “ATATÜRK’S HOUSE AND RAILWAY MUSEUM”

*KURTULUŞ SAVAŞI SIRASINDA ATATÜRK’ÜN EVİNDE ATATÜRK’E AİT
MOBİLYALARIN KORUNMASI VE DEMİRYOLU MÜZESİ*

DENİZ HEPDİNÇ HASGÜLER* SERAP ÖZDEMİR**

Abstract: Atatürk’s House and Railway Museum building is situated in the Ankara Railway Station Complex of the State Railways of the Republic of Turkey. It was constructed as the “Administration Building” in 1892 during the construction of the Baghdad Railway. The building was used as Atatürk’s house and the Supreme Military Command Headquarters during the War of Independence witnessing important domestic and foreign decisions taken on account of the recent political history of Turkey in the War of Independence between 1920-1922, thus assuming a historical identity. The building was redesigned in 1964 to be used as a museum. Objects that belong to the railways, Atatürk’s personal belongings and leather and wooden furniture that date from the period are displayed in the museum. The deterioration of different types and sizes caused by a variety of factors was observed in the objects and furniture that constitute the scope of our work. Factors such as wear, neglect and use have been significant in the deterioration of these objects, as well as environmental conditions. By means of restoration and conservation work carried out within the context of the project, the culturally and symbolically invaluable furniture and objects which were largely damaged have regained their integrity. The original forms and materials were maintained as far as possible; only if it was unavoidable were objects restored and partly renewed. This study records the results obtained through the conservation of different materials and quality carried out on the objects involved.

Keywords: Deterioration • Restoration • Conservation
• Leather • Furniture

Öz: Atatürk’ün evi ve Demiryolu Müze Binası Ankara’da bulunmaktadır. Türkiye Cumhuriyeti Devlet Demir Yolları, 1892 yılında Bağdat Demiryolu yapımı sırasında “Yönetim Binası” olarak inşa edildi. Bina, tarihsel kimliğe göz önünde bulundurularak 1920-1922 yılları arasındaki Kurtuluş Savaşı ve Türkiye’nin son siyasi tarihinden dolayı alınan önemli yerli ve yabancı kararlara tanıklık eden Kurtuluş Savaşı sırasında, Atatürk’ün evi ve Yüksek Askeri Komuta Merkezi olarak kullanılmıştır. Bina müze olarak kullanılmak üzere 1964’te yeniden dizayn edildi. Demir yollarına ait nesnelere, Atatürk’ün kişisel eşyaları, deri ve dönemi yansıtan ahşaptan mobilya müzede sergilenmektedir. Çeşitli faktörlerin sebep olduğu farklı tip ve ölçüler, bizim çalışma alanımızı oluşturan mobilya ve objelerde gözlemlenmiştir. Aşınma, ihmal ve kullanım gibi faktörler, çevre koşullarının olduğu kadar bu nesnelere bozulmasında önemli olmuştur. Restorasyon ve konservasyon çalışmaları yolu ile büyük ölçüde tahrip edilmiş olan kültürel ve sembolik olarak çok değerli mobilya ve nesnelere bağlamında proje kapsamında yürütüldü, büyük ölçüde tahrip edilmiş olan kültürel ve sembolik değere sahip mobilya ve nesnelere ele geçirildi. Orjinal formlar ve malzemeler mümkün olduğunca korundu, kısmen bir bölümü yenilenmiş ve tamamlanmış nesnelere ise kaçınılmazdı. Bu çalışma, ilgili nesnelere üzerinde yürütülen farklı doğa ve kalitesinin korunması yoluyla elde edilen sonuçları gösterir.

Anahtar Kelimeler: Bozulma • Restorasyon • Konservasyon • Deri • Mobilya

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Introduction

Atatürk's House and Railway Museum building situated within the Ankara Railway Station Complex of the State Railways of the Republic of Turkey was constructed in 1892 as the "Administration Building" during the construction of the Baghdad Railway. The building was used as Atatürk's house and the Supreme Military Command Headquarters during the War of Independence when it witnessed important domestic and foreign decisions taken on account of the recent political history of Turkey and in the War of Independence between the years 1920 and 1922, thus assuming a historical identity. The treaty negotiations with the French and the ceremony of signing the treaty on October the 21st, 1921 took place in this building, and following the constitution of the Turkish National assembly on April the 23rd, 1920, the decision to celebrate the day as National Sovereignty and Children's Day every year was taken in this building. The building was redesigned on December the 24th, 1964 to be used as a museum to perpetuate the invaluable memory of our great leader Atatürk.

The first floor of the two-storey museum building houses the "Railway Museum". The objects and documents related to railways since 1858 have been displayed here. On the second floor, there is an office with Atatürk's personal belongings and leather upholstered wooden furniture of the period, a meeting room, a bedroom and the room used by Fikriye Hanım, Atatürk's step-cousin, whenever she came to Ankara.

An agreement for this conservation project was signed between the Directorate General of the State Railway Company and the Gazi University, Faculty of Fine Arts, Department of Conservation and Restoration of Cultural Properties for the maintenance and restoration of those objects and furniture with a variety of characteristics which formed the subject of this conservation project.

The work carried out by the teaching staff of the Department of Conservation and Restoration of Cultural Properties took place in the workshop environment created in the museum.

The General Conditions of the Objects Prior to Conservation

Deterioration of various types and quantities due to various factors were detected in the furniture forming the subject of the project. Factors included usage, wear over time and neglect, as well as environmental conditions such as the relative humidity, the temperature, light and air pollution. The leather of the sofas and chairs had shrunk and had hardened due to the loss of moisture (Fig. 1) caused by unfavourable conditions, such as high temperatures and low humidity leading to physical damage, rupture, tear, loss of pieces and changes in colour.

The furniture comprises a wooden frame, filled with wool, straw, animal hair, sackcloth and metal springs. Dark brown or maroon leather was used to cover the furniture. The leather upholstery was attached to the wooden frame of the furniture by small and large nails.

There was cracking and flaking (Fig. 2) and heavy tears were observed on the surfaces of some of the leather upholstery. The wooden parts of the sofas and chairs, mostly painted in dark brown, were worn, scratched and faded (Fig. 3) from both use and age. There were separations at the joints of some chairs and sofas as a result of the glue used which had lost its adhesion. Decay was detected in the wool (Fig. 4), in the animal hair and sackcloth used inside the sofas and chairs; while the iron



Fig. 1 *Loss of Moisture*

springs had lost their integrity resulting in the sagging of the seats (Fig. 5). Bugs had spread all over the big couch in Atatürk's Office (Fig. 6).



Fig. 2. *Splitting and Flaking*



Fig. 3. *Scratched and Faded*



Fig. 4. *Decay of the Wool*



Fig. 5. *Sagging of the seat*



Fig. 6. *Bug Infestation*

The beds in Atatürk's and Fikriye Hanım's bedrooms were formed through joining the square cut metalwork. A portable bedstead with metal springs was used in each bed. The metal parts of the beds were painted with white oilpaint which had come off or had become scratched (Fig. 7) as result of shocks and friction together with dirt and stains observed on the surface. The springs had become deformed from use. Tarnish was found on the brass elements of its construction.

In the bathroom of the residence, the bathtub belonging to Atatürk had survived in its original place and position in good condition. However, wear and spills of the enamel coating caused by shocks and friction, as well as dirt and stains due to other factors and corrosion was found (Fig. 8).



Fig. 7. Oil Paint loss and Scratches



Fig. 8. Dirt and Stains from Corrosion

Conservation Work

Before dealing directly with the conservation work, the objects to be conserved were numbered and grouped, the deterioration on these objects and their causes were determined and photographed in detail for documentary purposes.

Following the identification and documentation work conservation work was carried out according to a set plan.

The conservation and restoration work was carried out on a variety of materials and in stages can be summarized under the following group headings:

The Conservation and Restoration Work Performed on the Sofas and Chairs

Removal of the Leather Upholstery and the Renewal of the Inside Fittings (Fig. 9)

At first, the furniture whose wooden frames are in good condition was disassembled to enable the renewing of the interior fittings and fillings and to restore the leather upholstery (Fig. 10). Consequently, the leather had to be removed in a controlled and careful manner. The studs used to attach the upholstery were kept with care to be reused. The removed leather was subjected to cleaning, softening and finishing procedures.



Fig. 9. Removal of the Leather Upholstery



Fig. 10. Renewal of the Interior Fittings

Some of the inside fittings (wool, animal hair and sackcloth) which were badly-deteriorated, decayed and scattered due to insect invasion were replaced with grey and yellow foam rubber. The deformed interior springs were returned to their original state using hemp (cannabis sativa) ropes tied in a pattern called arch binding.

Cleaning and Softening Procedures (Figs. 11-12)

The superficially dirty, torn and rigid leather was cleaned. A leather cleaning agent called “Moroccan”, an emulsion made from synthetic lubricants and emulgators resistant to light, acids, alkalis and salts, was employed for this purpose. It was applied to the surface with cotton wool.



Fig. 11. *Cleaning Procedures*



Fig. 12. *Softening Procedures*

The paint and whitewash stains were cleaned with dilute alcohol. The dust and dirt on the back side of the surface was removed by brushing with soft bristle brushes.

The delicate leather which was over-hardened, worn and brittle was softened following the cleaning process. A gelatinous substance made of a mixture of alcohol and lanoline, a component used in the preparation of emulsifying creams for leather and which can be dissolved in alcohol, ether, benzol and acetone, was applied to the leather surface with the result of softening of the leather and returning it to resiliency.

The Completion of the Missing Parts (Fig. 13)

Observations made concerning the various areas of missing or lost parts of leather due to factors such as tearing, rupture etc. The missing parts were completed for the sake of visual unity, and colorless calf leather consistent with the original material was preferred to serve this purpose.



Fig. 13 *Completion of Missing Parts*

The size and shape of the parts to be completed was defined using the template method and the leather was cut and shaped accordingly and the edges trimmed and thinned using a scalpel.

This thinning procedure was carried out to eliminate the difference in the level of the edges to be joined and to achieve integrity in the places where the new and the original leather was united.

The leather prepared to complete the missing parts was strengthened and supported by pasting artificial leather to the back and it was dyed in the shades conforming with that of the original, employing mineral dyes dissolved in ethyl alcohol.

The pasting was done using “Denlax”, a solvent based common adhesive of single component polyurethane origin. It is used for fixing artificial leather and leather surfaces to each other and to MDF surfaces. It can be applied by pistols because of its consistency or by means of a brush.

Reassembling the Leather Upholstery and the Restoration of Slits and Cracks

The leather having undergone the cleaning, softening and finishing procedures was placed on the

furniture whose interior filling and fittings had been renewed. Additional staples and nails were used where needed to increase its durability and longevity. The missing buttons on the Chesterfield sofas (a type of handmade buttoned sofas made in the 18th century by English craftsmen) were replaced with new buttons similar to the originals.



Fig. 14 Reassembling the Leather Upholstery

Following the assembly, the slits and cracking present on the leather upholstery (Fig. 14) of the furniture was consolidated by infilling them with, “Alta Cuir Magic Alta” a paste used to repair and to infill torn, burnt, pierced and cracked leather. This substance is effective in filling holes not more than 2 cm in size, and cannot be recommended for larger areas. The filling should be done before restoration and dyeing procedures to make the restoration procedures easier. When the substance dries, it assumes the elasticity and flexibility of leather.

After the paste is dry, “Alta Cuir Baume” was applied in a similar shade to the original. Alta Cuir Baume is a leather paint used for reviving the colour of the leather faded by time or by the sun, leaving a coloured coating on the surface. It is applied in a circular motion using a cloth. This paint is more suitable for soft and smooth types of leather excluding the natural cracks (Fig. 15). It can be applied to leather sofas, to lamb-skin, aniline, goat and pig skins. It is harmful to water creatures and can damage the aquatic environment in the long term.



Fig. 15 Restoration of Slits and Cracks

The flaked surfaces of leather were treated with “Alta Cuir Resine Reperatrice” which is used for consolidating, with a brush. It is a colourless substance and applied with the fingers or brush in a circular motion. Prior to application, the leather should be cleaned and tested on a suitable piece to determine if there could be unfavourable results. Then, “Cire 213” is applied to the completed parts to provide a shine. Cire 213 is a water-based emollient used on leather and parchement. It is a mixture prepared by the French National Library. It contains 40% water, 10-18% cow foot fat, 5% vaseline, 5% wax, 2% fungicide, 1% silicon oil and 1% potassium oxalate. It softens and shines the leather by penetrating into it and prevents poisonous gases from penetrating into the leather.

Lastly, to stabilise the colouring applied to the completed parts and acquire reinforcement against harmful UV (ultraviolet) rays, the whole surface was treated with “Alta Cuir Fixa Soft” spray, a shiny leather protectant to prevent the early aging of the colour of the leather. It is a water repellent and used to prevent stains from penetrating into the leather, as also to consolidate against harmful UV rays radiated from light sources.

The Conservation and Restoration Work Performed on the Bath-tub Belonging to Atatürk

Firstly, the improper cement-based repair mortars which were far from the original colour and texture, creating visual pollution were scraped off mechanically employing a scalpel. The dirt and stains on the outer and inner surfaces were removed using mild chemical methods such as alcohol and non-ionic detergent. The parts where the enamel coating had come off were filled using a mixture of glass beads and epoxy resin. The surfaces of these fillings were smoothed and polished

with sandpaper attached to a rotary engine.

The brass elements at the back and at the water outlet of the tub were cleaned by mechanical methods.

The outlet part was rendered into its original shape through welding, and the lead pipe was attached to the tub. The fillings and damaged parts were painted with Polisan Spray enamel paint. Polisan Spray paint is a quick drying modified acrylic based paint with solvent which forms a protective film of coating suitable for inner and outer surfaces such as wood, metal, cement and stucco.

The Conservation and Restoration Work Performed on the Metal Beds

The dirt and stains that had gathered overtime on the original painted surfaces of the metal beds were cleaned using a non-ionic detergent and a mixture of water and alcohol. Where the chemical interventions were insufficient, especially in the case of hardened and persistent stains, scalpels were used to mechanically remove these stains. The parts which had corroded or where the paint had come off were filled with metal paste to be sanded after drying. The filled parts were painted with oil paint in its original shade.

The deformation in the springs of the bed were removed and the brass elements were cleaned and shined using a metal polisher (Figs. 16-17-18).

Conclusion

By means of the conservation and restoration work carried out within the project, the culturally and symbolically significant furniture and objects that had been to a great extent damaged, have been returned to their original appearance. The authenticity of forms and materials of the objects were retained as far as was possible; the complete or partial renewal of parts was not undertaken unless it was absolutely required.

The active intervention on the objects will ensure their longevity and survival without further damage. However, in addition to the above mentioned practices, certain measures should be taken against the factors that contributed to this deterioration, for the maintenance, continuance and durability of the work of conservation. Above all, it is most important for the museum's environmental conditions to be reorganized and improved to accord with the characteristics of the materials and objects that are displayed. For instance, ensuring the monitoring of temperature, illumination and humidity is of vital importance. Keeping the objects away from natural sources of light and applying advanced systems for illumination purposes that don't radiate heat and harmful ultraviolet (UV) rays, with a low level of light (50 lux) such as LED (light emitting diode) or similar means should certainly be employed. (For the management of monitoring illumination in museums see: Thomson, G.- Bullock, L., *Conservation And Museums Lighting*, Museum Association Information Sheet 24, London, 1980; De Guichen, G., *Conservazione Preventiva Nei Musei, Il controllo dell'illuminazione-Il controllo del clima*, ICCROM- ICR, Roma, 1983; Anonim, *Müzelerde Koruma: Çevresel Koşulların Denetimi*, T.C. Kültür ve Turizm Bakanlığı, İstanbul 1987).

Moreover, curtains or filters should be applied to the windows to prevent direct sunlight; and window frames as well as gaps and openings between the frames and the glass should be well insulated to keep out dust and atmospheric pollution.



Fig. 16. *Cleaning Procedures*



Fig. 17. *Before and After Restoration*



Fig. 18. *Before and After Restoration*

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