

RECENT DISCOVERIES AT PHOCAEA

Phocaea, Athena, griffon

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Les fouilles archéologiques à Phocée furent reprises en 1989. Depuis cette date, les travaux et les fouilles ont lieu chaque année. Au cours des dernières fouilles, des découvertes ont été faites en de nombreux endroits de la ville. On a pu comprendre que l'histoire de la ville remonte à l'Âge du Bronze Ancien. Contrairement aux résultats des fouilles anciennes, les dernières fouilles ont prouvé que l'établissement originel de la ville était sur le continent et non sur la presqu'île.

Phocée, Athéna, griffon

Die archäologischen Ausgrabungen in Phokaia wurden 1989 erneut aufgenommen und werden seitdem kontinuierlich weitergeführt. Dabei wurden an vielen Stellen der Stadt zahlreiche Untersuchungen vorgenommen. Es stellte sich hierbei heraus, dass die Stadtgeschichte bis zur frühen Bronzezeit zurückreicht. Im Gegensatz zu den früheren Ausgrabungen haben die neueren zu der Erkenntnis geführt, dass die Hauptsiedlung sich nicht auf der Halbinsel, sondern auf dem Festland befand.

Phokaia, Athena, Greif

Gli scavi archeologici a Focea sono ripresi nel 1989. A partire da questa data, i lavori e gli scavi hanno avuto luogo ogni anno. Nel corso degli ultimi scavi, sono state fatte scoperte in numerosi luoghi della città. Si è potuto capire che la storia della città risale all'Età del Bronzo Antico. Contrariamente ai risultati dei vecchi scavi, gli ultimi scavi hanno dimostrato che lo stanziamento originario della città era sul continente e non sulla penisola.

Focea, Atena, grifone

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Presenting a paper on the Foça excavations to the VIth Turkish History Congress, Akurgal (1967, 76) stated that: "The excavation of this ancient Ionian city, an important *desideratum* of archaeological literature, has provided results which are important for the Hellenic pottery of the Archaic period and for the Ionic architectural order". Here Akurgal wished to emphasize that the excavation of Phocaea was something greatly to be desired in the literature of archaeology. Years later, when the Phocaea excavations were resumed by us, Akurgal stated: "Truly Phocaea has an enchanting natural site. Just as it was the most attractive and charming city of antiquity, it was also the most beautiful one"¹. The archaeological excavations at Foça present three periods. Felix Sartiaux began the first investigations of

a scientific nature, opening test trenches in the years 1913, 1914 and 1920².

All these exploratory diggings of Sartiaux occurred during the war years; for this reason he was unable to work on a long term basis. After the 1920s for a long it was impossible to do excavation of a scientific nature at Foça.

The second period excavations were carried out without interruption between 1952 and 1957, under the leadership of Ord. Prof. Dr. Ekrem Akurgal³. Afterwards the digging continued at intervals up to 1970. The excavations of this period were generally done on the peninsula. In the course of these, a portion of the Archaic layer (the settlement of the 6th and 7th centuries BC) and also finds belonging to the Temple of Athena were revealed.

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1.- In S. Özyiğit 1998, preface and back cover.

2.- Sartiaux 1914a, 1914b, 1921, 1952; Langlotz 1976; Morel-Deledalle 1995; Hermay 2004.

3.- Akurgal 1956a, 1956b, 1957, 1961 (180, 287, 294-295, figs. 252, 262), 1967, 1976, 1993 (55-59, figs. 8b, 101-108), 1995, 2000 (290-292); Serdaroğlu 1967; Bayburtluoğlu 1967; Özyiğit 2004b.



Figure 1. Aerial view of Foça and Phokaia (We thank the municipality of Foça for permission to reproduce this photograph). Areas of the recent excavations: 1. Temple of Athena; 2. The sacred precinct of Cybele, called the "Harbour Sanctuary"; 3. Fortification walls of the Genoese and Ottoman periods; 4. Ancient theatre; 5. Roman period ceramic wasteheap; 6. Archaic megaron structure; 7. Ancient city centre excavations; 8. Sacred precincts of Cybele on the theatre hill; 9. Bedding trenches of the Archaic period city walls; 10. Archaic period city gate; 11. Archaic period city walls; 12. Small harbour; 13. Great harbour; 14. First settlement area of the city of Phokaia.

THE RECENT EXCAVATIONS AT PHOCAEA (Fig. 1)

After a long interval, archaeological excavations at Foça were again on the agenda in 1989 (Özyiğit 1991, 127-128). From that date up to now the archaeological excavations at Phocaea have continued every year. Since 1989 digging has been conducted in various places in the city. The work carried out has yielded important results and the extent of the city has been determined. We can list some of the results of these recent excavations as follows:

SOME IMPORTANT SCIENTIFIC RESULTS OF THE RECENT EXCAVATIONS

- 1.- The Archaic period settlement was located on the mainland and not, as was proposed during the previous excavations, upon the peninsula⁴; this settlement was surrounded by fortification walls (Fig. 1).
- 2.- These walls, which are frequently mentioned by Herodotus, were first discovered in all their magnificence within the Maltepe tumulus in 1992 (Figs. 1-2) (Özyiğit 1994a, 1994b, 1995). Their length was more than 5 km and may perhaps have been as much as

4.- Özyiğit 1997, 1-9, figs. 1-5, pls.1-15; Özyiğit 1998, 764-765, 770-772, figs. 1-2, pls.1-6, 18-22.

8 km. The settlement within them, which we date to 590-580 BC, may have been one of the largest of the world in that time.

3.- It is understood that the antique city within these walls reached its greatest limits during the Archaic period, that it conserved these limits during the Classical period, but that beginning with the Hellenistic period its size began to shrink. One sees that in the Roman period the reduced town was transformed to the status of a centre of pottery production. As for the Byzantine period, the city by then must have been mainly located on the peninsula. In the centre of the modern city of today we see stratification from the 7th century BC up to the Early Byzantine period (Fig. 1.7)⁵.

4.- The uncovering of the earliest theatre of Anatolia in the course of the excavations of 1991 counts as one of the most important finds of the recent excavations (Figs. 1 & 3) (Özyiğit 1993).

5.- In 1992 digging carried out within the Maltepe Tumulus confirmed that this was not a settlement mound, as had been proposed during the earlier excavations, but rather a tumulus (Fig. 2) (Özyiğit 1994b, 83).

6.- Excavations concerning these famous walls, mentioned by Herodotus and found within the mass of the Maltepe tumulus, were carried out at the city gate. These investigations elicited military evidence of the Persians' attack. A catapult ball retrieved here at the level of the gate's floor surface is the oldest known in the world (Özyiğit 1994b, 90, Ph. 23, 26-27).



Figure 2. The Archaic period city walls mentioned by Herodotus. These were uncovered in the course of the 1992 excavations (590-580 BC).

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Figure 3. The oldest theatre of Anatolia, whose existence was first discovered in the 1991 excavations (340-330 BC).

5.- Supra, note 4.



Figure 4. General view of the excavation area of the Phokaian Temple of Athena.

7.- The excavation work carried out revealed that the cult of Cybele was very important at Phocaea; this was demonstrated by shrines of Cybele not only on the north slope of the Temple of Athena but also carved out of the rock on the shores of the islands. In the course of the same work it was understood that the island of Baccheion mentioned by Livy was not, as the previous excavators had thought, the peninsula where the Temple of Athena had stood, but rather the present-day İncir Adası (Özyiğit 1998, 767).

8.- The podium walls of the temple constructed for Athena, the chief deity of the city, were uncovered by Ord. Prof. Dr. Ekrem Akurgal and with these it was ascertained that the temple was first built at the beginning of the 6th century BC. It was concluded that this temple, thus reassigned to an earlier date, was contemporary with the fortification walls and that it was constructed in the course of the great building activity at the beginning of the 6th century BC (Fig. 4) (Özyiğit 2001, 2-3).

9.- From the excavations done in recent years it has been ascertained that the place where Phocaea was

first founded was outside of the fortification walls on the slope south of the city (Figs. 1 & 5)⁶. Among the materials retrieved in this area, pottery belonging to the Early Bronze Age was encountered. Perhaps Phocaea was first founded in the Early Bronze Age. In the first half of the second millennium, after architectural and ceramic finds relevant to the Middle Bronze Age, we see Mycenaean influences in the second half of the second Millennium. Besides Mycenaean pottery, we also encounter local imitations of Mycenaean ware in large numbers. An oval house from the 14th century BC is the oldest structure of known plan at Phocaea. Also in the same area a blacksmith's shop which was active in the 11th century BC is the oldest known smithy in the world. Immediately above this workshop two Early Protogeometric oval houses from the beginning of the 10th century BC are the earliest known Ionian structures in Anatolia. In this area and inside the city two megarons were unearthed; they both belong to the 7th century BC.

10.- In the years 2000-2001 excavation work, restoration and landscaping was carried out at the Persian Monumental Tomb located 7 km distant from Foça

6.- Infra, note 9.



Figure 5. General view of the first settlement area (3rd millennium - 6th century BC).

(Fig. 6) (Özyiğit 2002; Özyiğit 2003, 333-336, figs. 1-7, pls. 1-3). According to the work we did, this tomb is the oldest Persian grave monument in Anatolia, established as being built by the Persian King Kyros in the first half of

the year 546 BC immediately after the battle of Sardis. Thus this tomb is the prototype of the examples in Iran, for it is earlier than those. It was brought into being as the joint product of Persian, Lydian and Ionian artisans.

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Figure 6. The monumental tomb near Phokaia: the earliest Persian monument in Anatolia (546 BC).

11.- In the southern section of the city, within the limits of the first settlement area, there are two altars from the beginning of the 6th century BC, Phocaea's most magnificent period. They may perhaps have been sacred to Apollo and Artemis (Özyiğit *et al.* 2000a, 11 ff; Özyiğit 2000b, 38-39, figs. 1-2, Res. 9; Özyiğit 2001, 3-4, fig. 2, pls. 2-3). The Egyptian finds retrieved from a grave in the necropolis in this area also reveal the relations between Phocaea and Egypt (Özyiğit 2001, 4, pls. 6-7). 12.- The Diş Kale (Outer Castle), which is located on a promontory to the southwest of the city and is known as the "Genoese Castle", is not in fact Genoese but rather a fort of the Ottoman period. The Genoese Castle was on the peninsula where the Temple of Athena stood. Recent excavations have established that the peninsula in question was first surrounded by fortification walls in the Archaic period, that the walls were repaired in places in the Roman Imperial period and that they underwent major repairs by the Genoese (Özyiğit 1994b, 79). It would seem that this major repair work done by the Genoese gave rise to the belief that there was a Genoese period castle at Foça.

THE FOUNDING OF PHOCAEA

According to the ancient writers, Hellenes arriving under Athenian leaders founded the first settlement in a place allowed them by the men of Cyeme⁷. Josef Keil has shown that this statement of the ancient writers makes the error of assuming that the Phocaeans were the same as the people living in Phokis in Greece and is an attempt to link the Ionian colonization to Attica⁸. Based on the grey ware found in the excavations, Akurgal (1956b, 38; 1995, 32) states that the first arrivals were Aeolians. Pausanias (VII 3, 8) relates that Ionians coming from Teos and Erythrai settled at Phocaea. As understood from the ancient sources, the Aeolians arrived earlier at Phocaea, then later the Ionians; however the recent excavations we have done show that these two peoples were not the first to settle there. In contrast to what the ancient sources tell, the city existed much earlier, for on the slopes south of the city, further south than the fortification walls which Herodotus informs us of, the earliest settlement area of Phocaea was located. The first scientific archaeological excavation work carried out in this area was done in the years 1996-2004. These excavations established the fact that the potsherds belonging to the third millennium BC, that is, to the Early Bronze Age, are the earliest finds at Phocaea. The numerous finds from this

excavation area brought with them important modifications to the history of Phocaea.

THE FIRST SETTLEMENT AREA (Figs. 1.14 & 5)⁹

In digging carried out in a plot of land on the slopes south of the city, pottery belonging to the Early Bronze Age was encountered. It is unfortunate that, due to the small area of the excavation, the architectural remains to which these ceramics belonged were not found. Besides pottery of the Middle Bronze Age, the remnant of a wall related to this time was also retrieved. It is in this area that we find the first house with a clear plan, a Late Bronze Age house dating from the 14th century BC. This oval house must have been used in the time of the Mycenaeans. Again in this area, after the middle of the second Millennium BC, plentiful Mycenaean pottery was encountered. Most of this Mycenaean ware was not original ware, but of local production. We see that many of these ceramics were painted with colours, while some were produced as unpainted ware from grey fabric. The burnished pottery called Grey Minyan is also local. Most of the locally produced pottery has profiles which are the same as those of Mycenaean vase forms of the Late Bronze Age.

It is of considerable importance that the Blacksmith Workshop of the Early Iron Age was retrieved in this area. That this workshop is the earliest smithy known so far increases its importance still further. This blacksmith shop was used from the beginning of the 11th century BC until late in the same century and was set up on a semi-circular terrace. Upon this were found numerous forges of horseshoe shape. The unroofed smithy area and all the forges faced north, thus being open to the north winds. Numerous pieces of iron slag were retrieved in this area. The end of the smithy is made clear by a late Sub-Mycenaean amphora retrieved from its floor surface. The amphora at the same time dates the oval house that was constructed upon it. According to this, the oval house above must be from after the late Sub-Mycenaean, in the early Protogeometric period.

A second oval house belonging to the Early Protogeometric period was also uncovered in this area. These structures are positioned so that they face south. Both have a single hearth in their eastern walls. The hearths, which lean against the walls, probably had also chimneys. These two structures are the earliest oval houses belonging to the Protogeometric period that have been retrieved in Anatolia. They are at the same time the earliest representatives of the Hellenic world in Anatolia.

7.- Strabon XIV 633; Pausanias VII 3, 10; Nicolaos de Damascus FGr. H II 1, 352 Frgm. 51.

8.- Josef Keil, *Pauly-Wissowa* XX 1, Phokaia 444.

9.- Özyiğit 1998 (772-782), 2001(6), 2003 (342, figs. 6-7), 2004a (442-443, 449, pls.3-4), 2004b (115, fig. 1) and 2005.

They are also earlier than the oval house at Bayraklı (Akurgal 1983, 16-17, fig. 8, Pls. 4-5). We see that in the 7th century BC, that is, in the Orientalizing period, *megara* were built upon the oval houses belonging to the Early Protogeometric period. The area under consideration was probably abandoned after the Archaic period.

THE SECOND SETTLEMENT AREA

The pottery retrieved from the main settlement of Phocaea, located opposite the peninsula, goes back as far as the Protogeometric period. We are of the opinion that, beginning from the Protogeometric period onwards, occupation began to spread to the city's main settlement area on the mainland opposite the peninsula, while still continuing on the first site. Among the ceramics retrieved from the 2004 excavations at the site of the Temple of Athena the earliest go back as far as the Early Bronze Age; taken together with the fact that Middle and Late Bronze Age pottery is also found here it can be concluded that the sanctuary is parallel with the First Settlement Area. That is, while occupation continued in the First Settlement Area, the place of worship of the people who lived there was the rocky area where the Temple of Athena was located and the site of this sacred precinct did not change over the years. We think that under the influence of this place of worship, occupation extended to the mainland, that is to the area located east of the peninsula upon which the Temple of Athena was located, and here it slowly developed. For a time both settlements continued together. As we mentioned above, the First Settlement Area was later abandoned, probably after the Archaic period.

In the 7th century BC the Phocaeans, together with the Milesians, expanded to the Mediterranean and to the Black Sea and founded colonies. They entered into important commercial relations with the city of Naukratis on the Mediterranean coast of Egypt. Thus in the first half of the 6th century BC they achieved economic prosperity through their trade and the colonies which they founded. It was then that the Temple of Athena and the Open Air Cybele Sanctuary on the slope below it were built. In the years 590-580 BC the city was surrounded with the famous walls reaching 7-8 km that are mentioned by Herodotus (Özyiğit 1994a, 1994b, 1995). In that time Phocaea was one of the largest cities of the ancient world.

The sailors of Phocaea played an important part in the spread of Ionian sea commerce. They traded with the city of Naukratis in Egypt. Joining forces with the Milesians they founded Lampsacus (present Lapseki) in the straits of the Dardanelles and also the city of Amisus (present Samsun) on the coast of the Black Sea. In the

620s BC they went as far as Tartessos in Andalusian Spain. Massalia (Marseilles) in southern France, Emporion (Ampurias), Alalia in Corsica and Elea (Velia) in southern Italy are some of the many colonies that they founded in the 600s BC.

In the 7th century BC the Royal Road beginning at Susa in Iran extended as far as Sardis and here joined a road coming from Phocaea and Cyme, near the present Aliğa. Another road beginning from Ephesos must have passed through Smyrna and reached Phocaea. After Smyrna was destroyed by the Lydian King Alyattes in the 600s BC commercial supremacy in the valley of the Hermos (Gediz River) passed into the hands of Phocaea. This domination is also obvious from the enrichment of the coins of Phocaea.

In the second period, excavations carried out under the direction of Ord. Prof. Dr. Ekrem Akurgal at the site of the Temple of Athena were undertaken and numerous finds were retrieved from the temple area¹⁰. These excavations were continuous between the years 1952-1957 and also went on at intervals up to 1970. The Temple of Athena was located on the peninsula where the former middle school building, now a part of today's lycée, stands. The temple belonging to the city's chief deity, Athena, stood on a rocky eminence on the peninsula's highest point. It dominated the antique city and the lesser port and was the most important temple of the city. In the course of the work carried out in this area during the second period of excavations, numerous architectural elements such as column drums, bases and capitals were found. Later, in 1979, while this area was being used as the playground of the middle school and the lycée, the trenches containing the sections of the temple excavated in the course of this work were closed, never to be reopened, and for this reason numerous trees were planted over the former excavation trenches.

In order to uncover for a second time the remains of the Temple of Athena, and with the intention of beginning the efforts to re-erect one section of the temple, excavation work in this area was re-commenced on 28 July 1998. Because schooling still continued in the lycée building the digging was begun at the back of, in other words to the west of, the former middle school structure where the temple was located. In the course of this digging the large trench opened in the time of Akurgal was cleared anew. In the unexcavated areas neighbouring the old trench important finds were encountered. In the course of this work the west podium wall of the temple was found. The structure and workmanship of this podium wall, built in the first phase of the temple, to some extent also bears partial witness to the magnificence of the Temple of Athena. The style that this podium wall shows us is that of the Archaic period

10.- Supra, note 3.

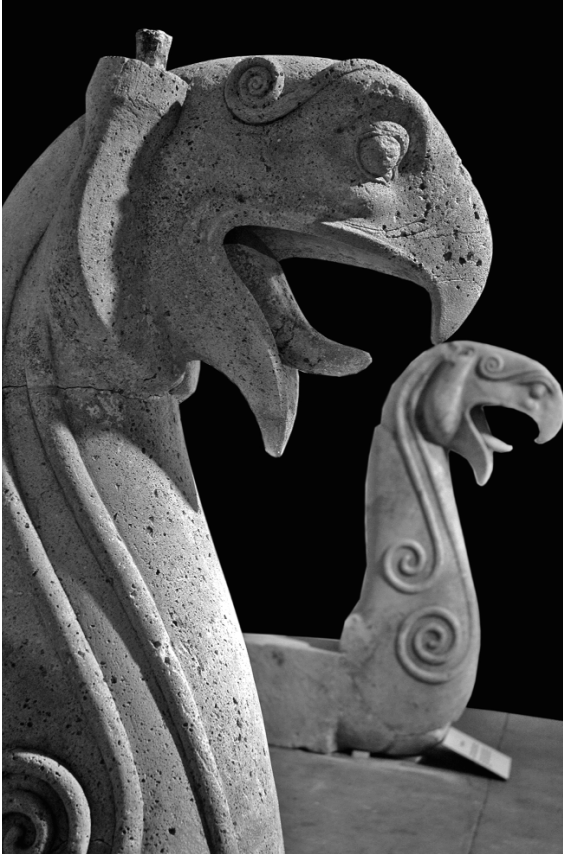


Figure 7. Tufa stone griffon protome sculptures no. 1 and 2, which decorated the Phokaian Temple of Athena. Found in the excavations of 2005. Beginning of the 6th century BC.

fortification wall which was brought to light in the course of the 1992 Maltepe Tumulus excavations, thus the podium's date should not be different from that of the fortification walls¹¹.

It is known that the name of Foça comes from Phocaea, while Phocaea was derived from the Greek word for seal (*phoke*). On the coins of Phocaea are found, along with images of seals, depictions of griffons. What's more, the Phocaean coins bearing images of griffons are much more numerous than those bearing depictions of seals. We see these depictions of griffons on coins from the end of the 7th century BC, Phocaea's most magnificent period, down to Roman times. The earliest of the Phocaean coins with images of griffons were made of electrum. Later, examples made of silver and bronze were struck. At the beginning of the 6th century BC the temple of Athena at Phocaea was constructed together with its griffon protome sculptures over the sacred precinct of the goddess Cybele. Thus beginning from, at the latest, the 600s BC onwards, the griffon became part of the life of Phocaea and, together with the seal, became a symbol of the city.

In the course of the digging done to the west of the Temple of Athena in 2005, important finds were encountered (Özyiğit 2007, 341; 2008, 489 ff.). The temple, constructed around the beginning of the 600 century BC, must have stood for a long time. From the excavation results we understand that the Archaic period temple collapsed as the result of an earthquake within the last quarter of the 2nd century BC. Architectural and sculptural elements related to this temple were retrieved from between the podium wall and the Roman period fortification wall.

With the numerous fragments of column drums, Ionic capitals, architraves, Lesbian cymatia-decorated friezes, dentils and geisons which were found in the excavations, it has become possible to make a complete restitution of the Archaic period temple.

Together with Ionic capitals and other upper structural elements griffon and horse protomes were found. The condition of two griffon (Fig. 7) and two horse protomes found in 2005 was quite good and it was possible to complete these to a large extent. In the excavations of 2006 three more griffon protomes were retrieved. In the course of Akurgal's excavations one griffon and two horse protome fragments had been found; however at that date it was not possible to ascertain what they were. Before the excavations of 2005 it was not known that the Temple of Athena was decorated with griffon and horse protomes.

The temple was dedicated to the chief deity of the city, Athena. It is not surprising that the Temple of Athena should have been decorated with griffons, Phocaea's symbol. On the other hand, the horse protomes that decorated the temple together with the griffons are again relevant to Athena, for Athena is also known as a goddess who trained and mastered horses. The griffons probably served as guardians of the Temple of Athena. At the same time they were creatures sacred to the father of Athena, Zeus.

Griffons are mythological birds. Like the sphinx, the siren and the chimera, they are composite creatures. In ancient Greek these creatures are called "Gryps", and in the western languages, "griffon". In the first half of the 8th century BC, after acquiring the Phoenician alphabet, the Ionians again reached a high level of culture. They reached a state in which they could profit from the level of civilization of the eastern countries. Meanwhile they continuously copied all the composite creatures of eastern mythology. They again took from the east the mythological, composite animal called the griffon. The mythological bird called the griffon has the head of an eagle, the body of a lion and wings. One also encounters depictions in which it has the body of a human. The ears are those of a horse or donkey, while the upper jaw is always that of an eagle. As for the lower jaw, it is

11.- Özyiğit 1995 (33 ff.), 2000b (33-34, figs. 1-4), 2001 (1-3, 7, fig. 1), 2003 (336-337), 2004b (109 ff., 117). Özyiğit *et al.* 2000a, 11-13.

sometimes that of an eagle, sometimes that of a lion. Griffons in the form of protomes are seen later.

THE GRIFFON PROTOMES OF PHOCAEA

The griffon protomes made of tufa stone have the form of the head of an eagle with a long neck and long ears. These protomes were 1.30 m in height. Together with the ears they reached a height of 1.50 m (Fig. 8). Only one of the ears retrieved could be completed. The height of this ear was measured as 25.8 cm (Fig. 9). The ears were attached by lead which was poured into a cavity 3.2 cm in diameter (Fig. 10). The knobs on the griffins' foreheads were not retrieved; however these knobs were, like the ears, fastened with lead into a circular cavity in the head. In this case the hole was 7.3-9 cm in diameter. The iconographic characteristic of these griffons are as follows:

- 1.- A wide open beak.
- 2.- An upward-curving tongue.
- 3.- The upper and lower jaws are those of an eagle. A very curved and pointed upper jaw.
- 4.- On the forehead a high addition in the form of a knob.

- 5.- Long upright ears in the shape of donkey ears.
- 6.- Two tresses which begin immediately at the back of the ears and which descend on both sides of the neck, ending in a spiral shape.
- 7.- A ruff that surrounds the throat from one ear to the other, like that seen on lions.
- 8.- A long, slender pipe-shaped neck.

These iconographic characteristics of Phocaeen griffons exactly correspond to the cast griffon protomes that are affixed to bronze cauldrons retrieved at Olympia; therefore their dates should not differ greatly.

WHERE ON THE TEMPLE WERE THE PHOCAEAN GRIFFON AND HORSE PROTOMES PLACED?

The griffon and horse protomes retrieved in 2005 were found together with cella wall blocks related to the cella wall of the Archaic temple. In the course of excavating, these protome statues belonging to the earthquake-destroyed temple were found *in situ*, lined up as one griffon followed by one horse. This situation indicates that the protome statues were placed in the intercolumnar

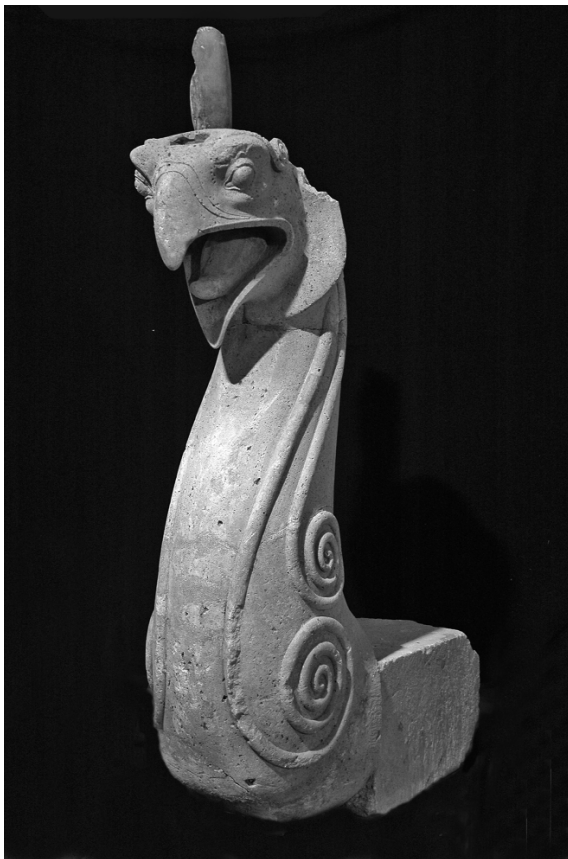


Figure 8. Griffon protome no. 1. Beginning of the 6th century BC.



Figure 9. Detail of griffon protome no.1. One ear of this griffon was also retrieved.



Figure 10. Staple hole containing the lead which served to fasten the ear of griffon protome no.1 to its head.

spaces, alternating one griffon with one horse. These protome statues were hung up by affixing the beam-shaped protrusion at their backs to the cella wall. These projections, which entered into the cella wall, were each carved as a single piece together with a sculpted protome, out of the same tufa stone. On griffon protomes the protrusions were located at the bottom of the back side and, on the horse protomes, in the middle of the back side. The measurements of these protrusions on the backs of griffon and horse protomes conform to the cella blocks. These protomes were found in the course of excavation together with the cella blocks; thus it is understood that the protomes were located upon the cella wall. The fact that the griffon and horse protomes were found in very good condition indicates that they were located on the exterior surface of the cella wall at a height out of reach of people. On the backs of the necks of the griffons a semi-circular shaped cavity attracts the attention. By means of this cavity a stone rod inserted into an interstice in the cella wall must have ensured the stability of the griffon's long neck and prevented its from breaking.

The griffons probably served as guardians of the Temple of Athena. They were at the same time creatures sacred to the father of the goddess Athena, Zeus. It is no coincidence that one sees griffon heads on the earliest electrum coins of Phocaea. The Temple of Athena, contemporary with these electrum coins, was decorated with a surrounding of griffon protomes. The depic-

tions of griffons on Phocaeen coins are very similar to those surrounding and decorating the Temple of Athena. Both have in common the characteristics of a wide-open beak, a strong and mobile tongue, a round and pronounced knob on the forehead and, at the sides, decorations in the form of spirals. The examples most closely similar to these griffon protomes retrieved from the Phocaeen Temple of Athena are seen on large bronze cauldrons¹². On these large cauldrons one also sees, besides griffon protomes, attachments in the form of sirens. A large portion of the cauldrons with griffon attachments has been retrieved in the West, in Greece and in Etruria in Italy. These griffon protomes show in particular a great similarity to Late Hittite examples. Cauldrons with griffon protomes resembling the Phocaeen griffons have frequently been found in Greece on Samos and at Olympia. In particular the griffon-formed bronze attachments of a cauldron which was retrieved at Olympia are closely similar to the Phocaeen examples. The griffon protomes that were made of tufa stone for the Temple of Athena must have been inspired from these. The Phocaeen griffons must be from the same date as the temple, around the beginning of the 6th century BC.

THE DEVELOPMENT OF THE GRIFFON PROTOME

When did griffon protomes first appear? This subject has been much discussed; however the Phocaeen griffon protomes have brought out an important chronological novelty. It is for this reason we have felt it is necessary to consider the subject anew and have written the present paper. For a century now much research has been carried out upon griffon depiction and griffon protomes¹³. Researchers have set forth in detail their observations and findings.

On the matter of griffon depiction E. Akurgal (1949, 81-84) elicited the earliest mutual influencing of eastern and western artists; according to him the Cretans and the Mycenaean took the griffon depiction from the east in the 2nd millennium; however they developed it into a new and original form. The Phoenician griffon is inspired by the Cretan and Mycenaean examples. The Syro-Hittite griffon type in turn developed under Phoenician influence. As for the Hellenes, according to Akurgal (1992, 34) they imitated the griffon type produced in the late phase of the Late Hittite.

12.- For the cauldrons, see: Çilingiroğlu 1984, 64-80; Çilingiroğlu 1997, 124-126.

13.- J. Börker-Klähn, Greif, *Reallexikon für Assyriologie*; Roscher, *Lex.Myth.* 12, Gryps, 1742 ff.; Poulsen 1912, 49 ff; Kunze 1931, 166 ff; Moortgat 1932, pl. 23, fig. 6; P. Amandry, *BCH* 68-69, 1944-1945, 68 ff.; Kunze 1948; Barnett 1949, 1-19; Akurgal 1949, 80, 84-86; E. Kunze, *Olforsch* II, 1950, 229; Jantzen 1955; Amandry 1955-56, 7 ff.; Amandry 1956; G.M.A. Hanfmann, *Gnomon* 29, 1957, 241-248; Barnett 1957, Index: griffin; Amandry 1958, 85 ff; U. Jantzen, *AM* 73, 1958, 26-49, pls. 28-52; Akurgal 1959, 99-105; Akurgal 1961, 66-70; Simon 1962; Bisi 1965; B. Goldmann, *AJA* 64, 1966, 319-328; H. Kyrlelels, *MarbWPr* 1966, 1 ff.; Herrmann 1966; Akurgal 1968, 75-79, 82, figs. 60-61; Akurgal 1969, 56, 57, 61, 63 182-186; Benson 1969; Travella-Eujen 1970, pls. 1-22; Vidal de Brandt 1975; Herrmann 1979; Dierichs 1981; Akurgal 1992.

GRIFFON HEAD CURLS

On the Phocaean griffon protomes there is a single curl above the eyes between the nose and ear (Fig. 9). These curls terminate in a spiral shape at the ear end. By the fact that these curls appear singly, the Phocaean griffons show similarity to the Late Hittite bird-men. For example, at Zincirli the bird-men¹⁴ found on the orthostats of the city's southern gate and dated to the middle phase of Late Hittite (the last quarter of the 9th century BC), as well as on the bird-men of Kargamesh¹⁵, which are dated to the second half of the 8th century BC, we see that this curl occurs singly.

Also, upon the head of the griffon-man relief upon an orthostat at Sakçagözü, there is a single curl. Aramaic craftsmen mixed the traits of eagle, horse and lion and created a new type of griffon. This type, in the Aramaic-Hittite style, is from the late phase of Late Hittite (Akurgal 1969, 58, 61, fig. 16-17).

The head of a griffon relief upon an andesite orthostat which was brought to light at Ankara shows close similarity to the Sakçagözü example (Akurgal 1949, 84 ff, pl. 49a). The curl is located in front of the ear.

This curl seen on bird-men and griffon-men of the Late Hittite middle and late phases differs slightly from the curls on the Phocaean griffons. The Hittite curls are located in front of or at the level of the ear and both ends terminate in a spiral shape, while on the Phocaean griffons the curl is in front of the ear and above the eye. Only the lower end has a spiral shape. But, whether on the Late Hittite or on the Phocaean examples, the fact that the curl is single constitutes a similarity.

In the case of the Urartian bird-men, there are two curls; for this reason they differ from the Late Hittite and Phocaean examples. On the bird-men made of ivory at Toprakkale¹⁶ and Altintepe¹⁷ this state is clearly observable¹⁸.

On the other hand the raised and pointed tongue of the Urartian ivory bird-men also exists on the Phocaean griffons. From this aspect the Phocaean griffons also show similarity to the Urartian bird-men.

On the bird-man of an ivory relief, found at Nimrud and belonging to the New Assyrian period, one sees a single curl and an upward-curved tongue (Mallowan 1966, Cilt. II, 486, fig. 383; Orthmann 1975, pl. 259). This example is rare in Assyrian art and must have been made under Late Hittite and Urartian influence.

GRIFFON NECK TRESSES

The neck tresses are different from the head curls. These are located on both sides of the neck and are single or double. On forged or cast griffon protomes one sees different styles, but the general structure is the same.

On examples made with the forging technique the neck tress is usually single. On a single example from Olympia one sees double neck tresses (Akurgal 1992, pls. 12, 16-ab ve 17). This griffon protome is one of the earliest examples. On the two sides of the heads of early period griffon protomes made with the forging technique the tresses reach as far as the protuberance upon the head, ending in a spiral shape. Beginning in a spiral shape from under one side of the neck and continuing upwards, the tresses pass behind the ears and surround the knob in the centre of the forehead, then, descending from the other side of the neck, they again terminate in a spiral shape. This is the case on the vase from Aigina (Akurgal 1969, pl. 55).

The tresses on Phocaean griffon protomes are independent of each other. Two sculpted relief tresses beginning from behind the ears and with semi-circular profiles descend the two sides of the long neck and end in a spiral shape. These have no connection with or relationship to the knob on the forehead. This is also the case with the Olympian bronze griffon protomes made with the forging technique and which must be dated later. In the forged examples, besides the single tresses on each side of the neck, double tresses are frequently seen. On the Phocaean griffons, the manner of treating the subject and the workmanship of these relief curls is also seen on the Ionic capitals of the Temple of Athena to which they belong. The manner of treating the spirals in the volutes on the Ionic capitals is the same as that of the long tresses on the griffons. Since their styles are the same the Ionic capitals and the griffons must have been done by the same artisans and at the same time.

On a gold griffon protome from Ziwiye besides the head curl, one sees a pair of neck tresses¹⁹. Here the lower ends of the neck tresses end in a helix shape. The Ziwiye griffon protome, with its pointed upper beak and its raised, pointed tongue, shows the style of griffon protomes made with the forging technique.

14.- Akurgal 1969, fig. 79; Moortgat 1932, pl. 23, fig. 6 (Orthostat aus Kargamiş).

15.- Moortgat 1932, pl. 23, fig. 6; Wooley, Carchemish II, 1969, London, B 12.

16.- Barnett 1957, pl. 131, fig. W. 13, 14; Akurgal 1969, 82 fig. 61.

17.- T. Özgüç: *Altintepe* II, Ankara 1969: 39, fig. 36. 37; 80, pl. B, figs. 3-4; pls. 32-33.

18.- Akurgal confuses the curls in front of the ear with the long tresses behind the ear. Whereas these are distinct from each other and both are seen on Phocaean griffons (Akurgal 1992, 36).

19.- Godard 1950, 40, pl. 50; Parrot 1961, 139, fig. 169. This gold griffon is dated to the end of the 8th century BC. This date is too early for the style it shows. It must be from a later date.

THE KNOBS ON GRIFFON'S FOREHEADS

On the foreheads of Phocaeen griffons there is a round, high knob which was fastened with lead to a cavity opened in the centre of the forehead. We retrieved no example of a knob. The origin of this knob, a characteristic feature of Greek griffon protomes, goes back to the late phase of Late Hittite. On the foreheads of protome examples from the late phase of Late Hittite art there are spiral decorations or low relief protuberances. These later develop into high, round knobs; therefore the development of the knob is important from the aspect of chronological dating.

Akurgal (1992, 36 ff.) states that the protuberances on the foreheads of griffons originate from the late phase of Late Hittite and puts forth the development of this knob. According to him, this knob was perhaps first a curl worked in relief that is seen on some griffon heads in Zincirli reliefs from the middle phase of Late Hittite (Akurgal 1992, 37, pl. 12, 3-4).

There is a protuberance on the forehead of a bird-man from Sakçagözü (Akurgal 1969, fig. 16) dated to the 730s BC. On an eagle head from Tell Halaf (Parrot 1961, 96, fig. 105; Akurgal 2001, fig. 147) which is dated to the last quarter of the 8th century BC we see that the spiral in the centre of its forehead has been worked in relief.

Akurgal (1992, 37, pl. 12, 3-6), going still further, states that even earlier examples of this knob are found in the middle phase of Late Hittite.

The knobs on the foreheads of griffon protomes made with the forging technique are in the form of a low protuberance. The small knobbed protuberance on the forehead is clearly observable on examples retrieved from Olympia (Jantzen 1955, Lev. 1-8; Herrmann 1979, 1-29), Samos (Jantzen 1955, no. 33, pls. 11-12) and Etruria (Jantzen 1955, 64, pl 18). These are dated to the last quarter and to the end of the 8th century BC. Concerning this dating almost all scholars except ourselves are in agreement. The protuberances on the foreheads are not high. The upper jaw is in the shape of an eagle's beak, while the lower jaw is that of a lion. The upper jaw in the form of an eagle beak is not pointed. On the other hand the ears are short.

We also encounter these forehead protuberances on griffon protomes in the ceramic art of the Hellenes. For example, in the griffon relief upon a relief-decorated vase made at Erythrai in the Protocorinthian style and dated to the years 665-650 BC, we see that this protuberance upon the forehead is not of a high shape (Akurgal 1992, pls. 10, 1-2; 14, 1-3). The end of the griffon's upper beak, taken from that of an eagle, is not pointed, while the lower jaw is that of a lion.

A griffon-headed Cycladic depiction brought to light at Aigina (Akurgal 1969, 18) is dated to the years around 650 BC. Here the protuberance on the forehead has

been worked in the form of a button. That is, it is not high. The ears on this griffon have begun to get longer. Here the lower jaw is in the shape of a lion's. The characteristic of the upper jaw in the form of an eagle's beak is that it has a pointed end. The tresses on the two sides of the neck of the griffon head on this vase unite on the forehead and surround the forehead knob in the form of a half circle.

The Olympian and Samian griffon protomes (Jantzen 1955, no. 34-183, pls. 13-57; Herrmann 1979, no. 64-91, pls. 37-57) made with the forging technique are accepted as Hellenic work. The knobs on their foreheads are quite high and erect. Chronologically they are the latest of all the bronze griffons. The tufa stone griffon protomes related to the Phocaeen Temple of Athena are a part of this group.

THE DATING OF FORGED AND CAST BRONZE GRIFFON PROTOMES AND OF THE PHOCAEAN TUF A STONE GRIFFON PROTOMES

Numerous scholars up until this day have spent great efforts in studying the origins of griffon protome attachments upon bronze cauldrons and, in our opinion, Akurgal particularly stands out as being among the most important of these. According to these studies griffon protomes appear under the influence of Late Hittite and Urartu art. In our opinion, however, the date of the appearance of cauldrons with griffon protome attachments is around the middle of the first half of the 7th century BC. We divide the development of bronze griffon protomes chronologically into three separate phases:

- The First Phase: Bronze griffon protomes made with the forging technique (680 – 650/640 BC).
- The Transitional Phase: Bronze griffon protomes in which the manufacturing techniques and the styles of both the first and second phases are used together (650/640 – 630 BC).
- Second Phase:
 - Bronze griffon protomes made with the casting technique (630-590 BC).
 - Phocaeen griffon protomes made of tufa stone (600-590 BC).

THE FIRST PHASE: BRONZE GRIFFON PROTOMES MADE WITH THE FORGING TECHNIQUE (680 – 650/640 BC)

For the forged bronze griffon protomes belonging to this First Phase the dates of all scholars are in accord.

They place the production of these first griffon protomes within the last quarter and at the end of the 8th century BC. The characteristics of the First Phase griffon protomes are different from those of the second phase. In the West these protomes have been retrieved most numerous on Samos, at Olympia and in Etruria. The mouths of these griffon protomes made with the forging technique are open. The upper jaw is in the form of an unpointed eagle's beak, while the lower jaw is more like that of a lion. The tongue is not very long. There is a puffiness under the eyes. The ears are short and the knob on the forehead is not high. The neck tresses, which pass behind the ears, also surround the forehead protuberance. There is usually a single neck tress, which ends in a spiral.

We also find these iconographical characteristics, listed above for forged bronze griffon protomes, upon Greek vases made in the Protocorinthian and Orientalizing styles. For example, on a relief-decorated vase made of clay and in the Protocorinthian style, and which was retrieved in the course of the above-mentioned Erythrai excavations, we find these traits: the upper jaw of an eagle, unpointed, the lower jaw of a lion, short ears and a low forehead protuberance. This griffon head, dated to the years 665-650 BC, recalls the heads of First Phase griffons.

On the other hand we also find similar iconographic characteristics on a griffon-headed Cycladic jug uncovered at Aigina. A short forehead knob, the lower jaw of a lion, the upper jaw of an eagle and not very long ears. Also the fact that the tresses on either side of the neck surround the forehead protuberance is again a point in common with the First Phase griffon protomes. On this vase the traits which are ahead of the First Phase bronze griffons are the slight elongation of the ears, and the increasingly pointed upper jaw in the form of an eagle's beak. E. Akurgal (1969, 183-185) and E. Simon (1981, pl. 21) date this vase to the years around 650 BC. The griffons on the vases from Erythrai and Aigina are pottery examples which are similar to the bronze griffon protomes made with the forging technique. These must be contemporary; for this reason we are of the opinion that the bronze griffon protomes made with the forging technique will not go back any further than the 680s BC. In other words we can say that the bronze cauldrons with griffon protomes first appeared in the middle of the first half of the 7th century BC.

Are the bronze griffon protomes made with the forging technique Eastern or Western? This has been much argued about. Ulf Jantzen and Hans-Volkmar Herrmann believe that all bronze griffon protomes made with the forging and casting techniques are the works of Hellenic artisans. But P. Amandry (1958, 87 ff.) states that the interiors of lion and griffon protomes made with the forging technique were filled with a material

resembling asphalt, and that this technique was always practiced in the East. Akurgal is of the same opinion. Akurgal states that these griffon protomes made with the forging technique, which we place in the First Phase, were executed with extremely soft lines, while those of Greek artisans had much harsher lines. Thus these forged bronze griffons of the First Phase cannot be the product of Hellenic artisans, but were created in the East.

We are of the opinion that if one keeps in mind the fact that bronze cauldrons with siren, bull and lion attachments are Eastern, it will not be wrong to think that forged bronze cauldrons with griffon protomes were also produced in the East. In fact one cauldron found at Olympia is quite important (Herrmann 1966, no. 103), for on this there are, besides lion and griffon protomes, attachments in the form of a sirens. The griffon protomes on this cauldron are among the very earliest. On the other hand the winged figures on the conical base of the cauldron are quite interesting. There are stylistic particularities of Late Hittite, Assyrian and Aramaic art present both in the lion protomes and in the winged figures. The large pompon found on the headresses of the winged figures are an Aramaic influence (Akurgal 2001, figs. 137, 143). It is not possible that this cauldron, produced under the influence of the late phase of Late Hittite art, could be a Hellenic work. This cauldron clearly proves that the earliest griffon protomes, which we evaluate as belonging to Phase One, appeared in the Southeastern Anatolia-Northern Syrian region. Akurgal (1969, 185, pl. 17) dates it to the end of the 8th century BC; Boardman (1995, 83, fig. 46) to the beginning of the 7th century. We think that it would not be an error to attribute it to the years 680-670 BC, that is, to the beginning of the First Phase presently under consideration. Other conical-based cauldrons retrieved in fragmentary condition at Olympia (Herrmann 1966, pls. 65-73), together with a bronze cauldron found at Prönestes (Herrmann 1966, pls. 74-75; Akurgal 2001, figs. 187-188) in the Berberini tomb and today displayed in Rome in the Villa Giulia Museum, probably come from the same workshop as the above-mentioned Olympia cauldron and their dates should be the same or very close. On the Berberini cauldron there are two griffon and two lion protomes. On the other hand, on all cauldrons of this type, at the transition to the conical base, one sees a column capital whose leaves open upwards.

Among the taxes paid in 745 BC to the Urartian king, Sarduri II, by Kuşaşpili, king of the country of Kumahali, a city-state in Northern Syria, there were 1535 bronze cauldrons (Çilingiroğlu 1984, 71; 1997, 125). It is also known that cauldrons were produced in the country of Tabal. Accordingly, we understand that there was intensive production of cauldrons in the North Syria of the 8th century BC.

In our opinion, the use of griffon protomes on bronze cauldrons is later than the appearance of bull, lion and sirens attachments. As we mentioned above, griffon protomes first appeared in South-eastern Anatolia and Northern Syria, under the influence of the late phase of Late Hittite art, around the 680s BC. They were produced in large numbers and exported to the West. They were made with the forging technique. As we will see below, in the Second Phase, they were intensively copied in the West using the casting technique and with Hellenic lines.

THE TRANSITIONAL PHASE (650/640 – 630 BC)

The transitional phase is one in which the styles and manufacturing methods of bronze griffon protomes made with the forging and casting techniques are mixed. The relevant examples are not numerous. We see that griffon protome No. 33 from Samos is made with the casting technique (Jantzen 1955, pls. 11-12). But this protome presents in its entirety the characteristics of First Phase griffon protomes, such as a low forehead knob, an upper jaw in the form of an unpointed eagle beak, the lower jaw of a lion²⁰.

A Milesian protome made with the casting technique also reflects the stylistic characteristics of the First Phase (Akurgal 1961, 191, fig. 145): the unpointed upper beak of an eagle, the lower jaw of a lion, short ears, swellings beneath the eyes. In this protome the sinuous lines particular to Eastern art are predominant. The harsh traits seen in the works of Hellenic artists are not present. In contrast, the forehead knob is getting longer. The high forehead knobs appear in the Second Phase. Also the double neck ringlets which are more often seen in the Second Phase are present here²¹.

In our opinion the works in which the forging and casting techniques are used together also belong to this transitional phase (Herrmann 1979, pls. 52-71). We surmise that the works in which the head is made by casting while the neck is made with the forging technique were probably executed by Hellenic artisans.

THE SECOND PHASE: BRONZE GRIFFONS PRODUCED WITH THE CASTING TECHNIQUE (630-590 BC)

The bronze griffon protomes produced with the casting technique and which we assign to this Second Phase have generally been retrieved at Olympia and on Samos. Because these protomes have harsh lines they

must have been created by Hellenic artists. Their style is distinct from that of the First Phase. The upper jaw in the form of an eagle beak has become quite pointed. In the lower jaw the leonine mouth has been abandoned, transformed into an eagle beak. The knob on the forehead is quite high and erect and the ears have enlarged considerably, we might say that they have passed from being horse ears to donkey ears. The tresses on the two sides of the long neck are sometimes single, sometimes in pairs. Their ends do not extend to the forehead knob as in the First Phase protomes. Instead, they begin behind the ears. The mouth is wide open. The tongue has become longer and more pointed. Its end curves upwards. With all these characteristics the Second Phase griffon protomes are distinct from those of the First Phase.

In Hellenic vase paintings we see the Second Phase griffon type in the Corinthian transitional style phase. In the transition from Protocorinthian to Corinthian, around 640-625 BC, we encounter the lion-bodied, winged griffon type in canonical form (Payne 1931, pl. 16 fig. 2). There is a griffon upon the shoulder of an oinochoe belonging to the Orientalizing period and which is today exhibited in the Louvre Museum in Paris. On this griffon (Akurgal 1987, Lev.5; M. Akurgal 1997, pl. XX.) we can find the characteristics of the bronze griffon protomes produced with the casting technique which we evaluate as being within the Second Phase, such as the long ear, the high forehead knob, the pointed upper beak of an eagle, the long, pointed and upward-curving tongue. These griffon depictions on Hellenic vases clearly show that bronze griffon protomes produced with the casting technique were the fashion at that time. The griffon protomes of Phocaea are stylistically very close to these Second Phase griffons. Thus the bronze griffons of this phase were still the fashion when the Phocaeian Temple of Athena was being designed.

Up to the present no griffon protomes in the style of the Hellenic examples produced with the forging technique have been retrieved in the East. The griffon protomes made with the casting technique must be the work of Hellenic artists. The style of the Second Phase bronze griffon protomes is not very far removed from that of the First Phase bronze protomes; thus we think that it would be an error to think that the dates of the First and Second Phase griffon protomes, produced with the forging and casting techniques, are different. On the other hand the dates of the Greek vases mentioned above are also in conformity with these phases.

20.- Akurgal dates the Samian protome no. 33 to the 700s BC and theorises that the work was produced by a visiting artist from the East (Akurgal 1992, 41).

21.- Akurgal dates the Milesian protome to the first quarter of the 7th century BC and proposes that this work was made by an Anatolian artist schooled in the Hellenic style (Akurgal 1992, 41).

The ancient writer Herodotos also mentions these cauldrons. According to him (Herodotus 4.152), a brave sailor, Kolaïos of Samos, went to Tartessos in Spain in the 630s BC, which as is well known, is where the Phocaeans went. When Kolaïos returned to his native island of Samos he gave 1/10th of his profits to the Samos Heraion. The gift was a bronze cauldron with griffon protomes and was presented to the goddess Hera as an offering. From this we understand that griffon protomes were being produced in the West in those times. Numerous griffon protomes have in fact been found on Samos.

THE PHOCAEAN GRIFFON PROTOMES MADE OF TUFF STONE (600-590 BC)

The Phocaean griffon protomes were found together with the cella blocks of the earthquake-destroyed Temple of Athena. The protomes decorated the cella wall of the temple and were made at the date when the temple was constructed. On the basis of both ceramic and architectural finds, the temple was dated by us to the years 600-590 BC; thus the griffon protomes must be from the same date.

The griffon protomes of Phocaea are very close to the style of the bronze griffon protomes made with the casting technique that have been described above in the Second Phase. Thus their dating must also not be very far removed from the latter. The griffon protomes of Phocaea must have been designed by Ionian artists, taking as a model the cauldrons with griffon attachments which we considered within the Second Phase. The relief tresses ending in a spiral that are seen on the two sides of the griffons' necks are also present on the Ionic capitals of the Temple of Athena. Thus the griffon protomes must have been made by the same artisans who carved the capitals, and at the same time. These Ionian artisans did not go to the Late Hittite and Urartian centres for their inspiration. Instead, cauldrons with attachments that had been created under the influence of Late Hittite and Urartian art became in turn a mythological source of inspiration to, and an influence upon, the Ionian artists, and the Phocaean griffon protomes were produced as a result of this.

The Temple of Athena at Phocaea is one of the oldest in the Ionian world. For this reason a second uncovering of the remains of the temple and the re-erection of a portion of it are of great importance for the Ionians who founded today's Western civilization, for one of their greatest cities, Phocaea, and for the modern settlement of Foça located upon it. The completion of the excavations and, after restoration, the re-erection of one section of the temple together with its griffon and horse protomes will be a visible reflection of Phocaea's past upon our own day.

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