# ACHAEMENID ARCHITECTURE IN SOUTH CAUCASUS AND THE BLACK SEA CULTURAL BASIN

# GÜNEY KAFKASYA VE KARADENİZ KÜLTÜR HAVZASI'NDA **AKHAİMENİD MİMARİSİ**

# Saba BEİKZADEH\* - Farshid İRAVANİ GHADİM\*\*

# Makale Bilgisi | Article Info

Başvuru: 2 Ocak 2017

Received: Jenuary 2, 2017

Hakem Değerlendirmesi: 5 Ocak 2017

Peer Review: Jenuary 5, 2017

Kabul: 17 Şubat 2017

Accepted: February 17, 2017

DOI Numarası: 10.22520/tubaar.2017.20.007 | DOI Number: 10.22520/tubaar.2017.20.007

Keywords: Achaemenid Architecture, Cultural Region of the Black Sea, Southern Caucasus, Achaemenid Art

Anahtar Kelimeler: Akhaimenid Mimarisi, Karadeniz Hayzası, Güney Kafkasaya, Pers Stili

# **ABSTRACT**

The Achaemenid architecture is the most exquisite art of this culture due to the artistic and technical features. New excavations in the cultural region of the Black Sea and the southern Caucasus represent accumulation of Achaemenid artistic evidences and the effects of the Persian Style on the architecture. It contains palaces, columned halls, Gates, and temples. Achaemenid palaces with pedestals in Pontus and Oluz Höyük other monuments from Sari Tepe, Gumbati, Benjamin, Qaracamirli, Samadlo, Sarikhe, Zikhiagora are identified. All of them have similar features as Achaemenid's.

They reveal a kind of concordance in structures and decorations. Whence there are a vast number of the Achaemenid architecture evidences, an extensive scientific investigation is discussed. The most important question of this research is to introduce the homogeneity state of the Achaemenid architecture in the area of research. It is a fundamental investigation Conducted by a descriptive - Analytic method and documentation based in quantitative method and analysis the evidences.

M.A., (History of Art), E-mail: sababeakzadeh@yahoo.com

<sup>\*\*</sup> Assistant Professor Dr., Department of Archaeology Faculty of Conservation Art University of Isfahan, E-mail: iravanline@aui.ac.ir

# ÖZET

Akhaimenid mimarisi, artistik ve teknik özelliklerinden dolayı bu kültürün en enfes sanatıdır. Kara denizin kültürel bölgesi ve Güney Kafkasya'da yapılan yeni kazılarda Akhaimenid artistik bulgular ve mimaride Pers etkileri bulunmuştur. Bu bulguların arasında saraylar, sütunlu salonlar, kapılar ve tapınaklar vardır. Pontos ve Oluz Höyükte ki, Akhaimenid saraylarda bulunan kaideler, Sari Tepe, Gumbati, Benjamin, Qaracamirli, Samadlo, Sarikhe, Zikhiagora da bulunan başka anıtların tamamında Akhaimenid etkileri görülmüştür.

Bu yapılar yapım ve süsleme açısından bütünlük içerisindedir. Her ne kadar pek çok Akhaemenid mimari buluntu ve geniş bilimsel araştırmalar tartışılsada, önemli olan Akhaemenid devletinin mimarisinin homojen yapısının ortaya çıkartılmasıdır. Bu durum en azından çalışmamızın odağını oluşturan bölge için geçerlidir. Bu temel araştırma betimleyici-analitik yöntem kullanılarak ve dokümantasyon nicelik olarak incelenmiştir.

#### INTRODUCTION

Cyrus the Great spent the early years of his monarchy in Anshan, and then in Ecbatana and Babylon. The thought of establishing a great capital came to his mind after the conquest of Lydia and by observing the magnificent religious buildings and modern architecture of that land. So a group of Ionic and Lydian stonemasons were brought to the Persia. The footprints of them can be seen in Pasargadae on elements such as platform, columns and clamps used for fastening the stone blocks. As the Achaemenid architecture reveals harmony and proportion and also massive and magnificent palaces of the Achaemenid kings form important buildings, it could be considered as an art index of this era. It is identified in areas dominated by Achaemenid and either attributed to the constructions of the Achaemenid nobles or the influence of The Achaemenid architecture

The Black Sea is located between southeastern Europe and Anatolia. It is connected to the Marmara Sea through the Bosporus Strait and by the Dardanelles Strait to the Aegean Sea. It has had vital importance in the regional trade throughout the ages. The Black Sea is surrounded by six countries. It has borders with Ukraine on the north, Russia on the North-East, Georgia on the east, Turkey on the south, Romania and Bulgaria on the west. The works from the basin of the Black Sea indicate its importance in pre- history, and historic periods. A new chapter was opened in the field of the art and culture<sup>1</sup> by Cyrus the Great and Darius I in 514 BC regarding to the battles with the Scythians in the south area of Danube and conquest Thrace region (Tris).

The background research of the Achaemenid on the north of the Caucasus Mountains started with the theory of Tolstikov and continued with the theory of Vinogradov who believed in the effect of the local art. He considered sakaib art as an effective factor on the areas of Bosphorus more than the Achaemenid art<sup>2</sup>. Until the 1970s, there was not almost any excavation in the settlements of the Iron Age in Georgia. The Georgian archaeologist Gagoshidze was the first person who emphasized on the

important role of the Achaemenid architecture in this area he compared the tower like temple of Samadlo in the center of Georgia with similar buildings in Achaemenid imperial and Urartu<sup>3</sup>.

A discussion about the Achaemenid effect on the northern coast of the Black Sea was proposed by Fedoseev in 1997. He dealt with the collection of some of the Achaemenid goods which inspired by the Achaemenid arts. They were mainly seals and coins.

The theory proposed by Fedoseev was criticized by Molev in 2001. He believes that the existing works only prove the cultural and economic relationship between colonies and their metropolis conveyed by some of the elements of the Achaemenid culture and nothing more. The last publication and data accumulation the Achaemenid goods and inspired with the Iranian art related to the north region of Black Sea have been done by Treister<sup>4</sup>.

At the beginning of twentieth century, Smirnov claimed some of the findings in the Sites of the Southern Caucasus have Achaemenid origin<sup>5</sup>.

With the new findings Anochin, concludes that the ambassadors and Achaemenid merchants had strong presences in the region of the Black Sea. It was attested by two Achaemenid cylinder seals from Kerch. They have artistic court style. Iranian kings or fighters have been depicted on seals while fighting with enemies and defeating them<sup>6</sup>.

Identified Achaemenid architectures in Southern Caucasus and cultural region of the Black Sea

## **PALACE**

According to the conducted investigations in this research, 5 palaces were identified as follows:

# Sari Tepe Palace

An extensive structure was discovered uncovered in Azerbaijan on the outskirts of the modern town Kazakh in the Kura village at the west part of the Sari Tepe, (Fig. 1). There were two bell shape Achaemenid pedestals (Photo 1) and some potteries and earthen wares attested

V. (Rehm 2010:171-173), (Lukonin/Ivanoy 2012: 90), (Gergova 2010:78), (Трейстер 2013:351), (Venedikov 1977: 42-45), (Yablonsky 2010: 138), (Dzhavakhishvili 2007:118), (Simpson 2005: 124), (Sideris 2008:343), (Curtis 2005: 133), (Ignatiadou 2005.419), (Triantafyllidis 2001: 13), (Babaev/Gagoshidze/Knauß 2007: 31-45), (Babaev./Gagoshidze/Knauß 2009: 88-91) (Bill 2010:15-20), (Erlikh 2010: 47-65), (Knauss/Gagoshidze/Babaev 2010:111-122), (Shemakhanskaya/Treister/Yablonsky 2009:211-220), (Summerer2003:17-42), (Termartirossov 2001: 155-163), (Трейстер М.Ю (Бонн) 2010: 335-377), (Treister 2007:67-107).

<sup>&</sup>lt;sup>2</sup> Nieling, 2010:123.

<sup>&</sup>lt;sup>3</sup> Knauss 2005: 200.

<sup>&</sup>lt;sup>4</sup> Nieling 2010: 123-124.

<sup>&</sup>lt;sup>5</sup> Knausss 2005: 200.

Nieling 2010: 131.

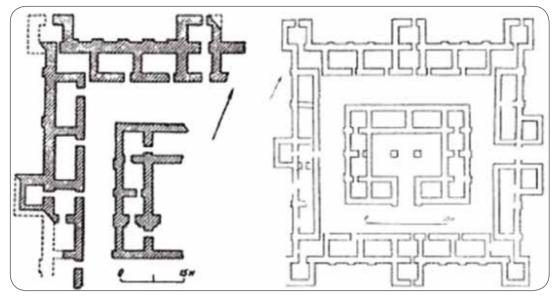


Figure 1: Sari Tepe / "Palace" Plan / Sari Tepe / "Saray" Planı (Khatchadourian 2008: 441)



Photo 1: Sari Tepe / Pedestal / Sari Tepe / Sütun Altlığı (Knauss / Gagoshidze / Babaev 2013: 5)

the presence of an Achaemenid palace. The pedestals were similar to Susa's and Persepolis' pedestals. Similar pedestal was identified in Caucasus and Gumbati<sup>7</sup>.

## Qarajamirli Palace

A clay-brick wall with the limestone glaze was discovered after digging half a meter of the soil in the first year of excavation in Ghorban Tepe in Azerbaijan. The height was about 1.70 meter. Then, an area was opened with dimensions of approximately 2000 square meter (Fig. 2). In the east side of the hill an entry with an architectural plan of two rows of six columns was identified. It seems to be a gateway to access central building. A podium with

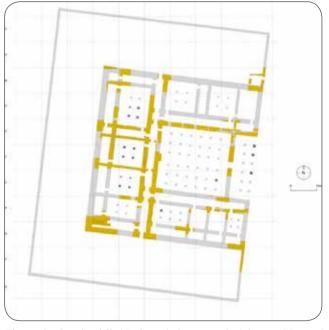


Figure 2: Qarajamirli / Palace / Qarajamirli / Saray (Knauss/ Gagoshidze/Babaev 2013: 11)

a width of 2 meters and a depth of 1 meter and a height of 3 meters was identified in the western part behind the large main hall<sup>8</sup>.

A vast hall in the central axis of the building was identified in the east side of the entrance<sup>9</sup>. The main hall is 27×27 square per meter. The roof must have been supported by 6 pedestals. The mud floor was probably rugged by carpets. Based on the architecture analysis, the architecture has been symmetric. One should be pass a long corridor to access the rooms. It is supposed the walls of the rooms were supporting ones and have bored

<sup>&</sup>lt;sup>7</sup> Knauss 2006: 96-97.

<sup>&</sup>lt;sup>8</sup> Knauss / Gagoshidze/Babaev 2013:10-12.

<sup>&</sup>lt;sup>9</sup> Babaev / Gagoshidze/Knauss 2007: 35.



Figure 3: Qarajamirli /Ghorban Tepe Palace / Qarajamirli /Ghorban Tepe Sarayı (Knauss/Gagoshidze/ Babaev 2013: 14)



Photo 2: Qarajamirli / Pedestal / Qarajamirli / Sütun Altlığı (Knauss/Gagoshidze/Babaev 2013: 12)

the heaviness on the roof. A porch has been discovered in the excavated section (Photo 2). The north-south corridor separates the west- east part. It is also the entrance way of four large halls. A six columns hall has been separated from other places by this corridor. There are small rooms behind the corridor (Photo 3). The corridor ended to a stairway in the southwestern side. The thickness of the wall shows its remarkable height. Outer walls have been usually made of seven mud bricks. The walls are 2.60 meters in height. The rooms have been surrounded by the thick walls made of 5 bricks. The walls are 1.85 meters in height (Fig. 3). The size of mud bricks are  $33 \times 33 \times 12$  centimeters. There is a sand layer beneath the mud bricks. A clay layer and sand temper are beneath the pedestals<sup>10</sup>.

Some wooden beams stand on the bell- shaped pedestals made of limestone, have supported the roof of the hall (Figs.4-6). These bases are decorated on top with the

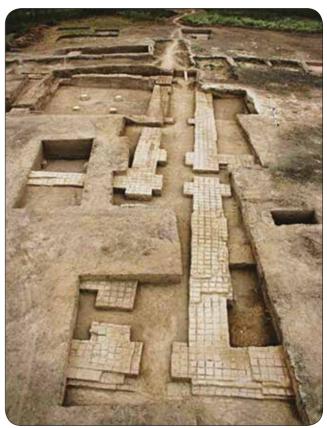


Photo 3: Ghorban Tepe/ North-South Corridor / Ghorban Tepe / Kuzey-Güney Koridoru (Knauss/Gagoshidze/ Babaev 2013: 13)

vertical leaves and petals and a torus (Photo 4). The shaft of the columns is 60 centimeters in height (Fig. 7)<sup>11</sup>.

The plan of this structure is comparable with the structure of Ideal Tepe. Another kind of pedestal has been found in the northwest of the six columns hall (Photo 5). The bell shaped pedestals were used in two identified four

<sup>&</sup>lt;sup>10</sup> Knauss/Gagoshidze/Babaev 2013: 12- 14.

<sup>11</sup> Babaev/Gagoshidze/Knauss 2007: 35.



Figure 4: Qaracamirli / A Column Base / Qaracamirli / Bir Sütun Altlığı (Babaev/Gagoshidze/Knauss 2007: 37)

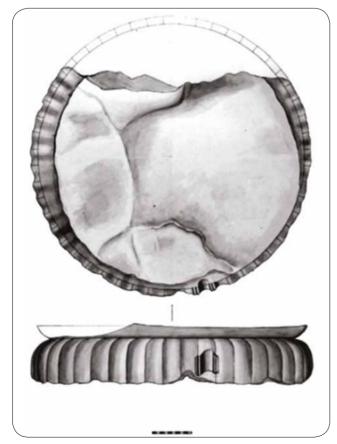


Figure 5: Qaracamirli / A Column Base / Qaracamirli / Bir Sütun Altlığı (Babaev/ Gagoshidze/Knauss 2007: 38)

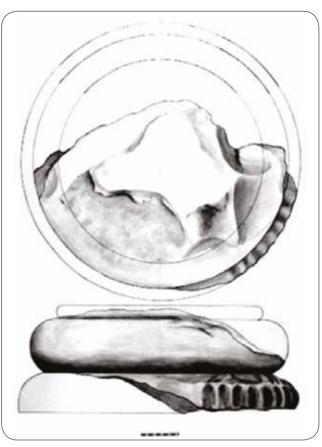


Figure 6: Qaracamirli / Azerbaijan, A Column Base / Qaracamirli / Azerbaijan, Sütun Altlığı (Babaev/Gagoshidze/Knauss 2007: 39)

columns halls (Photo 6). There are less delicate square shaped pedestals in the west and south parts<sup>12</sup>. There are a large number of hills around the temple- house. The pedestals made of limestone were discovered as same as those ones in Daraya Takh. Similar pedestals have been found in some historical sites in Iran and Mesopotamia. However, these pedestals seem to be simultaneous with Achaemenid bell shaped pedestals<sup>13</sup>.

About 150 pieces of pedestals have been found in Qarajamirli (Ghorban Tepe and Ideal Tepe). Qarajamirli has not been probably a center of satrapy as Zikhia-Gora. For this reason, Achaemenid style structures have not made of stone and wood as a local character has been used such as Caucasus.

#### **Gumbati Palace**

The remains of a monument (Fig. 8) were discovered in Alasani valley in the easternmost region of modern Georgia called Gumbati, it has been built in the 5th or early 4th century B.C. The ground plan measures approximately

<sup>&</sup>lt;sup>12</sup> Knauss/Gagoshidze/Babaev 2013: 15.

<sup>&</sup>lt;sup>13</sup> Babaev/ Gagoshidze/ Knauss 2007: 4.



Photo 4: Qarajamirli / Pedestal / Qarajamirli / Sütun Altlığı (Babaev/Gagoshidze/Knauss 2007: 40)

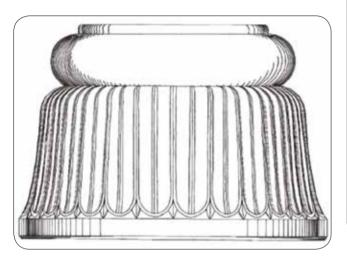


Figure 7: Qarajamirli / Reconstruction of the Bell-Shaped Column-Base of the "Palace" / Qarajamirli / Saray İçinde Çan Şeklindeki Sütun Altlığının Yeniden Yapılandırılması (Babaev/Gagoshidze/Knauss 2007: 40)

40 by 40 meters. The fragments of at least five bell-shaped pedestals (Photo 7) as and as a torus made of local limestone have been found, unfortunately none of them was in situ. One of the three bell shaped pedestals had the greatest diameter of approximately 84 cm, and two others were a little bit smaller relatively 73 cm. One may guess there were two columned halls or porticoes. There might be an entrance hall in the west part and a main hall in the center. Whether the central part was completely roofed or, designed as an open courtyard, is unanswered due to the insufficient archaeological evidences. No doubt such an edifice of this size and architectural decorations must have been primarily an administrative building. The functions such as religious activities might have been added. Neither its architecture nor any findings make us think that it was a temple. The towers and protrusions of the building exterior have fortification characters, but at least the pedestals show that it has not been a fortress. It must have been a kind of palace in the sense of a different use such as public with residential functions the existence of a small military detachment is a possibility that cannot be ruled out. The prototypes of such monuments are royal palaces in Persepolis and Susa. Architectural plan and small



Photo 5: Qarajamirli / Pedestal in Six Columns Hall / Qaracamirli / Altı Sütunlu Salon Sütun Altlıkları (Knauss/Gagoshidze/Babaev 2013: 16)



Photo 6: Qarajamirli / Bell Shaped Pedestal in four Columns Hall / Qarajamirli / Dört Sütunlu Salon Çan Şeklinde Sütun Altlıkları (Knauss/Gagoshidze/Babaev 2013: 15)

findings make it probable that the great building in Gumbati has served as the residential place of a Persian officer or a local chieftain - as vassal of the Great King. Anyway, it gives convincing proof of Persian presence in this region<sup>14</sup>.

<sup>14</sup> Knauss 2006: 89-91.

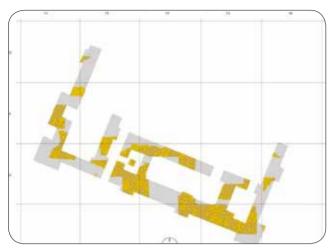


Figure 8: Gumbati / "Palace" Reconstruction / Gumbati / "Saray" Rekonstrüksiyonu (Knauss/ Gagoshidze/ Babaev 2013: 3)



Photo 7: Gumbati / Pedestal, Bottom / Gumbati / Sütun Altlığı, Alt Kısım (Knauss 2006: 90)

The quality of execution makes us suspect that at least some of the craftsmen have been foreigners. For example, the incisions on the bottom of a pedestal from Gumbati (Photo 8) indicate that they have been made by experienced stone-cutters. The purpose of those incisions was to divide a circle into four identical sections, using geometric formulas. At these points the stone-cutter made a notch on the exterior. These notches are still visible at the end of the spandrels. The pedestals and capitals show that the builder-owners have had close relationship with the Achaemenid Empire<sup>15</sup>.

# **Benjamin Historical Building Complex**

Felix Ter-Mmartirossov uncovered several monumental complexes at a site called Benjamin about 10 km southwest

Photo 8: Gumbati / Pedestal, Bottom / Gumbati / Sütun Altlığı, Alt Kısım (Knauss 2006: 96)

of Kumairi in north-western Armenia in the late 1980's. Three different stages of a huge building can be distinguished (5<sup>th</sup> -1<sup>st</sup> centuries BC). The earlier levels must have been contemporary with the "palaces" in Sari Tepe and Gumbati.

The pedestals made of local black tufa are found in this site. The excavator assumes that this building had cultic function but as no significant relevant structure or even a small ritual finding has been found; this interpretation is not decisive. It might have used as a place. Bell-shaped pedestals seemed to belong to the earlier phase and concurrent with the Achaemenid period<sup>16</sup>.

It was a large palace in the shape of rectangular. The palace was built in 5th century BC. Later on it has been reconstructed several times until the early Roman period in the Armenia based on the Augustan coins found there. At the first stage of settlement, the palace was almost square in plan with approximate dimensions of 28 × 28 (Fig.9). The lower parts of the walls were made of stone and upper parts were made of mud-bricks decorated with flat pilasters rested. The building included two large square rooms located in the central part, which were surrounded by rectangular rooms. The palace had two entrances or doors in the south. Functionally, the complex was a combination of the ritual rooms in the eastern part and ordinary rooms in the west. The central rooms might have had ritual function. The sanctuary was opened to a columned room in the north was supposed as a treasury. The western part was separated from the east side by a wall without passage. This part has been apparently a palace. A lotus shaped pedestal with flutings was found in this part (Fig. 10 / Photo 9). It was made of black

<sup>15</sup> Knauss 2006: 95

<sup>16</sup> Knauss 2006: 100.

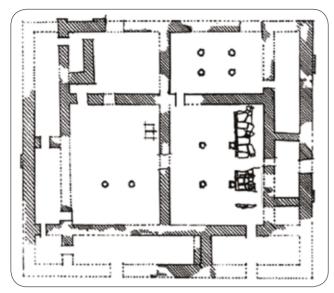


Figure 9: Benjamin / Plan of the Palace-Sanctuary / Benjamin /"Saray- Koruma Alanı" Planı (Termartirossov 2001: 158)

tufa-stone and has a diameter of 70 cm. A large number of pedestals have been found in the other part of the building. The majority of them had a torus-like shape (round) (Fig.11). The decorations of one of the black tufa pedestal remind the pedestals in Persepolis. But it has a different shape, a low square plinth on which a large round torus is placed. It is decorated by large stylized embossed petals. There is another torus above which marked on for putting the column. Perhaps Asia Minor and Iran had influences on the pedestal in question. The edges of the petals which have sprung outwards from a smooth cylinder are characteristics of the buildings of the reign of Artaxerxes I in the middle of the 5th century BC. Some of these pedestals were rearranged or moved, while others were destroyed during the reconstructions of the palace in post Achaemenid period. To calculate the number of the completely preserved pedestals and the fragments, there could have been 8 or 10 columns in the building. The columns themselves were made of wood. Considering the placement of the pedestals found in situ and the later reorganizations, the original layout of the building and the disposition of its columns seem to be as following: two torus pedestals have been placed in the sanctuary or along the paved floor or more probable in the entrance of the sanctuary. 4 or 6 pedestals were in the central part of the treasury while the other two pedestals were situated in the central part of the room<sup>17</sup>.

# Oluz Höyük Palace

Oluz Höyük is located 2 km north-west of Gözlek village and 5 km east of Toklucak (former Oluz) village and 3 km south of Amasya-Çorum south of the highway in Turkey.



Photo 9: Benjamin / Pedestal / Benjamin / Sütun Altlığı (Knauss/ Gagoshidze/ Babaev 2013: 6)

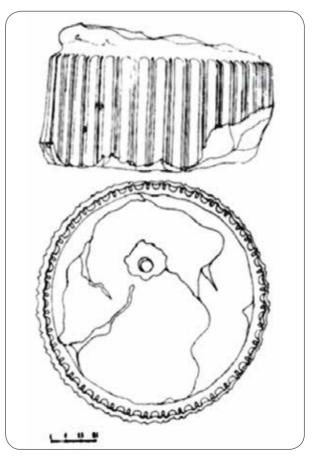


Figure 10: Benjamin / Pedestal / Benjamin / Sütun Altlığı (Termartirossov 2001: 159)

As a result of systematic archaeological excavation in 2011 four main cultural strata were found. Achaemenid new findings and architecture are very important in the Oluz Höyük. The second cultural layer (425-200 B.C.) is divided into two main stages, A and B. This layer is characterized of the architecture with a building complex

<sup>&</sup>lt;sup>17</sup> Ter-Martirossov 2001: 159-160.

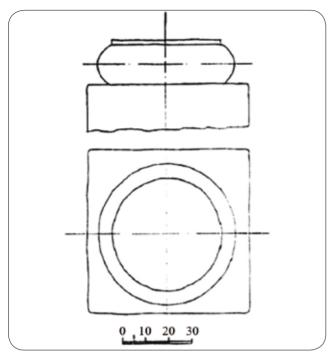


Figure 11: Benjamin / Pedestal / Benjamin / Sütun Altlığı (Termartirossov 2001: 159)

thought to be a small palace or mansion in the north (Photo 10)<sup>18</sup>. Potteries and a monumental stone paved road extending from southwest to northwest reflect the Achaemenid traces<sup>19</sup>.

#### **COLUMNED - HALL**

Based on the investigations conducted in this research, two columned halls were identified as follows:

# **ARGISHTIKHINILY COLUMNED- HALL**

Argishtikhinily was an important Urartian center in the Caucasus. It became an Achaemenid settlement in the 500 BC. It is difficult to define the "Achaemenid" layer, but several renovations, e.g., a hall in the western part of the citadel (Fig.12), may have related to the Achaemenid occupation. The ceramic assemblage sometimes shows close affinities to Achaemenid shapes. Nevertheless, it is uncertain whether these vessels have been made in the Achaemenid period or in Hellenistic time. Some of the Elamite cuneiform tablets dated to the 6<sup>th</sup> or 5th centuries B.C.<sup>20</sup> refutes the theory of the termination of the settlement in the Achaemenid period. Despite the differences of opinion about the text of the tablets linguistics accept to date them back to the end of the 6<sup>th</sup>



Photo 10: Oluz Höyük / Called A and B Phase Stratum is Characterized by the Remains of a Building with a Small Palace Features or North Showing the Site Host, and Southwestern Architecture / Oluz Höyük / A ve B Olarak Adlandırılan İkinci Mimari Tabaka, Küçük Bir Sarayın Kalıntıları, Kuzey Bina (Malikane) Ve Güneybatı Mimarisi (Dönmez 2012: 145)

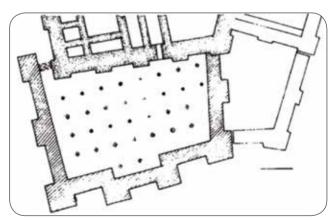


Figure 12: Argishtihinili (Armavir) / Citadel, Western Hall / Argishtihinili (Armavir) / Kale, Batı Salonu (Knauss 2006: 101)

and the first quarter of the 5<sup>th</sup> century BC. At the same time the columned hall was built at the entrance of the fortress<sup>21</sup>.

According to Geoffrey Summers this monument was the center of Armenia or the 13<sup>th</sup> satrapy. The archeological materials let us to consider Armavir (Argishtikhinily) as a large administrative center or even the center of the Armenian satrapy<sup>22</sup>.

<sup>&</sup>lt;sup>18</sup> Dönmez 2012: 145.

<sup>&</sup>lt;sup>19</sup> Dönmez 2011: 118/Dönmez, 2012: 142-145.

<sup>&</sup>lt;sup>20</sup> Knauss 2006: 100-102.

<sup>&</sup>lt;sup>21</sup> Ter-Martirossov 2001: 156.

<sup>&</sup>lt;sup>22</sup> Ter-Martirossov 2001: 157.

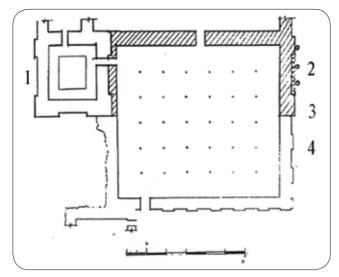


Figure 13: Erebuni / the Apadana, 1. Urartian 2. Post Urartian 3. First Achaemenid Period 4. Second Achaemenid Period. Erebuni / Apadana, 1. Urartu 2. Post-Urartu 3. Birinci Akhaemenid Dönemi 4. İkinci Akhaemenid Dönemi (Termartirossov 2001: 157)

#### **EREBUNI COLUMNED- HALL**

The Urartian fortress Erebuni is located on a hill called Arin Berd in the eastern outskirts of Erevan<sup>23</sup>. Erebuni was an important administrative center in the Achaemenid times. Felix Ter- Martirossov continued an excavation in this site again in the 1990's. His investigations mainly focused on the Achaemenid layers. According to Ter-Martirossov a number of the columned halls have been redesigned and built during the Achaemenid period (Fig.13)<sup>24</sup>.

There was an Achaemenid fortification on which 2 meters of height has left. Also, there were traces of an Achaemenid cultural stratum which had a depth more than one meter in some parts. It now appears that it could have been a fortified Achaemenid center, built on the site of an Urartian fortress also it was reconstructed and annexed to another part of the building.

A complex with a hall of 30 columns which could be called an Apadana was another discovery. It was the basis of the accurate identification of Erbuni as a center of the 18th satrapy by G. Tiratsyan and others.

It is supposed that the Apadana has been built on a place where had originally existed a hall with 12 columns belonged to the Urartian temple of Khaldi. It was has been also suggested that a hall with 18 columns was attached to the hall in the 5<sup>th</sup> century, thus creating an Apadana was formed.

The exploration carried out in 1999 showed that the Urartian cultural stratum is more deep and the level of the floor of the Urartian structures is 120 cm lower than the floor of the 12 columned- hall. Thus, the study of the stratigraphy gives the following picture: the Urartian cultural stratum was covered by a new clay-rammed floor 40 cm above the Urartian floor. The floor was paved by stone slabs and stretched beneath the wall of the 12 columned- hall. Also three large cylindrical pedestals stand along the paved floor. Later on, this structure was covered by another clay-rammed floor and the 12 columned- hall has been erected over it. Only later the walls of the Apadana annexed.

Thus, at first the site was the Urartian temple of Khaldi then a construction including a paved floor and some columns was erected near the temple in the 6<sup>th</sup> century. Hereafter, the 12 columned- hall was established. It seems the construction of the 12 columned hall in Erbuni related to the transformation of the function of the site into the center of 18<sup>th</sup> satrapy in the 5<sup>th</sup> century BC. The construction of Apadana is supposed to be dated to the middle of the 4<sup>th</sup> century<sup>25</sup>.

It is unique since the Apadana of Erbuni is the only building of this type found outside Iran. This structure would not been built by accident. It may be related to a specific historical person, named Orontes, who was the satrap of Armenia at the end of the 5<sup>th</sup> and the beginning of the 4<sup>th</sup> century BC. He married the daughter of the Achaemenid king Artaxerxes. He was the leader of the revolt of the satraps and minted his own coins which were the king's prerogative. Therefore it is probable to assume that the reorganization of the 12 columned- hall into an Apadana was the result of his royal aspiration<sup>26</sup>.

#### **PROPYLEION**

According to the conducted investigations in this research, 1 propyleion is identified as follows:

# QARAJAMIRLI PROPYLEION IN AZERBAIJAN

A limestone pedestal with cyma-recta-profile was found near the village Qarajamirli, Shamkir district in

<sup>&</sup>lt;sup>23</sup> Archaeological investigations began in 1950. According to the archaeological evidence the fortress has not been destroyed at the time of the fall of the Urartian Kingdom, whereas Karmir Blur on the northwestern border of Erevan, residence of the Urartian governor of Transcaucasia, was razed to the ground and completely abandoned in the second half of the 6th century BC.

<sup>&</sup>lt;sup>24</sup> Knauss 2006: 102.

<sup>&</sup>lt;sup>25</sup> Ter-Martirossov 2001: 157-158.

<sup>&</sup>lt;sup>26</sup> Ter-Martirossov 2001: 160.

Azerbaijan (Photo 11). This is a typical Achaemenid piece of architectural decoration and such prototypes are known from Susa and Persepolis. It belongs to the type of the bell-shaped pedestal which has been used at least from Darrius I until Artaxerxes II (521-359 BC). Such pedestals have exclusively been found in connection with the monuments owned by high Achaemenid officials<sup>27</sup>. Both the substance (limestone) and the execution of several details suggest that it had been made in the same workshop as the workshop of the bell-shaped pedestal found in Gumbati. The later workshop was in shamkir 60 km far from Gumbati<sup>28</sup>.

A large building of the Achaemenid period has been uncovered in Ideal Tepe near Qarajamirli. This is a large clay brick building of an almost square plan (Fig.14). The dimensions are 22m×23m and come close to the buildings in Pasargadae and Susa. The structure consists of a complex of three columned rooms in the central axis: an eastern portico with probably two columns, a central hall with four columns and a four columned- portico on the west part. These rooms were flanked by symmetrical subsidiary elements to the north and south. Visitors access to these rooms only through the central columned hall<sup>29</sup>.

The thickness of outer walls is almost 1.5m (four bricks), whereas the thickness of the inner walls is a few more than 1m (three bricks). The building lacks any decoration of pilasters or niches, which are characteristics of many Achaemenid structures. A conspicuous mud-brick structure may indicate that there was a staircase or a podium in the southwestern room of the building. In most cases, four layers of mud-bricks have left but sometimes not more than one, has been preserved; The size of these bricks are approximately 34 by 34 cm and their thickness are 12 cm. The use of half-bricks facilitated the bonding. A gravel foundation served as a drainage system in an unclear case and has revealed the extension of the walls<sup>30</sup>. Also pedestals had a sand foundation. The walls and floors were covered by clay<sup>31</sup>.

To estimate both the diameter of the pedestals and the width of the walls, a height of 5m or even 6m seems reasonable. The pedestals are 89cm in diameter at the bottom. The incision on top of the bases, in the torus shows a smaller diameter as 52 cm. That is approximately one royal Persian cubit. Remained traces by chisels and incisions on the bottom as well as on the front of the bases



Photo 11: Qarajamirli / Pedestal / Qarajamirli / Sütun Altlığı (Babaev/Gagoshidze/Knauss 2007: 33)

show that they have been made by skilled stonemasons. The column drums as well as the capitals must have been made of wood as no limestone fragments of which have been identified among the more than 150 pieces of the sculpture in Oarajamirli. It worth mentioning, up to the present day no stone column shaft and only two or three stone capitals from the Achaemenid era have been found all over Caucasus. One of them is the wellknown protome double-bull capital from Zikhia-Gora. A wooden structure must have borne the roof of the building in Ideal Tepe previously. It would have been flat as Mesopotamian used roofs. The wide alleyway on the central axis assures that this edifice was a monumental gate or a propyleion. This fact that two corresponding walls join the building from the north and south is a further conjecture. From the beginning, it was clear that this monument had been erected in Achaemenid period due to the masonries (Fig.15). This type of bell-shaped pedestal is exclusive to this period and to the Persian Empire. Except the major centers in Iran and Babylon, they have been only found in the southern Caucasus. They have been in Armenia, Georgia and Azerbaijan. The rectangular plan of the building, the architectural decorations and the regular sized mud-bricks prove that this structure in Oarajamirli has been designed and built by architects and craftsmen who had been familiar with the Achaemenid architecture. Before the arrival of the Persians in Caucasus, no architecture of the same size and elegance had been known in this place<sup>32</sup>. Those ceramics which have been found by chance on a flat mound near the spot pedestals hint at the settlement of the middle or late Iron Age<sup>33</sup>.

The potteries from the propyleion are dated to the midfifth to the late fourth century BC. However, the building may have been established earlier. For historical reasons,

<sup>&</sup>lt;sup>27</sup> Babaev/Gagoshidze/Knauss 2007: 31-32.

<sup>&</sup>lt;sup>28</sup> Knauss 2006: 97-98.

<sup>&</sup>lt;sup>29</sup> Babaev/Gagoshidze/Knauss 2010: 111.

<sup>&</sup>lt;sup>30</sup> Babaev/ Gagoshidze/ Knauss, 2010: 112.

<sup>31</sup> Babaev/ Gagoshidze/ Knauss, 2007: 41.

<sup>32</sup> Knauss / Gagoshidze / Babaev 2010: 113.

<sup>33</sup> Knauss 2006: 98.

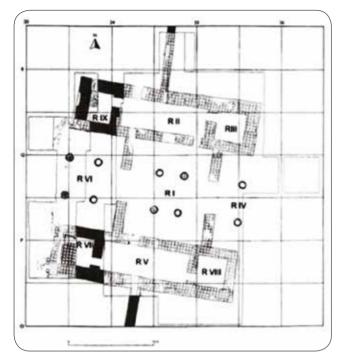


Figure 14: Qarajamirli / Plan of the Propyleion on Ideal Tepe / Qarajamirli / İdeal Tepe Geçit Planı (Knauss/Gagoshidze/Babaev 2010: 112)

the propyleion might have been erected after the Persians occupation in the late sixth century BC, probably in the course of the campaign of Darius I against the Scythians in 513-512 BC. The site was probably abandoned when the Empire fell apart following the invasion of Alexander the Great. Since there is no evidence for a violent destruction at the end of the Achaemenid occupation, the Persians must have took their goods and chattels and gone home after getting the news of darius' death and the final defeat around 330 BC. Local farmers or stockmen had taken shelter in this building. Some years later the central part collapsed and was never rebuilt but an oven, a fire place, pits, grain deposits and potteries in peripheral rooms reveal that life has continued there for quite a while. A large number of painted potteries help us to date the post-Achaemenid layer in the late fourth or early third century BC. Such examples exist only in eastern Georgia<sup>34</sup>. Some glazed bricks which seem to be used in roofs and a monumental propyleion joined to the enclosed walls are significant evidences of an important Achaemenid residence at Qarajamirli. This main building could be a temple or a palace on Absinth Tepe (Ghorban Tepe) a flat mound just 200m west of the propyleion. The view by east through the columned halls points exactly to the top of this Tepe. Some mud-bricks as well as a number of limestone fragments and Iron Age potteries were excavated in this mound by illegal diggers<sup>35</sup>.

Similar bases have been found at several sites in Iran and Iraq. However, it seems probable that these pedestals are

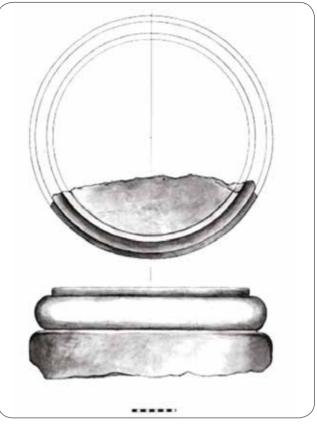


Figure 15: Qarajamirli / A Pedestal from Daraya Takh / *Qarajamirli /Daraya Takh 'dan Bir Sütun Altlığı (Babaev/Gagoshidze/Knauss 2007: 44)* 

approximately from the same period as the bell shaped pedestals i.e. form the Achaemenid Era<sup>36</sup>.

Finally, the large fragments of three different types of pedestals are found in a place called Daraya Takh between 500m and 950m north of the propyleion (Photo 12). Their shapes are similar to the bases of the propyleion and their diameters are a little bit smaller. However, they have no decoration and their surfaces were smooth probably only painted. Considering the archaeological evidences, there was a vast architectural complex in Qarajamirli in Achaemenid period<sup>37</sup>.

There are different types of propyleion in Pasargadae and Susa, as well as on the great terrace in Persepolis during the reign of Cyrus the Great. The closest criterion for the ground-plan of the propyleion in Qarajamirli is the so-called "Central Building" of Persepolis (the palace of three gates). It has a central hall, two porticoes and narrow adjacent rooms (Fig.16). It has been erected during the reign of Xerxes and Artaxerxes I. As in Azerbaijan, there are small square rooms in the corners and a long corridor passes through them. The purpose of the "Central Building" in Persepolis was to separate the visitors and the guests and led them in different

<sup>34</sup> Knauss/Gagoshidze/Babaev 2010: 114.

<sup>35</sup> Knauss/Gagoshidze/Babaev 2010: 116.

<sup>&</sup>lt;sup>36</sup> Babaev/Gagoshidze/Knauss 2007: 41.

<sup>&</sup>lt;sup>37</sup> Knauss/Gagoshidze/Babaev 2010: 116.

directions. In Qarajamirli the visitors was walking through the propyleion and probably entered a courtyard or a garden as in Pasargadae. The Achaemenid architecture has had a significant impact on Caucasian art and architecture<sup>38</sup>.

#### **TEMPLES**

Based on the investigations conducted in this research, 5 temples were identified as follows:

#### Samadlo Ritual Tower

Samadlo<sup>39</sup> is located on the bank of Kura River in the center Georgia (Fig.17). It has been probably built on top of the hill in 5<sup>th</sup> or 4<sup>th</sup> century B.C. This tower-like building is similar to prototypes in Iran such as Zendan-e-Sulaiman in Pasargadae and the Kaabah-e -Zardusht in Naqshe-e-Rustam. The archaeological evidences and documents attest a ritual function for the tower<sup>40</sup>.

# Zikhiagora Temple

An architectural complex<sup>41</sup> which encircled by stone walls and rectangular towers was identified in Zikhiagora hill of Georgia. Most scholars assume that it was a sanctuary, but only two buildings could be considered as the Achaemenid temples. Most ancient buildings, which have been excavated so far, were probably belonged to Hellenistic time. However, some findings seem to be of an earlier time as fragments of the bell-shaped pedestal of the same types as those found in Gumbeti. The bull shaped column head (Photo 13) was found in 3<sup>rd</sup> or 2<sup>nd</sup> century BC. in the surface of the temple. It is not improbable that this column head belong to an older building of the Achaemenid period. Since it is imitation of the Achaemenid column heads in Persepolis and Susa<sup>42</sup>. But the rounded saddle does not coordinate with architectural prototype in Persepolis. This sculpture does not completely match the original neither in presentation nor in decoration, but reminds the identified design. The eyes are round and the internal corners are pointed. The bulges are over the eyes and there are two hemispheres at the junction of ears. The beard and the hair of the chest are stylized as ornamental stripes (Fig. 18), although another style was used but it seems classified in Persian- Barbaric art group<sup>43</sup>.



Photo 12: Fragment of a Pedestal from Daraya Takh / Daraya Takh'dan Bir Sütun Altlığı Parçası (Knauss/Gagoshidze/Babaev 2010: 117)

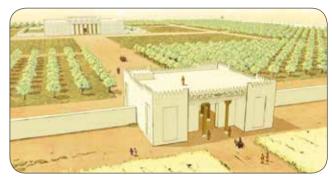


Figure 16: Qarajamirli, Ideal Tepe / Reconstruction of Propylon with the Palace in the Background / Qarajamirli, İdeal Tepe / Saray ve Giriş Kapısının Yeniden Yapılandırılması (Knauss/Gagoshidze/Babaev 2013: 10)

The sanctuary at Zikhiagora is related with Zoroastrian's. Most excavated monuments such as two temples (Fig.19) have been built in the 3<sup>rd</sup> to 2<sup>nd</sup> centuries BC. The plan of the main temple (I) reminds the Eastern models. Another building (VII) probably have ritual function. The general plan is square. An L-shaped corridor is the only entrance of the square room. Similar structure is seen in Persepolis too, so called Harem. A wall with square towers has surrounded the complex. The balance of exterior profile has been kept by means of columns and arches known in Samadlo (Fig.17) and the palace in Gumbati (Fig.8). It seems, if the above mentioned bull shaped column heads have been built in Post-Achaemenid period, this would be a proof of longevity of the Achaemenid prototypes in Georgia<sup>44</sup>.

#### Sairkhe Temple

The remains of a building have been identified near the Sairkhe village in the easternmost part of Colchis. It is supposed to be a temple. Up to now the plan and map have not been published. Two limestone column heads of this building are now in the museum of Fine Arts in Tbilisi. Based on the found column heads Brian Shefton

<sup>38</sup> Knauss/ Gagoshidze/ Babaev 2010:117-118.

<sup>&</sup>lt;sup>39</sup> Julon Gagoshidze compared the Samadlo tower-temple with similar buildings in Achaemenid and Urartian Kingdom.

<sup>40</sup> Knauss 2006: 87-89.

<sup>&</sup>lt;sup>41</sup> Since 1971 a wide archaeological researches was done on Zikhiagora Tepe in Georgia.

<sup>42</sup> Knauss 2006: 92.

<sup>43</sup> Rehm 2010: 180.

<sup>44</sup> Knauss 2006: 108.



Figure 17: Samadlo / Plan of the Tower / Samadlo / Kule Planı (Knauss 2006: 88)

believes that they have been built in the Achaemenid workshops. The oldest findings in Sairkhe belong to 8th and 7<sup>th</sup> centuries BC. Sairkhe became the center of the region in 5<sup>th</sup> century BC<sup>45</sup>.

# **Zela Temple**

In addition to the archaeological remains in the central region of the Black Sea, there are some documentary evidences of the Achaemenid period. Strabo has mentioned to the Scythians who invaded Zela and were defeated by the Persians. An Achaemenid building or a temple has been established for goddess Anaitis and reminiscence of this victory in Zela. People of Zela celebrated this victory by an annual festival called Sakai. This temple of fire is depicted on the back of the coins of Trajan and Septimius Severus (Photo 14). The fire altar is visible in the middle the Architecture temple<sup>46</sup>.

# **Oluz Höyük Temple**

A ditch was identified in the second cultural layer of Oluz Höyük in Anatolia. The layer is dated to Achaemenid period (425-200 B.C.). It seems to be a place for keeping sacred fire and relate to a Zoroastrian temple in the Ancient East<sup>47</sup>.

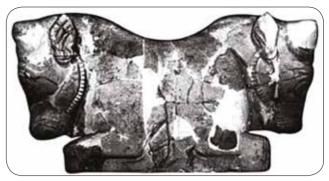


Photo 13: Zikhiagora / Bull Protome Capital / Zikhiagora / Boğa Protomu Sütun Başlığı (Rehm 2010: 180)

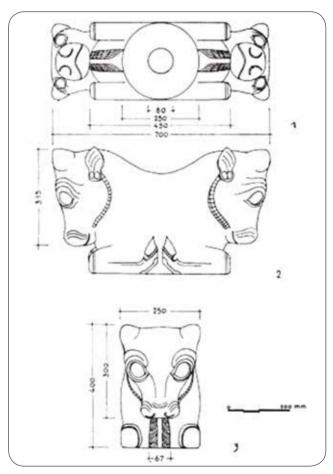


Figure 18: Zikhiagora / Bull Protome Capital / Zikhiagora / Boğa Protomu Sütun Başlığı (Knauss 2006: 93)

#### CONCLUSION

Persian Achaemenid architecture has been an eclectic art in the Achaemid period, since the effects, views and inspirations have been taken of many different resources.

Although it was influenced by other tribes of the region, it is not a sole passive imitation. The Achaemenids gained the subjugated tribes' experiences and artistries. By their competent management great evolution took place in

<sup>45</sup> Knauss 2006: 92.

<sup>46</sup> Dönmez 2007: 109.

<sup>&</sup>lt;sup>47</sup> Dönmez 2012:3.

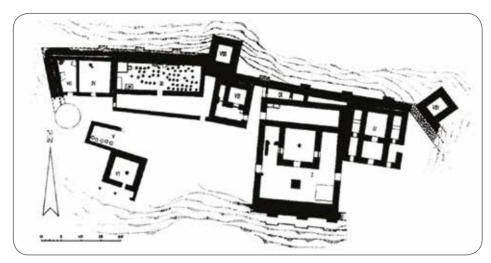


Figure 19: Zikhiagora / Temple Plan / Zikhiagora / Tapınak Planı (Knauss 2006: 108)



Photo 14: The Depiction of the Anaitis Temple in Zela on the reverse of a Roman Coin / Zelda'daki Anahita Tapınağı'nın Tasviri, Roma Sikkesinin Arka Yüzü (Dönmez 2007: 114)

their architecture. This progression caused incredible results. The Achaemenid architecture was subordinated by the principle of the people's obedience to the king and the king's obedience to God. This subject manifested so much in this period that a distinguished style called court style was created.

The Archaedogical evidences and document show that a new artistic style has been formed in the cultural region of the Black Sea after the domination of the Achaemenids. The new style was the combination of both an indigenous art and the art of the main Achaemenid centers in Pasargadae, Persepolis and Susa. The new archaeological excavations indicate the accumulation of the Achaemenid data and the effects of the Persian style in architecture.

Considering the alliance and concodance in both the architecture and decoration, the works seem to signify artists' interests for making same works as in the Achhaemenenian capitals. The parameters of the Achaemenid artistic style have been virtually used in their works. The construction techniques and architecture decorations are classifies as parts of the parameters.

Based on the investigation carried out in the sites fourteen Achaemenid architectural patterns were identified as follows:

Five palaces included Sari-Tepe palace, Gumbati Palace, a historical building complex in Benjamin, Qarajamirli (Ghorban Tepe) palace and Oluz Höyük palace. Two columned halls included Argishtihinili and Erebuni columned hall. One propyleion in Qarajamirli. Five temples included samadlo ritual tower and the temples of Zikhiagora, Sairkhe temple, Zela temple and Oluz Höyük temple.

#### **BIBLIOGRAPHY**

# BABAEV, I. / GAGOSHIDZE, I. / KNAUSS, F. S., 2007

"An Achaemenid « Palace» at Qarajamirli (Azerbaijan) Preliminary Report on the Excavations in 2006", Ancient Civilizations from Scythia to Siberia 13/1: 31-45.

# BABAEV, I. / GAGOSHIDZE, I. / KNAUSS, F. S., 2009

"Excavations in the Achaemenid Palatial Complex near the Village Karacamirli in the Shamkir Region, Azerbaijan - Land between East and West." Transfer of Knowledge and Technology during the "First Globalization" of the VII<sup>th</sup> - IV<sup>th</sup> Millennium BC. International Symposium Baku. April 1-3. Baku: 88-91.

# BILL, A., 2010

"Achaemenids in the Caucasus?" Achaemenid Impact in the Black Sea: Communication of Powers, Black Sea Studies 11, (Eds. J. Nieling / E. Rehm) Aarhus: 15-27.

#### CURTIS, J., 2005a

"Jewellery And Personal Ornaments", Forgotten Empire the World of Ancient Persia (Eds. J. E. Curtis / N. Tallis) London: 132-149.

# DÖNMEZ, Ş., 2007

"The Achaemenid Impact On the Central Black Sea Region", The Achaemenid Impact on Local Populations and Cultures in Anatolia. İstanbul: 107- 116.

# DÖNMEZ, Ş., 2011

"Oluz Höyük kazısı Dördüncü Dönem (2010) Çalışmaları: Değerlendirmeler ve Sonuçlar", Colloqium X: 103-128

# DÖNMEZ, Ş., 2012

"Oluz Höyük, Karadeniz Persler", Aktüel Arkeoloji 25: 104-145

#### DZHAVAKHISHVILI, K., 2007

"Achaemenian Seals Found in Georgia", Ancient Civilizations from Scythia to Siberia 13/1: 117-128.

#### ERLIKH, V. R., 2010

"Recent Investigations of the Ulski Kurgans", Achaemenid Impact in the Black Sea Communication of Powers, Black Sea Studies 11, (Eds. J. Nieling / E. Rehm). Aarhus: 47-65.

#### GERGOVA, D., 2010

"Orphic Thrace and Achaemenid Persia", Achaemenid Impact in the Black Sea: Communication of Powers, Black Sea Studies 11 (Eds. J. Nieling / E. Rehm). Aarhus: 67-86.

#### IGNATIADOU, D., 2005

"Achaemenid and Greek Colourless Glass", The World of Achaemenid Persia: History, Art and Society in Iran and, the Ancient Near East (Eds. J. Curtis / St. J. Simpson). Proceedings of a Conference at the British Museum, 29<sup>th</sup> September–1<sup>st</sup> October. London: 419-426.

#### KHATCHADOURIAN, L. 2008

Social Logics under Empire, The Armanian "Highland Satrapy" and Achaemenid Rule 600-300 BC., (A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy Classical Art and Archaeology in the University of Michigan). Michigan.

#### KNAUSS, F., 2005

Caucasus, L'archéologie de l'Empire achéménide: nouvelles recherches, pp. 179- 220.

# KNAUSS, F., 2006

"Ancient Persia and the Caucasus", Iranica Antiqua XLI: 79-118.

# KNAUSS, F. / GAGOSHIDZE, I. / BABAEV, I., 2010

"A Persian Propyleion in Azerbaijan Excavations at Karacamirli", Achaemenid Impact in the Black Sea: Communication of Powers, Black Sea Studies 11 (Eds. J. Nieling / E. Rehm). Aarhus: 111-122.

# LUKONIN, V. / ANATOLY, I. 2012

The Lost Treasure Persian art. USA.

# NIELING, J., 2010

"Persian Imperial Policy Behind the Rise and Fall of the Cimmerian Bosporus in the Last Quarter of the Sixth to the Beginning of the Fifth Century BC", Achaemenid Impact in the Black Sea: Communication of Powers, Black Sea Studies 11 (Eds. J. Nieling / E. Rehm) Aarhus: 123-136.

# REHM, E., 2010

"The Classification of Objects from the Black Sea Region Made or Influenced by the Achaemenids", Achaemenid

Impact in the Black Sea: Communication of Powers, Black Sea Studies 11 (Eds. J. Nieling / E. Rehm) Aarhus: 162-194.

# SHEMAKHANSKAYA, M. / TREISTER, M. / YABLONSKY, L., 2009

"The Technique of Gold Inlaid Decoration in the 5<sup>th</sup> – 4<sup>th</sup> Centuries BC: Silver and Iron Finds from the Early Sarmatian Barrows of Filippovka, Southern Urals", ArcheoSciences, revue d'archéométrie 33: 211-220.

# SIMPSON, St. J., 2005

The Royal Table, Forgotten Empire the World of Ancient Persia (Eds. J. Curtis / E. N. Tallis). London: 104-131.

#### SIDERIS, A., 2008

Achaemenid Toreuticsin the Greek Periphery, Ancient Greece and Ancient Iran: Cross-Cultural Encounters. 1st International Conference, Athens 11-13 November, (Eds. S. M. R. Darbandi / A. Zournatzi). 339-354.

# SUMMERER, L., 2003

Achämenidische Silberfunde aus der Umgebung von Sinope, Ancient Civilizations from Scythia to Siberia 9/1: 17-42.

# SUMMERER, L. / VON KIENLIN, A., 2010

"Achaemenid Impact in Paphlagonia: Rupestral Tombs in the Amnias Valley", Achaemenid Impact in the Black Sea: Communication of Powers, Black Sea Studies 11 (Eds. J. Nieling / E. Rehm). Aarhus: 195-221.

# TER-MARTIROSSOV, F. I., 2001

"The Typology of the Columnar Structures of Armenia in the Achaemenid Period", The Royal Palace Institution in the First Millennium BC: Regional Development and Cultural Interchange between East and West (Ed. I. Nielsen). Copenhagen: 155-163.

# ТРЕЙСТЕР, М.Ю (БОНН)., 2010

Серебряный ритони золотая гривна из Новокумакского кургана №1/1971, Археология и палеоантропология евразийских степей и сопредельных территорий, Герасимова М.М., Малашев В.Ю., Мошкова М.Г. (ред.), МИАР № 13, pp.355-377.

# ТРЕЙСТЕР, М.Ю., 2013А

Золотые бляшки ахеменидского стиля из кургана Б аксы в Восточном Крыму, Древности Боспора. 17, pp. 345-362.

#### ТРЕЙСТЕР. М.Ю., 2013b

Клад серебряных ритонов ахеменидского круга из Эребуни, Scripta antiqua, Ancient History, Philology, Arts and Material Culture, Volume Three, pp:341-422.

#### TREISTER, M. YU., 2007

"The Toreutics of Colchis in the 5<sup>th</sup> - 4<sup>th</sup> Centuries BC Local Traditions, Outside Influences, Innovations", Ancient Civilizations from Scythia to Siberia 13/1: 67-107.

#### TRIANTAFYLLIDIS, P., 2001

Achaemenian Glass Production, Annales, du 15e Congrès, pp.13-17.

# VENEDIKOV, I., 1977

"The Archaeological Wealth of Ancient Thrace", The Metropolitan Museum Of Art Bulletin 53/1: 7-71.

#### YABLONSKY, L. T., 2010

"New Excavations of the Early Nomadic Burial Ground at Filipponka (Southern Ural Region, Russia)", American Journal of Archaeology 114: 129-143.