# THE ROMAN TEMPLE ON THE ACROPOLIS OF ALAŞEHİR (PHILADELPHIA)

The Study And Proposals Related To The Restitution And Conservation Of The Existing Remains

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#### **ABSTRACTION**

Alaşehir, in which many cultures had been developed from the early ages, has been still given the traces of cultures. Alaşehir, which has been called by the names of Philadelphia, Neocaesaria and Alaşar, has been directed by the Pergamum Kingdom, the Roman Empire, the Byzantine Empire, Germiyanoğulları and Aydınoğulları Principalities, the Ottoman Empire and the Turkish Republic until 1922. During these periods Alaşehir has been protected its importance and became an important settlement in the region.

Although these cultural variations, no detailed observation had ben done till the lately ages. The monuments of the Ottoman culture and the Turkish culture were better protected than the remains which were belonged to the antique ages. Along the observations and the excavations about the Roman culture, which was begun in 1980, some remains of a temple was found on Toptepe near the Roman theatre. This study has been done in order to give a proposal about this Roman temple on the Acropolis of Alaşehir.

In the first chapter the city of Alaşehir in which the temple was constructed has been examined. The geographical location of Alaşehir, its historical development and its historical and cultural remains has been examined briefly.

The second chapter has been prepared about the observations done on the region. In this chapter the studies about the Roman Temple on the Acropolis of Alaşehir had been done. The examines and observations about the temple area, the detailed examinations of the foundations,

have been given. The foundations had been examined in details, the excavation reports have been observed, the spoilments of the foundations have been determined. The remains of the temple had been examined in three parts as, the crepidoma, the column and the entablature.

After examining the remains of the temple, the dating studies of the temple had been done. According to these dating studies the construction date of the temple had been determined. Dating studies, have been given in this chapter. After the determinations, the dating studies have been done, as there were no inscriptions found out during the excavations. According to the dating studies, the construction date of the temple was determined. Than the contemporary temples and the characteristics of the period, in which the temple was constructed, was examined. These would be useful for the proposal studies of the restitution.

In the final chapter, the studies about the restitution proposal has been given. As the foundations about the elements are pretty inefficient for preparing a restitution proposal, the restitution proposal was prepared by combining the detailed examinations about the foundings and the results of the comparisons of the Acropolis temple and its contemporary temples.

## ÖZET

Alaşehir, tarihin ilk devirlerinden bu yana, değişik kültürlerin yaşadığı bir yerleşim merkezi olmuştur. Tarih boyunca Philadelphia, Neocaesaria ve Alaşar isimleriyle anılan Alaşehir, sırasıyla Bergama Krallığı, Roma İmparatorluğu, Bizans İmparatorluğu, Germiyanoğulları ve Aydınoğulları Beylikleri, Osmanlı İmparatorluğu ve 1922'den itibaren Türkiye Cumhuriyeti tarafından yönetilmektedir. Tüm bu dönemler boyunca Alaşehir önemini korumuş ve yörede önemli bir yerleşim merkezi olmuştur.

Tüm bu kültürel çeşitliliğe rağmen, yörede yakın tarihe kadar hiç bir detaylı araştırma yapılmamıştır. Osmanlı ve Türk kültürüne ait eserlerin nispeten daha iyi korunmuş olduğu ilçede, antik döneme ait araştırmalar 1980'de başlamıştır. Bu araştırmalarda Roma dönemi de araştırılmış, Toptepe'deki Roma Tiyatrosunun yakınında bir Roma Tapınağına ait olduğu düşünülen kalıntılar ortaya çıkarılmıştır. Bu çalışma Alaşehir'in akropolü durumunda olan Toptepe'deki Roma Tapınağı'na ait restitüsyon araştırmalarını içermektedir.

Ilk bölümde tapınağın inşaa edildiği Alaşehir yöresi; tarihi gelişim, coğrafi konum yönleriyle incelenmiş, yöredeki tarihi ve kültürel eserler belirlenmiştir.

İkinci bölümde Toptepe'deki Roma Tapınağı incelenmiştir. Bu bölümde tapınak alanında yapılmış olan kazılarla ortaya çıkan buluntular incelenmiştir. Buluntular, yapı içinde bulundukları yerlere ve fonksiyonlara göre gruplar halinde malzeme, ölçü ve süsleme olarak değerlendirilmiştir.

Toptepe'deki Roma Tapınağı incelendikten sonra 3. bölümde tapınağın tarihlendirme çalışmaları yapılmıştır. Yapılmış olan kazılarda tapınağın yapıldığı tarihle ilgili hiçbir buluntu olmadığı için tarihlendirme çalışmaları tapınağa ait mimari buluntular üzerindeki süslemelere göre yapılmıştır. Tarihlendirme yapıldıktan sonra aynı dönemde Anadolu'da yapılmış Roma tapınakları ve bu tapınakların belirgin özellikleri tesbit edilerek Alaşehir'deki Roma tapınağının yapıldığı dönemin tapınak mimarisine ait özellikler belirlenmiştir.

Dördüncü bölümde ise Roma Tapınağı ile ilgili restitüsyon çalışmalarına yer verilmiştir. Bu bölümde gerek mimari elemanlara, gerekse tapınağın mimari organizasyonuna yönelik restitüsyon önerileri detaylı incelemeler ve aynı dönemde (Anadolu'da) yapılmış olan tapınakların karakteristik özellikleri birleştirilerek oluşturulmuştur.

Çalışmanın son bölümü olan beşinci bölümde tapınak alanına ve kazılarla ortaya çıkarılmış olan buluntulara yönelik konservasyon çalışmalarına yer verilmiştir. Konservasyon çalışmaları bozulmaların tesbiti, temizleme çalışmaları, gelecekte oluşabilecek olan bozulma ve tahribi önlemeye yönelik öneriler olarak üç etapta oluşturulmuştur.

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#### INTRODUCTION

In this thesis, the Roman temple which was found out during the excavations on the acropolis of Alaşehir (Toptepe) was observed and examined in order to give a proposal related to the restitution of this temple.

The temples were the religious buildings which had been constructed for the religions of different Gods. The temple buildings had been constructed from the early historical periods till the religions of one God like; the Jewish, the Christianity and the Islam. The temples were constructed for the Gods. The house of the Gods (the temple) had been developed in the historical process. The temples were one of the most important building types in the antique ages, because of this, the main characteristics of the period were seen on the temple buildings. It could be thought that the construction and the decoration of the temple was usually reflected the characteristics of the period.

The examinations on the remains of the Roman temple, which would be examined in this thesis, were important as they were the indications about the restitution proposal, but also these remains were important as they were the foundings which would show the main characteristics of the period in which the temple was constructed.

While preparing the proposal about the restitution, it was seen that the foundations about the temple were inefficient for a clear restitution proposal. As the excavations were continued only for three years, the soundings were inefficient and no foundings were found out about some of the elements used in the temple architecture ( the base, the frieze, the architrave, the clear

traces of the naos, and even the clear traces of the crepidoma). So, preparing a proposal about the temple would be impossible by examining only these remains.

In order to have an opinion about these elements and give a proposal about the restitution, the temple architecture ( its origin, its developments in the historical process, and the characteristics of the Roman temple ) and the contemporary temples which was constructed in the same period with the Acropolis Temple of Alaşehir was determined.

It would be possible to prepare a proposal related to the restitution (although it won't be a clear one) by connecting all these examinations and knowledge's about the temple architecture and the remains of the Roman temple on the Acropolis of Alaşehir.

# CHAPTER ONE ALAŞEHİR AND ITS HISTORICAL DEVELOPMENTS

#### 1. 1. THE ALAŞEHİR CITY

The city of Alaşehir, in which there are many civilizations was established since the early periods of the human history, has been located near the border line between Aegean and the Inner Aegean. Alaşehir has been bordered by Salihli on the west; Nazilli, Kuyucak and Kiraz on the south; Sarıgül and Eşme on the east and Kula on the north. The city has a height of 189m. from the sea level, and it is 120 kilometers far away from the center of Manisa (Fig - 1).

Alaşehir has been located on the Alaşehir plain, which is on the continuation of the Gediz plain, at the north side of Bozdağ Mountains. The district has a very productive and marshy plain and because of this, the great part of the land is covered by the grape vineyards. The great part of the economy depends on the viniculture. Besides the grape, there are also cotton, wheat, sesame, paddy and soya bean growing on the agricultural fields. Also the mineral water production and the animal husbandry can be seen in the distinct.

### 1. 2. THE HISTORICAL DEVELOPMENTS OF ALAŞEHİR

The city, which has been an important settlement from the early ages till today, was known by the names, Philadelphia, Neocaesaria and Alaşehir. The name of Philadelphia was coming from the King of Bergama, 1<sup>st</sup> Attalos Philadelphos, which means "brotherhood". For many

years, the city was known by this name. After the earthquake in 17 A.C., the name of the city was changed as Neocaesaria which means " the new city of Cezar " just to thank to the Emperor Tiberius who had helped the city after the earthquake. The city was known by the name Neocaesaria till Turks had occupied the city. After the Turkish domination the city has been known by the names Alâşar, Alaşar, Alaşehir and Alaşehir.

The Roman culture was affected the Philadelphia region after Iskender had occupied the Philadelphia region in 334 B.C. When Iskender was dead, Seleakos was landed the region in 213 B.C. III. Antiakhos was occupied Philadelphia in 190 B.C., III. Antiakhos was defeated on the war with the Roman army and he was run away to Sardies. With this escape the Romans gave the city to the King of Bergama, I. Attalos, who was the ally of the Roman Empire.

In the reign of Bergama Kingdom, the city was invaded as it had been located on a strategical region. The Bergama Kingdom was threatened as the Persian invasions has raised. Because of this treatments Romans had shown their force and influence just to help to the Bergama Kingdom. In 322 A.C., according to the last request of king III<sup>rd</sup> Attalos, the city was given to the Roman Empire.

In the period of Roman Empire, the city had protect its importance, but in the reign of Severius (3<sup>rd</sup> century A.C.) Philadelphia was threatened by the invasions and when the Roman Empire was divided into two parts, the city was took part in the Byzantine lands. The importance of the city did not changed in the Byzantine ages, and in 11<sup>th</sup> century, Philadelphia was directed by Shah Süleyman. After the death of Shah Süleyman the city was occupied by the Byzantine for a short time and in 1903, Philadelphia was started to directed by Seljukian Turks.

While the Crusaders' Campaign in, 1109 Byzantine was occupied the city again. The Philadelphia region was directed by Byzantine Empire till the beginning of 14<sup>th</sup> century. On the beginning of the 14<sup>th</sup> century; firstly Germiyanoğulları Principality and then the Aydınoğulları Principality had occupied the city. On that period, Alaşehir was directed by Turkish

Principalities from time to time, but it had never exactly taken away from the Byzantine Empire.

In 1389, Yıldırım Bayezıd had occupied the city, the city was participated in the Ottoman domunation and was taken the name Alaşehir. In 1520, as the Ottoman Empire was divided into 30 provinces, Alaşehir was directed by the Aydın Principality for many years. Continously the city was directed by the Ottoman Empire for 531 years, although the Greeks was occupied the city in 24 June 1920. In 1922 Alaşehir was participated in Turkish domination again and since 1922, Alaşehir has been a distinct of Manisa.

#### 1. 3. HISTORICAL AND CULTURAL REMAINS

The city of Alaşehir, in which there are many civilizations and cultures had ben established since the early ages, was directed especially by Roman Empire, Byzantine Empire, Ottoman Empire and many other cultures in the whole historical periods. In the city the remains which belongs to the Principality, Ottoman Empire and Turkish Republic periods have been much more protected than the other remains. No searches was done related to the antique periods till 1980. By the researches which was begun in 1980's, it was determined that in the antique periods the city was as important as it was on the Ottoman Empire and the Turkish Republic periods.

With the researches which was begun in 1980's there are many foundations belonging to the Roman period were found out on the region. Besides the remains of the Roman culture, there were also a few remains belonging to period of the Lydian culture. The studies, which was directed by the Minister of Tourizm and Culture in 1981, were included the excavations about Saint Jean Basilica and its surroundings. The church with six piers was constructed in the Roman period and it was dedicated to Hagios Johannes (Saint Jean) who was one of the apostles of Jesus Christ. Only three piers of this church has been reached up to today. In 1983 a Roman Theatre was brought to light by researches which was begun on Toptepe region. The enterprises which was begun with this researches had been continued in the years 1985, 1986,

and in 1987 with excavations which were directed by cooperations of Manisa Museum and Dokuz Eylül University, Faculty of Architecture and Department of Restoration. The researches were included the city walls surrounding the city from each side which were constructed in the reign of the East Roman Empire.

In the extent of excavations and environment searching in the city of Alaşehir (Philadelphia); Saint Jean Church which is in the centre of Alaşehir, Gavurtepe Mound, The Roman Theatre on Toptepe which is located as the acropolis of Philadelphia and its environment (The Acropolis Temple), Byzantine Semetary was researched. The researches and the analysis of these remains were published as "X<sup>th</sup>. Assembly of Excavation Conclusions" (Fig - 2).

In the region, besides the antique foundations which were given above, there are also other monuments belonging to the Ottoman Empire and Principalities ages. The other cultural monuments in the city are, Şeyh Sinan Mosque, Şeyh Sinan Tomb, Yıldırım Bayezıd Mosque, Güdük Minare Mosque, Yağhane Mosque, Kadışeyh Mosque and Its Tomb, Pazar Mosque, Kurşunlu Inn which belongs to the Turkish ages.

#### **CHAPTER TWO**

# THE OBSERVATIONS AND THE ANALYSIS ABOUT THE ROMAN

# TEMPLE ON THE ACROPOLIS OF ALAŞEHİR

#### 2. 1. THE OBSERVATIONS ABOUT THE TEMPLE

In 1983 the excavations on Toptepe which had been begun by the Ministery of Tourizm and Culture were including the researches of the Roman theatre. The excavations, studies and researches about the theatre and its surroundings were directed by cooperations of Manisa Museum and Dokuz Eylül University, Faculty of Architecture, Department of Restoration. The researches about the Roman theatre on Toptepe shows us that the theatre was partly used as a semetary in Byzantine ages, than the region turned into a settlement area which was a constitution of simple houses and in the reign of the Ottoman Empire the region had been used as a dump. While the studies about the surroundings of the Roman theatre was continuing, a shaft of a fluted column had been found out from a dump hole on the top of Toptepe. After the cleanliness studies on the hole some architectural elements and stone blockages were found out, and it was determined that these foundations belongs to a temple.

This determinations had started the systematic studies about the temple on Toptepe. During the soundings which made in 1985 two different structural layers had been found out. On the upper layer there were many foundations of marble chips, ash, animal bones and ceramic which - in generally - belonged to the late Byzantine period.

In the second (the lower) layer, some marble tile pieces, architectural marble bloks and lump stone blockages were determined. The ornaments on the marble blocks makes us think that this layer belongs to the late Roman period.

The foundations like blockages and architectural blocks which had been found out during the studies on Toptepe put out that a monumental temple was rising up here on Toptepe, the Acropolis of Alaşehir. The temple was defined as the Theatre Temple, as it was too close to the Roman theatre on Toptepe (Meric, R. 1985).

If we think that the temple located at the top of Toptepe which stated as the acropolis of Alaşehir, and also think the importance of the buildings on the acropolis in the Roman architecture, won't be wrong to define this monumental temple as the Acropolis Temple.

In the years 1986 and 1987 the studies and researches about the Acropolis Temple were continued. The researches were intensified on the south front of the temple. During the soundings which made on the south front some blockages were found out. These blockages were made of lump stone and mortar, the blockages were on the 297<sup>70</sup>, 298<sup>11</sup> and 298<sup>90</sup> altitudes. Besides the blockages, the marble blocks (AKR - 1, AKR - 2, AKR - 8, AKR-1, AKR - 16, AKR - 17 and AKR - 20), insitu step plancks of marble and insitu step blocks of limestone were the other foundations of the south front. Except the shaft of the column (AKR - 2) and the part of the inclined cornice (AKR - 11), the other marble blocks (AKR - 1, AKR - 8, AKR - 16, AKR - 17 and the AKR - 20) belongs to the entablature of the building. One of the most important architectural element which was found out during the soundings on the south front was the upper part (the upper angle) of the cornice (AKR - 11). The part of the upper angle of the cornice was an important foundation for the restitution of the Acropolis Temple. This founding part belonging to the upper corner of the cornice was an important foundation for the restitution of the Acropolis Temple, as it could give us an opinion about the slope of the fronton on the south front of the temple.

The excavations, which had been intensified on the south front of the temple, showed an important foundation about the restitution of the temple. During the 1987 excavations, a natural yellowish rough mainground constituted of big stones was found out on the south side of the insitu marble step plancks which have estimated that these marble step plancks were belonging to the lower step of the crepidoma. This mainground has been raising towards the south from the south front. With these knowledge's it would be right to estimate that the south front was not the entrance front of the temple. The mainground which has been rising towards the south and the place of the temple which has been overlooking the plain of Alaşehir and also the city of Alaşehir stating on this plain, shows that the north front must be the entrance front of the temple. Besides these south front foundings, there were lots of Byzantine ceramics and broken marble pieces had found out (especially in the zone in which no mainground was seen) during the south front excavations.

During the excavations on the west front, lots of glazed and a few unglazed ceramics had been found. Besides these ceramics; the lump stone blockages, which have the altitude of 298<sup>11</sup>, and an entablature block made of marble were the other foundations of the west front. The most important foundation which had been found out on the west front soundations was a part of a capital of a column on the 298<sup>38</sup> altitude. This founding has been the only foundation about the capitals which have been found out during the excavations. The ornaments on the capital piece has been showing that the founding capital, and possibly the whole capitals of the columns of the temple, was in the Corinthian order.

In the east front of the temple, marble pieces, glazed and unglazed ceramics had been found out as it was on the south and west fronts. Step blockages through the south - north direction were one of the other foundations on the east front. The blockages made of lump stone was found out on the 297<sup>70</sup> and the 298<sup>11</sup> altitudes. One of the other foundations on this front was the limestone insitu step blocks on the altitude of 297<sup>70</sup>. This step block, which continues the line of the limestone insitu blocks seen on the south front, was also insitu.

The north front of the temple was the least searched front, although it could be the entrance front. Only one sounding hole had been opened on the north front. The only foundation which was found out during this soundation was the step blockages on the 298<sup>11</sup> altitude. These step blockages were also made of lump stone.

The foundations which was obtained from the very short sounding studies continued on the excavations on the four sides of the temple place on the Toptepe plain, which begun in 1985 and continued in 1986 and 1987, were limited as we have given above. There are no other searching or excavating studies have been done about this temple place from that time. The only research, had been done during the excavation studies, about the surrounding of the temple was the cleaning studies and arrangement studies about the east and the west towers of the Byzantine city walls which surrounds the Toptepe plain.

After all these studies about the Temple on the Acropolis of Alaşehir, some determinations showing the excavation results - had been done (Dokuz Eylül University, Faculty of Architecture, Department of Restoration - 1987 - X<sup>th</sup> Assembly of Excavation Conclusions) (Fig - 3, Fig - 4, Fig - 5). From the excavation plan, which was published in the X<sup>th</sup> Assembly of Excavation Conclusions, we could easily see the blockage lines made of lump stone and mortar on the west, south, east and partially on the north fronts. Most of the step blockages, which could have easily seen on the plan of the excavation results, have been lost their clearness now. In the temple area, the blockages of the south and the east fronts have been much more protected than the blockages of the west and the north fronts (Fig - 6, Fig - 7). The blockages have been worn out by the natural influences, the blockages found out on the north front of the temple were the most deformed blockage lines between the other blockages. The blockages on the north front can not be seen today as the sounding hole had been turned to a dump hole.

Today, a decorative pool exists on the place of the temple area on Toptepe. In order to continue the studies on the temple area, firstly this decorative pool must be taken away.

Combining the north and the south fronts and determining out the northwest and the southeast corners can not be possible with this decorative pool (Fig - 8).

Besides the step blockages, the most of the architectural blocks and insitu marble step blocks, which had been found out during the temple excavations, are still on the temple place. The AKR - 1, AKR - 8, AKR- 16, AKR - 17, AKR - 20, belonging to the entablature; the AKR - 2, the only column shaft found out on the excavations; the insitu step blocks made of limestone; the insitu step plancks made of marble, were the foundings of the south front which are still on the temple area. The insitu step block made of limestone found out on the east front; and the AKR - 21, belonging to the entablature of the temple found on the west front are also seen on the temple area today. Some of blocks has been placed as their faces with the ornaments would sank ito the ground just to protect the ornaments. The foundations with more smaller measurements which had found out during the excavations like the upper part of the cornice (AKR - 11), the part of the capital and the parts of the marble tiles are still protecting in the excavation house which is in the excavation area of the Saint Jean Basilica in the centrium of Alaşehir city. The detailed analysis about the foundations found out during the excavation house, will be given in the part 2. 2.

The researches which had been made on the temple area on the Acropolis of Alaşehir are pretty inefficient for preparing a restitution proposal. The studies which are important for the restitution are getting difficult, as no other studies have been done after the 1987 excavations and also the foundations have been loosing their clearness because of the natural influences. But besides these negativeness, fixing the principals which has been needed for the restitution and making a restitution proposal can be possible by investigating the existing remains - which have established in the plans and the sections of the excavation area prepared according to the 1986 and 1987 excavations - in details, preparing their releves, and making the dating and comparison studies.

#### 2. 2. EXAMINATIONS ON THE EXISTING REMAINS

To prepare a proposal related to the restitution of the Roman Temple on the Acropolis of Alaşehir, besides the analysis of the temple, the architectural elements and the blocks which was found out during the excavations must have been examined in details. As it was defined on the Chapter 2. 1, different architectural blocks and blockages of the crepidoma belonging to the Acropolis Temple was found out on the excavations on Toptepe in the years 1985, 1986 and 1987. The architectural blocks which were found out on the excavations, are important foundations for preparing a proposal related to the restitution of the temple. Besides the restitution proposal, the blocks are very important as they can carry the main properties and characteristics of their construction date to today and even to the future.

In this chapter, the architectural elements which has been protected on the excavations area of the Acropolis Temple on Toptepe and partly in the excavation house in the centre of the Alaşehir city have been determined. The foundations have been examined in material and dimensional respects. The foundations found out during the excavations have been examined in parts according to the places and positions in which the blocks was used in the construction of the temple building. The foundations of the temple have been examined in three main parts which are the crepidoma, the column and the entablature.

#### 2. 2. 1. Crepidoma

The Roman period, in which the monumentality was a passion, the religious buildings were important buildings of the city. These religious buildings were raising through a podium as they had an important position in the city ( Wcherley, 1991, Pp. 76 - 80 ). Because of this, the podium of these buildings had been important from the reign of Augustus in which the Roman architecture was reached to its own characteristics. The podium was the platform on which the temple had been settled. The stepped structure which was also producing the podium was named as the Crepidoma.

The crepidoma which was constituted the lower part of the temple building was a stepped construction part. Besides the steps that were taking part on the entrance front of the crepidoma, the crepidoma could also be constituted by the steps which surrounds the whole temple. Sometimes the podium arms, which was an affect of the Etruscian architecture, were used as the border elements limiting the steps on the entrance front.

In the whole Roman temples, the crepidoma was one of the most important parts of the temple. It would be impossible to give a proposal related to the restitution without the studies and the examinations about the crepidoma. The foundations about the crepidoma, found out on the excavations and researches of the Acropolis Temple of Alaşehir, were limited by the blockages of the steps, insitu step blocks made of limestone and insitu step plancking blocks made of marble.

By the researches and the excavations, some parts of the step blockages belonging to the steps of the crepidoma were found out on all four fronts, especially the blockages on the south front were very clear. On the south front the blockages were found on the altitudes of 297<sup>70</sup>, 298<sup>11</sup>, and 298<sup>90</sup>. Between the blockage lines only the blockage line on the 298<sup>11</sup> altitude was determined on the west, east and the north fronts. The only blockage line which were found out on the west and the north fronts was the blockage line found out on the 298<sup>11</sup> altitude. On the east facade, besides the step blockage on the 298<sup>11</sup> altitude, the step blockage on the 297<sup>70</sup> altitude was also determined. Although these step blockages were not showing continuity along a whole front, they could be seen partly on the same line (Figures - 9, 10, 11 and Fig - 12).

The step blockages which were made of lump stone and mortar has been disintagrated by the natural affects till today. Among the step blockages found out during the excavations, the step blockage on the 297<sup>70</sup> altitude has been seen on the lines G9, B0 - G9, B0<sup>5</sup>; G9, D2<sup>5</sup> - G9, D18<sup>5</sup> on the excavation plan. The step blockage on the 298<sup>11</sup> altitude has been seen on the lines G8, D8 - G8, D18; G8, D4<sup>5</sup> - G8, D7<sup>5</sup> and G8, D2 - G8, B1<sup>5</sup> on the south front, on the lines B4<sup>5</sup>, K2<sup>5</sup> - B4<sup>5</sup>, K5 on the west front, on the lines D18, G5 - D18, G8

on the east front. On the north front, the step blockage line on the 298<sup>03</sup> altitude (this line could also be admitted as the line on the 298<sup>11</sup> altitude) has been seen on the line K27, D7 - K27, D10. The other step blockage found out during the excavations was the blockage line on the 298<sup>90</sup> altitude and it has been seen on the line G7, D4 - G7, D6.

As it has been seen on the excavation plan given in the chapter 2. 1., the step blockage line on the 298<sup>11</sup> altitude was the most clear blockage line found out during the excavations. This line has been clear on all four sides of the temple. The other clear blockage line coming after the blockage line on the 298<sup>11</sup> was the step blockage line on the 297<sup>70</sup> altitude on the south front. When these two clear step blockage lines have been examined, the horizontal distance between these step blockage lines was determined as 60 centimeters. The vertical distance between the blockage lines on the 297<sup>70</sup> altitude and the 298<sup>11</sup> altitude was determined as 41 centimeters. The other examinations which had been done on the measures of the step blockages was between the lines on the 298<sup>11</sup> and the 298<sup>90</sup> altitudes. The horizontal distance between the step blockages on the 298<sup>11</sup> and the 298<sup>90</sup> altitudes which has been placed on the south front was determined as 135 centimeters and the vertical distance between them was determined as 79 centimeters.

The step blockages, which were determined as the parts of the step blockage on the 298<sup>11</sup> altitude, were the only blockage lines found out on the west and the north fronts. In the soundings, which were opened on the east front, the step blockages on the 297<sup>70</sup> altitude and on the 298<sup>11</sup> altitudes could have been determined. The distance between these blockage lines could be determined like these; the horizontal distance between 297<sup>70</sup> and 297<sup>40</sup> was 100 centimeters and the vertical distance between them was 30 centimeters. The horizontal distance between the 298<sup>11</sup> and the 297<sup>70</sup> altitudes was 150 centimeters and the vertical distance was 41 centimeters.

The other foundations belonging to the crepidoma, which was found out on the excavations, were the step blocks made of limestone and the step planking blocks made of marble. The step blocks were made of local limestone and they have been still placed on the excavation area on

Toptepe. There were eight limestone step blocks have been found out on the line G10, D8<sup>5</sup> - G10, D16<sup>6</sup> on the south front, and there was only one limestone step block has been found out on the point G9, D20<sup>5</sup> on the east front of the temple. All these step blocks were found out on the 297<sup>70</sup> altitude. Their thicknesses were determined as 30 centimeters and the depth of the step blocks were nearly 100 centimeters and the width (although they were changing) was 80 ~ 150 centimeters. Under these step blocks there was a blockage layer which have a height of 15 centimeters. The step blocks of limestone, which were found out on the south and the east fronts were insitu. On some of these step blocks, traces of metal clamps (we could accept that these metal clamps were used for fastening the step blocks) were observed (Fig - 13). These limestone step blocks have also been spoiled because of the natural affects during the time period from the excavations till today.

Besides the step blocks of local limestone, two plancking blocks belonging to the steps of the crepidoma was observed on the excavation studies. These step plancking blocks were made of marble and they were found out on the same line (G10) with the limestone step blocks on the south front. The marble step blocks were found out on the  $297^{80}$  altitude. The marble step plancks which was shown on the line G10, D2<sup>5</sup> - G10, D5<sup>3</sup> on the excavation plan had a thickness of 20 centimeters and the step plancks had a measure of  $50 \times 150 \text{ cm}$  (Fig - 14). The step blocks have been deformed a little, as they were made of marble. It would be possible to accept the settlement of the step plancks, on the  $297^{80}$  altitude, above the limestone step blocks on the  $297^{70}$  altitude.

Technically, it could be accepted that the step plancks which was found out on the 297<sup>80</sup> altitude must have a thickness of 10 centimeters in order to settle on the limestone step blocks on the 297<sup>70</sup> altitude. However the thickness of the step plancks could be accepted as 10 centimeters, the examines that were done on the excavation had shown us that the real thickness of the step plancks were 20 centimeters. It was accepted that this difference between the measured height and the possible height could be constituted by the subsidence of the land under these step plancks. The step plancks were also insitu on the excavation area like the limestone step blocks.

During the excavations a natural, rough, big stoned and yellowish main ground was determined on the south side of the step plancks on the 297<sup>80</sup> altitude, which were on the same line with the limestone step blocks on the 297<sup>70</sup> altitude. This main ground was rising towards the south from the south front of the temple. The raising of this main ground towards south has been showing that the south front was not the entrance front of the temple, as it has been also showing that the step plancks (found out on the 297<sup>80</sup> altitude) and the step blocks (found out on the 297<sup>70</sup> altitude) which were found out on the same line, were belonging to the lower step of the crepidoma. So, the line G10 (which was shown on the excavation plan) constituted of the limestone step blocks on the 297<sup>70</sup> altitude and the marble step plancks on the 297<sup>80</sup> altitude was the lower step of the crepidoma. It could be accepted that the insitu step blocks and the insitu step plancks which were seen on this step line -whether in material or in measure- were used in the whole construction of the crepidoma of this temple. As it will be seen in the Chapter 4. 1., the crepidoma proposal related to the restitution of the Roman Temple on Toptepe has been prepared according to this acceptment.

In the sounding hole on the south - east corner of the temple, the limestone step blocks and the step blockage under the step block has been easily seen. As the thickness of the insitu step blocks on the south-east corner of the temple area was known, the altitude of the step blockage under this block could be determined. The altitude of the step blockage which was belonging to the lower step of the crepidoma has been determined as  $297^{40}$  (  $297^{70}$  -  $0^{30}$  =  $297^{40}$ ). The upper step blockage of the crepidoma on the south front was on the  $297^{70}$  altitude. The horizontal distance between the blockages on the  $297^{40}$  altitude and the  $297^{70}$  altitude on the south front was 130 centimeters, and the vertical distance between them was 30 centimeters. The height between these two step blockages was different from the others, but this could be accepted as the blockage on the  $297^{40}$  altitude was belonged to the lower step of the crepidoma.

When the knowledges about the lower step (this was the only step about which the all informations were determined) of the crepidoma, the total height of the lower step from the

main ground was determined as 65 centimeters (the step blockage of 15 centimeters + limestone step blocks of 30 centimeters + marble step plancks of 20 centimeters = 65 centimeters).

#### 2. 2. 2. The Column

The columns had been one of the most important architectural elements in the Roman Temple as they were in the whole Roman Architecture. The columns had been constituted by three main parts. These parts were; the capital, the topmost member of the column; the shaft, the middle portion of the column; and the base, the lower part of the column. These parts had been always used in the all three orders; the Doric order, the Ionic order and the Corinthian order and also in the Composite order which had begun to use in the Roman architecture. Only in the Doric order, the base was frequently absent.

In the excavations about the Roman temple on the Acropolis of Alaşehir only a shaft and a little part of a capital was found out. These were the only foundations about the columnar elements of the temple. AKR - 11, which was a part of the capital of a column found out during the excavations was in the Corinthian order. Because of this foundation, it could be possible to estimate that the columns of the Acropolis temple of Alaşehir could be constructed in the Corinthian order. So, examining the columns - only - in the Corinthian order would be enough for this study (Fig - 15).

For examining the column in details, the main parts such as the base, the shaft and the capital must have be examined separately and the foundations about these parts must have be determined in details.

#### THE BASE:

There had been no foundations, about the base, found out in the excavations of the temple. Because of this we could not examine the original base of the temple. The only thing we can do for the restitution proposal is to examine the bases which had been mostly used in the Corinthian order as the only foundation about the columnar elements were the part of the capital of a column and a part of the shaft of a column.

The Corinthian bases had similarities with the Ionic bases. The main parts of the base were the same in the both orders. The base which had been used in the Ionic and the Corinthian orders was in three parts; 1) the torus, a convex molding; 2) the scotia, trochilus or cavetto, a deeply concave molding; and 3) another torus (Tzonis & Lefaivre, 1992, P:68). The most common type of the bases which was used in the Corinthian order were the Attica - Ion bases. The studies about the base would be done in the Chapter 4. 1. 2. in details.

#### THE SHAFT:

The shaft of the column in the Corinthian order was similiar to the Ionic column. Generally the shaft was divided into twenty-four flutes, usually relatively deep elliptical in section and separately by a narrow flat strip (Tzonis & Lefaivre, 1992, P:68). The only difference between the shafts of the Corinthian order and the Ionic order was the proportion between the diameter of the base of the shaft and the height of the column (the base + the shaft + the capital). The Corinthian shaft was getting more thinner as it raises above, and its height was more than the shaft of the Ionic column.

During the excavations, the only foundation about the shaft of a column was found out on the south front of the temple (Fig - 16). The shaft was found out on the point G10, D14. AKR - 2 which was a part of the shaft of a column has been deformed because of the natural influences and maybe because of the reason which was also the cause of the demolition of this temple. As it has been deformed, it is difficult to determine the exact borders (the lower and the upper borders) of the shaft which was one of the parts of the columnar element. The column shaft has twenty-four flutes (made of the bagets and the canellurs) as it was usually seen in the columns of the Ionic and the Corinthian order. The distance between the two bagets on the shaft has been determined as 9<sup>7</sup> centimeters. The width of the bagets on the shaft have

been determined as 2<sup>5</sup> centimeters. The distance between the midpoints of the two bagets have been determined as 11 centimeters. As it has been seen on the Fig - 16, some of the bagets have been deformed. The given measurements about the flutes have been determined by the analysis and the observations on the existing remains.

The shaft which was found out during the excavations was a cylinder, as it was in the whole Greek and the whole Roman architecture. The diameter of the shaft has been determined as 90 centimeters. As it has been known, the diameter of the shaft was not equal in the whole column element. The shafts were getting thinner through the top of the column. So, this founding shaft could be placed in the top, in the middle or in the bottom of the column. But, it is impossible to determine the real place of this shaft through the column. The thickness of the shaft at the bottom of the column has been always thinner than the thickness of the shaft at the top of the column.

As the place of the shaft which was found out during the excavations could not been determined exactly, and as this part of the shaft has been the only foundation about the shaft of the column belonging to this temple; the only think we could do is to resume that the part of the shaft was the part of the bottom of the shaft. This admission has been done as the thickness of the bottom of the column was very important in the determination studies of the measures of the other elements like the base, the capital and even the entablature.

The releve of AKR - 2, which was the only foundation about the shaft, has been drawn according to the measurements given above (Fig - 17). This releve has been very important for the restitution as it has been the only foundation about this part (the shaft) and even the only foundation about the column of the temple.

#### THE CAPITAL:

The third part of the column was the capital. Although the capital could have been in three orders which were the Doric order, the Ionic order, and the Corinthian order; a new order was

formed in the middle ages of the Roman Empire which was called the Composite order. In this study we won't mention the orders and even the properties of the capitals except the Corinthian order, as it was the order in which the Roman Temple on the Acropolis of Alaşehir was constructed.

The only foundation about the capital of the column was only a part of a column. This part of the capital was found out on the point B6<sup>27</sup>, K2<sup>05</sup> on the east front of the temple. This foundation was very important for the restitution of the temple, as it was the only foundation about the capital and also the only foundation which would help us to determine the order in which the temple was constructed.

The part of the capital was in the Corinthian order, so it could be accepted that the whole capital of the temple was constructed in the Corinthian order. The order of the capitol was determined because of the abacus leaves on the founding capital part (Fig - 18).

These determinations, which has been done according to the foundations of the excavations, were the only determinations about the foundings of the column element of the Roman Temple on the Acropolis of Alaşehir. In fact these foundings were pretty inefficient for a restitution proposal, but it would be possible to determine the parts of the column by examining the contemporary temples which will be given in the Chapter 3. 2. 1.

#### 2. 2. 3. The Entablature

The other important architectural element in the Roman temple was the entablature. The entablature was a horizontal element placed above the column. The most of the ornaments and the decorations of the temple building was seen on this part, on the entablature, in the whole temple architecture. Because of this, the entablature had been changed along the process of Roman architecture. The entablature was used in the Corinthian order as it was used in the Doric, the Ionic, and the Composite order (Fig - 15).

The entablature used in the temple architecture was divided into three parts; the cornice: the uppermost member projecting in the continuous eave, the frieze: a band made of blocks on the architrave, and the architrave: made of blocks which span the distance between the two columns and the rest on the capital of the column (Tzonis & Lefaivre, 1992, P: 53).

During the excavations on Toptepe some marble architectural blocks had been found out, most of the founding were belonging to the entablature of the temple. These foundations were AKR - 1, AKR - 8, AKR - 16, AKR - 17, AKR - 20, and the AKR - 21. The whole foundations about the entablature were belonging to the cornice, the upper part of the entablature. There were no clear foundations, found out during the excavations, about the frieze and the architrave of the Acropolis Temple.

Just for examining and determining the entablature in details, it would be better to examine it in parts; the cornice, the frieze, and the architrave.

#### THE CORNICE:

The cornice, the most decorated element in the entablature, was divided into parts as; the sima, the geison, the modillions or the consoles, the Ionian cymatium and the dentils. These parts were the ones which were generally used in the cornice. Besides these parts there could be seen some other different parts in some temples or some of these given parts could be taken off from the organizations of the cornices.

The cornice blocks, which were found out during the excavations of the Roman temple on Toptepe, were absolutely in the Corinthian order. This determination could be easily seen and understood according to the curved palmette leaves on the sima, and according to the deep acanthus leaves on the evident consoles. Essentially the dating studies of the temple ( will be given in the Chapter 3. 1. ) has been done according to the ornaments which has been seen on the cornice blocks.

There were six foundations had been found out during the excavations. All these founding blocks were belonging to the cornice. As there were six foundings about the cornice had been found out, it would be better to examine them separately in details. The detailed examinations about these cornice blocks have been given below;

#### **AKR-1:**

The block was a part of the cornice band. The cornice block was found out on the point G11<sup>30</sup>, D13<sup>50</sup> on the right side of the south front on the excavation area of the Acropolis Temple. This cornice block was the one on which the most clear ornaments could be observed about the temple. The ornaments and the decorative parts of the block was very clear and noticeable (Fig - 19). Of course this has been very important for this study. Whether the AKR - 1 block was found out on the right part of the south front or the cornice block was cutten off diagonally, it could be accepted that this cornice block was a part of the right part of the inclined cornice on the south front.

The diagonally cutten cornice block made us think that the block was belonged to the inclined cornice which was also called as inclined geison. This cornice was cutten diagonally, essentially this was one of the reforms of the second century A.C. temple architecture, just to seen in a straight mood from the ground level (from below).

The lower part of the cornice block AKR - 1 was formed by a dentil row. The dentils were measured as  $9 \times 10$  centimeters and there were twelve dentils could be seen on this row on the cornice block. The distance between the two dentils was measured as  $4^5$  and the thickness of the dentils on the block were 8 centimeters.

Above the dentils, the consoles were seen .But between the dentils and the consoles, a row of Lesbian cymatium was determined. The lesbian cymatium was determined on a cyma - reversa profile and it was measured as 5 centimeters horizontally and 4 centimeters vertically. The consoles above the lesbian cymatium were formed on cyma - recta profiles (Fig - 20).

There were three consoles on the cornice block and the depth of these consoles were 24 centimeters. The consoles were decorated with deeply carved acanthus leaves and these console heads were measured as  $30 \times 25$  centimeters. The consoles were bordered with the Ionian Cymatiums on three sides (on two sides and on the top). The distance between the consoles was 29 centimeters and there were treofil figures between the console heads. These treofil figures were measured as  $10 \times 10$  centimeters.

Above the consoles the geison band was seen. There were no ornaments have been seen on the geison band. The geison was in a simple form and the height of the geison band was measured as 15 centimeters. The geison was bordered with the Ionian Cymatium on the top. The Cyma - recta profile which was formed the Ionian cymatium was 5 centimeters horizontally and it was measured as 6 centimeters vertically.

The upper part of the AKR - 1 block which was seen on the geison band was the sima. The sima was formed on a cyma - recta profile and the sima was decorated with palmette figures. The ornaments on the sima were wide and curved palmette leaves, these palmette leaves were settled in turns of down (the open palmette leaves) and up (the closed palmette leaves). The carving of the ornaments were deep and this depth of the ornaments showed that drill was used in the decorations of the cornice block which was one of the main reforms of the 2<sup>nd</sup> century A.C.

The AKR - 1, inclined cornice block which has been determined above in details was measured as  $170 \times 88$  centimeters totally (Figures 21, 22). The inclined cornice block, which was probably one of the blocks of the right part of the fronton on the south front, was made of marble as the other blocks (belonging to the entablature) found out during the excavations (Fig - 23).

#### **AKR-8:**

The, AKR - 8, cornice block was found out on the point D9, G9 on the south front of the excavation area. This block was also cutten diagonally like the AKR - 1 block. The total measure of the block was the same as AKR - 1 ( 170 x 88 ). The ornaments and the arrangements of the ornaments on the cornice block was the same as the AKR - 1 block which was also found out on the same front ( the south front ). The measures of the main parts of the, AKR - 8, cornice block like; the sima, the Ionian Cymatium, the geison band, the consoles, the Lesbian Cymatium and the dentils were just the same as they were in the inclined cornice block AKR - 1 (Fig - 25, Fig - 26).

As the similarities on arrangements of the ornaments and their measurements and as the two blocks (AKR - 1 and AKR - 8) was cutten in the same way, diagonally, it would be possible to think that these two blocks were in the same, unbroken block line which was the inclined cornice line, on the fronton of the south front.

The AKR - 8 block was found out on the left part of the south front on the excavation area, so it would be possible to think that AKR - 8 was a part of the inclined cornice line on the left part of the fronton on the south front of the Roman temple on the Acropolis of Alaşehir. These two blocks (AKR - 1 and AKR - 8), which were the parts of the inclined cornice, has been showing the properties and the measures of the inclined cornice, and this would be an important founding about the restitution of the upper construction of the temple.

The AKR - 8 was also made of marble, some parts of the block - especially the corners - were deformed by the natural affects and maybe because of its falling to the ground from the top. Although the inclined cornice block was partly deformed, the ornaments on its surface were in a good manner. The ornaments were more protected as the block was placed on the excavation area as its decorative surface was settled in a buried mood in the ground.

#### AKR - 16:

This cornice block was found out on the point D5, G9 on the south front of the temple. The great part of the block was deformed. Only the natural affects could not deformed this block in this way, so it would be possible to think that this deformation was happened by a falling or by a sudden hit.

From the ornaments on the surface of the block, it could be determined that AKR - 16 was a part of the entablature, the console band (Fig - 27). The measures of this block - especially the console measures - was also showing this. The width of the console was measured as 29 centimeters and the distance between the two consoles on this block was 30 centimeters. The treolif figures between the console heads were measured 11 by 11 centimeters (Fig - 29).

The AKR - 16 block was not cutten diagonally as the AKR - 1 and the AKR - 8 blocks, this property of the block shows that it was not a part of the inclined cornice, probably it was a part of the entablature, the console band of the cornice block. There were no dentil rows and Lesbian cymatium rows on this block as the inclined cornice blocks, according to these determinations it could be accepted that the cornice block (used in the entablature of the south front of the temple) could be formed in two parts; the upper part, from the top of the sima to the bottom of the console band, and the lower part which was from the top of the Lesbian cymatium to the bottom of the dentils.

This cornice block (AKR - 16) was made of marble as the other blocks found out on the excavations. It would be possible to think that this block was produced from the veined part of the marble as it has been seen on the figure - 27. There were clear splits seen on the AKR - 16, which could be resulted from the veins of the marble block.

#### AKR - 17:

The AKR - 17 block was much more deformed than the AKR - 16. From the ornaments which was hardly examined on the surface of the block, it was determined that the block was also a part of the cornice, the console band (Fig - 28). The trace of the console band on the block was determined as 27 centimeters in width. There were also two treolif figures which could be observed on AKR - 17 (Fig - 30).

The block was found out on the point D3<sup>5</sup>, G8<sup>7</sup> on the left part of the south front of the temple. The block was found out near the block AKR - 16, the examines on the both blocks (AKR - 16 and AKR - 17) shows that these two blocks could be the continuing blocks of the console band on the entablature. The block was also made of marble.

The AKR - 17 was also cutten straightly at the bottom of the console band as the AKR - 16, though the cornice was a massive block and the console band was in the middle of this block. According to this determination, it could be thought that the cornice was separated in two parts as it was told above on the AKR - 16.

#### AKR - 20:

The block was found out near the south - east corner, on the point D15, G105 on the south front of the temple. The measure of the surface of the block with the ornaments was nearly the same as the AKR - 1, but the palmette styles on the block was quite a different from the AKR - 1 and the AKR - 8 (Fig - 31).

AKR - 20 was also cutten straightly like AKR - 16 and AKR - 17, so it could be accepted that this block was not a part of the inclined cornice, it could be a part of the cornice. Like AKR - 16 and AKR - 17, the AKR - 20 was also cutten straightly under the console band. It could be thought that AKR - 16 and AKR - 17 blocks, which were deformed greatly, were

like the AKR - 20 in their original form. AKR - 20 has been also deformed, especially the corners of the decorated surface of the block was partly deformed because of the natural affects.

At the top of the AKR - 20, the sima was settled. The sima was formed on a cyma - recta profile. The height of the sima was 25 centimeters and it was decorated with the closed and open palmette leaves like the sima bands on AKR - 1 and AKR - 8, but the palmette figures on AKR - 20 was quite different from AKR - 1 and AKR - 8. The palmette leaves on the sima of the AKR - 1 and AKR - 8 were wider than the ones on the AKR - 20. From these analysis it could be determined that AKR - 1 and AKR - 20 were not on the same line (band).

The geison band on AKR - 20 was also separated from the sima by an Ionian cymatium as it was on AKR - 1. The height of the Ionian cymatium was 4 centimeters and it was measured as 5 centimeters horizontally. The geison band was deformed but it could be seen that it was not decorated. The height of the geison band was nearly 13 centimeters.

The console band which was the bottom of the cornice block AKR - 20 was measured as 16 centimeters vertically and 34 centimeters horizontally. The console heads were formed on a cyma - recta profilles and were decorated with deeply carved acanthus leaves. One of the console head was wholly deformed but the other console seen on AKR - 20 was quitely well protected. The console heads were surrounded by Ionian cymatium rows on three sides and treofil figures were placed between the consoles (Figures - 32, 33).

AKR - 20 cornice block which has been determined in details was measured  $170 \times 185$  centimeters. As it has been seen on figure - 33, AKR - 20 was cutten diagonally on one side (the inner side, which was not seen from the outside). There were two holes (which was made in straight forms) on this side of the block, it could be thought that these two holes were made in order to fasten the blocks to each other or to carry the block.

#### AKR - 21:

This block was the only founding block on the east front and also it was the only foundation about the entablature of the temple on this side. AKR - 21 was found out on the point B4<sup>3</sup> - K9<sup>5</sup> on the east front of the temple.

The temple was deformed greatly, but still some of the ornaments were seen on the block (Figures - 34, 35). The Dentils, the Lesbian Cymatium, and the Consoles were examined on AKR - 21. According to this examination, it could be determined that AKR - 21 was differently from the AKR - 16, AKR - 17 and AKR - 20 which were the parts of the horizontal band (the entablature) as these blocks were cutten under the console band. AKR - 21 had similarities with AKR - 1 and AKR - 8 as it was a massive block with the dentils, the Lesbian cymatium and the console parts decorated on its examined surface. But as it was found out on the east front, it could not be a part of the inclined cornice block like AKR - 1 and AKR - 8. So, it could be accepted that the entablature block was made of massive blocks on the west front.

Although AKR - 21 was greatly deformed, there were ornaments which could be examined on the block which was made of marble like the other entablature blocks found out on the excavations. The dentils which were partly seen on the block was measured 10 by 10 centimeters, nearly the same as the dentil on the AKR - 1. The distance between the dentils were measured 4 centimeters. The Lesbian cymatiums were following the dentil row on AKR - 21. The Lesbian cymatiums formed on a cyma - reversa profile was also deformed as the other ornaments on the block.

The consoles which was placed above the Lesbian cymatium was greatly deformed, even the ornaments on the console head could not be seen and examined. Only one console head (without the ornaments on it ) was seen on AKR - 21. Besides the console head, Ionian cymatiums which was surrounding the console was clearly seen on the block (Fig - 36).

No traces were seen belonging to the geison band and the sima on AKR - 21 as these parts of the block were probably broken down by the natural affects or a sudden hit. There was a hole on the bottom of the block which could be probably used for fastening the block to the frieze settled below the cornice block.

The depth of the block (to the end of the dentils) was measured 110 centimeters, but it would be impossible to measure the total height, the total depth or the total width of the block as it was greatly deformed.

#### AKR - 11:

The AKR - 11 was found out on the point G8<sup>8</sup>, D7<sup>3</sup> on the south front of the temple. This founding was one of the most important foundings of the excavations about the Roman Temple. The founding was a part of the inclined cornice ( the topmost part of the inclined cornice) of the fronton of the temple on the south front. According to the examinations, it could be accepted that this founding was belonged to the upper corner of the inclined cornice, in other words the upper corner of the fronton on the south front (Fig - 38).

This founding was very important as the slope of the fronton could be determined by the examines on this founding. According to the figure - 38 the slope of the AKR - 11 could be measured as % 35. So, the slope of the south fronton would be also determined as % 35.

These foundings (about which the examinations has been given above in details) were the whole foundations about the cornice, and even the inclined (inclined geison) which were found out during the excavations on the Roman Temple on the Acropolis of Alaşehir.

#### THE FRIEZE:

The frieze was a band of blocks which was placed on the architrave in the entablature element of the temple. In the Corinthian order, the frieze had the same properties like the frieze in the Ionic order. The frieze was a continuous band with carved reliefs throughout its full length, even it was named zoophoros in the Greek period meaning that which carries representation of live things. Alternated to these reliefs, a continuous band of dentils were used in frieze in some examples of the temple architecture. Along the developments on the architecture, the frieze was tended to be a band with reliefs and the dentils were placed above the frieze in the cornice (Tzonis & Lefaivre, 1992, P: 56).

In the Roman period - especially in the second century A.C. - the frieze had been narrowed and sometimes convex profiles were used in the frieze blocks. Usually simple blocks with no reliefs or no ornaments were used in the frieze block.

During the examinations of the Roman Temple on the Acropolis of Alaşehir, no foundations were found out about the frieze. As there were no frieze blocks found out during the excavations, the main characteristics of the frieze used in the Roman period - especially the period in which the Acropolis Temple of Alaşehir was constructed - would help us to determine the frieze used in this temple, as it was necessary for the proposal related to the restitution.

#### THE ARCHITRAVE:

The architrave was also a band of blocks which was the prototype of the modern joist. The architrave was divided into three parts which were called fasciae in the Ionic and the Corinthian orders. In some temples the fasciaes were separated by the bead and the reel rows especially in the Roman period.

There was no certain foundation about the architrave found out during the excavations of the Roman temple on the Acropolis of Alaşehir, though a marble block which could be a part of the architrave was seen on the south front. This block was determined as AKR - 6. This marble block had a thickness of 22 centimeters and the depth of the block was measured as 46 centimeters, the original length of the block could not be measured as the block was deformed on the both sides. The measures of AKR - 6 are suitable for a fasciae of the architrave, but it would be wrong to determine this block as a fasciae at the architrave as the measures of AKR - 6 are nearly the same as the other founding step plancks which are placing on the south front like AKR - 6.

These are the determinations about the all elements which were found out during the excavations. But besides these foundings there was another founding which was found out on the south front of the temple. This founding (AKR - 5) was a part of a shaft (Fig - 37). The diameter of the shaft was 52 centimeters and it was an unfluted shaft. The bottom of the shaft could be observed, but the upper part of it could not be observed as the top of the shaft was deformed. As the shaft was too thin to be a column shaft and as it was unfluted, this shaft could not be a part of the columns of the temple. It was impossible to determine the original function of this shaft, even it could be taken to the temple area from somewhere else. Because of this determination AKR - 5 would not examine in the restitution proposal.

Besides these foundations some parts of the marble ties were found out during the excavations (Fig - 39). These marble ties are still protecting in the excavation house in the centrium of Alaşehir. These tiles are showing us the roof of the temple was covering by these marble tiles.

#### CHAPTER THREE

## DATING STUDIES AND EXAMINATIONS ON THE CONTEMPORARY TEMPLES

To define the temple and give a proposal related to the restitution of the Roman Temple on the Acropolis of Alaşehir, about which the foundations found out in the excavations have been searched in details in the previous chapter, firstly the construction date of the temple must have been determined.

The dating studies are very important for the restitution studies as we can have an opinion about the unknown elements of the temple. The temple architecture had been developed and showed many differences on the architectural planning and also on the arranging the ornaments in the long time period from the oldest temples constructed in Egypt culture in the 3<sup>rd</sup> thousand BC. till the last examples built in the 2<sup>nd</sup> and 3<sup>rd</sup> centuries AC.

In all these various examples of temples, they give common properties on the common elements in the same time period and on the same region. For example Doric order had been usually used in Greece while the Ionic order had been using in the same time period in the Asia Minor. The differences between the regions and the time periods could also be seen on the architectural planning. The naos was a low rectangle in the Roman period - especially in the 1<sup>st</sup> and the 2<sup>nd</sup> centuries A.C., although it was a long and narrow rectangle in the Archaic period. According to the conclusion of the dating studies it would be possible to determine the properties of the elements, about which no clues have been found out on the excavations, by comparing them with the contemporary examples.

The dating studies related to the architectural monuments have been usually done according to the inscriptions found out on the excavations. During the excavations that had been continued for a short time ( for three years ) no inscriptions had been found out, which would show us the construction date of the temple. So it won't be possible to determine the construction date of the temple according to the inscription which belongs to the temple. There is also another way for the dating studies which could be done by searching the carving styles of the ornaments and the way of arranging the ornaments, which were seen on the founding blocks about the temple.

To define a date according to the style and the arrangement of the ornaments, firstly the general types of the ornaments and the periods in which they had been usually used must be searched in details. As it was mentioned above, the ornaments have been showed many differences in the different time periods according to the popular carving styles of that period and especially according to the carving techniques. After searching the styles of the ornaments, the type of the ornaments which had been used on the decorations of the architectural blocks of the Acropolis Temple of Alaşehir must have been determined. And finally according to these two studies about the ornaments, it would be possible to determine the construction date of the ornaments on the architectural blocks and so the construction date of the temple.

#### 3. 1. DATING STUDIES RELATED TO THE TEMPLE

It has been already known that the Acropolis Temple on Toptepe had been constructed in the Roman period. This determination had been done, as the foundings about the temple had found out near to the excavation area of a Roman theater which is also on Toptepe. Although it has been known that the temple was constructed in the Roman period the problem is to determine the exact date of the temple as the Roman period spreaded out to a long time period. So it would be enough to examine the styles of ornaments seen in the Roman period.

In the ornaments on the architectural elements of the Roman period, the lotus - palmette rows have been usually seen, as they were also seen in the Hellenistic period. The Lotus - Palmette rows, which had been used as a decoration on the architectural elements, had been used on the Sima, Geison, Cornice Surbase elements and even on the door frames in the Hellenistic and the Roman periods in different forms (Başaran, 1989, P:53). These decorative lotus - palmette rows have been also called as the Antemion zone. (Erder, 1967, P:41) The Antemion zone, in other words the lotus - palmette rows, had been applied on the cyma - recta profiles in all these architectural elements (Erder, 1967, P:7).

The Antemion zone could be searched in four main arrangement types (Başaran, 1990, P: 57). These four main types have been showing little differences in arrangement (Fig - 40).

- A) The Triple Arrangement: This type of arrangements had been constituted by the lotus flowers and the palmette leaves. The Lotus flowers had been used with the open and closed palmette leaves in turns. The lotus flowers and the palmette leaves had been connected to each other in different types. Type A1; Type A1a
- B) The Lotus Palmette Arrangement: This type could be examined in two types. In the first type the lotus flower had been used with the open palmette leaves (B, B1 and B1a types) and in the other type the lotus flower had been used with the closed palmette leaves (C, C1 and C1a types).
- C) The Double Palmette Arrangement: This type of arrangement had been constituted by the open and the closed palmette leaves in turns (D, D1, D1a types).
- D) The Up and Down Arrangement: This arrangement had been constituted by using the lotus and palmette leaves and sometimes the open and closed palmette leaves in turns of up and down. (CII, DII, EII types).

These are the main knowledges about the antemion zone used as a decorative element on the architectural elements. With this knowledges the antemion zone used on the elements of the Acropolis Temple must be examined in order to determine the type of the decorative rows. When the antemion zone used on the architectural elements (AKR - 1, AKR - 8, AKR - 20, AKR - 21) of the temple has been examined, it could be easily observed that the open and closed palmette leaves had been used separately in the antemion zone (Fig - 41). The closed palmette leaves had been used upwards and the open palmette leaves had been used downwards in the arrangement. The leaves of the palmettes used on the antemion zone were wide and their endings were curled. Another property of these ornaments was the carving styles of the palmette leaves. The palmette leaves had been carved deeply, it would be possible to think that these ornaments had been carved by drills.

As it had been observed from the antemion zone, seen on the architectural elements of the Acropolis Temple of Alaşehir, the ornaments which had been used on the blocks were in the DII type. On the ornaments, the open and closed palmettes had been used in turns of up and down. In order to find out the construction date of the temple, the time period in which this type of antemion zones (DII type) had been usually used, must be determined. Examining the Roman buildings and the architectural elements decorated in DII type - and also examining their construction dates - would help us to determine the construction date of the Acropolis Temple of Alaşehir.

Some of the Roman architectural monuments, on which the ornaments in DII type had been used, could be listed as follows;

- The Gymnasium of the Theatre at Ephesus: It was constructed in the first half of the 2<sup>nd</sup> century A.C. (Başaran, 1989, pp: 49, 50) (Fig 42).
- The Roman Bath at Ankara: It was constructed between the years 211 217 (in the first half of the 3<sup>rd</sup> century) A.C. (Başaran, 1989, pp:67, 68) (Fig 43).

- The Theatre at Hierapolis : It was constructed in the  $2^{nd}$  century A.C. (Başaran, 1989, P: 101) (Fig 44).
- The Nympheum at Side: It was constructed in the second half of the 2<sup>nd</sup> century A.C. (Başaran, 1989, pp: 68, 69) (Fig 45).
- The Gymnasium at Sardis: It was constructed in 130 (in the middle of the 2<sup>nd</sup> century)

  A.C. (Başaran, 1989, pp: 68, 69).
- The Temple of Serapis at Ephesus: It was constructed between the years 138 192 (in the middle and the second half of the 2<sup>nd</sup> century) A.C. (Başaran, 1989, pp: 34, 35) (Fig 46).

As it has been given above; the buildings decorated with the ornaments in DII type - the known and determined ones - had been usually constructed in the 2<sup>nd</sup> century, especially in the middle and the second half of the 2<sup>nd</sup> century.

Besides the arrangaments of the ornaments on the antemion zone; the styles, the arrangaments and the carving depth of the Ionian Cymatium (the eggs and tongues) and the Lesbian Cymatium, which has been usually seen on the architectural elements of the Roman period, has been the other elements which has been affected the dating works of the temple. The arrangaments and the carving depth of the Ionian and the Lesbian Cymatiums determined on the architectural elements of the Acropolis Temple has been showing us the 2<sup>nd</sup> century, as the depth of them were very deep and made us think that these cymations must had been made only by drills and the deep carvings made by using drills were one of the characteristics of the 2<sup>nd</sup> century A.C.

When all these informations has been examined; it would be possible to think that the time period, in which the given architectural monuments decorated with the ornaments in DII type and with the Ionian cymatium, Lesbian cymatiums had been constructed, could be the

construction date of the Acropolis Temple of Alaşehir. As these antemion zone and the cymations have been showing similarities with the Ionian cymatiums, Lesbian cymatiums and the Antemion zone seen on the founding blocks of the Roman Temple on the Acropolis of Alaşehir. According to all these studies it would be possible to determine the construction date of the temple as the second half of the 2<sup>nd</sup> century A.C.

Besides all these dating studies according to the ornaments on the founding blocks, a correspondence had been done with Prof. Dr. Cevat Başaran about the ornaments seen on the founding blocks. (Başaran, C., 1996 December 25, Personal interview) Prof. Dr. Cevat Erder and his assistances had been examined the photographs of the founding architectural blocks of the temple just to determine the construction date of the temple according to the ornaments on the Antemion zone, Lesbian cymation and the Ionian cymation, their arrangements and their carving depth. After these examinations, they have been determined the construction date of the Roman temple as the time period between the end of the 2<sup>nd</sup> century and the beginning of the 3<sup>rd</sup> century A.C.

As a result of the dating studies, it would be possible to determine the date of the Roman Temple on the Acropolis of Alaşehir as the second half of the 2<sup>nd</sup> century A.C. This date could be admitted in the reigns of Antonius Pius (138 -161 A.C.), Marcus Aurelius (161 -180 A.C.) according to the studies on the ornaments on the existing foundations.

### 3. 2. EXAMINATIONS AND COMPARISONS ON THE CONTEMPORARY TEMPLES:

After the dating studies about the temple, the examinations on the contemporary temples must have been done in order to compare the temples with the Acropolis temple of Alaşehir. Also the properties of the architectural period in which the Acropolis temple on Toptepe had been constructed (the second half of the 2<sup>nd</sup> century) must have been determined and observed just to determine the unknown elements of the temple. These studies must also have done in order to prepare a proposal related to the restitution of the Roman Temple on the Acropolis of

Alaşehir. By the results which would be obtained by the comparisons on the contemporary temples, it would be possible to form an idea about the elements, about which no foundations were found out during the short excavations. The architectural monuments constructed in the same time period have been shown similarities in decoration (the styles and the arrangments of the ornaments, their carving depths), in architectural organization and even in proportions, as the popular ornaments, new architectural organizations, new tecniques had been directly affect the architecture and the other branches of art in the same time period.

As it has been observed in the Chapter 3.1., the construction date of the Roman temple on the Acropolis of Alaşehir has been determined as the second half of the 2<sup>nd</sup> century A.C. according to the dating studies about the ornaments on the architectural blocks which had been found out during the excavations. For determining and comparing the properties of the 2<sup>nd</sup> century A.C. temple architecture, firstly the Roman temples constructed in these time period must have been examined in details ( their measures, their main architectural properties and their proportions). In these examinations, it would be better to examine only the temples which had been constructed in Asia Minör, as the temples have been showing differences according to its construction region. To determine the properties of the second half of the 2<sup>nd</sup> century temple architecture, it would be possible to examine the temple architecture in the whole 2<sup>nd</sup> century as the main properties were generally the same in the whole 2<sup>nd</sup> century A.C.

#### 3. 2. 1. The Contemporary Temples

It would be possible to determine the most important temples which were constructed in Asia Minor in the  $2^{nd}$  century A.C. as below;

#### - The Temple of Serapis at Ephesus:

The temple was erected in the Antonine period in 138 - 192 A.C. It was consisted of a cella, roofed with stone vaulting and a porch with eight Corinthian Columns. The cella was  $29^{00}$  meters wide and the cella door was  $6^{00}$  meters across. The diameter of the Corinthian columns

at the bottom (the base of the shaft) was 150 centimeters, the total height of the columns with the base, the shaft and the capital was 14<sup>00</sup> meters. (Akurgal, 1983, P:163)

#### - The Temple of Hadrian at Ephesus:

The temple was erected between the dates 117 and 120 A.C. The temple was settled in the city center. There were four Corinthian columns on the entrance front. A vault which was rested on the two columns on the middle of the front side was constructed on the fronton of the temple, so a different type of fronton was seen on the entrance front which had a vault inside. The horizontal entablature on the fronton was carried unbroken round the curve of arch. The vaulted fronton was one of the reforms of the 2<sup>nd</sup> century temple architecture, as the vault and the dome was begun to use in that period (Akurgal, 1983, P: 164) (Fig - 47).

#### - The Temple of Seleukeia on the Kalykadnos (Silifke)

The temple was dated in the first half of the 2<sup>nd</sup> century A.C. The temple was a hexastyle peripteros with eight by fourteen columns. The whole columns were in the Corinthian order. Some of the columns, including one column surmounted by a Corinthian capital, are still insitu on the Kalykadnos (Akurgal, 1983, P: 341) There were girlands which has been carrying nikes and bucranions on the friezes of the entablature (Anadolu Uygarlıkları Ansiklopedisi - 2, P: 410)

#### - The Temple at Termessos:

The temple was dated to the period of 138 - 192 A.C. The temple was a peripteros in the Corinthian order. (Akurgal, 1983. P: 327) It was concluded that the temple was dedicated to Artemis. The temple had a vaulted fronton as it was seen on the Hadrian. Temple at Ephesus, but there is a difference between these two vaulted frontons. In this temple, the horizontal entablature was broken and spanned by an indepented arch with a narrower border (Fig - 48). The cella of the temple was 5<sup>50</sup> meters wide and it was 5<sup>50</sup> meters depth (Uysal & Buyruk,

P: 50). It was smaller than the usual temples of the period of the Roman Empire as it was constructed in the city like the Temple of Hadrian at Ephesus.

#### - The Temple of Zeus at Euromos:

The temple was erected in the region of Hadrian (between the years 117 - 138 A.C.). The temple was a peripteros with six by eleven columns, the columns were all in the Corinthian order. The temple was raising on a stylobat which was  $14^{40}$  meters wide and  $26^{80}$  meters depth (Akurgal, 1983, P: 246) (Fig - 49). Some of the columns and even a part of the entablature are still insitu.

#### - The Temple at Olympos:

There is still a cella door of the temple which is insitu. From the inscription of a statue-base lying at the foot of the door, it was learned that a statue of Marcus Aurelius stood somewhere in the temple. Therefore, it might be erected in the region of Marcus Aurelius (161 - 180 A.C.). (Akurgal, 1983, P: 265) The temple might be a templum in antis of the Ionic order. The cella measured as  $10^{70}$  meters by  $12^{53}$  meters and the inside measurements of the cella door, which is still insitu was  $2^{90}$  meters by  $7^{85}$  meters.

#### - The Temple at Knidos:

The temple was dated to the region of Hadrian (117 - 138 A.C.). The temple was a pseudo - peripteros (with engaged half columns on the exterior walls), which had a tetrastyle prostyle and an opisthodomos with two columns in antis. The columns of the temple were in Corinthian order. The Corinthian temple stood on a high podium and it was approached on the east by a flight of seven steps (Akurgal, 1983, P: 253).

#### - The Temple of Athena at Notion:

The temple was erected in the region of Hadrian and it was dedicated to Athena Polias, the most important god of the city. The temple which was a templum in antis was constructed in the Corinthian order. The crepidoma was three stepped and it was measured 7<sup>50</sup> by 16<sup>00</sup> meters (Akurgal, 1983, P: 15). The temple and the altar (which was stated on the east side of the temple) was surrounded on all four sides by stoas in the Doric order.

#### - The Temple of Zeus at Aizanoi:

The temple was erected in the region of Hadrian (117 - 138 A.C.). The temple was a pseudo - peripteros with columns of eight by eleven. The platform on which the crepidoma was settled was 35<sup>48</sup> by 53<sup>28</sup> meters. The crepidoma was eleven stepped and the height of the steps were 26 centimeters. The stylobat was constructed on vaults, and the measurement of the stylobat was 21<sup>94</sup> by 37<sup>49</sup> meters. The height of the podium (the stylobat) was 2<sup>86</sup> meters. The thickness of the base of the column shaft was 2<sup>45</sup> meters, and the total height of the column with the base, the shaft and the capital was 9<sup>62</sup> meters. the total height of the order with the column and the entablature was 11<sup>84</sup> meters (Fig - 50).

#### - The Temple of Apollo (N1) at Side:

The temple was erected in 150 A.C. The temple was settled on a natural konglomera layer which was used to form the level layer by whittling the upper part of the natural konglomera layer. By whittling the konglomera layer the crepidoma was formed as three stepped. The stylobat was  $16^{37}$  meters by  $29^{50}$  meters and it was covered by square plates. The temple was a peripteros with six by eleven columns. The columns were all in Corinthian order. The thickness of the base of the shaft was  $1^{08}$  meters, and the thickness of the top of the shaft was  $0^{89}$  meters. The shaft was fluted and it was constituted by twenty-four flutes. The base of the column was in Attica-Ion form and its height was  $0^{61}$  meters. The height of the Corinthian capital of the

column, which was constituted by two rows of acanthus leaves, was  $1^{12}$  meters. Total height of the column ( with the base, the shaft and the capital ) was  $8^{85}$  meters.

The height of the architrave surmounting the columns was  $0^{74}$  meters. It was separated into three fasciae by the "bead and reel" and a Lesbian cymatium was following the architrave at the top. The height of the frieze block surmounting the architrave was  $0^{59}$  meters. The height of the richly decorated consoles was  $0^{49}$  centimeters and the height of the sima on the console was  $0^{24}$  meters.

The height of the entablature was  $2^{00}$  meters, total height of the fronton was  $3^{40}$  meters and its width was  $17^{50}$  meters (Mansel, 1978, pp : 122, 125, 127) (Fig- 51).

#### - The Temple of Athena (N2) at Side:

The temple which was erected in the ages like the Temple of Apollo and it was also settled on a natural konglomera layer. The height of the crepidoma was 0<sup>31</sup> meters and its depth was 0<sup>40</sup> meters. The back of the naos was closed as it was also seen in the temple of Apollo at Side. The temple was a peripteros with six by eleven columns, its stylobat was measured as 17<sup>65</sup> meters by 37<sup>49</sup> meters. The thickness of the base shaft of the column was 1<sup>26</sup> meters and the thickness of the top of the shaft was 0<sup>96</sup> meters. The bases were in Attica-Ion type and their height were 0<sup>78</sup> meters. The shaft of the column was constituted by twenty-four flutes and the height of the shaft was 8<sup>30</sup> meters. The capital of the column was in the Composite order and its height was 1<sup>25</sup> meters. Total height of the column ( with the base, the shaft and the capital ) was 10<sup>34</sup> meters. The height of the frieze was 0<sup>73</sup> meters ( Mansel, 1978, pp : 128, 132 ) ( Fig - 51 ).

#### - The Temple of Aesculapis at Pergamum (Bergama):

The temple was erected between the years 140 and 175 A.C. It was constructed ascribed to the Pantheon model. It was a circular temple building and there was an entrance with a portico

infront of the circular part. The diameter of the circular temple was  $24^{00}$  meters. On the massive cella, a dome was settled which was made of bricks. The depth of the podium steps were  $0^{47}$  meters (Ward - Perkins, 1977, pp : 277 - 278) (Fig - 52).

#### - The Temple of Traianeum at Pergamum (Bergama):

The temple was erected by the Emperor Hadrian for the Emperor Traian in the reign of Hadrian (in the period 117 - 138 A.C.). The temple was constructed in the Corinthian order.

#### - The Temple of Serapis at Pergamum (Bergama):

The largest building in the ancient Pergamum was the temple which was dedicated to the Eygptian Gods. It was constructed of the red bricks and the temple was known popularly as "Red Courtyard". The temple was erected in the reign of Hadrian ( 117 - 138 A.C. ). The temple was different from the usual Roman temples with its large courtyard lying infront of it, which covers an area of 10<sup>00</sup> meters by 26<sup>00</sup> meters. The main structure of the temple was constituted of a building with one nave, two aisles and one apse. There were two symmetrical buildings situated on the north and the south sides of the temple with big round towers and courtyards. The temple and the two buildings with the towers opening to a courtyard measuring 10<sup>00</sup> meters by 20<sup>00</sup> meters. (Akurgal, 1983, pp : 103, 104) The temple was also different from the usual Roman temples with its architectural space organization. The largest fragments found in the south round-towered building with the twice life-size statues of Eygptian type which has been proved that the temple was set apart for Eygptian religious practices.

#### - The Temple of Zeus at Aezani - Phrygia:

The temple was built in the reign of Hadrian, especially in 125 A.C. It was stood on a huge rectangular terrace. The many stepped podium was measured as 21<sup>70</sup> meters by 38<sup>40</sup> meters and the height of the podium was 4<sup>30</sup> meters. The temple was a pseudodipteros, except at the ends,

where it was pseudotripteral (Robertson, 1992, P: 220). The naos was a well preserved prostyle preceded by a poch with four columns and a narrow opisthodomos with two columns inantis. There was a vaulted chamber under the naos, reached by a staircase from the opisthodomos. The inantis columns placed in the opisthodomos were in the Compozite order. Besides these Compozite columns, the columns which were surrounded the naos eight along the short side and fiftheen on the long sides were in the Ionic order (Akurgal, 1983, P: 269) (Figures - 53, 54). The thickness of the bases of the shaft was 0<sup>95</sup> meters and the thickness top of the shaft was 0<sup>81</sup> meters. The base of the column was in Attica - Ion type and its height was 0<sup>57</sup> meters. The height of the capital of the column was 1<sup>00</sup> meter.

The temples mentioned above are the contemporary temples of the Roman temple on the Acropolis of Alaşehir according to the dating studies which has given in the Chapter 3. 1. The common similarities of all these temples are their construction dates and also their construction regions. All these temples were constructed in Asia Minör. Also a few examples can be given to the other contemporary temples which were constructed in the 2<sup>nd</sup> century A.C. in the land of the Roman Empire. These two contemporary temples were the important Roman temple buildings which were not constructed in Asia Minör.

#### - The Temple of Antonius & Faustina in Forum Romanum (Rome):

The temple was dedicated by the Senate to Faustina the Elder, wife of Antonius Pius, on her death in 141 A.C. The temple was settled in the Forum Romanum in Rome. Although it was not in Asia Minör, it has been examined as it was characteristically Roman type. The stylobat was measured about 21<sup>70</sup> meters by 38<sup>70</sup> meters to the front of the porch columns. The temple was a hexastyle with a prostyle porch and three bays. The whole of the hexastyle prosyle porch with much of the cella walls has been stood up to the level of frieze (Robertson, 1992, P: 217). The columns of the temple were made of unfluted monoliths of cipollino. The capitals of the columns were in Corinthian order and the frieze was decorated with an uninteresting scheme of griffins and candelabra.

#### - The Temple of Baachus at Baalbek:

The construction of the temple was begun in the 1<sup>st</sup> century A.C., but it was ended in the 2<sup>nd</sup> century A.C. The properties of the temple was belonged to the 2<sup>nd</sup> century A.C. The temple was a peripteros with eight by fifteen columns. The stylobat was measured about 35<sup>20</sup> meters by 68<sup>48</sup> meters. The pteron columns were unfluted and their height was 18<sup>24</sup> meters. The smaller porch columns were fluted. The capitals of the columns were in the Corinthian order and the height of the podium was 5<sup>10</sup> meters (Robertson, 1992, P: 229) (Fig - 55).

After mentioning the contemporary temples and their properties given above, it would be possible to reach a desicion by examining these given 2<sup>nd</sup> century temples. All of the properties of these temples could be combined in tables (Tables - 1, 2). As a result of these examines and comparisons through these temples, the properties of the 2<sup>nd</sup> century temples (as the Roman temples were showing different details and proportions in different periods) could be determined as below.

#### 3. 2. 2. The Roman Temple Architecture In The 2nd Century A.C. :

The Roman architecture, like the other branches of art, were greatly affected from the Greek and Tuscan culture. The Roman architecture had been continued with these affects till the reign of Augustus (43 B.C. - 14 B.C.). With the reign of Augustus the Roman architecture had been reached to its independence and an original expression. During the Roman Empire, the monumentality which had been affected the whole architectural structures had been a Roman property, even a passion. This passion of monumentality had been also affected the Roman temple. The temple buildings had been showed this passion by their high podiums, deep peristyls, decorative statues placing in the niches made on the inner walls.

Total height	•	1	-	1		1			11,84
Te				·					11
Steps:		,		,	ŧ.		•	•	0,26
Column height	14,00	1	ı	•	1	1	•	•	9,62
Column D. U-L	1,5	•	ı	1	•		ı	,	2,45
Height of the Podium	1	•	ı	,	•	_	,	Three stepped	2,86
Stylobat	1	,	•	1	14,40 x 26,80	1	-	9,50 x 16,00	21,94 x 37,49
Style	8 x	4 x	8 x 14	•	6 x 11 peripteros	Templum in antis	Pseudo - Dipteros	Templum in antis	8 x 15 pseudo-dip.
Order	Corinthian	Corinthian	Corinthian	Doric	Corinthian	Ionic	Corinthian	Corinthian	Ionic
Date	138-192 A.C.	117-120 A.C.	First half of the 2nd cent.A.C.	138-192 A.C.	117-138 A.C.	161-180	117-138 A.C.	117-138 A.C.	117-138 A.C.
Place	Ephesus	Ephesus	Kalykadnos	Termessos	Euromos	Olympos	Knidos	Notion	Aizanoi
Name of the Temple	Serapis	Hadrian	Seleukeia	Termessos	Zens	Olympos	Knidos	Athena	Zens

Table - 1. The proporties of the Contemporary Temples

Table - 1. The proporties of the Contemporary Temples

Name of the Temple	Place	Proportion of Stylobate	Column D./H.	Column Base / D.	Column H.C./ L.D.	
Serapis Ephesus		· -	1,07 / 10	· -	-	
Zeus Euromo		5,37 / 10	<del>-</del>	-	~	
Athena	Notion	5,93 / 10	-	-	-	
Zeus	Aizanoi	5,85 / 10	-	<u>-</u>	<del>-</del>	
Apollo (N1)	Side	5,55 / 10	1,02 / 10	5,65 / 10	10,37 / 10	
Athena (N2)	Side	5,05 / 10	1,02 / 10	6,19 / 10	9,92 / 10	
Antoninus & Faustina	Rome	5,60 / 10	<u>-</u>	· _	-	
Zeus	Aezani	5,91 / 10	-	5,98 / 10	10,41 / 10	
Baachus Baalbek		5,14 / 10	_	-	-	

Table - 2. The results of the examinations on the contemporary temples

H: Height D: Diameter

H.C.: Height of capital L.D.: Lower diameter

In the historical process, the Roman temple architecture had been developed by the affects of different cultures, new architectural elements and organizations and by new techniques. When the Roman temple architecture had been examined from the early ages till the 2<sup>nd</sup> century A.C., many newness and developments could be easily seen. The temple architecture had been showed different properties in different time periods and in different regions. As we examined the temples constructed in Asia Minör in 2<sup>nd</sup> century A.C., we could determine the common properties and the new techniques as below.

In the early ages of the Roman architecture, the temples were dedicated to the Gods protecting the city. In the second century A.C., the temples were dedicated to the Emperors besides the Gods who were deified after death. The temples were settled in temenosses which were reserved for the Emperors. Especially in the second half of the 2<sup>nd</sup> century the cities were contending for producing compositions with axial plans to make the temples more magnificient. Of course this property was usually seen in the city.

The peripteros, pseudoperipteros and the circular plan types were the most common planning types in these ages (2<sup>nd</sup> century A.C.). They were usually constructed in hexastyle: with six columns on the main front, or in octastyle: with eight columns on the main front. The podiums were raised just to gain more magnificience.

In this period mostly the masonry with ashlar blocks were used in the Roman architecture. The ashlar blocks and especially the masonry were marvelous. The walls made of ashlar blocks were seen in the temple of Traianum at Pergamum and the temples of Apollo and Athena at Side.

Besides the walls made of ashlar blocks, many temples were constructed by the mortared wall technique in the 2<sup>nd</sup> century A.C. in Asia Minör. The wall construction technique which was used in the temple of Hadrian at Ephesus was mortared. Another technique which was used in the temples of Athena (Notion), Zeus (Aizanoi) and Termessos was the wall

techniques which was looked like a massive wall, but it was not massive in real. The wall was made by stuffing the (independent) inner and outer surfaces only by rubble (without mortar) (Anabolu, 1970, pp: 41, 42).

The column construction was made by fastening the shaft together by metal clamps. The final form of the outer surface of the column was given after the shafts were placed in their places. Marble was usually used in the column construction. It was known that there were many quarries in Anatolia in the 2<sup>nd</sup> century A.C. and it was also known that the marbles produced in these quarries were used in the buildings which were constructed in Asia Minör.

The bases of the columns used in 2<sup>nd</sup> century A.C. were usually in Attica - Ion type. The shafts of the columns were usually fluted and they were in the Ionic, Corinthian and Composite orders. Although unfluted columns surmounted by Corinthian capitals were seen, the fluted and unfluted columns were used together in some of the temples like the temple of Zeus at Euromos.

The capitals of the columns were in the Corinthian order. The acanthus leaves used in the Corinthian capitals were showing characteristics of the capital. The acanthus leaves, seen on the capital ornaments, were wide in this century. The acanthuses were formed of leaves which were seen as the quarter of a circle schematically (İdil, 1976 - 1977, Anadolu - XX, P:27). The other order, which was usually seen in the capitals in this period, was the Composite order, but the Composite capitals were rarely seen in the temple architecture of the 2<sup>nd</sup> century A.C. The deep carvings of the acanthus leaves, which made by using drills, were one of the other characteristics of the 2<sup>nd</sup> century A.C.

Coming to the entablature, the architrave was made of two or three fasciaes. The fasciaes were separated by the "bead and reel" rows. Usually the last fasciae was surmounted by the Lesbian cymatium, but in some of the temples; like the temple of Serapis (Ephesus), the temple of Zeus (Aezanoi), the temples of Apollo and Athena (Side) Ionian cymatium and

the Lotus - Palmette rows were taken the place of the Lesbian cymatium (Anabolu, 1970, P:73).

In the Corinthian order the friezes, which were usually used in the temple architecture, were simple bands. Besides these simple bands as the frieze element, decorated friezes were also seen in this period. On the frieze decorations plant patterns, bucranions, guirlandes which were carried by Nike or Eros could be seen. The guirlandes were made of plant patterns like; bares, leaves, buds, flowers, fruits and they were tied up with ribbons.

On the decorations of the temples of the 2<sup>nd</sup> century A.C. the guirlandes which were heavily loaded were usually used. In the lately ages of the 2<sup>nd</sup> century A.C. drill usage was begun in the decoration of the entablature, because of this, the entablatures which was decorated by the usage of drill could not be constructed in the previous periods.

The other two newness which were produced in the second half of the 2<sup>nd</sup> century A.C. were the narrow friezes and the friezes with convex profiles. The consoles used in this period was decorated with ornaments, the ends of the consoles were covered with the acanthus leaves.

The sima was decorated with plants patterns like rinceau and sometimes with lotus - palmette leaves. Especially the geisopodes or dendanes which were used in the temples of the middle of the 2<sup>nd</sup> century A.C., had great depth and dimension, because of this they were so impressive. The sima blocks took place on the left and on the right sides of the fronton of the temple was cutten diagonally just to seen in a straight mood from the eye level.

The superstructure of the temple above the level, on which the architectural order elements were ended, was wooden ridge roof. The roof was covered with the terracotta or marble tiles. The inclined cornice band forming the fronton of the temple was in the same slope with the ridge roof.

The common properties of the 2<sup>nd</sup> century A.C. temple architecture had been given above just to define the unknown elements of the Roman temple on the Acropolis of Alaşehir, which this thesis is about. By these knowledges about the 2<sup>nd</sup> century temple and comparisons about the Acropolis temple with the contemporary temples, it could be possible to determine the unknown elements (about which no foundations had been found out during the excavations) of the temple.

# CHAPTER FOUR THE PROPOSALS RELATED TO THE RESTITUTION

In the mostly parts of Anatolia, many civilizations and cultures were developed since the early ages. Traces of many Greek and Roman settlements have been still seen especially in the Aegean, as these regions were directed by the Greek and than after them by the Romans for many centuries. The remains of these cultures and their monuments have been shown the characteristics of that cultures, their construction styles, techniques, shortly their way of living. By the excavations and observations about the building types of their cultures.

The remains of the Roman temple on the Acropolis of Alaşehir (briefly the Acropolis Temple of Alaşehir), has been also important as it could give us indications about the Acropolis Temple, and if the Acropolis temple could be imagined wholly, it could give us indications about the characteristics of the temple architecture of the period in which the Acropolis temple was constructed.

In the Roman period, the temple building was one of the most important buildings in the whole city, because of this the main characteristics of the period; the new techniques, the most popular decoration styles, the most popular stuffs were seen on the temple buildings. The Acropolis Temple of Alaşehir must have been an important temple in the city as it was placed on Toptepe (the Acropolis of Alaşehir) which was seen from the every point if the city located on the Alaşehir plain.

T.C. YÜKSEKÖĞRETÎM KURUMY DOKUMANTASYON MERKEMI The foundations which were found out during the excavations on the temple area were inefficient to prepare a proposal about the restitution as the excavation studies were done only for three years and after that no further studies had been done on Toptepe. Preparing a restitution proposal could only be possible by connecting the examines of the foundations found out during the excavations on the temple area (given in the chapter 2. 2.) and the comparisons of the 2<sup>nd</sup> century temples - the contemporary ones - (given in the chapter 3. 2. 1.) and the characteristics of the 2<sup>nd</sup> century temple architecture (given in the chapter 3. 2. 2.).

While preparing the restitution proposal, it would be better to study in parts. The restitution study would be prepared in two parts; the proposal about the elements of the temple and the proposal about the architectural organization of the temple.

#### 4. 1. THE PROPOSAL ABOUT THE ELEMENTS OF THE TEMPLE:

In the Chapter 2. 2. the founding elements of the excavations about the Acropolis Teple on Toptepe was given in parts as; the crepidoma, the column and the entablature. In this part of the study, it would be better to study in parts as; the crepidoma, the column and the entablature like the Chapter 2. 2. By this way it would be easier to determine the main principals of the restitution.

#### 4. 1. 1. The Crepidoma:

The crepidoma which was constituted the lower structure of the temple was a stepped construction part. In the Roman period, in which the monumentality was a passion, the religious buildings was raised on a podium as they had an important place in the whole city life and the city view. In the Roman period the crepidoma was placed on a slope of a hill in order to dominate the whole city or placed on a high podium in the city.

Although the stepped crepidoma was formed generally by raising the podium in the temples, the crepidoma was sometimes formed by whittling a natural stone layer ( The Temple of Apollo at Side, The Temple of Athena at Side ). In the temples which was placed on a slope of a hill, the temple was settled towards the city as it could dominate the city through its entrance front. Besides the steps which took part in the entrance front, the crepidoma could be surrounded by the steps in all four sides of the temple. The stepped crepidoma had been showed many differences. In some temples the height of the steps was lowered just to supply easy usage for the old priests and the lowered steps were supplied by dividing the steps - which surrounds the whole four sides of the temple - only in the entrance front.

During the excavations about the Acropolis Temple of Alaşehir, the lumpstone step blockages which were found out on the excavation area were some of the foundings about the crepidoma. Besides the step blockages; insitu limestone step blocks and insitu marble step plancks were found out. These foundings have been effective in constituting the crepidoma form and determining the measures of the crepidoma (Fig - 56).

The lower founding, which was found out during the excavation studies, was the insitu limestone blocks on the 297<sup>70</sup> altitude. On the same line - with these blocks - two insitu step plancks made of marble were found out on the 297<sup>80</sup> altitude. The thickness of the limestone step blocks were 30 centimeters and the marble step plancks were 20 centimeters. Although it could be thought that the step plancks must have a thickness of 10 centimeters in order to settled on the limestone step blocks (according to the altitudes on which they had been found out), the thickness of them were 20 centimeters in real. It was accepted that this was constituted by the subsidence of the land under these step plancks.

As a result; it could be possible to accept that the step blocks and the step plancks were constituting the same step on G10 line. There were blockages under the limestone step blocks which had a thickness of 15 centimeters according to the examines done on the temple area.

As it was determined on Chapter 2. 2; a natural, rough, big stoned and yellowish main ground was determined on the south side of the insitu step plancks found out on the south front. This main ground was raising towards the south according to the observations. With

these knowledges it could be accepted that the step which was constituted by insitu step blocks (of 297<sup>70</sup> altitude) was the lower step of the crepidoma on the south front. Also it was showing that the entrance front of the temple was not the south front. So the entrance front could be examined as the north front (which was dominating the whole Alaşehir city). As the thickness of the insitu blocks on the lower step were known, the total height of the lower step could be determined as;

the step planck: 20 cm. + the step block: 30 cm. + the blockage: 15 cm. = 65cm. from the main ground level.

The step blockages which were found out during the excavations were limited with the ones on the 297<sup>70</sup>, 298<sup>11</sup> and 298<sup>90</sup> altitudes. The blockage on the 297<sup>70</sup> altitude has been seen on the south front and the east front. The blockages on the 298<sup>11</sup> altitude were seen on all sides; on the south, the west, the north and the east fronts. But as the sounding which was opened on the north front has been closed by the natural affects, the blockage line on the 298<sup>11</sup> altitude placed on the north front can not be seen today. So the blockage line on the 298<sup>11</sup> altitude which was the only founding on the south front could only be seen from the excavation plan. Besides these two blockages the other founding about the step blockages was the blockage found out on the south front on 298<sup>90</sup> altitude ( seen on the figure - 3 ).

As there were no clear traces according to the crepidoma had been found out on all four sides, it would be possible to define the crepidoma by completing the founding step blockages as much as it could be.

The step blockage on the 298<sup>11</sup> altitude could be taken as the bench mark as it could be the only step blockage which was seen on all four sides of the temple. After completing this blockage line, it would be possible to define the crepidoma by carrying the distance between this blockage line and the other two blockage lines to all four sides of the temple. In this study, it was accepted that the distance between the blockages which were found out during the

xcavations were all the same in the whole crepidoma except the entrance front which was the north front in this temple.

The horizontal distance between the  $297^{70}$  altituded and the  $298^{11}$  altituded step blockages was 60 centimeters and the vertical distance between them was 41 centimeters. This could be the original step measurement of the temple (height of the steps = 40 centimeters; depth of the steps = 60 centimeters) as it was not too different from the contemporary temples which were examined on the Chapter 3. 2. 1.

Besides these measurements the horizontal distance between the blockages on the  $298^{11}$  and the  $298^{90}$  altitudes was 135 centimeters and the vertical distance between these blockages was 80 centimeters. These measures made us think that there could be another step blockage between these blockages (  $135 = 60 \times 2$ ,  $79 = 40 \times 2$ ). With this probability it could be accepted that there was another step blockage on the  $298^{50}$  altitude between the step blockages on the  $298^{11}$  and the  $298^{90}$  altitudes (Fig - 57).

So there had been determined four step blockages on the south front on the 298<sup>90</sup>, 298<sup>50</sup>, 298<sup>11</sup> and 297<sup>70</sup> altitudes. Besides these four blockages there had been examined some insitu blocks on the 297<sup>70</sup> altitude.

As it was examined in details in the Chapter 2. 2. the other foundations about the crepidoma were the limestone step blocks and the marble step plancks. The height of the limestone step block was 30 centimeters, the height of the marble step planck was 20 centimeters. As these were the only step blocks found out in the excavation area, it could be accepted that step blocks like these ones could be used in the whole crepidoma. So the total height of the steps above the blockage could be determined as 50 centimeters ( step block of 30 cm. + step planck of 20 cm. ), and this height could be applied to the whole crepidoma steps ( Fig - 57 ).

With these examines and determinations the crepidoma could be determined as; five stepped. The altitudes of the step blockages from the top were; 298<sup>90</sup>, 298<sup>50</sup>, 298<sup>11</sup>, 297<sup>70</sup> and

297<sup>40</sup>. The altitudes of the steps ( from the top of the step planck ) were 299<sup>40</sup>, 299<sup>00</sup>, 298<sup>60</sup>, 298<sup>30</sup> and 297<sup>70</sup>. These five steps could be surrounded the temple in four sides, but in the north front the number of the steps could be raised. The main ground which was found out on the south side of the south front was rising towards the south side of the temple, so it could be thought that the main ground on Toptepe is loosing altitude towards north. By this acception, it would be possible to think that the height of the crepidoma from the main ground was increasing towards the north front. So probably the number of the steps on the north front was also more than five, as the height of the crepidoma on the north and the south fronts could be different from each other ( Fig - 58 ).

When all these observations and examines were combined, the five stepped crepidoma has been formed. The crepidoma has been formed as five stepped on the east, south and the west fronts. On the north front, the number of steps has been determined more than five. But the absolute number of the steps could only be determined by examining the altitude of the main ground on the north front of the temple. The steps of the crepidoma has been covered with the marble step plancks of 20 centimeters thickness. These step plancks had a width of 150 centimeters. Their depths were changing according to the front and the step line on which they had been settled. Depth of the two upper steps of the crepidoma has been determined as 60 centimeters through the whole temple fronts. But the depth of the lower steps must be deeper than these ones. The lower step has a depth of 100 centimeters on the east and the west fronts, though it has a depth of 60 centimeters on the south front. The second step from the bottom has a depth of 150 centimeters on the east and the west fronts, it has a depth of 60 centimeters on the south and the north front just like the lower step.

By these studies the crepidoma has been determined as  $28^{00}$  meters by  $38^{70}$  meters ( to the end of the lower steps on the  $297^{70}$ ) and the stylobat has been determined as  $20^{80}$  meters by  $33^{60}$  meters ( to the end of the upper steps on the altitude of  $299^{40}$ ).

#### 4. 1. 2. The Column:

The column was the vertical element of the temple architecture. They had been one of the most important architectural elements in the Roman Temple as they were in the whole Roman Architecture. The columns had been constituted by three main parts. These parts were; the capital, the topmost member of the column; the shaft, the middle portion of the column; and the base, the lower part of the column. These parts had been always used in the all three orders; the Doric order, the Ionic order and the Corinthian order. These three orders were the ones which had been used since the Greek period. In the Roman period a new order called the Composite order had begun to used in the Roman architecture. As it was mentioned above the three parts of the column ( the base, the shaft, the capital ) were used in all these four orders: Only in the Doric order, the base was frequently absent. The columns had been shown differences according to the time periods, in which they constructed. In the historical process the columns were constructed in different orders according to the time period and the region.

In the Roman period usually the Corinthian and partly the Composite orders were used in the temple architecture. The Doric order was rarely seen in the Roman Temple architecture as it was rarely seen in the whole Roman architecture. In this study, it has been examined that the column used in the construction of the Acropolis temple has been formed in the Corinthian. As the only foundation about the capital which was found out during the excavations was in the Corinthian order and the examinations on the contemporary temples have shown us that Corinthian order was the most popular one used for the capitals. So, the examines on the column must be in the Corinthian order.

There were only two foundings about the column which was found out during the excavations. There were a part of the shaft and part of a capital which was belonged to a column on the west front of the temple.

These foundings are too inefficient to prepare a restitution proposal. Preparing a proposal could only be possible by comparing the columns used in the temple constructions settled in

Asia Minor in the 2<sup>nd</sup> century. In order to examine the column in details, the main parts of the column must be examined separately as; the base, the shaft and the capital. In this chapter, firstly the shaft will be examined as the thickness of the column has been very important for determining the other parts of the columns.

### THE SHAFT:

The shaft of the column in the Corinthian order was similar to the Ionic column shaft. The shaft had been divided into twenty - four flutes, usually relatively deep and narrowed flat strip.

The diameter of the base of the shaft was the most important thing for determining the parts of the column. The proportions of the column and even the entablature was determined by using the thickness of the base of the shaft. These proportions was different in three main orders (the Doric, the Ionic and the Corinthian orders). Vitruvius mentions that the origin of the relation between the "thickness of the column" and its height or its size of the parts, was the human body. The proportions of the Doric column were derived from the male body. The total height of the shaft, the base, the capital was equilant to the six times of the thickness of the base of the shaft (Tzonis & Lefaivre, 1992, P: 42).

The form of the Ionic order follows the "feminine slenderness". In the Vitruvius 's words "They made the diameter of the column the eight part of it, so that it might be taller". In addition to these models, "the bare, unadorned and manly" and the "the feminine", there was a third one; the Corinthian order, which "imitates the slight figure of a maiden" (Tzonis & Lefaivre, 1992, P: 42).

It could be said that, in order to determine the column, firstly the thickness of the base of the shaft must be determined. There was only one founding about the shaft of the column which was AKR - 2 (as it was determined in details in the Chapter 2. 2. 2.). It was not clear whether the part of the shaft was belonged to the base of the shaft or not. As there were no other foundings about the shaft and as the thickness of the base of the shaft was too important for

determining the column and constituting the plan of the temple, the founding part of the shaft was accepted as the base of the shaft.

The thickness of the part of the shaft which was found out during the excavations was 90 centimeters, so the thickness of the base of the shaft has been determined as 90 centimeters. According to the base of the shaft it would be possible to determine the height of the column as Vitruvius was said. According to Vitruvius the height of the Ionic columns was varied from eight to ten times of its lower diameter. The Corinthian columns were taller than the Ionic columns. When the contemporary temples - which were constructed in the 2<sup>nd</sup> century A.C. - was examined (Tables - 1, 2), a proportion was seen between the height and the diameter of the base of the shaft.

From the examinations, which was made through the 2<sup>nd</sup> century temple architecture, the proportion between the diameter and the height was determined as;

As the diameter has been determined as 90 centimeters, the height of the column has been determined as  $\approx$  870 centimeters including the base, the shaft and the capital.

According to the examinations on the contemporary temples - about which the measures of the diameter, the base and the capital of the column were known - the proportions about; the upper diameter / the diameter of the base of the shaft could be determined as;

the upper diameter 
$$8,24$$
In the Temple of Apollo (N1) at Side: ----- the lower diameter  $10$ 

By examining the proportions on the contemporary temples the proportions can be taken on an average as ;

the upper diameter 
$$8,10$$
 U.D.

the lower diameter  $10$  90cm.

 $\Rightarrow$  the upper diameter = 73 cm.

If the proportions used in the temples of the  $2^{nd}$  century A.C. (which has been listed above) has been applied to the columns of the Roman Temple on the Acropolis of Alaşehir. The measures of the column would be like this;

the upper diameter of the shaft = 73 cm. the lower diameter of the shaft = 90 cm. After determining the diameter of the column, the flutes of the shaft must be examined. As it was mentioned in Chapter 2. 2. 2. the founding part of the column shaft was fluted. There were twenty-four flutes on the shaft. So it could be accepted that the shaft of the column on the Acropolis Temple were fluted. The distance between the two bagets on the shaft has been determined as 9,7 cm. and the width of the bagets were determined as 2,5 cm.

### THE BASE

In the temple architecture of the 2<sup>nd</sup> century A.C., the bases of the Ionic and the Corinthian columns were the mostly seen ones. The Ionic and the Corinthian bases were usually separated in three parts;

- 1) The torus, a convex moulding at the top of the base
- 2) The Scotia, trochilus or cavetto, a deeply concave moulding on the middle of the base
- 3) Another Torus at the bottom of the base (Tzonis & Lefaivre, 1992, P: 68).

These three parts of the base were separated by narrow horizontal bands and the torus at the bottom of the base was usually placed on a square block known as plinthos.

The Attica - Ion bases were the mostly used ones in the 2<sup>nd</sup> century A.C., as it was determined in the Chapter 3. 2. 2. The Attica - Ion bases were also separated into three parts as it was mentioned above. These separations of the base block was made in proportions to the total height of the base (The proportions of the base had taken from Tzonis & Lefaivre, 1992, P:96) (Fig - 59). As it has been examined on the Attica - Ion bases, the total height of the base was divided into eight equal parts. The first part of the base from the top was constituted the torus and formed a convex moulding. The following two parts (2<sup>nd</sup> and 3<sup>rd</sup>) were constituted the scotia (with the horizontal separation parts between the toruses) which was a deeply concave moulding. The following two parts were constituted the square plinthos block by which the base (and the whole column) was settled on stylobat of the temple.

To determine the original height of the base of the Roman Temple on Toptepe - as there were no foundations about this part of the column had been found out during the excavations - the bases of the contemporary temples ( about which the measures of the base and the diameter of the shaft were known) the proportions about the base / the diameter of the column could be determined as ;

In the Temple of Aizanoi at Phrygia:	h. of the base	6,05
	the diameter	10
In the Temple of Apollo (N1) at Side :	h. of the base	5,64
	the diameter	10
In the Temple of Athena (N2) at Side:	h. of the base	6,20
	the diameter	10
In the Stoa at Aphrodisias :	h. of the base	6,13
	the diameter	10

By examining the proportions on the contemporary temples, the average proportion between the base and the diameter of the column can be taken as ;

Although the Corinthian base was similar to the Ionic base and the height of the Ionic base had been determined as "1/2 diameter", it would be possible to accept the proportion of 6/10 which was found out according to the examinations on the contemporary temples. Besides, it has been known that the heights of the elements (especially the column and the entablature) was increased in the Corinthian order.

According to these examinations on the Attica - Ion bases, the determinations about the proportion between the height of the base and the diameter of the shaft according to the examinations on the contemporary temples; the height of the base and its parts could be determined as ;

 $\Rightarrow$  the height of the base : 54 cm.

The parts of the base of the column could also be determined as;

The height of the torus : 6,75 cm.

The height of the scotia : 13,5 cm.

The height of the other torus : 13,5 cm.

The height of the square block (plinthos) : 20,25 cm.

With all these determinations, it could be possible to determine the base of the column, though there were no foundations about the base had been found out on the excavations (Fig - 61).

### THE CAPITAL:

During the excavations on the Roman Temple on the Acropolis of Alaşehir, it was determined that the capital of the columns ( and also the whole column element ) was constructed in the Corinthian order. This determination was done as there was a part of a capital had been found out - in Corinthian order - on the west front of the temple.

As it has been known that the capitals of the temple was constructed in the Corinthian order, it would be enough to examine the Corinthian capitals in order to determine the properties of the capitals of the Roman temple on Toptepe, the Acropolis of Alaşehir.

The Corinthian capital could be examined generally in two parts; the top was the abacus which was formed by the sections: a small convex cymatium, an even more slender taenia and a tall cavetto at the bottom, abacus and abacus leaves. The acanthus leaves were curled outwards and they were superimposed on another (Tzonis & Lefaviure, 1992, P: 69). The Corinthian capital was also showed differences in the temple examples.

In order to determine the capital of the column, firstly the height of it must be determined. As there were no foundations had been found out about a whole capital block, it could only be possible to determine the height of the capital by examining the contemporary temples. The proportions (of the height of the capital / the diameter of the base of the shaft) of the contemporary temples could be given as;

		h. of the capital		10,5
In the Temple of Aizanoi at Phrygia	:		=	
		the diameter		10

According to these examinations about the capitals of the contemporary temples, the average height of the capital of the  $2^{nd}$  century A.C. could be determined as;

It would be possible to accept that the proportion about the capital of the Roman Temple on Toptepe as given above. Anyway the height of the capital in the Corinthian order had been determined according to the diameter of the base of shaft (the lower diameter). So the height of the diameter could be determined as;

 $\Rightarrow$  the height of the capital = 92,7 cm.  $\approx$  93 cm.

The separations of the Corinthian capital was also made according to the proportions between the height of the parts of the capital and the height of the total capital (Fig - 60). The Corinthian capital was divided into seven equal parts (in height). The upper part was forming the abacus. There was a acanthus flower on the middle of the abacus. The following parts were forming the Kalathos. The symbolized voluts were placed on Kalathos. The following sections, which were formed by two parts, were the rows of acanthus leaves. There were two acanthus leaves and they were curling outwards.

According to these examinations about the Corinthian capital and its separations; the proportions of the capital / the diameter of the shaft of the contemporary temples, the properties of the capital could be determined as;

the total height of the capital: 93 cm.

the diameter of the capital: 81 cm.

the height of the abacus: 13 cm.

the abacus could be accepted as a square block of 117 cm. by 117 cm.

the acanthus leaves had a height of 26,5 cm. (Fig - 62)

When we examine the ornaments on the capital block, we must firstly examine the ornaments on the capital which were mostly used in the 2<sup>nd</sup> century A.C. The main characteristics of the ornaments on the capital in this period were the pointed endings of the acanthus leaves and the acanthuses were formed of the leaves which were seen as the quarter of a circle diagramatically ( Idil, 1976 - 1977, Anadolu - Anatolia - XX, P: 20 ). The upper acanthus leaves were raising between the acanthus leaves placed on the lower row. The veins of the leaves were carved deeply ( as a result of drill using ) ( Idil, 1976 - 1977, Anadolu - Anatolia - XX, P: 23 ).

The examinations and determinations about the three parts of the column (the capital, the shaft and the base) have been given above in details. According to these studies the column of the temple could be determined as;

the diameter of the base of the shaft : 90 cm.

the diameter of the top of the shaft : 73 cm.

the height of the base : 54 cm.

the height of the capital : 93 cm.

the height of the shaft : 723 cm.

the total height of the column : 870 cm. (Fig - 63)

#### 4. 1. 3. The Entablature

The other important part of the temple building in the Roman architecture was the entablature. The entablature was the topmost element of the temple in a horizontal form. It was placed above the columns and the most of the ornaments of the temple were seen on this part of the building. Although the main separations were the same in the all orders, the entablature had been changed in the historical process of the architecture, as the details of them were changing according to the periods, their esthetic preferences and even the new materials.

The entablature was divided into three main sections, the cornice; the uppermost member, the frieze: a band made of blocks on the architrave, and the architrave: made of blocks which span the distance between the two columns and rest on the capital (Tzonis & Lefaivre, 1992, P:53).

During the excavations about the Roman temple on the Acropolis of Alaşehir, the most of the foundings were belonging to the entablature and especially the cornice (as they were examined in details in the Chapter 3.2.). As it was made in the Chapter 3.2., it would be more easier to examine the entablature and give a proposal about it in parts like; the cornice, the frieze and the architrave.

#### THE CORNICE:

On the excavations there were seven blocks had been found out about the cornice of the temple. Some of them were parts of the horizontal cornice band - belonging to the south and the west fronts - and some of them were the parts of the inclined cornice (which was also called the inclined geison) belonging to the south front. It would be better to study the cornice and the inclined cornice separately as they could show differences from each other, though they were formed of the some sections.

The foundations about the cornice was seen on the south and the west front of the temple. There were no foundations had been found out on the north (the entrance front) and on the east front. We must have accept that the cornice bands on the east and north fronts were the same as the south and west sides as only the cornice blocks of these fronts could be absolutely determined in this study.

The AKR - 16 (Figures - 27, 29), the AKR - 17 (Figures - 28, 30) and the AKR - 20 (Figures - 31, 32, 33) on the south front and the AKR - 21 (Figures - 34, 35, 36) on the west front were the founding blocks about the cornice band. All these blocks has been already examined in details in Chapter 2. 2.

On the south front; the AKR - 20 was the most protected block among the others. AKR - 16 and AKR - 17 were deformed in great parts. Although the deformations on them, the common properties of these three blocks could be determined. All these three blocks were cutten straightly from the bottom of the console band in the cornice block, though the AKR - 1 and the AKR - 8 blocks (the inclined cornice blocks) were massive blocks including the dentils and the Lesbian Cymatium under the console band. According to these determinations, it could be accepted that the cornice band was made in two parts on the south front of this temple. The

upper part was constituted of the sima. the Ionian Cymatium, the geison band; and the lower part was constituted of the Lesbian Cymatium and the dentils.

The properties of the cornice blocks on the south front could be determined according to the examinations which have done on the Chapter 2. 2. The measures (the widths, the heights) and the types of the ornaments were similar and even the same in these three blocks (AKR - 16, AKR - 17, AKR - 20) so it could be accepted that these blocks were belonging to the cornice block and placed in the continuity of this blocks.

The measures of the parts and the ornaments on them on the AKR - 20 could be accepted as the properties of the cornice block on the south front of the temple (Fig - 64). So we can accept that the height of the upper part of the cornice was 60 centimeters and the height of the lower part of the cornice was 18 centimeters. The total height of the cornice was 78 centimeters.

As the total width of AKR - 20 was determined as 170 cm., it could be accepted that the width of the blocks which were constituted the cornice were 170 centimeters.

When we come to the west front, only one founding about cornice (AKR - 21, Fig - 36) has been seen on this front, the AKR - 21 was also greatly deformed as AKR - 16 and AKR-17. The measures of the parts of AKR - 21 were nearly the same as the other cornice blocks. But there was a clear difference between AKR - 21 and the other cornice blocks found out on the south front. Although AKR - 21 was greatly deformed (especially the top of the block - the sima, the Ionian cymatium and the geison band), it had been observed that the console band, the Lesbian cymation and the dentils were on the same block on AKR - 21. According to this observation, it could be accepted that the cornice block was a massive block (with a height of 78 centimeters) on the west front constituted of the sima, the Ionian cymation, the geison band, the consoles, the Lesbian cymatium and the dentils (Fig - 64).

As the measures of the sections and the ornaments on these sections were showing similarity with the cornice blocks on the south front, AKR - 21 could be accepted as a part of the cornice on the west front.

The other foundations about the cornice were AKR - 1, AKR - 8 and AKR - 11. All these blocks were found out on the south front of the temple. As they were examined in details in Chapter 2. 2., it had been observed that the cutting style of these blocks (AKR - 1 and AKR - 8) were diagonal. This cutting style was a newness of the 2<sup>nd</sup> century A.C. which was examined in Chapter 3. 2. 2. According to this cutting style, it could be accepted that these two blocks were belonging to the inclined cornice of the fronton on the south front of the temple. These two blocks were the most protected blocks which were found out during the excavations. It was easy to determine all the sections of them in details as it has been done in Chapter 2. 2. 3. The measurements of the sections and the ornaments on these sections were nearly the same as the cornice blocks found out on the south and the west fronts. From the observations on the AKR - 1 and the AKR - 8 the height of the inclined cornice had been determined as ≈ 80 centimeters. The width of the inclined cornices had been determined as 170 centimeters like the cornice blocks.

The other founding - which was one of the most important foundings of the excavations - was the AKR - 11. The AKR - 11 was the part of the upper corner of the inclined cornice, in other words it was the top of the fronton on the south front. By examining this founding, the slope of the inclined (and by the way the slope of the fronton) has been determined as % 35. This determination is very important as the slope of the inclined cornice will help to determine the height of the fronton on the south fronton.

### THE ARCHITRAVE:

When we come to the architrave, we must firstly think of the horizontal element which were carrying the whole upper structure of the temple. As the foundations about the column have shown us that the column had been constructed in the Corinthian order, and as no foundation

had been found out about the architrave, it would be possible to accept that the architrave was made in the Corinthian order. The architrave of the Corinthian order was similar to the architrave of the Ionic order.

It won't be wrong to think of the Ionic architrave, while determining the architrave. The architraves vary from the half the thickness of the column to one - twelfth the height of the column, depending on the height of the column (Tzonis & Lefaivre, 1992, P: 90). In order to determine the height of the architrave band, the proportion of "the height of the architrave / the diameter" could be used. This proportion could be listed according to the examinations on the contemporary temples as ;

	h. of the architrave	6,95	
	the diameter	10	
h. of the architrave	6,95		
	=	$\Rightarrow$ h. of the architrave = 63	cm.
the diameter	10		

The cymatiums were used in some architraves, these cymatiums of the architrave were one - seventh of the architrave's total height. The rest of the architrave was sectioned into twelve units, three of which were for the lowest fasciae and five for the subsequent ones, for reasons more than conceptual (Tzonis & Lefaivre, 1992, P: 89). But in some of the temples the architrave was divided into three equal parts. It was observed that the fasciaes of the architrave was separated by the bead and the reel rows, and usually the last fasciae was surmounted by the Lesbian Cymatium, the Ionian Cymatium or the Lotus - Palmette rows in the 2<sup>nd</sup> century A.C. (examined in the Chapter 3. 2. 2.).

As a result of all these examinations and observations about the architrave the total height of the architrave could be determined as 63 cm. as it was found out by the proportion of "the height of the architrave / the diameter of the shaft".

This height could be accepted as the original height of the architrave, as there was a block (AKR - 6) found out during the excavations which could be a part of the architrave with a thickness of 20 cm. It has been known that the architrave was made of three equal parts and these parts were separated the bead and reel rows. It would be possible to accept the height of the fasciaes as 20 cm. and the two bead and reel rows as 1,25 cm. each, so the total height of the architrave could be determined as;

the lower fasciae: 20 cm. + the bead and reel row: 1,5 cm. + the middle fasciae: 20 cm. + the bead and reel row: 20 cm. = 63 cm.

It would be also possible to accept that an Ionian Cymatium was used on the top of the architrave as an ending band. The height of this cymatium could be accepted as 4,5 cm. according to the ones on the architrave.

The length of the architrave blocks could also be determined after the determination of the intercolumnation of the temple which will be examine in the Chapter 4. 2 (Fig - 65).

### THE FRIEZE:

The frieze was also a horizontal member of the temple architecture as the cornice and the architrave. No foundations had been found out about the frieze during the excavations about the temple. As there were no frieze parts had been found out and as the foundings about the column parts were in the Corinthian order, it would be possible to accept the frieze in the Corinthian order.

The frieze of the Corinthian order was nearly the same with the Ionic frieze (especially in the measurement). The frieze was one - fourth less or more than the architrave, depending on whether or not it carries reliefs (Tzoni & Lefaivre, 1992, P:89).

As the 2<sup>nd</sup> century temple architecture had been examined in the chapter 3. 2. 2., it could be seen that the friezes were getting more narrow and more simple in this period. Usually simple blocks with no reliefs or no ornaments were used in frieze bands, though the frieze was full of ornaments like bucranion, guirlandes, nikes or erosses in the Corinthian order.

When the examine the proportion between the height of the frieze and the diameter in the contemporary temples of the Roman temple ( which this thesis about ) this could be accepted as;

h. of the frieze 
$$5,63$$

the diameter  $10$ 

h. of the frieze  $5,63$ 

The height of the frieze  $50,67 \approx 51$  cm.

D (=90 cm.)  $10$ 

It could also be accepted that the frieze (having a height of 51 cm.) were made of a simple block. It could not be possible to determine the length of the frieze blocks as there were no foundations had been found out about them during the excavations, but we could accept their length as 170 cm. as the length of the cornice blocks found out during the excavations were 170 cm.

As it was mentioned in the Chapter 2, these parts of the temples ( the crepidoma, the column, the entablature ) were not the whole parts of the temple building. There were some

other elements were used in the construction of the temple building. These elements were the walls (forming the naos, pronaos and sometimes the opisthodomos), the door of the naos, the ceiling casettes and (probably) the inner decorations of the naos.

No foundations had been found about these elements (like the naos walls, the door of the naos, the casettes) during the excavations. Because of this, it won't be possible to determine and form these elements. Giving proposals about the restitution of these elements would be imaginary as these elements were showing differences in the temple examples of the 2<sup>nd</sup> century A.C. Determining the original forms of these unknown elements can only be possible if the excavations will continue and new foundings about these elements will bring to light.

# 4. 2. THE PROPOSAL ABOUT THE ARCHITECTURAL ORGANIZATION OF THE TEMPLE

When we come to the architectural organization of the temple. We must think about the examines on the contemporary temples and the architectural organizations of them. The examined temples could be divided into two groups; the hexastyle temples and the octastyle temples. It would be possible to determine the number of columns by applying both hexastyle and the octastyle to the podium about which the measure of the stylobat have been determined (as  $20^{80}$  m. x  $33^{60}$  m.) in the Chapter 4. 1. 1.

Firstly the hexastyle have been applied to the temple. In order to place 6 columns on the entrance front, the intercolumnation on this front would be determined as 390 cm., but this measure is very long for the intercolumnation of the temple on which the upper diameter of the column was 73 cm. As the intercolumnation of 390 cm. means the architrave block which had a length of 390 cm. and placed on a column with an upper diameter of 73 cm., it would be right to accept that the Roman Temple on the Acropolis of Alaşehir was not constructed in the hexastyle.

The other type of the architectural organization was the octastyle. In octastyle, 8 columns were placing on the entrance front. When 8 columns have been placed on the entrance front, the intercolumnation of the temple would be determined as 278,5 cm. This intercolumnation means that, the architrave blocks with a length of 278,5 cm. might have been used in the temple construction. This interval is more suitable than 390 cm. for an architrave block, as it was carrying the whole weight of the upper structure; the frieze, the cornice and even the pediment.

By these examinations, we could accept that the temple has been constructed in the octastyle. Now, we must determine the number of columns on the side fronts. In the observations through the contemporary temples, it has been seen that different column numbers have been used in the temple architecture in the 2<sup>nd</sup> century A.C. When we apply these number of columns to the Acropolis temple, the intercolumnation would be determined as;

- 8 by 13 (seen on the temple of Aphrodite at Aphrodisias); the intercolumnation on the side fronts = 269 cm.
- 8 by 14 (seen on the temple of Seleukeia on the Kalykadnos); the intercolumnation on the side fronts = 248,5 cm.
- 8 by 15 (seen on the tempes of Zeus at Aizanoi, Zeus at Aezani, Baachus at Baalbek); the intercolumnation on the side fronts = 230,7 cm.

Besides these examinations, we must also mentioned that the temples which were constructed with 8 by 15 columns were the huge temple buildings with big stylobats. The temples of 8 by 13 and 8 by 14 columns were more similar to the temple on Toptepe. Between these given intercolumnations the first one (which was 269 cm.), the temple of 8 by 13 columns has been accepted in this study. It would be better to accept the organization of the outer column row of this temple, as this temple (the Temple of Aphrodite at Aphrodisias)

was more similar to the Roman Temple on Toptepe in size and also Aphrodisias was a settlement which was not far away from Philadelphia in which the Acropolis temple had been constructed.

After determining the outer column rows, the plan type of the temple must be determined. As there are no traces about the plan type of the temple had been found out on the excavations, the plan type could only be determined by comparising the temple with the contemporary ones. When we have examined the contemporary temples, it has been determined that the mostly common plan type used in the 2<sup>nd</sup> century A.C. Roman temples was the peripteros. In the peripteros temples, there was a naos, a pronaos infront of the naos with -usually- two columns in antis. In these examples no opisthodomos had been seen .But when the peripteros plan type has been applied to the Acropolis temple with the naos and only the pronaos -with the accepted intercolumnation-, it has been seen that the naos formed as a long, narrow rectangular part of the temple. When the temple architecture in the historical process had been examined, it had been observed that the naos was such a long and narrow rectangular part in the Archaic period. As the temple architecture had been developed, the naos had become more shorter than the previous ones by adding the pronaos and the opisthodomos to the ends of the naos. As a result the naos was shorter than the determined naos ( without the opisthodomos ) in the 2<sup>nd</sup> century A.C. So, it won't be wrong to accept that there could be also an opisthodomos placing at the back of the naos in the architectural organization of the Acropolis Temple.

As the contemporary temples have been examined in Chapter 3. 2. 1., it had been observed that there was a column row settled infront of the antis walls of the pronaos (Temple of Zeus at Euromos, Temple of Zeus at Aizanoi, Temple of Zeus at Aezani). Although this kind of architectural organization of the pronaos, there was another type of organization for the pronaos. There were two columns in antis, forming the pronaos in the temples of Apollo and Athena at Side. It is difficult to define the pronaos of the Acropolis Temple as these two groups of contemporary temples have been showing different characteristics. But, as the measures of the stylobat of the Acropolis Temple is more similar to the Temple of Zeus at Euromos and the

Temple of Zeus at Aizanoi, it would be possible to form the pronaos with no inantis columns, but with a porch of four columns in front of the antis walls just like these temples.

The ceiling of the naos, pronaos, opisthodomos and the peristyls around the naos must be formed of cassettes like the other temple examples. But, as there had been no foundations had been found out about the cassettes, it would be impossible to give an opinion about the cassettes. When we examine the cassettes of the other temples ( and even the other buildings like Roman stoas, houses, etc. ) we could only say that the cassettes of the Acropolis Temple could be square or rectangular blocks which had been decorated with cymatiums ( Ionian or Lesbian ) on four sides and maybe there were treolif figures placed in the middle of these cassette blocks ( Fig - 66 ).

As a result of all these observations and determinations about the plan types and architectural organizations, the Roman Temple on the Acropolis of Alaşehir could be determined as a peripteros with 8 by 13 columns (Fig- 67, Fig - 68). The intercolumnation on the side fronts has been determined as 269 centimeters and the intercolumnation on the entrance and the back fronts has been determined as 278,5 centimeters. With these determinations, the inner width of the Naos could be determined as 746 centimeters, and the depth of it was 1255 centimeters. The thickness of the naos walls was 90 centimeters ( it was equal to the lower diameter of the shaft ). The depth of the pronaos has been determined as 269 centimeters, the depth of the opisthodomos has been determined as the same as the pronaos - 269 centimeters - the only difference between the pronaos and the opisthodomos are the two columns insitu between the ante walls. It has been also determined that there must be a peristyl in front of the pronaos with a depth of 807 centimeters (Fig - 69).

### **CHAPTER FIVE**

# THE PROPOSALS ABOUT THE CONSERVATION OF THE TEMPLE

In the previous chapters, the Acropolis Temple on Toptepe had been examined in details (the temple area and the remains of the temple). These studies had been done just to give a proposal about the restitution of the temple. Although the foundations were inefficient for a restitution proposal, the restitution proposal had been given by combining the observations on the remains of the temple and the examinations on the temples of the 2<sup>nd</sup> century in which the Acropolis Temple on Toptepe had been constructed.

After these studies about the restitution proposal had been completed, the other important study - the conservation studies - must be done. As it has been seen on the photographs ( given in the figures ) and the excavation plan, there are only a few architectural blocks and a small part of the blockages had been found out. These foundings are inefficient to define the temple and also they had been greatly deformed by the natural affects. To carry the properties of the temple to the future, the few remains of the temple must be well protected.

To protect the remains of the temple, the conservation studies must be done. As the foundations are not so much, it is difficult to apply the usual methods like anastylosis, reconstruction and restoration which would make the people imagine the original form of the temple. The only thing we can do as a conservation study is to clean up the foundings and protect them from the further damages.

It would be possible to prepare the conservation studies in three steps. Firstly the damages on the blocks and the blockages must be determine and then the most suitable way of cleaning must be determine and apply to the foundings. Finally the foundings must be protect from the further damages. During these conservation studies it would be better to examine the foundings in two parts; the limestone blockages and the marble blocks ( the architectural elements ) as their materials and the original functions are different from each other.

## 5. 1. THE DAMAGES ON THE FOUNDATIONS AND PROPOSALS FOR CLEANING:

During the time period from the construction date to nowadays; the building and its materials have been damaged by various affects. Some of these affects are mineral salts, water damages, bio deteriation, black crust, etc. These affects could harm the blocks and the blockages separately or a few of them could give harm together to the foundings.

On the observations on the excavation area it had been observed that the mostly seen damages were the water damage and the mineral salts which made pores especially on the blocks. Black crust and bio deterioration are nearly not seen on the blocks. The damages which had been mostly affected the foundings were the dispersions and the spoilments. These dispersions which were especially affected the blocks could be happened by the water damages and the changes in micro - climate.

As it had been determined above the mostly seen damages on the foundings were the dipersions (probably because of the water damages and the changes in micro - climate) and the pores made by the mineral salts. To stop the further damage and protect the foundings firstly the mineral salts must be removed and the pores must be filled by injecting a proper solution. There are different methods to remove the mineral salts from the blocks. The most proper method for cleaning the soluble salts from the marble blocks is the removal of salts by extraction of

solution. In this system the surface of the stone should be covered with an absorbing material to protect deposition of salts on the surface and to obstruct the minerals giving harm to the blocks. Generally the material is wetted first and salts dissolved into the water sucked by it by evaporation. The other suitable method for removing the salts could be washing. Whenever water is poured at the top of the block, the solution of dissolved salts is collected at the bottom. By continuing pouring water without letting it dry and changing the collected solution the process extracts all the salts.

Although two proper methods have been given about the removal of the mineral salts which damages the blocks; the most proper method could only be selected by examining the type and characteristics of the blocks; their size, shape, surface quality, condition, etc. and the also the characteristics of the salts in the laboratory studies.

### 5. 2. PROTECTION FROM THE FURTHER DAMAGES:

After the cleaning studies, the protection from the further damages must be done as the final step of the conservation studies. In this step of the study the foundations must be taken in two groups; the step blockages and the architectural blocks.

The step blockages and the few step plancks are too important to make the visitors dream of the original form, original measures of the temple. As they were examined in the previous step of the study, the blockages had been dispersed as the mortar which was fastening them was spoiled probably by the water damage and the changes in micro - climate. These step blockages shall be fastened by capping studies. In the capping studies the blockages will be fastened with the mortar which consist of marble sand, sand, water and a small part of white cement just to fasten these materials to each other. Cement is not used in capping as it contains salts and gives harm to the stone.

After the capping studies it will be better to cover the fastened step blockages with a sand layer just to protect them from the further damages. Although the founding step blockages and

the few step plancks are inefficient to help us imagining the original borders of the temple. Just to make the visitors dream of the original form of the temple, a small part of the steps can be reconstructed. A corner of the stylobat on which maximum damage has been observed must be selected for the reconstruction. This study must be done on the north-east or the north-west corners as the only foundings about the step blockages and the step plancks have been seen on the south facade of the temple. By the help of this reconstruction the visitors can see both the lower structure of the stylobat ( the founding step blockages and the step plancks ) and the original form of the stylobat ( the reconstructed part ) on the temple area.

When we take the marble blocks belonging to the architectural elements of the temple, firstly the pores on their surfaces must be filled by injecting the most proper solution which will be selected by the laboratory studies. Of course all these studies will be done after the cleaning studies. The surfaces of the stone blocks which will be cleaned by the suitable method ( or methods ) can be damage again by the same affects or by different affects. The stone blocks attracks water again and dissolve in it, the water with the salts in it can penetrate into the material. This again cause physical damage as the original protective skin of the stone had been taken away during the cleaning studies. To stop this further damage after the filling of the pores, the blocks must be covered by a suitable solution which would be determined by the laboratory studies.

The temple area is on the top of a hill, Toptepe, and it is surrounded with high trees. The region can be an attractive place for the local and the foreign tourists as there are some remains of historical monuments can be seen on the slope of the hill. A Byzantine cemetery and some remains of a Roman theatre has been seen on the beginning of the slope of Toptepe. Besides the remains on the slope of the hill, there are two towers belonging to the Byzantine city walls which surrounds the Toptepe plain. The temple region is such a touristic and cultural place, the visitors can come to Toptepe to see the cultural remains. They will firstly see the Byzantine semetary and the remains of the Roman theatre, then the towers belonging to the Byzantine walls and finally the remains of the Roman temple will welcome them on their cultural journey.

As the temple area and the remains of the temple have importance because of its cultural importance, but the remains are too inefficient to make the visitors dream of the original forms and the original vision of the temple. As the foundings are too inefficient to make an anastylosis or a restitution study, it won't be wrong to protect the foundings on the temple area after the cleaning and protecting studies. There are two chances to protect them and exhibit them on the temple area on Toptepe. The first chance is to place them on their original places (in situ) as they had been found out on the excavations and watch for them in the time period. If the deformation on the remains will increase in the future, it will be better to place them under a protective roof.

The other chance is to keep them under a protective roof on Toptepe near the excavation area after covering them with a suitable solution. This protective roof can be a roof with tiles which will be carried by simple vertical elements. The marble blocks must be placed on a platform which will be increased from the ground just to protect them from the affects of the water, moisture, etc. Some of the cornice blocks might be exhibited under this protective roof in the original positions; a little high from the ground level, on a horizontal position and carried by simple steel columns. This exhibition style will help the visitors to understand the original position of the blocks in the whole temple architecture.

Besides these step blockages and the architectural blocks, there are some small foundings like a small part of the capital and a small piece of the top of the inclined cornice. These foundings are too small and it will be better to protect them in the excavation house in Alaşehir or in a museum.

In the whole conservation studies mentioned above, it will also be better to open a water channel around the crepidoma of the temple. A water channel is necessary as the water gives harm to the blockages and the steps when the water stays a long time on them.

These studies mentioned above can be taken as a proposal about the conservation study of the Acropolis Temple on Toptepe. If there are some other parts of the temple will find out in the excavations in future, it will be better to make another conservation study or at least it will be better to make a revision study on the conversation studies. All these proposals for the conversation can be taken as a step for the further studies.

### **CONCLUSION**

There had been many cultures lived in the land of Anatolia. All of these cultures had been important powers of their time periods and there are still many traces have been seen in Anatolia belonging to these cultures. It is a great pleasure to see all these remains of cultures as it is all known that the cultural remains are the indications of their cultures an their living styles. So, observing these remains and determining the life styles of their cultures will bring light to the past of the humanbeing.

In this study the Roman Temple on the Acropolis of Alaşehir (briefly the Acropolis Temple) had been examined and observed in order to give a proposal related to the restitution of the temple. Though there were no inscriptions had been found out about the construction date of the temple, the construction date of the temple has been determined as the second half of the 2<sup>nd</sup> century A.C. by the dating studies which were done according to the ornaments on the cornice blocks. The remains of the temple had been examined in details. Although the foundations which had been found out during the excavations were inefficient, the determinations of the unknown parts of the temple had been done by examining the contemporary temples constructed in Asia Minör. The restitution studies had been done according to these determinations.

It would be right to underline that all the restitution proposals has been given just to make the main principals of the restitution more clear. There are no foundations had been found out according to some of the elements of the temple like the base of the column, the architrave, the frieze. If the excavations will begin again in the future, the determinations about these unknown elements might be changed according to the new foundations.

Besides the observation and restitution studies the other important study which had been done in this thesis is the conservation studies. The conservation studies is also very important as the remains of the temple had been greatly deformed by different affects in the time period. These remains must be cleaned, fastened and protected from the further damages just to carry the properties of the temple to the future. Also the remains of the temple must be exhibited (though the remains are so inefficient to exhibite) to make the visitors dream of the whole temple more easily. As the foundations are inefficient for an anastylosis, restoration or even a good exhibition all we can do in the conservation studies is to give proposals about the conservation. All these studies (anastylosis, restoration or exhibiting in their original forms and places) can be possible by continuing the excavation studies.

All the studies which had been done in this thesis; the observations on the remains, the restitution studies and proposals about the conservation studies of the temple must be elevated as a starting point, a step for the new researches and the new studies which might be begin in the future.

### **FIGURES**



Figure 1. 1. A view of Alaşehir city from Toptepe

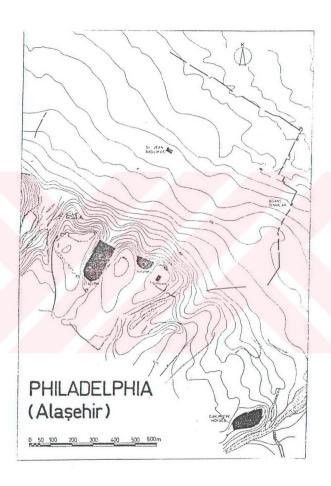


Figure 1. 2. The foundations of the excavations in Alaşehir

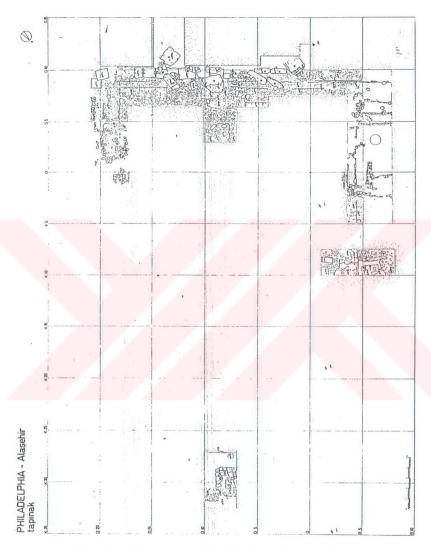


Figure 2. 3. The excavation plan of the Roman Temple on Toptepe

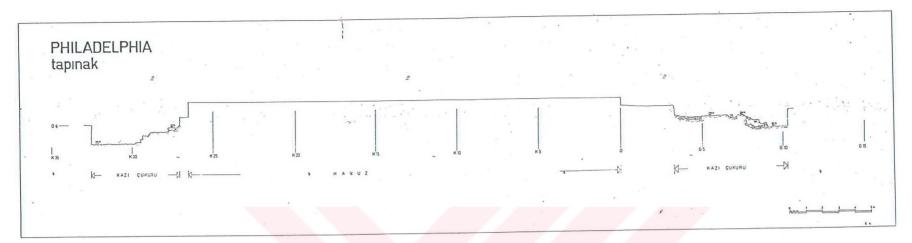


Figure 2. 4. Section from the Temple Area



Figure 2. 5. Section from the Temple Area



Figure 2. 6. View from the south front of the temple



Figure 2. 7. View from the east front of the temple



Figure 2. 8. The excavation area today



Figure 2. 9. The blockages on the south-east corner



Figure 2. 10. The blockages on the south front

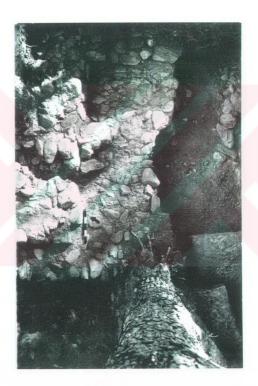


Figure 2. 11. The blockages on the east front

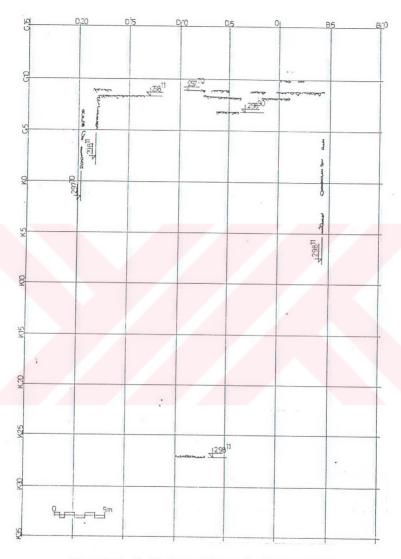


Figure 2. 12. The blockages of the temple with their altitudes

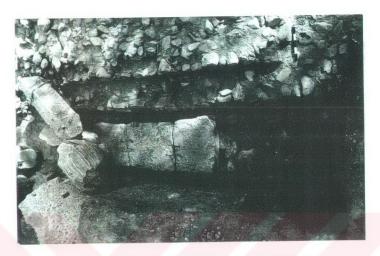


Figure 2. 13. The step blocks with the traces of metal clamps



Figure 2. 14. The step plancks of marble

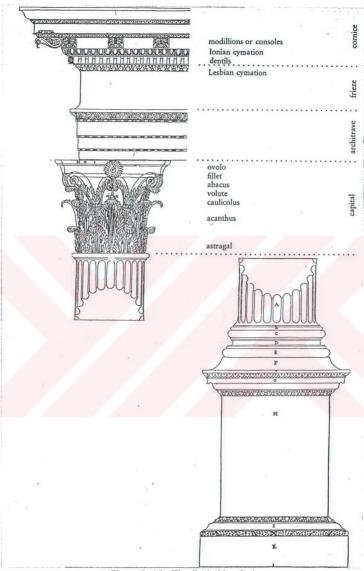


Figure 2. 15. The Corinthian Order





Figure 2. 16. The shaft of the column ( AKR - 2 )

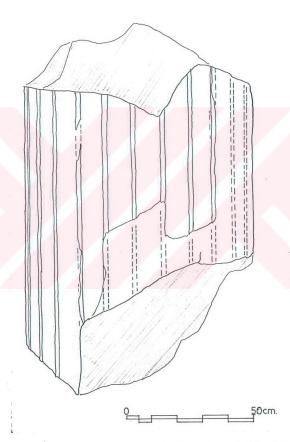


Figure 2. 17. The releve of the shaft of the column ( AKR - 2 )



Figure 2. 18. The part of the capital of the column



Figure 2. 19. The inclined cornice block (AKR - 1)

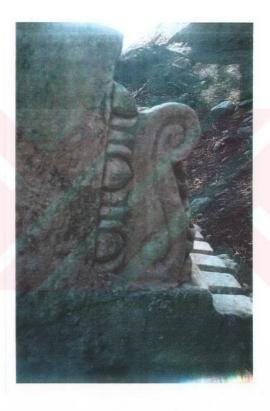


Figure 2. 20. Detail from the console profile (from AKR - 1)

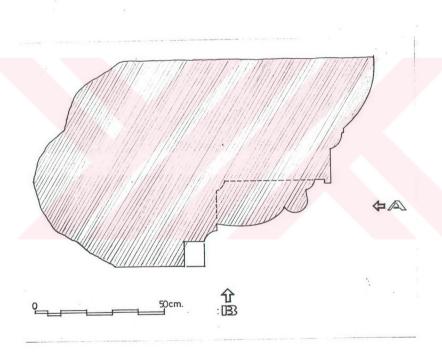


Figure 2. 21. Releve of AKR - 1 (the section)

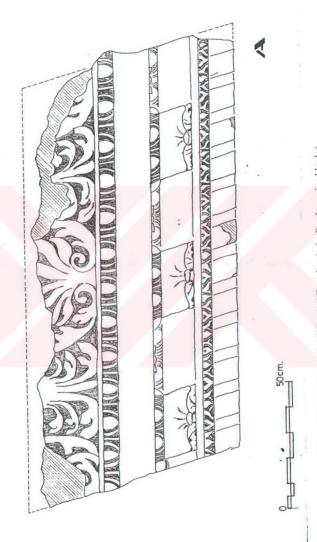


Figure 2, 22. Releve of AKR - 1 (Facade -A; inclined cornice block)

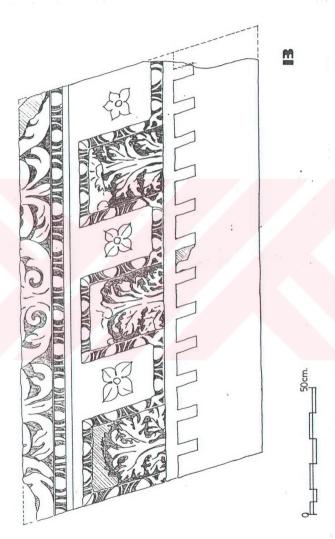
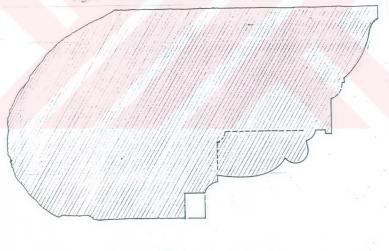


Figure 2. 23. Releve of AKR - 1 (Facade -B; inclined cornice block)



Figure 2. 24. The inclined cornice block (AKR - 8)



0\_\_\_\_\_\_\_50cm.

Figure 2. 25. Releve of AKR - 8 (the section; inclined cornice block)

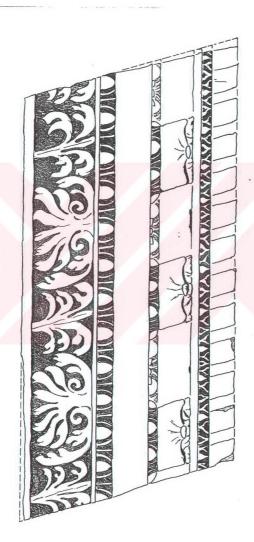


Figure 2. 26. Releve of AKR - 8 (inclined cornice block)



Figure 2. 27. The cornice block (AKR - 16)



Figure 2. 28. The cornice block (AKR - 17)

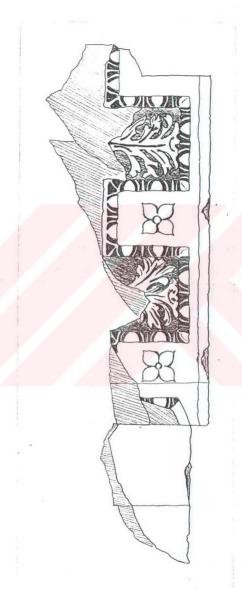


Figure 2. 29. Releve of AKR - 16 (the cornice block)

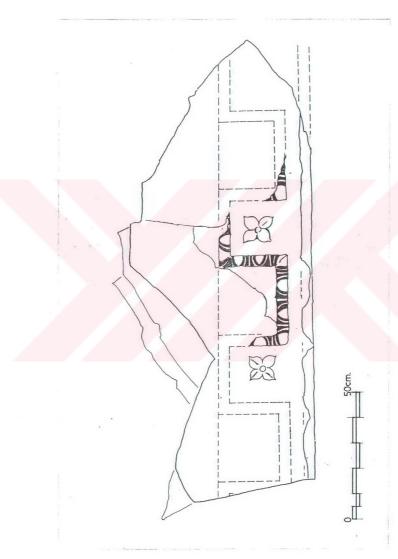
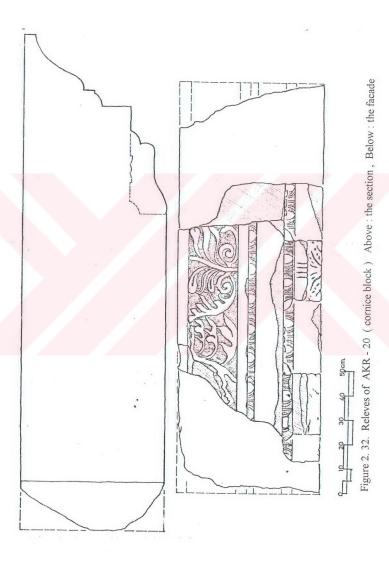


Figure 2. 30. Releve of AKR - 17 (the cornice block)



Figure 2. 31. The cornice block (AKR - 20)



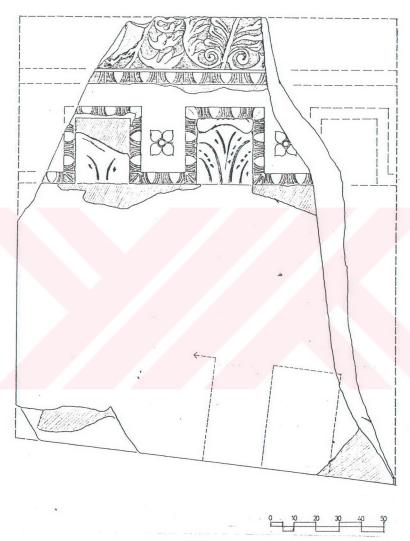


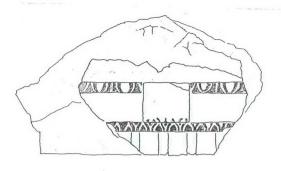
Figure 2. 33. Releve of AKR - 20 (the upper view)



Figure 2. 34. The cornice block (AKR - 21)



Figure 2. 35. The upper view of the cornice block (AKR - 21)



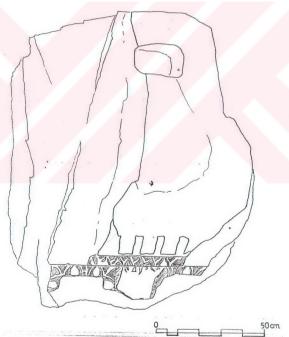


Figure 2. 36. Releve of AKR - 21 (Above: the facade, Below: the upper view)

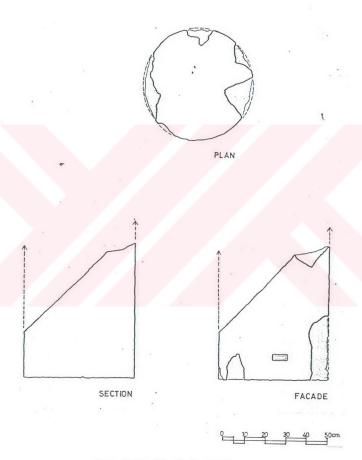


Figure 2. 37. The Shaft (AKR - 5)



Figure 2. 38. The upper corner of the fronton (AKR - 11)

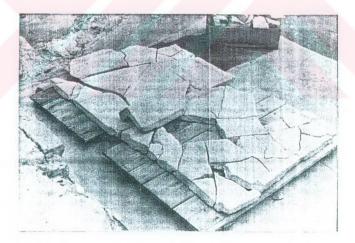


Figure 2. 39. The marble tiles

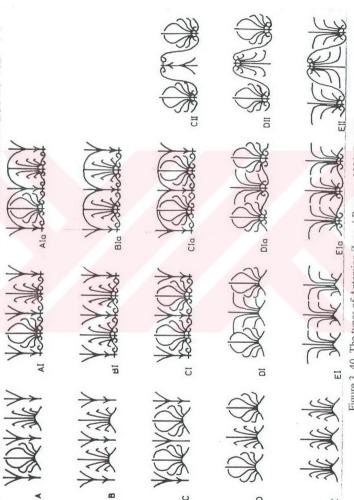


Figure 3. 40. The types of Antemion Zone (Başaran, 1989, P: 57)



Figure 3. 41. The ornaments of AKR - 1 (inclined cornice)



Figure 3. 42. The Gymnasium of Theatre at Ephesus (Başaran, 1989, Lev: 13d)



Figure 3. 43. The Roman Baths at Ankara (Başaran, 1989, Lev: 14a)



Figure 3. 44. The Theatre at Hierapolis (Başaran, 1989, Lev: 37d)



Figure 3. 45. The Nympheum at Side (Başaran, 1989, Lev: 31b)



Figure 3. 46. The Temple of Serapis at Ephesus (Başaran, 1989, Lev: 6d)

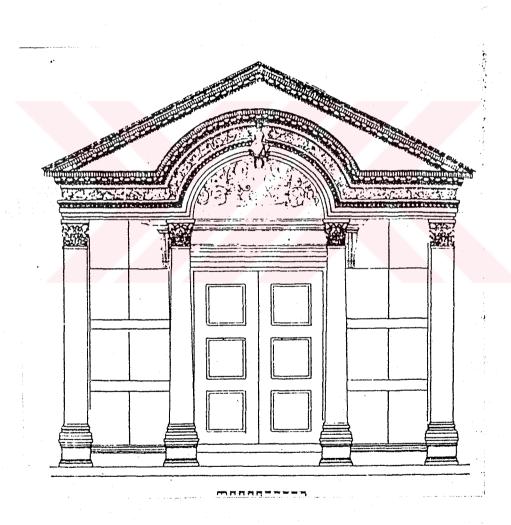


Figure 3. 47. The Temple of Hadrian at Ephesus (restoration of the facade)



Figure 3. 48. The Temple at Termessos

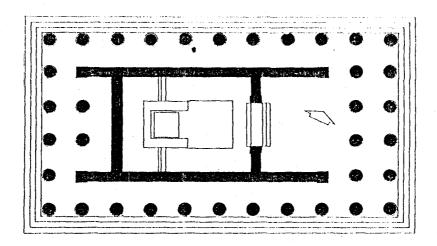


Figure 3. 49. The Temple of Zeus at Euromos (the plan)

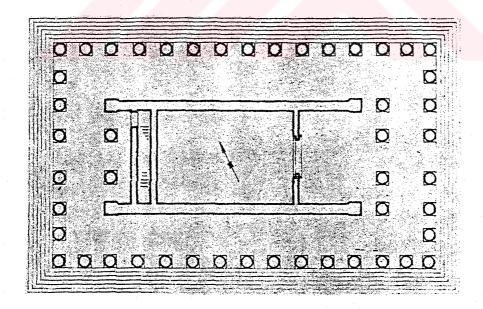


Figure 3. 50. The Temple of Zeus at Aizanoi

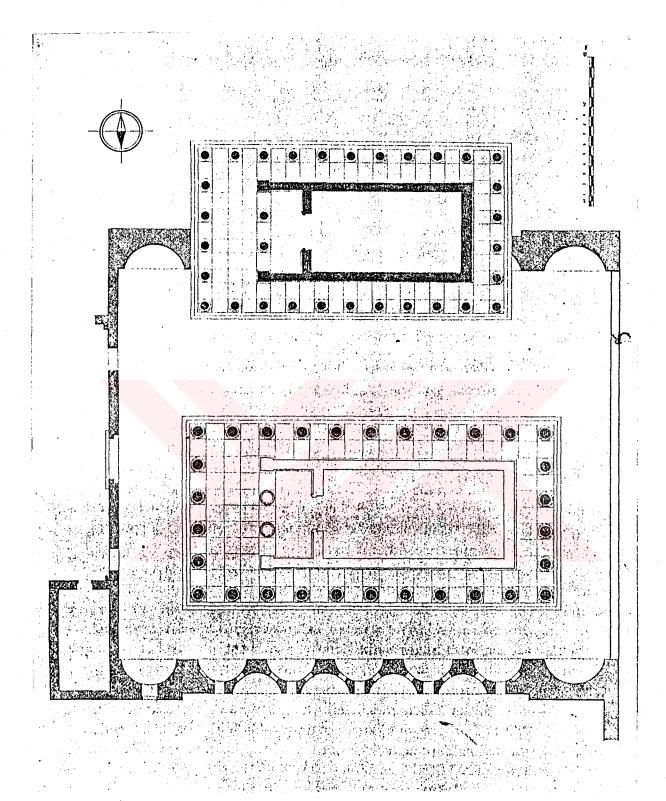


Figure 3. 51. The Temples at Side

Above: Temple of Apollo (N1) Below: Temple of Athena (N2)

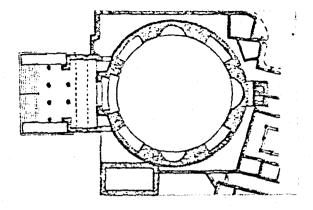


Figure 3. 52. The Temple of Aesculapis at Pergamum

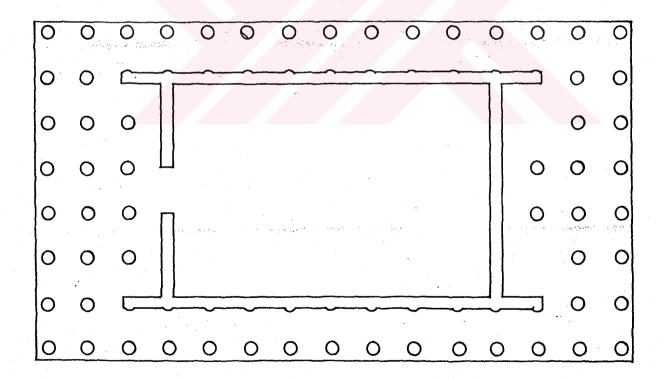


Figure 3. 53. The Temple of Zeus at Aezani

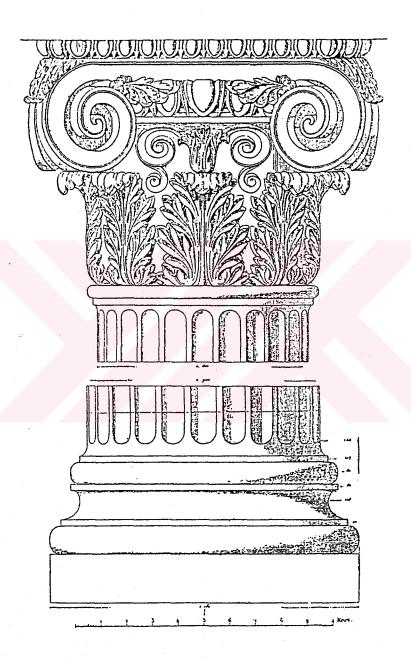


Figure 3. 54. Column detail from the Temple of Zeus at Aezani

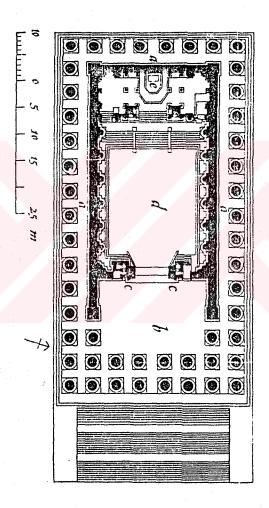


Figure 3.55. The Temple of Baachus at Baalbek

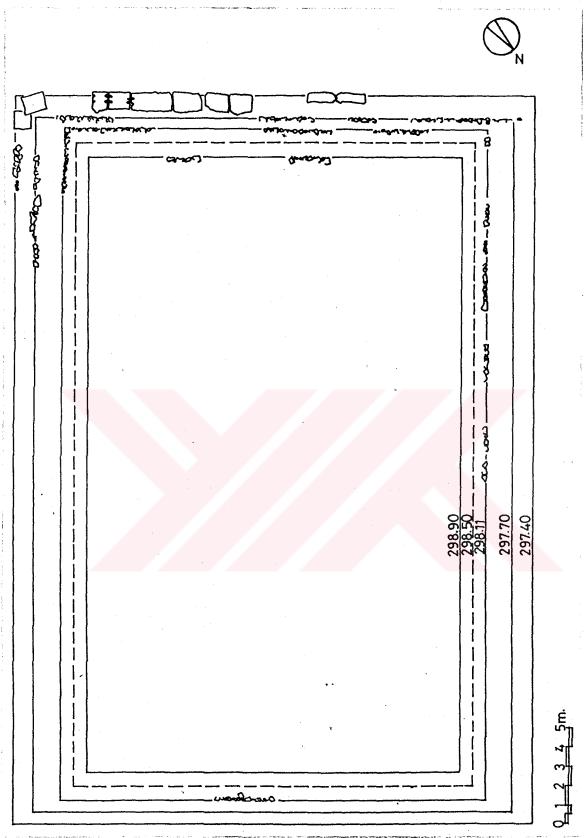


Figure 4. 56. The blockage lines and insitu step blocks

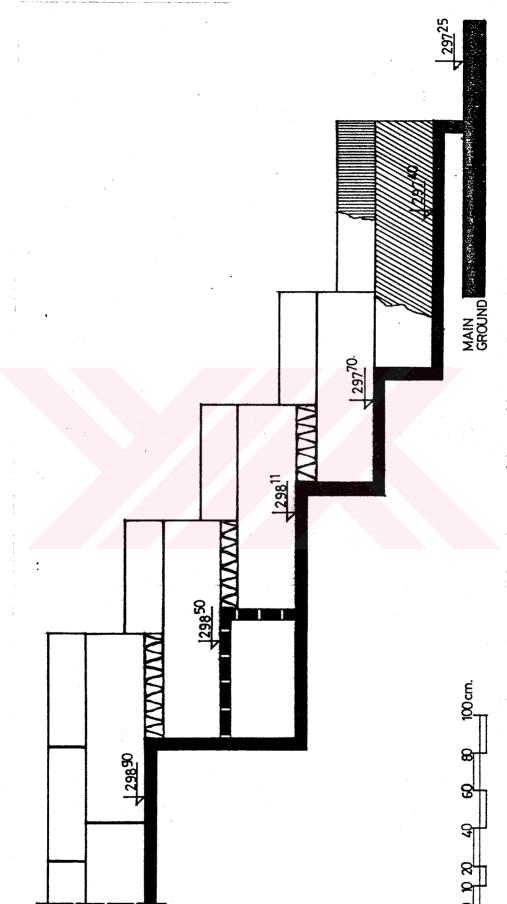


Figure 4. 57. Detail from the steps of the crepidoma on the south front



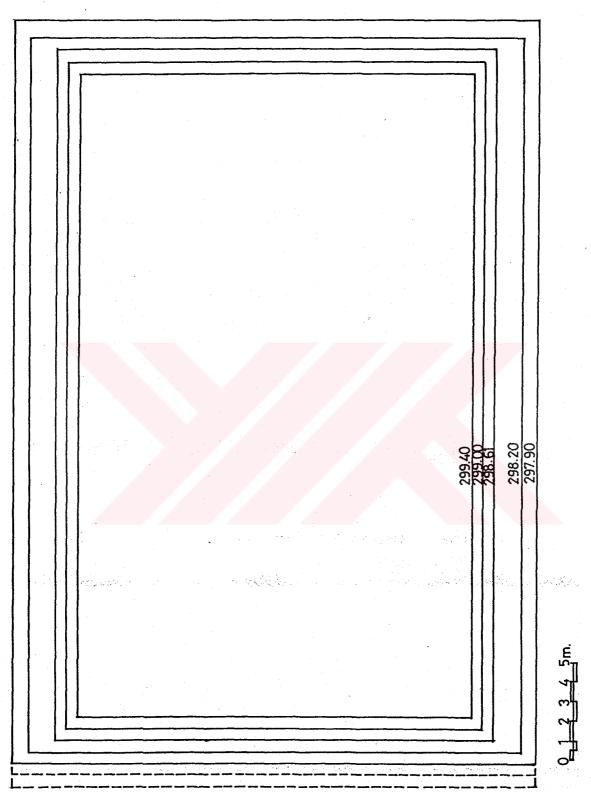


Figure 4. 58. The steps of the Crepidoma (Restitution Proposal)

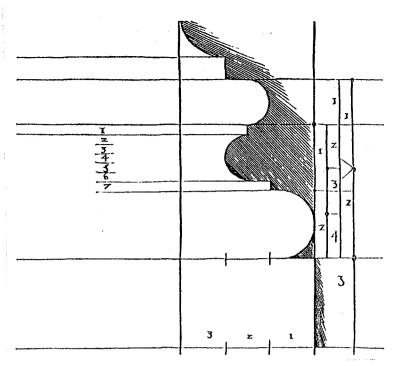


Figure 4. 59. Proportions of the Attica - Ion Base (Tzoni & Lefaivre, 1992, P. 96)

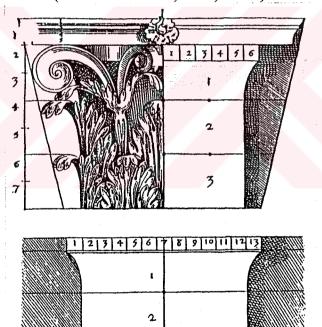


Figure 4. 60. Proportions of the Corinthian Capital (Tzonis & Lefaivre, 1992, P: 73)

1 12 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11

3

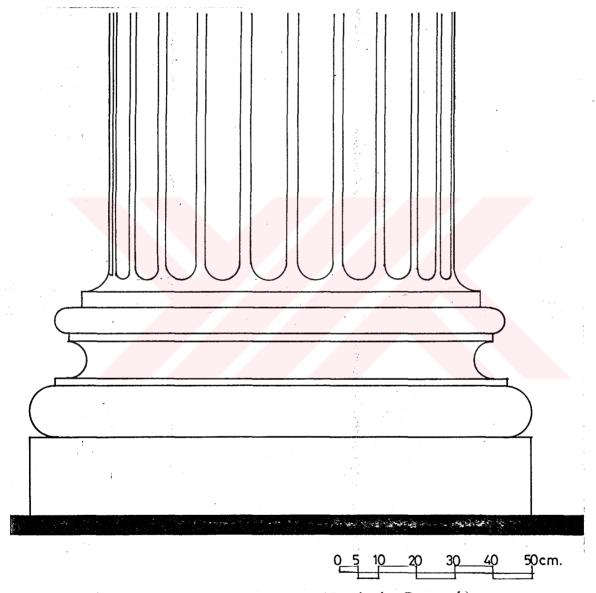


Figure 4. 61. The Base (Restitution Proposal)

(The proportions have been taken from, Tzonis & Lefaivre, 1992, P: 73)

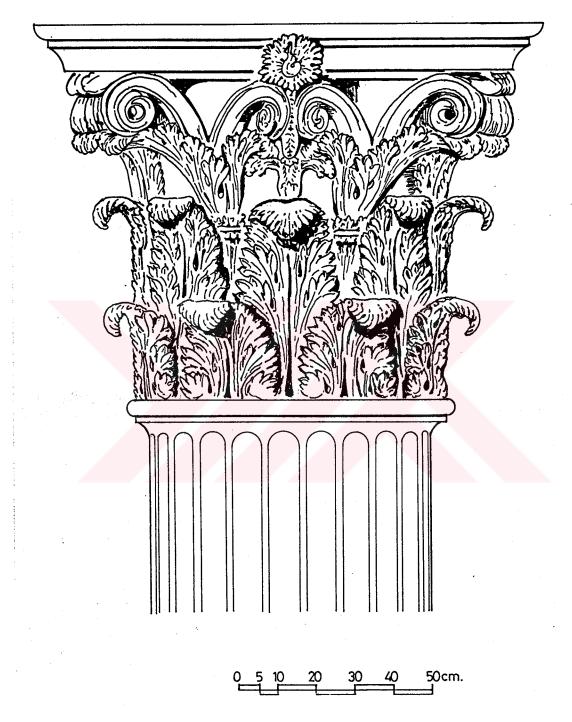


Figure 4. 62. The Capital (Restitution Proposal)

(The proportions have been taken from: Fletcher, 1978, P: 33)

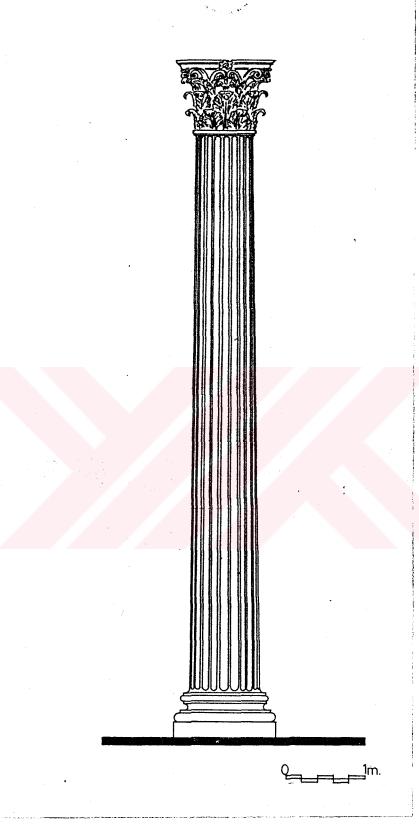


Figure 4. 63. The Column (The Restitution Proposal)

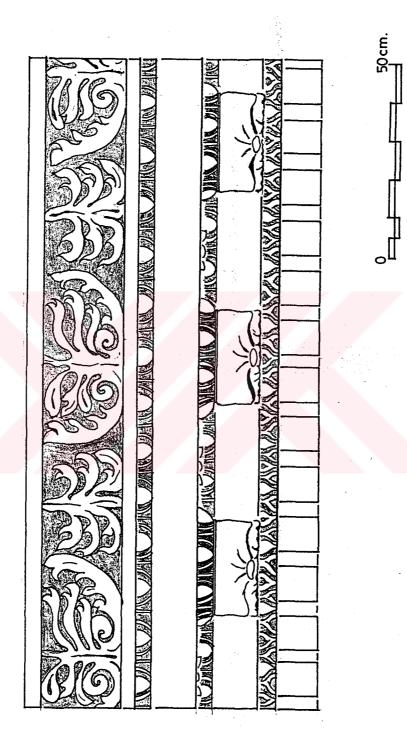


Figure 4. 64. The cornice block (Restitution Proposal)

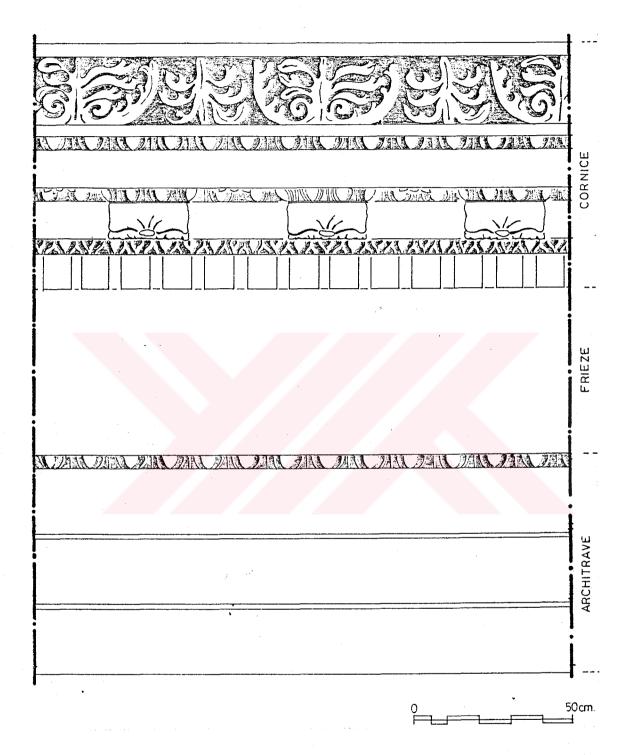
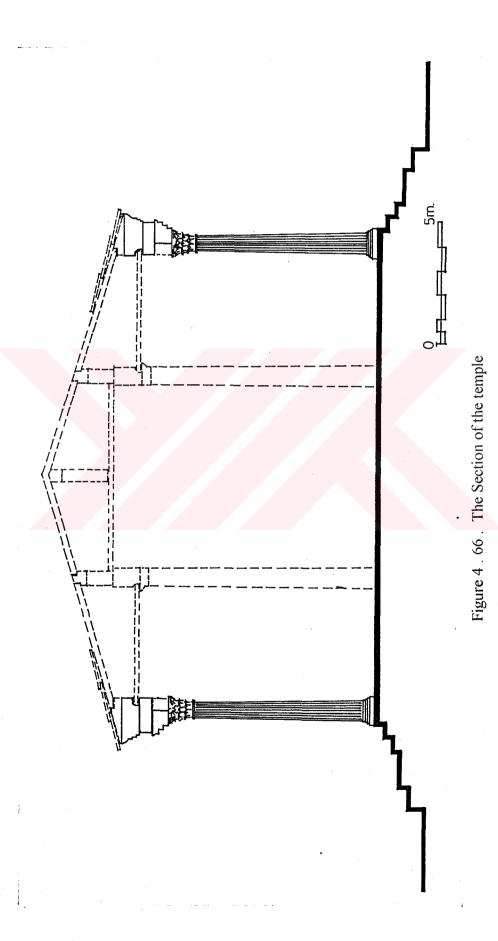


Figure 4. 65 . The Entablature (Restitution Proposal)





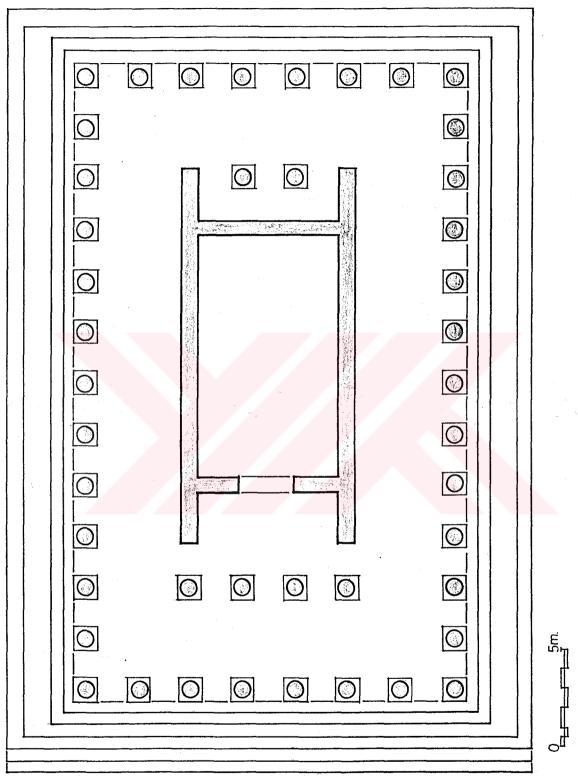


Figure 4. 67. The Plan of the Temple (Restitution Proposal)

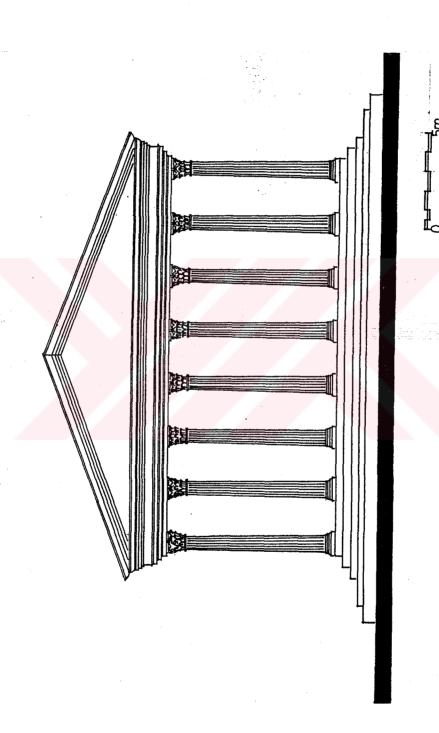


Figure 4. 68. Facade (Restitution Proposal for the South Facade)

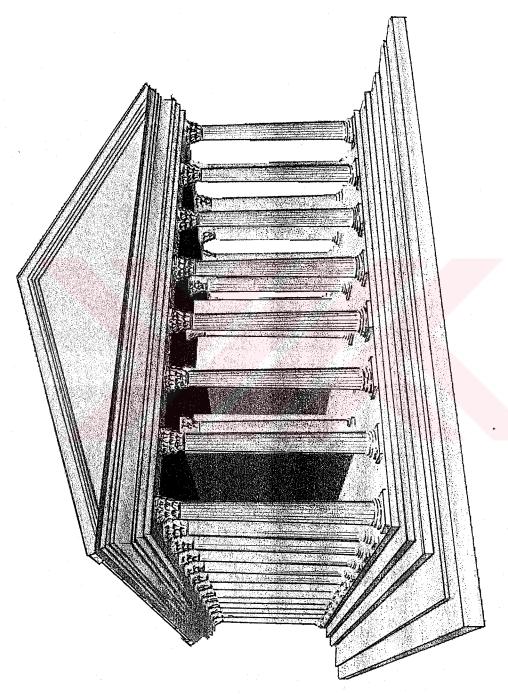


Figure 4. 69. Perspective of the Acropolis Temple

## **GLOSSARY**

ABAKUS: The uppermost member of a capital.

ACROPOLIS: Upper city.

ANTEMION ZONE: Lotus - Palmette rows.

ANTA: Pilasters of slight projection terminating the lateral walls of a cella in the Greek temple.

APSE: A semicircular recess in a wall.

ARCHITRAVE: A horizontal band resting on the column. The lowest member of the entablature.

ASHLAR MASONRY: Masonry composed of rectangular blocks.

ASTRAGAL: A moulding of ronded section, usually adorned with a carved or painted bead-and-reel and often combined with an egg -and-tongue.

ATTICA-ION BASE: A kind of an Ionic base consisting of an upper and lower torus and scottia between them.

BASILICA: 1) A Roman building consisting of a central hall with aisles which are lower in height than the central hall. 2) A Byzantine church composed of a nave and two or four aisles, which are lower in height than the nave.

BEAD-AND-REEL: The carved or painted ornament adorming an astragal.

CAPITAL: The topmost member of a column.

CELLA: The naos in the Hellen world.

COLLONADE: (also stoa or portico) A long and covered hall with columns in front.

COLUMN: The vertical structural element.

COMPOZITE CAPITAL: Corinthian capital combined with Ionic ovolo and volutes.

CORNICE: The upper member of the entablature.

CREPIDOMA: (Crepis) The stepped platform of a Greek Temple.

CYMA-RECTA: The concave profile used on the Ionian Cymatium, Sima.

CYMA-REVERSA: The convex profile used on the Lesbian Cymatium.

DENTIL: Rectangular blocks originally representing the ends of joints which carrying a roof.

DIPTEROS: A temple surrounded by two rows of columns.

EGG-AND-TONGUE: Egg-and-dart. This is the Ionic ovolo profile originally consisting of a row of egg figures.

ENTABLATURE: The superstructure of a temple carried by columns.

EPISTYLE: The Greek term for architrave.

FASCIAE: Slightly projecting bands of architrave on the Ionic and Corinthian orders.

FLUTES: The vertical channels of columns seperated one from the other by an arris (in the

Doric order) or by a fillet (in the Ionic order).

FRIEZE: The middle member of the entablature in the Ionic order.

FRONTON: The two triangular side surfaces of the ridge roof covering the temple building.

GEISON: The Greek term for the cornice.

IONIAN CYMATIUM: Another name for the egg-and-tongue or Ionic ovolo.

MEGARON: A long, narrow, isolated house consisting of one front room as an entrance and a hall with a hearth in the middle.

NAOS: The main chamber of the temple containing the cult statue.

OPISTHODOMOS: The porch at the rear of a Greek temple.

OVOLO: Upright slabs forming the base of the walls.

PERIPTEROS: A temple surrounded by a row of columns.

PERISTASIS: A row of columns surrounding a temple.

PERISTYLE: A courtyard surrounded by colonnades.

PLINTHOS: A square block forming the bottom of an Ionic base.

**PODIUM**: A continuous and raised base carrying columns, sarcophagi, statues or temples.

PORCH: Vestibule.

PORTICO: Colonnade or stoa.

PRONAOS: The porch in front of a cella.

PROSTYLOS: (Prostyle) A temple preceded by a porch with columns in front.

PSEUDO-DIPTEROS: A dipteral temple of which the inner row of columns in front.

PTERON: The Greek word for wing. A row of columns surrounding the Greek temple.

SCOTIA: A concave moulding used in the Ionian column base.

SHAFT: The body of a column between the base and the capital.

SIMA: The gutter of a building.

STOA: (Colonnade or Portico) A long covered hall with columns in front.

STYLOBATE: The upper step of a temple forming platform for the columns and naos.

TYMPANON: (Tympanum) The triangular wall of the pediment.

TORUS: A large convex moulding of semicircular profile.

TROCHILUS: The Greek term for scotia.

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