

THE STILL EXISTING OTTOMAN *HAMAMS* IN THE GREEK TERRITORY

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OTTOMAN BUILDINGS IN GREECE

Ottomans marked their passage by the Balkan cities with the offprint of their culture. Although they brought many of their cultural features from Anatolia, they assimilated many of those found in the conquered lands and developed a multi-cultural character. This noticeable architectural 'Ottoman' expression included many building types, that were formed within this cultural mix.

Islam prescribes ablution before prayer; this was a great encouragement to the construction of fountains, public baths and water supplies. Similarly, its insistence on education and study from childhood to old age gave a great impulse to the building of *medreses*, and since social and medical assistance are among the basic principles of religion, hospices and hospitals were required to be built. Finally the importance attached in Islam to commerce created a demand for hostleries and caravanserais (Ünsal 1959, 11).

Ottoman buildings which are found in Greece belong to three basic categories:

1. Religious buildings, such as *cami*, *mescit*, *tekke*, *türbe*, *zaviye*, *medrese*;
2. Secular buildings, as *social- public* and *domestic* buildings (including *commercial* ones, such as *bedestens*, social buildings, as *hamams* (1), *imarets*, markets, caravanserais, libraries, etc. and houses, mansions, etc.);
3. Works of military architecture, such as fortresses, castles, towers.

In Greece, unfortunately, there has been no thorough registration of the existing Ottoman buildings. They are legally protected by the Ministry of Culture, supervised by the thirteen Eforeie of Byzantine and post-Byzantine Monuments Department, to which most of them belong. On the

1. *Hamam*, as a Turkish word, is also used in Greek, to refer to the Ottoman bath, which is a civic building for public collective use.

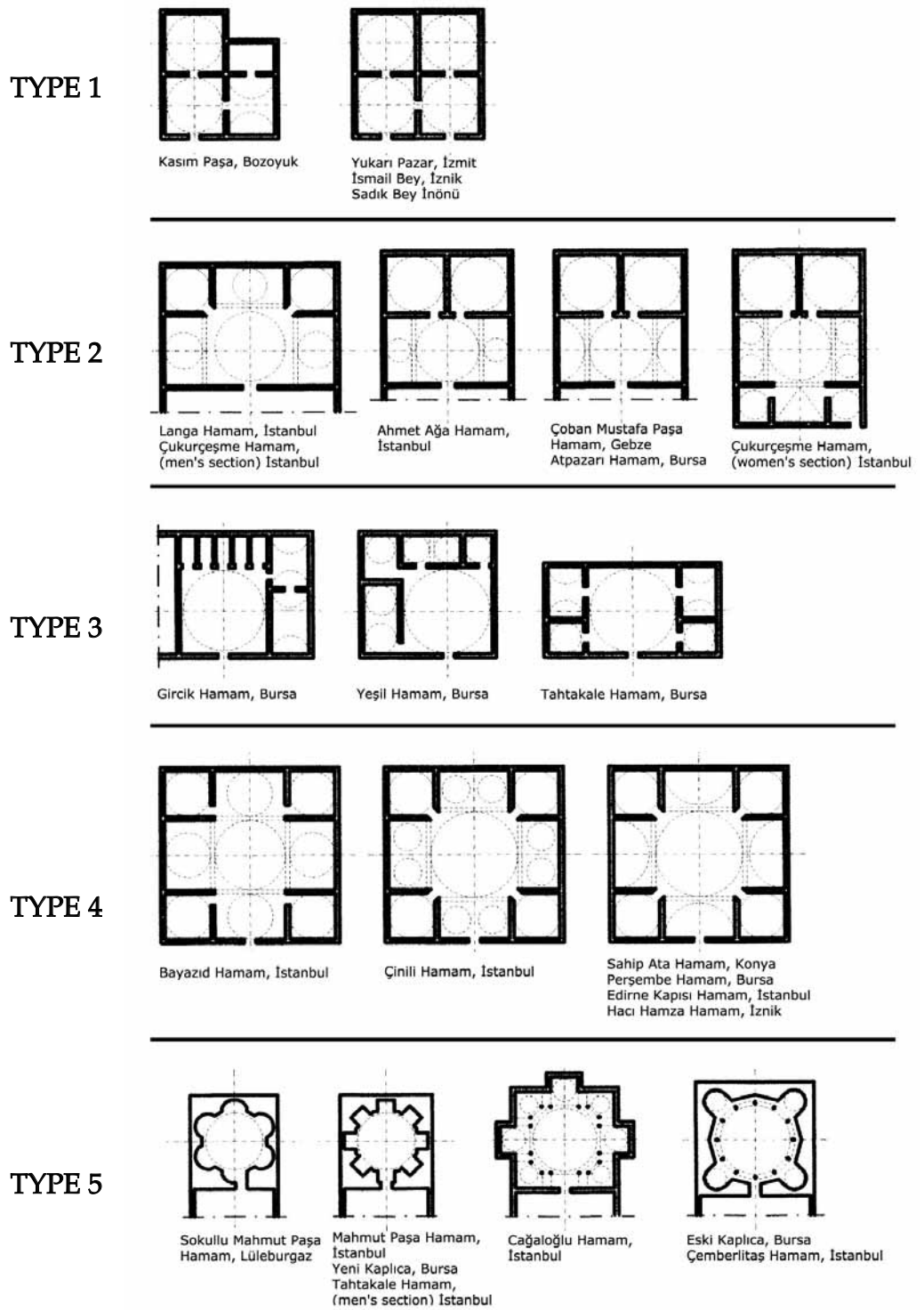


Figure 1. Typology of Ottoman Baths according to K.Klinghardt (sketches: E. Kanetaki).

other hand, there are many cases where Ottoman buildings belong to private owners. A few articles have been presented (Vigopoulou-Papazotou 1989, 409-411; Theodorides 1994, 211-217; Kanetaki 1997, 87; Kanetaki 2000, 49-75; Kanetaki 2001, 16-20; Kardamitsi-Adami, Grafakou 1989, 34-42; Tsitroulis 1981, 1-31; Tsitroulis, Souift 1978; 51-3; Hadjityfonos 1988, 139-167; Hadjityfonos 1989, 79-120; Tsioutras, Hadjityfonos, Hadjityfon, Aifantis 1997, 181-191), though on solitary cases, in opposition to the interest shown by Turkish researchers and their publications (Ayverdi 1982; Çam 2000; Çelikkol 1986; Eyice 1954-55; Yenişehirlioğlu 1989; Anon 1992).

Apart from these, we must acknowledge the recent rising effort of Greek researchers in regard to cataloguing archival material, as is done in the National Hellenic Foundation for Scientific Research (Athens) and the Mediterranean Studies Foundation (Rethymno) (Balta 2003, 20). What is still missing is the necessary collaboration between scientists in different fields, especially between architects and historians and wishfully, a collaboration between Greece and Turkey, that could enlighten important aspects on the preservation of these monuments (2).

HAMAMS IN GREECE

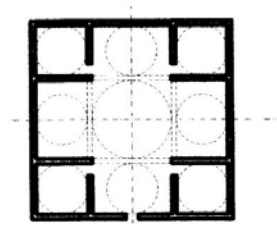
Hamams were regarded as a major Islamic building type, since the fulfillment of rules concerning hygiene were interwoven within the Muslim religious regulations, according to which only running water was used for ablution and in bathing. Thus, *hamams* form a unique building type, that varies from the other kind of baths called '*kaplıca*' (thermal baths). Hamams were among the first buildings to be constructed in a newly conquered city, just like *Bey Hamam*, built at Thessaloniki in 1444 by Murat II.

A number of preliminary monographs on the subject of Ottoman baths is rather insufficient and they usually refer to *hamams* located in certain regions or cities of the Islamic world (Dow 1996; Aru 1949; Lane 1890, 308-314; Kreševljakovic 1952; Ecochard, Le Cour 1942, Önge 1995). Greek bibliographical references are poor, since very few elements are mentioned. Unfortunately no comparison or grouping has been attempted and issues such as their restoration are rarely discussed. Meanwhile, a comparative juxtaposition is offered about the grouping made by certain foreign scholars, such as M. Kiel (1976, 87-96), K. Klinghardt (1927), S. Eyice (1960, 99-120), H. Glück (1921) based on the typology of these buildings (in accordance to the function of the ground floor and the especially the disposition of the hot section).

The baths which were constructed in Greece during the Ottoman period, form a unique building category (Kanetaki 2001, 16). They vary in size, quality of construction, as well as with their decorative elements, while the interior space still shows signs of excellent aesthetic expression. The existing *hamams* (which amount to sixty buildings) are widespread in all the Greek territory, while it is very difficult to specify their exact dates of construction, since no epigraphs are to be found on each, and in most cases, the buildings are in a state of decay (Kanetaki 2000, 67-68, Aslanapa 1971, 253). Their origin stems from former building types and they continue the ritual of the Roman and Byzantine baths.

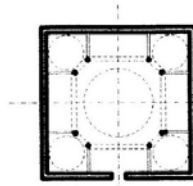
2. The recent steps towards collaboration of the two national scientific parties are first, promising in terms of developing mutual relationships for the preservation of human culture, and second, increasing the value and validity of similar research.

TYPE 1

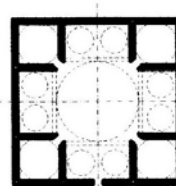


Bayazid Hamam, İstanbul

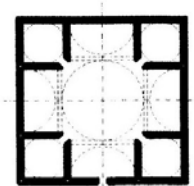
TYPE 2



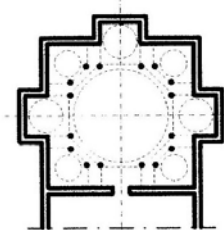
Süleymaniye Hamam, İstanbul



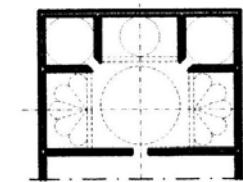
Çinili Hamam, İstanbul

Sahip Ata Hamam, Konya
Perşembe Hamam, Bursa
Edirne Kapısı Hamam, İstanbul
Hacı Hamza Hamam, İznik
Çukur Hamam, (men's section)
İstanbul

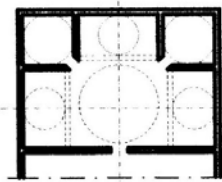
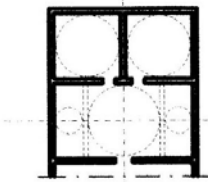
TYPE 3

Cağaloğlu Hamam,
İstanbul

TYPE 4



İshak Paşa Hamam, İstanbul

Langa Hamam, İstanbul
Çukurçeşme Hamam,
(men's section) İstanbulAhmet Ağa Hamam,
İstanbul

TYPE 5

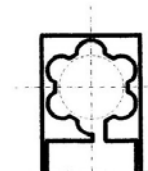
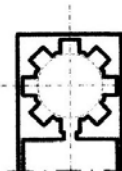
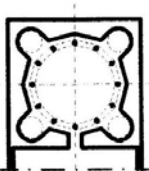
Sokullu Mahmut Paşa Hamam,
LüleburgazMahmut Paşa Hamam,
İstanbul
Yeni Kaplıca, Bursa
Tahtakale Hamam,Eski Kaplıca, Bursa
Çemberlitaş Hamam,
İstanbul

Figure 2. Typology of Ottoman Baths
according to H.Glück (sketches: E. Kanetaki)

THE FUNCTIONAL LAYOUT OF *HAMAMS*

The typical sequence of rooms (the disrobing room, tepid and the hot section), whose existence was dictated by the rigid order in which the ritual operations in the *hamams* were performed, has remained practically the same everywhere and no evolution is traced – the pattern in layout of baths remains unaltered throughout the Islamic world.

The disrobing room (*soyunmalık* or *camekân*) was entered from the street and people would sit on low wooden or stone benches (traces of them are found in some *hamams*) around the walls. It was often provided with a central fountain (*şadırvan*), while the women's section included a depilatory. The next room was the tepid section (*soğukluk* or *ılıklik*), where the bather would get used to the rising temperature inside the *hamam* and prepare himself for the hot part (*sıcaklık*), that was situated adjoining to it. On the center of the *sıcaklık* was the *göbektaş*, the navel stone or marble slab, on which the bather was to recline to be massaged. Basins (*kurnas*) with taps were around on the walls of this section, used by bathers for washing (they would scoop the water from the basins using *tas*, a brass or copper bowl, and pour it over themselves). The *sıcaklık* was a domed area in the center, that included private corner cells (*halvet*). The furnace (*külhan*) was built against one wall of the hot room and the fire was lit under a copper cauldron (copper warms up very rapidly, so the heat is transferred easily) built into the furnace, while the whole of its upper part served as a water reservoir. Smoke from the fire and hot air passed along a duct and circulated under the floor of the hot and tepid room, the hypocaust (*cehennemlik*), before rising up the vertical, ceramic smoke pipes (*tüteklik*) that were built in the wall during construction.

Hamams left the architect little scope for variation, who was obliged to follow the accepted norms, arranging the various sections in accordance with a pre-conceived plan. In spite of this, Turkish architects managed to create original forms by finding diverse solutions to the perennial problems (Demetriades 1973; Moschopoulos 1959, 486-514; Mpiris 1959, 44; Celebi 1991; Celebi 1999).

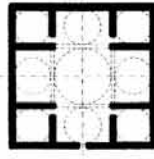
HAMAMS AND THEIR PRESENT STATE

Greek Ottoman baths are found widespread in the Greek territory. Evliya Çelebi's *Seyahâtnâme*, written during his visits to many places, give us a lot of information on the historic existence of Ottoman buildings (Kiel 1971, 300-329). Other travellers have left narrations, which helps us now trace the site where important buildings were constructed.

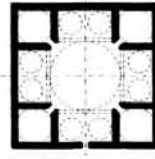
This study presents for the first time, a well documented list of all the still existing *hamams* that are now found in the Greek territory, according to its geographical division, many of which still remained unknown (Figure 1). A few of these were constructed during the last decades of 1300s, such as the *Gazi Evrenos Hamam*, Giannitsa in 1392 (Kiel 1981, 127-146), and the *Oruç Paşa Hamam*, Didymoteichon, in 1398 (Demetriades 1983, 416-417).

Most of these buildings were constructed during the 15th, 16th and 17th century, according to the information given by historians, basically people who had the possibility to check the Ottoman Archives. Inscriptions are unfortunately present in rare cases, just like in the *Bey Hamam*, Thessaloniki, where the year and the building's donator are mentioned on the main façade (Kanetaki (2003, 136-137).

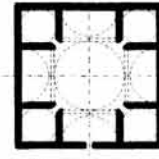
TYPE A



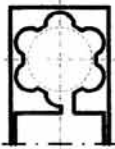
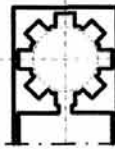
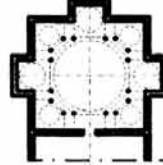
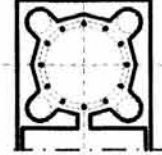
Bayazid Hamam, Istanbul



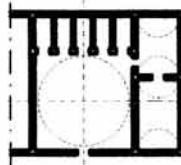
Çinili Hamam, Istanbul

Sahip Ata Hamam, Konya
Perşembe Hamam, Bursa
Edirne Kapısı Hamam, Istanbul
Hacı Hamza Hamam, Iznik

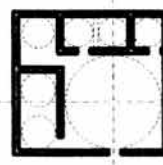
TYPE B

Sokullu Mahmut
Paşa Hamam,
LüleburgazMahmut Paşa Hamam,
Istanbul
Yeni Kaplıca, Bursa
Tahtakale Hamam,
(men's section) IstanbulCağaloğlu Hamam,
IstanbulEski Kaplıca, Bursa
Çemberlitaş Hamam,
Istanbul

TYPE C



Gircik Hamam, Bursa

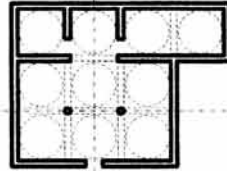


Yeşil Hamam, Bursa



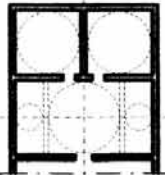
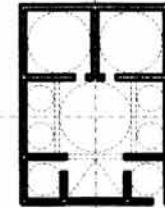
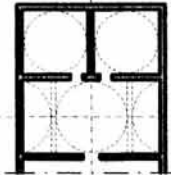
Tahtakale Hamam, Bursa

TYPE D

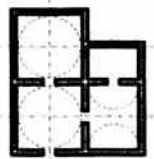


Haseki Hamam, Istanbul

TYPE E

Ahmed Ağa Hamam,
IstanbulÇukurçeşme Hamam,
(women's section) IstanbulÇoban Mustafa Paşa Hamam,
Gebze
Atpazarı Hamam, Bursa

TYPE F



Kasım Paşa, Bozöyük

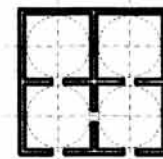
Yukarı Pazar, Izmit
Ismail Bey, Iznik
Sadık Bey, İnönü

Figure 3. Typology of Ottoman Baths according to S.Eyice (sketches: E. Kanetaki)

Some of the baths are half-demolished, in a bad state of decay, while a few have been restored and had the luck to be inserted into the modern urban tissue, as a new use has been introduced. Two of them are still functioning as *hamams*. We should at this point mention the rising interest for such buildings, which led to the following, but quite recent, restoration projects (Balducci 1932, 31-58):

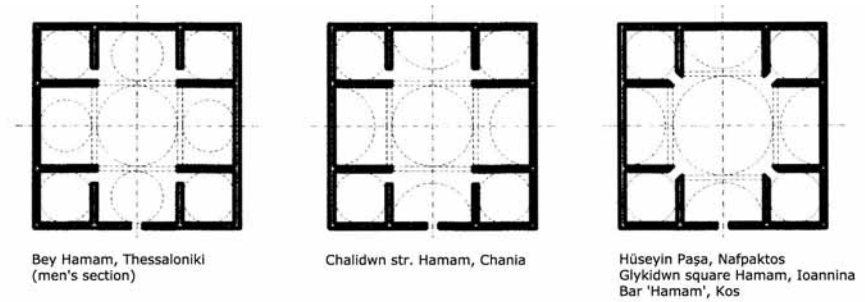
Bey Hamam, Thessaloniki, was partially restored and housed in the 1997 exhibition of *Secular Medieval Architecture in the Balkans, 1300-1500 and its Preservation*. The bath was endowed with a new function, as few modifications were necessary in order to re-arrange it for cultural purposes, while the building itself 'behaves' also as a 'living monument' exhibit.

Pazar Hamam (known also as *Louloudadika*, *Kadınlar* and *Yahudi hamam*), Thessaloniki, was also partially restored as it was included in the works made for the city's celebration of Europe's cultural capital (1997). While many researches have been done on this building (like thesis for graduate and post-graduate studies, scientific research programmes and even publications), unfortunately it remains closed to the public.

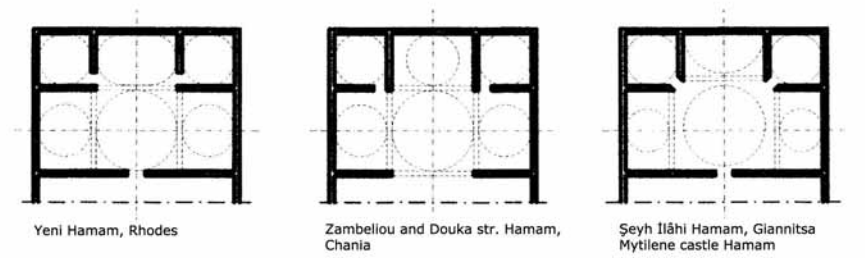
A thesis on the restoration project of the *Apollonia Hamam (Pazargâh)*, Lake Volvi, was presented at the *Postgraduate School for the Protection, Rehabilitation and Research of Architectural Heritage* at the Architectural School of Beograd (1986) and the *Specialization Course Protection, Conservation and Restoration of Architectural Monuments* at Aristoteleio Panepistimio Thessaloniki (1998-99). Similar interest has been shown for the *Zambeliou and Douka Str. Hamam*, Chania, whose restoration project and adaptation to the city's Historic Museum was presented as a graduate thesis at the Architectural School of National Technical University Athens (1994); the *Niceforo Foca Str. Hamam*, at Rethymno, whose restoration and rehabilitation into a gallery was prepared as a project and was presented as a postgraduate thesis at the *Corso di Specializzazione in Restauro dei Monumenti*, Università di Roma La Sapienza, (1997); the Salt Warehouse, at Kos, was studied as a postgraduate thesis at the *Specialization Course Protection of Monuments* of the National Technical University Athens, 2000.

There are also renewed and restored cases. The *Abid Efendi Hamam* (or the 'Hamam of the Winds') in Athens, was allocated to the Greek Folk Art in 1984, and during the 1990s its restoration and reuse project was presented, where the *hamam* is now housing the Center of Documentation for Body Embellishment (2000). The *Yeni Hamam* in Thessaloniki, a double bath, which is partially preserved (the hot sections were destroyed in 1917), was formerly used as an open cinema and is now converted into a cultural center and musical stage. The *Çarşı Hamam*, Mytilene, is currently restored (2003) and will be open to public soon. The *Yeni Hamam* in Rhodes, which is a double bath, was restored in 1992-95, financed by the European project *Rebuild*, which sustained the use of renewable energy sources in historic buildings. It is one of the two still functioning *hamams* in Greece, as the *Mpoukaouri Str. Hamam*, Patra. The *Halidwn Hamam*, Chania, has been restored and re-arranged for commercial use, while a restoration project is under preparation for the *Glykidwn Square Bath* in Ioannina.

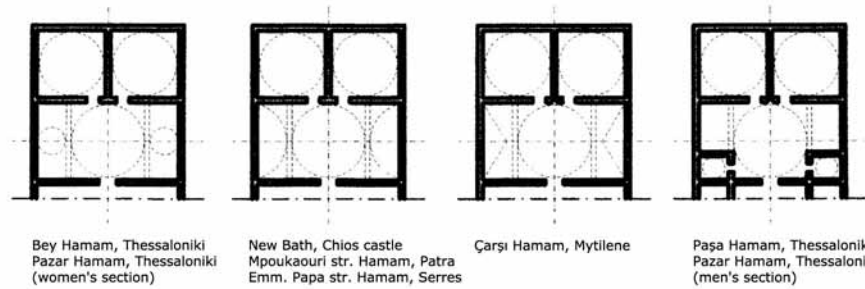
SCHEME A



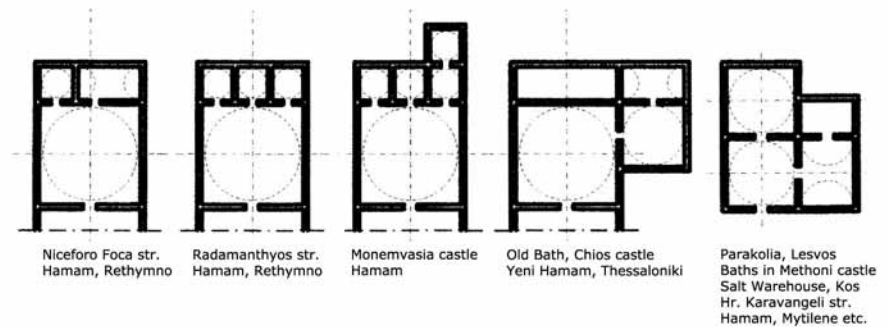
SCHEME B



SCHEME C



SCHEME D



SCHEME E

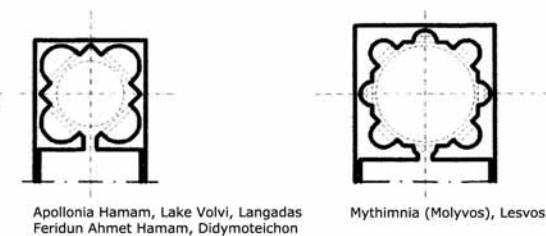


Figure 4. Suggested Typology of Greek Ottoman Baths (according to E. Kanetaki)

TYOLOGY OF *HAMAMS* IN THE GREEK TERRITORY

A few historians and archaeologists have dealt in the past years with the study of baths. K. Klinghardt (1921), H. Glück (1927), S. Eyice (1962), M. Kiel (1981) offered a grouping based on the typology of these buildings, in accordance to the function of the ground floor and especially the disposition of the hot section. They base their conclusions on a study of baths found either in İstanbul or in other areas of the Ottoman Empire, such as Asia Minor (i.e. Konya, Bursa,), while H. Balducci (1932) mentions the basic typological groups of Ottoman *hamams*, in an article on the Turkish Architecture in Rhodes (Eyice 1960, 120). All of them describe the building types, referring to some well-known buildings in big Ottoman centers, such as İstanbul (namely the *Mahmut Paşa*, 1466, *Bayazid*, 1501, *Haseki Hürrem*, 1556, *Çemberlitaş*, 1584, *Cağaloğlu Hamam*, 1741), Bursa, Konya and others. None of them, except S. Eyice (Kanetaki 2003, 98-103), referred to the necessary design layout, which would give the reader sufficient details in order to fully understand the basic typology each one suggests and belongs to. Our first contribution will be a thorough examination of the grouping proposed by each scholar (**Figures 1, 2, 3**) and at the end, a comparative confrontation of their basic points (Ünsal 1970, 73). According to K. Klinghardt (**Figure 1**), H. Glück (**Figure 2**) and M. Kiel, baths are categorized under five groups, while S. Eyice (**Figure 3**) presents six categories.

In Greece we find small, medium-sized and big Ottoman baths. Some of them are single and some others double (*çifte*), with separate accommodation for men and women. The two sections show signs of symmetry, since one is placed with its big axis parallel to the other, but they present and share a common water reservoir and furnace. We do not notice mirror symmetry (symmetrically designed about the longitudinal axis) (Kanetaki 2003, 388-390), just like in the *Haseki Hürrem (Roxalane) Hamam* (1556) in İstanbul.

As far as the men's part is concerned, it is usually richer in decoration than the women's part, the dome in the disrobing hall is higher than the one at the female department, just like in the *Yeni Hamam*, Rhodes.

One might explain this as first, a sign of social discrimination, which dictated this differentiation associated with the two sexes, and second, as due to high number of male customers using the *hamams* compared to the females.

As was mentioned, the typical sequence of rooms (the disrobing room, the tepid and the hot section), whose existence was dictated by the rigid order in which the ritual operations in the *hamams* were performed, has remained practically the same everywhere and no evolution is traced; the pattern of the bath layout remained unaltered throughout the Islamic world. The comparative study of *hamams* in the Greek territory leads to a grouping into five typological categories (**Figure 4, 5**), based on comparisons and confrontation between them, with the criteria of their size and especially the disposition of the hot section, that is regarded as the basic functional part of each building (Sezgin 1993, 298).

In the first group, the hot room is cross-shaped, forming four *eyvans* with four private small cells (*halvet*) situated in each corner. A semi-spherical dome rests on the intersection of the two axes: transition of loads from the dome to the walls is implemented through solutions such like pendentives, squinches and Turkish triangles (*haçvari dört (4) eyvanlı ve*

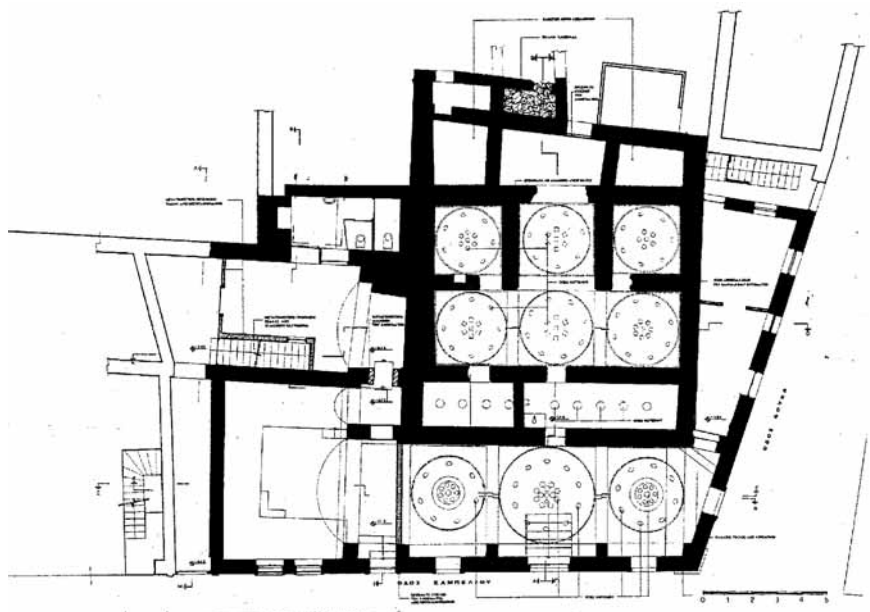
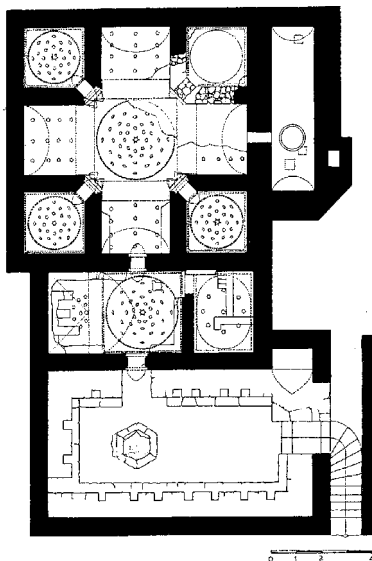
Figure 5. Suggested Typology of Ottoman Baths in the Greek territory (sketches: E. Kanetaki).

A/A	Name	City	Date	Scheme
1	<i>Bey Hamam</i> (Paradeisos baths) -men's section	Thessaloniki	1444, double	A
2	<i>Glykidwn square</i> , Ioannina	Ioannina	17th - 18th century	A
3	<i>Hüseyin Paşa</i> , Castle (Figure 6)	Nafpaktos	1701 - 1702	A
4	<i>Halidwn str.</i>	Chania	double	A
5	<i>Bar Hamam</i>	Kos		A
1	<i>Şeyh İlahi Efendi</i>	Giannitsa	beginning 15th century	B
2	Mytilene Castle	Mytilene	19th century	B
3	<i>Zambeliou and Douka str.</i> (Figure 7)	Chania		B
4	<i>Yeni Hamam</i>	Rhodes	~1500, initial ground floor	B
1	<i>Bey Hamam</i> (Paradeisos baths) -women's section	Thessaloniki	1444, double	C
2	<i>Pazar Hamam</i> (<i>Louloudadika, Yahudi, Kadinlar</i>)	Thessaloniki	1500, double	C
3	<i>Paşa Hamam</i> (Phoenix) (Figure 8)	Thessaloniki	1520	C
4	Emm. Pappa str.	Serres		C
5	Mpoukaouri str.	Patra		C
6	<i>Çarşı Hamam</i>	Mytilene	1800 - 1825	C
7	New bath, Chios castle	Chios		C
1	<i>Oruç Paşa Hamam (Fısıltı)</i> (Figure 10)	Didymoteicho	1398 - 1399	D
2	Ferres	Ferres	before 1455	D
3	Makri	Aleksandroupoli	16th-17th century	D
4	<i>Kilkis Hamam</i>	Kilkis	18th - beginning 19th century	D
5	<i>Gazi Evrenos</i>	Giannitsa	1385 - 1395	D
6	Stageira bath (Sidirokausia)	Stageira	early Ottoman	D
7	<i>Yeni Hamam</i> (Aigli)	Thessaloniki	1575 - 1600, double	D
8	<i>Tuzci Hamam</i>	Veroia	end 14th century, double	D
9	Zixni	Zixni	15th-16th century	D
10	<i>İç-Kale Hamam</i>	Ioannina		D
11	Platykampos	Platykampos		D
12	Tyrnavos	Tyrnavos	18th - beginning 19th century	D
13	<i>Abid Efendi</i> (Hamam of the Winds)	Athens		D
14	Nafplio	Nafplio		D
15	Castle, A' bath	Methoni		D
16	Castle, B' bath	Methoni		D
17	Monemvasia	Monemvasia		D
18	Hrackleias and Karavangeli str.	Mytilene	19th century	D
19	Parakoila	Lesvos		D

20	Klappados	Lesvos		D
21	Old bath, Chios castle	Chios		D
22	Salt warehouse	Kos		D
23	Northern Therms	Kos		
24	Lalakia	Lalakia Syros		D
25	Bath in a Turkish mansion	Chania		D
26	Katre str.	Chania		
27	Radamanthys str.	Rethymno	1670	D
28	Niceforo Foca str (Figure 9)	Rethymno		D
1	<i>Feridun Ahmed Bey Hamam</i>	Didymoteicho	1571-1572, double	E
2	Apollonia, Lake Volvi (Figure 12)	Langadas	1550-1600 or 1566-1574	E
3	Mythimna (Molyvos)	Lesvos		E
1	Polykastro	Polykastro		small
2	Agios Vasileios	Langadas		small
3	Pisiona, Vasilika	Vasilika		small
4	Faik Paşa	Arta	partially demolished	small
5	Larissa	Larissa	partially demolished	
6	A' bath	Ancient Corinth		small
7	B' bath	Ancient Corinth	partially demolished	small
8	Rio castle	Rio	partially demolished	small
9	Karytaina	Karytaina	partially demolished	
10	Ypsilometopo	Lesvos	partially demolished	
11	Sigri	Lesvos		small
12	Pyli	Kos		small
13	Kastellorizo	Kastellorizo		small

Figure 6. *Hüseyin Paşa Hamam*, Nafpaktos, plan (drawing : E. Kanetaki). Kanetaki (2000, 60).

Figure 7. *Zambeliou and Douka str. Hamam*, Chania, plan (drawing: E. Kanetaki). Kanetaki (1997, 87).



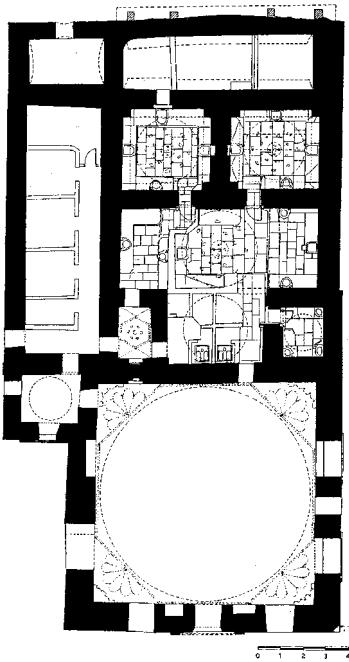


Figure 8. *Paşa Hamam*, Thessaloniki, plan (drawing: E. Kanetaki). Kanetaki (2003, 187).

Figure 9. *Niceforo Foca Hamam*, Rethymno, plan (drawing: E. Kanetaki). Kanetaki (2000, 67).

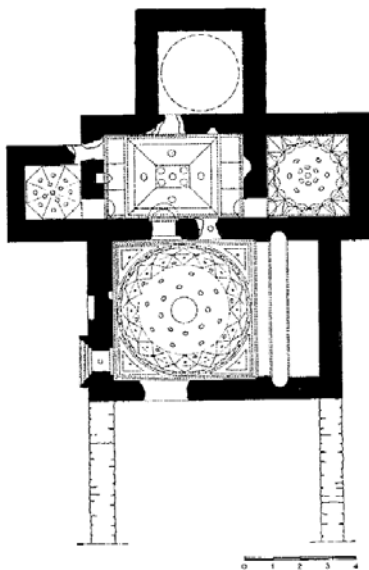
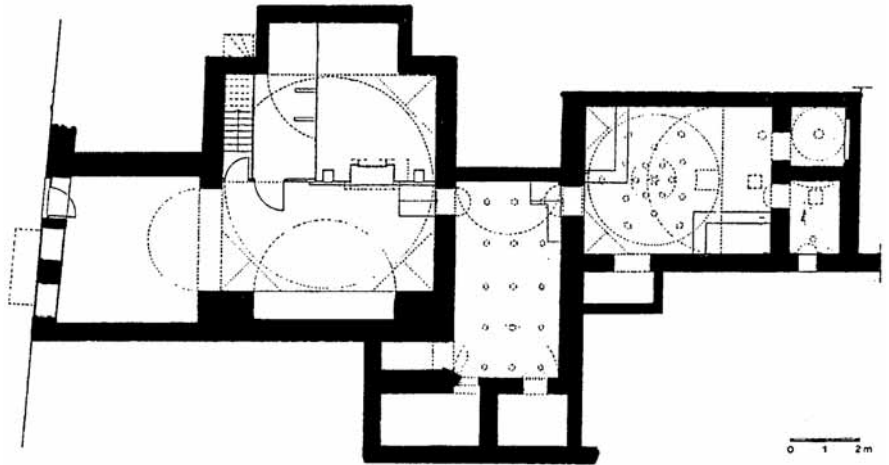


Figure 10. *Oruç Paşa Hamam*, Didymoteichon, plan (drawing: E. Kanetaki). Kanetaki (2000, 51).

köşe hücreli tip). There is a hypothesis that this type originates from the dwelling model found in Central Asia (four *eyvan* and four *halvet* plan) (Moutsopoulos 1990, 124).

The four *eyvan* scheme is found in many building types, such as dwellings, hospitals even *medreses*. They look very much like traditional (vernacular) houses at Kastoria, in Central Macedonia and Mount Pelio (Kuban 1976, 447-459, fig. 11). The doors in the corner rooms are placed at 45° degrees cutoff walls, just like in many other places of in the Balkans, like Bosnia, Bulgaria and Kosovo.

The scheme A is traced at *Bey Hamam*, Thessaloniki (the men's section), at *Hüseyin Paşa* in Nafpaktos (Figure 6), at *Ioannina Hamam*, Halidwn str., Chania and at the *Bar Hamam*, Kos.

The next group includes baths, where the hot part forms an inverted T plan, with three *eyvans* and two private hot rooms (*halvet*), situated at the end of the bath against the wall of the water container. This plan has been used in other Ottoman buildings such as mosques, just like in the *Alaca İmaret Cami*, Thessaloniki and the *Mehmet Bey Cami*, Serres. The scheme B is recognizable in the *Şeyh İlahi Hamam* at Giannitsa; the *A' Hamam* at Methoni castle; the *Zambeliou and Douka str. Hamam*, in Chania (Figure 7) and was applied to the initial phase of the *Yeni Hamam*, Rhodes (before the addition of the women's section).

In the third group, the *sıcaklık* still gives the impression of a two-*eyvan* room, but the third one between the two *halvet* areas has been omitted and rooms have been placed directly against each other. The first rectangular room is covered by a dome, which rests partly on the transversal walls, partly on the two arches (*ortası kubbeli, enine sıcaklıklı ve çifte halvetli tip*). This type is found in many *hamams*, such as the *Paşa (Phoenix)* (Figure 8), *Pazar (Louloudadika, Yahudi or Kadınlar Hamam)*, the women's section of *Bey Hamam*, all of them at Thessaloniki, the *Emm. Papa str. Hamam* at Serres, the *Çarşı* at Mytilene, the *Old* and the *New Hamams* within the Chios castle.

The fourth type is very wide-spread throughout the Greek territory and is characterized by a square-shaped domed hot room, that is surrounded by small hot rooms (*kare bir sıcaklık etrafında sıralanan halvet hücreli tip*). Many buildings can be grouped under this typological unity, such as *hamams* found in Kilikis, Veroia (the *Tuzci Hamam*, a double bath in an L



Figure 11. *Gazi Mihal Hamam*, Edirne, ılıklık dome. Kuban (1976, Fig. 11).

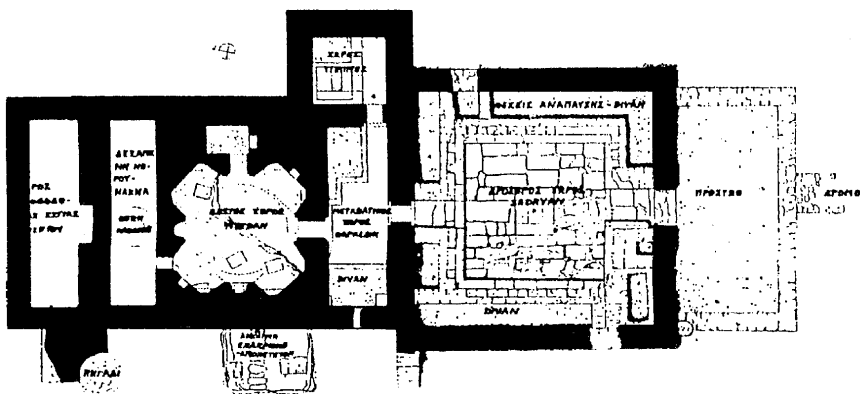


Figure 12. *Apollonia Hamam*, Lake Volvi, Langadas, plan (drawing: E. Hadjitrifonos) Hadjitrifonos (1988, 144).

shaped plan), Tyrnavos, Larissa and Nafplio (in both cases partially demolished), Methoni (two baths in the castle), Monemvasia, Mytilene (*Hrakleias* and *Karavangeli str. Hamam*), Kos (the former *Salt warehouse*), *Niceforo Foca str.* (**Figure 9**) and *Radamanthios str. Bath*, both in Rethymno. Two of the oldest Ottoman *hamams*, the *Oruç Paşa (Fısıltı)* at Didymoteichon (**Figure 10**) and the *Gazi Evrenos Bey* at Giannitsa, follow this scheme. The first is characterized by a special constructional system in the disrobing hall, that resembles the dome in the *soğukluk (ılıklık)* of the female section at the *Gazi Mihal Hamam* in Edirne (**Figure 11**) (Eyice 1991, 48-49). The semispherical dome is decorated by an impressive rhombic pattern, that is very likely to be playing a structural role. The *Gazi Evrenos Bey* presents a dome ornamented on the inside with spiral lobes, a feature also found at the *İsmail Bey Hamam*, İznik, a building of the early 15th century (Kiel 1981, 127-146).

The last group shows a polygonal hot part with niches (alcoves, *maksuras*), a feature that refers to the octagonal *sıcaklık* found in Bursa (*yıldızvari sıcaklıklı tip*), such as the *Eski Kaplıca* (1389?-1511) and the *Yeni Kaplıca* (1520-1566). Buildings of this type show morphologic similarities also with the *Mahmut Paşa Hamam* (1466), the oldest Ottoman bath in İstanbul, and the *Sokollu Mehmet Paşa Hamam* (1574) at Lüleburgaz. Scheme E applies to the *Feridun Ahmet Hamam*, Didymoteichon (1571-2) (Eldem 1987, 206 and Cerasi 1989, 89), a double bath partially demolished in 1970s, the *Apollonia Hamam*, at Lake Volvi (**Figure 12**) and the *Mythimna Bath* (Molyvos), Lesbos.

CONCLUSIONS REGARDING THE TYPOLOGY

General remarks that can be made, resting on the comparisons of the main typological groups suggested by scholars such as Kiel, Klinghardt, Glück and Eyice are:

a. Baths in the Greek territory do not form original prototypes, since their architectural characteristics match the rhythmological and structural features found in all the Ottoman Empire. Ottoman architects based their plans on a code of constructional techniques and rules of proportion. Greece at that time, was a province of the Empire and if we recognize this fact, we shall understand the reason of this homogeneity, as the process of a building's construction there did not differ from the one in the Asiatic region.



Figure 13. *Oruç Paşa Hamam*, Didymoteichon, exterior (E. Kanetaki).



Figure 14. *Tuzci Hamam*, Veroia, exterior (E. Kanetaki).



Figure 15. *Platykampos Hamam*, interior (E. Kanetaki).

b. The ground floor of the buildings was adopted by a certain model. The state architect plainly concerned himself with establishing the main structures of buildings under his supervision, after which they were left in the hands of master craftsmen, occasionally overseen by him. It was traditional materials and building techniques which decided the eventual structure of the building, beyond the architect's very basic plan. The officially appointed architects that supervised the construction and guided the workers, followed the formal design (Moutsopoulos 1967, 51).

c. Craftsmen bore a common vocabulary, which was used for all aspects of buildings. This is also supported by the following facts that, as builders' corporations, the *esnaf* (*συντεχνίες*) (Goodwin 1971, 22), were moving from one place to the other. They applied their construction techniques, in accordance to the site, regional materials and the financial aid of each donator.

CONSTRUCTION OF GREEK BATHS

Their analysis offers information as far as the construction methods, the materials in use and their morphology are concerned (masonry, domes, architectural elements such as functional and technical equipment, ornamentation). Small private baths are found in houses or monasteries, while the public *hamams*, single or double, are of middle or larger size and present similar rhythmological and constructional features with the other Ottoman buildings.

MASONRY

Masonry in *hamams* did not differ one from the other in Ottoman buildings which were built in Greece. Their thickness varies from 0,60 m to 1,20 m., while both surfaces of walls (external - internal) were usually plastered. Turks used local Byzantine construction methods for everyday architecture, but in order to create monumental expression, they returned to stone and continued to embellish their buildings in the Muslim expression. Walls were constructed according to local techniques and consisted of :

a. Alternate brick and stone layers: The geometrically designed brick courses in wall-faces have the function of reinforcing the rubble masonry. This type of masonry is found in the four Thessaloniki *hamams*, *Bey* (1444), *Pazar* (*Louloudadika*, *Kadınlar*, *Yahudi*), *Paşa* (*Phoenix*) and *Yeni* (*Aigli*), (1575-1600); at *Oruç Paşa*, Didymoteichon (**Figure 13**); *A' bath* at Stageira; *Gazi Evrenos* at Giannitsa; *Apollonia* at Lake Volvi, Langadas; *Tuzci Hamam* at Veroia (**Figure 14**).

b. Hard-hewn cut and rubble stone: Examples can be traced at *the A' bath*, Ancient Corinth; *B' bath*, Methoni castle; the *Platykampos Hamam* (**Figure 15**); *Hr. Karavangeli str.* at Mytilene; *Pyli* at Kos.

c. Ashlars: Masonry, in which all stones are squared, giving a uniform pattern of vertical and horizontal joints. We can mention *Yeni Hamam*, Rhodes and *Feridun Ahmet Hamam* at Didymoteichon.

DOMES – VAULTING

a. Construction of domes-vaults:

Domes (*kubbes*) were constructed either by bricks or close-fitting ashlar stone (although small stone pieces and rubble were sometimes used, set in mortar) or rough-hewn stone.

a.1. Construction by bricks is found in the *Glykidwn Square Hamam*, Ioannina; *Hüseyin Paşa Hamam* at Nafpaktos (**Figure 16**); *Platykampos* and *Apollonia Hamam* at Lake Volvi, Langadas (**Figure 17**); *Tuzci Hamam*, Veroia (**Figure 14**); *Pisiona* at Vasilika; *Şeyh İlâhi Hamam* at Giannitsa; *Oruç Paşa* in Didymoteichon (**Figure 13**); *Abid Efendi Hamam* in Athens; *Pazar* (*Louloudadika*, *Kadınlar*, *Yahudi*) and *Yeni* (*Aigli*), both in Thessaloniki.

a.2. Construction by rough-hewn stone can be traced at *Pyli and Kos* at Monemvasia; *A' bath* at Methoni castle; *Lalakia* in Syros; *Old bath* in Chios castle.

b. Form of domes-vaults:

We notice semispherical domes, lowered semispherical domes, barrel vaults (continuous vaults of semicircular section = semicylindrical ones) and in some cases also cloister vaults.

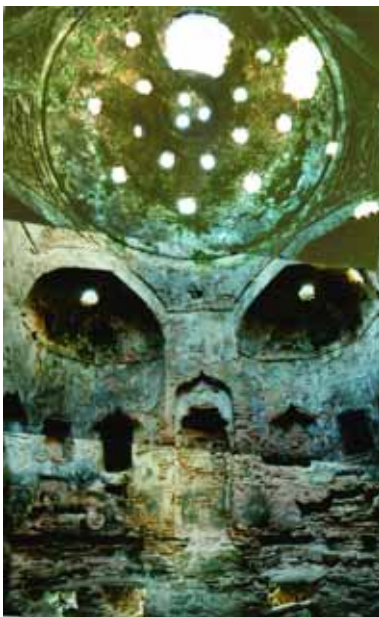
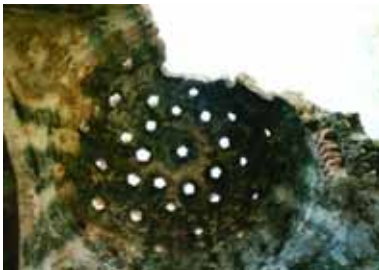


Figure 16. *Hüseyin Paşa Hamam*, Nafpaktos, sıcaklık dome (E. Kanetaki).

Figure 17. *Apollonia Hamam*, Lake Volvi, Langadas, sıcaklık niches (E. Kanetaki).

Figure 18. *Larissa Hamam*, horasan coated dome (E. Kanetaki).

