ΙΔΡΥΜΑ ΜΕΙΖΟΝΟΣ ΕΛΛΗΝΙΣΜΟΥ

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Summary :

One of the four most imposing bath complexes in Ephesus is located at the eastern edge of the city, close to the gate that led to the Artemisium. It was probably founded in the mid-2nd cent. AD. The palaestra of the complex was reconstructed in the early 3rd cent. AD.

Date

Mid-2nd century AD

Geographical Location

Ephesus

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1. Location

The East Baths (no.12) were named after the location they were built in, i.e. in the eastern edge of Ephesus. South of the Baths stood the Magnesian Gate (no.10), one of the city's gateways leading to the sanctuary of Artemis and Magnesia on the Maeander.[1]

2. Architectural type

In the East Baths of Ephesus the main chambers, the frigidarium, the tepidarium, and the caldarium were arranged respectively along the building's main N-S axis. The bath's main halls were surrounded on their three sides by three long and spacious rooms forming a Pi shape. These provided effective insulation for the bath's chambers and enhanced its functionality.[2] A palaestra was built in front of the fourth side. Similar typology, that is, arrangement of the rooms, can be observed in the East Baths[3] and the Theatre Baths[4] in the same city, as well as the Baths at Alexandria Troas.[5] The East Baths represent an earlier example. Therefore this type emerged, most likely in Ephesus, in the first half of the 2nd cent. AD.

3. Short description of the structure and the function of its spaces

The bath complex, along with the palaestra, occupies an area of 13,500 sq.m.[6] The main entrance was located on the south side of the complex, on the road that led to the city gate and continued to Magnesia. This side featured a long stoa which turned towards the north at its west corner, forming an angle. This stoa functioned independently of the warm baths. Successive rooms equal in size opened on its rear, destined for various commercial activities. The stoa also offered shelter to passers-by on their way out of the city or those who had just entered it. A monumental propylon was situated at the centre of the stoa, which first led visitors to the palaestra's rectangular peristyle. The peristyle was an open-air courtyard, colonnaded at its four sides; behind it four stoae formed respectively (6 m. in width).

Behind the peristyle's west stoa was a rectangular room of the exedra type, that is, it opened towards the stoa's peristyle and featured a colonnade on its façade. Rectangular niches formed at the other three sides of this hall, and another deep, semicircular niche was located at the centre of the rear west wall. These niches were intended for setting up statues. Fragments from a statue of Asclepius, god of Medicine, were found in the central semicircular niche. Two facing marble statues were placed in the niches of the short sides, on top of pedestals; one depicted a man wrapped in his himation, the other a seated female figure. On the basis of their iconography, these statues have been identified as a priest and a priestess, and probably depicted the building's founders. Other fragments from marble statues depicting the Muses, Aphrodite, Dionysus and Pan also originate from this chamber. Chambers of this form, usually open-air with a colonnade close to the palaestra and richly adorned with sculptures which conferred an air of formality, are often found in the Baths of Asia Minor and were intended as places of Imperial Cult for the emperor and his family, as well as for earlier deified emperors.[7]

Closely mirroring the aforementioned room, a second rectangular chamber was formed behind the east side of the peristyle. It was

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slightly smaller than the first. This hall was suitable for gatherings, giving lectures and teaching theoretical subjects, as it featured three rows of benches along its three long sides. A wide double doorway opened at the middle of the west side. Right in front of this door, at the chamber's internal space, two marble columns supported a richly decorated marble entablature. The *bema* (rostrum) was probably found at this spot, from which the speakers, usually scholars or politicians, delivered their lectures. Two smaller entrances were placed on either side of the central doorway; the audience used these to enter the room and head directly for the rows of benches. Small steps facilitated the ascent to the higher rows. On the east side two pedestals supporting statues were interposed in the row of benches. Only the stone slabs on which the two pedestals were based survive.[8] Chambers furnished with benches, intended for lectures, are mentioned in the literary sources as *auditoria*.[9] The auditorium of the East Baths is one of the best preserved, and thanks to its discovery we have a clear picture of the architectural arrangement and the furnishings of such rooms.

In the same side of the palaestra, on either side of the auditorium, were at least two more chambers, whose function remains unclear. These chambers were also adorned with sculptures, as testified by the marble statues found in the room north of the auditorium[10] depicting Hygeia and a captive barbarian, which was possibly placed in one of the peristyle's stoae.[11]

The main building of the baths was a rectangular structure covering an area of 82.70 sq.m. One walked through the palaestra reaching two spacious corridors (*basilicae*), through which one entered the two long chambers on the building's west or east side respectively. A semicircular niche was formed at the back of each of the two corridors, where statues were probably placed. From the corridors the visitor could pass through the auxiliary spaces straight to the caldarium, or reach the north long chamber and from there make his way to from the frigidarium to the caldarium. The two corner auxiliary spaces are identified as changing rooms (*apodyteria*). The apodyteria were rooms essential for the operation of any gymnasium or bath. Along their walls they usually featured benches and chests of drawers, built into the wall or made up of wood (*loculi*), intended for storing the visitors' clothes.

Chambers 6 and 8 belonged to the frigidarium. The long chamber (6) was taken up almost exclusively by a large, rectangular cold water pool with its two short sides arched. Chambers 10, 14 and 15 probably formed the zone of the tepidarium. The central chamber (11) of the caldarium was the largest (measuring 25 x 30 m) and the most impressive. It was situated at the heart of the building, so as to enjoy the best possible insulation. Niches opened on its walls. Basins (*louteres* or *pyeloi*) or pools (*alvei*) containing warm water were usually placed in these niches.[12] Apart from one middle semicircular niche at the north side of the chamber, all the other niches were rectangular; three deep ones were created on the long sides and two shallow ones at the short sides.

4. Masonry and building techniques

Two different masonry systems were used in the construction of the building. The façades and the internal walls, the pilasters and the arched elements of the bath's main chambers were constructed using the opus quadratum technique. A cheaper masonry system was used in the smaller rooms and the secondary spaces; the opus incertum. The walls were covered on the outside by successive layers of mortar. The walls of the most important of these chambers were covered in multicoloured marble slabs (*orthomarmarosis*) affixed on the mortar with iron pegs. Skylights and large windows channelled ample light and also provided natural heating to the rooms.[13]

The three *basilicae*, i.e. the long corridors surrounding in a Pi shape the chambers of the bath (4), the bath's large central chambers, as well as some smaller auxiliary spaces, were all roofed with domes. Baked bricks were used in the vaulted roofs and the hypocausts. The baked brick technique was a novel construction method, which had only recently been introduced to the East from Italy.[14]

5. Building's foundation and chronological phases

The terminus ante quem for the foundation of the complex, i.e. the chronological boundary before which we should place the establishment of the building, is defined on the basis of the dating of earlier movable finds which were unearthed during the construction works for the building in the mid-2nd cent. AD.[15] The 2nd cent. AD sees the proliferation of this type of bath complexes

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throughout the cities of Asia Minor.

The palaestra's peristyle in its surviving form, with the two luxurious chambers on its flanks, the Imperial Cult chamber, and the auditorium are later structures. This view rests on the fact that with the construction of the peristyle exactly to the south of the baths the large southerly windows of the caldarium were rendered useless, but also from the dating of a fragmentary inscription, carved on the epistyle of the palaestra's colonnade.[16] This, however, was probably the site of another, earlier palaestra whose plan is unknown. The reshaping of the palaestra and that of the flanking chambers would have been carried out in the early 3rd cent. AD, during the reign of emperor Septimius Severus (193-211 AD). After its reconstruction the palaestra shrunk, as its width became rather smaller than that of the building of the baths. The reduced footprint of the palaestra in this second building phase reflects the waning of interest in physical exercise during this era.[17]

The construction of the palaestra with its luxurious chambers was attributed to a member of the Vedii family, the prominent Ephesian sophist Flavius Damianus and his spouse Vedia Phaedrina.[18] Flavius himself is known for the foundation of a stoa with a vaulted roof very close to the baths under consideration, along the way that led to the Artemisium. The stoa offered shelter from adverse weather to those heading to the sanctuary of Artemis, particularly during the ritual procession.[19]

6. History of research

Excavations in the complex were carried out in 1930 and 1931 by the Austrian Archaeological School under the direction of F. Miltner. He also drew the ground plan and made suggestions for the visual reconstrunction of the complex.[20]

7. Current state

The ruins of the East Baths, imposing and verdant, constitute an important source of knowledge for anyone interested in studying Greco-Roman architecture. The walls of the vaulted chambers survive to a substantial height, in certain places up to the skirts of the domes, that is, the hemispherical roofs that covered the baths. Therefore, one has the opportunity to study construction techniques, like the alternate employment of masonry systems and building material. The numerous smaller and more substantial fragments from architectural members that have lavish sculptural decoration and are preserved to date *in situ*, as well as the marble statues found in the chambers of the palaestra and nowadays exhibited in the archaeological museums of Ephesus and Smyrna, testify to the building's past wealth and luxury.

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1. Scherrer, P., *Ephesus: The New Guide* (Instabul 2000) 70-71, pl. 1-3.

2. These long chambers that constitute a characteristic feature of Roman bath architecture are mentioned in the bibliography with the conventional term *basilica thermarum* (mainly for baths in Italy and the western provinces) or with the term *ambulacrum, -a* for the baths of Asia Minor. Cf. Yegul, F., *Baths and Bathing in Classical Antiquity* (New York 1992) p. 414, 415 and n. 1. Nielsen, I., *Thermae et Balnea* (Aarhus 1990) p. 106.

3. Nielsen, I., *Thermae et Balnea. The Architecture and Cultural History of Roman Public Baths* (Aarhus 1990) C298. Yegul, F., *Baths and Bathing in Classical Antiquity* (New York 1992) p. 279ff., where earlier bibliography is collected.

4. Nielsen, I., *Thermae et Balnea. The Architecture and Cultural History of Roman Public Baths* (Aarhus 1990) C300. Yegul, F., *Baths and Bathing in Classical Antiquity* (New York 1992) p. 279ff.

5. Smith, A.C.G., The Gymnasium at Alexandria Troas. Evidence for an outline reconstruction, *AnatSt* 29, 1979, pp. 23-50.

6. Nielsen, I., *Thermae et Balnea. The Architecture and Cultural History of Roman Public Baths* (Aarhus 1990) C298.

7. At Ephesus, such chambers intended for the Imperial Cult have also been discovered in the Baths of Vedius and in the Theatre Baths. Imperial cult chambers survive in better condition in the baths at Sardis and Aphrodisias. For the architectural form of these halls and their possible origin from the

ephebeum of the Hellenistic gymnasium see Yegül, F., *Baths and Bathing in Classical Antiquity* (New York 1992) p. 422ff.

8. Keil, J., Vorläufiger Bericht über die Ausgrabungen in Ephesos , *ÖJh* Beibl 28, 1933, p. 10.

9. Halls equipped with benches, intended for theoretical discourses are mentioned in the Greek sources as **ἀ** *κροατήρα* and were a feature of the Greek gymnasia since the 3rd cent. BC at the latest. See Nielsen, I., *Thermae et Balnea* (Aarhus 1990) 166. See also Höpfner, W. "Pergamon, Rhodos, Nysa, Athen. Bibliotheken in Gymnasien und anderen Lehr- und Forschungsstätten" in W. Höpfner (ed.), *Antike Bibliotheken. Antike Welt Sonderbd.* (Mainz am Rein 2002), p. 67. The city of Ephesus had one more *auditorium*, testified epigraphically; it was situated on the east side of the square, in front of the library, cf. Keil, J., Vorläufiger Bericht über die Ausgrabungen in Ephesos, *ÖJh*Beibl 28, 1933, p. 10 n. 2.

10. Keil, J., "XVII. Vorläufiger Bericht über die Ausgrabungen in Ephesos", *ÖJh* 28 (1933), Beibl., p. 11, fig. 4.

11. Keil, J., "XVI. Vorläufiger Bericht über die Ausgrabungen in Ephesos", *ÖJh* 27 (1932), Beibl., p. 30

12. For the terms πύελος (η) and alveus, see Ginouvès, R., *Dictionnaire méthodique de l'architecture grecque et romaine* III: *Espaces architecturaux, Bâtiments et ensembles* (Paris – Rome 1998), p. 100, 103.

13. For the lighting and heating of Roman baths in general see Weber, M., *Antike Badekultur* (München 1996) p. 51.

14. For this technique see Yegül, F., *Baths and Bathing in Classical Antiquity* (New York 1992) p. 258, fig. 323.

15. Nielsen, I., *Thermae et Balnea. The Architecture and Cultural History of Roman Public Baths* (Aarhus 1990), p. 98, C298 (inscription IK Ephesos III 839).

16. Keil, J., "XVI. Vorläufiger Bericht über die Ausgrabungen in Ephesos", *ÖJh* 27 (1932), Beibl., p. 31.

17. Miltner, F., *Ephesos, Stadt der Artemis und des Johannes* (Wien 1958), p. 75.

18. Keil, J., "XVII. Vorläufiger Bericht über die Ausgrabungen in Ephesos", *ÖJh* 28 (1933), Beibl., p. 10.

19. Miltner, F., *Ephesos, Stadt der Artemis und des Johannes* (Wien 1958), p. 78.

20. Wiplinger, G. – Wlach, G., *Ephesos, 100 Jahre österreichische Forschungen* (Wien – Köln – Weimar 1995), pp. 53-55.

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- **Keil J.**, "XVII Vorläufiger Bericht über die Ausgrabungen in Ephesos", *ÖJh*, 28 Beibl., 5-44

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Glossary :

architrave or epistyle

The lowest part of an entablature resting on the columns capitals and supporting the frieze.

caldarium

Derivative of the Latin verb caleo (= warm up). It is the strongly heated room of Roman baths. Its hot plunge pool was used to take not only a hot bath but also a steam bath due to high levels of humidity. It was also called the "inner room".

entablature, the

The upper part of the classical order, that rests on the columns, it consists of the architrave, frieze and cornice.

frigidarium

A large cold pool to drop into after enjoying a hot Roman bath (from frigeo). Normally frigidarium has used after a visit to warm rooms (caldarium) or after a training in palaistra. As the largest room in the thermae and often functioned as a hall for social events or communication

himation, the

Rectangular woolen (mainly) cloth that was worn over the *chiton* (cloak). It could be wrapped around the shoulders and the body in different ways and was fastened with a belt or with brooches.

hypocaust, the

the main system for the heating of ancient baths. The word means literally a “furnace that burns underneath”. With this system the room’s floor was supported by small poles and the space underneath the floor was heated by the circulation of hot air, while the heat was transferred through the walls by conductors.

isodomic masonry (opus quadratum)

A type of masonry in which blocks of equal length and thickness are laid in courses, with each vertical joint centered on the block below.

mortar, the

Liquidised paste consisting of soil, water, sand or marble. It is used as binding material between rocks or plinths. Thus, it assures stability and protection of mansory.

niche

Semi-circular recess on the surface of the wall.

opus incertum

Masonry style where small, irregular stones are used for the wall's facade mixed with plaster.

palaestra

A colonnaded enclosure for athletic exercise. The palaestra functioned both independently and as a part of the Greek gymnasium. It was formed as an open court surrounded by colonnades with adjoining rooms.

pedestal

Base on which stands a bust, a stele or a statue.

peristyle

A colonnade surrounding a building or a courtyard .

propylon

Monumental architectural entrance, most often to a sanctuary or a building complex.

stoa, portico, the

A long building with a roof supported by one or two colonnades parallel to its back wall.

tepidarium

The word is derived from the verb tepeo meaning ‘to be tepid’. It is the room of tepid water in the Roman thermae. It was also called middle house or tepid house and was usually situated between the caldarium and the frigidarium. Its main function was the acclimatization of the bather to the change

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of temperature. Being at the Tepidarium the visitor could also apply ointments on his/her body before or after the hot bath, although, there was a special room for this function called unctorium.

terminus ante quem (lat.)

Technicality of historical studies for expressing the chonological line, before which an event took place.