



Summary :

The upper terrace of the Gymnasium complex at the Acropolis of Pergamon is found in bibliography as Upper Gymnasium or Gymnasium of the Young. It is a complex of buildings including a palaestra, an Ionic tetrastyle prostyle temple and two facilities of thermae. It was founded in the years of Eumenes II. Extensive interventions and modifications were made in the Late Hellenistic and Roman years. The place was constantly used until the Byzantine period.

Date

2nd c. BC

Geographical Location

Pergamon, Mysia

1. Hellenistic Years

The upper and largest in dimensions (225 x 160 m) of the three terraces of the Gymnasium complex at the Acropolis of [Pergamon](#) is situated to the southeast of Demeter's precinct, directly to the south of the precinct of Hera Basileia. The construction of the terrace required the erection of two horizontal parallel retaining walls on the southern side of the inclined ground. The two walls formed an oblong passage (S) 212.20 m long, 6.80 m wide and less than 4 m high.¹ The passage was covered with a wooden flat roof and had a door on either edge. It was ventilated and rather faintly lighted by narrow openings on the south wall.²

This underground structure was also a means for moving from the middle to the upper terrace. An external staircase to the east of the middle terrace led to the eastern door of the underground passage. The north wall of the passage had two staircases leading to the upper terrace. However, the main entrance to the upper terrace was through a paved inclined level, which started from the main street that connected the lower city with the Acropolis of Pergamon and ended on the east end of the underground passage, at roof level. A gate possibly existed at that point, though no remains have survived.³

The reconstruction of the original Hellenistic shape of the upper terrace is particularly difficult because of large-scale subsequent interventions. A central rectangular courtyard measuring 36 x 74 m was surrounded by two-storey *stoas* on the east, north and west sides,⁴ with the Gymnasium rooms opening behind them. The Doric *stoas* were made from andesite and included 14 columns on the narrow and 29 columns on the long north sides.⁵

Behind the east stoa, the remains of the Hellenistic cross walls reveal the original arrangement of four rooms. The small southern space (A) was probably the staircase leading to the upper floor of the stoa.⁶ There was also a larger room (B) as well as a third one, which occupied the area of the subsequent passage C and approximately 2/3 of the later room D. Finally, there was a room that occupied the rest of the subsequent room D and room E.⁷

Among the possibly six rooms of the Hellenistic north stoa, the largest (28 x 10 m) room H is the only to have maintained elements of its original layout. It had a Doric facade with four columns between *antae* and a triple north wall. The two interior walls formed rectangles at the centre. They reached up to 8 m high, where the hall of the second floor started, which exploited the overall width as far as the third exterior wall. A smaller niche also opened in the north wall of the second floor, along the same axis as the niche of the first floor. The niche of the first floor incorporated a semicircular base of a group of statues,⁸ whose *orthostates* had roughly inscribed names of the young that studied at the Gymnasium on their surfaces, as it happened with the interior walls of the hall.⁹ This site was identified with the *ephebeum* –a teaching and meeting room reported by Vitruvius (5.11.2) as the most important room of the Greek



Gymnasium.¹⁰

The Hellenistic character of the rooms of the west stoa is in better condition. The west side is created by two parallel walls (peristasis), joined at intervals through small cross walls. Rooms K and M were open to the east, with two Doric columns standing between pilasters. In room K, traces of a water supply system reveal its use as a bath.¹¹ Room L had a double door on its east side. As evidenced by the remains of the water supply and drainage system, the **hydraulic mortar** on the walls, the tiled floor and the marble basins, all coming from subsequent interventions made in the Hellenistic years, the place served as a bath throughout the operation of the Gymnasium.¹²

1.1. The Foundation of the Gymnasium

The Gymnasium complex was founded in the years of [Eumenes II](#), who extended the city to the southeast. The date is indicated by the fact that the sanctuary of Hera to the north of the Gymnasium, dated according to a votive inscription on the temple's **architrave** in the years of [Attalus II](#), should be a little posterior to the Gymnasium, for it is confined to a small terraced area, directly above the upper terrace of the Gymnasium.¹³

1.2. The Terrace with the Ionic Temple

The remains of a small marble temple (R) directed south, whose foundations measure 17.15 x 11.15 m, were revealed in the NW area of the upper terrace, about 10 m above the **palaestra**. Access to the level of the temple was possibly through a staircase on the south side of the cliff as well as through the second floor of the west stoa of the palaestra. It was an Ionic tetrastyle **prostyle temple** with a deep **pronaos**. Elements of the superstructure of a Doric temple were incorporated at unseen points of the Ionic wall. It remains unknown whether these architectural **spolia** come from the original design of the temple, which for some reason was changed during construction, finally adopting the Ionic order,¹⁴ or were transferred from another place.¹⁵ The sculpted decoration of the **frieze** and the **pediment** remained unfinished for some reason. The base of the cult statue extended all along the rear wall of the **cella**. The god to whom the temple was dedicated remains unknown.¹⁶ The temple should have been founded according to the original Hellenistic design of the upper Gymnasium terrace of Eumenes II, as indicated by the position of the temple and its altar on an axis parallel to that of the palaestra. An additional element is that the west wall of the palaestra was used as a retaining structure during the construction of the temple's terrace. This chronology is also supported by the temple's masonry and the triple retaining wall on the southern side of the terrace.¹⁷

1.3. Late Hellenistic Interventions

Apart from architectural remains, archaeological research also possesses a number of inscriptions providing useful information about the restorations and modifications made to the buildings of the upper terrace in the course of time. A late 2nd c. BC inscription reports the donations of the **gymnasiarch** Metrodorus, who sponsored part of the equipment of a bath and a **sphairisterion**.¹⁸ According to a view, the sphairisterion is identified with K, while L must be the bath.¹⁹ Thanks to epigraphic evidence, it is also known that the gymnasiarch Diodorus Paspáros, Herod's son, sponsored the construction of a new conisterium²⁰ and a bath, thus replacing trachyte, the material widely used until then, with marble.²¹ The people of Pergamon honoured Diodorus Paspáros by dedicating to him a statue which would be erected on a marble **exedra**.²² This testimony is connected with the interventions made to the rooms of the east stoa, which are dated to the early 1st c. BC, according to their architectural design. More specifically, in the course of time Room B was converted into a marble Ionic exedra with a podium along the wall so that statues could be placed on it and, as a result, the exedra was proposed to be identified with the one reported in the inscription, where Paspáros' statue was erected.²³ Interventions of the same period are also noted in the two successive rooms, which were therefore identified with the conisterium and the bath.²⁴

2. Roman Years



2.1. Reconstruction of Stoas and Changes in the Palaestra

In [Trajan](#)'s years the Hellenistic Doric stoas made of andesite were replaced by marble stoas in [Corinthian order](#). The upper floor was decorated with relief parapets and statues.²⁵ The spaces behind the east stoa were rearranged so that two entrances could be created (spaces C and E) for the [thermae](#) built to the east of the palaestra, while the room already existing on the NE corner of the [peristyle](#) was extended to the east, thus forming a stoa (F10).²⁶ Room D was covered with a vaulted roof and was lined with coloured marble. In the north stoa the front side of room H was improved with the addition of columns.²⁷ An amphitheatric room (Auditorium) holding 1000 spectators was constructed to the west of the stoa, occupying the area of at least two earlier rooms (Odeum J).²⁸ Because the Roman structure needed more space, it was extended beyond the north Hellenistic wall so that the upper part of the [cavea](#) could be built on the rock, while the remaining part stood on an artificial vaulted construction.²⁹ Two entrances leading to the [parodoi](#) (passageways) opened on either side of a strengthened two-storey facade shaped like a theatrical [scene](#), with five elevated doors of a rather decorative nature.

An oblong room (G) to the east of the north stoa, which included arched narrow sides, should be dated to the late 2nd c. AD, a few decades after the stoas were reconstructed. The room resulted from the unification of two earlier rooms.³⁰ It had a lavishly decorated Ionic facade, mixed with elements of the Corinthian order, as well as a vaulted roof above the arches. The room has been connected with the [imperial cult](#) thanks to an inscription attached to the architrave.³¹

2.2. Western and Eastern Roman Thermae

The two thermae complexes, which were built in the Roman period, exploited in the best way the area to the west and east of the palaestra; the original Hellenistic layout and operation of the area remains unknown.³² The restricted area dictated the asymmetric development of their architectural design. However, a sense of strict symmetry is restored in their interior due to the symmetric arrangement of arches and niches along the long and narrow walls of the rectangular rooms.³³

Access to the Western Thermae was either through the underground passage and a narrow staircase to the west or through the palaestra, after crossing the successive N, O and T spaces. The next spaces were the [Frigidarium](#)³⁴ (P) and space U³⁵ and then the [Caldarium](#) (X), after passing through a double door.³⁶ The north side of the Caldarium included a large semicircular niche with a basin, where water arrived from two reservoirs (spaces Y and S) built at a higher level to the north of the thermae. Heat was produced through a firing process at the [Praefurnium](#) (V), while the hot air was channelled under the floors of the rooms serving the hot bath (spaces U, X, Z and W).³⁷ Almost all rooms had a vaulted roof. As indicated by the simple architectural design and the technique followed in the masonry, the Western Thermae were probably founded towards the mid-1st c. AD.

Access to the Eastern Thermae was either through the underground passage and a narrow staircase or through the central courtyard of the palaestra, rooms C and E and the stoa F10,³⁸ which gave to the Frigidarium (9). The west part of the room included a rectangular pool, while the east part had large semicircular niches, where water flowed into marble basins. To the south the room communicated with a large courtyard (4) with a colonnade on its three sides and a closed auxiliary passage to the east.³⁹ The other spaces of the thermae were arranged successively from north to south as follows: the NE part of the complex included an oblong room (8) with a vaulted roof resting on [pillars](#), with rectangular and semicircular niches being formed between them. Room 5 to the east was a kind of extension.⁴⁰ A smaller room (11) was to the north of the oblong room (8), with its north side creating a semicircular arch, which included a circular marble basin. A reservoir providing water to the thermae facilities was built on the rock to the east of room 11. Access to [Tepidarium](#) (7) was through room 8 and the Frigidarium. Then the bathers moved to the Caldarium (3) through two symmetric doors. A rectangular niche with fountains or statues existed in each of the two long sides of the Caldarium, on either side of a central semicircular arch with marble basins. Large niches with pools for the hot bath were created on the two narrow sides. The pools were on structures with hypocausts, which were short pillars from trachyte with the hot air produced by firing in the Praefurnium (I) circulating among them. Spaces 6 and 2 ([Sudatorien](#)) are subsequent additions. A small rest room was built to the east of space 2.



Architectural elements of the Hellenistic Doric colonnade of the palaestra were used as spolia for the construction of the thermae, which indicates that they were reconstructed in the same year or immediately after the reformation of the peristyle of the palaestra in Trajan era. This chronology is confirmed by the similarity between the architectural decoration of the later Ionic colonnade of the palaestra and the courtyard (4) of the Eastern Thermae.⁴¹

3. Late Antiquity

Further interventions in the rooms of the palaestra, mainly reinforcements of the walls and the vaulted structures, were made in the Late Roman years.⁴² In the Byzantine period, some spaces of the Roman thermae and the palaestra were converted into large reservoirs.

4. Identification

Epigraphic evidence reports a Gymnasium of the Youth, which has been identified with the upper terrace of the Gymnasium of Pergamon thanks to the combination with other inscriptions. Lists of adolescents were found carved on the walls of the small temple of the middle terrace, while inscriptions including the names of children becoming adolescents were revealed on the retaining wall on the north edge of the lower terrace. As a result, it was suggested that the three terraces of the Gymnasium complex, namely the lower, the middle and the upper, were intended for children, adolescents and young men, respectively.⁴³

5. Decoration

Gymnasiums were cultural cores of the Greek world and served as centres of artistic expression in all periods. The halls, the stoas and the courtyard were decorated with a wealth of votive objects, statues and inscriptions, as indicated by the pedestals revealed in the area, some from as back as the Hellenistic years.⁴⁴

6. Research and Current Condition

Excavations at the Gymnasium complex of Pergamon were carried out by the German Archaeological Institute in the early 20th century.⁴⁵ After the buildings were brought to light, the inhabitants of the modern city looted them extensively. However, the visitor is still impressed by the sight of the monumental complex. The facilities of the upper terrace area consist a source of valuable information, mainly about issues of ancient technology, such as water supply, drainage and heating systems as well as issues of architecture (masonry, vault construction).

1. Similar retaining structures were selected by the architects of Pergamon as the best solution for creating terraces on other occasions as well, as it happened with the terrace of the Theatre, the Upper and Lower Agora as well as beneath the south stoa of Demeter's sanctuary.

2. Due to its form and length –almost equal to one stade– it was proposed that this underground passage served as a training area for the race event in harsh weather conditions: Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), p. 4. However, this proposition should be considered with some reservations mainly due to the low ventilation and lighting levels of the space. It has also been proposed that a stoa existed above the underground passage, with a colonnade to the south and lots of openings on its north wall so that it could communicate with the central courtyard of the Upper Gymnasium. However, no remains of such a construction have survived. For the issues of the form and use of the underground passage, see as above, pp. 43-46; Delorme, J., *Étude sur les monuments consacrés à l'éducation en Grèce (des origines à l'Empire romain)* (BEFAR 196, Paris 1960), p. 190; Radt, W., *Pergamon. Geschichte und Bauten einer antiken Metropole* (Darmstadt 1999), p. 124.

3. Delorme, J., *Gymnasion. Étude sur les monuments consacrés à l'éducation en Grèce (des origines à l'Empire romain)* (BEFAR 196, Paris 1960), p. 173.



4. The second floor is documented by the preserved architectural elements on the west and north sides, while it is similarly completed on the east side as well; see Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), p. 52.
5. Parts of the Hellenistic Doric superstructure were found on the walls of the posterior Roman thermae. For the dimensions of columns, capitals and epistyle, see Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), p. 47.
6. Although no traces of the staircase have survived, the interpretation is supported by the small size of the room. Reservations are expressed by Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), p. 52; see also Glass, S.L., *Palaistra and gymnasium in greek architecture* (Diss. Univ. of Pennsylvania 1967, 1981), p. 164.
7. Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), pp. 51-55; Glass, S.L., *Palaistra and gymnasium in greek architecture* (Diss. Univ. of Pennsylvania 1967, 1981), p. 165, believes that space E was possibly an independent room right from the start.
8. The statues of the rulers of Pergamon were probably here. At a subsequent moment statues of benefactors of the city as well as the statue of the gymnasiarch Diodorus Paspas were possibly added; see Radt, W., *Pergamon. Geschichte und Bauten einer antiken Metropole* (Darmstadt 1999), p. 127.
9. The young people of the Gymnasiums often inscribed their names or even love verses and symbols on the walls of the rooms and on the vertical surfaces of pedestals bearing statues. Interesting examples can be found in the Gymnasiums of Delos, Messene, Priene, etc. For the way people lived in the Gymnasiums and the palaestrae, see Hesberg, v. H., "Das griechische Gymnasium im 2. Jh. v. Chr.", in Wörle, M. – Zanker, P. (ed.), *Standbild und Bürgerbild im Hellenismus. Kolloquium, München 24. bis 26. Juni 1993* (München 1995), pp. 13-28. For homosexuality in the palaestra, see Dover, K., *Homosexualität in der griechischen Antike* (1983), from p. 25 onwards.
10. Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), p. 58.
11. Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), from p. 63 onwards.
12. The bath was a place necessary for the operation of the Greek Gymnasium. The water was not heated in Greek Gymnasiums, as it happened in Roman thermae. For the operation and importance of the bath in the ancient world, see Weber, M., *Antike Badekultur* (München 1996).
13. Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), from p. 10 f.
14. Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), from p. 71 f.; see also Delorme, J., *Gymnasion. Étude sur les monuments consacrés à l'éducation en Grèce* (BEFAR 196, Paris 1960), pp. 171-191.
15. Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), p. 86.
16. According to ancient sources (Athenaeus, 13, 561d), it is known that the two patron gods of adolescents, Hermes and Heracles, even Eros (Love) sometimes, were generally worshipped in the Gymnasiums and the palaestrae of the ancient world. However, other gods were also worshipped in Gymnasiums. An aedicula, where a seated statue stood, probably Asclepius, was formed in the temple of the Gymnasium of Pergamon, at the centre of the pedestal of the cult statue. It was believed that the body of a seated male figure of excessive dimensions, found in the Western Thermae, came from the temple and was identified with Asclepius; see Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), p. 78; Radt, W., *Pergamon. Geschichte und Bauten einer antiken Metropole* (Darmstadt 1999), p. 131, fig. 75.
17. Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), from p. 80 f.
18. The ancient term "sphaeristerium" has been interpreted either as a room intended for training the young in boxing –Delorme, J., "Sphaisterion et gymnase à Delphes, à Délos et ailleurs", *BCH* 106 (1982), pp. 53-73– or as an open-air space for playing with a ball; see Roux, G., "A propos des Gymnases de Delphes et de Délos. Le site du Damatrimon de Delphes et le sens du mot sphairistérion", *BCH* 104 (1980), pp. 127-149. For the same issue, see also Glass, S.L., *Palaistra and gymnasium in greek architecture* (Diss. Univ. of Pennsylvania 1967, 1981), p. 174.
19. A subsequent niche in the rear wall of bath L, from where water flowed through metal pipes into the room, has been attributed to Metrodorus' interventions. The water was collected in reservoirs existing in the empty area of the peristasis, behind the western wall of the room; see Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), p. 65.



20. The area of the Gymnasium where there was powder or sand used by athletes for body care; see Delorme, J., *Gymnasion. Étude sur les monuments consacrés à l' éducation en Grèce* (BEFAR 196, Paris 1960), pp. 276-279.
21. For the chronology of the inscription, see Glass, S.L., *Palaistra and gymnasium in greek architecture* (Diss. Univ. of Pennsylvania 1967, 1981), p. 167, n. 460; Radt, W., *Pergamon. Geschichte und Bauten einer antiken Metropole* (Darmstadt 1999), p. 125.
22. Open-air rooms of the palaestra with colonnades facing the main courtyard. The exedrae of the Gymnasiums and the palaestrae had lots of different functions. Vitruvius (5.11.2) reports that they were meeting and teaching spaces. For more details about the term, see Delorme, J., *Gymnasion. Étude sur les monuments consacrés à l' éducation en Grèce* (BEFAR 196, Paris 1960), pp. 325-329.
23. The inscription reports that the exedra was constructed on the site of the first room upon entering the stoa. It probably meant the west main entrance to the upper terrace, which is directed to the SW corner of the courtyard, although it was destroyed when the late Roman Eastern Thermae were founded. The information provided by the inscription coincides with the position of the room; see Schazmann, P., *Das Gymnasion* (AvP VI, Berlin 1885-1937), p. 52; Glass, S.L., *Palaistra and gymnasium in greek architecture* (Diss. Univ. of Pennsylvania 1967, 1981), p. 171; Radt, W., *Pergamon. Geschichte und Bauten einer antiken Metropole* (Darmstadt 1999), p. 125.
24. Schazmann, P., *Das Gymnasion* (AvP VI, Berlin 1885-1937), p. 52; see also Glass, S.L., *Palaistra and gymnasium in greek architecture* (Diss. Univ. of Pennsylvania 1967, 1981), from p. 173 f. The same inscription reports the term "peripatos", whose exact meaning remains unclear. Only guesses have been made. Schazmann, P., *Das Gymnasion* (AvP VI, Berlin 1885-1937), p. 4, believes that the place was to the east of the palaestra, although no traces of the Hellenistic layout have survived; see Delorme, J., *Gymnasion. Etude sur les monuments consacres a l' education en Grece (des origines a l' Empire romain)* (BEFAR 196, Paris 1960), from p. 189 f. According to a different opinion, it was the colonnade around the internal courtyard of the Palaestra; see Glass, S.L., *Palaistra and gymnasium in greek architecture* (Diss. Univ. of Pennsylvania 1967, 1981), p. 167, n. 462, 170.
25. The architecture of the Roman stoa presents a variety of dimensions and asymmetries. The columns of the first floor were unfluted with Corinthian capitals. The form of the architectural elements is reminiscent of the architecture of the great temple in Aezani, which is dated to Trajan era. The upper floor included monolithic, oval columns with Corinthian capitals. Fragments of the architrave were also found, bearing an inscription with the names of those that had contributed to the reconstruction of the stoa. For the form and the dimensions of columns, capitals and the architrave of the Roman stoa, see Schazmann, P., *Das Gymnasion* (AvP VI, Berlin 1885-1937), p. 49.
26. Schazmann, P., *Das Gymnasion* (AvP VI, Berlin 1885-1937), p. 53.
27. Schazmann, P., *Das Gymnasion* (AvP VI, Berlin 1885-1937), p. 60.
28. Schazmann, P., *Das Gymnasion* (AvP VI, Berlin 1885-1937), p. 61.
29. The odeum was a place intended for meetings and lectures rather than theatrical performances; thus, there was no scene building. However, a wooden podium for speakers sometimes existed in the orchestra; see Radt, W., *Pergamon. Geschichte und Bauten einer antiken Metropole* (Darmstadt 1999), from p. 127 f.
30. According to Schazmann, P., *Das Gymnasion* (AvP VI, Berlin 1885-1937), p. 58, the area was originally occupied by two Ionic exedrae, parts of which were found attached on the walls of room M and in the underground passage. According to some of their preserved and inscribed parts, the one was dedicated to Hermes and the other was dedicated by Pyrrhus son of Athenodorus; see also Delorme, J., *Gymnasion. Etude sur les monuments consacres a l' education en Grece* (BEFAR 196, Paris 1960), p. 186, who believes they were in rooms F and G, respectively. Reservations are also expressed by Glass, S.L., *Palaistra and gymnasium in greek architecture* (Diss. Univ. of Pennsylvania 1967, 1981), pp. 166, 170. According to a different opinion, Pyrrhus' exedra was on the site where spaces W and f of the Western Thermae were later built; see Radt, W., *Pergamon. Geschichte und Bauten einer antiken Metropole* (Darmstadt 1999), p. 129.
31. The inscription probably refers to emperors Marcus Aurelius and Lucius Verus, who reigned together from p. 161 f. This chronology is supported by the style of the architectural members of the room as well as by the more extensive use of coloured marble; see Schazmann, P., *Das Gymnasion* (AvP VI, Berlin 1885-1937), from p. 56 f.
32. Hellenistic remains are traced in the foundations of spaces N, O, T and W, which were incorporated into the complex of the Western Thermae, although their original form cannot be reconstructed; see Schazmann, P., *Das Gymnasion* (AvP VI, Berlin 1885-1937), p. 81.
33. Unlike the standards of the great imperial institutions of Rome and the thermae of western provinces, where circular and semicircular spaces are preferred for the main spaces of the bath (the most typical examples being the thermae of Caracalla and Constantine in Rome), in Asia Minor thermae



these shapes are restricted to semicircular niches, which are usually inscribed on rectangular rooms; see Yegül, F., *Baths and Bathing in Classical Antiquity* (New York 1992), p. 251 f.

34. For the term, see Nielsen, I., *Thermae et Balnea* (Aarhus 1990), p. 153 f.

35. Space U is possibly identified with the Tepidarium, the room for the warm bath; see Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), p. 81. For the term, see Nielsen, I., *Thermae et Balnea* (Aarhus 1990), p. 155 f.

36. The Caldarium was one of the most important rooms of the Roman thermae. The water for the bath and the room itself were heated. For the term, see Nielsen, I., *Thermae et Balnea* (Aarhus 1990), p. 156 f. In this case, the door was double so that the one half could possibly give access to the hot air of the Caldarium and the other half could allow exit to the warm space U; see Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), p. 81.

37. Space W was later shaped into a kind of pool with hot water (Sudatorium). When the Western Thermae were founded, the construction of such facilities was unknown; see Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), p. 80 f.; Yegül, F., *Baths and Bathing in Classical Antiquity* (New York 1992), p. 288. For the term Sudatorium and its function, see Nielsen, I., *Thermae et Balnea* (Aarhus 1990), p. 159 f.

38. A stone oblong basin extended alongside the entire rear north wall of the stoa. The basin was not watertight and was considered a basin for sand. Therefore, it was suggested that the room should be identified with the conisterium of the Roman years or the aleipterion (a room of the gymnasium/palaestra, where the young spread oil onto their body), whose existence is also evidenced by inscriptions; Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), p. 56.

39. Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), p. 86.

40. Such rooms are typical of the Roman thermae and it seems that they had a variety of functions; see Yegül, F., *Baths and Bathing in Classical Antiquity* (New York 1992), p. 414. Rooms 8 and 5 of the Eastern Thermae have been identified with the apodyteria (changing rooms), while it is possible that the closets for the visitors' clothes were placed in the niches of their walls. Bathing basins were found in the three semicircular niches of the north wall of room 8; see Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), p. 87 f.

41. Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), p. 80 f.



42. These interventions were made probably after a destructive earthquake. The most important of them is the destruction of the second floor of room H and its vaulted roof, which was possibly constructed in the 3rd c. AD; see Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937), p. 60 f.

43. However, no epigraphic evidence has been handed down concerning an alleged "Gymnasium of the Young" or "Gymnasium of the Children". Moreover, there were few facilities in the lower and the middle terrace but they could not serve all the needs of a gymnasium. It is equally likely that the children and the adolescents also used spaces of the upper terrace. For more details, see Glass, S.L., *Palaistra and gymnasium in greek architecture* (Diss. Univ. of Pennsylvania 1967, 1981), p. 174.

44. Pedestals of votive objects were revealed mainly in front of the northern colonnade as well as in front of the two southern rooms of the eastern stoa (rooms A, B). Two Hermaic stelae existed on either side of the entrance to Bath L. The rooms of the thermae must have been decorated with lots of sculpted works; see Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937). For the decoration of the Roman thermae with sculptures, see Manderscheid, H., *Die Skulpturenausstattung der kaiserzeitlichen Thermenanlagen* (Berlin 1981).

45. The publication of the Gymnasium complex of the Acropolis of Pergamon was made by Schazmann, P., *Das Gymnasium* (AvP VI, Berlin 1885-1937).

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Glossary :

	anta or pilaster, the
A shallow rectangular feature projecting from a wall, having a capital and a base and architecturally treated as a column.	
	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".	
	cavea
The auditorium or audience sitting of a theater.	
	cella
Interior enclosed part - nucleus of a temple or other temple-shaped building.	
	corinthian order
The most elaborate of the ancient greek architectural orders. It was developed in the 4th century BC in Greece and it was extensively used in Roman architecture. It is similar to the Ionic order. Its capitals being four-sided and composed of a basket-shaped body decorated with volutes and rows of acanthus leaves.	
	ephebeum
The main room of the Greek gymnasium. It could have served educational and social functions. It usually had the form of an exedra, with seats in it.	
	exedra, the
1. Large semicircular niche-like structure with stone seats ranged around the walls, often outdoors or with a hemidome over. An exedra may also be expressed by a curved break in a colonnade, perhaps with a semi-circular seat. 2. The rectangular hall of the palaestra, open to the courtyard with columns at the front. The exedrae in gymnasium and palaestra could have served many functions. Usually a hall of such type was the Ephebeum.	
	frieze (1. architecture), (2. painting)
1. The part of the entablature resting on the architrave and below the cornice. In the Doric order the frieze is decorated with two alternative motives, namely the triglyph and metope, while in the Ionic order the frieze is a decoratively carved band. 2. Decorative horizontal band that sweeps parts of a vessel or the highest part of the walls in a room.	
	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

 [gymnasiarch, the](#)


The man responsible for the supervision of the youngsters and the adolescents who were trained at the gymnasia and at the palaestrae. This rank, widely diffused in all cities of the ancient Greek world, constituted a public office which was usually bestowed on the most eminent and rich citizens, since it required great expenses.

 [hydraulic mortar](#)


A waterproofing mortar, applied to the walls of spaces exposed to water and humidity, such as cisterns, baths etc.

 [orthostate](#)

A course of blocks laid on edge, normally in the lower part of the wall of a building.

 [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.

 [parodos](#)

It was one of two side passageways in an ancient Greek theatre, between the scene and the cavea, through which the chorus and the actors entered the orchestra.

 [pediment, the](#)

The triangular structure, over a building façade, between the horizontal entablature and the sloping roof, often decorated with sculptures, reliefs or painted figures.

 [peristyle](#)


A colonnade surrounding a building or a courtyard .

 [pillar](#)

Pier of square or rectangular cross-section.

 [praeurnium](#)

Furnace of a Roman bath. The term may denote only the stroke hole (formix) of the furnace, or the larger area of the furnace or furnaces.

 [pronaos](#)

The porch in front of the cella of a temple

 [prostyle temple](#)


A term applied to a temple with a portico of columns in front.

 [scene \(lat. scaena -ae\)](#)

The stage building of the ancient theaters originally used for storage but provided a convenient backing for performances.

 [sphaisterion \(sphaeristerium\)](#)

A room for ball games in the Greek gymnasium.

 [spolia](#)

From the Latin word *spolium* (=spoils, booty). Architectural remains from destroyed buildings that have been reused in later periods.

 [stoa, portico, the](#)

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

 [sudatorium](#)

It is the architectural term, deriving from the latin verb "sudo" (=sweat), for the sweating room of the roman baths. It is usually a vaulted room of rectangular form between the caldarium and the tepidarium. In the Early Roman times (1st- 2nd c. B.C.) sudatoria used to be of circular form.

 [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 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.