

The Shops of Pergamon – Terraced *Ergastēria* as Economic Spaces

Julian Gabriel Schneider

The Hellenistic kingdom of Pergamon is world famous for its monumental architecture both within and beyond the royal residency, but little research has been conducted on economic aspects of the urban development of the *polis*. This study focuses on the smallest commercial units of Pergamene architecture – the *ergastēria* – dating from the 2nd century BC until the early Imperial Times (fig. 1).

Presence of *ergastēria* can be considered solid evidence for at least a partial economic function of a building analogue to the well-known and extensively studied Roman *tabernae*.¹ The definition of the Greek term ἐργαστήριον² – literally ‘a place where work is done’ – falls within the broad spectrum of various commercial activities, such as craft production of all kinds, storage, the sale of goods and miscellaneous services.³ Such shops and workshops appear in linear arrangements as part of larger building complexes like *stoai*, but also as single architectural units affiliated with commercial activity.⁴

Pergamon presents a challenging case-study: Due to the long continuity of settlement as well as the lack of detailed archaeological records of the earliest excavations, a precise interpretation of the function of such architectural units is hardly ever possible. This study, therefore, focuses on more basic identification criteria such as the architectural configuration, the location and accessibility to roads, squares or terraces. The Greek term *ergastērion* thus suitably corresponds with the ubiquity and the multifunctionality of such economic micro-spaces and serves to label these units – at least on a typological level – wherever a precise function cannot be identified. This inquiry mainly regards *where* the *ergastēria* are located, to what broader building complex they belong, and *how* their development can be connected to the urban history.⁵

Evidence of *Ergastēria* in Pergamon

Presumably in the 2nd century BC⁶, a monumental square was created by building massive foundations for the Upper Agora, which enclosed the temple of Zeus Soter on its southern and eastern sides.⁷ Thirty-one rooms over two floors were incorporated into the terrace walls (fig. 2). Most of these units consisted of a back and a front room and were accessible through a small terrace surrounding the entire complex. An inscription preserving a royal letter⁸, which is conventionally attributed to the reign of Attalos I. on the basis of the letter shapes and contextual arguments, defines the earnings of a priest of Zeus.⁹ Among others, these specifically include revenues from *ergastēria*, which were to be leased by the allotted priest and handed over to the successor in good condition.

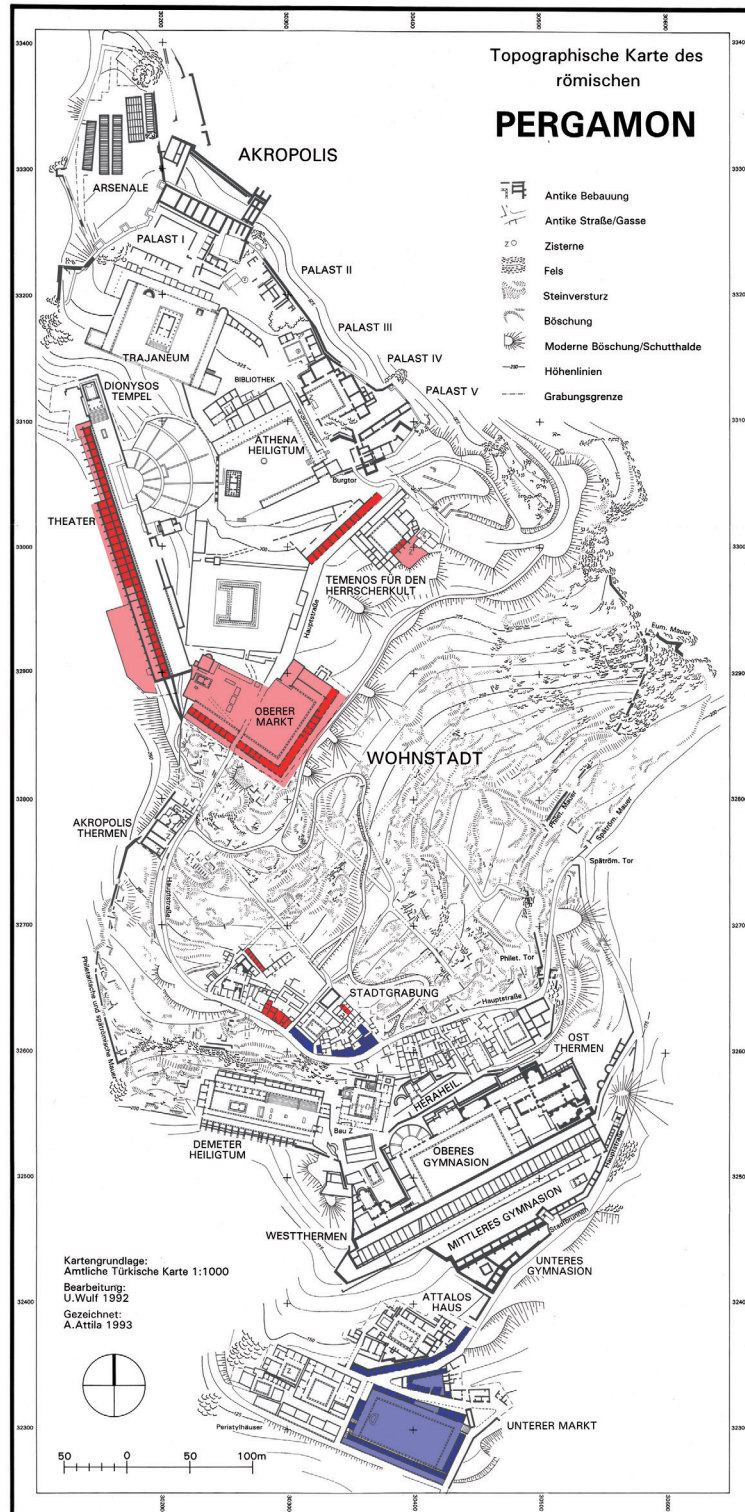


Fig. 1: The city of Pergamon and its *ergastēria* of the 2nd (red) and 1st (blue) cent. BC/AD.

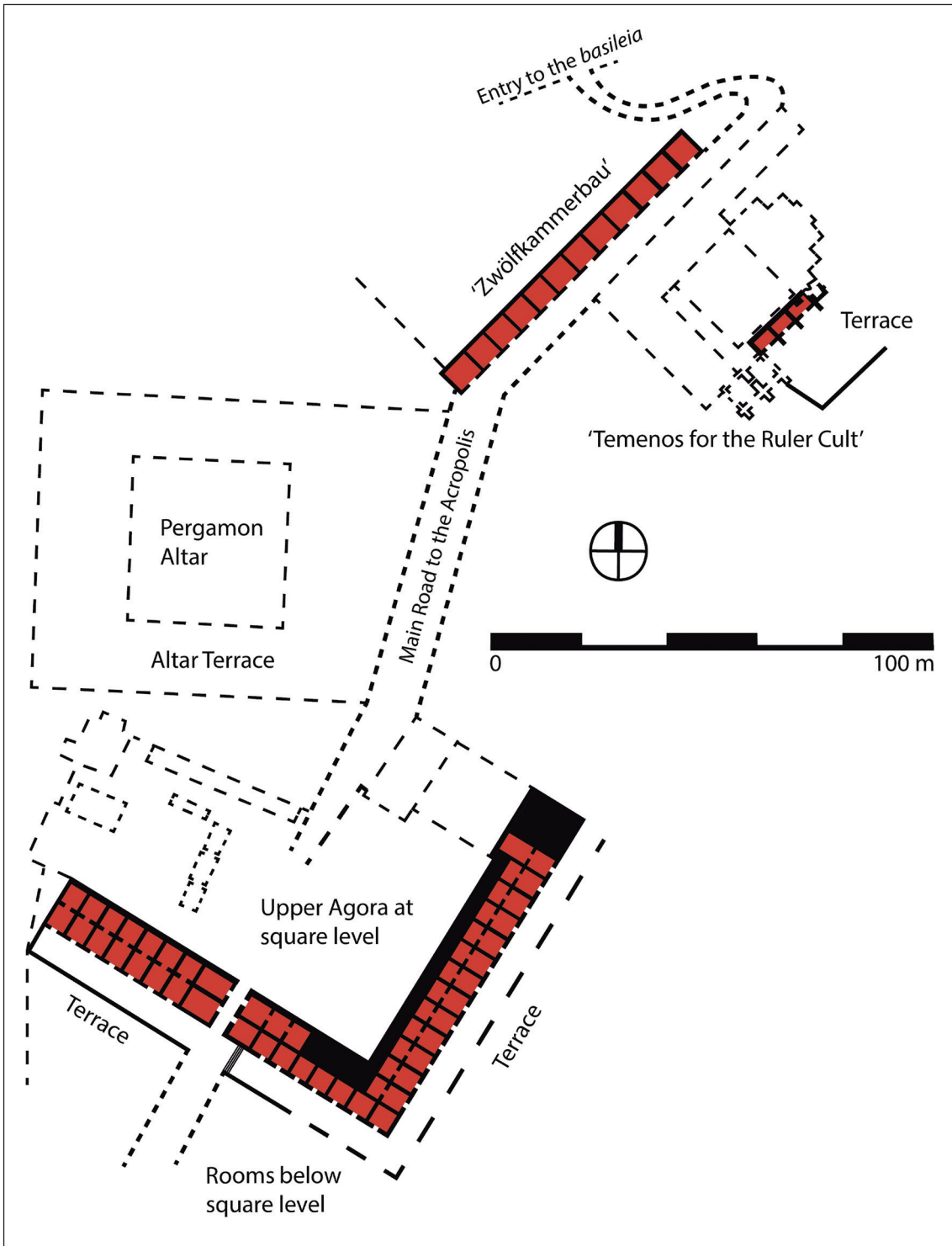


Fig. 2: The *ergastēria* in the area of the Upper Agora, the 'Zwölfkammerbau' and the 'Temenos for the Ruler Cult' (2nd cent. BC).

Louis Robert perhaps rightly wondered if the surviving rooms in the substructions of the Upper Agora should not to be associated with the inscription's content, but the chronological development – as presented by K. Rheidt's re-investigation – does not support a direct connection.¹⁰ At least in principle, the leasing of workshops to finance a priestly office should not be excluded for the 2nd century B.C., which then would have served a dual purpose: they provided a sustainable source of revenue as well as being essential substructures for the square. On courtyard level, the conventionally accepted reconstruction displays another set of twenty-eight rooms, but the complete devastation of the superstructure does not provide conclusive evidence for this hypothesis.¹¹

The twelve uniform rooms of the 'Zwölfkammerbau' line the western side of the main road before the entrance to the *basileia* (fig. 2) and were presumably built concurrently with the Upper Agora's monumental building phase of the 2nd century BC.¹² The rooms' functions must have been largely commercial, as suggested by the prominent location at Pergamon's main road. About concurrently or little earlier¹³, the 'Temenos for the Ruler Cult' was greatly extended and included three rooms in the foundations of the court's southeastern wing, connecting to a terrace;¹⁴ also these rooms probably served economic purposes (storage?).

The Theatre Terrace – Pergamon's longest terrace – demanded a highly complex, staggered construction to overcome the hill's steep incline, and formed the nucleus of numerous *ergastēria* of which several are still exceptionally well-preserved today.¹⁵ Two series of paratactic rooms were part of a monumental building phase which took place between the end of the 3rd to the middle of the 2nd century BC (fig. 3)¹⁶: The main

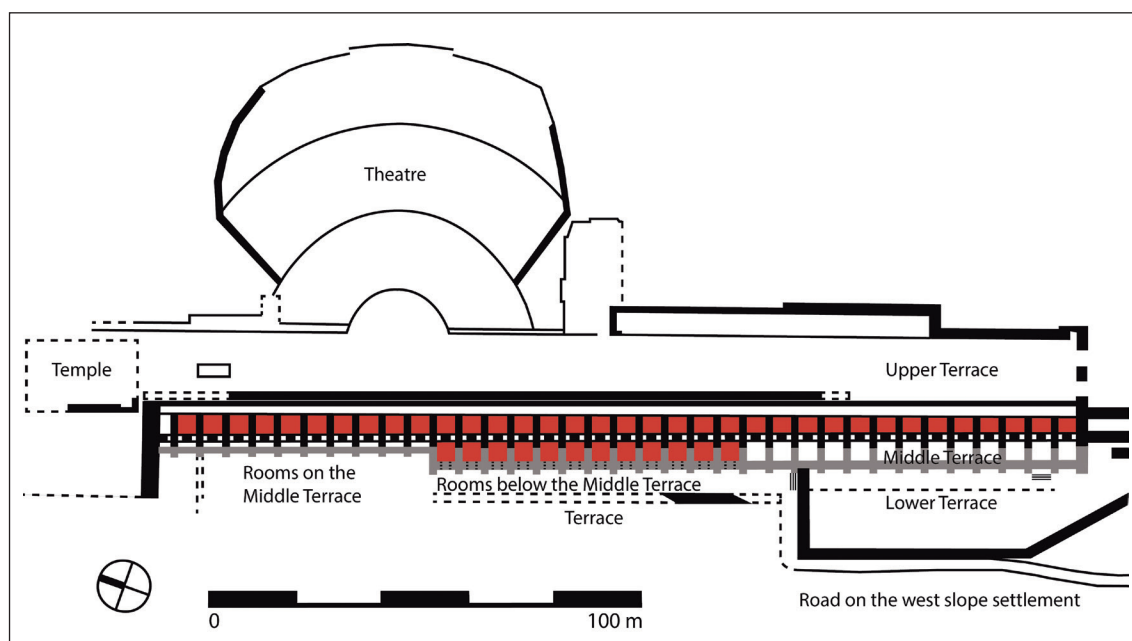


Fig. 3: The *ergastēria* in the substructures of the Theatre Terrace (2nd cent. BC).

group of thirty-five rooms within the sustaining walls, contained a door (1.0 × 2.25 m) and a window (1.55 × 1.57 m) and faced the so-called Middle Terrace.¹⁷ Similarly, a second group of twelve rooms was situated inside this terrace at the foot of the slope: these consisted of two floors and their entrances faced a small terrace close to the road network on the west slope settlement.¹⁸ The so-called Lower Terrace, built at an intermediate level between the Middle Terrace and the narrow path leading to the shops, used stairs to connect the various platforms.¹⁹

The earliest evidence of *ergastēria* in the area of the Upper City dates back to the first half of the 2nd century BC. Although their scarce remains merely allow hypothetical reconstruction, a consistent pattern of at least twenty-nine paratactic rooms oriented towards the major roads may be observed.²⁰ In the 1st century BC, the entire Upper City underwent fundamental change: various buildings – including many *ergastēria* – were reshaped after a period of decay (fig. 4).²¹ The better state of preservation of the Upper City enables a more precise identification in several cases ranging from the 2nd to the 1st century BC: one room in the foundations of the so-called ‘Gebäude mit dem Podiensaal’ had a counter, ideal for selling goods to passersby on the street²²; another exhibited installations for a fireplace.²³ On the southeastern corner of the main road, several *pithoi* were installed under a small portico to facilitate the sale of liquids or other goods.²⁴

The building complex of the Lower Agora consisted of a central square, a wrap-around porticus and various *ergastēria* (fig. 5).²⁵ They were situated on all three different levels of the complex’s terrace architecture: at least six on the second floor of



Fig. 4: The *ergastēria* in the Upper City area built in the 2nd (red) and 1st (blue) cent. BC.



Fig. 5: The *ergastēria* of the Lower Agora and its surroundings (late 1st cent. BC, early 1st cent. AD).

the northern *stoa*, four on the western and three on the northeastern side at courtyard-level. Six counterparts in the east wing, as well as the upper floors in the south *stoa*, remain uncertain reconstructions.²⁶ Below courtyard-level, the southern and eastern retaining wall was bordered by twenty-three rooms that all faced the surrounding roads and formed a solid foundation for the upper structure. New investigations suggest that the presumed 'Eumenian' date of the main construction phase needs to be revised to the early Imperial period (end of 1st century BC or beginning of the 1st century AD).²⁷

The area north of the Lower Agora exhibits an arrangement of *ergastēria* that clearly adapts to the winding main road. The architectural intertwining of the area suggests that these structures were built concurrently with the Lower Agora and thus likely date to the 1st century BC as well.²⁸ The massive terracing wall for the 'Attalos House' encompassed a row of at least twenty-one rooms in front of Pergamon's most important traffic route (fig. 5). Across the road, the triangular building is usually identified as a commercial complex, since its fourteen *ergastēria* faced mainly inward onto the triangular courtyard.²⁹

Chronology and Development of the *Ergastēria* in Pergamon

The chronological statistics and the spatial distribution of the preserved *ergastēria* show that the number of 122 units from the 2nd century BC³⁰ rose to 194 by the turn of the eras³¹, when the Lower City underwent fundamental change and became a new economic hotspot in the area of the Lower Agora. The *ergastēria* of Pergamon thus illustrate – both in number, urban distribution and chronology – the development of the urban economic spaces from Hellenistic times until the beginning of the 1st century AD.³²

The majority of the rooms – at least 109³³ out of 194 – appears in the foundations of large-scale buildings and thus form essential parts of the genuine Pergamene terrace architecture.³⁴ Consequently, economic aspects seem to have been taken into account in various major royal building projects, because *ergastēria* not only served as essential substructures, but also created long-lasting sources of revenue for the building contractor. Thus, this phenomenon is perhaps best described as sustainable project planning wherein commercial functions were considered in the planning process and integrated into the later management of such buildings.

The main road at Pergamon offered a unique economic hotspot, since *ergastēria* are found on every part of its route, turning this important traffic system³⁵ into a lively bazaar.³⁶ Where a direct access to the Pergamene road network was lacking, terraces themselves enabled access to the shops and storerooms.

This analysis demonstrates that commercial functions of Pergamene architecture were not limited to the two *agorai*, but can be found in various buildings – mostly large

scale – whose primary function was not necessarily related to commerce. Thus, the initiators of such building projects were fully aware of profitable sub-purposes regarding the essential terrace architecture, eventually leading to a sustainable development of the city’s economic spaces.

Notes

* This article presents a short summary of the results of my B.A. thesis (University of Zurich 2015). I owe special thanks for critical and fruitful discussions on this subject to B. Emme, F. Pirson, U. Wulf-Rheidt †, M. Trümper, Ch. Reusser, Ch. Leybold, M. Flohr and R. di Cesare. All epigraphic abbreviations follow the AIEGL conventions (<<https://aiegl.org/grepiabbr.html>> last checked on 7. 12. 2021).

¹ See most recently Holleran 2012, 99–158; Holleran 2017.

² Liddell – Scott – Jones 1996, 682 s. v. ἐργαστήριον. On the etymology see Chantraine 1970, 365 s. v. ἔργον; Beekes 2010, 450 s. v. ἔργον.

³ Karvonis 2007, 41 f. 47. The term appears frequently in epigraphic sources and is discussed by Ph. Gauthier in *I.Sardes Suppl.* II pp. 101–106 and Hellmann 1994, 137 (*SEG XLIV 1772*; *BE 1995*, 438 no. 58); on Delos see Hellmann 1992, 138–140 (*SEG XLII 735*; *BE 1993*, 467 f. no. 54); on Attica see Stanley 1990, 1–13 (*SEG XL 175*).

⁴ Karvonis 2008, 61–68 (*SEG LVIII 798*). Particularly well established in Greek cities was the combination of *stoai* with rooms behind the colonnades, which were either called *oikoi/oikemata* or – revealing their commercial purpose – *ergastēria* (see Cannistraci 2011, 362–375 [*SEG LXI 1692*]; *BE 2014*, 398 f. Nr. 10)).

⁵ Similar mappings and brief discussions of economic spaces in Pergamon were published by Karvonis 2008, 75 f. with fig. 9 and Pirson 2012, 194 fig. 5. A more extensive study on Pergamon’s economy is currently being conducted by Sandra Völkel (DAI Istanbul). Following these previous attempts, I exclude the rooms surrounding the courtyard on the west and east side of the sanctuary of Demeter (nos. 4. 7. 8. 9. 31–33, see Bohtz 1981, 32–34. 37 f. 58; pl. 43 “Baustufe 4”), being referred to as “the *stoai* and the *oikoi*” in the dedicatory inscription on the propylon (Hepding 1910, 439–442 no. 24 l. 2; Cannistraci 2011, 365). The ambiguous terminology (compare the explicit term *ergastēria* in *I.Pergamon* I 40 l. 7, *infra* n. 8), their seclusive location and the primarily religious function of the building complex do not directly point to economic activity; they thus rather served primary purposes of the sanctuary (“heilige Gemächer” according to Bohtz 1981, 33. 58). Börker 1983, 14 with n. 43 identifies them “zweifellos” as banquet rooms (followed by Leybold 2008, 119–122 no. 30). A comparable, non-commercial function can be assumed for the rooms nos. 11–17 in the “Untere Nord-Stoa”, dating to the times of Philetairos (Bohtz 1981, 34 f. 57 f.; pl. 42 “Baustufe 3”).

⁶ Rheidt 1992, 268 f. argues for a construction under the reign of Eumenes II. as already Lauter 1970, 96 on the basis of the masonry. This conventionally accepted date, however, has not yet been verified by archaeological findings and reflects the content of the famous passage by Strab. 13,4,2 (= 624C): κατεσκεύασε δ’ οὗτος τὴν πόλιν καὶ τὸ Νικηφόριον ἄλσει κατεφύτευσε, καὶ ἀναθήματα καὶ βιβλιοθήκας καὶ τὴν ἐπὶ τοσόνδε κατοικίαν τοῦ Περγάμου τὴν νῦν οὖσαν ἐκεῖνος προσεφιλολόγησε. “It was him (i.e. Eumenes II.) who also built up the city, and he planted the Nikephorion with a sacred grove, and out of

love for splendour he added dedications (i.e. buildings?) and libraries and today's wide extension of the settlement of Pergamon.”

⁷ Schrammen 1906, 93–107; pl. 22–34; Lauter 1970, 88f. no. 2; Rheidt 1992, 263–269. 279–282; Köse 2005, 141 f.; Bielfeldt 2010, 168–179; Mathys 2012, 261–264; Radt 2016, 89–93; Laufer 2021, 159–163 (with a useful summary of the controversially discussed development of the area as *Temenos* and *Agora*). The thirty-one units did perhaps not solely serve as storerooms (as believed by Lauter 1970, 95: “Die dunklen Gelasse im Untergeschoß des Marktbaus von Pergamon mit ihrer einen Türe können den Kaufleuten höchstens als Warenlager gedient haben”), but rather as proper shops on an attractive point of sale on Pergamon's most significant road. Due to the descent of the slope, at least the rooms on the far west consisted of two floors (see Schrammen 1906, 93, the cross-section on pl. 26, and the front view on pl. 31). For justified criticism of the conventional interpretation of the Upper *Agora* as ‘State Market’ compared to the Lower *Agora* as ‘Commercial Market’ (e.g. by Coulton 1976, 176; Wulf 1994, 142 and others) see Hoffmann 2008, 38 n. 20; Bielfeldt 2010, 168f.; Mathys 2012, 264. 268. The presumably strict distinction reflects rather the economic theory of the ideal *polis* developed by Aristot. *pol.* 7, 1331 a 32–b 3 than the commercial reality of hellenistic Pergamon, as the revised chronology of the Lower *Agora* suggests (see *infra* n. 27).

⁸ *I.Pergamon* I 40 ll. 1–14 [ὁ δ' ἀεὶ λαχῶν φορεῖτω | [χ]λαμύδα λευκὴν καὶ σ[τέ]φανον ἐλάας μετὰ ταυ-
ν[ι]δίου φοινικιοῦ καὶ λαμβανέτω τῶν θυομένων γέβρα τὸ δέρμα καὶ κωλέαν | καὶ τῶν ἐργαστηρίων ὧν
| ἀνατέθηκα τὴν πρόσσο|δον· μισθοῦτω δ' ἀεὶ ὁ λαχῶν, ἐπεσκευασμένα | δὲ παραδιδότω ὁ ἐξιῶν ἢ ἀπο-
τινέτω τὸ γεινόμενον εἰς τὴν ἐπι[σ]κευὴν δαπάνημα. “The allotted (priest) shall wear a white chlamys
and an olive crown with a purple ribbon, and he shall receive from the sacrificed animals as perquisite the
skin and thighbone and of the workshops, which I (i.e. Attalos I.?) dedicated (to the god), the revenues.
The holder (of the priesthood) shall always lease them, and when leaving the office he shall hand them
over in well-repaired state or he shall pay the resulting costs for the repair.” (cf. *Syll.*³ 1018; Welles, *RC* 24;
LSAM 11; Pleket 1970, 73; *I.Sardes Suppl.* II p. 106; Bielfeldt 2010, 175 f. with fig. 28). The *ergastēria* were
thus considered as continuous sources of revenue and cross-financed the priesthood. For a comparable
case in Miletus see *I.Didyima* 479 Z. 9–14, where the revenues from the shops of the famous *stoa* of An-
tiochos financed construction work at the Didymeion (Meier 2012, 382–387; for other examples, see
Ph. Gauthier in *I.Sardes Suppl.* II pp. 101–106).

⁹ The lack of the preface is particularly regretful. Max Fränkel collected the arguments for a date in the reign of Attalos I., “ohne dass freilich eine frühere Entstehungszeit ausgeschlossen wäre” (*I.Pergamon* I p. 37). At any rate, the description of the priest's dress (ll. 1–4) makes an identification of the diety (l. 19) with Zeus is fairly certain and Ohlemutz 1940, 65–79, provided firm grounds for this interpretation.

¹⁰ Robert 1984, 496–499 (SEG XXXIV 1250) with a useful survey of the previous interpretations of the passage (supported by Ph. Gauthier, *I.Sardes Suppl.* II p. 106). The connection between the *ergastēria* (ll. 7–14) and the archaeological remains is an attractive hypothesis and would support the economic function of the thirty-one rooms in the substruction as leased workshops. Also the provision to keep the *ergastēria* in good condition would match the context, as these workshops formed significant substructions for the porticus on the square-level. However, Rheidt 1992, 257 (followed by Bielfeldt 2010, 175 f.) ascribes the inscription's content to a building phase in the 3rd century B.C. when remains of *ergastēria* are completely lacking in the archaeological record. At any rate, the epigraphic evidence makes it clear that commercial activities must have existed in this earlier phase.

¹¹ Coulton 1976, 68. 274 fig. 102 and Rheidt 1992, 263 f. with fig. 9 adopt the vague statement and hypothetical reconstruction by Schrammen 1906, 105 with tab. 32. More cautiously remains Lauter 1970, 89. These fully reconstructed rooms are excluded here until further evidence is produced.

¹² Rheidt 1992, 261–263. 267 with the discussion of a rather on an obscure ‘market building’ west of the ‘Zwölfkammerbau’ (supported by Mathys 2012, 261 f.; Laufer 2021, 161–163 who introduces the term “Big Agora” for the area between the Upper Agora and the “Zwölfkammerbau”; *contra* Bielfeldt 2010, 1729.

¹³ Boehringer – Krauss 1937, 74–81; Wensler 1989; Schwarzer 1999, 274 f.; Emme 2013, 189–196.

¹⁴ Boehringer – Krauss 1937, 44–46.

¹⁵ Bohn 1896, 26–34; with pl. 15–23; Lauter 1970, 89 no. 2a; Köse 2005, 141; Helm-Rommel 2009, 42–46 with pl. 32–37. 95–99. 102–106. 145.

¹⁶ Helm-Rommel 2009, 73–82. 87–90. 255–263 with pl. 103. 145.

¹⁷ Helm-Rommel 2009, 79 f. 257–259; Radt 2016, 262 fig. 205; Klinkott 1991, 131 f. Due to the location and position, Lauter 1970, 95 decidedly stressed that “die Räume unter der Theaterterrasse natürlich sowieso keine Läden aufnahmen” but certainly are to be interpreted as storerooms. This is perhaps true for the twelve two-storey rooms located below the Middle Terrace (Helm-Rommel 2009, 80). As for the thirty-five rooms facing the Middle Terrace, the wide window on the right of each door rather points to commercial shops (already Helm-Rommel 2009, 259).

¹⁸ Helm-Rommel 2009, 89 f. 259 with pl. 35, 1. 97. 103; Pirson 2017, 76–82.

¹⁹ Helm-Rommel 2009, 4. 43. 263 f.

²⁰ Wulf 1999, 197–199 fig. 79; Schwarzer 2008, 30–41. 44–53. 80; Radt 1977, 305 f. (on the so-called ‘Magazingasse’); Filgis – Radt 1986, 55 with pl. 58. 59. 80 a.

²¹ Wulf 1999, 199–203 with fig. 80; Schwarzer 2008, 88 f.

²² Schwarzer 2008, 38 f. 52. 54 with fig. 10; compare the windows of the Theatre Terrace (*supra* n. 17).

²³ Schwarzer 2008, 30–36.

²⁴ Wulf 1999, 136 f. 142–145 with fig. 70.

²⁵ Dörpfeld 1902, 16–26 with pl. 2; Dörpfeld 1904, 114–116 with pl. 7; Köse 2005, 142; Emme 2013, 165–171; Mathys 2012, 259–261; Radt 2016, 87–89; Laufer 2021, 163. First results of the re-investigation by B. Emme and A. Öztürk † are published in preliminary reports (Pirson 2014, 122–131; Pirson 2015, 115–126; Pirson 2016, 147–156; Pirson 2018, 118–127).

²⁶ Emme 2013, 169 f. with pl. 91 following Coulton 1976, 68. 273 with fig. 101.

²⁷ B. Emme – A. Öztürk in Pirson 2015, 118 f.; Pirson 2016, 149–151, and B. Emme in Pirson 2018, 121 (for earlier attempts see Pirson 2008, 102–104). Detailed results can be expected from the announced monographic publication. A late date was already assumed by Pinkwart – Stammnitz 1984, 76. For the impact on the urban development see Pirson 2017, 82 f.

²⁸ On this area of the city see Dörpfeld 1902, 35 f.; Dörpfeld 1904, 120 f. with pl. 7; Dörpfeld 1907, 188 f. with pl. 14; Salzmann 1991, 440–444; Mathys 2012, 259–261; Pirson 2017, 82 f.

²⁹ Dörpfeld 1907, 163–166 with pl. 14; Radt 2016, 86.

³⁰ Upper Agora (31), ‘Zwölfkammerbau’ (12), ‘Temenos for the Ruler Cult’ (3), Theater Terrace (47), Upper City (29).

³¹ *supra* n. 30 plus Lower Agora (37) and the adjacent area in the north (35).

³² On the urban development after 133 BC, see Pirson 2017, 89–96.

³³ Upper Agora (31), ‘Temenos for the Ruler Cult’ (3), Theater Terrace (47), Upper City (5 in the foundations of the ‘Gebäude mit dem Podiensaal’), Lower Agora (23 in the southern and eastern foundations).

³⁴ Klinkott 1991, 131–136 and most recently Laufer 2021, 137–144. 265. The architecture of terraced, multi-storey stoai and market buildings was identified as being a typical Pergamene phenomenon and fundamentally studied by Lauter 1970, 86–101 (‘Marktgebäude’). His collection of examples from Asia Minor is further completed by Köse 2005, 139–160 (‘Pergamene-style market-buildings’), Cavalier 2012, 241–255 (‘portique à sous-sol dossé’) and Laufer 2021, 63–70. 165–169 (‘Terrassenhalle’). At Pergamon, main emphasis was apparently put on the efficient use of highly limited space, e.g. on steep slopes, where firm ground was rare.

³⁵ Hoffmann 2008, 35–41; Pirson 2017, 75–86; most recently Laufer 2021, 151–155.

³⁶ Radt 2016, 87; Pirson 2012, 195. A comparable picture is developed by Aischin. Tim. 124 who describes “these *ergastēria* along the roads” in Athens (τούτων τῶν ἐπὶ ταῖς ὁδοῖς ἐργαστηρίων).

Image Credits

Fig. 1: By author based on Wulf 1999, pl. 24. – Fig. 2: By author based on Boehringer – Krauss 1937, pl. 72; Schrammen 1906, 96; pl. 1. 21. 22. 24. 32; Rheidt 1992, 264 fig. 9; 281 fig. 15 d. – Fig. 3: By author based on Helm-Rommel 2009, pl. 146; Pirson 2015, 94 fig. 5. – Fig. 4: By author based on Filgis – Radt 1986, pl. 58; Wulf 1999, 200 fig. 80; Schwarzer 2008, 46 fig. 5. – Fig. 5: By author based on Dörpfeld 1902, pl. 2; Dörpfeld 1904, pl. 7; Dörpfeld 1907, pl. 14.

References

Beekes 2010

R. Beekes, An Etymological Dictionary of Greek I, Leiden Indo-European Etymological Dictionary Series 10/1 (Leiden 2010).

Bielfeldt 2010

R. Bielfeldt, Wo nur sind die Bürger von Pergamon? Eine Phänomenologie bürgerlicher Unscheinbarkeit im städtischen Raum der Königsresidenz, *IstMitt* 60, 2010, 117–201.

Boehringer – Krauss 1937

E. Boehringer – F. Krauss, Das Temenos für den Herrscherkult. ‘Prinzessinnen Palais’, *AvP* 9 (Berlin 1937).

Bohn 1896

R. Bohn, Die Theater-Terrasse, *AvP* 4 (Berlin 1896).

Bohtz 1981

C. H. Bohtz, Das Demeter-Heiligtum, *AvP* 13 (Berlin 1981).

Börker 1983

Ch. Börker, Festbankett und griechische Architektur, *XeniaKonst* 4 (Konstanz 1983).

Cannistraci 2011

O. S. Cannistraci, Problemi di definizione. Il caso delle stoai [bitte kursiv setzen, JGS] con *oikoi/oikemata* e stoai con *ergasteria*, ASAA 89, 2011, 359–378.

Cavalier 2012

L. Cavalier, Portiques en bordure des agoras d'Asie Mineure à l'époque hellénistique et à l'époque impériale, in: Dies. – R. Descat – J. de Courtills (eds.), Basiliques et agoras en Grèce et d'Asie Mineure. Colloque à Bordeaux le 7 Avril 2007 et à l'institut d'Études Anatoliennes (Istanbul) le 26 Mars 2010 (Bordeaux 2012) 241–256.

Chantraine 1970

P. Chantraine, Dictionnaire étymologique de la langue grecque. Histoire des mots II, E – K (Paris 1970).

Coulton 1976

J. J. Coulton, The Architectural Development of the Greek Stoa (Oxford 1976).

Dörpfeld 1902

W. Dörpfeld, Die Arbeiten zu Pergamon 1900–1901 in Pergamon. Die Bauwerke, AM 27, 1902, 10–43.

Dörpfeld 1904

W. Dörpfeld, Die Arbeiten zu Pergamon 1902–1903. Die Bauwerke, AM 29, 1904, 114–151.

Dörpfeld 1907

W. Dörpfeld, Die Arbeiten zu Pergamon 1904–1905. Die Bauwerke, AM 32, 1907, 163–240.

Emme 2013

B. Emme, Peristyl und Polis. Entwicklung und Funktion öffentlicher griechischer Hofanlagen (Berlin 2013).

Filgis – Radt 1986

M. N. Filgis – W. Radt, Das Heroon, AvP 15, 1 (Berlin 1986).

Fränkel 1890

M. Fränkel, Die Inschriften von Pergamon, AvP 8, 1 (Berlin 1890).

Hellmann 1992

M.-C. Hellmann, Recherches sur le vocabulaire de l'architecture grecque d'après les inscriptions de Délos, BEFAR 278 (Athen 1992).

Hellmann 1994

M.-C. Hellmann, La maison grecque. Les sources épigraphiques, Topoi 4, 1994, 131–146.

Helm-Rommel 2009

I. Helm-Rommel, Das Theater am Burgberg von Pergamon (Diss. Technische Universität Karlsruhe 2009) <<http://digbib.ubka.uni-karlsruhe.de/volltexte/1000012598>> (08.12.2020).

Hepding 1910

H. Hepding, Die Arbeiten zu Pergamon 1908–1909 II. Die Inschriften, AM 35, 1910, 401–493.

Hoffmann 2008

A. Hoffmann, Wege der Kommunikation in kleinasiatischen Städten, in: D. Mertens (ed.), Stadtverkehr in der antiken Welt. Internationales Kolloquium zur 175-Jahrfeier des Deutschen Archäologischen Instituts Rom, Palilia 18 (Wiesbaden 2008) 35–57.

Holleran 2012

C. Holleran, Shopping in Ancient Rome. The Retail Trade in the Late Republic and the Principate (Oxford 2012).

Holleran 2017

C. Holleran, Finding Commerce: The *Taberna* and the Identification of Roman Commercial Space, BSR 85, 2017, 143–170.

Karvonis 2007

P. Karvonis, Le vocabulaire des installations commerciales en Grèce aux époques classique et hellénistique, in: J. Andreau – V. Chankowski (eds.), Vocabulaire et expression de l'économie dans le monde antique (Bordeaux 2007) 35–49.

Karvonis 2008

P. Karvonis, Typologie et évolution des installations commerciales dans les villes grecques du VI^e siècle av. J.-C. et de l'époque hellénistique, REA 110, 2008, 57–81.

Klinkott 1991

M. Klinkott, Hellenistische Stützmauerkonstruktionen in Pergamon, in: A. Hoffmann – E.-L. Schwandner – W. Hoepfner – G. Brands (eds.), Bautechnik der Antike. Internationales Kolloquium in Berlin vom 15.–17. Februar 1990 veranstaltet vom Architekurreferat des DAI in Zusammenarbeit mit dem Seminar für Klassische Archäologie der Freien Universität Berlin, DiskAB 5 (Mainz a. Rhein 1991) 131–136.

Köse 2005

V. Köse, The Origin and Development of Market-Buildings in Hellenistic and Roman Asia Minor, in: S. Mitchell – C. Katsari (eds.), Patterns in the Economy of Roman Asia Minor. Colloquium Exeter July 2002 (Swansea 2005) 139–166.

Laufer 2021

E. Laufer, Architektur unter den Attaliden. Pergamon und die Städte zwischen herrscherlichem Bauengagement und Lokaltradition, PF 19 (Wiesbaden 2021)

Lauter 1970

H. Lauter, Die hellenistische Agora von Aspendos, BJB 170, 1970, 77–101.

Leypold 2008

Ch. Leypold, Bankettgebäude in griechischen Heiligtümern (Wiesbaden 2008).

Liddell et al. 1996

H. G. Liddell – R. Scott – H. S. Jones, A Greek-English Lexikon. With a Revised Supplement 9 (Oxford 1996).

Mathys 2012

M. Mathys, The Agorai of Pergamon. Urban Space and Civic Stage, in: L. Cavalier – R. Descat – J. de Courtils (eds.), Basiliques et agoras en Grèce et d'Asie Mineure. Colloque à Bordeaux le 7 Avril 2007 et à l'institut d'Études Anatoliennes (Istanbul) le 26 Mars 2010 (Bordeaux 2012) 257–271.

Meyer 2012

L. Meier, Die Finanzierung öffentlicher Bauten in der hellenistischen Polis (Berlin 2012).

Ohlemutz 1968

E. Ohlemutz, Die Kulte und Heiligtümer der Götter in Pergamon (Würzburg 1940).

Pinkwart – Stammnitz 1984

D. Pinkwart – W. Stammnitz, Die Peristylhäuser westlich der Unteren Agora, AvP 14 (Berlin 1984).

Pirson 2008

F. Pirson, Pergamon – Bericht über die Arbeiten in der Kampagne 2007, AA 2008/2, 83–155.

Pirson 2012

F. Pirson, Hierarchisierung des Raumes? Überlegungen zur räumlichen Organisation und deren Wahrnehmung im hellenistischen Pergamon und seinem Umland, in: F. Pirson (ed.), Manifestation von Macht und Hierarchien in Stadtraum und Landschaft, BYZAS 13 (Istanbul 2012) 187–232.

Pirson 2015

F. Pirson, Pergamon – Bericht über die Arbeiten in der Kampagne 2014, AA 2015/2, 89–179.

Pirson 2016

F. Pirson, Pergamon – Bericht über die Arbeiten in der Kampagne 2015, AA 2016/2, 135–223.

Pirson 2018

F. Pirson, Pergamon – Bericht über die Arbeiten in der Kampagne 2017, AA 2018/2, 109–192.

Pirson 2017

F. Pirson, Die Siedlungsgeschichte Pergamons – Überblick und kritische Revision. Mit einem Appendix von Anneke Keweloh-Kaletta, IstMitt 67, 2017, 43–130.

Pleket 1970

H. W. Pleket, Nine Greek Inscriptions from the Casyter-Valley in Lydia. A Republication, Talanta 2, 1970, 55–88.

Radt 1977

W. Radt, Pergamon. Vorbericht über die Kampagne 1976, AA 1977, 297–319.

Radt 2016

W. Radt, Pergamon. Geschichte und Bauten einer antiken Metropole ³(Darmstadt 2016).

Rheidt 1992

K. Rheidt, Die Obere Agora. Zur Entwicklung des hellenistischen Stadtzentrums in Pergamon, IstMitt 42, 1992, 235–285.

Robert 1984

L. Robert, Documents d'Asie Mineure, BCH 108, 1984, 457–532.

Salzmann 1991

D. Salzmann, Mosaiken und Pavimente in Pergamon. Vorbericht der Kampagnen 1989 und 1990, AA 1991, 433–456.

Schrammen 1906

J. Schrammen, Der große Altar. Der Obere Markt, AvP 3, 1 (Berlin 1906).

Schwarzer 1999

H. Schwarzer, Untersuchungen zum hellenistischen Herrscherkult in Pergamon, IstMitt 49, 1999, 249–300.

Schwarzer 2008

H. Schwarzer, Das Gebäude mit dem Podiensaal in der Stadtgrabung von Pergamon. Studien zu sakralen Banketträumen mit Liegepodien in der Antike, AvP 15, 4 (Berlin 2008).

Stanley 1990

Ph. V. Stanley, The Value of Ergasteria in Attica. A Reexamination, M^BAH 9/1, 1990, 1–13.

Wensler 1989

A. F. Wensler, Zur Datierung des Temenos für den Herrscherkult in Pergamon, AA 1989, 33–42.

Wulf 1994

U. Wulf, Der Stadtplan von Pergamon. Zu Entwicklung und Stadtstruktur von der Neugründung unter Philetairos bis in spätantike Zeit, *IstMitt* 44, 1994, 135–175.

Wulf 1999

U. Wulf, Die hellenistischen und römischen Wohnhäuser von Pergamon. Unter besonderer Berücksichtigung der Anlagen zwischen der Mittel- und der Ostgasse, *AvP* 15, 3 (Berlin 1999).