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The Ancient Pergamos Project

Fieldwork report for 2024

Abstract

The aim of this paper is to report on the fieldwork conducted at Pergamos in 2024, in order to make the data available and to provide preliminary observations and interpretations of the finds. In the absence of any previous archaeological work at the site, the main objective of this first fieldwork season was to construct a basic chronological framework of human presence and activity. To this end, a systematic surface survey was carried out, providing an overview of the material, along with excavations in the lower terrace of the hill of Koules/Alonaki, in connection to the better-preserved southern fortification walls. The architectural elements and the finds unearthed revealed important, previously unknown, aspects about ancient Pergamos, embracing a variety of activities and indicating connections with both the local/regional material culture but also with that of regions further away.*

Keywords: fortified site, Late Roman, northern Greece, Pergamos, Pieria valley

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This paper reports on the fieldwork conducted at Pergamos in 2024 within the *Ancient Pergamos Project* (APP), which is a collaboration between the Ephorate of Antiquities of Kavala and the Swedish Institute at Athens.[1] The purpose here is to present data and some first thoughts and interpretations of the finds. These results are preliminary; the finds have not yet been studied systematically, and the current contexts are not sufficient to provide a more complete understanding of the structures and layers exposed.

Since no archaeological work has previously been conducted at Pergamos, the main aim of the fieldwork in 2024 was to provide a basic chronological framework for the site.[2] To achieve this, two methods were employed. First, a systematic surface survey was performed, providing an overview of the material. Second, excavations were carried out in the lower terrace of the hill,[3] in connection to the southern section of the fortification walls (*Fig. 1*). The aim was to obtain stratigraphic material related to activity at the site, as well as to expose and understand the connection between the two then-identified primary phases of the walls, one of which dates to the Late Archaic period and another most likely to Late Roman times,[4] clearly distinguishable at the outer face of the fortification.

To be able to present our first preliminary results, this report focuses on the architectural elements unearthed and

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[1] The project is led by Stavroula Dadaki from the Ephorate of Antiquities of Kavala and Patrik Klingborg from the Swedish Institute at Athens and Uppsala University, along with the assistant director of the Swedish Institute at Athens, Georgia Galani.

[2] For a report on the preliminary work at the site before the inception of the project, as well as an overview of the site and its location in the landscape, see Klingborg *et al.* 2024.

[3] Klingborg *et al.* 2024, 9–10, fig. 1b.

[4] For a description of the fortifications, see Klingborg *et al.* 2024, 10–15, figs 1–4.

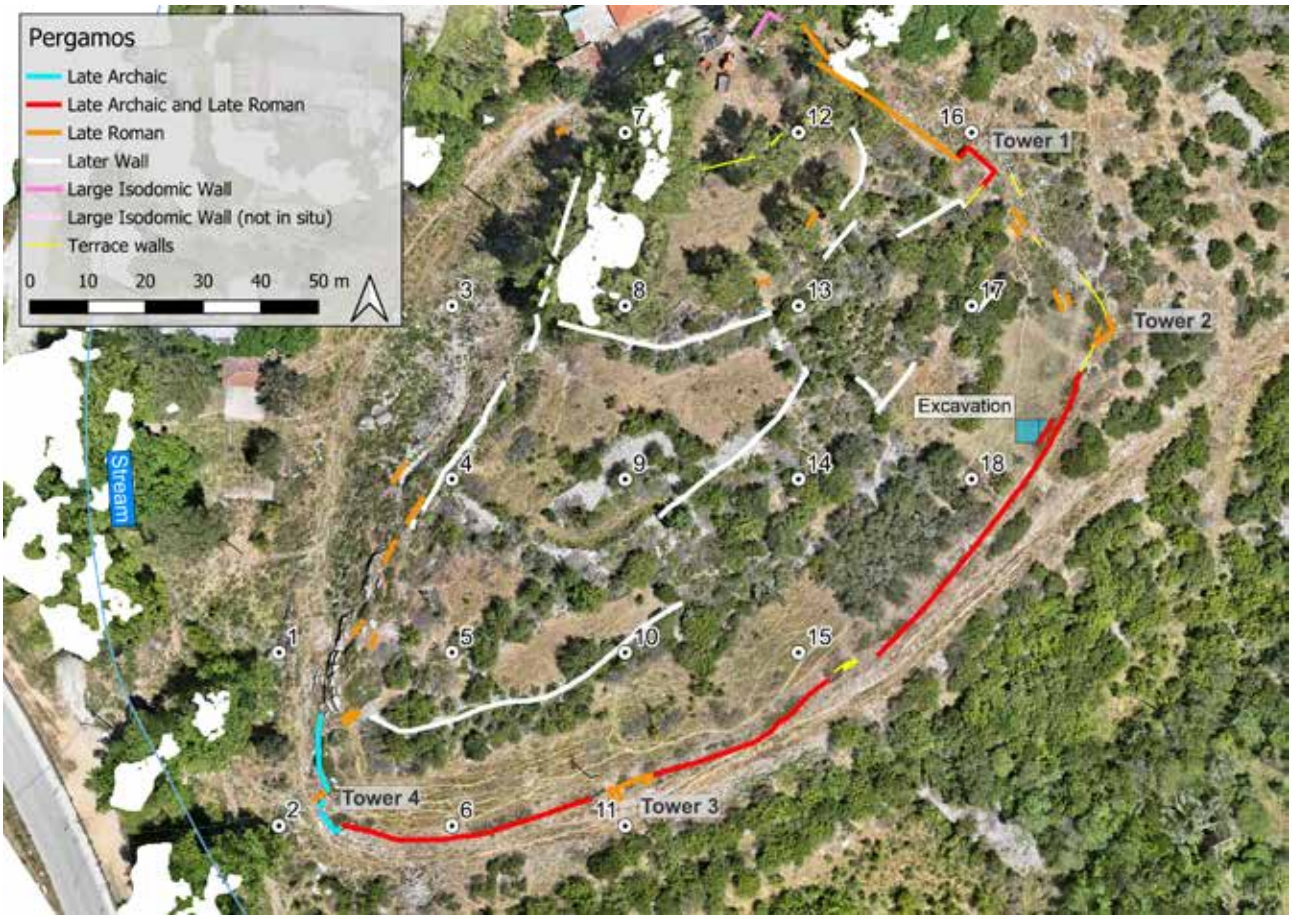

Fig. 1. Plan of Pergamos with the visible phases of the walls indicated, as well as the locations investigated during the survey and the area excavated. Illustration: Patrik Klingborg. Copyright: Hellenic Ministry of Culture.

the chronological phases, along with a broad overview of the finds, with a commentary on the ceramic material.

2024 fieldwork

Pergamos is located on a small hill known today as Koules/Alonaki, just south of the modern village of Moustheni, in the Pieria valley, west of Kavala.[5] The identification of the site is based on Herodotos (7.112), who mentions that Xerxes marched towards southern Greece through the valley, passing by the fortresses (literally "walls", τείχεα, a word commonly used for fortresses in this context) of Pergamos and Phagres.[6] Since Phagres has been securely identified at the south-western end of the Pieria valley,[7] about 15 km south-west of the site discussed here, and no other imposing Archaic remains are known in the relevant area, the site at Moustheni has almost certainly been correctly identified with ancient Pergamos.[8] The most impressive visible remains of the site are the

[5] Located at 40°51'20.05"N, 24°6'48.76"E. For the topography of the site, see Klingborg *et al.* 2024, 9–10.

[6] "Passing through the land aforesaid Xerxes next passed the fortresses of the Pierians, one called Phagres and the other Pergamus. By this way he marched under their very walls, keeping on his right the great and high Pangaean range, wherein the Pierians and Odomanti and the Satrae in especial have mines of gold and silver." (Godley 1922).

[7] At the modern-named Kanoni Hill, in the village of Orphani, the ancient city of Phagres has been identified based primarily on numismatic evidence; see Liampi 1991; Pikoulas 2001, 105–106, 174–176; Loukopoulou 2004, 865. Nikolaidou-Patera has excavated the site of Phagres and has presented a number of excavation reports in the conference series on the Archaeology of Macedonia and Thrace (AEMTh) in Thessaloniki; see, e.g., Nikolaidou-Patera 1993; 1997a; 1997b.

[8] The site was first identified as Pergamos by Afthonidis (1892). See also Nikolaidou-Patera 1997c, 313; Pikoulas 2001, 64–65, 176–179;

Fig. 2. Ceramic material from survey point 11. Illustration: Samuel Blixt. Copyright: Hellenic Ministry of Culture.

fortification walls, surviving exceptionally well in a stretch of about 170 m on the south side, reaching in places a height of at least 4 m above modern ground level.

Survey

As a part of the 2024 fieldwork season, a survey at Pergamos was conducted with the aim to obtain a better understanding of the diachronicity of the site through visible surface material. This was deemed important as surface finds have been used by previous researchers to attest human presence at the site, and even activity levels, during various periods.[9] Another aim was to gain insights into the surface material compared to that from the excavations—to establish how representative the surface finds are in relation to stratified material. To achieve this, the survey was performed based on the so-called "dog-leash method",[10] which focuses on collecting material in a number of discrete spots rather than evenly over a large area. This is useful in cases where the aim is to acquire a representative sample rather than to establish distribution patterns.[11] This methodology was deemed appropriate in the case of Pergamos due to the heavy erosion and because large parts of the site are currently inaccessible because of thick vegetation; consequently, there is little potential to identify distribution patterns and activity areas.

Following the "dog-leash method", a 30-m grid was superimposed over the site, producing 18 spots to be investigated, the majority (13) within the fortifications (*Fig. 1*). In this way the survey produced evidence both within and just outside the fortifications. At each survey point, a circle with a radius of 1 m was measured, creating an area of just over 3 m^2, within which all (ancient) material found on the surface was collected.

The finds were scanty. Four points (2, 4, 12, 15) produced no finds at all, while two points (9, 14) were inaccessible due to heavy vegetation. The great majority of the finds consisted of pottery, while some tile fragments were also collected,[12] as well as a few pieces of slag. Only three points produced ten or more pottery fragments (survey point 10: 47 fragments; survey point 11: 15 fragments; survey point 18: 10 fragments). The condition of the pottery sherds was poor (*Fig. 2*), an indication of their long exposure on the ground surface, to the degree that they could not provide useful information about activities at the site. There was no quantitative or qualitative difference in the finds retrieved from the inside or the outside of the fortification walls and no readably datable material. This suggests caution should be employed when using surface finds at Pergamos to create a chronological framework for activity and habitation at the site.

However, while the material in the selected spots was poor, during the fieldwork it became apparent that there were con-

Loukopoulou 2004, 857; Zannis 2014, 182–183, 256. This identification has, however, been occasionally disputed in the past, with alternative suggestions for the location of Pergamos; see, e.g., Theocharis 1954; Samsaris 1976, 162; Papazoi 1988, 22. Despite those objections, we believe that the identification is sufficiently secure to use. See also Lazaridis 1978, 281–282.

[9] Pikoulas 2001, 64–65; Malamidou 2021, 50. For the architecture of the fortifications, see Ouellet 2024, 268, figs 63–64, pls 44–45.

[10] First described by Binford 1964, 436.

[11] Or, as Dinçer, Şahin and Karahanto (2023, 246) describe it, "to intensively examine a particular findspot"; here Koules/Alonaki can be viewed as one find-spot.

[12] One piece near survey point 5 was a large fragment of a seemingly Late Roman Laconian tile. For Roman roof tiles in northern Greece, see Hamari 2019; 2023.

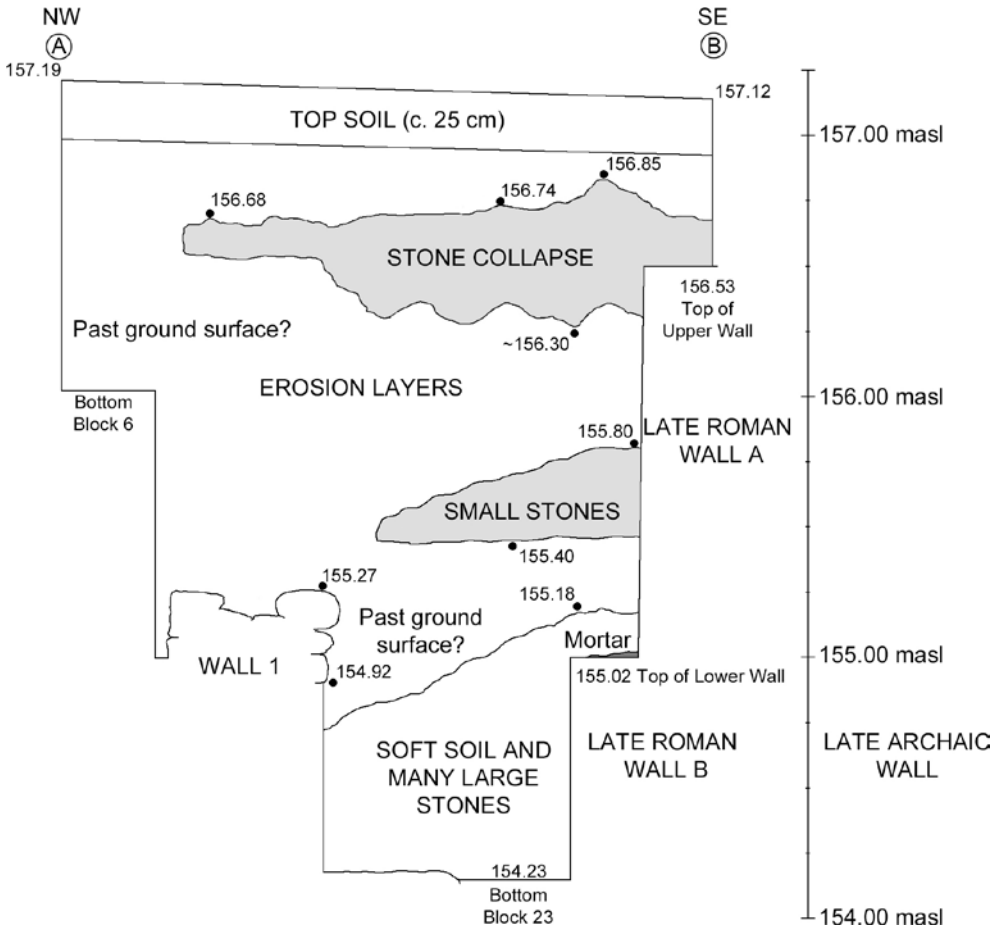

Fig. 3. Schematic section of the excavations in H1-20 (see also Fig. 4*). Illustration: Patrik Klingborg. Copyright: Hellenic Ministry of Culture.*

centrations of pottery and slag in places, particularly in some of the large stone piles next to former agricultural surfaces. This suggests two things: 1) that there was more material scattered at the site in the past, and 2) that this material has probably been removed from the open, accessible, areas because of agricultural practices. Some of this material was considerably easier to date than that collected during our survey, and it probably reflects what has been observed by previous scholars.

Excavations

One of the principal aims for the season was to create a chronological sequence for activities at Pergamos. In addition to this, we intended to expose the inner face of a well-preserved section of the fortification walls on the south side of the site, in order to better understand the connection between the Late Archaic and the Late Roman wall, and to date more narrowly, if possible, the latter.

To organize the excavation work, a north–south oriented grid, with squares measuring 4 × 4 m, was created for the site. Based on this grid, excavations were conducted in grid squares G1-20 and H1-20 (*Figs 1*, *3–5*). Throughout the excavation process, "Block" was used as the basic excavation unit (*Fig. 4*);[13] it could be as small or large as necessary for a specific context. When possible, these blocks follow existing features and/or stratigraphic layers, but due to the extensive erosion, which in places was more than 1 m deep, many blocks were divided artificially to subdivide the material for easier processing, and to enable future analysis in case it revealed aspects not visible in the field. As a consequence of this methodology, there are no separately numbered trenches. Rather the work is organized and presented based on the blocks within each grid square.[14] In total, 24 blocks were excavated during the 2024 season, of which seven were in grid G1-20 and 17 in grid H1-20.

[13] This is based on the methodology of the Swedish excavations at Kalaureia (Wells *et al.* 2006–2007, 32; Penttinen & Wells 2009, 97; Bonnier *et al.* 2021, 28).

[14] This means, for example, that find bags are identified by grid square and block, not a numbered trench.

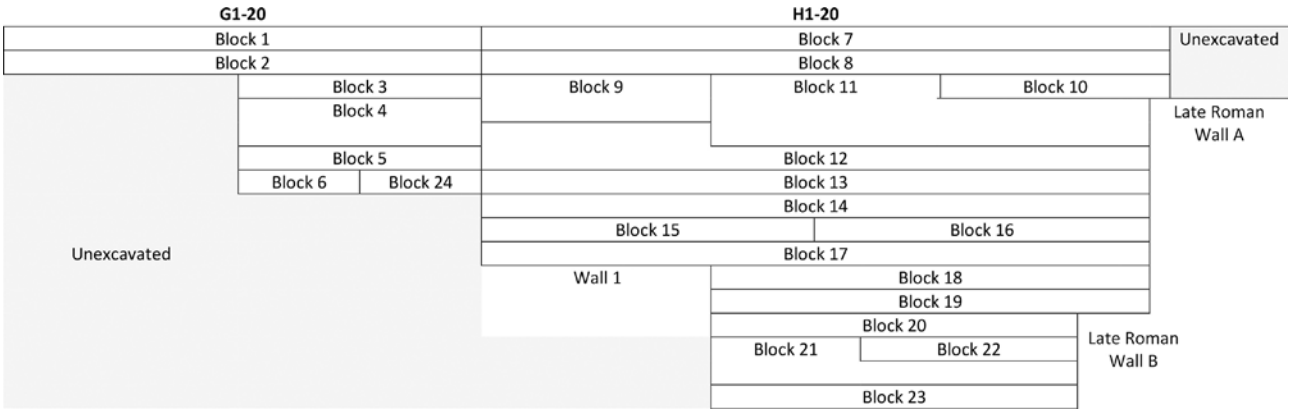

Fig. 4. Schematic view of the relationship between the blocks. Not to scale. Illustration: Patrik Klingborg. Copyright: Hellenic Ministry of Culture.

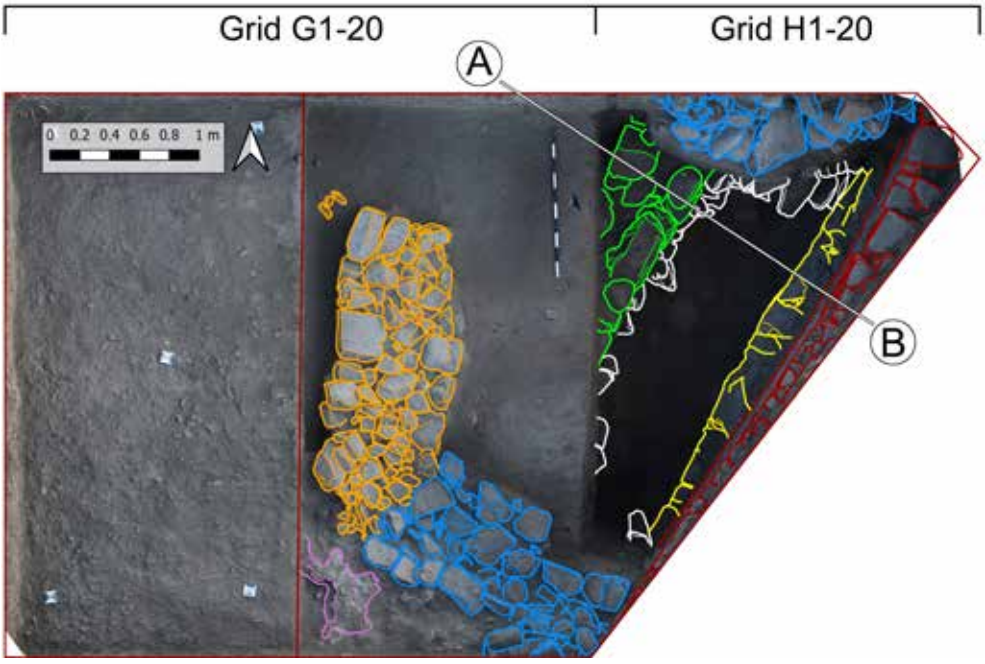

Fig. 5. State of the excavations at the end of the 2024 season, with the line of the section in Fig. 3 *indicated. Yellow: Late Roman Wall B (Phase 2024:1), Red: Late Roman Wall A (Phase 2024:2), White: loose stones (Phase 2024:3), Green: Wall 1 (Phase 2024:4), Orange: irregular stone feature and potential post-hole (Phase 2024:8), Pink: mortar concentration (Phase 2024:8), Blue: collapse (Phase 2024:9). Illustration: Patrik Klingborg, based on photographs by Samuel Blixt and 3D-model by Hannes Lidström. Copyright: Hellenic Ministry of Culture.*

The result was a trapezoid-shaped trench (*Fig. 5*) with a maximum dimension of 4 × 7 m, and its surface at between 157.10 and 157.20 metres above sea level (masl). In G1-20, the western half was only excavated down to a depth of *c.* 0.45 m. In the eastern half of the grid square the excavations continued somewhat further down, exposing an irregular stone foundation at a depth of *c.* 156.45 masl. In grid square H1-20, to the east along the south fortifications, much deeper excavations were conducted revealing collapsed material from the defensive wall, and a great deal of eroded soil (to a depth of about 155.27 masl). Under this, a short stretch of a wall (Wall 1), preliminarily assigned a Late Roman date, was found. Exposing the inner face of the fortifications allowed us to document a well-preserved section with two distinct Late Roman construction phases. Finally, between the fortifications and the Late Roman structure (Wall 1), excavations continued down for about a metre. Here, a fill composed of loose soil and many large stones was found, with ceramic material primarily dating to Hellenistic and Classical times, but also Roman material. This material is preliminarily interpreted as a fill intending to level the area after the strengthening of the fortifications during Late Roman times.

MAIN CHRONOLOGICAL PHASES

The remains exposed during the season can be divided into at least ten distinct phases, dating from Late Roman times (*c.* 300–600 AD), or possibly earlier Roman, up to the present day (*Figs 3–5*). Since this is a preliminary report, it is important to stress that the phase numbering below concerns the excavation work of 2024 and it will most likely be adapted in the future. Below, we begin with the earliest phase, going for-

Fig. 6. The masonry of Late Roman Wall B. Illustration: Samuel Blixt. Copyright: Hellenic Ministry of Culture.

ward in time. One important aspect is that the ceramic material (see below) was mixed in all blocks, dating broadly from Archaic to Late Roman times (albeit earlier material appeared more consistently at the bottom blocks), therefore providing no clear chronological indications for the various phases.

Phase 2024:1

The earliest phase exposed during 2024 consists of the lower part of the fortification wall, referred to as Late Roman Wall B (*Figs 3–6*). It is abutted by the fill in Blocks 20–23 of Phase 2024:3, and thus predates this (*Fig. 9* below). The excavated section of this wall is 2.9 m long and about 0.8 m high (154.23–155.02 masl), with the bottom not visible at the currently exposed level. Its upper surface is formed by two flat levels: the 2 m towards the north-east at a slightly higher elevation (155.02 masl), and the 0.9 m to the south-west at an elevation of 154.74 masl. These surfaces project out from the Late Roman Wall A (Phase 2024:2) by 0.1 to 0.25 m. The exposed inner face is slightly convex when viewed from above, giving Late Roman Wall B a somewhat different orientation than Late Roman Wall A on top. Notably, the upper surface of Late Roman Wall B is at roughly the same level as the visibly preserved Late Archaic Wall at the outer face of the fortification.

Late Roman Wall B is constructed with the use of medium-large stones of various sizes, most of them relatively flat and elongated, up to 0.5 m long, 0.25 m high and at least 0.2 m wide. Other stones are considerably smaller, measuring just 0.1 m long and less than 0.1 m high. Some rounder stones are also used. Mortar has been applied both on top of the wall and in between the stones. It is also clear that some of the stones of Late Roman Wall B extend under Late Roman Wall A without any bonding visible. However, it is very difficult to make detailed observations of this due to the liberal use of mortar on Late Roman Wall B.

Overall, the date of this wall is currently difficult to determine. The slightly different orientation of Late Roman Wall B compared to Late Roman Wall A may suggest that the two date to different periods. Similarly, the fact that the highest elevation (155 masl) of Late Roman Wall B is roughly in line with the top of the Late Archaic Wall at the fortification's outer face suggests some connection with the wall of the Archaic phase. However, the existence of mortar between the stones of Late Roman Wall B either indicates a Roman date for its construction, or a Roman modification/repair of the Late Archaic Wall. One possibility is that this was done in Early–Middle Roman times to strengthen the still existing fortifications, although this is probably not likely due to the use of mortar which is rare in fortifications before the end of the 3rd century AD.[15] A more likely explanation is that Late Roman Wall B was a restoration of the Late Archaic Wall with the intention to use it as a foundation for Late Roman Wall A. This function as a foundation would perhaps explain why Late Roman Wall B did not receive the same façade treatment as Late Roman Wall A.

Phase 2024:2

The second phase is represented by Late Roman Wall A. This follows the same line as Late Roman Wall B (Phase 2024:1)

[15] Brasse & Müth 2016, 80.

Fig. 8. North corner, outer face, between Tower 1 and the Late Roman fortifications (see Fig. 1*), with remains of mortar covering the masonry. Illustration: Patrik Klingborg. Copyright: Hellenic Ministry of Culture.*

for a distance of 2.9 m, but is slightly concave instead of convex. Stratigraphically it is abutted by the erosion and material in Blocks 11–20, which it thus predates (*Fig. 10* below). It is about 1.8 m thick at its uppermost level and preserved to a height of 1.95 m from the top of Late Roman Wall B, upon which Late Roman Wall A is constructed.

Its building technique is primarily characterized by a much-increased use of mortar compared to Late Roman Wall B, both as a binding material in between the stones and, more prominently, for covering most of its face, creating a kind of façade; as a result, it is difficult to discern the wall's stone masonry in detail (*Fig. 7*). At the top, where the mortar is not as well preserved, several kinds of stones can be discerned. The visible stones in the southern part are roughly rectangular, *c.* 0.1 m high and 0.15 m wide, while those in the northern part are larger and flatter, roughly 0.35 m long, 0.1 m high and 0.25 m wide. In other places, elongated stones, up to 0.4 m long and around 0.1 m high, but seemingly not very wide, are used. Overall, the stones employed in the wall seem to be rather heterogeneous, perhaps originating from material already available at the site when Late Roman Wall A was constructed. The mix of stones also corresponds, roughly, to what can be observed on the exposed outer face of the Late Roman fortification walls.[16] Traces of a similar heavy use of mortar have also been observed, for example, at the outer face in the north-west corner of Tower 1 and other parts of the Late Roman fortification (*Fig. 8*). This suggests that the outer face was once covered in the same way, at least in part, and that the now-exposed stones are, perhaps, the result of long exposure and erosion rather than the original appearance. More importantly, while it is likely that the Late Roman fortifications of the site were built as part of the same repair/building phase, this is the first positive evidence pointing to this direction. Finally, the use of mortar in this way suggests that the inner face of Late Roman Wall A was intended to be visible, in contrast to Late Roman Wall B. The building method of Late Roman Wall A therefore suggests a ground surface in this area around

Fig. 7. Inner face of Late Roman Wall A. Note the heavy use of mortar almost completely covering the masonry. Illustration: Samuel Blixt. Copyright: Hellenic Ministry of Culture.

[16] See, e.g., Klingborg *et al.* 2024, fig. 4.

Fig. 9. Stone filling in Phase 2024:3, abutting Late Roman Wall B, with the red line indicating the level of the stone fill at this specific location. A soil sample column is visible in the middle of the image. Illustration: Samuel Blixt, modified by Patrik Klingborg. Copyright: Hellenic Ministry of Culture.

a level of *c.* 155 masl, at the time when the fortifications were reinforced (around the levels of Blocks 18–19).[17]

Chronologically, the extensive use of mortar indicates that this phase of the fortifications should be dated no earlier than the 3rd century AD when mortar begins to be widely used in fortifications in the eastern part of the Roman Empire.[18] Based on their construction technique with irregular stones of various sizes bound with mortar, combined with the absence of brick layers and *spolia*, good parallels can be found in the fortifications of Topeiros (tentatively dated in the 3rd–4th centuries AD) and Didymoteicho (dated in the 6th century AD under Justinian I)

[17] See also the discussion of the ceramic material below.

[18] Brasse & Müth 2016, 80.

Fig. 10. Stone filling in Phase 2024:3 leaning towards Late Roman Wall B (below) and A (above). Illustration: Samuel Blixt, modified by Patrik Klingborg. Copyright: Hellenic Ministry of Culture.

in Thrace.[19] This time period is further supported by the historical developments in northern Greece, with a trend towards refortification works from the mid-3rd century AD onwards[20] and the repair and strengthening of the existing walls, with new ones often built on top of older ones. Following this, many settlements are abandoned after the mid-6th and 7th centuries AD.[21] It is therefore likely that the Late Roman fortifications at Pergamos were constructed at some point during this 300-year period.

Phase 2024:3

Following the construction of Late Roman Wall A, the area inside the fortifications was filled in (Blocks 20–23). This was done with medium-size stones, *c.* 0.3 m large with loose soil in between, leaning towards both exposed phases of the fortifications (Late Roman Walls A and B), showing that the fill was deposited after the construction of Late Roman Wall A. The uppermost stones of this fill, abutting the fortifications, reach a level of around 155.20 masl (0.2 m above the top of Late Roman Wall B). From this point, the elevation decreases gradually to the west, with the lowest stones at a level

[19] Tsouris 1998, 423–424, pls 136a, 137a.

[20] Tsouris 1998, 420–421; Bintliff 2012, 352–353; Evangelidis 2022, 142–148. Major examples of this refortification trend, connected with the multiple "barbarian" invasions during the second half of the 3rd century AD, are found in the walls of Dion (Stefanidou-Tiveriou 1998, 157–197) and Thessaloniki (Vitti 1996, 124–125); another phase in the fortification of the two cities is placed in the second half of the 4th century AD (Vitti 1996, 126–127; Stefanidou-Tiveriou 1998, 198–215). In Philippi, a 3rd–4th century AD phase is also detected in its walls, while the latest addition is the proteichisma in the late 5th–6th centuries AD (Provost 2001, 132–134).

[21] Tsouris 1998, 427–429. Cf. Haldon 1999.

of 154.75 (top) to 154.30 masl (bottom) (*Figs 9–10*). On top of this stone fill, a layer of soil, 0.1–0.15 m thick, evened out the area before a foundation (Wall 1, Phase 2024:4) was built upon it.

Based on the currently available material, the origin and purpose of this stone and soil fill remains enigmatic. It may represent a gradual deposition of loose stones (perhaps originating from the Late Archaic walls, although other structures at the site cannot be excluded) along the fortifications, but it could also be a deliberately placed fill intended to protect Late Roman Wall B if the latter was now used as a foundation for Late Roman Wall A. In this case the fill would be used as a way of levelling the area rather than backfilling a traditional foundation trench. This is especially relevant in relation to the argument above, namely that there was a surface level in the area at *c.* 155 masl, when Late Roman Wall A had been constructed. The question remains if Late Roman Wall A was constructed immediately after Late Roman Wall B, or with a long or short time interval between the two. The increase in the number of Classical and Hellenistic pottery sherds from Phase 2024:3 (Blocks 20–23), compared to those above, was also notable, although Late Roman material was still present.

Phase 2024:4

After the placement of the stone fill in Phase 2024:3 (Blocks 20–23), the foundation for a structure (Wall 1) was constructed in the north-west part of H1-20, parallel to the fortifications, at a distance of *c.* 0.8 m (*Figs 3*, *5*). Some time presumably passed between the deposition of the fill and Phase 2024:4, considering that the soil would have needed to settle. This foundation (Wall 1) with a maximum width of 0.6 m was uncovered for a length of 1.4 m and built as two faces of unmortared stones in 2–3 courses. On the eastern exposed side, the bottom of the lowest course is found at 154.92 masl, with the top of the highest stone at 155.27 masl. There were no traces of a distinct filling between the two faces of Wall 1, although one would have expected a mix of smaller stones if it was intended to carry a mud-brick superstructure. Perhaps thick clay, now lost, was used. Another possibility, although less likely, is that the structure formed part of a drainage system keeping water away from the waterproof Late Roman Wall A, where the lack of weep-holes would have allowed pressure to build up behind the fortifications.

In terms of chronology, it is notable that the bottom of Wall 1 is found just below the top of Late Roman Wall B, while it also extends 0.25 m above it. Considering that, as argued above, there probably was a ground level at 155 masl, it seems likely that, whatever building this foundation formed part of, it was contemporary with Late Roman Wall A and it should therefore be viewed as part of the settlement fabric in Late Roman times.

Phase 2024:5

Currently, both the date of construction and the abandonment of Wall 1 in Phase 2024:4 is unknown. However, it is clear that, once abandoned, the area was filled with soil (Block 17), probably through erosion. This was represented during the excavations by a layer of loose fine-grained soil, *c.* 0.2 m thick in Block 17. The top of this soil layer was found at around 155.40 masl.

Phase 2024:6

Above the eroded soil in Phase 2024:5, a layer formed by a mix of many small stones (mostly 0.05–0.08 m in size), as well as some mortar and tiles, was found (Block 16) (*Fig. 11*). This layer extends roughly 1 m from the fortifications towards the west. The maximum depth of the layer was 0.4 m (154.40–154.80 masl), but it was somewhat thinner just by the wall, and sloped down towards the west (*Fig. 3*).

At the moment, it remains unclear what this layer represents. It seems unlikely to be collapsed material from the fortifications because of the small size of the stones. A more likely possibility is that this area of the site had at some point been transformed to agricultural land, and in this case the layer could reveal the efforts to clear the fields of small stones which would be an obstacle during farming. This is common practice and the large stone piles still visible at the site almost certainly reflect similar work over time. It is also attested that the area within the fortifications was used for agriculture until modern times, possibly echoing earlier practices. Another, perhaps somewhat less likely, possibility is that the small stones were intended to create a walkway along the wall, perhaps for defensive purposes. Depending on the original height of Late Roman Wall A, this walkway may have created a convenient platform to patrol from. However, the fact that the surface slopes down towards the interior of the site makes it poorly suited for this function.

Phase 2024:7

The stone layer (Phase 2024:6) was followed by a soil layer (Blocks 6, 12–15, 24), again most likely from erosion, 0.7–1.1 m thick. The mass of this soil layer strongly suggests that this represents a prolonged period of inactivity at the site, or perhaps agricultural or pastoral usage. It is possible that this layer testifies to the period after the post-antiquity abandonment of the site, at a currently unknown point in time, but presumably after *c.* 600 AD based on the ceramic material.

Phase 2024:8

Above the erosion layer of Phase 2024:7, the excavated area included the eastern half of grid square G1-20 (*Figs 4–5*, *12–13*). In the centre of this area, in G1-20, an irregular

Fig. 11 Small stones in Phase 2024:6. Illustration: Samuel Blixt, modified by Patrik Klingborg. Copyright: Hellenic Ministry of Culture.

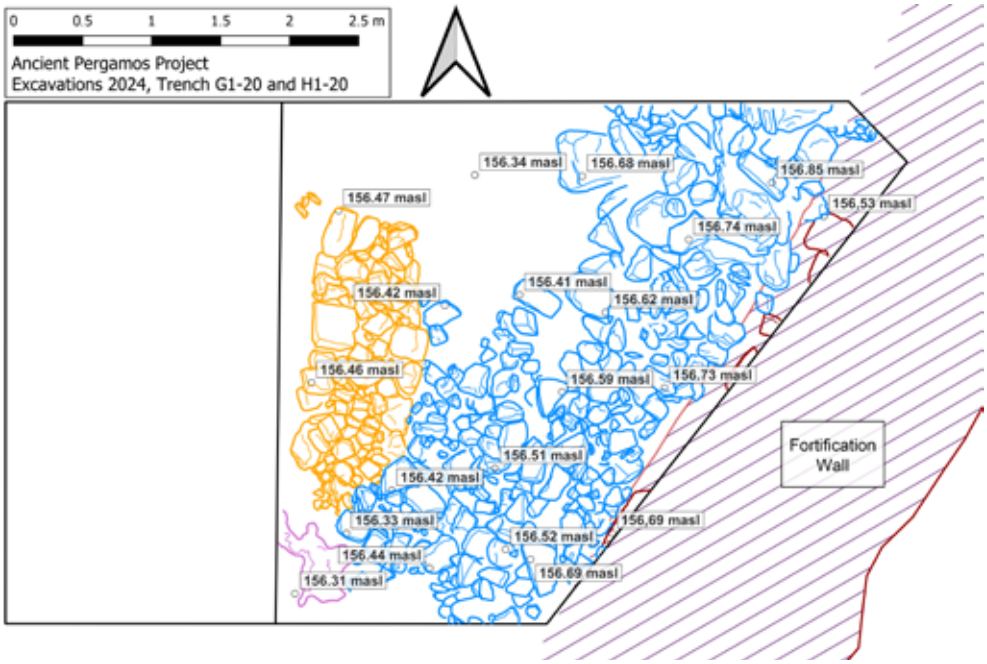

Fig. 12. Plan of the irregular stone feature and potential post-hole in Phase 2024:8 (orange) and collapse in Phase 2024:9 (blue). Illustration: Patrik Klingborg. Copyright: Hellenic Ministry of Culture.

stone feature, perhaps a foundation, was found, as well as a mortar concentration in the south-west corner. This is abutted by the material in Blocks 3–5. The feature, 0.8 m wide and 1.9 m long, is composed of stones ranging in size from *c.* 0.3 m to 0.1 m, laid with two reasonably clear faces in the west and east. It comprises one, or in places, two courses. There was no mortar or other bonding material in between the stones. The stone feature's south-east corner was obscured by a later collapse (Phase 2024:9). Adjacent to this stone feature, close to its surviving NW corner, three upright small stones stood next to each other in a Π-shaped formation, indicating some sort of human-made construction, perhaps a post-hole. The high find density in terms of pottery around the irregular stone feature (Block 5) suggests the presence of a past surface level 0.05–0.1 m below the top of the potential foundation.

Fig. 13. Irregular stone feature in Phase 2024:8. Note the collapse of Phase 2024:9 visible in the trench-scarp, to the rear of the excavated area (centre-top part of photograph) and the potential post-hole in the bottom right. Illustration: Samuel Blixt. Copyright: Hellenic Ministry of Culture.

Fig. 14. Collapse in Phase 2024:9. Note that parts of the collapse in grid G1-20 (right side) had been removed at this point. Illustration: Samuel Blixt. Copyright: Hellenic Ministry of Culture.

Phase 2024:9

The last major phase is formed by a large stone collapse about 1 m thick (Block 11), extending *c.* 1.4 m from the fortification walls (*Figs 12*, *14*). It consists of stones of various sizes, some of them substantial (up to 0.7 m long) and others considerably smaller (0.1 m). This material almost certainly originates from the fortification walls, which collapsed or were destroyed at some late point in the history of the site.

Phase 2024:10

Above the wall collapse and the late foundation, a layer of eroded soil and topsoil (Blocks 1–4, 7–10), up to 0.45 m deep was found. These blocks were characterized by mixed material and a great deal of roots, and were practically void of modern contamination.

FINDS

The excavations of 2024 yielded a variety of finds, ranging from pottery and bones to metal, glass, slag and shells. Of these categories, the pottery sherds and the slag were by far the most abundant.[22]

Regarding the pottery, a total of 5,000 fragments was found, showing a wide chronological and typological variety in both grid squares (G1-20 and H1-20). The presence of some fragments of handmade pottery, often called "Slavic ware", suggests activity at the site in the 7th–9th centuries AD (*Fig. 15b*).[23] Earlier material was considerably more abundant. In all blocks of H1-20 (although mainly in the upper and the middle ones) fragments of many large undecorated utilitarian vessels of daily use (amphorae, pithos-shaped vessels, etc.), with band-shaped or circular handles (many of the latter bearing relief striations), have been identified (*Fig. 15c*); those types were used continuously from Early Roman times up to the 5th century AD, and they present similarities with corresponding examples from other areas of the Mediterranean and the Black Sea. Sherds of cooking vessels (cooking pots/chitrae, smaller cooking pots/arytires, lekanai, oinochoe, etc.) for daily use were also found. We note the case of two fragments of the same greyish cooking pot, with repair joints (*Fig. 15a*), found in two different blocks (Blocks 20–21).[24] There were also a few sherds with a glaze, mainly greenish, of post-Roman times (e.g., Block 8), but not enough to suggest habitation at this point.

Several sherds of red slip wares were found, originating mainly from small-size vessels, like small skyphoi, lekanidai, and plates/pinakia. Some of them are dated in the 1st–3rd centuries AD, but there are also later examples such as fragments of African red slip from the 4th–5th century AD, one of them decorated with a palm-branch stamp,[25] as well as a fragment of Phocaean red slip, dated in the late 5th–early 6th century AD (*Fig. 15d*). At the same time, a significant number of Megarian bowl sherds (*Fig. 15e*) with floral decoration or scenes from the Homeric poems (*c.* late 3rd–mid-1st centuries BC), were also found in many blocks (e.g., Blocks 7, 12, 14, 17, 19–21, 23).[26] Two sherds with decoration of the West Slope type (3rd–2nd centuries BC) were found relatively deep (Blocks 19, 21), and another one a bit higher, in Block 14 (*Fig. 15f*).

In the deeper blocks of H1-20, several black-glazed sherds were found (*Fig. 15g*), mainly from drinking vessels (late 4th–3rd centuries BC) (e.g., Blocks 21, 23), as well as two joining red-figure krater sherds, depicting a naked male figure (4th century BC; Block 23) (*Fig. 15i*); another sherd of a red-figure vessel was found higher up in Block 14 (*Fig. 15h*).[27] There were also small pottery sherds dating to the Archaic period (*Fig. 15j*), which mainly come from drinking vessels (kylikes and skyphoi), with some of them bearing banded decoration (e.g., in Blocks 14, 23). Also worth mentioning are the amphora and hydria sherds with a whitish coating and painted decoration (banded or wavy decoration on the body and on the handles, *Fig. 15k*), dating from the early 6th century BC to the mid-5th century BC.[28] This category was popular in the coastal zone from Thrace to Chalkidiki and it reflects the influences of the workshops of Eastern Greece and the Islands, testifying to regional trade relations with the cities in these areas. Similar pottery has been found, for example, in excavations at Argilos, Galepsos, Sindos and Phagres.[29] Finally, and importantly, Late Roman sherds were found even in the deepest blocks of H1-20.

The relatively small number of identified prehistoric sherds was a more surprising result. A number of decorated fragments are probably Archaic Thracian, with close parallels in Argilos dated to 650–600 BC (*Fig. 15l*), but vessels with similar decoration are also attested during the Late Bronze Age.[30] Another example possibly from the Late Bronze age was recovered in Block 2, close to the modern surface (*Fig. 15m*), but this type of pottery too could be Archaic Thracian.[31] One difficulty here is that several sherds that seem to date to the Archaic, and perhaps even the Early Classical period, are decorated with designs imitating prehistoric ones.[32] This complicates both earlier testimonies concerning the extensive presence of prehistoric sherds on the surface at the site,[33] and our analysis.

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[22] As this is a preliminary excavation report, a more detailed analysis of the finds will be presented in future reports.

[23] Zachariadis 2018, 68, fig. 12, ζ. See also Zachariadis 2022, 466, fig. 18.8.

[24] Such repairs are fairly common, see, e.g., Bonnier *et al.* 2021, 48.

[25] For the palm-branch decoration (top-left in fig. 15d) see, e.g., Hayes 1972, 231, fig. 39, 10h; *Agora* 32, 77, pl. 55, no. 1092.

[26] *Agora* 22, 1.

[27] For a substantial sample of red-figure vases in the larger area, see Akamatis (2020) for material from Argilos.

[28] Panti 2006, 75–79. This type of pottery is generally difficult to date (Panti 2006, 78).

[29] For Argilos, see Perron 2006; 2013. For Sindos, see Saripanidi 2013. For Phagres, see Nikolaidou-Patera 1993, 519; 1997a, 501, fig. 3. For Galepsos, see Malama 2012, 353, fig. 5.

[30] Boniaz & Perreault 2002, 115, fig. 4; Deliopoulos *et al.* 2015, 226–228, fig. 4.

[31] Concerning the prehistory of the area, see Malamidou 2021. We would like to thank Jacques Perreault for his input on this type of ceramic.

[32] For example, in Blocks 1 and 5 in grid square G1-20 and Block 7 in H1-20. See Panti 2012 for a discussion about vessels with prehistoric designs in Archaic and Early Classical times. Considerably later handmade pottery (so-called "Slavic ware") has often been identified as prehistoric material in the past (see Zachariadis 2022, 458).

[33] Pikoulas 2001, 65; Malamidou 2021, 51.

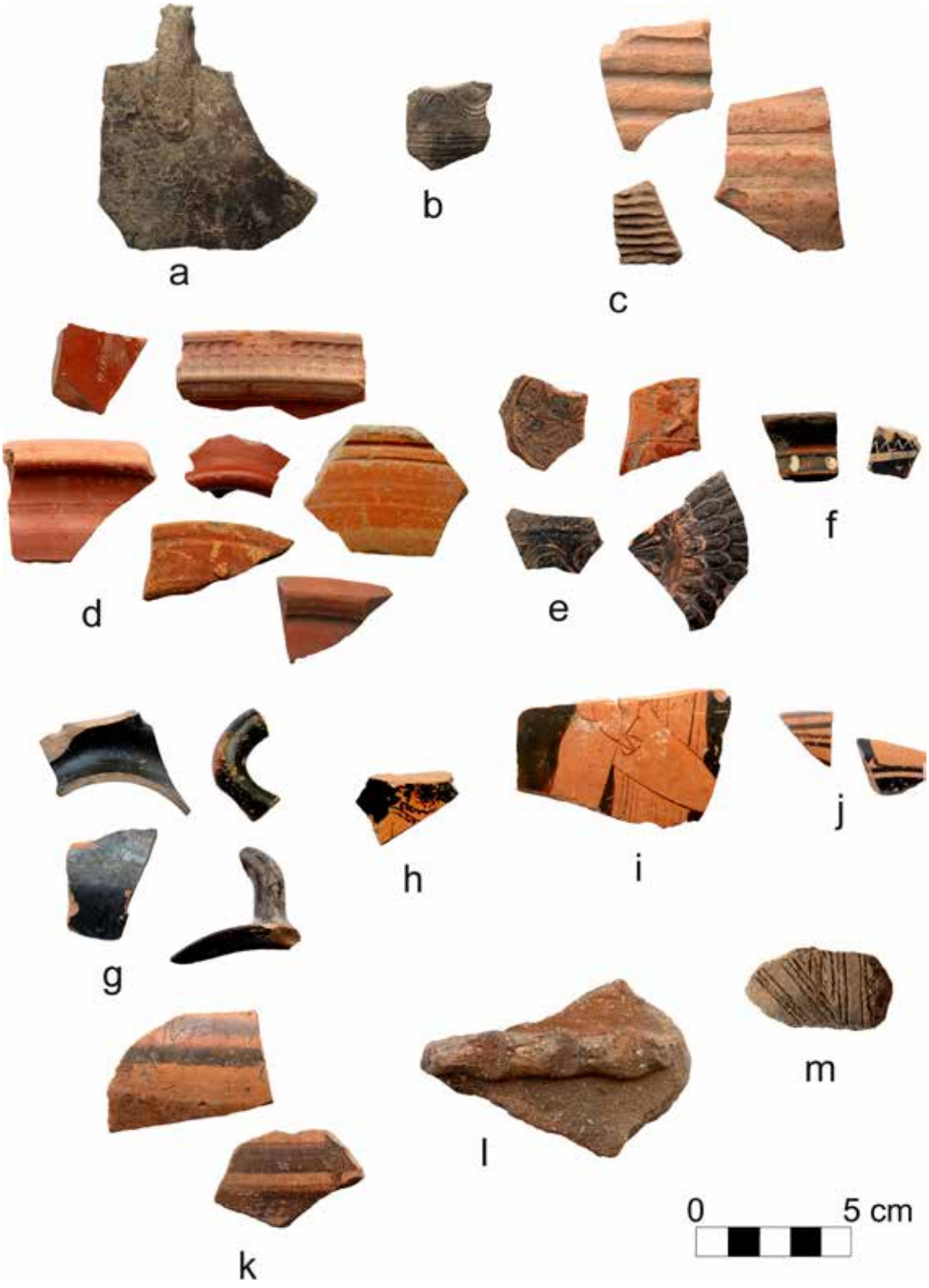
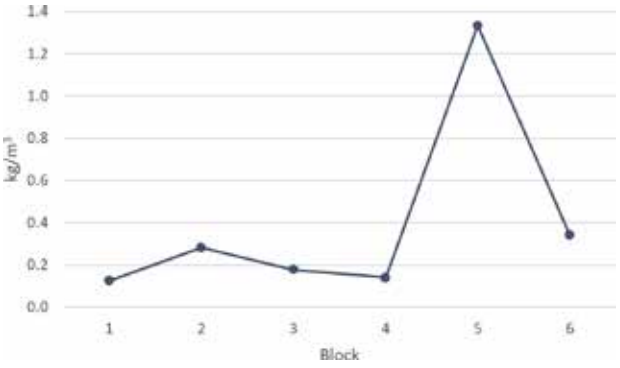
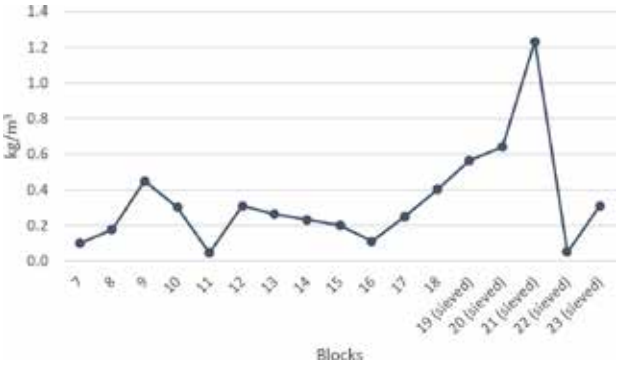


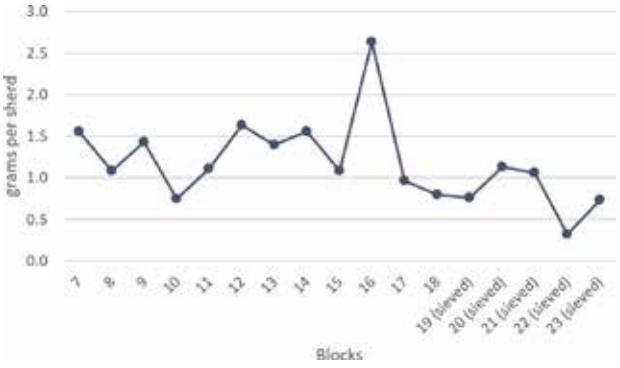
Fig. 15. Selection of ceramics from the excavations in 2024, from most recent at the top to oldest at the bottom. a: Undated sherd with lead repair (Block 21). b: Handmade pottery, so-called "Slavic ware", 7th–9th centuries AD (Block 7). c: Undecorated utilitarian vessels from Early Roman times up to the 5th century AD (Block 7). d: Red slip ware sherds, 1st–6th centuries AD (Blocks 1, 2, 6, 21). e: Fragments from Megarian bowls, late 3rd–mid-1st centuries BC (Blocks 2, 4, 18, 23). f: Fragments of West Slope Ware, 3rd–2nd centuries BC (Blocks 14, 19). g: Black-glaze sherds, late 4th–3rd centuries BC (Blocks 13, 23). h–i: Red-figure sherds, 4th century BC (Blocks 14, 23). j: Fragments of Archaic vessels (Blocks 7, 23). k: Pottery of local style from the coastal zone from Thrace to Chalkidiki, early 6th–mid-5th centuries BC (Block 23). l: Thracian ware (Block 5). m: Late Bronze Age sherd (Block 2). Illustration: Samuel Blixt. Copyright: Hellenic Ministry of Culture.



Graph 1. Pottery recovered per block in grid square G1-20, expressed as kg/m³ excavated (Block 24 not included). Illustration: Patrik Klingborg. Copyright: Hellenic Ministry of Culture.



Graph 2. Pottery recovered per block in grid square H1-20, expressed as kg/m³ excavated. Illustration: Patrik Klingborg. Copyright: Hellenic Ministry of Culture.



Graph 3. Pottery fragmentation per block in grid square H1-20, expressed as the average weight (g) per sherd. Illustration: Patrik Klingborg. Copyright: Hellenic Ministry of Culture.

The distribution pattern of the pottery within the excavated blocks reveals interesting aspects.[34] First, there is a spike in the amount of pottery recovered in Block 5 (G1-20) (*Graph 1*). Along with the relative elevation of this block next to the late possible foundation (Phase 2024:8), this is interpreted as an indication of a former ground surface. A smaller increase in the find density is also observed in the roughly corresponding Blocks 9 and 12 in grid square H1-20 (*Graph 2*), although to a lesser degree, probably due to the presence of the collapse there. Following this, there is a considerable spike in the sherd size (expressed as grams per sherd) in Block 16 (Phase 2024:6), which was composed of soil and a great deal of small stones (*Graph 3*).

More significantly, there is a sharp increase in the find density in Blocks 18–21 (*Graph 2*), also interpreted as the remains of a ground surface, this time probably in Late Roman times, in connection to Wall 1 (Phase 2024:4). This increased material density stands out, particularly in comparison to Blocks 22–23 which contained much less pottery even though the soil was sieved.

In conclusion, the pottery from the first excavation season at Pergamos provided strong evidence for the continuous habitation on the Koules/Alonaki hill, from at least Archaic to Late Roman times. The material is mixed in all blocks, although with considerably more sherds of early date (Archaic–Classical) appearing in Blocks 21–23. This leads us to three main conclusions. First, all the material down to Block 17 seems to form part of erosion layers that were created at the site over time, accumulating almost 2 m of soil by the fortification walls, probably after Late Roman times. Secondly, Blocks 18–20 are likely to represent a surface level of (Late) Roman times (see *Graph 2*). Thirdly, in Blocks 21–23, the increased number of sherds of Archaic–Classical date, although still combined with material of later periods (two Megarian bowl sherds, and more sherds of Roman/Late Roman date), suggests that the material in these blocks has a different character than the eroded soil in the higher blocks.

The omnipresence of slag (*Fig. 16*) in all excavation blocks provides archaeological substance to the literary sources' testimony regarding the region's rich metal resources and the

[34] All the block volumes are approximations. While a publication such as this gives the impression of a straightforward situation, that was not the case in the field: some blocks slope slightly, others have stones in them changing the actual volume of soil. In particular, the collapse of large stones in Block 11 and 22, as well as the layer of smaller stones in Block 16, created layers with complex shapes, difficult to account for accurately. That being said, the relative volume of each block should be perceived as representative for the current purpose. In addition to this Blocks 1–7, 20–21 and 23 have adjusted sherd counts made after washing the pottery, resulting in approximately 1% fewer sherds. Furthermore, all soil in Blocks 19–23 was sieved, increasing the number of finds, especially small ones, although to a lesser degree than expected. A smaller sample of the soil was sieved in Block 18.

Fig. 16. Slag recovered from Block 9 (0.6 kg). Illustration: Samuel Blixt. Copyright: Hellenic Ministry of Culture.

local populations' engagement in mining and metallurgical processing.[35] In total, more than 600 slag fragments, weighing 30 kg in total, were found, and in some of the blocks large numbers of slag were accumulated (most in the top soil layers, e.g. Blocks 2 and 7–8, but also in some lower ones, such as Blocks 16, 19, and 21 [see *Table 1*]). This provides important archaeological evidence for Pergamos as a site strongly connected to metallurgical activities.[36] Macroscopically, based on the different colours (brown, green, grey, yellowish), we can observe different kinds of base metal compositions in the slag. One important question that remains is where the metal refining processes, producing the slag as a waste by-product, took place.

In the category of terracotta finds, eight loom weights in two shapes (pyramidal and discoid with a central hole), in various sizes and fabrics, were found in different blocks, starting in Block 5 and going down to Block 17 (*Fig. 17*).[37] Two further pyramidal loom weights were found as stray finds.

Regarding the metal finds, 24 items were recovered, most of them nails and pieces of lead, presumably for the mending of vessels. Two such lead repairs were found still attached to ceramic fragments (*Fig. 15a*). The most impressive metal find was a pair of bronze tweezers from Block 12 just under the upper stone collapse in Phase 2024:9 (156.50 masl), preserved in good condition (*Fig. 18*).

Table 1. Distribution of recovered slag. Block 24 did not contain any slag, presumably due to its small volume. Illustration: Patrik Klingborg. Copyright: Hellenic Ministry of Culture.

Block	Number of finds	Weight (kg)	Kg per excavated m^3
1	61	1.4	0.2
2	90	3.9	3
3	13	0.3	0.2
4	15	0.7	4.7
5	11	1.5	3.0
6	18	0.3	3.0
7	64	2.9	1.5
8	45	1.4	1.2
9	26	0.6	1.5
10	9	0.1	1
11	3	0.1	0.1
12	23	1.1	1.1
13	6	0.1	0.1
14	14	1.6	2.7
15	22	1	2.0
16	28	5.1	5.7
17	27	1.7	2.1
18	30	1	1.7
19	40	1.2	4.0
20	24	0.9	1.8
21	35	2.3	7.7
22	3	0.1	0.5
23	23	0.8	1
Total	**630**	**30.1**	

A small number of glass remains were also found (17 fragments). Four of the fragments, all found in the higher erosion layers,[38] can preliminarily be identified as belonging to stemmed base vessels.[39] These were used from the 1st century AD, but became popular as household goods primarily in Late Roman times (4th–6th centuries AD),[40] after which glass becomes uncommon in the Greek territory.[41] In general, their presence in the material further strengthens the notion of an active Late Roman phase at the site.

Two fragments of millstones were also found. One of them is a corner (*c.* 0.3 m long, 0.15 m wide) of a so-called "Olynthian mill", also known as a hopper-rubber type, spotted as a stray find just to the east of Tower 2. This is important because this

[35] For a brief overview, see Klingborg *et al.* 2024, 17. The ancient mining activity in the Pangaion region was extensively explored by Unger & Schütz 1982; Unger 1987. More recently, see Vaxevanopoulos 2017.

[36] Cf. Klingborg *et al.* 2024, 18.

[37] For more on loom weights from the region, see Dimova 2016.

[38] All the diagnostic fragments were found in Blocks 5, 11–12, i.e., in the upper parts of the excavated area.

[39] Similar vessels can be seen in the Archaeological Museum of Philippi. For parallels, see Selkokari 2017, cat. nos 12–23.

[40] *Agora* 34, 148.

[41] Selkokari 2017, 101.

Fig. 17 (above). Terracotta loom weights found during the fieldwork of 2024. Illustration: Samuel Blixt and Patrik Klingborg. Copyright: Hellenic Ministry of Culture.

Fig. 18 (left). Tweezers (Block 12). Illustration: Samuel Blixt. Copyright: Hellenic Ministry of Culture.

type of mill is first attested in the late 5th century BC and it was used primarily throughout Classical and Hellenistic times until the 1st century BC, providing evidence for activity and agricultural processing at the site during this period.[42] Robert Curtis has argued that these mills represent commercial production rather than household usage where much simpler saddle querns remained in use long after the introduction of the hopper-rubber type.[43] If correct, this suggests that food production at Pergamos went beyond sustaining the individual household. However, it is also clear that Olynthian-style mills have been found in domestic contexts where commercial usage seems less likely.[44] That these millstones are made of a particular volcanic stone that is often identified as originating from the island of Nisyros,[45] also provides evidence for Pergamos' connection to the international trade network. The second millstone fragment, *c.* 0.2 × 0.1 m in size, consists of the broken remains of a saddle quern found in Block 12. This can probably be envisioned as originating in a domestic sphere. This type is more difficult to date, being used from Neolithic times onwards around the whole Mediterranean and beyond, remaining in use in the Greek world during Classical and Hellenistic times.[46]

In addition to the millstones, two further lithics were of interest: two pieces of a seemingly unprocessed semi-precious stone, or gemstone (*Fig. 19*), discovered in Blocks 17 and 19. The fragments have a width of *c.* 1.5–3 cm, with a brownish-red tinge containing streaks of black. Based on macroscopic observations, the stones appear to be a variety of jasper, a semi-

[42] Curtis 2001, 282–287; Santi & Renzulli 2015, 805–806. See also Frankel 2003. However, Curtis (2001, 282) believes that the hopper-rubber type must have been developed somewhat earlier. Examples are also known from Roman times although rotary mills became widespread in Greece from the 1st century BC (Curtis 2001, 288). In some areas, such as modern Israel, Olynthian mills were still in use in Byzantine times (Frankel 2003, 18).

[43] Curtis 2001, 284.

[44] For example, Olynthian mills appear in domestic contexts in Megara Hyblaea from the second half of the 4th century BC as larger mills are introduced in what seem to be commercial settings (Chaigneau 2019, 209).

[45] Curtis 2001, 287.

[46] Curtis 2001, 264, 280–281.

precious stone occurring in three colour variations: yellow, medium to dark green and medium to dark red.[47]

The stones found in Pergamos seem to belong to the latter category of red jasper. Both stones have a partly glossy surface caused by breakage, intentional or unintentional, reminiscent of the surface that is produced when flints are struck. Evidence of stone-working in Egypt indicate that gemstones were first roughly shaped by chipping,[48] and since both flint and jasper are sedimentary rocks composed of microcrystalline quartz—classified under the general term "chert"—it is not surprising to see both stone types breaking in a similar manner.[49]

Red jasper appears in Greece as early as in the Minoan period, but it is more commonly used from the time of Augustus (27 BC–AD 14) and onwards.[50] Jasper occurs naturally in Thrace, more specifically in the area around the southern parts of the Rhodope Mountains and the modern town of Sapes,[51] although the identified ancient extraction sources of jasper seemed to be located either in the Near East or Egypt.[52] Pliny the Elder (*HN* 37.68) mentions the existence of a so-called "Thracian Stone", which occurs in three different varieties, although none of them corresponds to the modern description and properties of jasper.[53] In an earlier passage (*HN* 37.37), he describes the varieties of "iaspis", in which the "turpentine iaspis" bears the closest resemblance to red jasper. James Harrell, however, identifies modern red jasper with the ancient haematitis, which is described by Pliny (*HN* 37.60) as "blood-red in colour".[54]

Finally, bones were recovered in all blocks except for the uppermost levels (Blocks 1–3, 7–8).[55] Overall, the material is fairly fragmented, and significantly more remains were found in the lower levels of the excavations, in particular in Blocks 19–23, as well as in Block 12. The assemblage primarily seems to consist of medium-sized mammals, and it is possible to identify remains of sheep/goat and pig in several of the layers. Remains from large-sized mammals were also noted in a few cases, among them bones from cattle. A few bones from microfauna are present in the sample (for example, a few rodent bones in Block 19). In general, mammalian long bone fragments and loose teeth are well represented in the sample, but it is also possible to note the presence of parts from the cranium, mandible, vertebrae, pelvis and phalanges.

Fig. 19. Lithic find, identified as a semi-precious stone, probably red jasper (Block 17). Illustration: Samuel Blixt. Copyright: Hellenic Ministry of Culture.

Conclusions

While the results in this article are preliminary, the finds from the fieldwork in 2024 revealed important, previously unknown, aspects about ancient Pergamos, including the chronological range and variety of its activities, as well as insights into, primarily, a Late Roman phase at the site.

The excavations provided much improved knowledge regarding the chronological span of the site, largely thanks to the ceramic material found in the deep erosion layers accumulated inside of the south fortification walls. Although the material is not part of primary contexts, the layers themselves and the material found in them were, due to the topography of the site on Koules/Alonaki hill, the result of long erosion processes that happened within the fortification. Therefore, the material found in these layers must have originated at the site and testifies to the activities and periods of use at Pergamos.

The preliminary analysis of the ceramic material showed that it originated from a wide range of periods, spanning at least from Archaic to Late Roman times, with some handmade fragments from after 600 AD, as well as a very small number of glazed Byzantine sherds. It is important to note that, although there was more Late Roman material in the upper and middle blocks, there are still plenty of Classical and Hellenistic, as well as some potentially Archaic, sherds even

[47] Harrell 2012, 6, table 1.
[48] Harrell 2012, 15–16.
[49] Luedtke 1992, 5.
[50] Richter 1968, 9.
[51] Voudouris *et al.* 2019, 3, 18, fig. 1.
[52] Moorey 1994, 98; Nicholson & Shaw 2000, 29; Boschloos 2012, 5; Harrell 2012, 11.
[53] See Kostov 2007 for the historical descriptions of the "Thracian Stone".
[54] Harrell 2012, 6, table 1. However, Lisbet Thoresen illustrates the problem with using ancient sources as an identification to gemstones and their use, since the modern categories and descriptions do not correspond to the ancient taxonomy (Thoresen 2015, 155–157; cf. Richter 1968, 8).
[55] We would like to thank Julian Wareing for sharing with us his preliminary thoughts on the osteological material.

in the upper blocks.[56] Therefore, the eroded material does not provide a neat chronological stratigraphy. Rather, the composition of the material suggests that the pottery in the eroded soil represents a cross-section of periods during which humans inhabited, or were active at, the site.

In relation to this, the paucity of prehistoric material, preliminarily identified by scholars on the surface in the past, is noteworthy.[57] Naturally, the absence of evidence for a prehistoric phase is not evidence of absence of human activity during this period, but if there is still prehistoric material on the surface of the site, then one would expect that this would also be found in the eroded soil that represents a reasonably accurate chronological cross-section for Pergamos.

Another conclusion from the ceramic material is that a thriving Late Roman phase can be attested at the site. This was previously indicated by the presence of the Late Roman fortifications, which had tentatively been dated to this period,[58] and the find of an architectural fragment probably originating from a church.[59] Now this view is reinforced based on the large volume of Late Roman pottery found, including many sherds belonging to vessels pointing towards everyday activities and utilitarian usages.

The excavations also revealed new information about the fortifications, for which two clearly distinct phases of the Roman walls (Late Roman Wall A and B) were attested. It is currently unknown if these follow each other immediately, or if they are separated by a more significant amount of time. Based on the current evidence, it seems that the present state of Late Roman Wall B is the result of restorations of the Late Archaic Wall.

In contrast to this, Late Roman Wall A was a completely new Roman construction. A secure date for this new construction cannot yet be provided, but there is now considerably more evidence available, combining the historical context with ceramic material recovered during the season. Historically, the settlements in northern Greece are often refortified from the mid-3rd century AD, providing a plausible *terminus post quem*. Following this, many sites were abandoned after the mid-6th and the 7th centuries AD, and this period seems to see distinctly reduced and/or transformed activity, at Pergamos as well, since the ceramic material dates primarily no later than the 5th century AD. In combination, this suggests a tentative date of construction for Late Roman Wall A between the late 3rd and 6th centuries AD.

Another interesting aspect of the construction of Late Roman Wall A is the extensive use of mortar, covering most of the inner face of the fortifications, thus creating a kind of façade. It remains to be verified if this is representative of the rest of the defensive walls, but traces of similar techniques have been observed in isolated parts of the outer face as well, suggesting that this may have been a consistently used method. More importantly, however, the use of this technique shows that, although Late Roman Wall A is not particularly thick (*c.* 1.80 m), a great deal of energy and financial expenditure was invested in its construction.

The excavations also revealed remains of an ancient structure inside the fortifications (Phase 2024:4). While little can be said about this building at the moment, except that it may have been a rather large structure based on the width of its foundation, it remains important because it is the first *in situ* evidence for ancient buildings at Pergamos besides the fortifications.[60] This structure is probably Late Roman in date, based on the abundance of pottery from this period found in the corresponding blocks, as well as its orientation and elevation closely following Late Roman Wall A.

The fieldwork also identified at least three periods of significant erosion at the site. These periods of inactivity, as attested by the erosion, are important because they highlight the times during which the site was used. The smallest one, *c.* 0.2 m thick, occurs after the abandonment of the structure in Phase 2024:4. Somewhat higher up, a second much more significant erosion layer up to 1.1 m thick is found (*c.* 155.40–156.50 masl). This probably represents a long period of sharply reduced activity, or abandonment of the site, at some unknown point, but presumably after *c.* 600 AD based on the currently available ceramic material. The last erosion layer occurs after a period of reuse when a stone feature (Phase 2024:8), possibly a foundation, was constructed at a high level. The date and function of this potential stone foundation is also unknown at the moment, because the material around it was mixed from all periods, but it is most likely from Byzantine or Ottoman times.

To conclude, the first fieldwork season at Pergamos produced a diverse and highly interesting material, attesting to the long use and habitation of the site. The presence of Attic red-figure material, in combination with the Late Archaic walls, strongly suggest Greek influences, while much of the Hellenistic pottery must have been brought to the site under Macedonian and early Roman rule. Similarly, the Late Roman material covers a period when the area would have moved away from a traditional pagan religion into a new Christian

[56] See, e.g., finds PF 88 and 89 in Block 1 and PF 9, 25 and 26 in Block 2.

[57] Pikoulas 2001, 65; Malamidou 2021, 51.

[58] Klingborg *et al.* 2024, 13–14. Angelos Zannis (2014, 256) suggests a probable dating of these Late Roman walls in the 4th–6th centuries AD.

[59] Klingborg *et al.* 2024, 16, 21.

[60] For stray finds, see a fragment of a column, probably Late Classical or Hellenistic, as well as a Late Roman demi-colonnette, probably a mullion (Klingborg *et al.* 2024, 15–17).

belief system. The results of the first season of fieldwork at Pergamos suggest that a long history of a multifaceted site awaits to be uncovered.

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