# The archaeological and architectural context of the mosaic floor in the Roman fort of Apsaros (Gonio, Georgia)

**Abstract**: Since 2012, a joint Polish-Georgian expedition has been conducting research at the Roman Fort of Apsaros (Gonio, Georgia). The most important discovery made during this project is a mosaic floor decorated with geometric motifs. The room with the mosaic is part of an architectural complex dating to the second half of the 1st century and first half of the 2nd century AD. During this period, the building underwent changes in both form and function. Initially, it served as a granary. Later, a garrison bathhouse was erected on the same site. The final reconstruction resulted in a residence that included, among other features, private baths and an atrium. The floors of at least two rooms were decorated with mosaics. The residence is dated to the reign of Hadrian, and its construction may have been linked to the stay at Apsaros of Flavius Arrianus, governor of the province of Cappadocia.

**Keywords**: Apsaros, Roman army, Roman forts, mosaic floor, Cappadocia, Arrian

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The mosaic floor was discovered in 2014 by a joint Polish-Georgian expedition directed by Prof. Radosław Karasiewicz-Szczypiorski and Prof. Shota Mamuladze, director of the Gonio-Apsaros Museum-Reserve (Karasiewicz-Szczypiorski et al. 2016: 525–526). Excavations continued over two subsequent seasons, during which

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initial conservation works were also carried out. In 2019, the walls adjacent to the mosaic were reinforced. Consultations and preparations are ongoing and, as a result, a new museum pavilion will be constructed at the site of the discovery.

The multi-year excavations, conducted primarily in the immediate vicinity of the mosaic, contributed to establishing previously unknown details concerning the construction circumstances and later usage of the Apsaros fort by the Roman army.

## CHRONOLOGY AND PHASING OF THE ARCHITECTURAL REMAINS ACCOMPANYING THE MOSAIC FLOOR

The first to mention the fort at Apsaros [*Fig. 1*] is Pliny the Elder (Plin. *HN* 6.12.4 and 6.13.11). Besides this fort on the coast of Colchis, he also mentioned the fort at Sebastopolis. These same two forts are marked on the eastern coast of Pontus on the *Tabula Peutingeriana*. Thus, ancient sources confirm the Roman military presence at the mouth of the Chorokhi (Akampsis) River in the second half of the 1st century AD (see also Joseph. *BJ* 2.366–367). It seems probable that the Roman army may have arrived in this area as early as during Nero's reign, in connection with the expedition he planned to Caucasian Albania (Tac. *Hist*. 1.6; cf. Mitford 2018: 58).


Fig. 1. Territories around the Black Sea showing the location of Apsaros and other forts (1st–3rd century AD) (Drawing N. Lockley)

Such an early genesis of Roman Apsaros has been increasingly confirmed by archaeological discoveries [*Fig. 2*]. This includes not only movable finds dated to the 1st century. While such artifacts had been identified earlier, they often came from secondary contexts or were recovered under poorly documented circumstances. At the current stage of research, the most important task is analyzing the relationships between the architectural remains, stratigraphy, and small finds, including, for example, coins (Karasie-

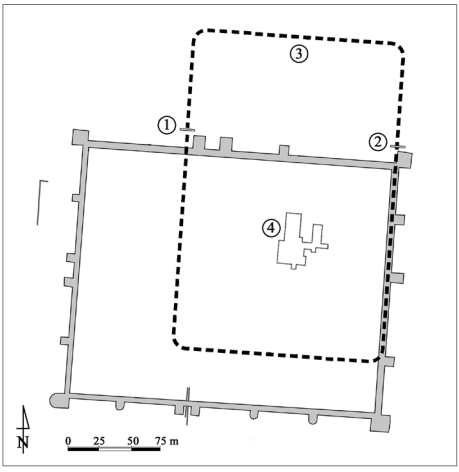


Fig. 2. Plan of the Apsaros fort (Gonio) (After Geyer 2003; adaptation R. Karasiewicz-Szczypiorski; drawing J. Kaniszewski, O Kubrak, and M. Marciniak)

wicz-Szczypiorski and Mamuladze 2019; Jaworski 2021; Jaworski, Karasiewicz-Szczypiorski, and Mamuladze 2021).

The interrelations between the remains of the various buildings uncovered so far, along with the associated layers and artifacts, allow us to conclude that in the area under investigation three buildings were constructed in succession, each with a different plan and purpose.

## THE GRANARY (*HORREUM*)

The earliest building (Phase 1), with its foundations located at the greatest depth, was a granary for storing cereal and other agricultural produce for the garrison [*Fig. 3*]. This function is primarily indicated by the presence of buttresses adjacent to some of the preserved foundations, as well as traces of a ventilation hole for the space under the floor. During the excavations, stone stairs were also discovered, which allowed access to the floor installed above the utility level in front of the building (Karasiewicz-Szczypiorski and Mamuladze 2018). All of these architectural features have numerous parallels and are characteristic of granaries built within Roman forts (Johnson 1987: 168–175). In


Fig. 3. Apsaros fort (Gonio). Plan in Phase 1: granary (horreum) (Drawing M. Marciniak)

the case of the *horreum* at Apsaros, it was possible to establish that it comprised two identical storehouses sharing a central bearing wall. The granary measured 19.60 m in length and 14 m in width. The entrance to the western storehouse was located on the southern side, near the southwestern corner. Not far from this spot, two hemidrachmas were discovered within the construction of one of the buttresses. These coins had been minted in Caesarea in Cappadocia during the reign of Nero, probably in AD 59 (Sydenham 1978: 40, fn. 80), [*Fig. 4:1–2*]. They commemorate the victory of Corbulo over Armenia in the war against the Parthians. The discovery of both coins in the same location suggests they were intentionally deposited. The first coin (Inv. No. 515/15; see [*Fig. 4:1*]) depicts Nike facing right, with the inscription ARME- [NIA C] (Sydenham 1978: 40, No. 81; RPC I, 3644), while the second (Inv. No. 517/15) shows Nike also facing right, writing on a shield (Sydenham 1978: 41, No. 83; RPC I, 3646; see [*Fig. 4:2*]). According to Piotr Jaworski, the coins probably constituted a foundation deposit placed there during the construction of the building. The use of coins bearing the image of a ruler later condemned to *damnatio memoriae* allows us to confidently conclude that the building must have been founded during the issuer's lifetime — i.e., before AD 68 (Jaworski 2021: 127; Jaworski, Karasiewicz-Szczypiorski, and Mamuladze 2021: 295). During the excavation of this structure, a broken beaker was also found in a cut beneath the foundation, near its southern wall. Made of yellowish-green glass, it belongs to the category of so-called "victory beakers" — cylindrical vessels with concave walls and relief decoration in two registers. So far, this type has been identified at only a few sites. The form and decoration style indicate production in Syro-Palestinian workshops during the 1st century AD (Dusenbery 1971: 13, Fig. 6). Due to its archaeological context, the beaker from Apsaros enables a more precise dating of this type of vessel to the mid-1st century (oral communication from M. Wagner, University of Warsaw). Archaeological research has also uncovered evidence for the destruction of the Phase 1 building, including fragments of roof tiles. On this basis, it can be assumed that the structure was completed and remained in use for some time.


Fig. 4. Two hemidrachmas minted in Caesarea in Cappadocia under Nero, found in a buttress of the horreum (After Jaworski, Karasiewicz-Szczypiorski, and Mamuladze 2021: Fig. 4)

## THE BATHS (*BALNEUM*)

At the current stage of research, it is impossible to determine conclusively how much time passed between the destruction of the granary and the construction of the baths. This next building (Phase 2) has been dated indirectly — based on the above-described observations concerning the previous construction phase, as well as similar data referring to the house that was later built on the same site.

The change in the function of the architectural complex was associated with its reconstruction and expansion [*Fig. 5*]. The foundations and the lower parts of the granary walls were reused during the construction of the garrison baths (thermae). A row of three rooms (Nos 1–3) was added onto the remains of the earlier storage building from the west. The granary buttresses were incorpo-

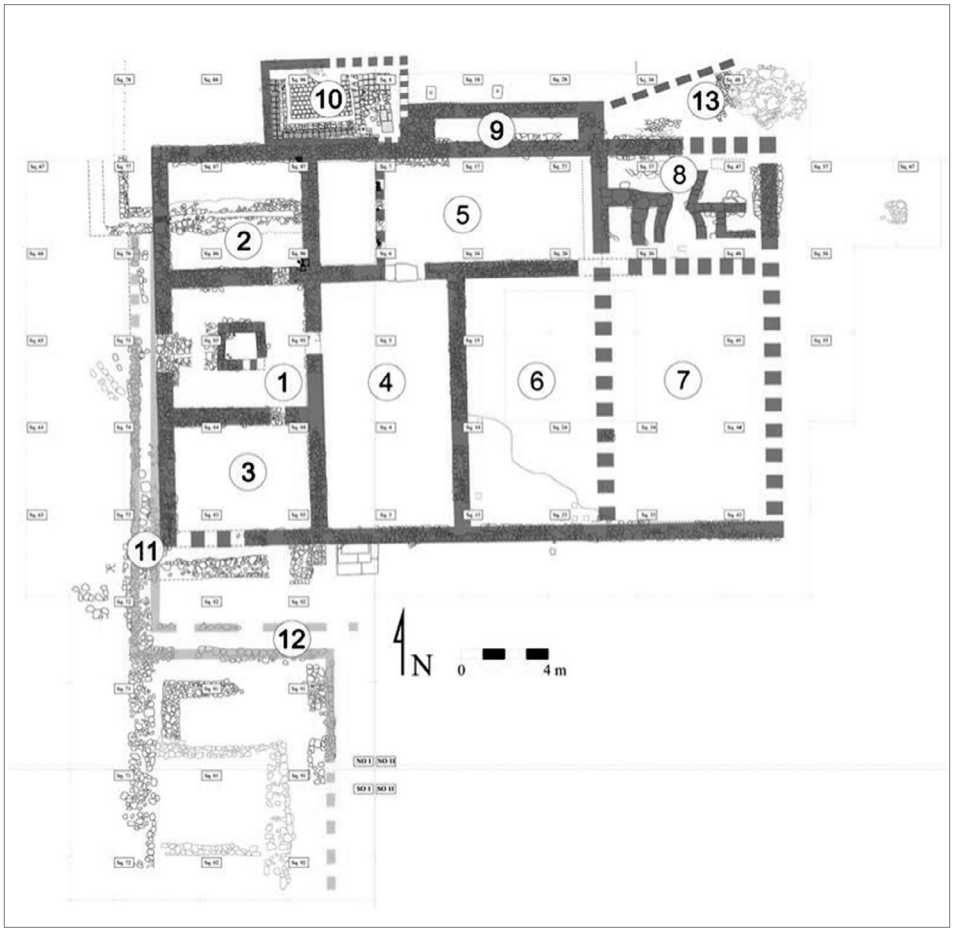


Fig. 5. Apsaros fort (Gonio). Plan in Phase 2: baths (balneum) (Drawing M. Marciniak): 1 and 3 – apodyteria; 2 – atrium; 4 – latrine; 5, 6 – frigidarium; 7 – tepidarium and caldarium?; 8 – praefurnium

rated into the new walls running along an east–west axis. The specific functions of these new rooms remain unclear, although it is known that their floors were made of unworked clay.

In the central room (No. 2), four square stone column bases were arranged in a square formation; three of them were found *in situ*. These bases were positioned at the corners of a shallow quadrangular pool, which was sealed with mortar with an admixture of crushed pottery.

In the room occupying the northwestern corner of the building (Room No. 2), the remains of a drain have been preserved. It served to channel water from the pool located further east (Room No. 5) and was constructed from ceramic pipes.

North of the granary remains, a separate room (No. 10) was added, which had no direct connection with the rest of the structure. A sewer with a floor made of ceramic tiles runs along the western and southern walls of this room, which was also paved with similar tiles. One of the ceramic pipes from the abovementioned pool emptied into this sewer (Room No. 5).

A large part of the western section of the former granary was occupied by a room (No. 4) with a floor constructed in the *opus signinum* technique, laid over a foundation of broken stone. In the northern parts of both former storage rooms, another room was established (Room No. 5), preserving the lower part of the pool sealed using mortar containing crushed pottery, although no traces of a basement hypocaust were found there. Most of the eastern portion of the granary was converted into a room under which a basement hypocaust was installed (Room No. 6). The *pilae* stacks in the *hypocaustum* were made of square bricks, on top of which ceramic tiles were laid.

Further east, a furnace (*praefurnium*, Room No. 8) was discovered. It served to heat the room with the hypocaust (Room No. 6). During this construction phase, the main entrance to the thermae almost certainly led from the west into Room No. 1.

Based on the preserved architectural remains, it is possible to reconstruct the likely functions of several rooms. The main entrance led into the atrium (Room No. 1), from which access was provided to the changing rooms (apodyteria, Rooms Nos 2 and 3) and the cool bath (frigidarium, Rooms Nos 4 and 5). The tepidarium (Room No. 6) was most likely located to the east of the frigidarium. Both the frigidarium and tepidarium were probably constructed on the footprint of earlier storage rooms and thus likely shared the same interior dimensions: 16.60 m × 6.10 m. Further east lay the room containing the furnace (Room No. 8). The room to the north of the frigidarium served as a latrine (Room No. 10).

It is worth noting that the garrison thermae at Chesters (Great Britain) had a comparable size and layout (Birley 1959: 22–24; Salway 1965/2009: 76; Wilmott 2009: 52–53; Lancaster 2015: 109–110; Southern 2016: 28). Both structures were constructed in the same period, i.e., the first half of the 2nd century.

## HOUSE OF THE GARRISON COMMANDER (PRAETORIUM)

Another phase of reconstruction within the architectural complex involved changes to the function of the entire building and its individual rooms [*Fig. 6*]. New floors were laid in the corner chambers of the western part of the house (Rooms Nos 2 and 3), above the previous utility level. These new floors were made of unworked clay. Additionally, an opening — likely serving as a water outlet to a canal in the adjacent street— was introduced in the western wall of the southwestern room (No. 3). A canal running through the northwestern room (No. 2) drained water from the neighboring pool (Room No. 5) into the wastewater sewer along the street bordering the house to the west.

In the western wall of the house, the remains of a doorway (1.62 m wide) leading into the street have been preserved

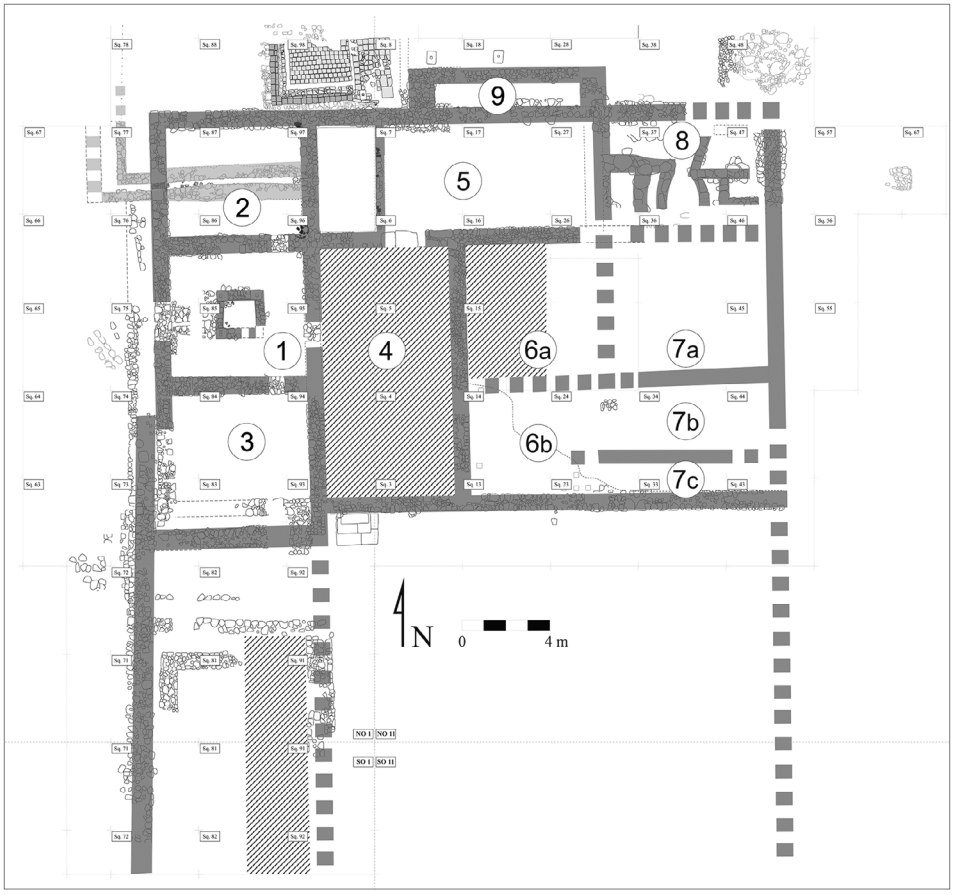


Fig. 6. Apsaros fort (Gonio). Plan in Phase 3: commander's house (praetorium) (Drawing M. Marciniak): 1 – kitchen?; 2 – atrium; 5 – private bathhouse (frigidarium); 6 – tablinum (or triclinium?); 7 – caldarium; 8 – praefurnium

(Room No. 1). The utility level around the water reservoir and surrounding columns was raised (compared to the floor from Phase 2) and reinforced with gravel. Traces of a passage into the adjacent northern room (No. 2) have also been preserved. This doorway, 0.90 m wide, was located near the eastern end of the wall separating Rooms 1 and 2. No evidence remains of a doorway leading to the southern room (No. 3), nor of one that might have connected to the eastern room (No. 4). The likely location of the missing passage was in the area where breaches in the preserved walls have been documented, caused by later excavations (Ottoman pits).

Changes were also introduced in the frigidarium (Room No. 4 from the previous Phase 2). A mosaic was laid over the earlier floor, which had been constructed in the *opus signinum* technique using mortar with an admixture of crushed pottery. The new floor was composed of fragments of local stone, likely collected from the nearby beach or river (geological research is underway to determine the exact source), in the form of flat pebbles. These stones were then roughly split in half to create irregular tesserae.

From the room with the mosaic, a passage led to Room No. 5. The doorway was 1.6 m wide — the same width as the entrance to Room No. 1 from the street. It appears that this room retained its bathing function, although its interior was modified. A new floor was constructed above the earlier one, as well as above the bottom of the pool, which had also been made using the *opus signinum* technique. The new, smaller pool occupied only the area to the left of the entrance.

Traces of this reconstruction were also observed in the structure of the preserved furnace (Room No. 8) (Karasiewicz-Szczypiorski 2016: 56–58). The room with the basement hypocaust located east of the mosaic room (No. 6) was likewise rebuilt. The original *pilae* made of square bricks were replaced with new ones constructed from ceramic pipes. During the investigation of damaged ceramic tiles that formed the Phase 3 floor, the scarce remains of a mosaic were observed — likely destroyed when the *hypocaustum* collapsed. Most of the tesserae had become scattered and were recovered during the excavation of accumulated layers above the collapsed basement.

In the phase under discussion, Room No. 10 (from Phase 2), which had served as a latrine, ceased to exist. The walls and part of the foundations were dismantled, while the remains of the floor and drainage canals that had not been removed were covered with a layer of gravel. At the same time, a gravel pavement was laid over much of the area north of the building.

Based on the discovered traces of reconstruction activity, it can be concluded that the earlier garrison thermae (Phase 2) were adapted to form part of a high-end residence (Phase 3). Although the surviving traces of the furnishings and architectural elements are limited, they allow for some preliminary interpretations of the functions of individual rooms during this phase.

The main entrance to the house was located on the western side and led into Room No. 1. The centrally placed water reservoir, surrounded by four columns, suggests that this space functioned as

an atrium. A narrow passageway led to rooms on the left (and likely also to those on the right), where the floors were made of clay. These features suggest that the spaces served as utility rooms. The presence of a separate water drain in Rooms Nos 2 and 3 may indicate that a kitchen was located here. However, no traces of a fireplace or oven were discovered in this or any other room. Nevertheless, the proposed function of Room No. 1 as an atrium is further supported by the convenient access it provided —via the atrium— to the more private rooms deeper within the house. These inner rooms most likely served a specific function.

A room with a mosaic was located along the axis defined by the main entrance and the impluvium, deeper within the house. This prominent position suggests that the room served a representative function — most likely as a tablinum. However, the arrangement of decorative motifs in the mosaic may indicate that the space was also used as a triclinium. The details of this mosaic will be discussed further on.

From the mosaic room, one could proceed to the left into a room with a small, unheated pool (Room No. 5). The available data indicate that, as in the previous phase, this space functioned as a frigidarium. A small private thermae installation was likely located in the northern part of the house. However, an exact reconstruction of the adjacent rooms is difficult due to the extensive damage caused by later construction activities in this area.

During the excavations of the described house, several important discoveries and observations were made, which served as the basis for dating its construction and destruction. A thick layer of clay, which contained almost no small finds, has accumulated above the ruins of the building. This clay deposit is interpreted as the remains of the collapsed upper walls, which were constructed of


Fig. 7. Three cistophoric tetradrachmas of Hadrian minted in the province of Asia (After Jaworski, Karasiewicz-Szczypiorski, and Mamuladze 2021: Fig. 6)

clay in their higher parts. Exceptionally rare silver coins were found within this clay layer [*Fig. 7*]. These include three cistophoric tetradrachmas of Hadrian, minted in the province of Asia, probably between AD 128 and 130 (Metcalf 1980: 123; RPC III.1, 165). Two were minted in Laodicea ([*Fig. 7:A–B*] RPC III, 1399), and the third in Ephesus ([*Fig. 7:C*]; RPC III, 1332). Cistophori are rarely found outside the province of Asia (Metcalf 1980: 73–74), and the discovery of three specimens in a single archaeological context strongly supports, following the recent findings of Piotr Jaworski (2021: 131), the interpretation of this find as a foundation deposit associated with the transformation of the thermae into a commander's residence. Without a doubt, this is an exceptional discovery. It is therefore worth considering the possible circumstances under which Hadrian's cistophori arrived at Apsaros.

In this context, the inspection of the fort in AD 131 by Arrian, governor of Cappadocia, is particularly noteworthy. This inspection took place amid political tensions in the Caucasus region (M.A. Speidel 2009: 603; Mitford 2018: 550) and in the Bosporan Kingdom (see Arr. *Peripl.* 17). In Arrian's surviving *periplus*, a visit to Apsaros is specifically mentioned (Arr. *Peripl.* 6). During his inspection, the Roman provincial army commander reviewed the fortifications, moats, supplies, and the health of the five cohorts stationed at the fort at the mouth of the Chorokhi River. The soldiers were also paid (*μισθοφορά*). In light of our current knowledge of coin finds from Apsaros (Jaworski 2021: 131), it may be assumed that the soldiers' pay consisted primarily of Cappadocia Caesarea drachmae and Roman denarii. However, as Jaworski has noted, the question remains open as to whether —and to what extent— special funds from the imperial treasury, in the form of Hadrian's cistophoric tetradrachmas, might have been used to finance wages during extraordinary military concentrations. With a high degree of probability, it can be concluded that the Asian tetradrachmas found in the discussed deposit were used to fund the transformation of the former baths into a praetorium. It is worth adding that a fourth cistophorus, minted in Sardis (RPC III, 1385), was recovered during the Georgian excavations at the site and is currently held in the collections of the Gonio-Apsaros Museum-Reserve. However, this coin should be considered an out-of-context find.

Another important stratigraphic observation is the accumulation of a layer of broken tiles on the mosaic floor [***Fig. 8***]. A similar layer was observed in several other places, primarily south of the room with the mosaic.[1] The collapsed roof — evidenced by the backfill of rooftiles on the floor of Room No. 4 — was never cleared. New construction on this spot did not occur until the Late Roman period. A sparse collection of small artifacts was found directly beneath the layer of rooftiles, resting on the floor. The context allows these finds to be considered especially important for dating the destruc-

1 Stamps of a *vexillatio* consisting of four cohorts of *legio V Macedonica* were discovered on the tiles (see Karasiewicz-Szczypiorski, Mamuladze, and Speidel 2021).

Fig. 8. Apsaros fort (Gonio). Layer of broken roof tiles covering the mosaic floor (Phase 3) during excavation (Photos O. Kubrak and A. Trzop-Szczypiorska)

tion of the house during its final phase (Phase 3). Among the movable artifacts, one item deserving special attention is a ribbed glass bowl made of light green glass (Isings form 3b; Isings 1957: 19–20), which is typically dated to the second half of the 1st century AD (Kunina 1997: 257–258, No. 56, Fig. 30).[2]

On the floor's surface, fragments of sigillata-type tableware were also found. These include a plate with a vertical spout (Hayes 1985: Form 1; Žuravlev 2010: Pontic Sigillata A, Form 4), dated to the late 1st–early 2nd century AD, and a deep bowl with a vertical spout and horizontal appliqué handle (Žuravlev 2010: Pontic Sigillata A, Form 28), dated similarly to the end of the 1st–beginning of the 2nd century AD.

Among the amphora sherds —mostly small and difficult to identify— one notable piece is a handle of a Rhodian amphora (Zeest 1960: 110–111, Table XXIX, 67b), a type also dated to the 1st–early 2nd century AD.

These artifacts can be considered contemporaneous with the abovementioned coins of Hadrian. Based on these observations, it is likely that the building was destroyed shortly after its last reconstruction. The commander's house, therefore, appears to have been in use for only a brief period and was never rebuilt after the roof collapsed.

The main research issues regarding the mosaic described in this article concern its technology and iconography. Several questions also relate to the future conservation of this exceptional find and its accessibility to visitors.

The mosaic is in a very bad state of preservation. The most extensive damage resulted from a large pit in the southeastern part of the room. The outer edges of the floor have also been damaged due to the dismantling of adjacent walls for building stone. Ongoing deterioration of the remaining mosaic is linked to the leaching of the mortar binder, which once held the tesserae

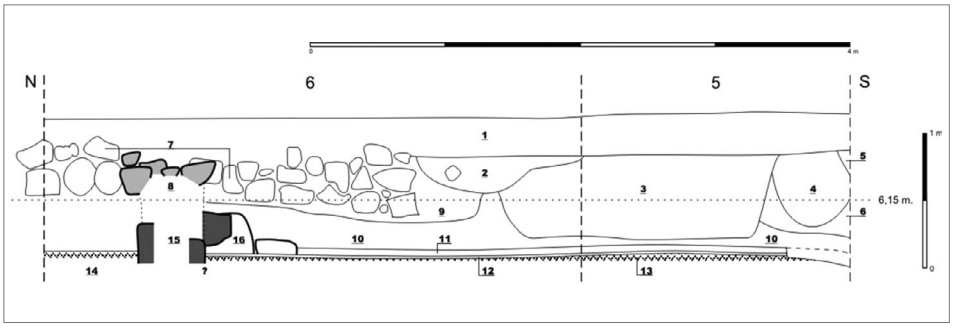


Fig. 9. Apsaros fort (Gonio). Room No. 4, section N–E: 1 – topsoil; 2–5 – later (Ottoman?) pits; 7–9 – foundations and foundation trenches of Byzantine walls; 6–10 – layers formed after the destruction of the Roman-period building (Phase 3); 11 – destruction layer (broken tiles); 12 – layer of tesserae – mosaic floor (Phase 3); 13 – floor made using the opus signinum technique (Phase 2); 14 – floor in Room No. 5 (Phase 3); 15–16 – remains of walls in Room No. 6 (Drawing M. Marciniak)

2 A ribbed bowl from the collection of the Hermitage Museum, originating from the 1905 excavations at Pantikapaion.

in place. Specific soil conditions have caused erosion of some of the tesserae, making them soft and vulnerable to mechanical damage.

The greatest damage to the mosaic was caused by the activities of the Turkish garrison stationed in the Roman-Byzantine fort during the 16th to 18th centuries. During that time, many pits were dug within the fort area, mainly to acquire building stone. At the same time, a series of round cesspits was created. These interventions caused extensive damage to the main panel of the mosaic, making it impossible to fully reconstruct the decorative motifs.

Stone floor mosaics were used long before the emergence of the *Imperium Romanum*. This form of architectural decoration was later adopted by the Romans and disseminated throughout their provinces, including the Black Sea region. Floor (and wall) mosaics made by famous Greek artisans adorned the homes of the elite (Cisek 2002: 49). This type of decoration became a standard element of interior design in both private and public spaces. The multicolored stones used by the Romans were typically cut into small hexahedrons (tesserae).

The mosaic floor from Apsaros is located in one of the main rooms of the garrison commander's residence (praetorium). Geometric motifs are depicted in the central part of the floor. The entire composition was created using the *opus*

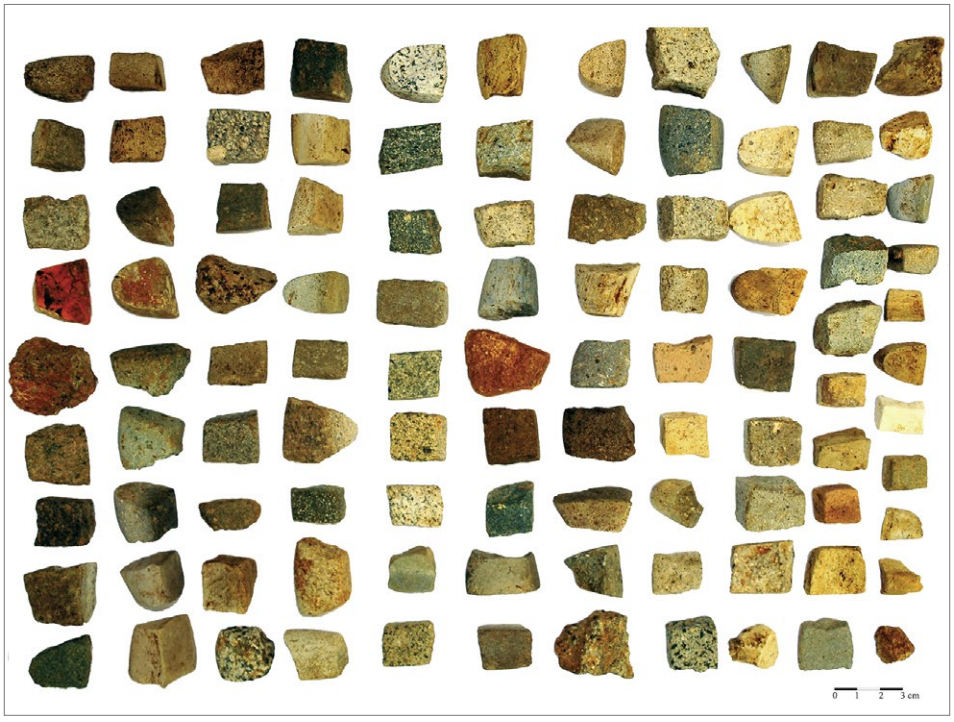


Fig. 10. Apsaros fort (Gonio). Irregularly shaped tesserae made from broken pebbles, found in Room No. 4 (Phase 3) (Photos B. Kujda)

*tessellatum* technique, probably executed entirely *in situ*. It appears unlikely that any part of the pattern was pre-fabricated in a workshop. In all probability, the tesserae were bound with lime mortar, a material commonly used in this type of work (Dunbabin 1999: 282–284). As previously mentioned, the mosaic was laid over an earlier floor constructed with mortar mixed with crushed pottery, employing the *opus signinum* technique [*Fig. 9*].

The tesserae were cut from local raw materials, specifically fragments of flat pebbles. Such multicolored stones, available along the coast or in rivers, support the theory of local sourcing. This is further indicated by the irregular shapes of many tesserae [*Fig. 10*]. Some specimens, semi-circular at the base, are clearly fragments of flat, polished stones.

Fragments of stone in various colors were used to create the mosaic. The central motif comprises tesserae in red-pink, gray-blue, and white. The background is composed of multicolored, randomly arranged fragments. Most mosaic stones measure between 1 and 1.5 cm in length and up to 1 cm in width, which is a typical size for the *opus tessellatum* technique. However, some tesserae may vary in size due to the variability of workmanship.

## MOSAIC FROM ROOM NO. 4 (PHASE 3)

The mosaic from Room No. 4 is decorated with a simple geometric pattern [*Figs 11, 12*]. It is located in the central part of the floor, creating the illusion of a carpet. A patterned strip, measuring 7.5 m × 1.7 m, was laid along the longer axis of the room (N–S). However, due to the room's layout, it was not possible to view the entire composition from the main entrance, i.e., from the atrium.

Three decorative motifs can be distinguished on the panel, arranged symmetrically across five fields: a checkerboard pattern at both ends, a motif of two diamonds flanking the central emblem, and the central motif itself, composed of half-circles arranged side by side to form a circular shape. Within this circle there is another, also made of half-circles, the center of which is filled with blue mosaic stones. A simple border in the form of a narrow band of blue tesserae surrounds the entire carpet-like panel, dividing it into geometric units. While light-colored tesserae fill the background of the central motif, red-pink tesserae were also used to articulate specific pattern elements. Each checkerboard section consists of five equal squares on the east–west axis and seven similar squares on the north–south axis. The entire design is enclosed by a surrounding border.

The checkerboard and diamond motifs are symmetrically arranged around the central field with a concentric garland design, together forming a so-called "carpet panel". A narrow band of red-pink tesserae outlines the panel, positioned about 1.5 m from the longer sides and approximately 0.5 m from the shorter sides. The area between the central panel and the red border, as well as the space between the border and the walls, is filled with the multicolored background tesserae, predominantly in shades of white and yellow.


Fig. 11. Apsaros fort (Gonio). Mosaic floor (Photos K. Nowicki; digitizing M. Bura and J. Janowski)

## WORKMANSHIP

The mosaic under discussion decorates the floor of one of the rooms in the commander's house within a fort located on the borderlands of Roman Cappadocia. In this context, both the floor mosaic and the presence of private thermae attest to the luxurious character of the house, with a standard exceeding what was typical for border garrison quarters (see Johnson 1987: 155, Fig. 101). At present, we do not know of many examples of mosaic decoration in Roman praetoria from forts. Of course, this cannot be directly correlated with the presence of such decorations in legionary camps. Therefore, several questions arise: who was responsible for furnishing these quarters, on whose order, and for whose benefit?

The method used to acquire the raw material —cutting pebbles collected from the seashore— is not a typical solution (Dunbabin 1999: 280–281). In the Black Sea region, only one other comparable example has been identified. In all probability, the same technique was employed in the military thermae at the fort located at the Ay-Todor Cape (near Yalta in Crimea) [see *Fig. 1*]. Unfortunately, the documentation from the excavations conducted there over 100 years ago has not been preserved. We have only brief descriptions and limited excavation results published in early reports (Rostovcev 1900; 1902; D'åkov 1930). Among these, D'åkov (1930: 26) noted fragments of a mosaic made from cut beach pebbles (*galka* in Russian).

Linking the evidence from Apsaros and Ay-Todor confirms that the practice of arranging mosaics from tesserae made of broken flat pebbles was not an isolated experiment.

Fig. 12. Mosaic reconstruction and visualization (R. Karasiewicz-Szczypiorski and M. Osiadacz)

The technique used was *opus tessellatum*, and it appears that the artisans worked directly on site. Although our understanding of how mosaics were laid —particularly bedding preparation and pattern design— is extensive (Romero and Vargas 2011), much less is known about the organization of mosaic workshops (Donderer 1989: 44–45; Sweetman 2001; Lichtenberger and Raja 2017). It does seem clear, however, that the majority of mosaics were laid *in situ* using pre-prepared tesserae (Dunbabin 1999: 281–282). A pit containing rejected/leftover tesserae, found near the house, may attest to this practice. Compared with mosaics known from the Southern Caucasus —let alone similar finds from the Roman East— the Apsaros floor was executed with less care, showing limited attention to the regular hexahedron form of the cubes. It can be assumed that the mosaic in Apsaros was produced by a relatively unskilled local craftsman, or perhaps even by soldiers from the local garrison. A pit filled with unused waste from tesserae production was found inside the architectural complex that houses the mosaic floor.

Whether the work began with the background or the central panel cannot be determined, mainly due to the poor preservation of the floor. Typically, experienced mosaicists began with the main panel, or installed a prefabricated *emblema* produced in a workshop, followed by the border and background (Dunbabin 1999: 281–283).

The question of who laid the Apsaros mosaic remains open. Given the mosaic's technical and aesthetic characteristics, it seems most likely that it was created by soldiers from the local garrison. It is also probable that the second mosaic —fragments of which were also found in the same house— was executed by the same hand. However, the limited remains of this second floor do not permit a definitive conclusion.

The planned restoration of the carpet-like mosaic pattern will likely involve its temporary relocation. This process will provide archaeologists and conservators with a rare opportunity to study the construction layers and underlying floor deposits in greater detail.

## SUMMARY

In the regional context, the floor mosaics from Apsaros stand out primarily due to their early date (early 2nd century AD). Only the mosaic from the River Site at Artaxata (Armenia) can be dated to the same period. Both finds —though to varying degrees of probability— may be linked to the presence of the Roman army in the eastern borderlands of the Empire and to the need to accommodate high-ranking provincial officials. However, the quality of the decorated floors differs markedly between the two sites.

At the current stage of research, the issue of correlations between the presence of the Roman army and the gradual Romanization of local elites remains open. Nevertheless, it seems plausible that Caucasian leaders and members of ruling families may have encountered mosaics during their visits to the residences of Roman military commanders and officials at locations such as Apsaros and Artaxata.

In the case of Apsaros, the reconstruction of the former garrison thermae, linked to a change in the building's function, may appear surprising. Of course, it cannot be assumed that the garrison lacked a functioning bathhouse during the period when the new mosaic-decorated house was in use. Discoveries to the west of the praetorium, however, indicate that new, much larger baths were built there.[3]

In similar cases, an additional room was typically added to the existing structure, resulting in two (or more) rooms with the same function coexisting. Sometimes an entirely new sequence of bath rooms was constructed. Such a solution was adopted in response to the growth of garrisons in various forts — for example, in Taurica (at the Chersonese Citadel and Ay-Todor Cape) (Karasiewicz-Szczypiorski 2015: 38, 108–110, 165–166; 2019: 176–177). Why was a different approach taken at Apsaros? Perhaps it was simpler to adapt the old thermae into private baths adjoining the commander's house. In other words, the garrison may have grown too large to allow for further expansion or for the old bathhouse to be incorporated into a new design.

It is worth emphasizing that the exceptional standard of the Apsaros commander's residence is underscored by the presence of mosaics in a private bath — something rare in auxiliary forts (see Johnson 1987: 155, Fig. 101). However, the mosaics appear to have been made hastily and by unskilled hands — possibly those of a soldier. In light of these observations, it is relevant to refer to Arrian's account of his inspection at Apsaros (Arr. *Peripl.* 6) and the likely prolonged stay of the governor of Cappadocia at the fort during the campaign against the Alani, around AD 135 (M.P. Speidel 1986: 658; M.A. Speidel 2009: 602).

The abovementioned five cohorts reportedly stationed near the Chorokhi River during Arrian's first visit constitute at least four more than the typical garrison for such a fort (M.P. Speidel 1986: 658). A force of that size would likely have required newly built thermae, rather than the adaptation of existing facilities. The extended (and possibly long-term) stay of Flavius Arrianus would also have necessitated a house of a higher standard than that usually allocated to the commander of a single auxiliary cohort. This raises the question: might the house with the mosaic have been prepared as quarters for the provincial governor? This hypothesis appears all the more plausible given the discovery —just west of the discussed house— of what were likely enormous thermae from the same construction phase. This interpretation is supported by excavations conducted by the Georgian expedition in the 2019 season. It is, of course, too early to draw definitive conclusions. However, the recently unearthed pool, constructed without a basement hypocaust, measures approximately 16.60 m × 6.10 m in dimensions (almost 102 $m^2$). This is considerably larger than the pools of thermae known from other Black Sea sites housing auxiliary or temporary task forces (*vexillationes*). For comparison,

3 The research results of the Georgian expedition have not yet been published.

the pool area in the Chersonese Citadel (Antonova and Zubar' 2003: Fig. 3) and in the fort at the Ay-Todor Cape near Yalta (Blavatskij 1951: Fig. 22) averaged only about 24 m². The newly-discovered pool in Apsaros is more comparable in size to the *tepidarium* in the early *balneum* of the legionary fortress at Novae (Dyczek 2011: Figs 11–13).

It is possible that the hastily made mosaics and the private baths in this house were constructed in response to a special commission from the governor of Cappadocia. This remains a hypothesis, and it is difficult to assess whether further research will yield additional evidence to support this intriguing possibility.

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## Abbreviations

| | |
|---|---|
| Arr. *Peripl.* | Lucius Flavius Arrianus, *Periplus Ponti Euxini* |
| Joseph. BJ | Josephus Flavius, *Bellum Judaicum* |
| Plin. *HN* | Caius Plinius Secundus (Pliny the Elder), *Naturalis historia* |
| RPC I | Burnett, A., Amandry, M., and Ripollès, P.P. (1992). *Roman provincial coinage* I. *From the death of Caesar to the death of Vitellius (44 BC – AD 69)*. London: British Museum Press |
| RPC III | Amandry, M. and Burnett, A. (2015). *Roman provincial coinage* III. *Nerva, Trajan and Hadrian (AD 96–138)*. London: British Museum Press |
| Tac. *Hist.* | Cornelius Tacitus, *Historiae* |

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