

INVESTIGATION OF LATE ANTIQUE PERISTYLE VILLAE IN PANNONIA LANDSCAPE – ARCHITECTURE – ARTEFACTS

ORSOLYA HEINRICH-TAMÁSKA¹ – MÁTÉ SZABÓ² – MÁRTON SZABÓ³

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The provinces along the Danube of the Roman Empire, including Pannonia, played a crucial role in Late Antique imperial politics. Their importance is attested at social, military, and economic levels, and the changes they underwent are also reflected in the Roman countryside. In Pannonia, villae and the so-called inner fortifications are excellent indicators of this process. Our research focuses on the landscape-shaping effect, the architectural character, and the social impact of these rural establishments. Here, we present the methodological background of our multiscalar (three-level) research programme and the results obtained through the case study of Alsóheténypuszta.

Keywords: Pannonia, Late Antiquity, Roman villae, peristyle villa, inner fortifications, landscape archaeology, Late Antique society, Alsóheténypuszta

INTRODUCTION

The transformation of the Danube Region in Late Antiquity brought about a marked change in the life of Roman villae. With the increasing importance of the role of the frontier provinces, which more and more often provided rulers for the Empire, the settlement structure of the hinterland was also transformed, and significant villa estates or villa-like economic centres were established. Two projects to explore these have been launched recently. The project ‘*Mutation of Architectural, Social and Landscape Space in the Mirror of Late Antique Peristyle Buildings along the Danube (MASLAP)*’⁴ concerns with the architectural, social, and landscape spaces of Late Antique peristyle buildings (a building complex around a central courtyard) in the Middle and Lower Danube provinces, with a special focus on Pannonia. The second, the research of the Late Roman villa landscape around the former Sopianae (Pécs) is the subject of a postdoctoral NKFI programme.⁵ The two topics complement each other well because of the applied approach. The MASLAP project analyses Late Antique sites with peristyle buildings dating from the 3rd to the 7th centuries AD on three levels: a macro-scale, focusing on whole sites and their role in the landscape/environment; a meso-scale, examining the interior courtyard buildings from the perspective of the sociology of architecture, and a micro-scale, analysing the social context of individual buildings or settlement units based on associated artefacts.

This threefold perspective allows one to reconstruct architectural and functional (administrative/representational) changes in the peristyle buildings and analyse associated social contexts. In addition, it makes it possible to determine the place and function of the buildings within the settlement and the region, with particular reference to topographical features and infrastructural development. In this paper, we provide insight into the three scales mentioned above and illustrate the perspectives and results of such research through the example of Alsóheténypuszta.

¹ Prof Dr Orsolya Heinrich-Tamáská, archaeologist, Leibniz Institute for the History and Culture of Eastern Europe (GWZO), email: orsolya.heinrich-tamaska@leibniz-gwzo.de

² Dr Máté Szabó, archaeologist, research associate, HUN-REN Research Centre for the Humanities, Institute of Archaeology, email: marton.szabo@univ-lille.fr

³ Márton Szabó MA, archaeologist, doctoral student, Université de Lille, email: marton.szabo.etu@univ-lille.fr

⁴ Université de Lille (I-SITE ULNE, HALMA-UMR 8164. (<https://maslap.univ-lille.fr/>). Project leaders: Orsolya Heinrich-Tamáská and Dominic Moreau.

⁵ Máté Szabó: NKFIH PD 138585, HUN-REN Research Centre for the Humanities, Institute of Archaeology.

VILLAE AND LANDSCAPE ARCHAEOLOGY: THE MACRO-SCALE

The research of Roman villae in Hungary has benefited from non-invasive archaeological methods, allowing us to understand their interaction with their surroundings (SZABÓ 2012). Our projects meet in landscape archaeology: aerial archaeology and geophysical methods make it possible to investigate not only the buildings but also the environmental conditions of the sites, the formation of the landscape, the traces of its use in the Roman Period, and the network of roads connecting the sites. In obtaining results at a landscape level beyond the narrow limits of the sites, we rely primarily on aerial photographs, which, together with ground penetrating radar surveys and environmental studies, can also contribute to refining the typology and relative chronology of individual features (e.g., NEUBAUER *et al.* 2012; DONEUS *et al.* 2018a; DONEUS *et al.* 2018b; KLAMMER 2018; SZABÓ 2020).

The focus areas include sites in very diverse states of research. Some selected for the MASLAP project, like Aszófő, Kékkút, Tokod (*Fig. 1*), Keszthely-Fenekpuszta, and Alsóheténypuszta have more detailed data and allow us to compare the results of non-invasive surveys of the last decades with those of older excavations and field investigations, whereas the state of research of sites in the area of Sopianae is at an entirely different level (e.g., Hosszúhetény; *Figs. 2–3*). Nevertheless, we aim to produce results that can be standardised and analysed in a comprehensive landscape-archaeological way.



Fig. 1. Tokod, the relationship between the fortress and the villa based on recent investigations. The background of the features is provided by the multi-directional shadow effect model recorded in the micro-relief survey of the area (by Máté Szabó)

The presence or absence of villa estates in a given area depends on the character of the landscape but not exclusively or primarily; it is more affected by combined natural, social, and economic factors (RIVET 1969, 169–170; ROYMANS & DERKS 2011, 3, 9), the interplay of which influences the changing character and role of the villa estates; the related transformations can be observed even at landscape level (in the appearance and disappearance of villa-dominated landscapes).

The impact of the transformations on villa architecture in Late Antiquity is well illustrated in our projects' focus area. The rise of Sopianae as an administrative centre during Late Antiquity coincided with the rise in importance of the region and the emergence of a villa-dominated landscape (SZABÓ 2015, 88). The

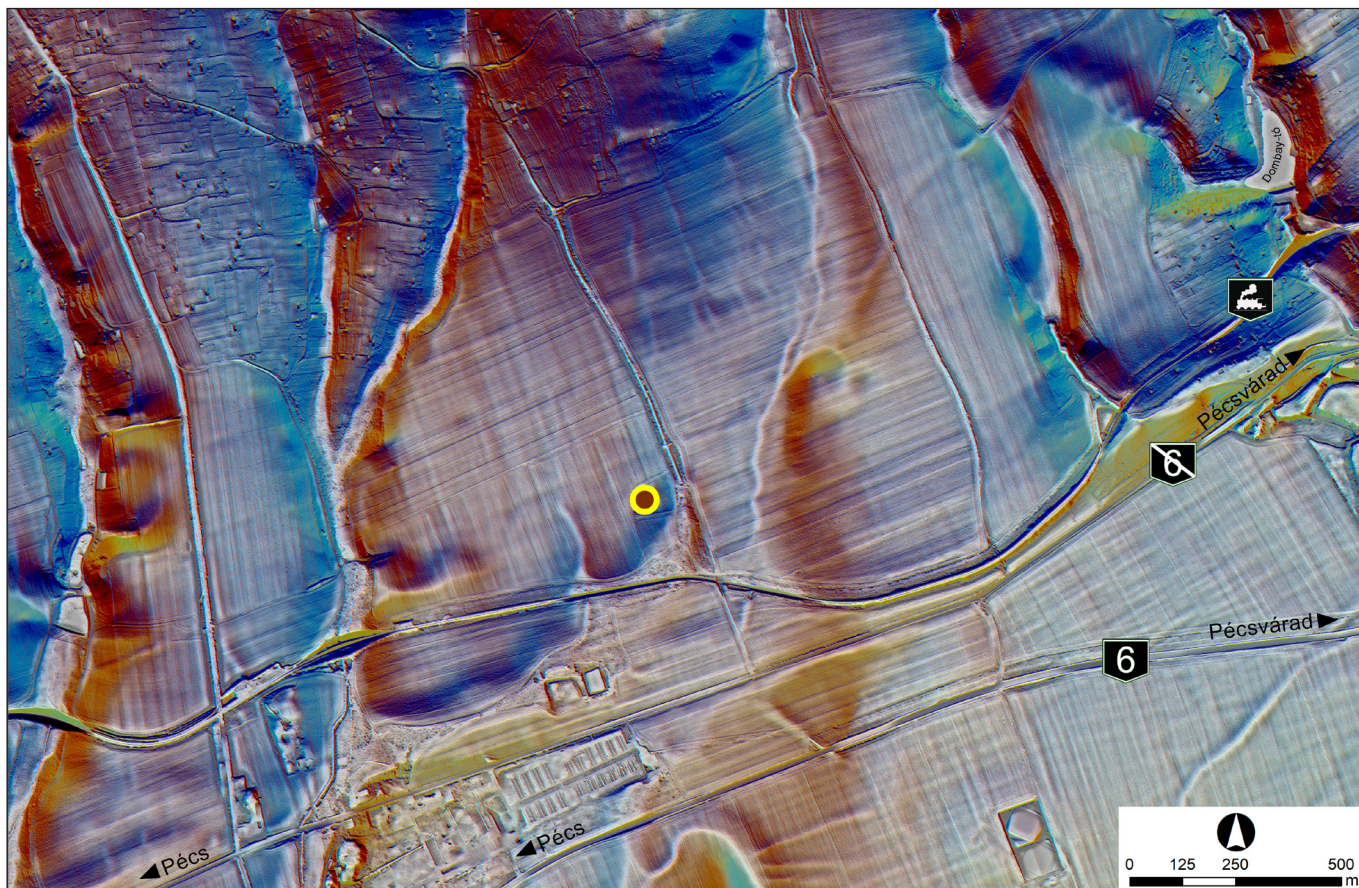


Fig. 2. Hosszúhetény, map with landscape-archaeological information (a micro-relief model with Multi-HS and Local Dominance visualisation). Yellow circle marks the location of the main building of the villa, while the former and present-day main road (Road 6) and the railway are marked in the southern part of the area (ALS data source: JPM, map by Máté Szabó)

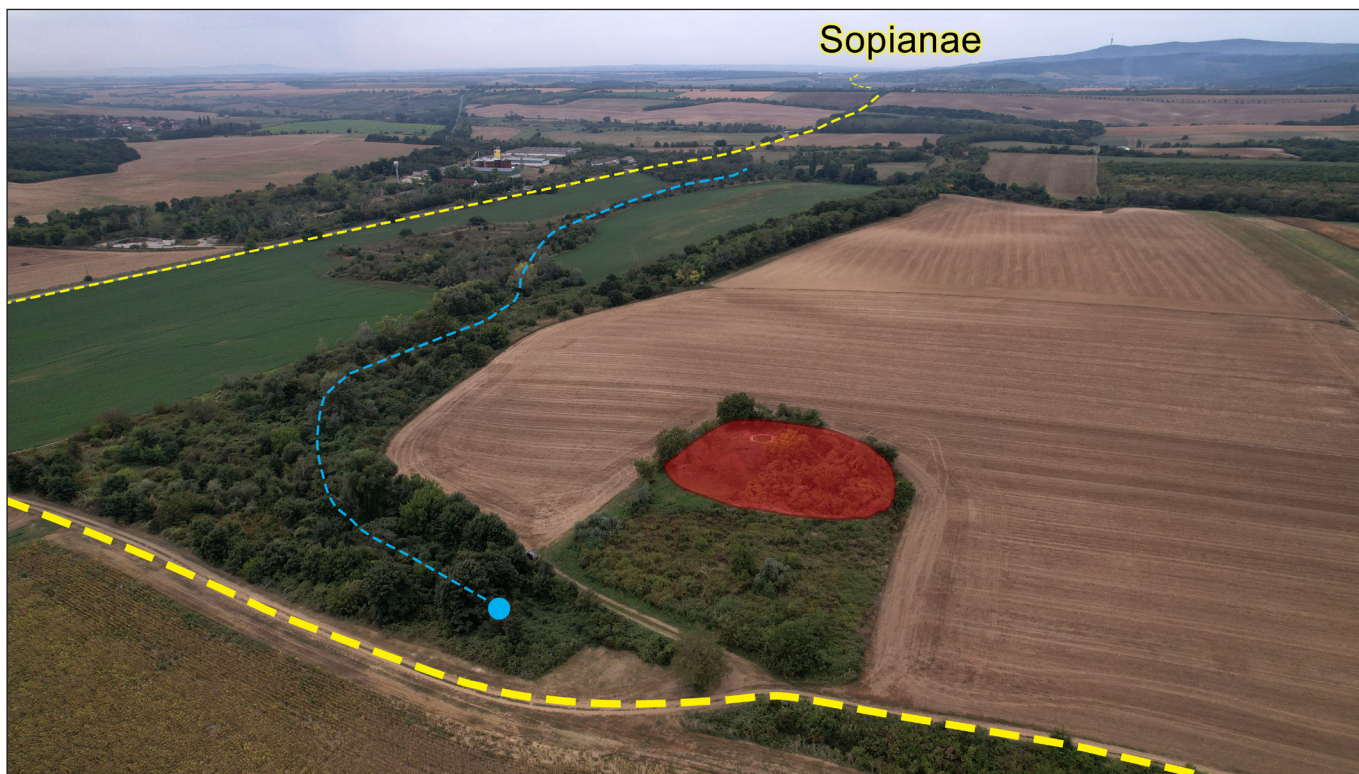


Fig. 3. Hosszúhetény, surroundings of the villa on an aerial photo taken towards the direction of Pécs-Sopianae (yellow: roads that may have existed in Roman times; blue: spring and stream in the vicinity of the villa; red: location of the main building of the villa estate)

most conspicuous development and dominance of villa estates in this permanently inhabited area was the result of the administrative transformation of the area during the Tetrarchy (AD 293–324), reflecting that the existence and role of villa estates were closely linked to the social and economic prosperity of Sopianae. The villae, rebuilt or newly created in a similar style, could serve not only economic purposes but also as a manifestation of the local elite's wealth and prestige (MRÁV 2021, 13, 18–19).

VILLAE AND ARCHITECTURE: THE MESO-SCALE

The peristyle is a common feature of Greco-Roman architecture, combining elements of seclusion (shutting oneself off from the outside) and inclusion (opening onto the interior). The term describes an open courtyard or garden within a house of rectangular or square plan. The columns or square pillars surrounding the garden supported a roofed portico (EMME 2013, 230–233; ELLIS 1991; SMITH 1997, 172–195). The peristyle villa (*domus*) was defined by P. Simon ELLIS (1988, 565) as the ideal 'Roman house', emphasising the close connection between this building type and the Roman elite.

In Late Antiquity, the peristyle was combined with an *aula* with an apsidal end or *aula absidata/basilica* (TEICHERNER 2011, fig. 6; ZABEHLICKY 2011, fig. 8). The *aula*, a central space in Late Antique representative buildings, has clearly symbolic dimensions: the single nave is twice as long as wide and a round or polygonal apse is attached to the short side. The floor of the central apse is generally somewhat narrower, and its level is higher than that of the nave. The *Kyborion/coborion* (canopy) erected over the throne clearly symbolised, according to the imperial code, the sky above the head of the *cosmocrator*-emperor, as did the semicircular layout of the apse. The *aula* could be entered through three richly decorated doors (ALFÖLDI 1935, 130; TREITINGER 1956, 56–58). The ground plan of the peristyle is ideal for separating the political and administrative (communal) spaces from the private and representative (particular) domain (MEYER 1999, 118, fig. 13). This scheme appears in many different social contexts in Late Antiquity, both in urban and rural settings, in civilian as well as military situations.

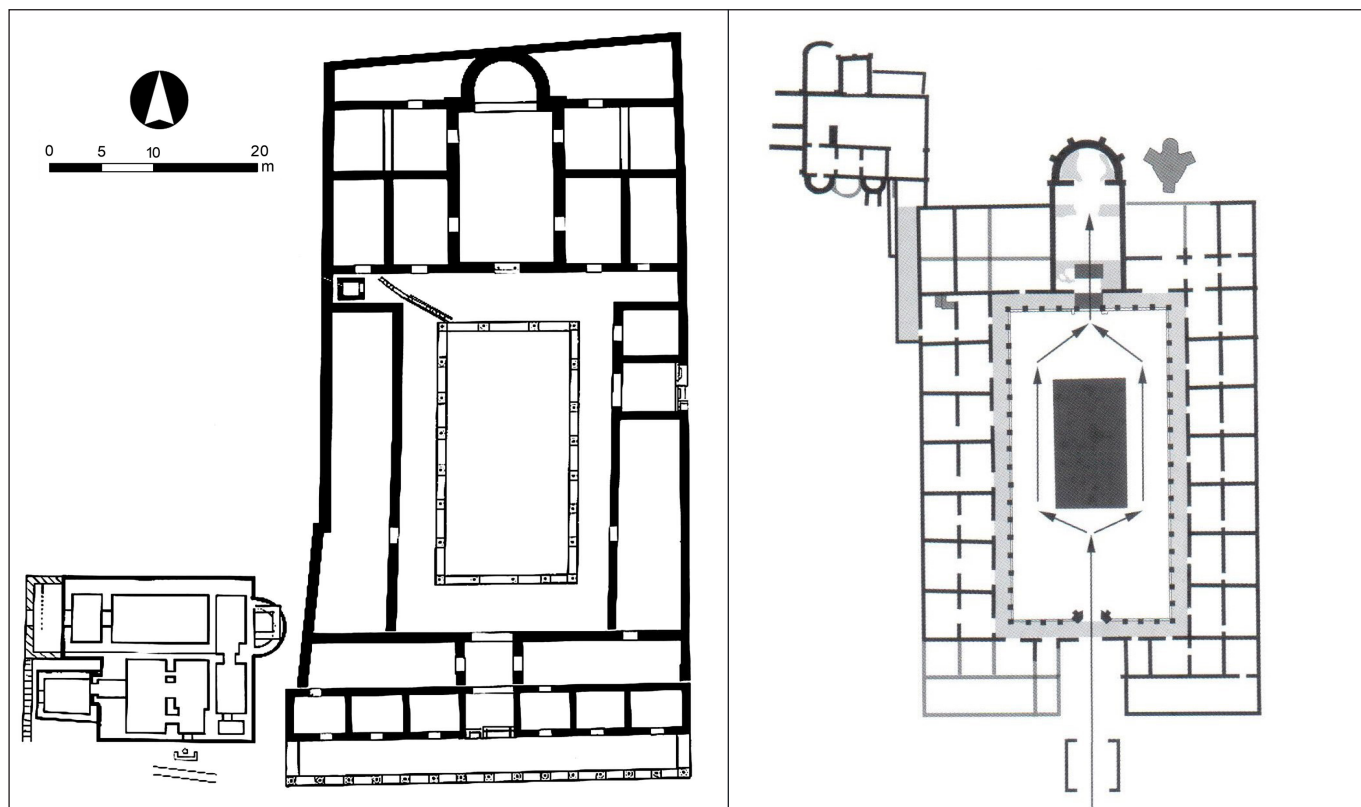


Fig. 4. Left: Abritus, main building with a peristyle (Building VII, Period 3, 6th century AD; after RADOŠLAVOVA 2011, fig. 4); right: Mediana, villa with a peristyle, an assembly hall, and baths (Period 2, AD 330–378; after MILOŠEVIĆ 2011, fig. 6.1)

The villa buildings studied in the MASLAP project can be divided into two main categories. The first consists of classic Late Antique villa estates. Here, we focus mainly on sites from the northern shore of Lake Balaton and the Balaton highlands (e.g., Kékkút and Aszófő). Their evaluation is closely related to the Late Roman peristyle villae around Sopianae (e.g., Hosszúhetény: THOMAS 1964, 355–365). The second group is related to the so-called Late Roman ‘inner fortifications’ of Pannonia. The main buildings with a peristyle, an apsed *aula* of such fortifications and the villa estates have several elements in common; they seem to differ only in the degree of interior decoration (HEINRICH-TAMÁSKA 2011; TÓTH 2022). Such buildings can be found not only within the fortifications but also in their immediate vicinity (*extra muros*), like in Alsóheténypuszta (SZABÓ *et al.* 2022, 72–79) or Tokod (SZABÓ 2011, 158–162).

These two groups can also be distinguished in the Lower Danube provinces. Peristyle villae are present in the hinterland of the Danubian *limes*, in fortifications and towns, as the example of Abritus (*Fig. 4 left*; DINCHEV 2008, 407–408, fig. 4; 2018, 359–367; IVANOV 1985, 68–69, fig. 4) and the ‘palace’ in the imperial *castrum* of Gamzigrad show (VASIĆ 1993). Peristyle buildings also appear among the main buildings of classic villa estates like Mediana (*Fig. 4 right*), Madara, or Gorotsvet (MULVIN 2004, 385–390).

The floor plans of all buildings mentioned above can be linked to the theory of the so-called ‘*Raumkanon*’ (‘space canon’), based on separating public and private spaces and governing the line of sight between them (MEYER 1999, 118–119; EMME 2013, 229–230, fig. 45). The peristyle is in the centre, controlling entrance to and exit of the building and acting as a distributive space through which the interior rooms of different functions can be reached. The *aula* or *triclinium* is mostly located on the opposite side of the entrance hall, providing a clear view of it. The spatial canon relying on the axis of these three main elements reflects the rhythm of social hierarchy and interactions.

VILLAE AND ARTEFACTS: THE MICRO-SCALE

The micro-scale of the MASLAP project focuses on the find material recovered from Pannonian peristyle villae with an apse and *aula*, including architectural fragments (frescoes, mosaics), and artefacts with inscriptions. These are classified according to find context, including findspot, archaeologically datable layers, building periods, and the different kinds of rooms, thus making it possible to deduce the role the building fulfilled in each period and the diverse functions of its rooms. Its primary aim is a typochronological evaluation of the finds, and the results are also used in analysing the social context of the buildings as a whole and the individual rooms.

In addition to classic villa estates, such as those in the Mecsek Mountains (SZABÓ 2020), around Aquincum (THOMAS 1964, 250–255; TOPÁL 1994), in the highlands of Lake Balaton (THOMAS 1964, 34–49; 52–59; 118–122; BIRÓ 1974, 31; 37; 40–41; MÓCSY *et al.* 1990, 226; 231; PALÁGYI 2003; FIRNIGL 2012), as well as in the Lake Fertő region and the area between the Drava and Sava rivers (MÓCSY 1974, 169; 173; 299; 302; MULVIN 2004, 385–390; LELEKOVIĆ & RENDIĆ-MIOČEVIĆ 2012), our research also covers the central buildings of the ‘inner fortifications’ (HEINRICH-TAMÁSKA 2011; TÓTH 2022).

Thus, by selecting various important examples, we hope to create a comprehensive picture of the social layers, military and civilian groups, and elites associated with these villae. The comparative typological analysis and the comparative evaluation of analogous traits and differences will hopefully provide additional information on the different, complex functions (representative, commercial, and/or administrative) of each villa building. This not only yields more information about the social and economic status and their changes of the inhabitants but also provides new evidence of the possible continuity of use of the buildings after the end of Roman rule.

ALSÓHETÉNYPUSZTA (ALSÓHETÉNY, ALSÓHETÉNY-SÜLLYEDTVÁR): A CASE STUDY AT THREE LEVELS

A representative example of our projects is Alsóheténypuszta (Tolna County, Kapospula-Alsóhetény), a Late Roman settlement unit in the hinterland of the Pannonian defensive system and on the northern border of the

regional villa-dominated landscape of Sopianae. The site has allowed us to study the relationship between a Pannonian inner fortification and its interior villa buildings and an *extra muros* villa estate (Figs. 5; 7). Thanks to the non-destructive surveys conducted in the last decade, we have been obtaining increasingly detailed pictures of not only the organisation of the inner fortifications themselves but also their surroundings and use of the landscape (RUPNIK *et al.* 2022; HEINRICH-TAMÁSKA 2014; SZABÓ *et al.* 2022; HEINRICH-TAMÁSKA & SZABÓ 2019; SZABÓ 2017, 298–310). Their exact role has remained a matter of debate, as the various architectural and material remains associated with the facilities attest to both economic and military functions; however, they seem best interpreted as military logistical centres (HEINRICH-TAMÁSKA 2015; VISY 2018).

In Alsóheténypuszta, we can expect new results mostly from examining the landscape on a macro-scale. While the systematic aerial and geophysical investigations of the last two decades have enabled a detailed evaluation of the fortified area and its surroundings, the site also proved to be ideal for targeted geophysical surveys (at the meso-scale) focusing on peristyle buildings. Moreover, future research includes evaluating the archaeological artefacts recovered during the excavations in their find contexts (micro-scale).

The nearly rectangular fortification of Alsóheténypuszta, measuring 20 hectares, was built at the beginning of the second third of the 4th century AD, and its second phase, with round towers, was dated by Endre TÓTH (2009, 64–71) to the rule of Valentinian I (AD 364–375). Traces of twenty-one buildings have been identified within the walls; the ground plans of ten have only become known thanks to the aerial surveys of the last years (SZABÓ *et al.* 2022, tab. 1, fig. 18). The springs (the water of which could be channelled and possibly swollen into an artificial lake), next to which the remains of several baths were found, and the hillslopes, (located mainly in the northern part of the fort) where groups of agricultural buildings and granaries were identified probably played a decisive role in the villa's choice of location.

Villa-like edifices, including two large peristyle buildings (TÓTH 2009, 48–49), are situated in the southern parts of the fortified area. In the east, Building VIII, previously defined as the main building, dominates the area (TÓTH 2022, 43–45, fig. 5), while in the west, there is a similarly complex and large building (Building IX: SZABÓ *et al.* 2022, 91–92, fig. 38a–d) (Fig. 5 centre and left). Building VIII is in a central position within the fortification, on a small elevation surrounded by the confluence of two streams, while Building IX is situated on the hillside, farther away from water. GPR surveys were carried out in the area of both buildings; the results not only clarified their ground plans but also raised the possibility that they may have different construction phases.

The size and ground plan of Building VIII show a connection with the first phase of Building 25 of the inner fortification of Keszthely-Fenékpuszta (HEINRICH-TAMÁSKA & PRIEN 2017/18, 138–140, fig. 10). Apart from a few traces of interior decoration, the canons of the two buildings are similar: the entrance of each was on the southern side, and from here the main line of sight led northwards through the inner courtyard to the *aula apsidale*. It has remained a question whether the south-western wing of the building in Alsóheténypuszta, which also has an *aula*, is a later addition; we also do not know its function (Fig. 5 right).

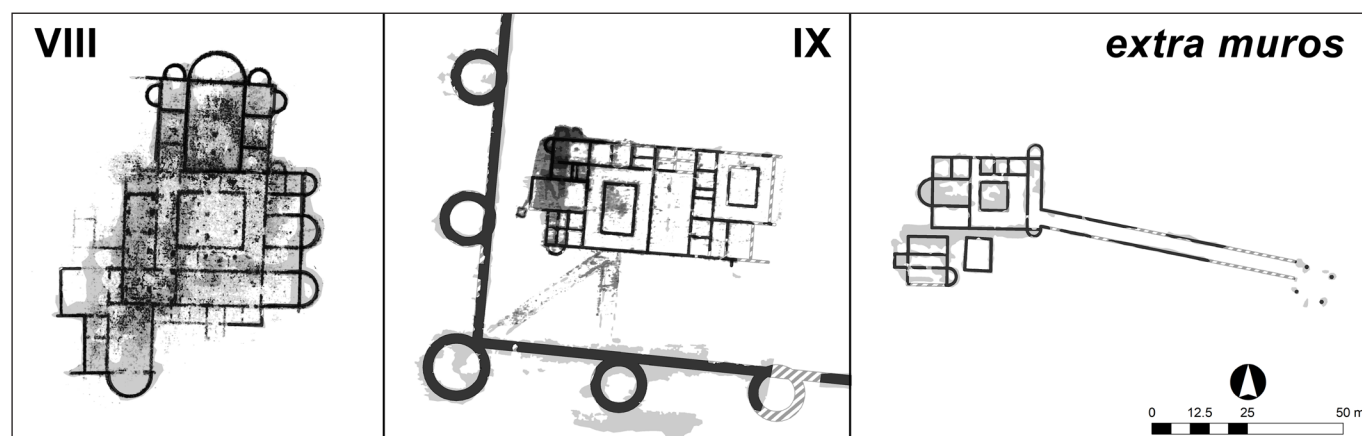


Fig. 5. Alsóheténypuszta, floor plans of peristyle buildings. Left: Building VIII, centre: Building IX and right: *extra muros* (by Máté Szabó)

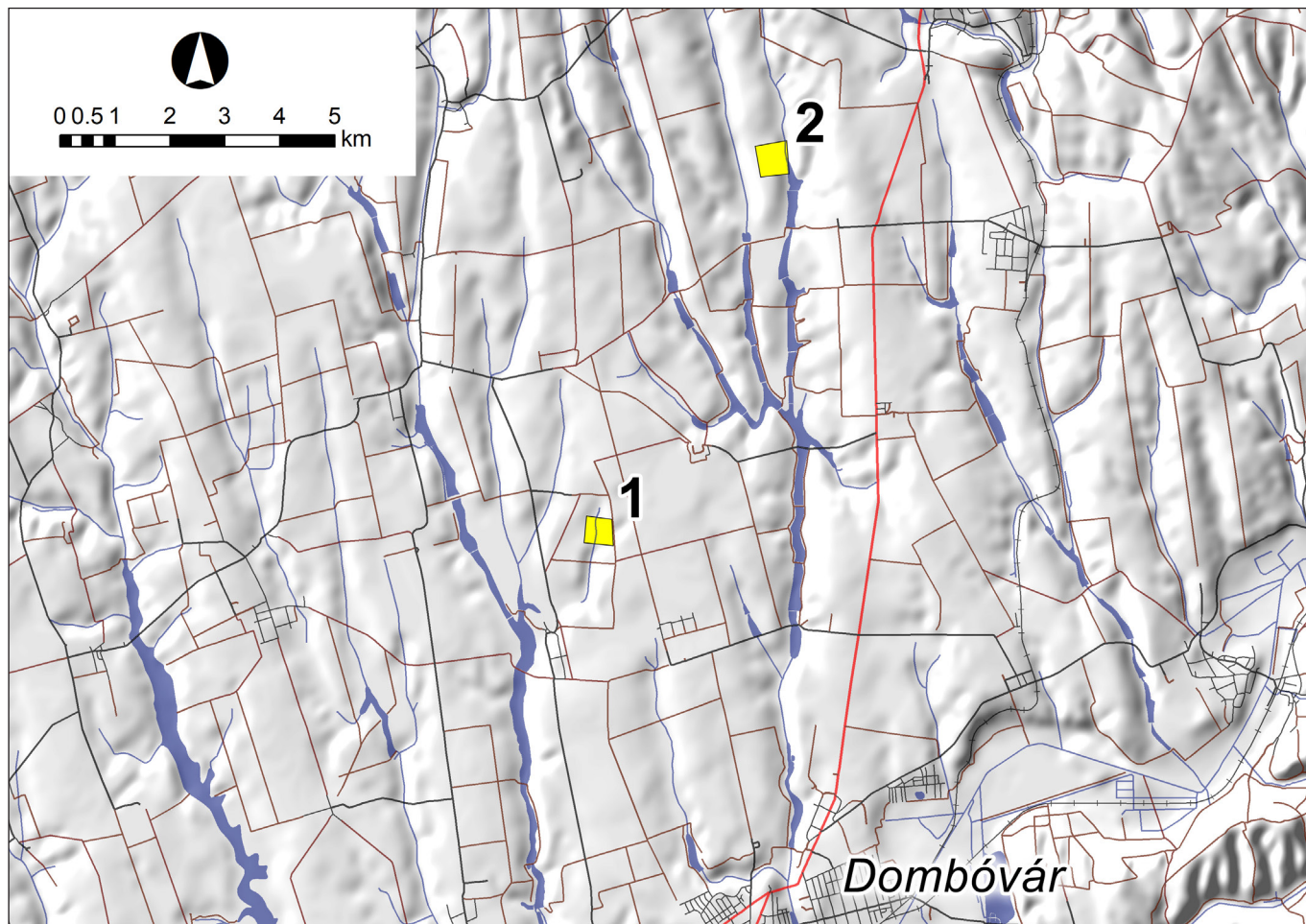


Fig. 6. 1, Alsóheténypuszta and 2, Szakcs-Gölösi-dűlő, characteristic landscape structure and relationships of the surroundings (topography, hydrography, and road network; by Máté Szabó)

Building IX has two inner courtyards, but whether the floor plan reflects two or more building phases is unclear. Interestingly, corridors lead from the southern side of the courtyard to the south-western corner tower of the fortress and the first tower to the east along the southern defence wall (Fig. 6). The current evidence suggests that the two buildings (VIII and IX) are aligned with the layout and orientation of the fortress and were erected at the same time; however, in the absence of more precise data, it is not possible to establish a relative chronology. The position of both buildings and the dual military and economic role of the inner fortifications allow us to suggest a military-administrative function for Building IX and a private-representative function for Building VIII.

An organic field system and road network are visible in the immediate surroundings of the fortress of Alsóheténypuszta, showing irregular patterns in detail (Fig. 7). Although the picture may seem unusual at first sight, the main lines of this system also acknowledge the Roman buildings (by avoiding buildings, etc.). Without further data, the exact relationships and chronology of the features are not known, but there are good analogies of similar organic structures from other parts of Pannonia. Based on the examples of Bőny (SZABÓ 2016, 198; 2017, 138–148, 340) and Halbturn (DONEUS *et al.* 2018a, 219–221), these features may be contemporaneous with antique structures. The above indicates that possibly a combination of ‘regional’ and ‘local’ landscape elements (field systems, roads, etc.), akin to the one in Halbturn, was observed in Alsóheténypuszta; however, further investigations are needed to clarify this question.

The aerial photographs show a complex of buildings characteristic of a villa estate, with a main building and outbuildings connected by paths and colonnades (Figs. 5 right and 8) south-west of the fortified area, in the organic network of field boundaries and roads. Since only non-destructive investigations and previous field surveys are available, the dating of the remains is uncertain (SZABÓ *et al.* 2022, 72–79).



Fig. 7. Alsóheténypuszta, archaeological and landscape features of the fortified area and its surroundings (by Máté Szabó)

The main building measures nearly 30×20 m, with a square peristyle in the centre, an *aula* on the west, and a portico in the east with an apse at its northern and southern ends (Fig. 5 right). During evaluation, several groups of features could be distinguished based on orientation. One of these, parallel to the western wall of the fort, at about 100 m from its ditch (*fossa*), shows structures aligned with the south-western corner of the fortification (SZABÓ *et al.* 2022, 72, fig. 14). A similar configuration is known in Tokod-Várberek (Fig. 1), where the remains of a coeval villa estate were observed west of the Late Roman fortress (SZABÓ 2011, 158). It is, therefore, possible that the fortification and the *extra muros* villa building in Alsóheténypuszta were contemporary; however, without excavations, the question remains unanswered.

The disputed function of the inner fortifications also affects the question of who inhabited and used these buildings and what social layers can be connected to these types of settlements. In this respect, early Christian monuments are especially important in Alsóheténypuszta. While excavating a 4th-century AD cemetery southeast of the fortification (Fig. 7), Endre Tóth discovered a 39 m long building, which he interpreted as a mausoleum. He distinguished the individuals buried inside it from those in the graves outside not only because of their supposed Christian background but also because of their high social status. Although only a few clothing items were recovered from the graves, the textile remains decorated with gold threads suggest that the people buried there belonged to the local elite (TÓTH 1987/88; SÍPOS 1990).

The relationship between the elite, early Christianity, and the military is also illustrated by two further artefacts: a helmet nose-plate and a gilded bronze plate/badge, both decorated with a Christogram (Fig. 9). The nose-plate was found during the excavations of the fortification's western defence wall (TÓTH 1991, 39). The fragment is from a stack of multiple-folded silver sheets that may once have covered an Inter-cisa III-type helmet (Fig. 9.a). These silver sheets were gilded (KOC SIS 2003, 521, 530). The central part

of the sheet shows an unframed *Chi-Rho* (*XP*) motif embossed on the back (Kocsis 2003, 522).

Neither the find context nor the function of the other plate with a *Chi-Rho* motif is clear (Fig. 9.b). It is a gilded bronze sheet with a circular Christogram in relief at the centre (Tóth 1987/88, 59; Gáspár 2002, 50). Endre Tóth originally identified the find as a brooch, but it has also been suggested that it may have been used as a liturgical instrument, as part of a bishop's *pallium* (Tóth 1987/88, 59; Gáspár 2002, 50; Kocsis 2003, 532; Tóth 2009, 176).

Several fragments bearing a Christogram akin to the latter bronze sheet from Alsóheténypuszta have been found in recent decades (e.g., Miks 2008, 456), suggesting that it was also part of a helmet. The growing number of analogies made a typological classification of such finds possible (Migotti 1997, 6, 58; Sostarits 1997, 314–315); however, it cannot be excluded that the fragment, originally worn on the helmet, was later given a secondary use (Miks 2008, 460; Kocsis 2013, 124; Prins 2003, 319–320).

The helmet decoration from Alsóheténypuszta dates to the second half of the 4th century AD, as does the helmet plate described above (Kocsis 2003, 534). Military helmets bearing Christograms are generally associated with high-ranking military officials, and the material of the two sheets highlights their value. They may be related to the protective function of a

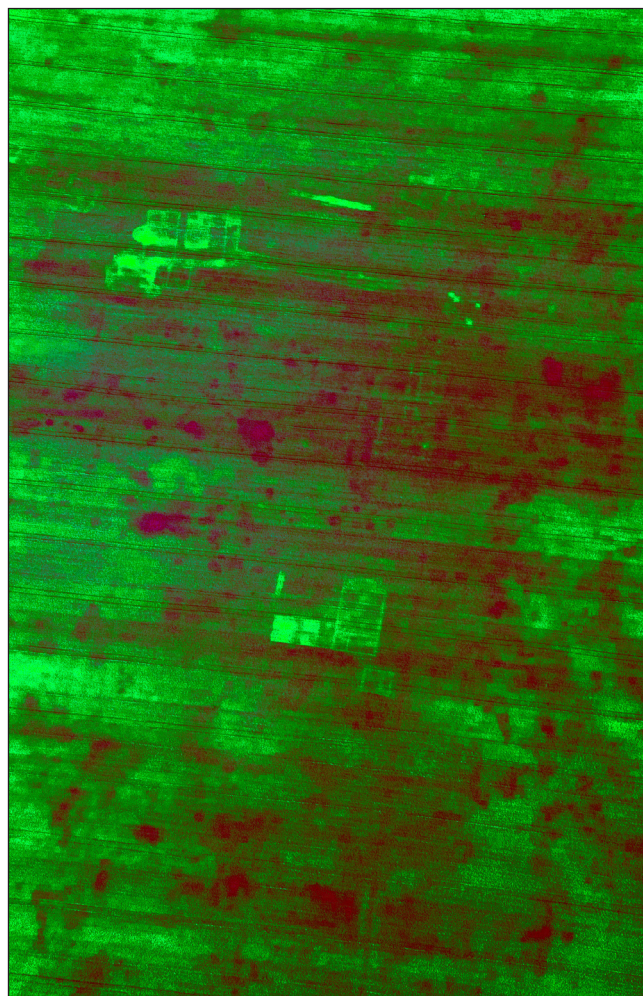


Fig. 8. Alsóheténypuszta, the extra muros villa estate on an aerial photo (by Máté Szabó, 22.06.2011; PLT 39345)

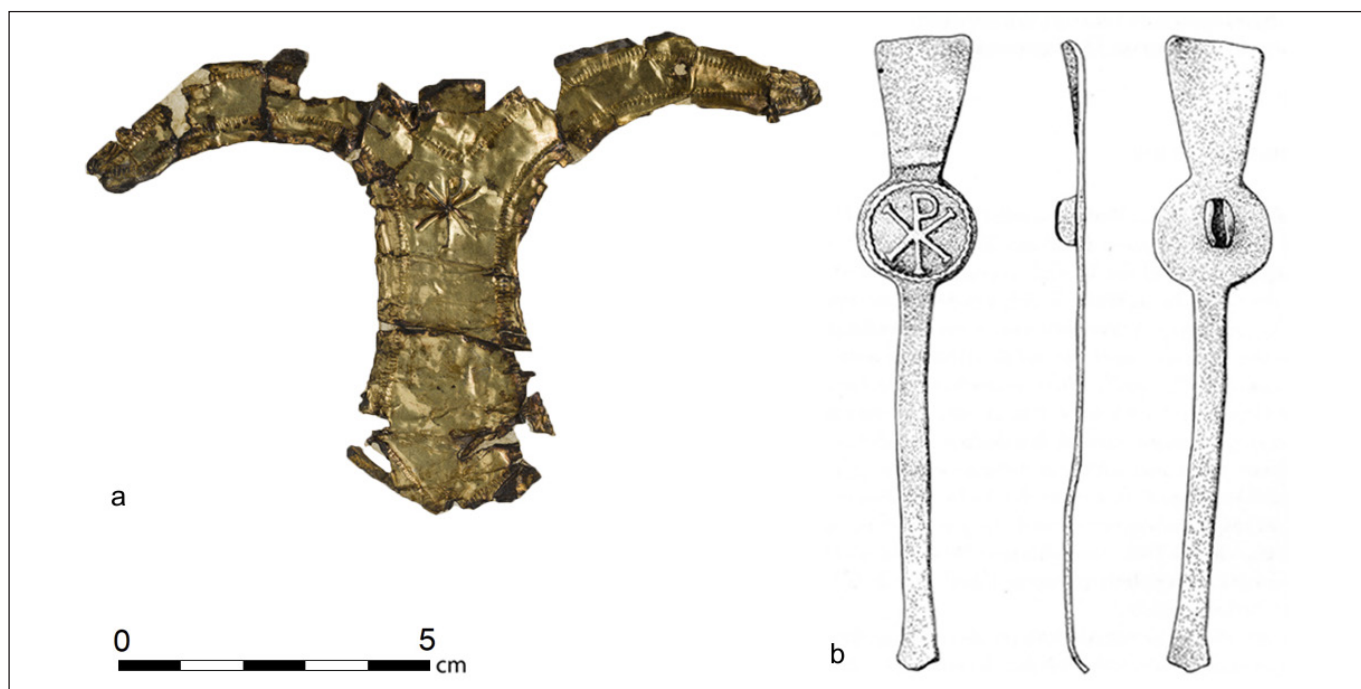


Fig. 9. Alsóheténypuszta, two artefacts with Christograms. A, nose-plate with a Christogram (after Kocsis 2003, fig. 1.1); b, gold-plated bronze helmet ornament (after Tóth 1987, fig. 25)

new, powerful deity but may also indicate an individual profession of faith and loyalty to the emperor and the ruling family (Kocsis 2013, 123). Of course, reading such meaning into the two Alsóheténypuszta fragments is highly hypothetical, given the lack of archaeological context in one case and the uncertainty of interpretation in the other. The fragments excavated at the gate tower suggest they were buried for the valuable metal to be recycled later. Be that as it may, our two finds fit well into the picture of Late Antique Alsóheténypuszta described above since the cemetery is as much a sign of a local upper class as the villa buildings of the inner fortification, evoking an architectural style connected with the civilian elite.

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