

Sonderdruck

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Conference »Late Republican and Early Augustian influences on the fringes of the Eastern Alps – architecture and military« in Magdalensberg (Carinthia), June 10th, 2022



Sonderdruck aus Fundberichte aus Österreich, Band 60, 2021

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Impressum:

Herausgeber: Univ.-Doz. Dr. Bernhard Hebert, Bundesdenkmalamt, Hofburg, Säulnstiege, 1010 Wien, bernhard.hebert@bda.gv.at

Englisches Lektorat: Dr. Andreas Picker, Bundesdenkmalamt

Redaktion: Mag. Nikolaus Hofer, Bundesdenkmalamt

Bildbearbeitung: Stefan Schwarz

Satz und Layout: Berger Crossmedia

Layoutkonzept: Franz Siegmeth

Coverdesign: BKA Design & Grafik

Covergestaltung: Martin Spiegelhofer

Foto Cover: Ausgrabung am Magdalensberg 2019 © ISBE

Druck: Digitalprintcenter des BMI, 1010 Wien

ISSN: 0429-8926

Conference »Late Republican and Early Augustan influences on the fringes of the Eastern Alps – architecture and military« in Magdalensberg (Carinthia), June 10th, 2022

INTRODUCTION

BERNHARD HEBERT and KATRIN SCHWARZKOGLER

The Magdalensberg in Carinthia is Austria's most iconic site connected with the beginning of the Roman period in the Eastern Alps. Extensive rescue excavations took place in its summit area in 2019/2020, which will soon be published as a monograph by excavation director Georg Tiefengraber and his team.

The international conference organized by the Austrian Federal Monuments Authority took place on June 10, 2022 in the Gipfelhaus Magdalensberg. The expansion of this hotel was the reason for these cause-funded archaeological investigations. The conference ended with a walk across the summit area with its impressive ancient terracing and fortifications that can be easily made out in the landscape.

The conference's aim was to embed the recent findings at Magdalensberg in the latest research results on contemporaneous sites at the eastern edge of the Alps. In the discussion led by Bernhard Hebert, similarities and differences between the sites became just as clear as the chronological reliability of certain types of finds, especially the hobnails. What remains variable is the sometimes purely military but also clearly civilian or mercantile character of the settlements. Many sites thus differ in terms of their architecture and spectrum of small finds, their pre-Roman uses and the intentions behind the rise of Roman influence, which, if it was not a military action from the outset, seems to have had (also) a military aspect in most cases.

The speakers have agreed to make the summaries of their presentations available for an online publication by the Federal Monuments Authority, which will then be included in the digital part of the annual journal *Fundberichte aus Österreich*.

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THE TRIESTE REPUBLICAN MILITARY FORTIFICATIONS

FEDERICO BERNARDINI

The archaeological data and the available ancient literary sources do not allow us to precisely reconstruct the complex cultural palimpsest of the Karst area and of its neighbouring regions during the 2nd century BC, when the Romans progressively began their expansion to the east of Aquileia. At this time, Celtic tribes belonging to the Carni group had probably settled in the territory of present-day western Slovenia, which also includes part of the Karst. They occupied this area in the Late Iron Age at the expense of human groups who were culturally related to the populations that inhabited the territories of modern-day Veneto and Friuli. The necropolis of Socerb, in use at least since the 6th century BC up until the 1st century AD, is the most important site in the area of Trieste to have yielded Celtic remains, consisting mostly of weapons. However, ancient sources state that, at the beginning of the 2nd century BC, the coastal strip of Trieste and the Istrian peninsula, previously under Venetic influence, was controlled by the Histri.

Within this complex cultural mosaic, we must place the Roman expansion that occurred towards the end of the 3rd century BC. Literary sources report several conflicts in this region in the 2nd century BC, both before and after the foundation of Aquileia in 181 BC. The first, known as the First Istrian War, between Rome and the inhabitants of Istria occurred in 221 BC. Later, in 183 BC, the Romans forced a Celtic tribe, settled a few years earlier not far from the future colony of Aquileia, to come back to their territory beyond the Alps. Other clashes between the Romans and the Histri occurred during the foundation of Aquileia, an episode labelled the Second Istrian War by some scholars. However, it was only during 178–177 BC that Istria was conquered, during the conflict variously labelled the Second or Third Istrian War. In 176 BC, a garrison of *socii nominis Latini* was stationed in the Istrian territory to control the indigenous

population. In 171 BC, the consul G. Cassius Longinus mistreated the Histri, Carni, and Iapodes, so in 129 BC, further military expeditions were undertaken against the Taurisci, Histri, Iapodes and perhaps Carni and Liburni, in 119 BC against the Segestani, and in 115 BC against the Carni.

During the 1st century BC, according to literary sources, several Roman military campaigns were organised against the populations of the northern Balkans, mainly the Iapodes. The Romans probably defeated them, together with the Liburni and Taurisci, between 78 and 76 BC, and carried out at least two further, but unsuccessful, campaigns in the period approximately 55–35 BC. In 52 BC, the Iapodes plundered Tergeste and threatened Aquileia. They were only definitively defeated, together with the Pannonii and Delmatae, by Octavian in 35–34 BC.

Considering that the north-eastern Adriatic regions remained politically unstable from the foundation of Aquileia until at least the mid-1st century BC, the recent identification of Roman Republican military fortifications close to Trieste is not so surprising. The fortification system, aligned facing northern Istria, consists of a large main camp (> 20 ha) located on the San Rocco hill, flanked by two smaller structures, 4 km to the north-east at Grociana piccola (ca. 2 ha) and 1.4 km to the south-west at Monte d'Oro (ca. 0.4 ha; Fig. 1). After the first identification, they have been investigated through geophysical methods, surface surveys and small-scale excavations.

Mt. Grociana piccola is located in the south-eastern sector of the Trieste Karst. It overlooks part of the Karst plateau to the north and south and the Muggia Bay in the Trieste gulf to the west, as well as the routes leading from the sea north towards Aquileia, inland towards the area of modern Slovenia, and south-east to the Kvarner gulf (in modern Croatia). The site, therefore, had a strategic importance. Grociana piccola, intervisible with San Rocco, could have controlled a large sector of the Karst plateau not visible from the main San Rocco camp, which was built on the top of a marly-arenaceous hill, just 2 km away from the innermost present-day shore of Muggia Bay.

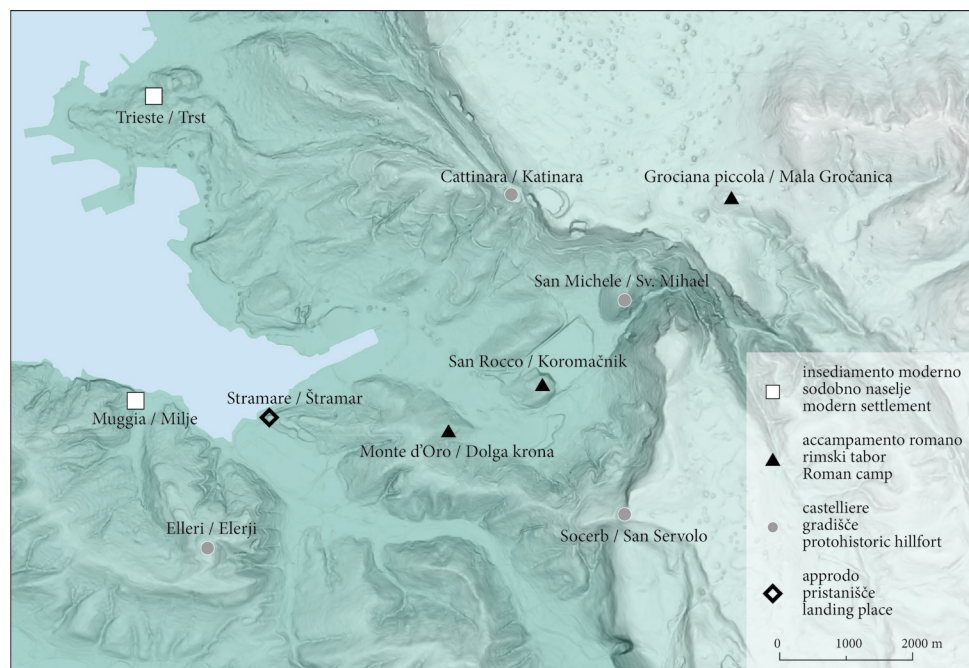


Fig. 1 Location of the Trieste camps and of other sites in the surrounding area inhabited between the 2nd and 1st century BC.

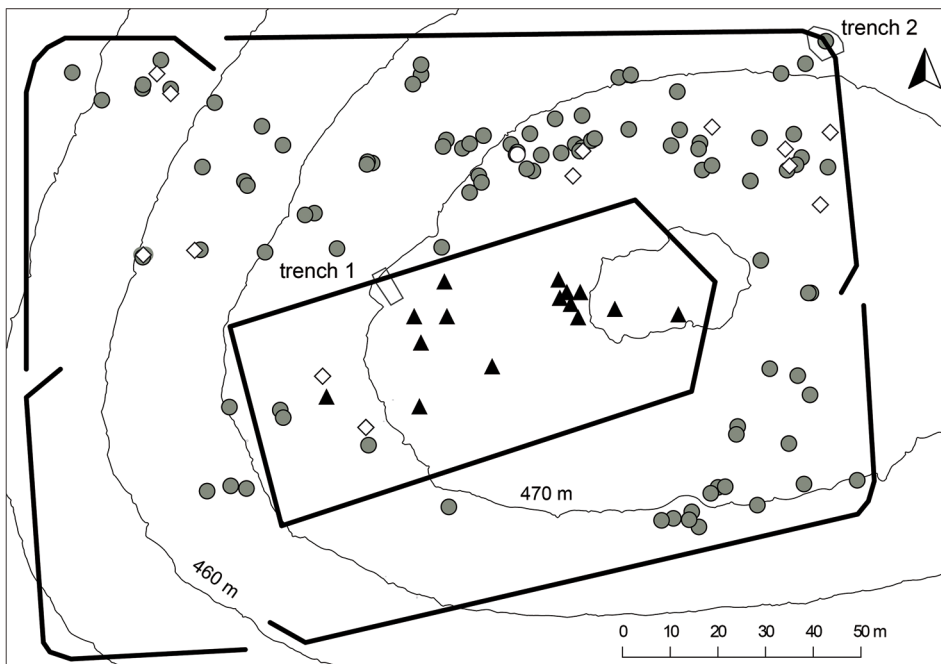


Fig. 2 Schematic plan of the Grociana piccola fortifications with the position of trenches 1 and 2 and the archaeological finds. Grey circles: *caliga* hobnails; black triangles: pottery; white diamonds: other metal finds; white circle: Roman coin.

LiDAR-derived images of Mt. Grociana piccola revealed a trapezoidal structure with blunt angles oriented east–west, containing a smaller sub-rectangular one with a different orientation (Fig. 2). The areas enclosed by the large and the small enclosures measure ca. 2 ha and 0.4 ha respectively. On site, the remains of the defensive ramparts are recognizable as modest earth banks. Four internal *clavicula* entrances have been identified along each side of the outer fortification. The inner structure probably had an entrance along the short western side, consisting in a simple gap within the fortified wall.

The inner fortification consisted of two low outer walls filled with rubble and reddish earth. It probably constituted the base for a fortified walkway. Not far from the external wall, excavations brought to light another alignment of large stones that may have formed the foundation for a palisade. Excavation within the internal terrace, adjacent to the defensive wall, yielded abundant Adriatic amphora fragments (Lamboglia 2 and probable late Greco-Italic types) dating to the 2nd century BC and few other artefacts of Roman origin, such as thin-walled beakers of Marabini 3 form and few other vessel types, found together with the amphorae.

The inner fortification of Grociana piccola, in visual connection with the camp of San Rocco, probably functioned as a lookout for the latter so as to control a wider area of the Karst plateau together with the communication routes that led from the sea towards the inland of modern day Slovenia and the Kvarner gulf (Croatia). Built in the 2nd century BC, it probably lost importance when the surrounding area was relatively pacified, and was then abandoned before the beginning of the 1st century BC.

The hill of Grociana piccola was subsequently occupied by a larger Roman military installation in the 1st century BC. Archaeological surface surveys retrieved a javelin point or catapult bolt, a bronze coin (a Republican as dating to the first half of the 2nd century BC), as well as about 100 *caliga* hobnails, most belonging to the Alesia D type. Recent excavations brought to light the north-eastern corner of the fortification, revealing an internal curvilinear wall associated

with an external stone alignment, placed at a slightly lower altitude, and with what is probably a base used for a guard post or tower adjacent to the corner of the fortification.

The *clavicula* type entrances, documented since the beginning of the 1st century BC, the regular plan of the fortification, that appears in Spain approximately in the same period and the presence of abundant *caliga* hobnails of Alesia D type date the external structure of Grociana piccola to the mid-1st century BC. The rough building technique, the absence of ceramic finds and the abundance of *caliga* hobnails belonging to the same type suggest it was a temporary camp. Without excluding other hypotheses, the camp could be associated with the Roman military reaction following the attack on Tergeste in 52 BC, probably by the Iapodes.

The hill of San Rocco is surrounded to the south by the Rosandra River and rises in a strategic position only a few hundred metres away from the innermost part of the gulf of Trieste (see Fig. 1). The camp situated on the hill covers over 20 ha and has a rather complex and irregular plan (Fig. 3). The main fortification is almost semi-circular in shape (Fig. 3/A–D) and encloses various other structures. Amongst these, a rectangular fortification is still recognizable today on the summit of the hill (Fig. 3/E). Other minor features can be interpreted as the remains of military barracks and buildings (Fig. 3/H).

According to the pottery recovered during the excavations carried out in 2019 and 2021, the large external fortification of San Rocco (Fig. 3/A–D) was built during the 2nd century BC and is probably contemporaneous with the inner fortification of the nearby Grociana piccola site. The complex defensive structure was about 8 m wide and characterised by 4 defensive lines. The main one consisted of a low walkway (made of two low walls with smaller stones and earth between them) protected by a palisade. It was externally defended by a parallel narrow ditch for housing wooden obstacles, an artificial escarpment, about 2 m wide and 1.5 m high, and a ditch at the base of the escarpment, most likely used for housing a palisade or wooden obstacles (Fig. 4). This structure was destroyed by a fire and subse-

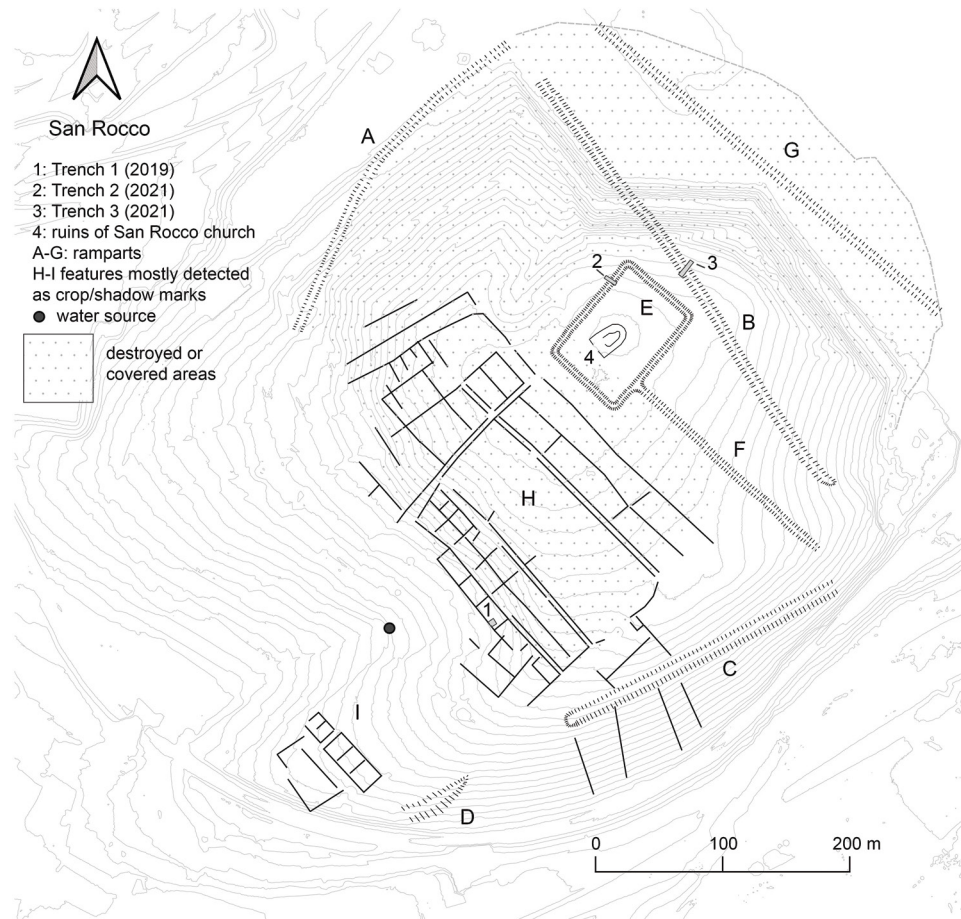


Fig. 3 Schematic plan of the San Rocco fortifications.

quently restored by widening the fortified walkway towards the interior by means of an approximately 3 m wide land fill supported by a stone alignment (Phase 2). Phase 2 of the external fortification can be dated to the end of the 2nd or the beginning of the 1st century BC.

More or less during the same chronological horizon, the uppermost rectangular fortification (Fig. 3/E) was probably built using a different building technique and orientation. It consisted of an earth bank almost 7 m wide, a little less than 1 m high, supported by a modest alignment of stones along the inner side and a consistent accumulation of stones along the outer one (Fig. 5). The rectangular fortification was then modified during the mid-1st century BC and abandoned as the whole camp before the Augustan period.

The site of Monte d'Oro, situated immediately to the south of San Rocco, is smaller in size (about 50 × 70 m) and is characterized by a rectangular shape whose orientation is very similar to the inner structure of Grociana piccola. It is surrounded by an external ditch and a rampart. Unfortunately, it still hasn't been investigated by means of archaeological excavations and no surface findings have been found, therefore its chronology remains uncertain.

Grociana piccola, San Rocco and, perhaps, Monte d'Oro provide some of the earliest examples of a Roman military camp and offer the rare opportunity to investigate Early Roman military architecture outside the Iberian Peninsula.

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Fig. 4 Excavation of part of the external fortification of San Rocco, seen from the north-east, with its complex defensive system.

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Fig. 5 Excavation of part of the uppermost rectangular fortification of San Rocco, seen from the west and with the outer accumulation of stones in the foreground.

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Fig. 1: FEDERICO BERNARDINI and MATEJA BELAK.
Fig. 2–3, 5: FEDERICO BERNARDINI.
Fig. 4: STEFANO FURLANI.

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ROMAN MILITARY ROUTES OF THE 1ST CENTURY BC IN THE SOUTH-EASTERN ALPS

JANKA ISTENIČ

The Romans controlled northern Italy from the end of the 3rd century onwards. The colony of *Aquileia*, founded in 181 BC in northeast of the region, was a centre of military command and commerce in north-eastern Italy. It was also a stepping stone for Roman economic and territorial eastward expansion.

The territory immediately east of north-eastern Italy, i.e. the south-eastern Alpine region (roughly present-day Slovenia), holds the strategic position between the Apennine Peninsula on one side and the middle Danube Basin and the Balkan Peninsula on the other side.

Research so far has shown that Roman armies used several routes in the south-eastern Alps. The contribution discusses the routes across Razdrto and along the Ljubljanica to Emona and the one that led presumably along the Nadiža to the Idrija-Cerkno region. The possibility of a pre-Augustan military use of the route over Hrušica (*Ad pirum*) pass is also mentioned.

The easiest route led from Aquileia across the Razdrto Pass (*Ocra*) to the Postojna Basin. The central pre-Roman settlement in the Razdrto area was the hillfort at Grad near Šmihel below Nanos. It was enclosed within ramparts, in the debris of which about 200 Roman weapons were found in 1890. In the last few decades, slingshot, artillery bolts and arrowheads were found, scattered in the settlement and on the slopes outside it. They indicate a Roman assault and conquest of the settlement in the 2nd century BC. This probably occurred after 181 BC (foundation of the colony of *Aquileia*) and before the end of the 2nd or beginning of the 1st century BC, when a Roman trading post was established at the Razdrto/*Ocra* Pass.

The main route from the Postojna Basin led to Vrhnika (*Nauportus*), a pre-Roman settlement and then a Roman *emporium* at the western outskirts of the Ljubljana marshes (Ljubljansko barje). The possibilities of passages on land

eastwards from Vrhnika to Ljubljana were highly limited by the marshy terrain. Therefore, the most convenient continuation of the route was along the river Ljubljanica. Strabo, in Books 4 and 7 of his *Geography*, reveals the great importance of transport along the river in the last two centuries BC. He relates that merchandise from *Aquileia* was conveyed in wagons across *Ocra* to *Nauportus* and from there down the rivers as far as the Danube.

In the stretch across the Ljubljansko barje, the Ljubljanica is a calm and slow River, suitable for navigation both upstream and downstream.

The in-depth research of Roman military finds from the Ljubljana has shown the great importance of traffic along the Ljubljanica, between the two transport hubs, *Nauportus* and *Emona*, for provisioning the Roman army in the period when the Romans needed to supply the army engaged in conquering new territories and imposing the Roman rule in the south-eastern Alps, the northern Balkans and central Danube Basin, i.e. from the mid-1st century BC to the end of the Augustan period.

The chronological distribution of the army-related artefacts from the Ljubljana indicates that this supply line was used during Octavian's Illyrian War (35–33 BC) and even more intensively during the Pannonian Wars (11–9 BC) and the Pannonian-Dalmatian rebellion (AD 6–9). The size of the ships found in the river, the groups of bricks and indirectly also the extensive warehouses unearthed at Dolge njeve in Vrhnika suggest that large quantities of military and other supplies were transported along the Ljubljanica.

The high numbers of militaria and several other groups of finds from the Ljubljana reflect the intensity of Roman military transports along the river. They are presumably mainly related to the activities at the harbours (*Nauportus*/*Vrhnika*) and at control points along the river (at *Bevke* and *Rakova Jelša*), as well as to religious purification rituals performed before crossing the boundary of the eastern limits of the *ager* of *Aquileia*. Until the foundation of the colony of *Emona* the eastern limits of the *Aquileian ager* were namely also the eastern border of the *ager limitatus*, i.e. of the province *Gallia Cisalpina* (after 42 BC, Italy).

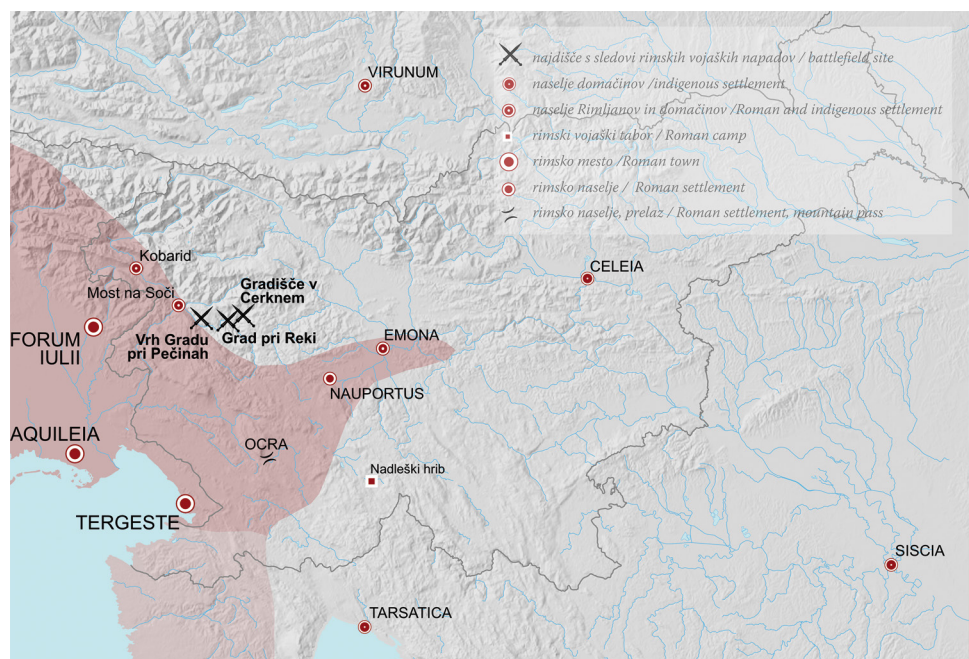


Fig. 6 Present-day Slovenia and neighbouring regions in the time of the Illyrian wars (35–33 BC).

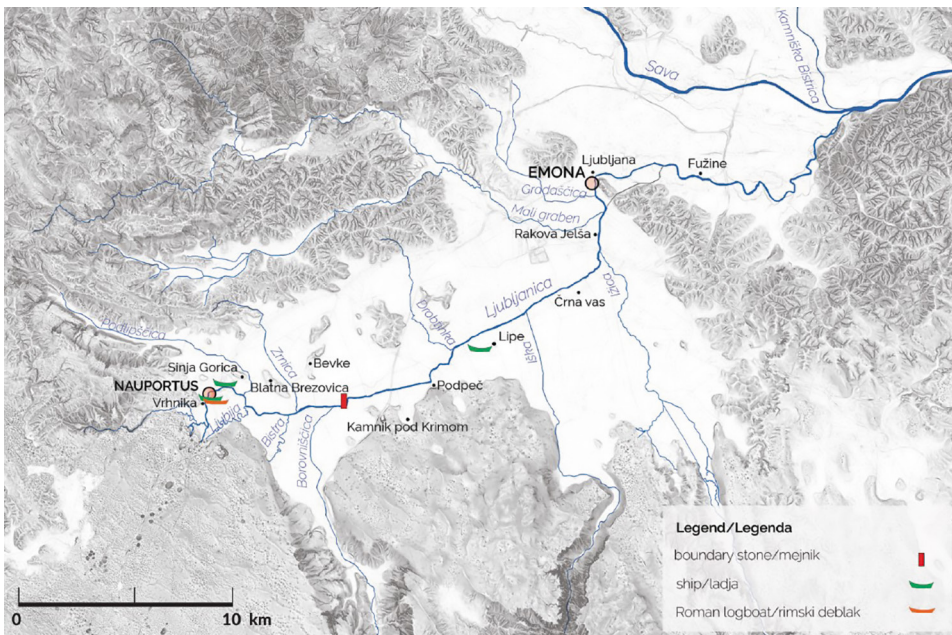


Fig. 7 The Ljubljansko barje with the places and sites mentioned in the text. The basemap digital terrain model at 5m resolution (DTM5) is derived from the airborne LiDAR data (source: www.evode.gov.si).



Fig. 8 Small finds related to Roman soldiers from the site Grad near Reka.

The quantity of the Early Roman militaria decreased drastically after the end of the Augustan or after the Early Tiberian period at the latest, suggesting a substantial reduction in the movement of military supplies after the end of major military operations in the region. The number of other finds decreased gradually from the Tiberian period onwards and is presumably related to the construction of the road along

the northern fringes of the Ljubljansko barje in the Late Augustan period.

Hobnails from soles of Roman military footwear with a characteristic pattern at the underside of the head are dated between the end of the 2nd century BC and about 15 BC and are a very good indicator of Roman army movements in the given period. They suggest one of the routes that Roman military used led from the region of *Forum Iulii* (north-eastern Italy), which became a *municipium* in Caesar's time, along the valley of the Natisone (Nadiža) or other courses leading to Breginjski kot and onwards to the valley of the River Soča at Kobarid, possibly at that time an *emporium*. One of the continuations from Kobarid was towards south and south-east, along the Soča River to Baška grapa and further to the Idrija-Cerkno region, where the sites at Grad near Reka and its environs, Gradišče in Cerkno and Vrh gradu near Pečine revealed traces of Roman military assault from the fourth decade BC, probably from the beginning of the Illyrian wars (35 BC).

According to Festus (*Breviarium VII 51, 10–13*), writing in the 4th century, the Romans built the road 'across the Julian Alps', in the time of Augustus. This refers to the road across the Hrušica Pass (*Ad Pirum*), which lies higher than the Razdrto pass, but is shorter than the route over the Razdrto Pass (*Ocra*).

The course of the *via publica* from Aquileia to Emona across Hrušica is mentioned in *Tabula Peutingeriana* (*In alpe iulia*) and *Itinerarium Burdigalense* (*ad Pirum summas Alpes*). In the stretch between Ajdovščina and Hrušica, the remains of the road were excavated near Col.

Recently hobnails of Roman military footwear, dated between the end of the 2nd century BC and earlier than c. 15 BC, have been found at several locations east of Ajdovščina, at locations that may be related to the route to Hrušica. This evidence might suggest that the Roman army began to use the route over Hrušica pass in the last decades of the Republic and/or in the early Augustan period.

PICTURE CREDITS

Fig. 6: JANKA ISTENIČ, *Traces* (see literature), Fig. 13; © Narodni muzej Slovenije.

Fig. 7: JANKA ISTENIČ, *Roman military equipment* (see literature), Fig. 139; © Narodni muzej Slovenije.

Fig. 8: Tomaž Lauko; © Narodni muzej Slovenije.

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TRACING THE CONQUERORS ROMAN MILITARY INSTALLATIONS BETWEEN OCRA AND ALBION

BOŠTJAN LAHARNAR

Archaeological studies of the territory between the northern hinterland of the Adriatic and the southeastern Alps indicate three main periods of the Roman military presence. The earliest (from the foundation of the colony in Aquileia 183/181 BC to roughly the end of the Augustan period AD 14) is associated with the gradual expansion of Roman influence and presence; it ended with the incorporation of the territory in the Roman state. The second period is the late 60s and early 70s of the 2nd century AD, during the Marcomannic Wars, when this region was crucial for the defence of Italy (establishment of the military zone *praetentura Italiae et Alpium* and the construction of the legionary fortress at Ločica in Savinjska dolina). The 3rd century and the Late Roman period are the third period, characterised by Roman troops engaged in civil wars and the defence against the incursions of foreign peoples into the Roman Empire.

Our ongoing research (in the framework of the »Archaeological heritage research« programme and the research project »Tracing the conquerors. Roman Army and indigenous communities in the Karst and Notranjska regions [SW Slovenia]«, both with the financial support from the Slovenian Research Agency) is focused on the first period, more precisely on the 2nd and 1st century BC and the first decades AD in the area of the Kras and Notranjska (south-western Slovenia). Mounts Nanos and Snežnik are the main orientation points that dominate the landscape in the region. They are among



Fig. 9 Grad near Šmihel pod Nanosom. Roman Republican militaria.

the geographical features noted in the earliest written records mentioning the territory of present-day Slovenia. At the junction of the Julian Alps and the Dinaric Alps, ancient authors use the name *Ocra* to mark a mountain pass (the Razdrto area), a mountain (Nanos) and a settlement (possibly at Grad near Šmihel pod Nanosom). In connection with *Ocra*, Strabo, Greek historian and geographer (born in 64 or 63 BC, died in 24 AD) also mentions the mountain name of *Albion*, which primarily stands for Mt. Snežnik.

Two main sets of archaeological evidence are at our disposal. The first one consists of stray small finds associated with the Roman army kept in the National Museum of Slovenia. Several of them were collected at the sites in the last four decades by unauthorized treasure hunters using metal detectors. Archaeological interpretation of the airborne LiDAR (ALS) data provides the second set of evidence. Several features detected with LiDAR in the region under discussion were interpreted as probable remains of Roman camps and other military earthworks. Further research of some of them, including surface collection of small finds and small-scale excavations, have confirmed the sites were Roman military installations.

Recent research indicated Roman military actions took place in the mid or second half of the 2nd century, during Octavian's Illyrian wars (35–33 BC), in the Augustan period (27 BC – AD 14) and perhaps also in the decades just before Octavian's Illyrian wars.

Roman military engagement in the region in many ways influenced the interrelations between the Romans and local, indigenous communities. The Roman military, for example, seems to be associated with the abandonment of several Late Iron Age settlements. On the other hand, there are indigenous settlements with clear continuity into the Roman time.

One of the key research challenges in studying the material evidence of the Roman army is the interpretation of small finds. Slovene archaeology has provided various interpretations for stray Roman military equipment finds: battles/skirmishes, presence of Roman soldiers in indigenous settlements, indication of Roman (military) routes along rivers related to activities at the harbours and at the control outposts, as to Roman religious rituals.

THE ŠMIHEL SITE COMPLEX

The earliest material evidence indicating Roman military intervention in the region comes from the hillfort Grad near Šmihel, where an assemblage (hoard) of Roman republican weapons came to light around 1890 (Fig. 9). The items from the hoard, as well as the stray finds of Roman weaponry documented in past three decades (Fig. 9, slingshot; Fig. 10/A–D and dots), have been linked to a single event – Roman attack on the hillfort. It is also believed that part of the weapons used in this attack was collected (hoard) and part of it left scattered on the ground (stray finds that came to light with metal detectors).

Finds from the 2nd and 1st centuries BC are considerably fewer at Grad near Šmihel pod Nanosom than at some of the other hillforts in the area. What is significant is the absence of brooches and other Italic items from LT D1 and LT D2 (from 150/130 BC to the beginning of Augustan Age), as well as the absence of Late La Tène Type VIII Certosa brooches of the local variant. This speaks in favour of the

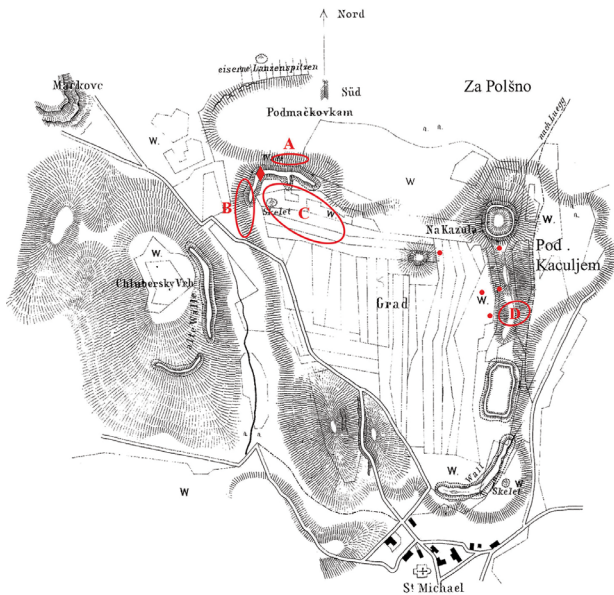


Fig. 10 Grad near Šmihel. Plan of the site (modified from DESCHMANN and HOCHSTETTER 1879, not to scale). Roman Republican militaria findspots: hoard (diamond), catapult bolts, arrowheads and slingshot found in 2007/2008 (A), areas with more than ten scattered slingshot (B, C, D), individual slingshot (dots).

hypothesis that the hillfort on Grad was abandoned after the Roman assault in the middle or second half of the 2nd century BC. Considering the historical situation, this event must have taken place sometime between the founding of Aquileia (183/181 BC) and the establishment of the Roman settlement on Mandrga at Razdrto pass in the late 2nd or early 1st century BC.

The findspots of Roman weaponry (hoard and part of the stray finds) indicate that one of the main directions of the Roman assault was from Žlovberski vrh hill and Mačkovec hill (Fig. 10, *Chlubersky Vrh, Mačkovec*) where the difference in altitude was smallest and access easiest, targeting the northwest corner of the Grad hillfort. Karl Deschmann and Ferdinand Hochstetter reported on an earthwork rampart (Fig. 10, *alte Wälle*) on the eastern and southern sides of Žlovberski vrh, which later researchers do not mention, but does appear on LiDAR visualisations. For the small finds from Žlovberski vrh and Mačkovec researchers only report finding those associated with Romans.

Further research will either confirm or refute the ramparts on Žlovberski vrh as a Roman military installation – possibly a siege camp.

THE ULAKA-NADLEŠKI HRIB SITE COMPLEX

An important body of evidence is the Ulaka–Nadleški hrib site complex in Loška dolina valley (Fig. 11). Our previous research suggests the complex played an important role in the Late Iron Age, Late Republic and Early Principate within the wider geographic context of the control over passes and corridors between Caput Adriae and the western Balkans. It includes the Iron Age hillfort at the Ulaka hilltop (Fig. 11/1), two Roman camps (Fig. 11/2–3) and very likely also remains of a battlefield from the last decades of the 1st century BC.

The Ulaka-tabor camp is situated at the northern slope of Ulaka hill (Fig. 11/3). The archaeological evidence indicates its dating to the decades just before the Augustan Age. For the camp at Nadleški hrib hill (Fig. 11/2), approximately 500 m south of Ulaka hillfort, our research suggests two occupation phases, the earlier, contemporary to the fort Ulaka-tabor fort, and the later, from the Augustan period.

The Ulaka hillfort and Nadleški hrib sites have long been known, while the Ulaka-tabor camp and the presumed remains of a battle were discovered in 2017. Airborne LiDAR data analyses indicate linear features leading from the corners of the Ulaka-tabor camp (Fig. 11/4). We assume these features are remains of Roman siegeworks, very likely related to the siege and conquest of the Ulaka hillfort, the central Iron Age indigenous settlement in the region.

The Ulaka–Nadleški hrib site complex is therefore an excellent case study of a conflict landscape from the period of Roman conquest of the region east of the province of Gallia Cisalpina (Italy after 42 BC). We can reasonably expect that an in-depth examination of this site complex would make a significant contribution to our knowledge on Roman expansion in the second half of the 1st century BC and at the beginning of the 1st century AD. Items of military equipment and other Roman stray finds, together with preliminary airborne LiDAR data evaluation suggest further similar and presumably roughly contemporaneous sites in the region between Odra (Mt. Nanos) and Albion (Mt. Snežnik).

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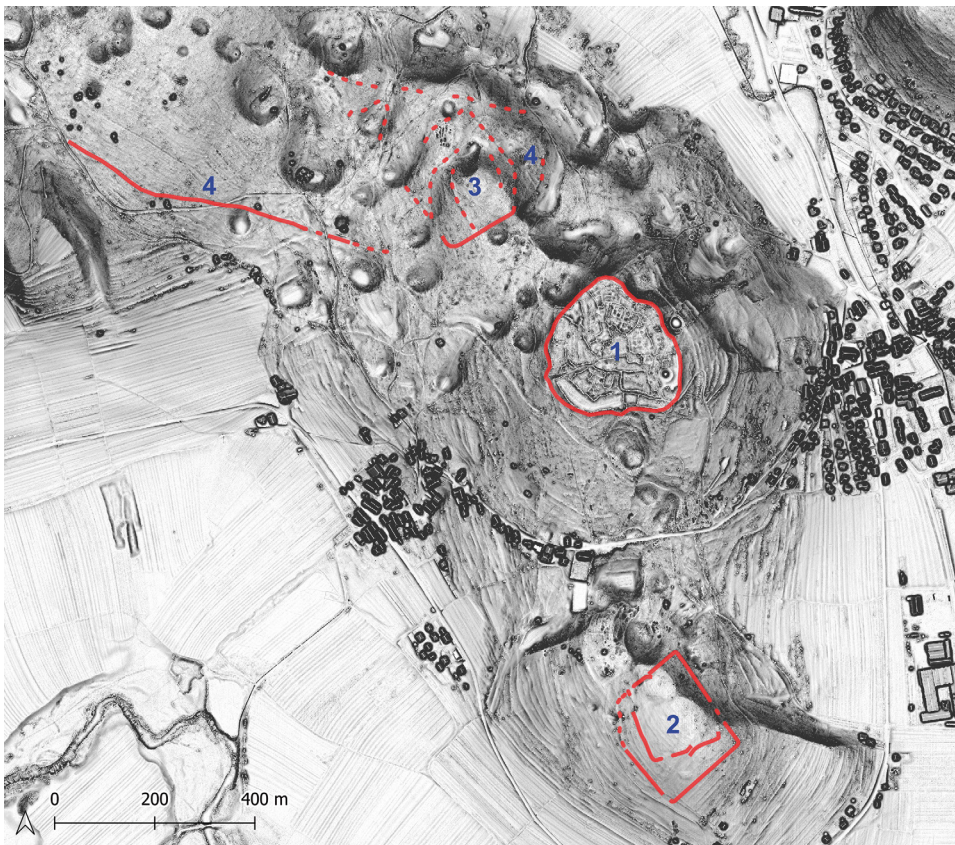


Fig. 11 The Ulaka-Nadleški hrib site complex: Ulaka, hillfort (1), Nadleški hrib, Roman camp (2), Ulaka-tabor, Roman camp (3), Roman siegeworks? (4). Archaeological interpretation of the LiDAR-derived digital elevation model.

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Fig. 10: Modified from: CARL DESCHMANN and FERDINAND VON HOCHSTETTER, *Prähistorische Ansiedelungen* (see literature).
Fig. 11: Elaboration of Slovenian Environment Agency data by MATIČ ZUPAN, National museum of Slovenia.

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BRATISLAVA CASTLE EXCAVATION, PRESENTATION AND INTERPRE- TATION OF THE ROMAN ARCHITECTURE FROM THE 1ST CENTURY BC

MARGARÉTA MUSILOVÁ

Archaeological excavations carried out during the reconstruction of the Bratislava castle and its surrounding area in the years 2008–2014 (2008–2011: Branislav Lesák, Margaréta Musilová, Branislav Resutík, Jozef Kováč, and Andrej Vrtel, Municipal Monument Preservation Institute in Bratislava; 2013–2014: VIA MAGNA Ltd. in collaboration with the Municipal Monument Preservation Institute in Bratislava, commissioned by the Office of the National Council of the Slovak Republic), brought the discovery of several Roman buildings. The surprise was and still is, that the buildings were built in the 1st century BC for the local Celtic nobility. At this time, Bratislava was an *oppidum* with *acropolis* on the top of the hill. The Celts took advantage of the dominant position as early as in the 2nd century BC. In the second half of the 1st century BC, they were already romanised, minted golden and silver coins with Latin inscriptions. Their elite lived in sumptuous residences in Roman style and drank wine from amphoras. This new information has significantly changed the history of the Central Danube region, on the crossroads of the important Amber and Danube transcontinental routes. Roman influence appeared on our territory much earlier than was previously assumed (Fig. 12, 13).

EXCAVATIONS AND PRESENTATION

Right at the highest point of the castle rock, under the present-day Castle Palace courtyard, in its northeastern part, there is an *opus signinum* (an older term for *opus caementicium*) flooring of beautiful quality, torsionally presented in the basement. A motif of many tiny multi-coloured rosettes is applied in the centre of the flooring. The rosettes are made of a central stone of pink to red colour and four

grey petal-shaped stones around it, spaced 20 cm apart. An 80 cm wide meander belt of swastikas made from white *tesserae* around the perimeter, highlights the stone flowers (Fig. 14–16). The design creates a beautiful flower carpet covering an area of around 23.5 m × 9 m, possibly intended to decorate a representation room of a member of the ruling Celtic nobility. This type of pavement and its decorative pattern was imported from Rome, using local materials (areas of Devínska Kobyla, the Devín castle Hill, or the Hainburg Hills). The flooring was feeding to the stone masonry, of which only the foundation grooves remained in the southern and western parts of the building. The perimeter stone masonry has been preserved only on the southeast corner of the building. The corner was built from blocks of limestone. Traces of a portico oriented to the South, with a view to the Danube River, were found adjacent. In Republican times – the ‘golden era’ of the *opus signinum* – a simple *opus signinum* pavement was by itself an exception, and decorative patterns were used only in the most important rooms or buildings. The rich decoration with *tesserae* indicates that this was one of the most important rooms, possibly an *atrium* or a *tablinum*.

The reconstruction of the castle included also a plan to build an underground parking lot right on the so-called Northern Terrace. The site was used as an amphitheatre in the 1950s. During the reign of Maria Theresa in the 18th century there was a baroque garden with a Winter Riding Hall there. It was a known fact that the Winter Riding Hall had been built over the buried medieval moat of the Castle in the south and the buried medieval quarry in the north. There were no assumptions that an earlier ancient building might appear while researching the foundations of the baroque riding hall. The archaeological research brought the discovery of the Roman Building I. It was a two-room stone masonry house on an area of about 107 m². The perimeter walls contained double-row masonry made of quarry stone connected with quality gravel-lime mortar. The corners were built with limestone corner blocks. The discovery of cast mortar *terrazzo* pavement (Terrazzo is a cast hydrophobic mortar flooring consisting of fragments of various stones,



Fig. 12 Strategic position of the Bratislava castle above the Danube river.

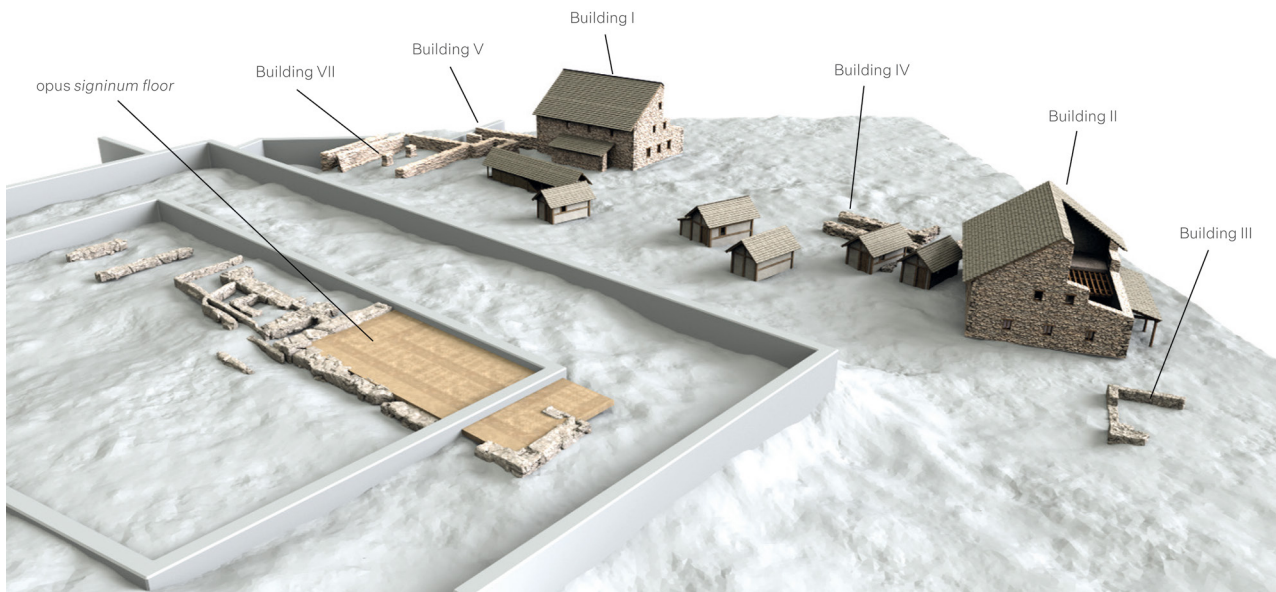


Fig. 13 3D model of the Acropolis of the oppidum of Bratislava, featuring the Celto-Roman buildings, viewed from the southeast.



Fig. 14 Detailed view on the rosette pattern of the *opus signinum* pavement.

including *tesserae*, bricks or shards, sanded on the surface) was surprising. The quality lime plaster plastered on the inside of the walls was also noteworthy. Shards of Roman amphorae found between the Celtic shards caught the attention of the archaeologists removing layers of soil in the building's entrance hallway. The increased caution while researching the building, led to a unique discovery: a treasure of gold and silver Celtic coins, 15 golden staters with the inscription BIATEC and NONNOS and seven silver tetradrachms and drachms with the same names. In addition to the discovered treasure of coins, the solidified mortar layer also contained silver buttons, pieces of a copper sheet with rivets, a Roman bronze seal case box, and shards of a little green glass bowl of Hellenistic origin dated to the turn

of the 2nd and 1st centuries BC. It was likely brought in the Middle Danube region as a luxurious item or a diplomatic gift. The function of the two-storey building cannot be accurately determined. Given the number of the amphora (830 pieces) shards discovered in the building and the nearby 15-metre long gutter carved out south of it, we hypothetically assume that it was a house of a merchant with an amphora storehouse, based on analogies from Corrent and the similar finds of wine cellars in ancient Rome (Fig. 17–19). The research of Roman buildings on the North Terrace has produced about two thousand fragments of amphorae of Roman and, sporadically, Greek origins. Stamps were found on the edges of some of the vessels, while their shoulders featured carved or painted inscriptions. The best-preserved amphorae were found in Roman Building II. The basic two amphora types are: Adriatic (Lamboglia 2, Dressel 6A) and Tyrrhenian (Dressel 1C, Dressel 2–4), dated 50 to 25 BC.

The Roman Building II is presented under a protective structure today. It is a large building with a rectangular floor plan with an area of about 224 m². The longer axis is oriented northwest-southeast. The perimeter walls are 89 cm thick and up to 70 cm high in places, made of quarry stone laid in regular rows and connected with hard lime mortar. The interior plaster has also been preserved. The building was a two-storey one. The paving on the ground floor and upstairs was terrazzo, with remains of a double colonnade preserved on the first floor. The colonnade originally consisted of eight circular columns. The ground floor of Roman Building II, just like Roman Building I, may have been used as a storehouse for rare goods. The interior equipment included a *tintinnabulum* – a copper hammered bell with a massive cast handle, iron hinges, likely from a wooden chest. Jewellery and tools were of domestic Celtic production, made of bronze and quality iron. Important finds also included a brass ingot of Roman origin, weighing 12 kg (ac-

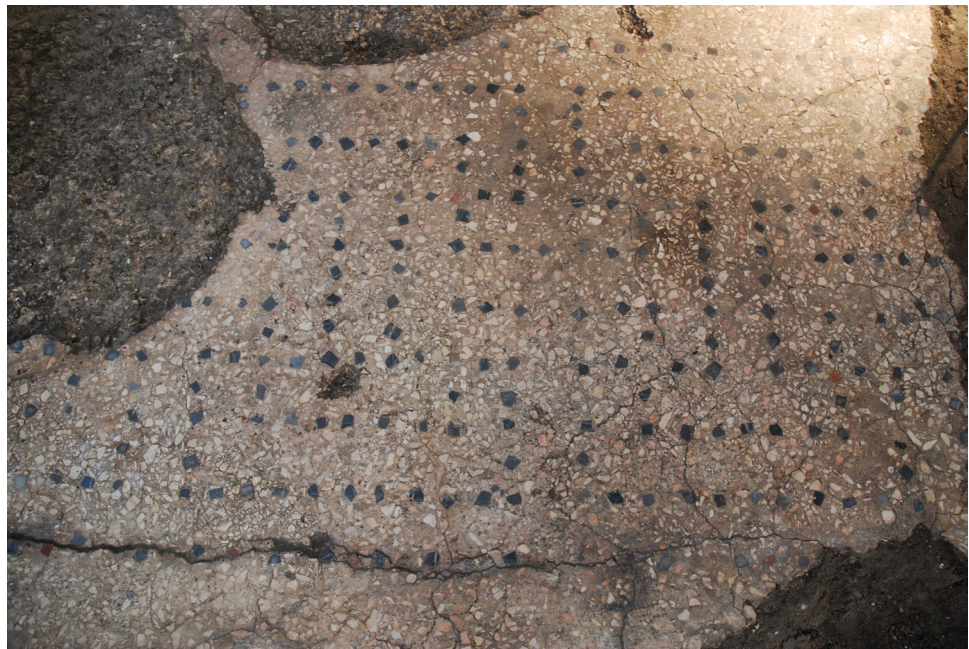


Fig. 15 Detailed view on the meander and swastika pattern of the *opus signinum* pavement.



Fig. 16 *Opus signinum* pavement *in situ*, under the Castle courtyard.

According to the chemical analysis carried out by Ivan Holický it was a copper-zinc alloy, i.e. brass, with a small admixture of aluminium and silicone), unprocessed amber as raw material, testifying the commercial transit on the Amber Road that passed through the Bratislava oppidum. Pieces of a thin gold foil used for gold plating were a highly dedicated raw material. The finds from Roman Building II also included coins, with domestic Celtic coins and imported Roman and Illyrian ones among them. Two silver Republican denarii of *Lucretius Trio* (136 BC) and *Rutilus Flaccus* (77 BC) were the oldest. Blue pigment residues are certainly among the exceptional finds, as the blue dye, the so-called Egyptian blue, was an imported raw material (Fig. 20, 21).

In 2014, fragments of coloured plaster were uncovered in the secondary location west of the Winter Riding Hall building, together with cast mortar paving identical to the

one in the main room of Roman Building I. Analyses revealed that various pigments had been used, including white, yellow, blue, and red, as well as the presence of marmorino, i. e. marble flour, used in antiquity as the final surface treatment of plaster to give it a high gloss. The rooms' interiors of the Roman buildings were likely decorated with coloured plaster, known from Pompeii or Herculaneum, Italy. The closest analogy to us are the Second-Pompeian-style wall paintings found in Magdalensberg, Austria, dating back to 50 to 20 BC. In addition to Roman Buildings I (preserved in the New Riding Hall) and the Roman Building II, more buildings or remnants of buildings from the late La Tène period were found on the Castle's Northern Terrace. These included Buildings III, IV, V, VI, and VII and objects related to farming, such as storage pits and water reservoirs. The largest building preserved at the Castle is Building VII, in the western



Fig. 17 Hypothetical 3D visualisation of the Roman Building I with the amphorae storehouse, view from the East.



Fig. 18 Hypothetical 3D visualisation of the Roman Building I, view from the East.



Fig. 19 View of the entrance corridor of the Roman building I during excavation in 2009, view from the South East.



Fig. 20 Current in situ presentation of the Roman Building II under a protective building.



Fig. 21 Protective building with entrance to the Roman Building II on the northern terrace from the south.

bastion. Its remains – two pillars and perimeter walls – can be seen in the New Riding Hall entrance hall. The building was possibly used as a warehouse or a granary (**Fig. 22**).

INTERPRETATION

The thorough archaeological research on the acropolis of the Bratislava oppidum documented the presence of not only large amounts of goods of ancient origin but also of Roman craftsmen and merchants.

As we learn from the findings, the Celtic social elite had been Romanised as early as the 1st century BC. This gives Bratislava and its wide hinterland a new historical role: It was the centre of interest of the Roman Empire in the time when the Roman Republic died with Caesar and young Em-

peror Augustus was conquering new territories. The finds of gold and silver coins, wine amphorae, amber and other items testify to the luxurious lifestyle on the Celtic acropolis. The choice of a Roman type decoration such as the *opus signinum* pavement also proves that in 2nd to 1st centuries B.C. there was a tight relationship with Rome, and that Roman decorative models were widespread even in this remote region of Europe. It also reflects the economic and political interests of the Romans in the time when there was no *Limes Romanus frontier* on the Danube yet. All masonry stone buildings date back to the third settlement stage, the so-called Celtic-Roman Stage, from 50/40 to 30/20 BC. The stone architecture was short-lived. The ultimate demise of the Celtic oppidum possibly had to do with Germanic raids from the north. Even though possibly abandoned, the buildings likely remained at the Castle until the arrival of



Fig. 22 A 3D Model of Roman Building VII.

the Roman legions led by Tiberius, in 6 AD. The first written mention of a Celtic settlement on the Danube, *Carnuntum*, is dated back to the same period. *Carnuntum* translates as a white or rocky town. A Roman expansion to the north never took place. The frontier of the empire stopped on the Danube. The vigilant guardians of the *Limes Romanus* line did not let anyone repopulate the abandoned oppidum for centuries. We do not know whether Bratislava was the mentioned Carnuntum by Velleius Paterculus. But it is very likely, given to the discoveries of the rare Roman buildings on the acropolis.

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Fig. 12: PETER BARTA.

Fig. 13: Design: JANA MINAROVIECH; Visualisation JAROSLAV ŠIMUN, STUDIO 727, Municipal Monument Preservation Institute in Bratislava (MUOP) and VIA MAGNA Ltd.

Fig. 14, 15: BRANISLAV LESÁK.

Fig. 16, 19–21: MARGARÉTA MUSILOVÁ.

Fig. 17, 18: Design: JANA MINAROVIECH; Visualisation: JAROSLAV ŠIMUN, STUDIO 727, and MARGARÉTA MUSILOVA, MUOP.

Fig. 22: Design: PETER HORANSKÝ, MUOP and VIA MAGNA Ltd.

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THE EXCAVATIONS AT THE HILLTOP OF THE MAGDALENSBERG (CARINTHIA) IN 2019 AND 2020

GEORG TIEFENGRABER

The Magdalensberg (municipality of Magdalensberg, district of Klagenfurt-Land, and St. Georgen am Längsee, district of St. Veit an der Glan, Carinthia) is one of the most important and equally well-known archaeological sites in Austria. The partially reconstructed stone buildings in the area of the extensive “Archaeological Park Magdalensberg” offer today’s visitor an excellent insight into Roman life and crafts etc. in the decades before and after the turn of the millennium. Other preserved stone architecture in the hilltop area represents the remains of the enclosing wall of an extensive sanctuary or sacred precinct, at the centre of which was a Roman podium temple at the highest elevation, on which today the Gothic church dedicated to St. Mary Magdalene and Helena stands.

Due to the intensive Roman development and later agricultural use of the area, older remains of settlements and buildings have largely fallen into disrepair or – due to the focus of research – have been forgotten. Especially in the wooded northern area below the hilltop, there are still numerous artificial settlement terraces of different sizes and, above all, a rampart enclosing the hilltop. This can still be made out on the west, north and east sides. In some places, it even reaches quite remarkable dimensions, with a reconstructable length of at least 2.5 km. In the south, the rampart was largely destroyed by the massive Roman construction works in the Forum area. In the north-east, an entrance or a breakthrough in the area of the so-called annex-wall is clearly visible, but the gate construction in the north-west is much more impressive. Even today, two more ramparts exist in front of the entrance, which probably not only had a fortification function, but also reflected the strength of

the fortification (and equally its inhabitants) by its visibility from afar in a representative way. Other gate systems, which have since been destroyed, presumably existed in the south and south-east area. The fortification itself enclosed an area of c. 36 hectares, which had a maximum north-south extent of 800 m and a west-east width of just over 500 m. From the former southern rampart to the peak of the hilltop (1059 m above sea level), almost 140 meters in altitude had to be overcome within the settlement.

The construction of a new hotel wing in the eastern and southern listed hilltop area made extensive archaeological excavations and construction supervision necessary in 2019 and 2020. These were carried out by a team from the Institute for Southeast Alpine Bronze and Iron Age Research ISBE under the direction of the author. More than 1,600 m² contiguous area were examined directly to the east below the uppermost hilltop plateau, as well as a narrow strip to the south below the existing restaurant, which was already noticeably disturbed by recent cunettes. Furthermore, the archaeological monitoring and documentation of several power and sewer lines were necessary, which were built both north below the hilltop and especially on the steep southern slope. All of these investigations yielded important new results regarding the pre-Roman settlement and use of the Magdalensberg. In due brevity, the results of the archaeological work from 2019 and 2020 can be summarised as follows: In a pipeline cunette on the northern slope below the summit as well as in large areas of a cunette that runs almost 250 m long on the southern slope from the hilltop plateau in a straight line down to the “Archaeological Park”, much narrower La Tène settlement terraces were recorded below massive, multi-phase Roman terrace deposits. These showed documentable widths of approx. 4–5 m and thus largely corresponded to the usual dimensions of well-known prehistoric settlement terraces as well as settlement terraces that can still be seen above ground today in the wooded steep northern slope of the Magdalensberg. Similar



Fig. 23 Aerial photo of the primary excavation area on the hilltop of the Magdalensberg in 2019.



Fig. 24 Postholes of a wooden building of the early Roman period in Section 1 of the excavation 2019.

settlement terraces were also recorded in the north-eastern area of the main excavation area (sections 1 and 2) from 2019, on which objects from the late La Tène period (pits, post pits, pit house, etc.) with finds from LT D1 were uncovered. With a width of 4–5 m, these terraces also corresponded to the artificial levelled areas recorded in the cunettes on the north and south slopes. These apparently La Tène terraces continued a little further west towards the hilltop in section 1, but were then destroyed by massive Roman terrain changes. Based on the finds significant for fine chronology, it is possible to date these late La Tène finds to the sub-phases Lt D1a and D1b, which takes an absolute chronological approach to the 2nd half of the 2nd century and the first decades of the 1st century BC.

Around the middle of the 1st century BC, the summit area underwent a significant transformation: The slope, which rises westwards to the actual small hilltop plateau, was worked off on its east side – according to evidence of the

edge of the terrain that is still clearly visible today – and also on its north side, due to use as a quarry. Because of its fragility and small fractures, the rocky subsoil, which was hardly usable as building material, was used as backfill material instead. Several narrow older terraces were covered with this quarry stone material and much wider, new terraces were created. Probably the hilltop was already surrounded by a massive enclosing or fortification wall in this earliest Roman construction phase, to which the embankments reached on the inside. With these measures, level and usable settlement areas were created very quickly and efficiently. Multi-phase wooden buildings were erected on these levelling layers, some of them with remarkably large and deep postholes, which were then successively overlaid with more recent levelling made of quarry stone material and were again built over with wooden buildings. In the western part, a bedrock level was created by the quarry work, which was also used for the erection of wooden build-



Fig. 25 Remains of an early Roman stone building in the middle part of the cunette on the southern slope of the Magdalensberg.



Fig. 26 Mask-Antefix from the former temple on the hilltop of the Magdalensberg.

ings. A complex, multi-phase sequence of beam trenches, postholes and other pits as well as hearths was also documented here. In the context of the oldest findings, numerous late Republican militaria were found, such as characteristic hobnails, which have a cross-shaped ridge and four slightly raised humps on their underside. There are also narrow two-winged arrowheads with sockets, with and without barbs, and a projectile tip with a socket and square tip. All of these militaria are pieces that represent characteristic late Republican-Caesarian types from the years between 60 and 40 BC, which is particularly useful in terms of fine chronology. If one does not want to assume that these objects are the equipment of local Noric soldiers or warriors, who at least partially owned and used Roman equipment already, then the Roman military presence from the middle of the 1st century BC on (at the latest) is much more likely on the hilltop of the Magdalensberg. Possibly the presence of Roman detachments in connection with the proconsulship of Caius Iulius Caesar in Gallia Cisalpina and in Illyria in the years from 59 BC aimed at securing Roman (political and economic) interests in Noricum.

The fortified summit area apparently experienced a massive architectural expansion in the early Augustan period: the remains of at least three multi-room (and also multi-phase) stone buildings in varying degrees of preservation were recorded, of which the easternmost building 1 was attached directly inside to the fortification wall, like a case-mate. This building continued further south into an area that had already been examined in 2003 by the Landesmuseum für Kärnten. Regrettably, a complete or coherent floor plan cannot be obtained from the data published to date. What is more important, however, is the fact that the building has multiple construction phases. Like a considerable part of the buildings, building 1 was obviously damaged by an earthquake postulated for the year 9 AD, which is indicated by parts of the wall that have been moved and repaired. Based

on the building materials used for the more recent repairs alone, this construction phase can be clearly identified in the preserved building stock. This includes incorporated marble fragments from the cult- and representational buildings on the hilltop plateau (which were probably also severely damaged), as well as crushed marble as mortar. Contrary to the preliminary reports on the excavations of 2003 and 2004 published by the Landesmuseum für Kärnten in the area to the south, remains of screed floors were uncovered under the collapse cone of the whitewashed wall plastering in all rooms of all stone buildings uncovered or cut in 2019 (and also 2020). A multi-storey building 1, which is actually set into the worn-out hillside, can be assumed, a roof tile covering is evident. Building 2, located almost 20 m to the west and up the slope, was considerably less well preserved. A cavern-like cellar carved into the rocks was primarily preserved, with walls that were still more than 1.5 m high in places. The adjoining rooms to the east were almost completely destroyed by the construction of a recent path. Casting crucibles and non-ferrous metal slag indicate craftsmanship within this building. Building 3 was eventually surveyed in sections to the south below the existing restaurant. The parts of this building adjoining to the south were already uncovered in the 1980s, to the east the building extends into the area excavated by the Landesmuseum für Kärnten in 2004.

In the northern area of the excavation area from 2019, a larger square-like area of about 52 × 55 m was created (at the latest) in the course of the early Augustan expansion phase, which was surrounded by newly erected walls in the north and south and reached up to the surrounding fortification wall in the east. Most of the documented walls also show repairs. The find material that can be associated with the building stock, but is largely unstratified, indicates that the area was used at least until the Flavian period. The findings in the cunettes, which were laid out from the hilltop

plateau to the Archaeological Park and documented during construction, proved to be particularly revealing. It turned out that, in fact, massive and multi-phase Roman levelling or terracing overlay narrow, older, predominantly La Tène settlement terraces in the entire slope area. Within the Roman layer complexes, levels with overlying hearths or ovens as well as pits and postholes deepened from there could be determined in most cases. Sometimes the superimposed retaining walls on the valley side were also preserved. In several places – both in the upper and in the lower slope area – remains of buildings were recorded, which indicate that originally the entire southern slope, which was favourable for settlement, was densely built on artificially heaped terraces, at the latest from the Augustan period, which in turn used existing La Tène settlement terraces or superimposed them.

Remarkably, these buildings in the north reach right up to the fortification or enclosing wall of the hilltop. The more recent Roman terraces can still be identified in the terrain today, although it has already been noticeably overstated by erosion. As the evaluation of LIDAR scans and surveys of the adjoining wooded areas in the west and east clearly show, this structure continues into these areas without any recognizable interruption. Only in the steep northern slope area, the narrow settlement terraces, probably from the La Tène period, can be found, spared in places from a more recent Roman building. They therefore have considerable potential with regard to further targeted research into the (heavily fortified) La Tène period predecessor settlement of the Roman Magdalensberg.

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