A red Roman column from Emona
(Ljubljana, Slovenia)

Rimski steber z rdeče barvanim ometom
iz Emone

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INTRODUCTION
The archaeological site of NUK II lies in Ljubljana, Slovenia (Figs. 1; 2). It is part of the Roman town of colonia Iulia Emona, built in the early 1st century AD according to a preconceived rectangular plan with a rectilinear street grid and enclosed with fortification walls. The NUK II site has been archaeologically investigated in several variously long campaigns, most extensively between 1996 and 1999, in advance of the planned construction of the new National and University Library of Slovenia (hence the acronym).
The excavation campaign in 1999, led by Ljudmila Plesničar-Gec and Damijan Snoj, unearthed a red painted column (Fig. 4), recorded as a special find (PN5983). The column is now held in the Mestni muzej Ljubljana under Inv. No. 510:LJU:0060969.

Upon discovery, the remains of the column were consolidated with animal glue and reinforced with plaster. It was then lifted and transferred to the storage facilities of the Mestni muzej Ljubljana. In December 2014, the plaster was removed at the Restavratorski center (Zavod za varstvo kulturne dediščine Slovenije).

Analyses ensued, with the characterisation of the mortar and paint layers of the column shaft, as well as the rock of the plinth, aimed at establishing the production manner and provenance.

**ARCHAEOLOGICAL CONTEXT**

**Archaeological site**

The NUK II site is located in the city centre of present-day Ljubljana and delimited by the streets of Rimska ulica, Emonska ulica, Zoisova cesta and Slovenska cesta. It extends across 7500 m² and comprises parts of Roman Insulae XIII, XVII, XLVI and XXVII, as well as the intersection of Streets F and H (Figs. 2; 3).

The excavation records show that the column was found in Insula XXVII, in Grid Square R/18 and at the very edge of the excavation area. Plesničar-Gec writes that Insula XXVII, located south of the decumanus maximus, was a residential and artisanal area in the first few centuries of its existence, while in the late 4th and the first half of the 5th century it formed part of a public recreation complex that extended into Insulae XVII and XIII.²

The column was found in stratigraphic unit SE1916 described as a crumbly light grey-brown sandy layer with pieces of painted wall plaster, crushed brick and gravel. It was a mixed layer with finds that included a coin minted in AD 40–41.³ SE1916 was overlain by mixed SE69 that extended across the site and contained post-medieval, medieval and Roman finds; SE69 was partially removed by machine. The stratigraphic unit with the column lay above SE1918 that yielded, among other finds, a coin of Valentinianus I, which dates the layer to the last quarter of the 4th century. In adjacent Grid Squares P/18 and O/18, excavations revealed a red and white watertight floor such as were usually used for pools. At roughly the same altitude, SE1916 in Grid Squares R/18 and S/18 revealed a hypocaust.

For further details, the excavation records are less useful. The piece is not drawn in any of the plans and cross sections made during excavation.⁴ It only appears in the list of special finds with its grid square, coordinates, brief definition (“worked stone; column with Fresco above stone”) and date of discovery. It also appears in a few photographs taken during excavation and after consolidation/reinforcement. The coordinates for the column give a single point, but it is not noted whether it was measured at the top, the bottom, the left edge, the right edge or at the centre of the 36 × 65 × 36 cm large piece. It is thus not possible to accurately locate the piece within the 0.12–0.78 m thick and 1.64–2.36 m wide SE1916. The photographs show the plinth lay between a straight wall to the north and a semicircular wall to the south, parallel with the straight wall, which is consistent with the given coordinates (Fig. 3). They also show that the bedding surface of the plinth was parallel with

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² Plesničar Gec 1999, 236.
³ Acc. No. S0041324, Caius Germanicus.
⁴ It is drawn into the plan of Insula XXVII in Plesničar Gec 1999, Fig. 322a, but not mentioned in the text.
Fig. 2: Emona. Insulae XXVII, XLVI, XIII and XVII separated by Streets F and H (adapted from Plesničar, Brenk, see Fn. 31).

Sl. 2: Emona. Inzule XXVII, XLVI, XIII in XVII ter križišče cest F in H (prirejeno po Plesničar, Brenk, glej op. 1).
the surrounding ground, slightly raised above it (Fig. 4). In connection with the latter, the surface finish on the stone plinth (for detail see below) indicates that the plinth must have stood 10 cm above the surrounding ground on three sides. Having said that, available excavation records offer no confirmation of whether the surrounding ground on the photographs is the original top surface of SE1916 and whether mixed SE1916 was actually a levelling layer as part of construction activities, hence the original context of the column. Given the available evidence and pending the results of an integral evaluation of the NUK II site, it is only possible to say that the column was likely found in situ and that it postdates SE1918. It is certainly of a Late Roman date; according to the phases of the NUK II site as proposed by Plesničar Gec in one of her last publications, the column belongs to the third construction phase dated between 400 and 452.5

**Description of the column shaft and its plinth**

The surviving piece of Roman architecture comprises the lower part of the painted stucco of the now hollow column shaft that is set directly onto a stone block (Fig. 5a).

The stucco survives in the maximum height of 17 cm. The lower diameter of the shaft measures 36 cm and the diameter of the hole for the organic core of the shaft measures 25 cm. The shaft is plain, red painted and without a base. The lower diameter

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roughly corresponds with the width of the stone block; the edges of the two pieces are aligned on one of the longer sides of the block, while on the opposite side the shaft slightly exceeds it. Neither is the shaft completely centred along the longitudinal axis of the block. The interior surface of the stucco shows impressions of vertically positioned reeds (common reed – Phragmites australis)⁶ that enveloped an organic, most likely wooden core.

The reeds were attached to the core with a cord spirally wound round the core at an interval of roughly 10 cm (Fig. 5b). The reed impressions between individual cord impressions are flat and curve neither vertically nor horizontally, suggesting that the core was of a solid material and that the reeds were not attached in bundles. Reeds on wood would have a double function: ensuring a better adhesion of the stucco and preventing the cracking of the stucco due to shrinkage of the wooden block have been sufficiently load bearing. We sincerely thank him for his contribution.
core. The combination of wood, reeds and stucco is used in Roman construction in specific circumstances, mostly on ceilings and vaults, but also in wattle-and-daub walls. Neither is the case for the column from Emona. In Roman construction, wooden elements would usually be roughened up and have the stucco applied directly onto it. The reed impressions certainly do prove, however, that the core was not made of natural stone or brick, as these materials would not require reed lining. Accepting a wooden core, it may have been a worked tree trunk, though it is also possible that we are dealing with a framework or some kind of wooden armature onto which the reeds were attached.

The stucco stands on a stone block measuring 62.5–65.0 cm in length, 34–36 cm in width and 24.5–26.5 cm in height. Considering the dimensions, with the height close to the width, the block would be a pedestal if visible whole, but as its surface finish (see below) shows that only the upper third stood above ground, the block actually served as a plinth. It shows imprecise workmanship, in both shape and surface finish. None of the surfaces is smoothly dressed. The bedding surface is dressed with a pointed chisel; there is no difference between the surface finish in the area covered with the shaft and the surrounding area. One of the longer side surfaces and both shorter ones are fairly smoothly finished in the height of roughly 10 cm from the bedding surface, with a very uneven and at places blurred border made with a flat chisel. Lower down, the surface is either coarse or undressed. The surface most smoothly finished (Fig. 5a), with a toothed chisel, is one of the longer sides, particularly its right end below the 10-cm strip that is finished with a finer toothed chisel. The purpose of this finer finish is not known and might indicate reuse of the block. This longer and both shorter side surfaces also have a border at the bedding surface, which is dressed with a flat chisel roughly in the height of 1.5 cm; this border does trace the edge of the surfaces, but as the edge is very uneven, so too is the border. The other of the two longer side surfaces, where the shaft exceeds the edge of the plinth, was left undressed (Fig. 5c). The surface finish of the plinth reveals that it was visible on one of the longer and both shorter sides in the height of roughly 10 cm, more precisely that it stood 10 cm above the surrounding ground or pavement on three sides, while on one side its bedding surface was levelled with the ground and the stucco in part reached onto that ground.

The shaft may have been plain along the entire height, but it may also have been plain only in the lower third and fluted above. The thickness of the stucco layers (4–7 cm) does allow for this possibility, though we should also note the substantial difference in the thickness that may indicate the existence of an adjacent structure at the thinner part rather than mere poor workmanship. The shaft was probably painted red only in the lower third. The absence of a base could signify a column with a Doric capital. According to Vitruvius’ recommendations on the proportions of Doric columns in colonnades and walks, a shaft measuring 36 cm in diameter would be an estimated 2.7 m high together with the capital and 2.5 without it. Considering the general poor workmanship, as well as the location of the find within an insula, however, the column may also have been reduced to a simple cylindrical element on a plinth terminating above with a slab in the constructional function of a capital. The stucco does not survive along the entire circumference of the column, but in a sufficient measure to suggest that the column was not engaged into a wall or a masonry fence; the column was presumably either fully free-standing or associated with a (wooden) fence attached higher up. The fact that the column is positioned roughly at the centre of the length of the footing and even more so the surface finish that points to differing ground levels suggest that it was not a corner element and that it may have been one in a series of such columns, in a structure such as a porticus or a peristyle/colonnaded courtyard. Such an interpretation is corroborated by the observation of the surface finish on the plinth that suggests two differing ground levels.

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7 Vitruvius VII, III, 2.
8 Vitruvius VII, III, 11.
10 This is a suggestion that Roger B. Ulrich (Department of Classics, Dartmouth College) put forward on the basis of a photo of the column remains. We heartily thank him for his opinion.
12 Considering the presumed source of the stone at Podpeč, the possibility of reuse is also suggested by the span of the datable artefacts from this rock, believed to have ended in the 3rd century AD (Šašel Kos 1997).
13 Vitruvius V, IX, 3.
EXPERIMENTAL

Materials

The samples of the stucco, consisting of one paint and four mortar layers, were taken across the profile of the column (samples ASL1-ASL3) in order to determine the mineralogical-petrographic composition of the mortars, i.e. the type of the aggregate and binder, the painting technique and the pigments used. Another sample (ASL 5) was taken from the stone plinth.

Methods

The polished thin-sections of the mortar layers for the stucco were studied with optical microscopy, using the Olympus BX-60 optical microscope equipped with a JVC3-CCD digital camera.

Polished cross-sections of the paint layer were studied by Raman microspectroscopy to identify the pigments of the red paint layer and the painting technique used. Raman spectra were obtained from the polished cross-sections of the paint layers with the Horiba Jobin Yvon LabRAM HR800 Raman spectrometer equipped with the Olympus BXFM optical microscope. Measurements were made using a 785nm laser excitation line, and the Leica 100× objective. The spectral resolution was about 1 cm$^{-1}$.

The stone plinth was examined macroscopically, sampled (sample ASL 5) and a thin-section prepared. It was studied under transmission light using the Zeiss Axiophot polarising optical microscope and classified according to Folk (1959; 1962) and Dunham (1962).

RESULTS

Painted stucco

The thickness of the stucco varies from 4 to 7 cm. The stratigraphy of mortar layers is as follows: (i) a red paint layer (ASL1) that covered four different mortar layers, (ii) first – ca 3.0 to 3.5 mm thick (ASL1), (iii) second – ca 17–20 mm thick (ASL1), (iv) third – ca 15–40 mm thick (ASL2) and (v) fourth – ca 5–6 mm thick layer (ASL3).

As observed under the optical microscope, the red paint layer was applied using the fresco painting technique (Fig. 6a), i.e. the pigment was applied as a water suspension onto fresh stucco. Raman microspectroscopy revealed the presence of hematite (Fig. 6b), which indicates that the pigment used is red ochre, a common earth pigment. Pliny the Elder distinguished between ‘florid’ pigments, which were rare and expensive, and ‘austere’ or sombre pigments, which were common. Red ochre belongs to the latter. The analyses thus far performed of the wall paintings from Emona, including this particular insula, confirm the absence of the rare and expensive pigments.

The aggregate of the first mortar layer, immediately under the paint layer, consists of angular and semi-angular dolomite grains measuring between 0.05 and 2.06 mm in size, 0.32 mm on

Fig. 6: Fragment of the Roman column. The red paint layer was applied a fresco (a). Raman spectrum of hematite indicating red ochre pigment (b). Emona, Insula XXVII.

N. h. 35.30.
Gutman et al., 2016.
average (Fig. 7a). The grains are poorly sorted with a high content of fine fractions (< 0.05 mm in size). The second mortar layer (Fig. 7b) has a 1:1 ratio of dolomite to silicate grains, which are poorly sorted, rounded, semi-angular and angular, measuring between 0.14 and 1.56 mm in size, 0.37 mm on average. Silicate grains such as quartz, mica, feldspar, chert and lithic grains of sediment and igneous rocks have been observed. The same composition of aggregate grains has also been observed in the third (Fig. 7c) and fourth (Fig. 7d) mortar layers with poorly sorted grains, measuring from 0.21 to 2.14 mm and 0.46 mm on average (for the third layer) and from 0.16 to 2.27 mm and 0.52 mm on average (for the fourth layer).

The binder of the mortar layers is lime, with lime lumps. The aggregate/binder ratio is approx. 1:1 for the first two layers, while binder prevails in the third and fourth layers, in the ratio of 1:2 and 1:3, respectively. High amount of fine fraction in the first layer resulted in a compact binder.

A similar stratigraphy of mortar layers was observed in the analysed fragments of wall paintings from Emona excavated in this area (Grid Squares R/18 and S/18). According to Vitruvius\textsuperscript{17}, the Romans applied up to six preparation layers of mortar before painting (three medium- to fine-grained layers, now commonly called arriccio, and three more fine-grained layers, called intonaco). He also described the correct method of plastering walls and ceilings and of making a high-quality base for wall paintings. In the case of wall paintings, Vitruvius recommended the use of ‘transparent grains of marble’ for at least three coats. At Emona, dolomite and rarely coarse-}

\textsuperscript{16}Gutman et al., 2016.

\textsuperscript{17}Vitruvius, VII, 3.
grained calcite was used instead.\textsuperscript{18} This has also been observed in the wall paintings from Celeia, a Roman town located some 60 km northeast of Emona.\textsuperscript{19} Moreover, at Emona most often a single layer has been observed, two at most, sometimes a mixture of the silicate and carbonate grains was used, while preparation layers for the Celeia wall paintings show up to three layers with carbonate aggregate, which underscores the differences in economic status between the two towns. These results suggest that the same recommendation was followed in case of the technology for the painted stucco columns.

The petrographic composition of the mortar aggregate usually reflects the local geological conditions. The presence of rounded and sub-rounded grains suggests a fluvial origin, most probably the alluvial deposits of the River Sava, which are composed of light and dark grey limestone and dolomite, grains of sandstones, quartz, schist and magmatic pebbles.\textsuperscript{20} Angular grains of dolomite aggregate indicate the use of crushed rock, and are likely to have been obtained from the dolomite rock that occurs in the vicinity of Ljubljana. Similar composition of mortars was also found in the preparatory layers for Emona wall paintings.\textsuperscript{21}

The rock of the plinth

The plinth is made of medium dark grey (N4 according to the Geological Rock-Color Chart) limestone. Running along the length of the block roughly at mid-height is a thin and highly uneven lamina of marly material that divides the otherwise uniform rock of the plinth in two parts (Fig. 5).

The plinth is made of oolitic packstone\textsuperscript{22} or oomicrite\textsuperscript{23} (Fig. 8).

The packstone texture consists of allochemical grains (approximately 65%) and a prevailing (25%) micrite to microsparite matrix with a subordinate (10%) granular sparite cement. The allochemical grains measure from 0.12 to 2.5 mm, 0.6 mm on average, and are moderately well sorted. Their form and roundness mainly depends on the type of grains: the ooids and intraclasts are predominantly isometric and well rounded, the echinoderm plates are mostly angular to sub-rounded. The grain-to-grain relations are mainly characterised by point and long contacts, less frequently by concave-convex and saturated contacts.

Almost parallel, up to 0.05 mm thick sparitic veins are present in the rock, two of them near perpendicularly intersecting stylolites.

Allochemical components are ooids, intraclasts and bioclasts.

Ooids make up approximately 50% of the thin-section surface. They measure between 0.2 and 1.5 mm, 0.6 mm on average. Their cores are seldom visible. Fossil fragments (echinoderms and gastropods) can be observed at the centre in some cases. Cortical laminas mostly have a radial crystal structure, while some ooids reveal a dual microstructure. The inner part has a radial, the outer part a tangential crystal structure. Some of them are composed of two or more ooids. The ooids show different degrees of micritization, some are completely micritized.

Intraclasts are present in roughly 10%. They are micritic, oomicritic and biomericitic in composition, and measure between 0.2 and 2.5 mm. They are mostly isometric and intermediate in cross sections, mostly rounded and partly angular. Echinoderms, fragments of bivalves, gastropods and ostracodes have been detected in the biomicritic intraclasts.

\textsuperscript{18} Gutman et al., 2016.
\textsuperscript{19} Gutman et al., 2015.
\textsuperscript{20} Premru 1980.
\textsuperscript{21} Gutman et al., 2016.
\textsuperscript{22} Dunham, 1962.
\textsuperscript{23} Folk, 1959, 1962.
Bioclasts are present with about 5% and represented by echinoderms. Some are micritised at the edges. They measure 0.2 to 1 mm. They are isometric to long in cross section and angular to sub-rounded.

The matrix of micrite and microsparite, mostly of the pore type, is present in the rock with about 25%.

Sparite is present with about 10%. It is granular with equant crystals measuring between 0.04 and 0.2 mm. Genetically, it belongs partly to pseudo- and partly to orthosparite. The latter is of the pore and corrosive type (late diagenetic sparite).

Opaque minerals are present in traces and most probably belong to up to 0.04 mm large limonitised pyrite grains. They are mostly concentrated along the stylolites and in part randomly scattered in the rock.

The described limestone microlithofacies of the plinth has been documented for different geological periods in different areas of Slovenia. Considering that the plinth was excavated in Emona, we suspect that the material for its production came from the wider surroundings of the town, presumably from the area of Podpeč, roughly 15 km southwest of Emona. It is a known site of Roman quarrying with Lower Jurassic beds of oolitic limestone.

**DISCUSSION**

The column represents an exceptional find both in the town of Emona and in Slovenia. Parallels for columns with an organic core are few to be found. Column shafts with a wooden core are believed to have been used in Carnuntum, forming part of a porticus that lined a street (Straßenhalle) in Insula VI of the civil town. As opposed to the column from Emona, these shafts were presumably placed between respective bases and capitals of stone. Together with the Temple of Diana, the Straßenhalle is attributed to the fourth construction phase and dated to the early 4th century.

We should mention that the said bases have no dowel holes that, together with the absence of pieces of shafts in either stone or brick, led the Austrian researchers to presume organic-core shafts. The plinth from Emona also bears no dowel holes on the bedding surface, nor any other markings that would indicate reinforcement of the joint; the stucco must thus have sufficed to keep the shaft on its footing. The excavations in Emona revealed no stone bases or capitals in Insula XXVII. Recently, excavations in Celje also brought to light a hollow stucco shaft on a stone plinth, but the impressions in the interior suggest a different core, possibly organic and held together with a sort of a cord wrapped around the core.

The analyses of the paint and mortar layers of the stucco from Emona have shown that it is comparable in composition and number of applied layers with the samples of Emona’s wall paintings thus far analysed. The analysis of the rock for the plinth has shown that it came from the Roman quarries in the vicinity of the town, presumably at Podpeč.

The excavation records reveal that the column formed part of a building or complex with a limited use of stone; it was used for the plinth, but not for the shaft. The shape of the plinth and its surface finish suggest that the column was part of a colonnade lining one or more sides of a building, as a porticus or a peristyle. The coordinates for the column show that the colonnade stood merely a metre from the wall to the north, which would mean a very narrow covered passage. The column was found in the central part of Insula XXVII that, according to Plesičar Gec, formed part of a recreation complex together with Insulae XVII and XIII. Insula XXVII also revealed a basin or pool south of the column, as well as a hypo-caust in its vicinity, which indicates the existence of baths. However, the current state of analysis of...
this part and the whole of the NUK II site does not allow us to draw conclusions. Stratigraphic data certainly point to the late 4th century as the most likely ante quem non for the column, which would correspond with the general picture of this part of Emona as suggested by Plesničar Gec (large investment, public space and so forth). Dating is made even more difficult by the fact that the site is only partially published and that the publications focus on the more extensively investigated Insulae XIII and XVII. The dating of the last phase of Insula XXVII from 1999 places the column in the late 4th and first half of the 5th centuries, while the last published dating of the complex is even later.

The column as part of a large public bath complex in Insulae XXVII and adjacent insulae (Fig. 3) corresponds well with what we known of Emona in the 4th and 5th centuries. Soon after the reign of Constantine, Emona entered into a period of economic prosperity reflected in the building activities documented at several sites within the Roman town. An extensive construction activity also took place at the NUK site, i.e. in Insulae XIII, XVII, XXVII and XLVI, which were transformed from private units to a vast public space for recreation and entertainment with baths, atria with impluvia, rooms with underfloor heating and a large public latrine, presumably all constructed in the late 4th century. In her last publication of the site, Ljudmila Plesničar Gec dates the complex – also based on coin finds – to a time between 400 and 452, while Andrej Gaspari places it in the late 4th or the early 5th century.

The changes described above can most readily be explained with the presence of army units at Emona and the role of the town in the hinterland of the Alpine barrier system. In addition to the renovation of the fortification walls, the presence of the army in the town is revealed by the finds of weapons and military equipment. This corresponds with the increase in population as reflected in the expanding northern cemetery of Emona. In some places such as the Kozolec site, this cemetery grew beyond the previous boundaries, with new burials predominantly from the second half of the 4th century, some of which contained goods interpretable as military items. The complex unearthed at the NUK II site included a small Early Christian aula primitiva in Insula XIII, which is logical for a time when a large part of the army was Christian. The spatial proximity of Early Christian and bath complexes is a known practice, documented in several Roman towns.

The use of the recreation complex in Insulae XIII, XVII, XXVII and XLVI, and the remains of the column as its presumed constituent part, is dated to the Late Roman period, presumably the first half of the 5th century or late 4th/early 5th century. We should add that the stratigraphic record for the column allows for the earlier beginning, i.e. the late 4th century. Pending a comprehensive and integral analysis of the NUK II site, this is merely a hypothesis.

Acknowledgements

We would sincerely like to thank all our colleagues for their contribution, particularly Andrej Gaspari from the Oddelek za arheologijo, Filozofska fakulteta, Univerza v Ljubljani, for his valuable comments on the archaeological context.
Rimski steber z rdeče barvanim ometom iz Emone

Povzetek

UVOD


ARHEOLOŠKI KONTEKST

Najdišče


Za bolj natančno lociranje in interpretacijo arheološkega konteksta pa imamo bolj bolj skope podatke. Kos ni vrisan v načrti in preseki najdišča NUK II. Vpisan je v seznam posebnih najdb z navenim kvadrantom, koordinatami, kratko definicijo (obdelan kamen; steber s freskami nad kamnom) in datumom najdobe. Zabeležen je tudi na nekaj fotografijah, posnetih med izkopavanji in po konsolidaciji/utrdivitvi. Koordinate za steber so znane, ni pa specificirano, ali je podana točka vzeta na vrhu, na dnu, na desnem robu, na levem robu ali v središču kosa, ki meri 36 × 65 × 36 cm. Tako ni mogoče natančno locirati kosa znotraj 0,12–0,78 m debele in 1,64–2,36 m široke SE1916. Fotografije kažejo, da je bila plinta najdena med ravnim zidom na severu in polkrožnim zidcem na jugu, vzporedno z ravnim zidom, kar se ujema s koordinatami na načrtu (sl. 3). Fotografije tudi kažejo, da je nosilna ploskev vzporedna z okoliškimi tlemi in malo dvignjena nad njih (sl. 4). V povezavi s slednjim je treba omeniti obdelavo površine kamnite plinte (za natančen opis glej spodaj), ki kaže, da je na treh straneh...
gledala približno 10 cm iznad nivoja tal. Pri tem pa iz dokumentacije ni razvidno, ali so okoliška tla na fotografiji očiščena zgornja površina SE1916 in ali je premešana SE1916 predstavljala izravnavo terena ob gradnji, torej originalni kontekst stebra. Dokumentacija trenutno, pred celostno obravnavo najdišča, kaže na to, da je bil ostanek stebra verjetno najden in situ ter da ga lahko datiramo v poznorimski čas, kasneje od SE1918. Ostanek stebra nedvomno sodi v poznorimski čas; glede na faziranje, ki ga za najdišče NUK II predlaga L. Plesničar Gec v eni svojih zadnjih objav, v tretjo gradbeno fazo, datirano v obdobje med letoma 400 in 452.  

Opis stebra in njegove plinte

Ohranjeni arhitekturni kos sestavlja spodnji konec votlega trupa stebra iz rdeče barvanega ometa, postavljen na kamnito plinto (sl. 5). Omet trupa stebra je ohranjen v največji višini 17 cm. Spodnji premer trupa meri 36 cm, premer votle notranjosti pa 25 cm. Trup je brez kanelur, zato velja, da je bil omet stebra ohranjen v največji višini, lahko pa samo v spodnji tretini, zgoraj pa približno toliko kot širina plinte; roba obeh kosov je neobdelana, zahteva pa preoblikovanje. Vzemlje ali je premešana SE1916 predstavljala izravnavo tla na fotografiji predmeta, za kar se mu najlepše zahvaljujemo.  

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Trup je bil pritrjeno na jedro z vrvjo, ovito obdajalo organsko, najverjetneje leseno jedro. Trup je brez kanelur po celotni višini, lahko pa samo v spodnji tretini, zgoraj pa približno toliko kot širina plinte; roba obeh kosov je neobdelana, zahteva pa preoblikovanje. Vzemlje. Ohranjeni arhitekturni kos sestavlja spodnji konec votlega trupa stebra iz rdeče barvanega ometa, postavljen na kamnito plinto (sl. 5). Omet trupa stebra je ohranjen v največji višini 17 cm. Spodnji premer trupa meri 36 cm, premer votle notranjosti pa 25 cm. Trup je brez kanelur, zato velja, da je bil omet stebra ohranjen v največji višini, lahko pa samo v spodnji tretini, zgoraj pa približno toliko kot širina plinte; roba obeh kosov je neobdelana, zahteva pa preoblikovanje. Vzemlje ali je premešana SE1916 predstavljala izravnavo tla na fotografiji predmeta, za kar se mu najlepše zahvaljujemo.  

Opis stebra in njegove plinte

Ohranjeni arhitekturni kos sestavlja spodnji konec votlega trupa stebra iz rdeče barvanega ometa, postavljen na kamnito plinto (sl. 5). Omet trupa stebra je ohranjen v največji višini 17 cm. Spodnji premer trupa meri 36 cm, premer votle notranjosti pa 25 cm. Trup je brez kanelur, zato velja, da je bil omet stebra ohranjen v največji višini, lahko pa samo v spodnji tretini, zgoraj pa približno toliko kot širina plinte; roba obeh kosov je neobdelana, zahteva pa preoblikovanje. Vzemlje ali je premešana SE1916 predstavljala izravnavo tla na fotografiji predmeta, za kar se mu najlepše zahvaljujemo.  

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proporčev dorskih stebrov in stebrišč, bi trup stebra premera 36 cm meril približno 2,5 m v višino brez kapitela in 2,7 m s kapitolem (Vitruius V., IX, 3). Vendar pa ne smemo zanemariti možnosti, da je bil steber omejen na preprost valjast trup na plinti, ki se je zgoraj zaključil s ploščo v konstrukcijski vlogi kapitela. Omet stebra ni ohranjen v celotnem obsegu, a v zadostni meri, da lahko izključimo možnost, da je bil steber deloma potopljen v steno oz. zidano ograjo. Steber je bil samostojen podporni člen, ki bi bil lahko povezan z (lese)no ograjo višje gor. Dejstvo, da je bil trup postavljen približno na sredino plinte po vzdolžni osi, še bolj pa razlika v obdelavi površine, ki kaže na različne nivoje tal, govorita proti temu, da je bil kos vogalni element, in v prid temu, da je bil del serije podobnih stebrov na plintah, kot del portika ali peristila neke večje stavbe.

NARAVOSLOVNE ANALIZE

Barvna plast in plasti ometa:
Vzorce plasti ometa smo preiskali z optičnim mikroskopom, s čimer smo določili strukturo in teksturo vzorcev ter njihovo mineraloško-petrološko sestavo. Debelina ometa je različna, od 4 do 7 cm. Apneni omet je sestavljen iz štirih plasti. Najbolj zunanja plast je debela približno 3,5 mm in ji sledi barvna plast z rdečim okrom (sl. 6). Barvna plast je bila nanesena na še svež omet, saj ni vidne jasne in ostre meje med barvnico plastjo in ometom, kot je to navadno v primeru, kjer je barvna plast nanesena na že suh omet. Torej gre za t. i. tehniko fresco. Sledi plast ometa debeline približno 15 mm. Tretja plast je debela približno 10 mm, četrta plast na najbolj notranji strani stebra pa 5–6 mm.


Kamen plinte:

Stratigrafski podatki kažejo, da je bil steber del stavbe oz. arhitekturnega kompleksa z omejeno rabo kamna; ta je bil uporabljen za plinto, ne pa tudi za steber. Oblika plinte in obdelava njegove površine nakazujejo stebrisč, ki se je naslonilo na jedro stavbe, kot portik ali peristil. Koordinate za steber kažejo, da bi stebrisče stalo manj kot meter

DISKUSIJA


Na podlagi analiz barvnice in plasti ometa ugotavljamo, da je omet stebra primerljiv z vzorci stenskih poslikav iz Emone po sestavi in številu plasti. Analiza kamnine pa je pokazala na izvor materiala iz širše okolice mesta, domnevno iz Podpeči.

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6 Humor 2003, 48.
7 Humor 2003, 42–45.
8 Odkrito med izkopavanji Pokrajinske muzeja Celje, ki so potekala leta 2018 na Muzejskem trgu (objava je v pripravi). Za podatke se iskreno zahvaljujemo Maji Bauzovac in Juretu Krajšku iz celjskega muzeja.
od zidu proti severu, torej nakazujejo zelo ozek pokrit hodnik. Steber je bil najden v osrednjem delu inzule XXVII, ki je po L. Plesničar Gec obsegala del rekreacijsko-zabaviščnega kompleksa skupaj z inzulama XVII in XIII. V inzuli XXVII je bil južno od stebra najden bazen, v neposredni bližini tudi hipokavst, kar nakazuje obstoj term, vendar ob trenutnem stanju analize tega dela oz. celotnega najdišča NUK II ni mogoče delati za ključkov. Stratigrafski podatki vsekakor kažejo pozno 4. stoletje kot najbolj verjeten ante quem non za steber, kar bi se skladalo s splošno podobo tega dela Emone, kot jo je predlagala L. Plesničar Gec (velika investicija, javni prostor itn.). Datacijo otežuje dejstvo, da je najdišče parcialno objavljeno in da je bil fokus objav na inzulah XIII in XVII, raziskanih v večjih obsegu. Datacija zadnje faze inzule XXVII iz leta 1999 postavlja tudi naš steber v konec 4. in prvo polovico 5. st.,10 medtem ko je zadnja datacija kompleksa še nekoliko mlajša.11

Steber kot del večjega javnega termalnega kompleksa v inzuli XXVII in sosednjih inzulah (sl. 3)12 se dobro ujema s sliko Emone v 4. in začetku 5. st., znano na osnovi dosedanjih odkritij. V Emoni je v času takoj po Konstantinu zaznati velik gradbeni in ekonomski razcvet, ki se kaže na več raziskanih lokacijah.13 Po obsegu izstopa velika investicija v ves kare območja NUK II (inzule XIII, XVII, XXVII in XLVI), ki je bil iz zasebnih inzul preurejen v ogromno javno "rekreacijsko-zabaviščno"14 območje, z bazeni, atriji z impluviji, hipokavsti, ogrevanimi prostori ter velikim javnim straniščem, zgrajenim konec 4. st.15 Celoten kompleks postavlja izkopavalka Ljudmila Plesničar Gec v zadnji objavi najdišča:16

Za naštete spremembe je zadrževanje ali stacioniranje vojaških oddelkov v/pri Emoni oz. funkcija Emon znotraj sistema Claustra Alpium Iuliarum najbolj smiselna obrazložitev.18 V mestu vojaško navzočnost poleg ponovne utrditve obzidja dokazujejo številne najdbe vojaške opreme.19 To se

10 Plesničar Gec 1999, 236.
16 Plesničar Gec 2005, 404.
18 Plesničar Gec 2005, 404.

21 Županek 2018.
22 Županek 2018; Mišček et al. 2020, 277.
23 Djurić 2012.
Rimski steber z rdečo barvanim ometom iz Emone

Ilustrations: Fig. 4 (photo: D. Snoj, MGML); – Fig. 5 (photo: M. Paternoster, MGML); – Fig. 6, 7 (photo: M. Gutman Levstik, Restavratorski center ZVKDS); – Fig. 8 (photo: D. Skaberne, Geološki zavod Slovenije)

Slikovno gradivo: Sl. 4 (foto: D. Snoj, MGML); – Sl. 5 (foto: M. Paternoster, MGML); – Sl. 6, 7 (foto: M. Gutman Levstik, Restavratorski center ZVKDS); – Sl. 8 (foto: D. Skaberne, Geološki zavod Slovenije)

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