A FEW INDICATIONS ON THE ARCHITECTURE OF SARMIZEGETUSA REGIA. ABOUT THE ANDESITE COLUMNS AND THE MEASUREMENT UNIT

Virgil Apostol*

Key words: andesite drums, andesite plinth, andesite columns, wooden entablature, bronze square, markings for measurement units

Abstract: The archaeological research undertaken at Sarmizegetusa in time has indicated or discovered a number of plinths, drums and bases of andesite columns. Several reconstruction hypotheses are proposed for the architecture of the Great Andesite Temple, the Small Rectangular Temple and the Large Rectangular Temple, based on the analysis of these architectural elements preserved *in situ*, in a secondary position or reused in Roman buildings. In the end an important archaeological discovery in the area of Orăștie Mountains is presented, a bronze square with markings (lines and dots) preserved on its arms, which indicate precisely the measurement unit used at the Dacian monuments at Sarmizegetusa Regia.

Rezumat: De-a lungul timpului au fost semnalate sau descoperite ca urmare a cercetărilor arheologice o serie de plinte, tamburi și socluri de coloană din andezit. Sunt propuse variante de reconstituire a arhitecturii Templului mare de andezit, Templului mic rectangular și Templului mare rectangular pe baza analizei acestor membraturi arhitecturale conservate *in situ*, în poziție secundară sau reutilizate în construcții de epocă romană. În final este prezentată o importantă descoperire din zona Munților Orăștiei, un echer din bronz pe brațele căruia se conservă marcaje (linii și puncte) care indică cu precizie unitatea de măsură utilizată la monumentele dacice de la Sarmizegetusa Regia.

Over time, a number of andesite column drums have been reported or discovered by archaeological research, scattered about the archaeological site. During the 19th century and the first half of the 20th century some of the drums were reported in the Southern Gate area (D.A.8-9.), in the area of the building with hypocaustum system - "Roman bath" (D.A.5-7; D.S.31), and in the area of the Pentagonal Tower (D.A.22.). Another group of drums was preserved in the form of spolia, built in the curtain section of the Roman fortification (D.A.10-15) between the Southern and Eastern Gates. (Fig. 1). A small number of them were ascribed to a monument in the sacred area, namely The Great Andesite Temple on the terrace no. X. Similarly in a preliminary hypothesis a series of ten such spolia drums (D.A.19, 21; D.A.23-30.) were ascribed to the Small Rectangular Temple on Terrace XI. This association however should be dropped, as there are dimensional discrepancies between the ten spolia-drums and the drums discovered in situ.

Column fragments, preserved in the original position, were discovered inside the rectangular andesite temples on the Terrace XI. Sixteen drums (D.S.32-47.) from the base of the columns are preserved inside the Small Rectangular Temple⁷ and one prismatic socle (B.L.3.) is preserved inside the Large Rectangular Temple.⁸ In addition there are three fragmented drums (D.S.48-50.) and one prismatic socle (B.L.2.) preserved in secondary positions inside those buildings. The register of component parts of columns was completed in

* Institute of Archaeology "Vasile Parvan", Bucharest, Romania, e-mail: apostol_virgil@yahoo.com

The sketches made by Téglás István in 1884 show two drums and an andesite plinth (Bajusz 2005, p. 164, fig. 4/139). Four drums and one andesite plinth can be identified in the area now.

⁴ Daicoviciu 1953, p. 159, note 1.

Daicoviciu *et alii* 1951, pp. 117-118; Daicoviciu 1952, pp. 293-294; p. 295, fig. 13.

Daicoviciu *et alii* 1951, p. 117; Rusu-Pescaru 2005, pp. 48-49.

8 Glodariu et alii 2006.

Caiete ARA 10, 2019, pp. 55-88

¹ For the history of discoveries and for the descriptions of some of the drums see Peṭan 2018, pp. 302-305. In a photo taken by D.M. Teodorescu in the Southern Gate area, two fragmentary drums are visible (Pârvan 1926, plate XXXIV, fig. 2). The recently identified fragments may be those captured in that photo (Florea *et alii* 2019).

³ The 1804 plan of the "Roman bath" and the Pentagonal Tower shows a column drum near the Pentagonal Tower (Österreichisches Staatsarchiv, Kriegsarchiv, Kartenabteilung KVIIk 403 I/2, *apud* Peṭan 2018, pl. VI). Nowadays the upper part of a shaft is preserved inside the Pentagonal Tower.

⁶ The upper diameter of the shaft fragments preserved *in situ* (72 cm) does not match the diameter of the drums scattered down the slopes (75 cm *cf.* Daicoviciu *et alii* 1951, p. 118).