

Preliminaries at the restoration project of
Trajan's bridge base from Drobeta Turnu Severin

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- abstract -

The bridge over the Danube, built by Apollodor of Damascus between today Kostol (Serbia) and Drobeta Turnu Severin, between the two expeditions of the war with the Dacians, is considered, even since antiquity, one of the most significant achievements of the Roman constructive genius.

The modern analysis of monument is encumbered by the loss of an important category of direct sources (Apollodor's writings, Trajan's comments regarding the Dacian war), by the contradictions among the few references of the antique sources kept until our time and, for the ruins of the bridgehead on the Romanian side, by the precarious or quality of the available archaeological data.

The initiation of a new restoration project (project INMI 264/1998), after the discontented conservation solution adopted in 1983-1984 (protection tank which drowned in concrete the bridgehead foundations and base of the piers from Drobeta Turnu Severin) has imposed, due to the impossibility of undertaking new archaeological researches, the revaluation of all the available data from the descriptions or researches undertaken on the monument along the time (Annex 2).

The primary data of the sole ample archaeological research of the monument performed at the end of the XIXth century (descriptions, plan sketches, topographical surveys of the site) have been compared with the information from different specialty papers regarding the bridge base or the ancient site Drobeta (fig. 2 and 3), as well as with metrical recordings from the 1979-1984 archaeological researches undertaken on the Serbian side (fig. 3, 10 and 11). The control of the data and their integration in the general survey of the bridgeheads ruins and of the Drobeta and Pontes forts (fig. 1, 10 and 11), have allowed the elaboration of a maximal variant of reconstitution for each of the four piers of the bridge base at the foundation, base and their elevation level.

The survey of the bridge base piers on the Romanian side (fig. 13) confirms the perfect planimetric symmetry of the bridgeheads, ignored or not suspected by the previous reconstitutions (fig. 3 and fig. 13). The better preservation state of the abutment pier PC platform has allowed, after the cleaning operations from 1998, the revaluation of the vertical piles network (6 rows x 6 piles) and of the ties system of each courses of the abutment pier PC platform (fig. 9). The study offers a reconstitution theory of the piers dimensions-maximal variant (Annex 3) and the hypothetic reconstitution of the ancient arrangement method of the piles network on the abutment piers platform (Annex 4).

The elaboration of the historical and archaeological study of the base bridge on the Romanian side restoration project aimed at the recuperation of several technical data necessary for the project, and as well at the analysis of the planimetric relations of the components of the assembly, namely the bridge, the forts from the bridgeheads (fig. 1, 1a and 1b) and the road from north of the portal pier PA, unidentified in the segment between portal pier PA and *porta principalis dextra* of the Drobeta fort, despite previous archaeological researches and of those from 1998-1999. In the actual research state, the hypothesis of the existence even since antiquity of the valley situated in front of the portal pier PA, stressed out in previous topographical surveys on both sides of the Danube, represents another starting point for future researches. An unsolved problem is that of the height of the bridge: besides several constructive elements, absolutely necessary reference elements are missing, such as the ground level in the fort during the beginning of the IInd century, and the ancient ground level at north of the portal pier. As regarding the functioning period of

the bridge, it must be mentioned that the destruction of the wood platform, of which we are informed by Dio Cassius, doesn't seem to sequential belong to the definitive abandonment as well, as long as the passage point represented by the Pontes-Drobeta ford will maintain its importance at least until the middle of the IIIrd century, as the ancient itineraries indicate.

The study analyzes the importance of the bridge for the evolution of Drobeta Roman site: the road that started from the portal pier towards north-north-west influenced the spatial organization of the site during the Roman period, as well as the structure of its roads network assembly, being, at least during the first decades of the IInd century, the major circulation axis, *kardo maximus*.

The general planimetry of the site, known especially due to previous discoveries and historical plans, allows the identification of the *military vicus*, during the period before the end of the IInd century, east of the long side (eastern) of the fort, in relation with *porta principalis sinistra*. The road that ran on the extension of the *via principalis* was the real important road for the military *vicus*, being *decumanus maximus* of the settlement dependent of the fort, but as well of the entire site. In the area from east of the military *vicus*, it has been also identified the earliest necropolis of the Drobeta site, an incineration necropolis. In the area from west of the fort, on the axis that ran from the western extension of *via principalis*, several funerary discoveries are known.

To the bridge construction period are assigned the buildings from the first phase of the thermal assembly, west of the bridge base, which enlist in an orthogonal pattern generated by the bridge axis over the Danube: the bricks with LEG V MAC stamp date the construction from the previous phase of the legion departure from Oescus.

The authors sustain the hypothesis that the first two construction phases of the buildings from Ghica market, most of them remained unpublished (situated at approximately 150-200 m north-north-west of the fort) might belong to the same constructive phase.

It is remarked the fact that the great number of troops necessary for the bridge building workings implies taking into consideration the existence of several forts during 102-105, other than those known at the present, namely the Drobeta fort and the one from Schela Cladovei (disappeared due to the extension of the modern locality).

The analysis of the constructive phases of the two forts from the bridgeheads, *Drobeta* and *Pontes*, important as well for the period of the bridge functioning, reveals the fact that the period during 138-181 (period of time during which are dated the epigraphs regarding *municipium Aelium Drobotensium*) is not mentioned in the Drobeta fort by reshufflings or ample reorganizations as those archaeologically attested at *Pontes*, and coincides with the absence of the inscriptions of the troop or military elements from Drobeta (until the diploma from 179, see Piso, Benea 1984, 111-124).

During 132-133 and the year 160, the troop considered to be present in the Drobeta fort (*Cohors III Campestris c.R.*) is not mentioned among *auxilia Daciae Superioris*, and between 160 (CIL XVI, 111)-170, the military diplomas mention it among *auxilia Moesiae Superioris*.

At the same time, all the existing documentation highlights the fact that, on the east-west axis, the area documented with Roman vestiges comprises at least 1200 m and groups at east and west of the fort. As long as the archaeological investigations have certified the military function of the Drobeta fort during the IInd and the IIIrd centuries, the identification of the Roman municipe near the fort or in its immediate neighborhood continues to be "the remarkable exception of the existence of a garrison with a locality with urban statute".