

# THE “LARGE TOWERS” OF ROMAN DOBRUJA\*

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**Keywords:** *phourion*-tower, artillery battery, interior load-bearing structure/masonry pillars, crosswall.

**Abstract:** The area of Dobruja has revealed, in most late fortresses, examples of rectangular towers remarkable both for their large dimensions and for their interior load-bearing structure represented by massive masonry pillars. The present study proposes for this particular type of defensive architecture the function of artillery battery. The implications that this hypothesis has on the conception of the local and zonal defensive system are examined. In the second part of the study a reconstruction proposition is made for this special type of defensive element.

**Rezumat:** În zona Dobrogei au fost descoperite la majoritatea cetăților târzii turnuri rectangulare, remarcabile atât pentru dimensiunile lor mari cât și pentru structura de rezistență internă, reprezentată de pile masive de zidărie. Studiul propune pentru acest tip particular de arhitectură defensivă funcțiunea de baterie de artilerie. Sunt analizate implicațiile pe care această ipoteză le are asupra concepției sistemului defensiv local și zonal. În cea de-a doua parte a studiului este formulată o propunere de reconstituire pentru acest element defensiv special.

The Late Roman fortifications built in the area of Dobruja<sup>1</sup> in the interval from the end of 3<sup>rd</sup> to the end of 4<sup>th</sup> century<sup>2</sup> are distinguished by the use of a defensive formula characterised by the introduction of towers with elongated U-shaped and fan-shaped plans developed exclusively outside the outer line of the curtain. Although similar defensive installations can also be found in other parts of the empire,<sup>3</sup> the great number of fortresses that use this defensive formula in Dobruja<sup>4</sup> points to a construction habitude, if not even a proper architectural-defensive programme extended to the whole region. Certainly, this manner of fortification did not exclude from the register of defensive elements the towers with rectangular plans (Abritus – eastern side, Ulmetum – south sector). However when they are employed these towers express, by the reduced amplitude of their footprint<sup>5</sup> and their disposition within the precinct, an efficient way of adapting the fortification to the defensive feature of the terrain.

Different from this situation, a special category of towers with rectangular plan – placed in areas which do not benefit of natural defence – is represented by the towers of very large dimensions (Fig. 1). These defensive elements contain a series of constructive particularities which indicate with precision a specific defensive structuring.

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<sup>1</sup> We use this toponym to designate the area of Scythia Minor situated north of Callatis – Zaldapa – Gaber line, where there is a concentration of fortifications with defensive features characteristic to the 4<sup>th</sup> century AD (Lander 1984, p. 255; Torbatov 2002, p. 527). These configurations may also be encountered at some fortresses in the Moesia Secunda province, such as Abritus, Iatrus or Augustae. Yet among the fortresses of the neighbouring province only three – Abritus, Iatrus, Durostorum (*castra*) – contain rectangular towers of large dimensions, which are analysed within the present study. For this reason, in respect to the more frequent presence of these elements on the territory of Dobruja, we consider the three fortifications either as isolated cases (Abritus, Iatrus), or as characteristic to the area of Dobruja (Durostorum).

<sup>2</sup> The upper limit of the chronological interval is represented by the fortification of Ulmetum, recently dated to the end of 4<sup>th</sup> – early 5<sup>th</sup> century (Băjenaru 2010, p. 47).

<sup>3</sup> Such as Udruh, el-Lejjun or Quasr-Qārūn (Castrum Dionysiados).

<sup>4</sup> Capidava, Troesmis-East, Noviodunum, Halmyris, Ibida, Ulmetum, Tropaeum Traiani, Histria, Durostorum (*castra*).

<sup>5</sup> For example *ca.* 140 sq m, the surface of ‘the second south-east tower’ (Pârvan 1913, p. 255), as compared to *ca.* 460 sq m, the area of tower *TM* at Noviodunum (Baumann 2010, pp. 57-119; dimensions *cf.* V. Apostol, inedited research). The area includes the surface of the perimeter walls (front, sides) and of the curtain along the breadth of the tower.