SOME PRELIMINARY CONSIDERATIONS REGARDING THE SPATIAL ORGANIZATION ON THE EPONYMOUS SETTLEMENT OF THE GUMELNITA CULTURE

Done Şerbănescu* Olguța Androne*

Cuvinte cheie: *Oltenița*, Măgura Gumelnița, *săpături arheologice preventive, amenajarea habitatului, organizare proto-urbană*.

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Rezumat: Măgura Gumelniţa, așezarea eponimă a celei mai înfloritoare civilizații din Europa din a doua jumătate a mileniului V a. Chr. se află la 3,5 km nord-est de orașul Olteniţa. Cercetările arheologice recente sugerează faptul că Măgura, pentru a fi locuită în epoca eneolitică, a fost terasată, fiind amenajate trei trepte pe care s-au construit locuințe. Pe platou erau 1-3 șiruri de locuințe așezate circular, iar în mijlocul lor exista un sanctuar și o piață. Așezarea era fortificată pe toate laturile cu șanţ, val și palisadă. O asemenea sistematizare realizată după un plan prestabilit este specifică așezărilor protourbane și dovedește că în acea comunitate era o diferențiere socială și avea un conducător care își exercita autoritatea asupra celorlalți, dar și asupra comunităților din jur.

Abstract: Măgura Gumelnita (the site that gave the name to the Eneolithic civilization flourishing in the Balkan Peninsula and evolving during the second half of the 5th millennium B.C.), is located on the Danube Valley, ca. 3.5 km northeast of the Oltenița Municipality. Recent archaeological investigations suggest that Măgura, in order to be inhabited during prehistoric times, had three terraces cut on its slopes and populated with dwellings. The top plateau also housed 1 to 3 circular rows of houses, while in the central part was a sanctuary and an unoccupied area for various community activities. The settlement was fortified on all sides with a ditch, rampart and palisade. Such organization performed after a predetermined plan is specific for proto-urban settlements and suggests that this community knew social differentiation and perhaps had a leader with authority over neighbouring communities.

The tell type settlement at *Măgura Gumelniţa* (Plate I/1), is located on a steep-sloped, rectangular natural mound, 4 km away from the river bank. The surface of the archaeological site covers ca. 3 ha, the tell being one of the largest north of the Danube¹.

^{*}Muzeul Civilizației Gumelnița, Oltenița.

¹ Lazarovici 2007, p. 85.

At the end of the 19th century, Grigore Tocilescu (then the Director of the National Museum of Antiquities), among several other scholars, suggested in the Large Geographic Dictionary of Romania (Marele dictionar geografic al României)², that Măgura Gumelnita covered the remains of the Constantiniana Daphne fortress, as previously mentioned by the Byzantine historian *Procopius of Caesarea*. According to the latter, the fortress was erected by Constantine the Great on the left bank of the Danube, right across the *Transmarisca* (the present day Tutrakan, in Bulgaria)³. So far. the archaeological research undertaken in the region did not confirm the existence of a fortification, of either Roman or Roman-Byzantine age.

Măgura Gumelnita was rediscovered in 1924 by Vladimir Dumitrescu, who, based on the burnt adobe fragments and the numerous ceramic fragments, recognized it to be a prehistoric settlement⁴. Thus, in the summer of the next year, with the help of his younger colleague, Ion Nestor, he carried out the first scientific, stratigraphy based prehistoric excavations in Romania⁵. The investigated surface covered ca. 60 m², and the results of the archaeological research were consequently published in the Dacia iournal⁶.

In 1939 the excavations on Măgura Gumelnita were resumed by Dinu V. Rosetti, the director of the Bucharest City Museum. The owner of the Măgura (= Mound) tell, a certain Calomfirescu, allowed him to dig wherever he wanted, as he was a family friend⁷, favour that had been denied to Vladimir Dumitrescu back to 1925. The two trenches excavated by Dinu V. Rosetti covered ca. 150 m². They were never backfilled and can be seen to this day. Unfortunately, the results of those excavations remained largely unpublished, with the exception of a few important details revealed in a paper on the subject of the funerary tumuli from Gurbănești⁸.

In 1960, Vladimitr Dumitrescu returned to the site and, with the help of Barbu Ionescu, then the director of the Oltenita Museum, started another excavation on the Măgura Gumelnita, over a surface of 40 m². On this occasion, he noted that, in places, the cultural layer reached 4 m in thickness, proving his previous stratigraphic observations, made 35 years before, correct⁹.

From the above mentioned information source, results that Vladimir Dumitrescu had excavated on the western side of the tell, while Dinu V. Rosetti conducted his excavations on the southern and northern parts. Thus, the central area of the site was never investigated. With only small scale sondages, there was no comprehensive image of the distribution of the dwellings and the other constructions, of their dimensions and density, the only existing information referring to those with a special destination, marked on the general plan of the settlement.

² Lahovari *et alii* 1900, p. 668.

³ FHD-R II, p. 469.

⁴ Dumitrecu 1993, p. 50-57.

⁵ Dumitrescu 1993, p. 56.

⁶ Dumitrescu 1925, p. 29-103.

⁷ Dumitrescu 1993, p. 50-57.

⁸ Rosetii, 1959, p. 791-813.

⁹ Dumitrescu 1966, p. 96 ff.

During 2010 and 2011, the Mayor of the Olteniţa Municipality aimed to include the well known prehistoric site among the tourist attractions of the town, in order to increase the number of visitors, and thus addressed the *National Commission of Archaeology* submitting a *Tourist Management Plan for the Măgura Gumelniţa* and, consequently asked for the release of a permit for preventive archaeological excavations in the respective area. The above mentioned *Plan* had been conceived by the present authors and suggested, among others, the development of an Archaeopark on the site area, composed of eight *Neolithic* dwellings, with distinct destinations, including a sanctuary - dwelling. The *Plan* also included the display of a stratigraphic profile of the site, exhibited together with several other vestiges and archaeological finds. The archaeopark would have included animal folds (with living sheep, goats etc.), and also areas cultivated with the domestic plants known at the time, as well as souvenir kiosks for the public, a small fishing pond, an equitation centre etc.

In order to obtain the permit for the preventive archaeological research, a topographic survey of the site was needed. This action revealed that certain areas of the mound had been cut into several terraces and the question as to the creators of those terraces rose. Mound terracing during present contemporary period was out of the question, as the site had been permanently under the supervision of the researchers of the Olteniţa Museum. On the other hand, the *Large Geographic Dictionary of Romania*, vol. 3, published in 1900, stated that "the mound is called Gumelniţa. Around it, on the upper part, there is a ditch, where it was believed a fortress wall had existed; in the centre of the latter certain people pretend that a church must have been erected" This quotation indicates that the terraces on the Măgura Gumelniţa were noticeable at the end of the 19th century, but this information was disregarded by the authors of the archaeological investigations carried out between the Two World Wars.

The late Barbu Ionescu (creator and developer of the Olteniţa Museum), in his unpublished manuscript Contributions to the archaeological repertoire of the Ilfov County, noted that "the Măgura Gumelniţa is surrounded on its upper part by a step associated to a lower terrace, preserved on most of its area. Between 1918 and 1973 a large number of soundings took place in the vineyards covering this terraced step. On the upper level, traces of the Cernavoda II culture were detected, reaching down to the depth of 0.50 m, and extremely seldom, remains of the Glina culture. A 1961 documentation survey on the eastern terraced step of the settlement exposed a thin habitation layer attributed to the Boian III-Vidra phase" 11.

In 2011, the Deputy Mayor of Olteniţa had the initiative of cutting a winding car road to the top of the *Gumelniţa tell*. During the bulldozering phase at the base of the mound, an archaeological layer was exposed, containing large amounts of daub, probably the remains of a dwelling, and thus the destructive initiative was brought to an end. Surprisingly, this occasion offered the opportunity to observe at the median level of the *Măgura Gumelniţa*, another terrace, probably cut during the Eneolithic

¹⁰ Lahovari *et alii* 1900, p. 668.

¹¹ Amu 2015, p. 29f.

times. This hypothesis is suggested by the fact that the constructions of the A2 Gumelnita phase were built right on this flat surface.

The analysis of the satellite images and the existing aerial views (courtesy of CIMEC) suggests that, during prehistoric times *Măgura Gumelnița* was terraced on all sides. A photograph of its norther part shows a second terrace towards its base (Plate I/2).

The terraces on *Măgura Gumelnița* can easily be observed today. The first terrace, 8-9 m in breadth, is located 8 m below the top plateau of the settlement (Plate II/1). The second terrace is 18 m below the plateau of the settlement, at what is the present day walking level, and thus its breadth has not been yet established. The Eneolithic habitation/walking level was probably at least 6 m lower than the present one.

Although only a few Gumelniţa settlements were investigated north of the Danube, prehistoric terraces were documented at other sites as well. During the excavations carried out at Alexandria - *Gorgan* (Teleorman County), ¹² and at Pietrele – *Măgura Gorgana*¹³, the authors of the excavations observed that during an initial stage of organizing the surrounding habitat, certain terraces had also been cut.

During his the investigations at the Eneolithic tell at Chirnogi (Călărași County), S. Morintz noted: "The level of the earliest habitation traces (ca. 3 m lower than the recent level of the meadows) indicates a rise of over 3 m of the floodable area of the Danube from the Boian III phase to the present. The Boian III habitation traces, marked by burnt horizons and characteristic materials, alternate with layers of alluvium "¹⁴.

Alternatively, the excavators of the Pietrele - *Măgura Gorgana* Eneolithic *tell* (Giurgiu County) suggest that the soundings and analyses carried out during several archaeological seasons indicate a difference of 6 m between the present day level of the Danube meadow and the Eneolithic one.

Thus, it appears that sediments deposited during prehistoric flooding events, from the Neolithic until our days, triggered a rise of the meadow surface of several meters.

This allows us to suggest that during second half of the 5th millennium BC when the habitation at *Măgura Gumelnița* was established, a third "terrace" existed, created in the shape of a battered area on the slope of the mound, 6 m below what is today the walking level. The resulted earth was used for constructions, as well as for the (unavoidable) fortification system.

The latter was similar to those of other contemporary settlements: a ditch, rampart and palisade. The 6-8 m terraces, dug into the local *loess*, were redoubtable obstacles in the way of the possible assailants. Probably, several guarded access ways existed to facilitate the entrance into the settlement.

¹² Andreescu et alii 2002, p. 38

¹³ Hansen et alii 2005: Hansen et alii 2006 etc.

¹⁴ Morintz, Ionescu 1968, p. 106.

Barbu Ionescu's observations regarding the existence of a thin Boian (the Vidra phase) habitation layer on the eastern terrace of the *Măgura Gumelnița* rises the following question: who were those who first modified the natural habitat at *Gumelnița*? Could the terraces on the *Măgura* have been cut by the predecessors of the Gumelnița culture, namely the Boian communities? It is not impossible, given the fact that many tells started their existence during the evolution of the Boian culture, e.g. those of the Vlădicesca tell (the late Giulești phase), the Hârșova tell (the Vidra phase)¹⁵, the Pietrele tell (during the evolution of the Boian culture) etc.

Following the development Plan mentioned above, geo-magnetic surveys took place in order to choose a location for the development of the archaeopark, location with a less dense concentration of archaeological features. The surveys were directed by David Mosses ("George Washington" University, Washington D.C., U.S.A.), our collaborator in the research of the Getic dava from Radovanu (Plate II/2). The distinguished researcher was assisted by a group of Romanian archaeologists, who were trained in the use of the magnetometer, later donated to the "Sebastian Morintz" Archaelogical Association.

Following the above mentioned investigations and in order to expose the site stratigraphic profile, as stated in the *Plan*, in the autumn of 2011 archaeological excavations took place in the central area of the *Măgura Gumelniţa*. A 2 m wide longitudinal trench, oriented north-south was initially excavated. The trench indicated the existence on the western area of the settlement of some daub constructions that extended over a distance of ca. 30 m. The same situation was observed on the northern side of the trench, where the dwellings extended just over a surface of ca. 15 m in length. Thus, we suggest that the northern side of the settlement, more exposed to the harsh winds of winter, was less inhabited. The area comprised probably just one row of dwellings, oriented north-south, while the southern side might have consisted of two such rows with the same orientation.

At that particular moment of our investigation, when we were not considering future systematic excavations, it was decided not to excavate further the above mentioned areas of the site where the dwellings had been identified, but instead, to deepen the existing trench in the area where no archaeological complexes existed. *Trench I/2011* was deepened during the campaign of 2012 over a length of 39 m, delimited by the centre of the mound and the dwelling on its southern side (Plate III/1).

The observed stratigraphy of Trench 1 was similar to the one recorded by Vladimir Dumitrescu in 1960: four habitation levels, the first three (counting from the base) belonging to the Gumelniţa A2 phase, and the upper one to the Gumelniţa B1. The upper level, disturbed by a vine plantation, contained also Cernavodă II ceramic fragments but any possible habitation complexes of this culture were destroyed by

¹⁵ Done Şerbănescu was part of the research team for the Hârşova-tell in 1961.

land works. Still, during his 1939 excavations, Dinu V. Rosetti uncovered an inhumation burial, attributed to this upper level¹⁶.

The excavation results of Trench 1 supports our hypothesis that *Măgura Gumelnița* had a second terrace located at the present day level of the meadow, populated by dwellings. One dwelling we uncovered at this level yielded rich archaeological material; its study is still in progress. As an example, we would like to mention an anthropomorphic statuette with a similar posture of the Hamangia "Thinker", but decorated with rich incised patterns (suggesting clothing items) and also some symbols. The "Gumelniţa Thinker" is nowadays the new "star" of the Neolithic art collection of the *Museum of the Gumelniţa Civilisation - Olteniţa* (Plate IV/2).

From the above mentioned dwelling and the cultural layer located on the plateau of the settlement, came an entire range of several complete or refittable vessels, ceramic fragments, several anthropomorphic figurines (recovered in the proximity of the "sacred" area), a copper pin and abundant faunal remains. Their study is a work in progress.

Another important element in our hypothesis is the large sanctuary model (with several stories - Plate IV/1) found in the infill of the military pits and trenches dug¹⁷ in the central area of the settlement during WWII. Together with other cultic objects, this was surely part of the inventory of a real sanctuary located on the mound. Our excavation observations allow us to suggest that on the *Măgura Gumelnița* the dwellings were set (in concentric circles or squares) towards the four sides of the top plateau in in one to three rows. The centre (ca. 60 m in diameter/length) was habitation free, perhaps with one more imposing building, with several stories, serving for magical-religious ceremonies, for depositing the food provisions of the community and perhaps other community activities.

Future research will focus on the plateau of the Măgura, envisaging magnetometric prospections in an attempt to estimate the number of existing dwellings. Other types of methods, such as core and soil sampling will be employed for the identification of the hypothesized third terrace and the fortification system.

The special organization of the habitat on the *Măgura Gumelnița* suggests a pre-established plan, with dwellings arranged in concentric rows; the central space, surrounded by dwellings, had a more imposing construction, possibly storied, serving both as a gathering place for the members of the community and as a sanctuary for magic-religious ceremonies (a possible reconstruction: Plate IV/3). The centre of the settlement had also an open space -the place for human contacts. In our hypothesis, we further suggest that such a community was socially ranked (as revealed by certain

¹⁶ The burial was covered with stone sledges and contained a flexed skeleton. The only grave good was represented by a vessel characteristic to the D stage (Cernavoda II)¹⁶. Other similar (unpublished) burials, were discovered by Barbu Ionescu on the neighbouring terrace. In 1988, Constantin Hălcescu studied a Cernavodă II small necropolis was situated ca. 1 km north-west from the Măgura; the resulted archaeological material are part of the collections of the *Museum of the Gumelnița Civilisation* at Oltenița, but the plans and field notes are missing.

¹⁷ A military observation point was located there, the mound being the highest location in the area.

aspects of the Boian culture). Thus, it is conceivable that the common people of the community resided in the peripheral areas (the terraces), while the elite lived in the central area, on the plateau of the settlement. Furthermore, a proto-urban society as the one on the Gumelniţa mound must have had an impact on the neighbouring communities. Such a hypothesis though, can only be proven after the careful future study of the inventory, size and location of the dwellings.

It is true that our proposed model for the spatial organization of the community on *Măgura Gumelnița* is not frequently found within the area of the Gumelnița culture north of the Danube, where a more common pattern is that of a settlement organized along two major axes. Similar patterns to those from *Măgura Gumelnița* can be recognized for the Cucuteni culture ¹⁸.

Such an effort in modifying and re-organizing the surrounding habitat must have requested a significant amount of labour force, suggesting either the existence on the *Măgura Gumelnița* of a large community, or the participation to this action of the neighbouring communities, perhaps dependant on the *Măgura Gumelnița* one, the latter being the most important proto-urban centre in the region.

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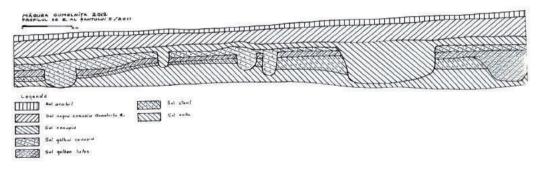
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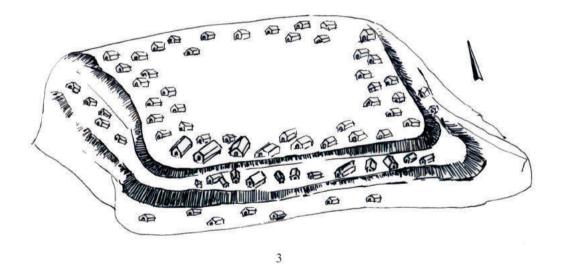


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