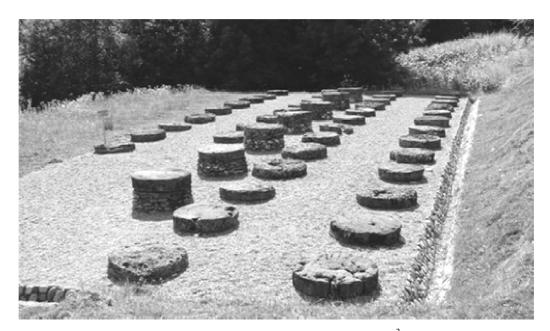
THE LARGE LIMESTONE SANCTUARY (LLS) from DEALUL GRĂDIȘTII ("SARMIZEGETUSA REGIA")

Adriana RUSU-PESCARU¹

Abstract: Taking in consideration all the up-dated archaeological informations about an old and very important Dacian sanctuary from Dealul Gradiștii (Sarmizegetusa Regia) and, especially, working together in a pluridiciplinary team (an archaeologist, a civil engineer and an architect), all these data gave to an appreciate archaeologist, Mrs. Adriana Pescaru, Phd, the opportuneness to depict a "new face" of one of the oldest relics from Dealul Gradistii (Sarmizegetusa Regia). Additionally to a punctilious analysis of what was preserved along of two mileniums, the author of the excellent monograph "SANCTUARELE DACIEI" is coming with a multidisciplinary reconstitution of the Large Limestone Sanctuary.

Keywords: limestone sanctuary; reconstitution of a relic; andesite-basalt; sanctuary; limestone slabs; manmade terrasse; plinth; wooden column; terra-cotyta medallion



The LARGE LIMESTONE SANCTUARY² (LLS; named S-68 in the multidisciplinary research) at DEALUL GRĂDIŞTII. In the picture is a current reconstitution of the sanctuary (till the level 2.85 m depth).

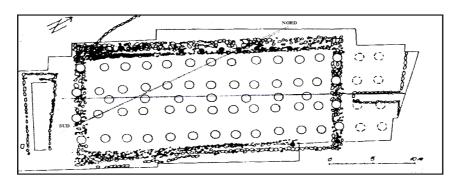
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² Adriana Rusu-Pescaru, Sanctuarele Daciei, 2005, Deva, p. 33-43.

The **Large Limestone Sanctuary** from the XIth terrace was identified in the archaeological campaign of year 1951, on a platform, South-East from the spring (on the XIth terrace). The full exploration was done in the next years, including 1979-1981 (the beginning of preservation work at "Sarmizegetusa Regia").

The sanctuary platform is orientated North-East to South-West and, in the digging process, have exhibited four phases of construction. Going deeper from upper level there is, first, a Roman structure of wood, situated on a rock layer and the layer is placed on the leveled debris resulted from the pull down of the sanctuary. (...). That level is about 1 m. deep.

The second level, which is a Dacian level, is only 0.35 m beneath the Roman one. There are the relics of a sanctuary build with andesit-basalt pillars, on top of a substructure formed by river-rocks comprised in clay.



In the middle of the surface (marked with andesit pillars) were 7 limestone plinths, each with an diameter of 1.30 m. and 0,20-025 bigness, supported by a foundation made by rocks mixed with soil. To this level, also, belongs the Northern platform which was the entrance into sanctuary. This platform is

2 m broad and is made by limestone slabs. In the Northern side, close to the end of entrance platform, archaeological digging identified also *an eighth imprint*, similar to the 7 plinths from the central line. (The conclusion: there were, originally, *eight plinths*!)

The next level was 2.85 m depth, formed by four lines of limestone plinths (see the above image), each line having *in situ* 13 plinths, with the same dimensions like the plinths from antecedent level. On the surface of some of the 52 plinths, were identified rounded-hollows, with a diameter of 0.50 - 0.80 m., hollows which (probably?) belongs to the diameter of the wooden columns raised on these plinths.

On the Western side, on a substructure similar to the second level of andesit pillars, became visible the marks of seven wooden pillars with a diameter between 0.50-0.80 m each. In the Eastern side were found two pillars, and also the marks of another four, with an average diameter of 0.40 m, The distance between the marks of the wooden pillars was 2 m.

Those four marks (discovered in 1980) drive to the hypothesis that the wooden pillars were placed around all four sides of the sanctuary.

At the same time the archaeologists have established that the limestone plinths were seated on foundations³ delved into a funnel hole into the padding soil of terrace. These holes have a highest diameter of 1.60-1.85 m. and a depth of 1.60 - 1.90 m. The foundations were made by river-rocks and clay and were placed to certain distances, depending on the space between the plinths. The foundations were the toughness support for the plinths, on which plinths should have been raised up the wooden columns.

The research from 1980-1981 have revealed the mark of the "foundation number 14" in the Eastern plinths-line of sanctuary. The 15th "mark of foundation" was lost in the former diggings when the archaeologists have verified the elevation of the Northern wall (at the beginning of research, in 1950-1951). Based on the new facts we conclude that, at this level of building, there was a *sanctuary with 4 lines of 15 columns each*.

It does mean we are in the presence of a sanctuary with 60 columns.

The columns were placed at 3.20 m between the lines; the distance between each of the columns was 2.50 m (the *inter-axes* distance).

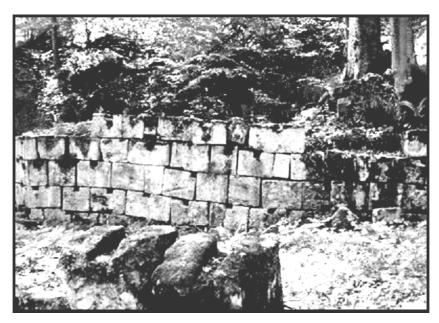
On the Southern side the supporting wall of the terrace is doubled with another one; the thickness of the second one is 1.08 m. The two walls were bounding the *entrance staircase to the sanctuary*, made by limestone slabs. It is ending front of a platform, located 0.40 m. above to the wall of terrace (it was the level of *the treading level* in the time of construction). Now is evidently that the plinths nr. 14 and nr.15 were disassembled later and re-used in another time of construction, together with the 8 plinths from the middle of sanctuary (and bounded later with the marginal pillars of andesite).

In the basement of sanctuary the deepest level was found at 4.40 m, formed by a line of groups (3-4 slabs of limestone) placed crosswise or triangularly. The slabs were found on the Eastern side of the terrace. In the same zone have appeared some lens, as half-round pits, connected each to other by rocks and the rocks joined by clay, which form the foundation, the supporting base for the columns.

The terrace (41m x 13 m) of the sanctuary, like all the terraces here, is manmade by Dacians and is protected against the nearby cliff by massy, very heavy walls, build in *murus dacicus* technique.

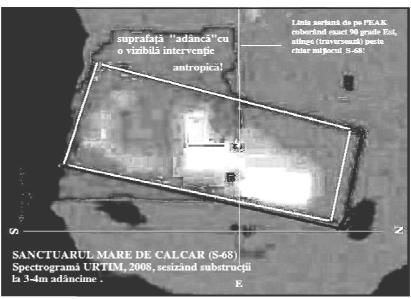
The supporting wall of the Large Limestone Sanctuary is made up with three sides (North, West and South), only 2.50-2.90 m thick. The side against the cliff is the protective wall (innate with 11-13 levels of heavy slabs; 6-8 m elevation).

³ H. Daicoviciu and his team, în *Materiale și Cercetări Arheologice*, 1986, p. 105-10

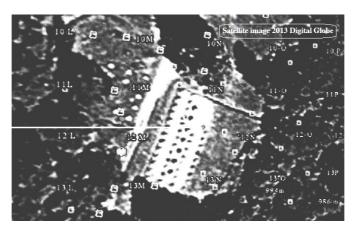


This protective wall against the cliff is today only a third of his heigh as in the I^{st} century A.D.

In the South-Eastern corner of sanctuary, on the South-East to North-Vest side, at 20.40 m, have been identified *into the wall* the margin of a tower with a rectangular design. The tower belongs to the first Dacian level of the platform.



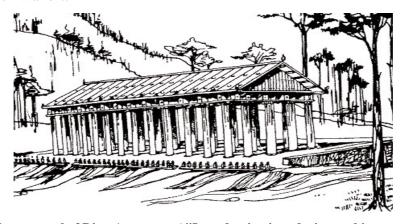
An URTIM spectrogram pointing out the pile structure of the basement, under the current ground level.



The location of the Great Limetone Sanctuar seen by a satellite image (Digital Globe)

At the beginning of the modern research (1948-1962) LLS was considered an "open sanctuary" (uncovered with a roof), with columns raised up on the limestone plinths, only about 1.50 m in elevation. Subsequently was proposed a new reconstitution, a building with two levels (basement and first floor with a porch, a cella and a roof), a model inspired by the Greek *dipter temple*, combined with the *pseudodipter* tipe⁴. Another opinion does not accept the hypothesis of a Greek influence, holding on just the idea of the roof and of a sanctuary surrounded with wooden pillars; also, eliminates the basement, cella, the porch⁵,

In another hypothesis is proposed a reconstitution with wooden pillars, a roof and wooden walls⁶..

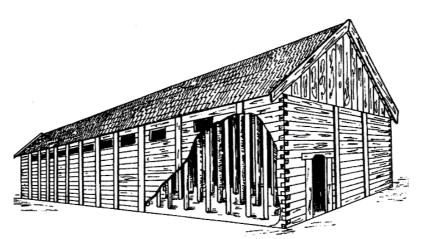


The proposal of Dinu Antonescu ("Introduction into dacian architecture")

⁴ I. H. Crişan, *Burebista şi epoca sa*, ed. II, 1977, p. 391-395

⁵ D. Antonescu, *Introducere în arhitectura dacilor*, 1984, p. 51-66

⁶ M. Strambu, I. Glodariu, în *Acta Musei Napocensis*, XVIII, 1981, p. 377-386



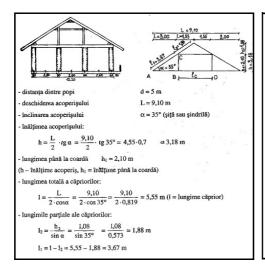
The reconstitution of M. Strîmbu and I. Glodariu

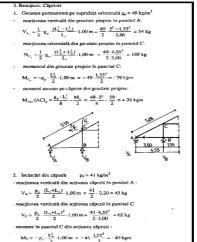
By the analysis of all data (2004), there is a sanctuary compounded from 4 lines, each with 15 bases for columns. Every plinth stand on a foundation, of which depth shout out the location of another construction (basement). That foundation take over the pressure of the column on the crumbly soil (even a friable rocky soil), and especially on the padding of terrace. At only 0.80 m from the marginal line of bases there are marks of wooden pillars. That does not give enough space for walking through, if there should be constructed some lateral walls.

We consider the probability of a building raised up with wooden columns, supported by the plinths, columns supporting - at their turn - a shingle-roof, with two inclined slopes (the roof made from wood), and the pillars making only a surrounding and a passage, to walk around the sanctuary. A similar solution is used in other sanctuaries. The entrance was made with steps located in the Southern side of the sanctuary.

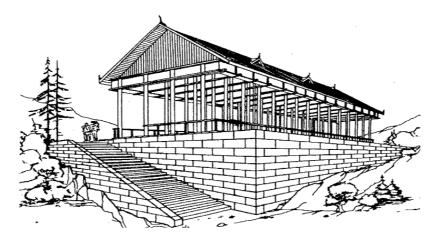
By the existing evidence - (together with Ms. Lavinia Brătescu, an engineer, and with Mr. Richard Stiller, an architect with Designing Institute from Deva, Hunedoara) - we have tried to reconstitute the *old appearance of this Large Limestone Sanctuary*, in the *second stage* (that with four lines of fifteen plinths and a surrounding made by a wooden line of pillars).

The Publisher's Note: The full process of a "pluridisciplinary reconstitution", from the reckonings of resistance and some very accurate and unusual measurements to calculate the burden and the distribution of the weight in dissimilar points of the sanctuary, for different meteorological events very specific for that area, even all of these data are very attractive, we'll do not reproduce here; (whoever interested for details may consult the extensive list of calculus in the 36 - 43 pages of the monograph). We will quote only two examples (from pg. 36 and 38), proves for the scientific work done by the tree collaborators, work which concluded a must correct pile (architectural vision) of the LARGE LIMESTONE SANCTUARY





The research conclusion: the Sanctuary LLS was raised *with wooden columns of 6 m. high*, at the margin of the cliff, which have amplifyied a dominant, an "elegant" stature of the old Dacian shrine!



Reconstitutive proposal for LLS, by the team lead by Adriana Rusu-Pescaru (2004)

When was build the Large Limestone Sanctuary?

In the heart of sanctuary, on the first disk from the line II, was discovered a terra-cotta medallion with a quasi-rounded size (axially 10.3 cm and 9.4 cm, thick by 1.5 cm). On the surface it has in relief a woman face. The reverse side is smooth, with no ornaments. The clay from which was made the medallion contain many small fragments of *mica-schist*, a sedimentary rock which proves that clay was took from somewhere close to Dealul Gradistii or nearby, where the mica-schist is the dominant rock. It is a big similitude of this medallion with a coin. (The most near analogy is a republican *dinar* from the time of Tiberius Claudius).

If the analogy is justified, the feminine effigy could be a representation of Diana. On the coin Diana had a diadem. That diadem is only schematized on the medallion, as a helmet with a peep hole. The bow and the quiver are also schematized. (On the coin Diana carry them on the shoulder). Besides of these details, observe of the coin is pretty well imitated, less the inscription, which is missing on the medallion.



DIANE (Bendis?!) on the medallion

The coin is surrounded with a circle of pearled points, set off in relief; on the medallion this is represented by a circle of incised lines. The margins of the coin are toothed, an effect roughly imitated on the medallion.

The medallion, found in the middle of the Large Limestone Sanctuary, has a main significance because it is a mark for dating. Even the dating cannot be made with total accuracy, is possible to conclude that *the sanctuary last from the first half of Ist century AD*, therefore giving the necessary time for the dinar, issued in the year 80 BC, to come up in Dacia and to be imitated in terra-cotta.

What is for sure, the medallion does not imitate directly the Roman dinar, but rather a... Dacian copy. (Dacian copies of the Roman dinars coming from Ist century B.C. are not a scarcity).

In the support of the estimated chronology comes, also, the discovery of a bronze coin from the time of Emperor Claudius (a coin issued in the year 41 AD), which proves the existence and the function of the Large Limestone Sanctuary in the middle of Ist century A1D. It is also possible that the coin was lost in the time of the final lay out, because it was found in the "closing zone" of the sanctuary, in the Southern side.