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A CONTRIBUTION TO UNDERSTANDING STRATIGRAPHY OF LEPENSKI VIR

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Abstract. – This paper presents the results of the analysis of the documentation from the excavations at the site of Lepenski Vir during two investigation campaigns in 1966. The focus is on the analysis of the vertical stratigraphy and stratigraphic interrelations between the elements of the Mesolithic culture of Lepenski Vir, i.e. the layers associated with the Lepenski Vir I and II phases and the Neolithic settlement, in other words, the elements of the Lepenski Vir III phase.

Key words. – Lepenski Vir, Mesolithic, Neolithic, stratigraphy, cultural layer, gelogical layer.

In the last decade a number of papers have been published for the purpose of providing a solution to several important questions which have remained opened since the beginning of the excavations at Lepenski Vir – cultural stratigraphy and chronology in the first place, given their crucial importance for understanding of the Mesolithic culture of Lepenski Vir and its possible relation to the population who was occupying the location of the eponymous site during the Neolithic. Unfortunately, most of the documentation from the excavations at Lepenski Vir has not been published. The same applies to small finds. Consequently, all the past conclusions on the chronology and stratigraphy of Lepenski Vir cannot be taken as final. They have been mostly based on the publications by D. Srejović and Lj. Babović, in which cultural stratigraphy and chronology were treated as elements of secondary importance for understanding the art and character of the Lepenski Vir I phase.[1] Considering conflicting opinions of the character and cultural affiliation of the structures with trapezoid bases and all other elements of culture associated with the Lepenski Vir I phase, as well as unresolved cultural and chronological relations between the phases of Lepenski Vir I and III,[2] and aiming at contributing to understanding of stratigraphy and complex processes of deposition, we have analyzed the documentation from the excavation of the riverside section of the site in 1966 and the extent to which it corresponds to the matching excavation reports and geological analyses.[3]

[1] Срејовић 1969; Srejović, Babović 1983.

[2] Radovanović 1996a; Radovanović, Voytek 1997; Budja 1999; Chapman 2000; Garašanin, Radovanović 2001; Borić 2002; Borić, Dimitrijević 2009; Thissen 2009.

[3] On the analysis of stratigraphy and 1965 excavation results, see: Perić, Nikolić 2004.

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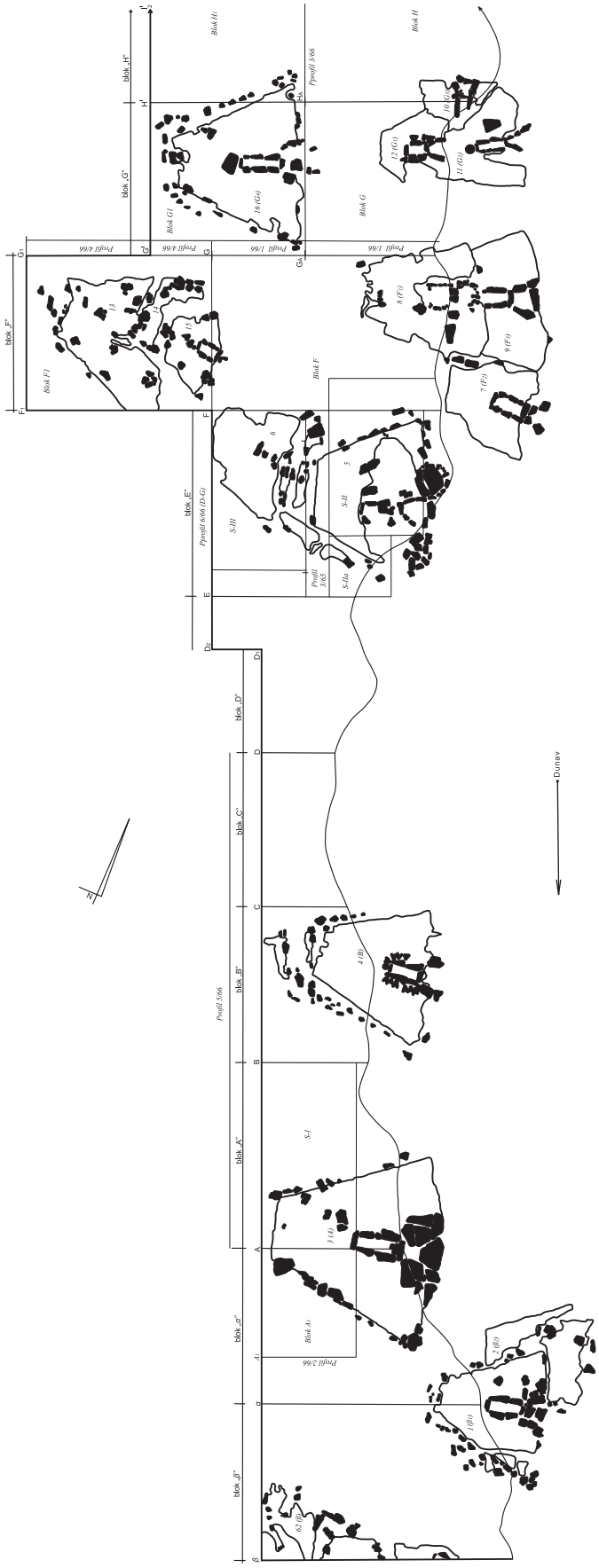

Fig. 1. Situation plan of the area investigated in 1966.

Сл. 1. Ситуациони план – истраживања 1966. године

EXCAVATION METHODOLOGY AND FIELD DOCUMENTATION

Excavation at Lepenski Vir in 1966 was continued in the riverside section between the trenches excavated in 1965.[4] Trench I was marked as block A, while trenches II, IIa and III, as well as a small part of the area which was not excavated, were marked as block E (Fig. 1). Three blocks (B, C and D) were set in the area between them. In addition to that area, the area lying southeast of block A (blocks A1 and β), and the area north and northwest of block E (blocks F, G, H, F1, G1, H1), were investigated. The excavation report states that the dimensions of all the blocks were 5 x 5 m.[5] However, the field journal of the summer campaign informs that the length of blocks B, C, D and F was 5 m, while they varied in width, due to the line of the Danube profile (Fig. 1), in such manner that the mean width of block B was 3 m, block C 2 m, block D 3.50 m, and block F 7 m.[6] The length of block A1 was 3.5 m. At the beginning of the autumn campaign 5 m long blocks were set. Blocks β, G and H also varied in width since their northeast side was "the bank of the Danube that unequally enters the land".[7] Block F1 measured 5 x 6 m, and blocks G1 and H1 5 x 5 m.

The excavation was conducted in two campaigns: the summer campaign, which lasted 13 working days from 28th June to 13th July, and the autumn campaign, which lasted 15 working days from 4th October to 20th October. Blocks A, A1, B, C, D and F were examined during the summer campaign, while blocks β, F1, G, G1, H and H1 were examined in the autumn campaign, which made the total investigated area of 275 m².[8]

The area where excavation was resumed, as well as the area excavated in 1965, had been constantly exposed to river erosion, which resulted in massive devastation of the layers above the building floors of the Lepenski Vir culture, along the riverside in front of the line of the Danube profile (Fig. 2).

In 1966, like in the first year of excavations, the same excavation method was applied – namely, the method of artificial horizontal excavated layers, which was totally inappropriate given the terrain features and the character of structures constructed at Lepenski Vir. The use of this method made it impossible to gain an objective insight into the interrelation of the stratigraphic units during the excavation, as it prevented better understanding of a number of issues related to reconstruction of life at this site. In such a situation, with the difference in height between southwest and northeast side of the block sometimes reaching more than one meter, when the levelling layer was removed, the width of the excavated layer at the section of the block lying closer to the Danube was about 0.20 m, while the width at the opposite side of the block toward the slope was even up to one meter (Fig. 3). For this reason, one excavated layer may have encompassed two, often three layers with different characteristics and contents, which resulted in having culturally and chronologically different units along the same horizontal base (Fig. 4). In such conditions it was impossible to distinguish layers and consequently their contents in due time. Because of this excavation method, when the base was levelled, certain displacement of finds along the horizontal line must have occurred, resulting in mixing of finds from different layers, which automatically meant their vertical shift, both in terms of stratigraphy and culture and chronology.

Perhaps the most salient consequence of such an excavation method is that the reconstruction of the terrain features in specific phases of life at that site, especially at the time when the structures with trapezoid bases existed in the Lepenski Vir I phase, has become virtually impossible. For the same reason, the pits from the Lepenski Vir III phase were noted only in their lower sections. What were the levels from which the pits were dug and how deep they were, we can only guess based on the profile drawings and some remarks in the journal regarding the distribution of the small finds and a distinct difference in colour and composition of soil at certain levels.

The documentation from 1966 excavation consists of excavation journal, level book, plans and photographs.

The excavation journal provides records and descriptions of the main characteristics and specific features of the excavated layers. The position of observed phenomena and structures was defined in relation to the edges and angles of blocks which, however, were not marked in accordance with the actual direction of north. In 1966 summer campaign the northeast edges of the blocks were marked as eastern, but in autumn

[4] An area of 51 m² was investigated in 1965. Four trenches marked with Roman numbers were opened (Perić, Nikolić 2004, fig. 2).

[5] Srejović, 1966, 94.

[6] Excavation journal 28. 6. 1966, p. 1.

[7] Excavation journal 5. 10. 1966, p. 2.

[8] Srejović, 1966, 94.

campaign they were referred to as northern. Thus, when reading the excavation journal one has to "interpret" those positions. Failure to notice this would make establishing of connections between excavation journal and technical documentation almost impossible.[9]

The level book comprises some data on measurement of the excavated layers, which, due to the absence of the absolute value of a secondary benchmark, can only be expressed as relative depth. Measurements were taken at two or all four angles of the block, on the surface and on the base of the excavated layer. Due to a sharp slope of the terrain and horizontal excavated layers, the difference between the relative depths measured along the northeast profile and those measured along the southwest profile was about one meter, so that their mean value is of no importance. However, it is mentioned in the journal as the relative depth of the excavated layer base. Consequently, an impression is created that when the depths of individually measured points, mostly the subsoil, were stated, it must have been a mistake, or in other words it seems as if the measured structure did not lie within the mentioned excavated layer. The data on the measurements of immovable structures (floor bases, stone blocks) can be found in the details.

The technical documentation consists of 20 sketches (including 10 details of the house bases or their hearths), six profiles, one situation plan of the area investigated in 1966, excavation plan and a few dozen photographs. Detail no. 18 does not exist in the preserved documentation. There are two details no. 1, with one of them written to have been drawn in 1965. North is not marked on any detail, while the angles of blocks are sometimes wrongly marked, very much like excavated layers and dates.

A few dozen photographs document 1966 excavation. All photographs from 1966 summer campaign were taken after completion of the excavations.[10] Several photographs were taken during the autumn campaign, but most of them, like in the summer campaign, were taken on the last working day, when the excavation had already been completed, and a photographer arrived to take pictures of the structures discovered in 1966.[11]

D. SREJOVIĆ'S OBSERVATIONS WITH RESPECT TO ARCHAEOLOGY AND STRATIGRAPHY

The main elements of stratigraphy in the area investigated in 1966 are shown and defined in a short report on the results of 1966 excavation.[12] According to that report, in a cultural layer, with the depth varying from 1.85 m to 2.10 m, there were two cultural strata where, in each of them, two dwelling horizons were noted.

Down below a 0.40 m thick humus layer there was a younger cultural stratum (stratum I, with dwelling horizons 1 and 2) which extended to the depth of 1.20 m. The house bases in that stratum, without preserved floors, were not clear. Only rows of crushed stones following the house bases, as well as stoves and hearths made of stone blocks and slabs, had been preserved. That stratum contained an abundance of movable archaeological objects – animal bones, bone and stone tools, as well as a great number of whole and fragmented vessels.[13]

A layer of greyish sand, with an average depth of 0.40 m, separated the younger cultural stratum from the older one. Movable finds were few in number in that layer. There, "only animal bones and scarce ceramic shreds were found sporadically".[14]

The older cultural stratum (stratum II), which was from 0.25 to 0.50 m thick, also contained two dwelling horizons (3 and 4).[15] 17 houses, dug some 0.30 m into the subsoil, in regular rows on the terraces along the bank of the Danube were noted. In the houses with trapezoid bases there were rectangular hearths made of stone blocks, "as well as some circular and horseshoe-shaped structures of unclear purpose", while in houses E and F/1 (houses 5 and 8), in addition to the stone hearths, there were horseshoe-shaped stoves "that were probably used for firing pottery".[16] Although the house bases were preserved, the report referred to above stresses that there were few movable archaeological objects in the older stratum – in addition to some animal bones, only bone and stone tools were found in a greater number, while pottery fragments were extremely scarce.

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[9] In this paper the position of all the phenomena and structures noticed in the blocks is defined in relation to the actual direction of north.

[10] Excavation journal 13. 7. 1966, p. 13.

[11] Excavation journal 18. 10. 1966, p. 22.

[12] Srejović 1966.

[13] Srejović 1966.

[14] Srejović 1966.

[15] Srejović 1966.

[16] Srejović 1966. The house investigated in 1965 in trenches II and IIa was marked as house E in 1966. It was renamed again in 1967 when it was marked as house 5. The house investigated in 1966 in block F was marked as house F1. It was renamed in 1967 when it was marked as house 8.

Fig. 2. Lepenski Vir before excavations, view of the Danube profile
Fig. 3. Blocks C–F during excavations,view from southeast

Сл. 2. Лепенски Вир пре ископавања, дунавски профил
Сл. 3. Блокови C–F током ископавања, са југоистока

In spite of obvious differences in the character and content of the described cultural strata, Lepenski Vir was defined as a settlement belonging to the earliest phase of the Neolithic culture in the Danube Basin.[17]

The report on the first excavation in 1965 provides similar interpretation of Lepenski Vir, assuming, based on the stratigraphic situation in trench III, even the existence of a separate pre-ceramic phase at Lepenski Vir.[18]

Cultural determination of the stratigraphic units noted during 1966 excavations was defined with more precision after 1967 excavation. In that report, summarizing the results of three years of excavation, the oldest stratigraphic unit – the layer with structures featuring trapezoid bases – was defined, for the first time, as a settlement of fishermen and hunters.[19]

On that occasion, the observations regarding stratigraphy were supplemented with new elements, and the cultural character of the stratigraphic units was redefined. All three units, defined in the previous report, were characterized in 1967 report as three separate cultural units lying within a layer with the thickness varying from 2.15 to 3.50 m. It was noted that on limestone rocks covered with a thin layer of non-stratified yellow sand the first settlement was established, i.e. the oldest cultural stratum (Lepenski Vir I layer)[20] "with the same forms of dwelling structures and almost uniform movable archaeological materials".[21] According to D. Srejović, this stratum was documented in the depths between 3.50 m and 1.95 m. The layer covering Lepenski Vir I was defined as the second cultural stratum (Lepenski Vir II) and described as "loess-like brown sand of unequal thickness, with one dwelling horizon".[22] A layer below a 0.30 m thick humus layer, which stretched to the depths of 1.45 m and 1.11 m, belonged to the youngest stratum (Lepenski Vir IIIa and IIIb). Thus, layers Lepenski Vir I and II were separated from the youngest cultural stratum (Lepenski Vir III) in terms of stratigraphy and culture, although their cultural meaning at that moment was not precisely defined. The question as to whether layers Lepenski Vir I and Lepenski Vir II represented a completely new and until then unknown form of the Starčevo culture or basic elements of an earlier prehistoric culture in the Danube Basin, noted for the first time at Lepenski Vir, remained open.[23]

The character of the youngest cultural stratum (Lepenski Vir III) remained unchanged. It was interpreted as a settlement of the Starčevo group with a clearly defined stratigraphic and cultural position in relation to the structures of the Lepenski Vir I phase. It was also

[17] Srejović 1966, 96.

[18] Srejović 1965. Stratigraphic situation in trench III, where house 6 was noted, is described in detail (Perić, Nikolić 2004, 174–175).

[19] Срејовић 1968.

[20] Marked as cultural stratum II in the previous report.

[21] Срејовић 1968, 158.

[22] Срејовић 1968, 158.

[23] Срејовић 1968, 158.

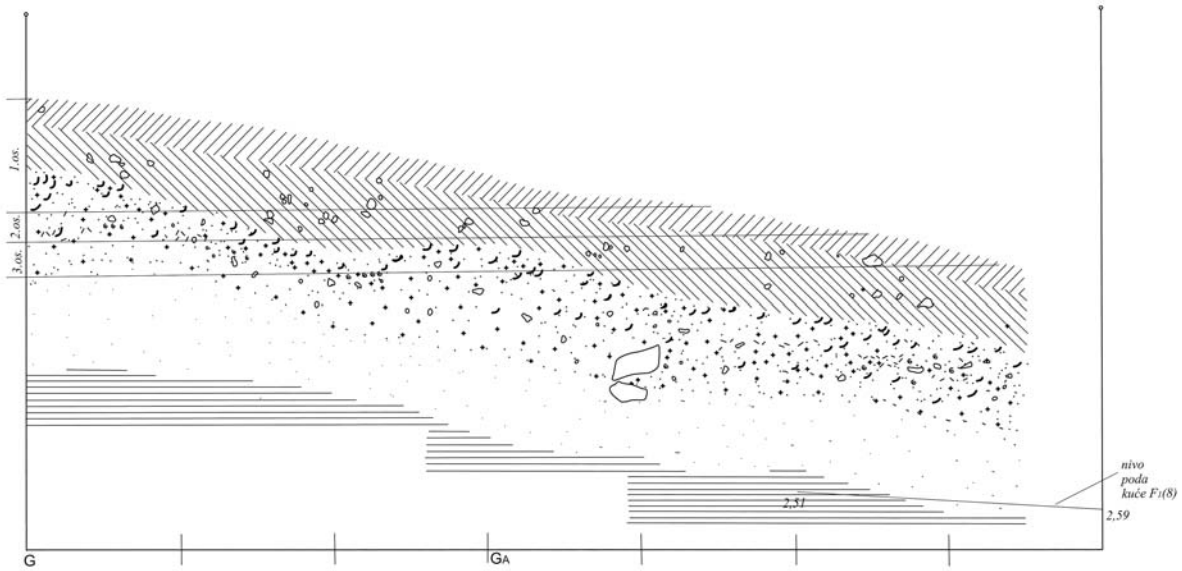


Fig. 4. Northwest profile in block F

Сл. 4. Северозападни профил блока F

emphasized in this report that stratigraphic overlapping of some structures of phases Lepenski Vir I and III were the result of digging of younger Neolithic structures. The horseshoe-shaped stoves on some floors of the trapezoid bases of Lepenski Vir I houses were explained as belonging to considerably younger dwelling structures dug to the extent of the floors of Lepenski Vir I houses (meaning houses 5 and 8).[24]

One may notice from this review of D. Srejović's first impressions and approaches to the cultural character of Lepenski Vir that the results of the first two years of excavation raised huge dilemmas, which is understandable considering a completely unknown cultural content found in the oldest layers. In the following articles D. Srejović articulated his view of the cultural events at Lepenski Vir,[25] which he would uphold basically throughout his work on the later defined culture of Lepenski Vir and the character of the eponymous site itself.

ANALYSIS OF LAYERS BASED ON PROFILE DRAWINGS AND FIELD JOURNAL

In comparison to 1965 excavation, the excavation carried out in 1966 was documented in a relatively satisfactory way. It should be specially noted that, considering the investigated area, two campaigns in 1966 were best documented by drawings of control profiles between the excavated blocks, which is of significant importance for gaining a realistic insight into vertical stratigraphy.

Based on the analysis of specific stratigraphic elements and the stated documentation, we have noted that a number of elements, such as recognized cultural and geological layers, then immovable structures within those layers and, undoubtedly, movable finds, are of the greatest importance for reconstruction of the stratigraphy of the excavated area and determination of the cultural character and chronological position of individual stratigraphic units. In this paper we analyze only the cultural and geological layers which were noted during 1966 excavation.

The data available in the field journal are used, along with profile drawings and photographs, in order to determine to which extent the data from the journal are consistent with the data from the technical documentation. In this respect, we start from the legends in profile drawings, where the following layers are marked:

1. Humus
2. Layer of yellow clay soil
3. Sandy "Lepenski" cultural layer
4. Yellow sandy layer – "sterile"
5. Proto-humus (Fig. 5)

[24] Срејовић 1968, 162.

[25] Srejović 1966a; Срејовић 1968.

1. Works in all blocks started with removal of a humus layer, which is shown in all drawn profiles as a uniform layer with thickness of some 30 cm (Fig. 6–11). The humus layer was usually identified with the levelling layer. The levelling layer was explained in the journal in the light of the necessity to level the terrain having a sharp inclination. Based on level measurements and entries in the journal with respect to the thickness and relative depth of the layer, it seems obvious that the levelling layer in most of the blocks was much thicker than the actual thickness of the humus. In some cases, the thickness of that so-called humus layer, i.e. the levelling layer, reached even one meter in the southwest sections of the blocks. Thus, that thick excavated layer must have encompassed three, in terms of their composition and content, different layers: besides the humus layer and the yellow clay layer (to which the journal makes almost no reference) also the youngest cultural layer. Such situations were regularly noted with a remark that in the northwest section of the excavated area work was being carried out "already in the cultural layer, while in the northeast section humus is still being removed".[26] Looking at the lines of the excavated layer bases projected onto the drawn profiles, one may conclude that, due to the slope of terrain, the levelling layer did not always encompass the entire surface of the block. In such situations, in the northeast sections of the blocks, the humus layer was actually removed with the subsequent excavated layers (Fig. 4).

2. Yellow clay soil, under the humus layer, was shown in all profiles as a 0.30–0.60 m thick layer. This layer is the most pronounced in profile 6 (Fig. 11). However, this layer was not described in the journal, but it could be identified with the layer of hard compact soil which was said to have occurred in some blocks within the first, more rarely the second excavated layer, but only in specific block sections, as was the case of the first and second excavated layers in block H, where uniform and compact brown-yellow soil mixed with pebbles was noted along the whole surface below the humus layer.[27] Since this layer was not mentioned in the field journal, it must have been an integral part of the so-called levelling layer. A conclusion can be made, based on the drawn profiles, that the layer did not contain any small finds. However, if the opinion that the layer can be recognized in some descriptions of the character of the first and second excavated layer is accepted, then the possibility of the first occurrence of pottery finds, at least in the lower levels of yellow clay soil, must not be excluded.

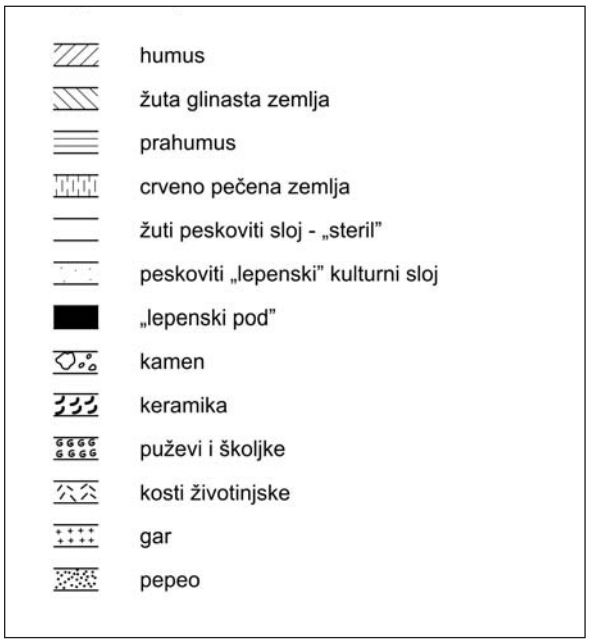


Fig. 5. Legend for the layers in profile drawings

Сл. 5. Легенда за профиле

3. The layer defined as sandy "Lepenski" cultural layer was illustrated in all profiles of the area excavated in 1966, but also in 1965.[28] The "Lepenski" layer is difficult to identify in the descriptions found in the journal, though. It could be connected only with the layers described as "sandy yellow" or buff soil (blocks G, H and β), which were almost archaeologically sterile.[29] On the other hand, the layers above subsoil and structures with trapezoid bases in blocks A–D were described as brown sand.[30] Nevertheless, "Lepenski" layer was shown in the profiles as a layer of uniform thickness ranging between 0.30 m and 0.50 m, and in the blocks where structures with trapezoid bases were noted as covering floors of those structures. The boundary between the Lepenski layer and the layer above was clearly visible in the profiles (Fig. 6–11). However, the journal gives similar descriptions of the structure and content of these layers, although it emphasizes the difference in colour, noting the colour of the Lepenski layer

[26] Excavation journal 7. 10. 1966, p. 3.
[27] Excavation journal 6. 10. 1966, p. 3.
[28] Perić, Nikolić 2004, Fig. 3–5.
[29] Excavation journal 10. 10. 1966, p. 6.
[30] Excavation journal 5. 8. 1966, p. 7.

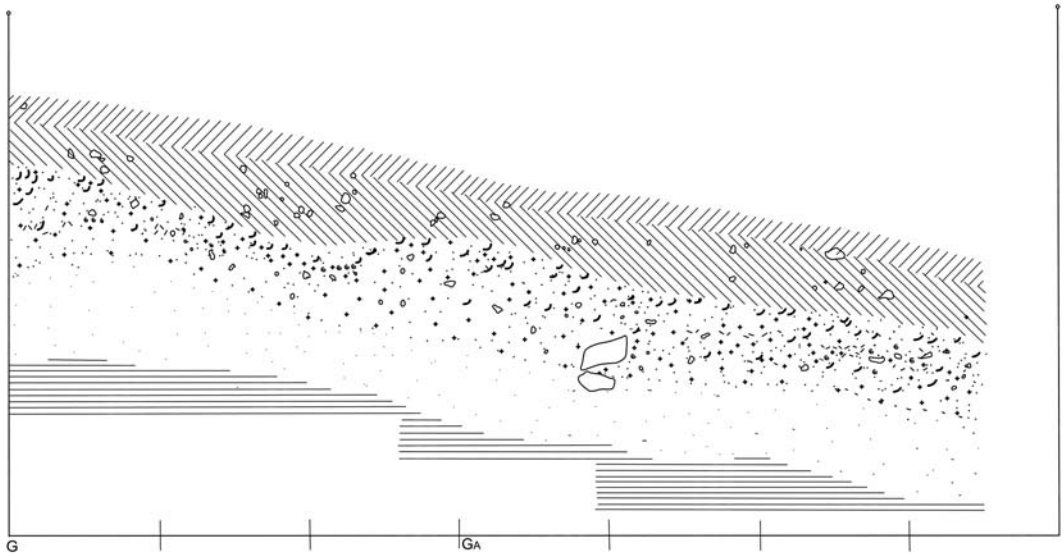


Fig. 6. Block F – northwest profile

Сл. 6. Блок F – северозападни профил

as yellow or buff, and the colour of the layer above it as brown or greyish.

4. Yellow sandy layer – "sterile" was not mentioned anywhere in the field journal, but it is possible to identify it on the basis of the legend only in a part of profile 6 illustrating the southwest profile of block F (Fig. 11). In that profile, this layer separated the bottom of a pit from the "Lepenski" layer which covered house 15.

5. Proto-humus, as an individual separate layer, was not mentioned at all in the field journal, but it was shown in all profile drawings, though. That was a layer in which floors of the structures with trapezoid bases had been dug and it was the deepest layer shown in 1966 profiles. Proto-humus was shown in the way a subsoil layer is usually shown in profiles (Fig. 6–11).

As we can see, a legend for the layer shown in the profiles under the layer of yellow clay is missing, although that layer contained all admixtures stated in the legend (stone, ceramics, animal bones, char, ash, snails and shells) (Fig. 6–11). A legend is also missing for the subsoil layer, which was not shown in any profile, but was mentioned in the field journal for 1966, only in the description of 9th excavated layer in blocks C and D, where "occurrence of the subsoil (yellow sand)" was noted.[31]

In this case, it is important to determine the character of the layer which, according to all the profiles, lay between clay soil and the "Lepenski" layer, given that that layer did not have a corresponding symbol in the legend. Since the total thickness of the layer stretching across the area investigated in 1966 was 1.80 – 2.10 m, the conclusion may be drawn that this layer was the most powerful in the vertical stratigraphy of the excavated zone. Its thickness varied between 0.40 and 1.30 m. The top boundary was defined by the layer of yellow clay soil, almost free of finds, while the bottom boundary was a loose sandy layer, so-called Lepenski cultural layer. Only in one case, in a section of profile 6, between the "Lepenski" layer and this layer, a yellow sandy layer – "sterile" is marked (Fig. 11).

However, the analysis of journal entries and profiles has shown that between the layer of yellow clay and the so-called Lepenski cultural layer, there were actually two layers completely different in composition, colour and content.

The stratigraphically and culturally younger layer can be defined on the basis of its main feature – Neolithic pottery, as a Neolithic layer. It appeared already in the first and second layer, but only in the southwest sections of the blocks. The Neolithic layer was described in the journal as loose soil, dark brown, black brown, black or ash-black in colour, with an abundance of pottery finds. That layer varied in thickness in individual sections at the site as it varied in the intensity of small

[31] Excavation journal 9. 7. 1966, p.10.

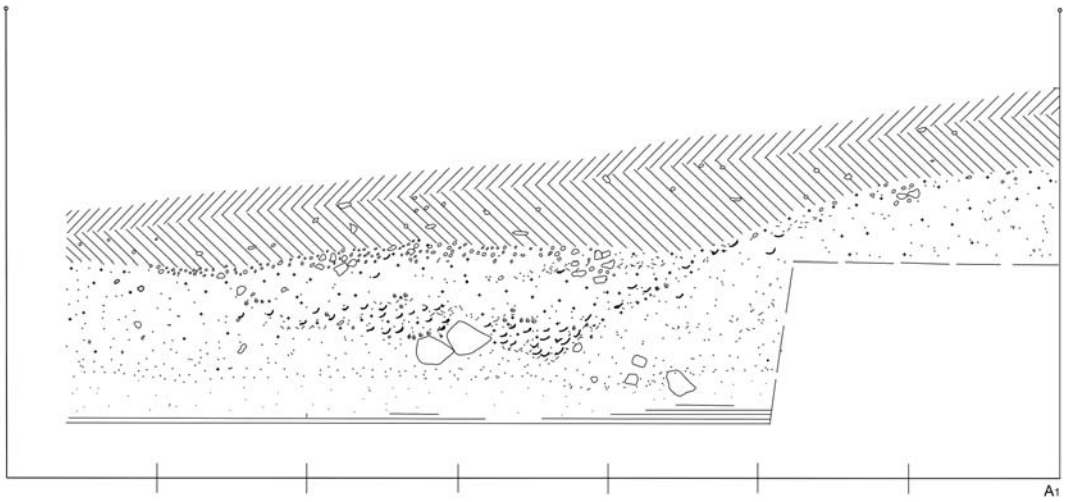


Fig. 7. Block A1 – southeast profile

Сл. 7. Блок А1 – југоисточни профил

finds. It was the most noticeable and thickest in profile 1 – about 0.80 m (Fig. 6), but much thinner in other profiles – from 0.30 m to 0.50 m. On the other hand, in profile 2 (Fig. 7), where a digging with Neolithic pottery dominated, this layer was not observable outside the pit, which means that it was barely distinguishable in that area. Unfortunately, the excavated layers in block A1 were not described, so that the situation shown in profile 2 (Fig. 7) cannot be compared to the notes in the excavation journal. It has to be emphasized that in the area excavated in 1965 and 1966 the Neolithic layer was the most distinguishable in the pits with the highest concentration of pottery.[32]

The bottom boundary of the Neolithic layer was not easily observable in the profiles, so that the line to which pottery finds extended (the lower level of the pottery zone) can be taken as the line marking the bottom boundary of that layer. However, according to the journal, the lower boundary of the Neolithic layer, i.e. the line separating the Neolithic layer from the layer below it, could be identified with the excavated layers which were described as "soil loses its ash colour and mixes with brown sand", that is with the excavated layers whose composition was not described, but whose most prominent feature was said to be the absence of pottery finds or a sharp decline in their number.[33]

The layer below the Neolithic layer was described in the journal as a "layer of dark brown sand", then as "loose dark brown with sand", or "a layer of lighter soil, with sand admixtures", where, apart from animal bones and scarce chipped stone tools, almost there were no other small finds, because of which it was stressed that the excavated layers in this layer were almost archaeologically sterile.[34]

Based on the situations shown in the profiles (Fig. 6–11), this layer appears to be the most powerful stratigraphic unit of the vertical stratigraphy in the whole area excavated in 1966. The thickness of the layer, however, was not uniform. It was the least distinguishable in profile 1 (Fig. 6), most probably because in that section the Neolithic layer, with a pit described in the field journal, was the most distinct. In the southeast section of the investigated area, judging from profile 2 (Fig. 7), its thickness was about 0.80 m. Using the same profile, it seems obvious that all the Neolithic pits were dug in the layer of soil mixed with dark brown sand.

The existence of such a layer provides evidence that the Neolithic settlement, in this section of the site, was established on the already existing sandy layer which covered the structures of Lepenski Vir I and II, according to Srejović.[35] This stratigraphic unit between

[32] Excavation journal 6. 7. 1966, p. 7.

[33] Excavation journal 2. 7. 1966, p. 4.

[34] Excavation journal 8. 7. 1966, p. 9.

[35] Срејовић 1969, 161.

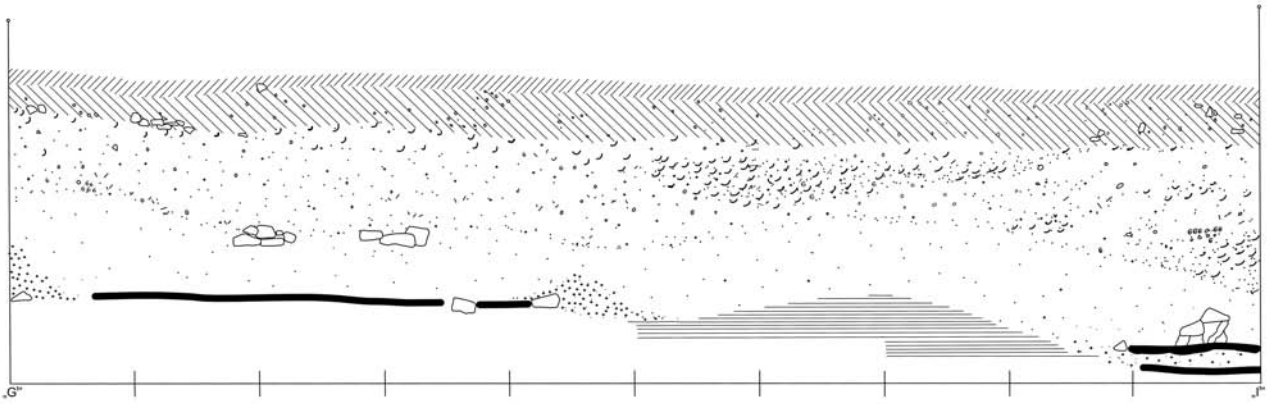


Fig. 8. Blocks G and H – southwest profile

Сл. 8. Блокови G и H – југозападни профил

the layers of the Lepenski Vir I phase and later Neolithic settlements should be identified with the layer of greyish sand, which in Srejović's report from 1966 separated the older cultural stratum from the younger one, i.e. with loess-like brown sand of unequal thickness, to which the dwelling horizon of the Lepenski Vir II phase was later assigned.[36]

Contrary to Srejović's approach, we are of opinion that this layer and the one below it document both the whole period in which the structures with trapezoid bases existed and, probably, a short period after the structures of Lepenski Vir I were completely abandoned, that is from the extinction of the Lepenski Vir culture, until the establishment of the Neolithic settlement.

It is important to note that in the field journal, where layers were being described, the term "layer of loose soil", meaning a layer of soil free of sand, was used only to describe the character of the Neolithic layer, while the layers below it were described as brown, light, yellow or buff in colour, with emphasized presence of a remarkable quantity of sand, or were simply referred to as layers of dark brown, yellow or buff sand.

Having in mind that during excavation in the bases of excavated layers no units different in colour or content were distinguished and that in the deeper excavated layers an intensified presence of sand was noted, neither the change from the dark layer with pottery to the lighter sandy layer without pottery, nor the change from the lighter sandy layer without pottery to the deepest layer of yellow sand, which could not occur at the same level, could have been properly and meticulously described in the journal. Especially so, if we take into consideration that the difference in colour in the deeper layers must have been hardly observable, and the sand was quick to dry, so that the differences in composition, content and colour of the layers were difficult to notice. Certainly, the situation regarding recognition and capturing these layers in profiles was not any better.

In addition to the above stated cultural layers in the vertical stratigraphy of the area investigated in 1966, an alluvial layer can also be identified. This layer was documented in the field journal, where the situation in the third excavated layer inside blocks G and H was described. In block G "in the northeast section of the block, along the control profile near the shore at the level of 1.35 m, a layer of alluvium consisting of pebbles and sand was noted" (Fig. 12).[37] Alluvium can also be recognized in block H from the description of the situation in the base of the third excavated layer: "In the northern part of the block earth is compact, hard and mixed with pebble, while in the south part it is softer and mixed with sand".[38] In addition to being documented in detail 10 (Fig. 12), the alluvial layer is visible in several photographs (Fig. 13). It is quite clear that all structures along the river bank must have been flooded temporarily, which has to be taken into consideration when stratigraphy is interpreted, especially when it comes to certain disputable situations at this section of the site.

As regards vertical stratigraphy taken as a whole or partially in blocks, the first conclusion which pre-

[36] Срејовић 1968; 1969.

[37] Excavation journal 8. 10. 1966, p.5.

[38] Excavation journal 8. 10. 1966, p. 4.

sents itself is that the character, but also the number of the cultural layers distinguished in profiles, does not correspond to the layers described in the journal.

The youngest layer, i.e. the layer with the Neolithic pottery, as we have seen, was not specifically distinguished in the profiles, but was recognizable in the journal in the descriptions of the layer of loose black or dark brown soil. Given the pottery fragments which make its main features, this layer can be recognized in profiles based on higher or lower concentrations of pottery fragments. Except for block β, where soil is getting lighter from the first excavated layer, the Neolithic layer is evident in all other blocks and mostly occurs in the first three excavated layers.

Below the level of the third and fourth excavated layer, the layer of dark brown soil remained only in those sections where Neolithic pits were noted. Judging by the profiles, the layer where the Neolithic pits had been dug was actually the most prominent layer in the area investigated in 1966. It can be recognized in the journal immediately after the third and fourth excavated layer where the layer of loose black and dark brown soil changed to the layer of brown sand without pottery in which, along with scarce finds of stone or bone tools, the finds of animal bones dominated. That is the layer which was often said to be almost sterile and which, based on the documentation, cannot be connected with any kind of immovable structures or typologically characteristic small finds.

Unlike in the profiles, the "Lepenski" layer is more difficult to identify in the journal, since it was, in the way it was marked in the profile, in fact absent from the descriptions in the journal. This raises questions about the extent to which a clear boundary between the "Lepenski" layer and the layer above it can be fixed. Furthermore, may we assume that below the Neolithic layer there were two clearly defined cultural layers, or it was only one layer, where the so-called Lepenski layer was actually its lower level with less emphasized difference in colour and composition, as was the case in blocks A–D?

The identification of the alluvial layer is important for several reasons. Namely, if the layer of alluvium extended to blocks G, H and β, it would mean that all houses on the bank had been exposed to flooding, which may have resulted in different forms of stratigraphic disturbances, from erosion and collapse of layers to dislocation of small finds, but also of some construction elements belonging to immovable structures. Flooding of the terrain may have had a special impact on the finds of organic origin, given that with every flood those finds were exposed to excess moisture, in other words, to additional contamination which may have had an effect on the results of possible absolute dating of such samples.

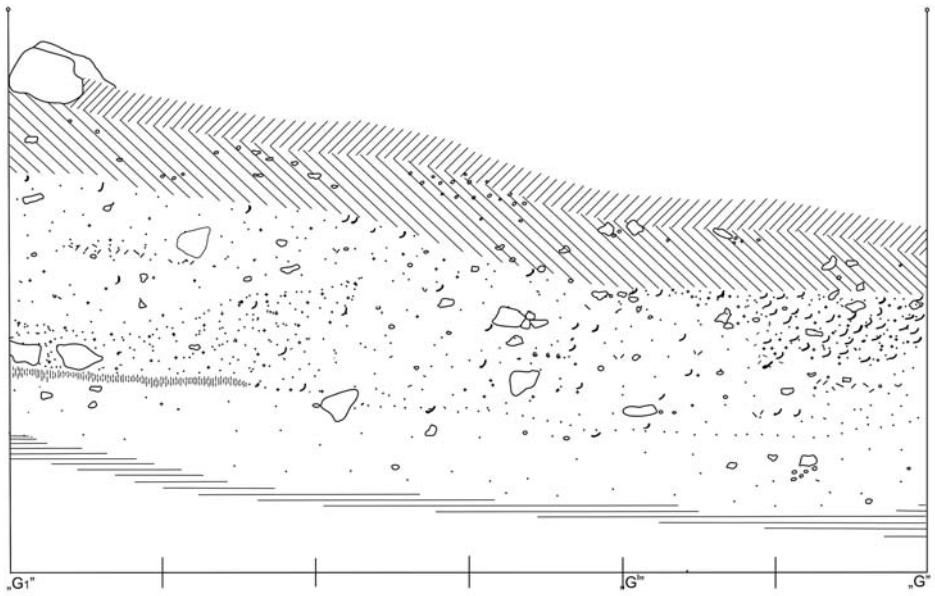
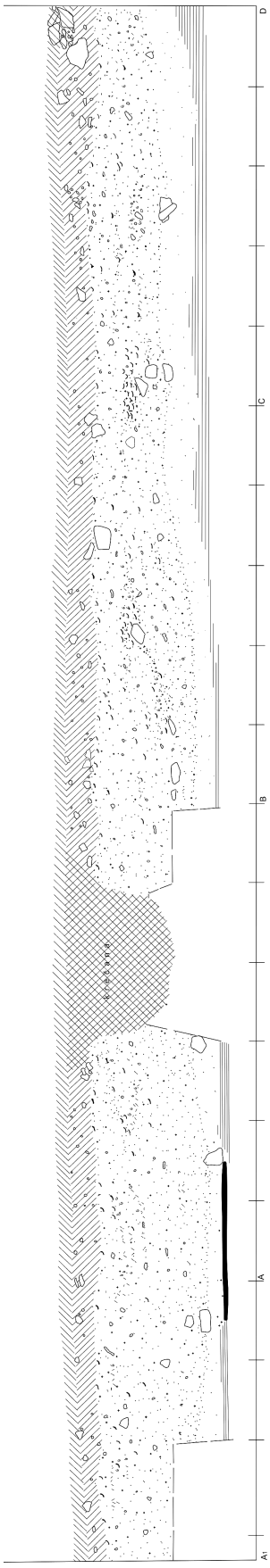


Fig. 9. Block F1 – northwest profile

Сл. 9. Блок F1 – северозападни профил



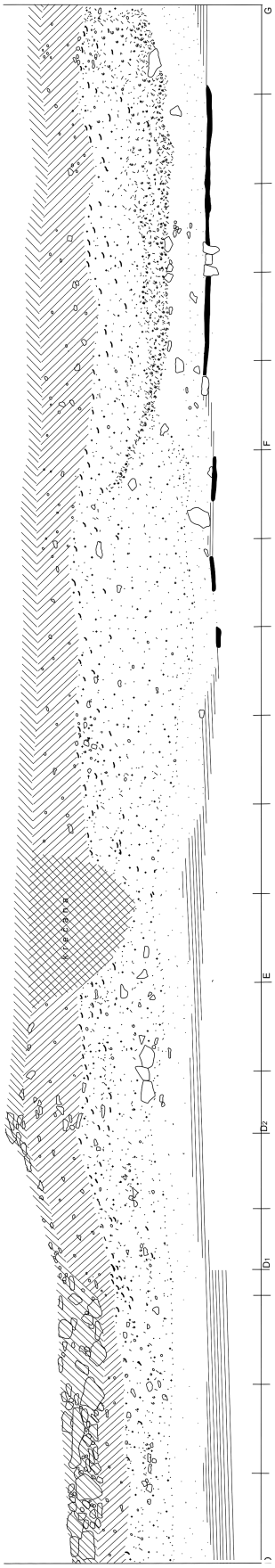


Fig. 10. Blocks A1, A, B and C – southwest profile
Fig. 11. Blocks D, E and F – southwest profile

Сл. 10. Блокови A1, A, B и C – југозападни профил
Сл. 11. Блокови D, E и F – југозападни профил

THE RELATION BETWEEN THE LAYERS AS SHOWN IN THE PROFILES OR DESCRIBED IN THE FIELD JOURNAL AND THE LAYERS AS NOTED IN SREJOVIĆ'S REPORTS

When the conclusions drawn on the analysis of the data from the journal and profile drawings are compared to Srejović's observations regarding 1966 excavation, a certain discrepancy appears. We have already stated that D. Srejovic, in his first report on the 1966 excavation results, recognized another three cultural layers under the humus layer. The layer containing remains of a Neolithic settlement ran to the depth of 1.20 m and it was 0.80 m thick. A 0.40 m thick layer of greyish sand was said to be lying below it, separating the Neolithic layer from the oldest layer with the structures of trapezoid bases. Since the maximum thickness of the layer was 2.10 m, and considering the fact that the structures were dug into the subsoil, the thickness of the oldest layer must have been about 0.50 m.

As we can see, here, compared to the layers recorded in the profile drawings, the layer with yellow clay under the humus layer, the yellow sandy layer – "sterile", and the proto-humus layer are missing, but the subsoil in which, contrary to the situation presented in the profile, the structures with trapezoid bases were dug, is mentioned instead.

If we tried to bring the layers referred to in Srejović's report into relation with the layers marked in the profiles, we could claim that below the humus layer, which in this case would also include the layer of yellow clay, three layers appeared. Two layers from Srejović's report – the Neolithic layer and the layer of greyish sand, with the total thickness of 1.20 m, would correspond to the layer between yellow clay and the sandy Lepenski layer in the profile drawings. At the end, Srejović's report informs on a layer of the older horizon, which would correspond to the sandy "Lepenski" layer in the profiles. In Srejović's report, the structures of the older horizon, i.e. the structures with trapezoid bases, were noted as being dug into the subsoil to the depth of 0.30 m,[39] while in the profiles, as we have seen, those structures were depicted as being dug into the proto-humus layer (Fig. 8, 10, 11).

The vertical cross-section, as presented in Srejović's report from 1966, in which the Neolithic layer and the Lepenski layer were separated from each other by a 0.40 m thick layer of greyish sand, not marked as a separate stratigraphic unit in the profile, did not provide a clue as to which layer the Neolithic pits were dug in. If the Neolithic layer was said to be separated from the Lepenski layer by another layer, then the logical conclusion would be that the Neolithic pits were within 0.80 m of the Neolithic layer. This would mean that the pits had been dug into the already formed Neolithic layer, which cannot be confirmed in the section of the site investigated in 1966 by any means.

By comparison between the stratigraphic picture from the first 1966 report and the descriptions of layers in the journal, it appears that the humus layer in Srejović's report would correspond to the levelling layer in the field journal, and that neither document refers to the layer of yellow clay as a separate layer. According to the descriptions in the field journal, a layer of dark brown, black or ash-black and loose soil with Neolithic pottery lay below the humus – that is, levelling layer. That layer occurred in the first three excavated layers across almost the whole excavated area and it would correspond to the younger cultural stratum in Srejović's report. The layer which was described in the journal as a "layer of brown sand", "loose brown with sand", or a "layer of lighter soil with sand admixtures" with sporadic small finds would correspond to the layer of greyish sand in Srejović's report. As we can see both in the field journal and Srejović's report, two cultural layers (the Neolithic layer and the layer separating the Neolithic layer from the settlement with the structures with trapezoid bases) were recognized between the humus layer and the structures with trapezoid bases. On the other hand, as we have seen, these two layers were shown together in the profiles.

At the end, the journal provides descriptions of the layer of yellow or buff sandy soil, where the structures with trapezoid layers were, with few finds outside the structures. The layer below floor bases of certain structures was described in the similar manner and noted as "sandy cultural layer with animal bones".[40] As already stated, proto-humus was not described in the journal as a separate layer, and the subsoil is mentioned in one instance only as a layer of yellow sand. All this actually refers to the third and fourth dwelling horizons of the older cultural stratum and the subsoil layer mentioned in Srejović's report, where the most notable difference has to do with the definition of the layer in

[39] Srejović 1966, 95

[40] Excavation journal 11. 7. 1966, p. 10.

which the structures of trapezoid bases had been dug: in the journal it was the layer of yellow and buff soil, in the profiles it was the proto-humus layer, while in Srejović's report it was the subsoil layer.

In the second Srejović's report regarding the excavations between 1965 and 1967, the previous ideas were modified to a certain extent in the light of the 1967 excavation results, or, in other words, were supplemented and made more precise.[41] In that new report, the cultural layer with the thickness between 2.15 and 3.50 m was divided, on the basis of culture and stratigraphy, into Lepenski Vir Ia–e, Lepenski Vir II, and Lepenski Vir IIIa and IIIb.

Lepenski Vir I settlement was said to have been formed on a thin layer of yellow sand covering limestone rocks. The thickness of the cultural layer of the oldest settlement was not equal everywhere, so that its remains were noted at the depths between 3.50 and 1.95 m, which means that the thickness of the Lepenski Vir I layer ranged between 0.20 and 1.55 m. Above Lepenski Vir I settlement, there was a 0.50 m layer of loess-like brown sand, containing the remains of the younger settlement of Lepenski Vir II. And at the end, a layer with the thickness varying between 0.81 and 1.15 m corresponded to Lepenski Vir III settlement.

Based on the given data, we may see, that contrary to the approach expressed in the 1966 report, Srejović now recognized a new layer – a thin layer of yellow sand covering limestone rocks, in which, although it was not explicitly said, the structures of Lepenski Vir I phase were dug, and which was not calculated in the total cultural layer thickness. In comparison to the layers described in the journal, the thin yellow sand layer in the new report would correspond to the layer of sandy yellow or buff soil, where the structures with trapezoid bases were, with few finds outside the structures, that is, to the proto-humus layer in the profiles and to the subsoil in the 1966 report. The thickness of the yellow sand layer on which the oldest settlement had been formed remained unclear in the 1967 report. However, the statement that the yellow sand layer, which covered the rocky base, was thin raises the question as to which layer the structures extending deeper to the slope had been dug in, notably those excavated in 1967, the back of which was dug as deep as 1m. Clearly, it may not have been the thin layer of yellow sand that was referred to in the mentioned report, but the layer which was thin only within a narrow strip along the river, while getting much thicker inside the slope, with the lower level probably different in colour and composition.

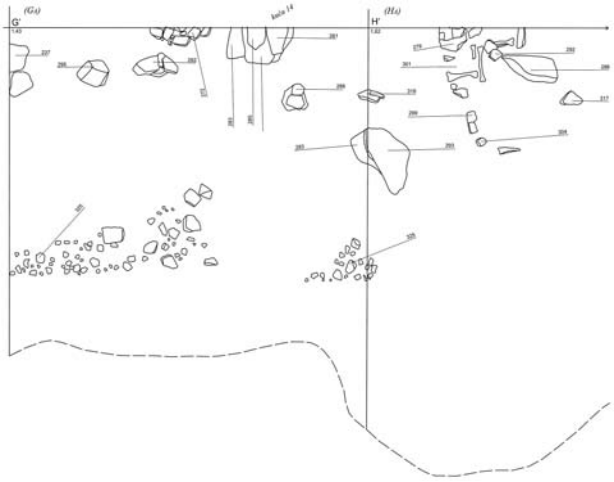


Fig. 12. Blocks G and H – ground plan in 3rd excavated layer

Сл. 12. Блокови G и H – основа у 3. ошкопном слоју

In the new report, the situation is completely different regarding the thickness of the layer of Lepenski Vir I settlement, which is probably understandable in the light of 1967 excavation which went much deeper into the slope. However, in the journal description we do not have a stratigraphic unit corresponding to this layer. As for the profiles, the sandy "Lepenski" cultural layer could correspond to it, but only in terms of stratigraphy, not in terms of thickness.

On the other hand, in the new report, the layer which earlier was characterized as the layer separating the youngest cultural layer from the oldest cultural layer was now ascribed to Lepenski Vir II settlement. Its thickness was slightly increased, while the description of the layer remained the same. The positions of this layer in the field journal and the profiles have already been stated.

The youngest cultural stratum, that is the layer to which Lepenski Vir III settlement belonged, was enlarged from earlier 0.80 m of thickness to the range between 0.81 to 1.15 m in the new report. This, as well as the 1966 report, prompts the conclusion that thus presented Neolithic layer must have implied pits, the issue we discussed above. The humus layer became thinner from earlier 0.40 m to 0.30 m in the new report, while the yellow clay layer under the humus layer was again passed over.

[41] Срејовић 1968.

In such a stratigraphic situation, firstly, it remains unclear in which layer the Neolithic pits were dug, and secondly, it is impossible to prove in any profile drawings from 1966 that the layer with the Neolithic pottery, except in the pits, was thicker than 0.30 to 0.40 m.

GEOLOGICAL AND STRATIGRAPHIC OBSERVATIONS

In order to get a convincing picture of the vertical stratigraphy of the area investigated in 1966, it is necessary to look at the reports on the geological and stratigraphic observations by J. Marković-Marjanović, which were published in two publications.[42] In the first report the author presented the geological profile of the terrain on the lowest river terrace at Lepenski Vir, in the form of a table with the sequence and thickness of the layers and auxiliary data.[43] 12 layers were recognized in that 13.85 m thick profile, and they were shown in a sequence from the youngest layer to the oldest one (Fig. 14). It should be noted that this profile was recorded after 1966, so that the thickness of the layers refers more to the space deeper inside the slope.

What is today surface ground, marked as layer 1, was divided into two parts, the upper part with the thickness of 0.50 m and the lower part with the thickness of 0.60 m.[44] These two parts of layer 1 correspond to the humus layer and the yellow clay layer in the profile drawings from 1966. The total thickness of this surface layer was 1.10 m, which is some twenty centimetres more than shown in the archaeological profile.

1.50 m thick layer 2 was denoted as Neolithic and described as a layer of light reddish-brown colour, which resembled the layer above it.[45] In comparison to the descriptions in the journal and to the layer which we characterized as Neolithic in the profile drawings, this layer is different in colour and is much thicker, since the field documentation from 1966 makes it clear that the thickness of the Neolithic layer together with the pits could not exceed 1.10 m.

Layer 3, 0.50 m thick, which was described as a layer which was barely coloured with humus, being almost buff in colour, was assigned to Lepenski Vir II settlement.[46] This means that layer 3 should correspond to the layer which, according to Srejović's report from 1966, separated the Neolithic layer from the layer with trapezoid bases, and which in his later report was defined as a layer of the Lepenski Vir II phase.[47] On the other hand, layer 3 in the profile drawings from 1966

Fig. 13. Houses 1 and 2 – view from southeast

Сл. 13. Куће 1 и 2, са југоистока

should correspond to the layer we marked as a layer below the Neolithic settlement, in which the Neolithic pit had been dug, with the maximum thickness of about 0.80 m. That layer was described in the journal as a "layer of brown sand", then as "loose brown soil with sand", or as a "layer of lighter soil, with sand admixtures", where apart from animal bones and rare chipped stone tools there were almost no other small finds.[48]

1 m thick layer 4 was described as a layer of brown colour similar to chernozem and Lepenski Vir I settlement was assigned to it.[49] Neither so called Lepenski layer in profiles nor the layer described in the journal as being connected with the structures with trapezoid bases cannot match this layer in volume or colour. On the other hand, in Srejović's report from 1966, its thickness was 0.50 m, while in the later 1967 report it was said to be varying from 0.20 to 1.55 m.[50] It is interesting to note that the layers assigned to the phases of Lepenski Vir I, II and III, do not correspond in their colour or composition to the cultural layers described in the journal, or to the layers drawn in the archaeological profiles.

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[42] Марковић-Марјановић 1969; 1978.
[43] Марковић-Марјановић 1969, 184.
[44] Марковић-Марјановић, 1969, 185.
[45] Марковић-Марјановић, 1969, 186.
[46] Марковић-Марјановић, 1969, 186.
[47] Срејовић 1968, 158.
[48] Excavation journal 6. 7. 1966, p. 7.
[49] Марковић-Марјановић, 1969,187.
[50] Srejović 1966; Срејовић 1968.

Layer 5, with the thickness of 0.70 m, was described as a layer with massive stone blocks scattered across the whole site, which the founders of Lepenski Vir I settlement had found *in situ.*[51] This layer could not be brought into relation with any layer described in the journal, nor layers in profiles, or layers described in Srejović's report.

0.30 m thick layer 6 was described as a layer of steppe or forest-steppe soil of light brown colour, to which we cannot find a corresponding layer in the journal descriptions, profile drawings, or Srejović's reports either.

Layer 7, 1 m thick, was described as typical continental loess of buff colour, with matching gastropod fauna.[52] Based on the description of its composition and colour, and to some extent thickness, this layer could be connected to the layer we have said to have been the most powerful in the profile drawings from 1966, to have been lying below the Neolithic layer and that the Neolithic pits had been dug in it. By accepting this opinion, we get closer to the conclusion that, on a certain basis, layers 3 and 7 could be equated, or in other words, the existence of one of these two layers could be questioned.

Layer 8, 2 m thick, was described as a layer with two levels, the upper level being a yellow loess-like layer which in the lower level changed to clean yellow eolic sand, and as a layer in which the structures with hearths of the Proto-Lepenski Vir phase were noted.[53] Based on the description of the colour and composition, the lower level of this layer could be connected to the layer of the original humus or the subsoil layer in the journal and profiles, while the upper level in this case would correspond to the Lepenski layer, i.e. the layer of Lepenski Vir I settlement. In this instance, as in the previous case, we may draw the conclusion that layers 4 and 8 can be equated, which is to say that one of these two layers can be eliminated from the vertical stratigraphy.

1 m thick layer 9 was described as chestnut coloured sandy fossil soil,[54] which cannot be connected to any layer in the journal, profile drawings or Srejović's reports.

Layer 10, with the thickness of 0.50 m, was described as grey fluvial terrace silty sand, which together with layer 11, which was 0.25 m thick in a form of multicoloured terrace gravel, covered layer 12, i.e. volcanic rock – red porphyry, whose upper level was at 59.40 m and which was the base of the lowest Danube terrace at Lepenski Vir.[55]

Based on the results of the analysis of the presented layers, J. Marković-Marjanović distinguishes four phases in formation of this profile, emphasizing that the first phase was erosive and that the solid terrace base of red porphyry of Permian origin corresponds to it.

Fluvial accumulation of multicoloured gravel and silty sand, originated in the Late Glacial period, when the Danube ran across the rocky terrace, corresponds to the second phase.

The third phase is a period when continental sediments of quicksand and loess were formed. Layers 5 to 9 correspond to this phase, with purely eolic sediments making layers 7 and 8 with total thickness of 3 m, out of which the layer of quicksand deposits was 2 m thick and the loess layer stretching over it 1 m. It is important to note that the dwellings in Proto Lepenski Vir settlement are associated with the sand layer.

The fourth phase is the period when the cultural layers of Lepenski Vir I, II and III, i.e. layers 4, 3 and 2, were formed. It was emphasized that Lepenski Vir I settlement had existed in unfavourable climate conditions, where the main source of substance was fishing. The unfavourable, cold and humid climate conditioned the construction of structures with a solid floor base on otherwise porous sandy ground.[56]

This insight into the stratigraphy of geological and cultural layers at Lepenski Vir also holds certain illogicality as well as discrepancies in relation to the field documentation and some descriptions of the cultural layers given in the reports, especially the one from 1966. First of all, it is surprising that in terms of composition, colour, and thickness, the layers described in the journal and shown in the archaeological profiles are most closely related to the two geological layers with the total thickness of 3 m, which to a certain extent is inconsistent with the total thickness stated in the 1966 report. This inconsistency, as we have already noted, is understandable taking into account that the presented geological profile was recorded deep inside the site, while the structures excavated in 1966 were on the very bank of the Danube.

Nevertheless, the most important issue in the analysis of that profile is addressing the mutual relation-

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[51] Марковић-Марјановић, 1969, 187

[52] Марковић-Марјановић, 1969, 187.

[53] Марковић-Марјановић, 1969, 188.

[54] Марковић-Марјановић, 1969, 188.

[55] Марковић-Марјановић, 1969, 188–189.

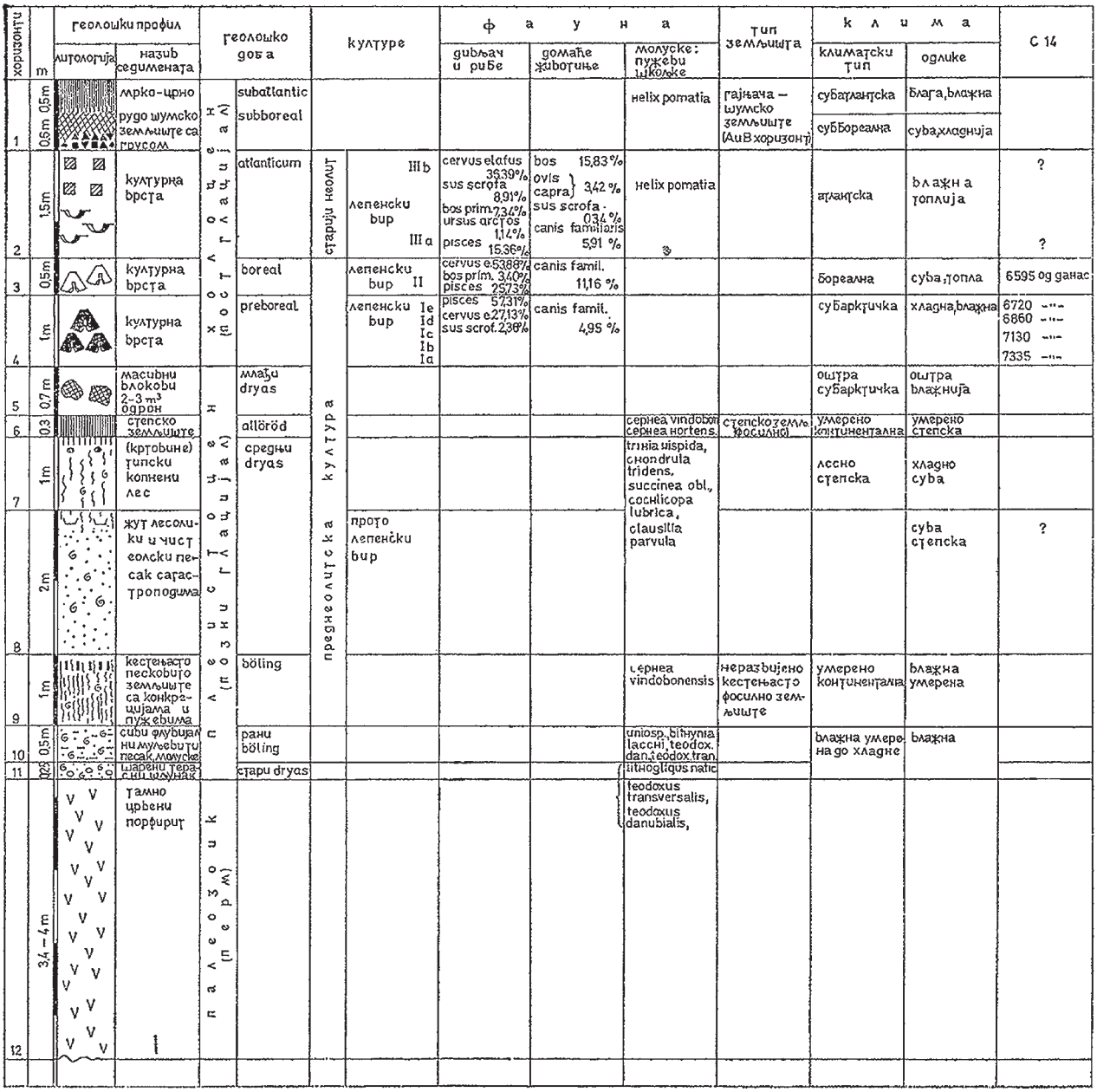
[56] Марковић-Марјановић, 1969, 190–191.

ship between two groups of layers: 3 and 7, and 4 and 8. Namely, it is necessary to answer the question as to whether there was enough space for so many layers between the hard ground of red porphyry and the surface layer; that is to say, whether layers 7 and 8 were those layers in which the structures of Lepenski Vir culture had been dug and in which traces of life had been preserved in the space below, above and around those structures.

In this respect, it may be interesting to see what would happen if all geological layers running below the oldest cultural layer were put at the upper level of the solid ground of the lowest Danube terrace, i.e. at the altitude of 59.40 m. When 5.75 m, which is the thickness of all geological layers, are added to 59.40 m, it appears that the cultural layer with the structures of the Lepensti Vir I phase began at the altitude of 65.15 m. Taking into consideration that the layer samples were

Fig. 14. Geological profil of the site (after Марковић-Марјановић 1969, сл. 56)

Сл. 14. Геолошки профил локалитета (по Марковић-Марјановић 1969, сл. 56)



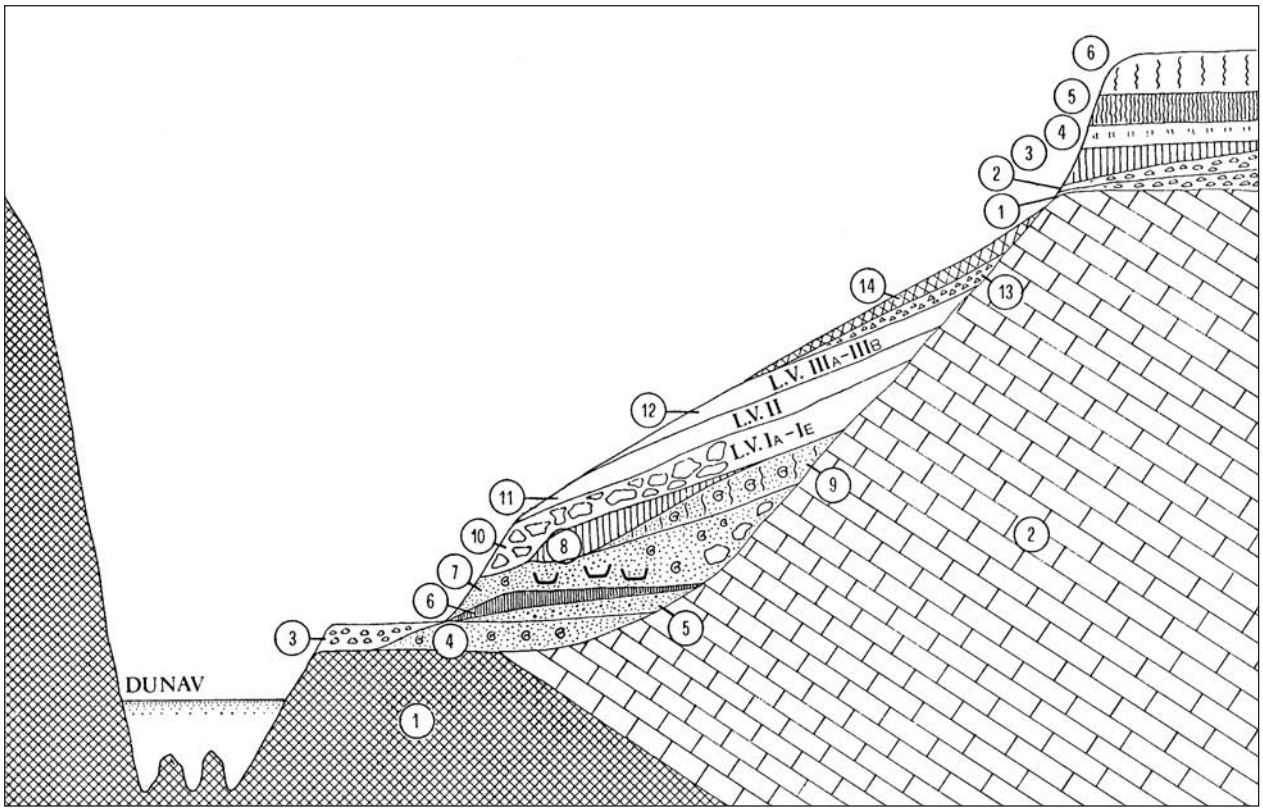


Fig. 15. Cross-section of the site (after Марковић-Марјановић 1978, сл. 2)

Сл. 15. Попречни профил локалитета (по Марковић-Марјановић 1978, сл. 2)

taken inside the settlement, and given the terrain inclination, this level could be lowered for no more than four metres on the opposite side, which was the altitude difference between the houses on the bank and those in the settlement southwest periphery. However, even then we could reach the altitude of 61.50 m, where floor bases should have stood on the bank, while the lowest structures excavated in 1966 actually stood at the altitude of 60 m or some ten centimetres below 60 m. This means that between the solid ground of red porphyry and the lowest floor bases in the riverside strip hardly might there have been a layer thicker than 0.60 m, let alone several geological layers reaching the maximal thickness of 5.75 m, and the minimal thickness of 1.50 m. If we add another three meters of the cultural layer and 1.10 m of the surface layer, we end with the figure which exceeds all surface levels in the whole excavated area, which would mean that the cultural layers in this stratigraphic picture were, in fact, a surplus.

Therefore, it is necessary to analyse the second profile of the same author.[57] The layers were presented in the sequence from the oldest layer to the youngest one, while the view of layers was given in the form of a cross-section (Fig. 15).

In this second profile, dark red porphyry, corresponding to layer 12 in the first profile, was marked as level 1.

Jurassic limestone forming the lateral sides of the terrace on which the layers deposited on porphyry sat was marked as layer 2. This layer was not shown in the first profile.

Layer 3 is fluvial quartz, terrace gravel, and layer 4 is recent multicoloured Danube gravel created during the high water level. (The numbers denoting these layers were permuted in the profile drawings.) These two layers correspond to layers 10 and 11 in the first profile, with the remark that all the layers in the first profile were one above the other, while in the second profile one next to the other, in other words on the same plane, since it was emphasized that the layer of multicoloured gravel was

[57] Марковић-Марјановић, 1978, 17, Fig. 2.

closer to the terrace section. Both layers, according to the first profile, originated in the Upper Pleistocene, while, according to the text in the second profile, the layer of multicoloured gravel was connected with the time of "Djerdap" power plant construction.

Layer 5, 0.50 to 1 m thick, was described as a layer of chestnut colour sandy loess-like soil with concretions. This layer, in its description and position, corresponds to layer 9 in the first profile.

Layer 6, without information about thickness, was described as a layer of massive limestone blocks, in other words, as rockslide on limestone ground. This layer did not exist in the previous profile, and it should represent, in fact, the solid ground, so-called live rock that had been reached here and there when structures with trapezoid bases, and sometimes graves, were dug.

Layer 7, 2 m thick, was described as loess-like and pure eolic sand or quicksand, in which, as emphasized, dwellings of the Proto-Lepenski Vir stage were dug. With respect to the thickness of this and other layers, it is likely that the maximum value, which could only be recorded at the part of the profile closer to layer 2, since, due to the terrain features, the thickness of the layers was not equal. Layer 7 corresponds to layer 8 in the first profile, although they do not lie on the same ground.

Layer 8, 1 m thick, was described as yellow sandy continental loess. Judging from the drawing of the profile cross-section, this layer did not occur across the whole slope area. (In the profile drawing, this layer was wrongly marked with number 9). Layer 8 would correspond to layer 7 in the first profile.

Layer 9, 0.30 m thick, was described as chestnut-colour, sandy steppe soil, which was only sporadically preserved below the blocks of the following phase. (This layer was wrongly marked with number 8 in the profile drawing). Layer 9 would correspond to layer 6 in the first profile, marked as a steppe soil layer.

Layer 10, in fact was slide of massive stone blocks scattered all over the site. The layer with massive stone blocks was marked in the first profile as 0.70 m thick layer 5. On the other hand, in the second profile massive stone blocks were associated with layer 9, which was only partly preserved, mostly below the blocks.

In the second profile drawing itself, the layer of stone blocks was shown together with the structures of Lepenski Vir I settlement, which is consistent with the remarks that the founders of Lepenski Vir I settlement must have found the stone blocks *in situ*.[58]

The text that followed referred to three cultural layers above layer 10: Lepenski Vir I was marked as layer 11, Lepenski Vir II as layer 12, and Lepenski Vir III as layer 13. The surface 1.10 m thick layer was marked as layer 14 in the text.[59]

As for the cultural layers, there is a discrepancy in the way they were marked in the text and in the drawing. In the drawing, as we have already stated, the cultural layer of Lepenski Vir I was, in fact, within layer 10 with massive stone blocks, so that Lepenski Vir II was marked as layer 11, Lepenski Vir III as layer 12, while the two parts of the surface layer were marked as layers 13 and 14.

At the end of the text about the profile at Lepenski Vir, it was concluded that Lepenski Vir and Padina II had been erected on the identical ground – quicksand and loess, and that it was suitable ground for house construction and shaping of floors.[60]

Through comparison of the data from the first and second text, and of the first and second profile, certain differences can be noted. Firstly, in the second profile there was no information on the total profile thickness, or on the thickness of the cultural layers. On the other hand, in the first profile there is no layer representing the solid limestone ground, which was reached in some places at the site when structures were dug in. At the end, the layer with massive stone blocks was shown differently.

The fact that the thickness of the cultural layers was not given in the second profile is very significant, since any comparison to the field journal or technical documentation is impossible. At the same time, the information was provided that the structures of the Proto-Lepenski Vir phase were dug into layer 7, which is 1.30 m below layer 10 or 11, with which the structures of the Lepenski Vir I phase were associated. This is absolutely impossible to prove. Namely, according to D. Srejović, the structures of the Proto-Lepenski Vir phase were concentrated exactly on the lowest bank terrace in a 0.50 m loess layer.[61] We should not forget that almost the same opinion was expressed in the 1967 report, but then it had to do with the Lepenski Vir I layer. In the light of this and some other data regarding the levels at which the structures of the Lepenski Vir culture, excavated in 1966, had been constructed, there

[58] Марковић-Марјановић, 1969, 187.
[59] Марковић-Марјановић, 1978, 16.
[60] Марковић-Марјановић, 1978, 18.
[61] Срејовић 1969, 30.

is no doubt that the structures assigned to the Proto-Lepenski Vir phase were actually on the same plane, in other words at approximately the same levels and dug into the same layer as the structures of the Lepenski Vir culture excavated in 1965 and 1966. If this opinion is accepted, then the stratigraphic positions of the cultural layers shown in the geological profiles by J. Marković-Marjanović must be questioned.

The fact that the accurate location where the profiles were recorded is unknown poses a big challenge to understanding of the situation shown in the profiles. However, after summing up the content of the first and second text, the situation shown in the profiles and all discrepancies mentioned above, one gets an impression, especially when observing the second, i.e. cross-section profile of the site, that J. Marković-Marjanović gave a realistic picture of the natural layers formed on the ground of red porphyry, but just borrowed, without a critical look, the picture of the cultural layers from D. Srejović.

In the previous part of the text, we have shown that there was no enough room for all geological and cultural layers in the site vertical stratigraphy, so that it is necessary to revise the first and second geological profile, in addition to Srejović's cultural stratigraphy, and, consequently, the corresponding layers.

Speaking about geological profiles, with all presented remarks, it seems that a sound approach to sandy layers is critical for the correct interpretation of the vertical stratigraphy. We have seen that there were three (7, 8 and 9) sandy layers in the second profile and two (7 and 8) sandy layers in the first profile. The thickness of layers 7 and 8 in the first profile was 3m, while in the second profile the thickness of layer 7 was also 2m, and the thickness of layers 8 and 9, wedged one under the other so that they can be considered one layer with uniformed thickness, was about 1m. This would mean that layers 7 and 8 in the first profile, and layers 7, 8 and 9 in the second profile had approximately the same thickness of about 3 m. Based on what we have said about the profiles by J. Marković-Marjanović so far, we think that the second profile provides a more realistic picture of the natural ground as it was on the arrival of the first inhabitants of Lepenski Vir.

Since we do not know the thickness of layers 3, 4, 6 and 10, we cannot, as in the previous case, calculate precisely the thickness of the layers below the oldest cultural layer. Nevertheless, judging from the cross-section profile drawings of the site, layer 7, where the riverside structures were dug in, began immediately from layers 3 and 4, which undoubtedly could not be above the altitude of 60 m, the fact consistent with the field situation in 1965 and 1966 excavations.

At the same time, the cross-section profile drawing allows us to conclude that on the ground surface prior to formation of the oldest settlement, to a bigger or lesser degree, three sandy layers (7, 8 and 9) were visible – layer 7 immediately along the Danube, layer 9 in the central section of the slope, and layer 8 only in a narrow strip in the southwest section.

If we add the fact that massive stone blocks, noted justly to have been *in situ* when the founders of Lepenski Vir I arrived, and visible in the pictures along the trapezoid bases excavated in 1966, were scattered across the whole area of the site, then we reach the conclusion that after deposit formation in the Late Glacial period, the lowest terrace at Lepenski Vir may have lost the form of a terrace,[62] gradually transforming to a slope with three sandy layers in its base. Certainly, at the time the slope was not as steep as when excavation at Lepenski Vir was conducted.

This was the terrain where the founders of the settlement of the Lepenski Vir culture came, and quite logically they constructed their first structures on more or less flat terrain on the bank. In this section of the terrace they found a layer of yellow sand, whose thickness, given the absolute altitude of the structures and solid ground on which they were constructed, may not have been more than 0.60 m. That layer, marked as layer 7 in the second profile and as layer 8 in the first profile of J. Marjanović-Marković, was described as a layer with the upper level of yellow loess-like sand, and the lower level of yellow eolic sand. The structures at a distance from the Danube shore, on higher sections of the slope, were built, actually carved into that layer, which in those section might have reached the maximum thickness of 2 m, but also in the layer above it, which was yellow in colour and sandy (layer 8 in the second profile, i.e. 7 in the first profile by J. Marković-Marjanović) too and 1m thick.

CONCLUSION

The analysis of the different interpretations of the 1966 excavation results from Lepenski Vir reveals that there are two groups of documents based on which cer-

[62] Марковић-Марјановић, 1969, 185.

tain conclusions about the vertical and cultural stratigraphy of the river bank section can be made. On the one hand, we have the field journal, which seems to be the most reliable document, since there the cultural layers were described as seen with the researchers' own eyes, that is, by the immediate witnesses of what was going on in the field. On the other hand, there is technical documentation, profile drawings in the first place, then D. Srejović's reports from 1966 and 1967, and his publication from 1969, and finally, the geological profiles made by J. Marković-Marjanović. As we have stated earlier in this text, there are certain discrepancies between the second group of documents and the descriptions given in the field journal, but, even more importantly, there are disagreements with regards to specific stratigraphic units and their cultural association – to the extent of certain contradictions.

However, all the documents have a fairly unified approach when it comes to the vertical stratigraphy, which is the main topic of this paper. Namely, in all the mentioned documents, in the same or similar form, the following stratigraphic units are continuously present:

Surface layer which would comprise the layers of humus and yellow clay.

Neolithic layer, which is emphasized to be a separate unit in all the documents except the control profile drawings. Its thickness varies from one document to another, but this is because of the different time when the document was made rather than because of different opinions regarding the thickness of the layer.

Layer of brown sand, which is characterised in the journal as a layer where ceramics is lacking and as a layer with scarce small finds. This layer may be the most problematic, since most concerns have to do with the determination of its character. On the other hand, this layer and the Neolithic layer are especially singled out in all the documents, except in the control profile drawings, although no kind of immovable structures or characteristic type of small finds can be reliably connected to it.

Sandy Lepenski cultural layer is mentioned in all the documents, but it is presented in different manners, in terms of its composition, colour or thickness.

At the end, there is a layer defined in one of the documents as subsoil, and in the other as proto-humus, or simply as a layer of yellow sand on which the oldest settlement at Lepenski Vir was founded. In one case it is Proto-Lepenski Vir, and in other Lepenski Vir I.

None of the five stated stratigraphic units is interpreted in an indisputable manner. As for 1966, the least disputable layers are those creating the surface layer. Here, the layer of yellow clay, whose main characteristic was the presence of tiny pebbles and absence of archaeological finds, was often left out. Regardless of being differently presented, these two layers are the least contentious and can be accepted as a fact in the vertical stratigraphy of the area excavated in 1966.

In our opinion, the Neolithic layer, also mentioned in all the documents, is presented in the most realistic way in the field journal. Namely, in spite of an inappropriate excavation method, based on the entries in the journal, it is possible to make a reliable reconstruction of the Neolithic layer thickness at specific points of the site. It is especially important that, on the basis of pottery concentration and the description of other parts of investigated blocks, the existence of pits can be assumed even prior to the explicit statement in the journal.

The main contentious issue concerning this layer was the way it was defined in the control profile drawings and its relation with the layer below it. However, the analysis of specific documents has undoubtedly shown that this layer ran, to a higher or lesser degree, across the whole investigated area, documenting the period of the existence of the Neolithic settlement at this location. Furthermore, the Neolithic settlement was formed on the layer shown only in the profile drawings together with the Neolithic layer as one stratigraphic unit, while in all other documents this layer was presented as a separate stratigraphic and cultural unit. Our analyses have demonstrated that the layer of "brown sand", as described in the journal, was separated from the Neolithic settlement in terms of stratigraphy, culture and chronology, but they were, in a way, connected by the Neolithic pits which were dug into this layer. And, as perhaps the most important conclusion regarding the Neolithic layer, it seems that the dwelling structures of the Neolithic settlers of Lepenski Vir were dug into a layer which covered the structures with trapezoid bases and that, depending on the slope inclination and the thickness of the layer below the Neolithic settlement, occasional direct contact between the Neolithic structures and the structures with trapezoid bases did occur, although they belong to essentially different and chronologically non-contiguous cultures.

At the end, we get to the most contentious layers. Those are three layers related to the Lepenski Vir culture, regardless whether that culture had one, two or three phases, as D. Srejović defined it. This group contains the previously mentioned layer above which the Neolithic layer was formed and in which the Neolithic

pits were dug, then the so-called sandy Lepenski cultural layer and the layer defined as subsoil, proto-humus or yellow sand, on which Lepenski Vir I settlement was formed.

The common feature of all three layers is their sandy or loess-like character, by which they are distinguished from the Neolithic, much later formed layer. At the same time, the doubts about the definition, mutual boundary determination and cultural and chronological associations of these layers, result from poorly marked mutual differences.

Through the analysis of all the documents, and especially on the basis of the geological profiles, we have reached the conclusion that upon arrival at this location the members of the Lepenski Vir culture must have found an area with a not very steep slope whose foot was a narrow and relatively flat terrace. The natural ground found by those who built the first structures at Lepenski Vir consisted of two, or three sandy – eolic sediments: the lowest yellow layer of so-called quicksand, which covered the whole surface of the terrace. Its maximum thickness, at the higher section of the slope, reached 2 m, while the minimum thickness was about 0.50 m on the riverside. Above it, there were a layer of yellow continental sandy loess and chestnut-colour sandy steppe soil, which did not extend to the foot of the slope, i.e. the narrow strip along the river, with the total thickness of 1 m. By formation of these layers in the Late Glacial period the lowest terrace of Lepenski Vir was transformed to a slope, i.e. through "subsequent processes of accumulation it increased in height and got a look of a pseudo-alluvium loosing completely its terrace-like shape".[63] The creators of the Lepenski Vir culture erected their first structures on the riverside in particular, but later also on the slope. Due to the terrain features, the structures were cut with its narrower side, i.e. the back of the structure, into the slope. In this way, on the riverside with a flat terrain where there was only one geological layer on the surface, the structures were dug shallowly in that oldest eolic sediment, which in the field documentation and D. Srejović's reports was named subsoil, proto-humus or simply a layer of yellow sand, which was the ground on which the oldest settlement was constructed. At higher levels, due to an excessive inclination of the slope, the backs of the structures were sometimes more than one meter below the ground, so that during construction of the structures two or three natural sediments running over the lowest terrace were cut through. In this manner, those structures were dug into the oldest eolic sediment, in its top level – yellow loess-like sand, while the younger eolic layer – continental sandy loess and the layer of chestnut coloured sandy steppe soil behind the backs of the structures remained "above" the floor bases, creating an impression of a well developed vertical stratigraphy. Thus, the members of the Lepenski Vir culture, while living in those structures and around them, were simultaneously occupying all three stated sediments. In their structures, by burials and all other artefacts which were integral part of their activity, they enriched and "coloured" those natural layers and in the course of time turned them to anthropogenic, i.e. cultural layers, which in terms of culture and chronology represent one unit. Their natural properties, structure, composition, and colour, along with small finds and movable structures being restricted to the oldest sediment, added to creation of a false picture in the vertical cross-section of a well developed vertical stratigraphy. However, it was the elements of material as well as spiritual culture which those layers contained that provide evidence that their cultural diversity cannot be proved, contrary to their culture unity that can, which is the topic of another paper.

At the end, we can draw the conclusion that in the vertical stratigraphy of Lepenski Vir, in this case, the section of the site investigated in 1966, between the layer with the remains of the Neolithic settlement and the eolic sediments formed during the late glacial period, there were no specific cultural layers formed during the existence of the Lepenski Vir culture, but in that period eolic sediments gradually transformed to cultural layers. Their total mass increased in the course of time due to immovable and movable archaeological finds and the effects of different forms of erosion.

Translated by Marin Markoš

[63] Марковић-Марјановић, 1969, 185.

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ПРИЛОГ ПОЗНАВАЊУ СТРАТИГРАФИЈЕ ЛЕПЕНСКОГ ВИРА

Кључне речи. – Лепенски Вир, мезолит, неолит, стратиграфија, културни слој, геолошки слој.

Последње деценије објављен је већи број радова са намером да се разреши неколико важних питања, отворених од почетка истраживања Лепенског Вира, пре свега питања културне стратиграфије и хронологије, која су од кључног значаја са разумевање мезолитске културе на епонимном налазишту и њеног могућег односа са популацијом која током неолита настањује исту локацију. Документација са ископавања Лепенског Вира, на жалост, углавном није публикована, као ни највећи део покретних налаза. Стога су и сви досадашњи закључци о хронологији и стратиграфији Лепенског Вира далеко од коначних. Због супротстављених ставова о карактеру и културној припадности објеката трапезоидних основа и свих других елемената културе који се везују за фазе Лепенски Вир I и III, анализирали смо документацију са ископавања 1966. године и њену усаглашеност са одговарајућим извештајима са ископавања и геолошким анализама.

Истраживање Лепенског Вира у 1966. години настављено је ископавањима приобалног појаса између и поред сонди истражених 1965. године. Као и прве године истраживања, примењиван је исти метод ископавања – вештачким хоризонталним откопним слојевима, који је непримерен конфигурацији терена и карактеру објеката грађених на Лепенском Виру. У таквој ситуацији, где је висинска разлика између југозападне и североисточне стране блока понекада износила и преко 1 m, приликом скидања тзв. нивелационог слоја, дебљина откопног слоја на делу блока ближе Дунаву износила је око 0,20 m, а на супротној страни блока, према падини, и до 1 m.

У овом раду предмет анализе су само културни и геолошки слојеви констатовани приликом истраживања 1966. године, због чега треба истаћи да су, с обзиром на истражену површину, две истраживачке кампање 1966. године најбоље документоване цртежима контролних профила између истражених блокова. Када је у питању вертикална стратиграфија, посматрана у целини или појединачно по блоковима, први закључак који се намеће је да се карактер, па и број издвојених слојева приказаних на цртежима профила не поклапа са слојевима описаним у дневнику. Детаљна анализа документације показује, међутим, да је, када су у питању стратиграфске целине, ситуација готово идентична на целој истраженој површини.

Површински слој хумуса је на свим профилима приказан као уједначен слој дебљине око 0,30 m. У дневнику се тај слој често поистовећује са нивелационим слојем, који је у већем делу свих блокова био много дебљи од стварне дебљине хумуса и због тога најчешће обухватао три, по структури и садржају различита слоја.

Жута глинаста земља, испод хумуса, приказана је на свим профилима као слој дебљине 0,30 – 0,60 m, без покретних налаза. С обзиром на то да се овај слој у теренском дневнику веома ретко помиње, он је очито био саставни део тзв. нивелационог слоја. Могао би се идентификовати са слојем тврде земље за коју се наводи да се у појединим блоковима јавља у оквиру првог, ређе другог откопног слоја.

Испод слоја жуте глинасте земље на свим профилима приказан је слој за који у легенди за профиле на постоји одговарајући симбол. Анализа документације показује да се у оквиру тог слоја налазе, у ствари, два – по структури, боји и садржају потпуно различита културна слоја. Слој непосредно испод глиновите земље се због његове основне карактеристике – неолитске керамике, може дефинисати као неолитски, а констатован је у југозападним деловима блокова већ у првом и другом откопном слоју. Различите дебљине на појединим деловима локалитета (0,30 – 0,80 m), неолитски слој је најизраженији у јамама, у којима је и највећа концентрација керамике. Тај слој се у дневнику описује као растресита земља тамномрке, црно-мрке, црне или пепељасто-црне боје, са обиљем керамичких налаза. Доња граница неолитског слоја на профилима није јасно уочљива, а у дневничким белешкама се може препознати у описима откопних слојева за које се наводи да земља губи пепељасти тон и меша се са мрким песком, односно са откопним слојевима чија структура није описана, а као њихова најуочљивија карактеристика истакнуто је да се налази керамике губе, или да њихов број нагло опада.

Слој испод неолитског у дневнику ископавања се описује као мрки песак, растресита мрка земља са песком, или као светлија земља са примесама песка, у коме осим животињских костију и ретких окресаних камених алатки готово да нема покретних налаза, због чега се често наглашава да су ти откопни слојеви археолошки скоро стерилни. За тај слој се, према постојећој документацији, не може везати ни једна врста непокретних објеката ни типолошки карактеристичних покретних налаза. Према ситуацијама приказаним на профилима, тај слој представља најмоћнију стратиграфску целину. На основу цртежа профила и описа у дневнику, јасно је да су све неолитске јаме укопане управо у тај слој земље помешане са мрким песком и да је на делу налазишта истраженом 1966. године неолитско насеље формирано на већ постојећем песковитом културном слоју.

Слој дефинисан као „песковити лепенски културни слој“ илустрован је на свим профилима као слој дебљине 0,30 – 0,50 m, који покрива подове објеката са трапезоидним основама. У теренском дневнику је тај слој тешко идентифи-

ковати, а могао би се довести у везу са откопним слојевима у неким блоковима који су описани као песковита жута или жућкаста земља, археолошки готово стерилна. На цртежима профила је граница између тзв. лепенског и мрког песковитог слоја изнад њега јасно уочљива, иако се у дневнику њихова структура и археолошки садржај описују на сличан начин.

Прахумус се у теренском дневнику не помиње, иако је приказан на свим цртежима профила, где је представљен као најдубљи слој, у који су били укопани објекти трапезоидних основа. На профиллима је приказан на начин како се обично приказује здравица. У дневнику се здравица, иначе, помиње само на једном месту, а описана је као жути песак.

Осим наведених слојева, у теренском дневнику и техничкој документацији документован је и слој наплавине, који показује да су сви објекти приобалног дела налазишта повремено били плављени, што је за последицу могло имати различите облике стратиграфских поремећаја.

Стратиграфска запажања Д. Срејовић о истраживањима 1966. године делимично се разликују од података које пружа теренска документација. У првом извештају о резултатима ископавања 1966. године издвојена су три културна слоја испод хумусног слоја дебљине 0,40 m. Слој са остацима неолитског насеља, са обиљем покретних налаза, спуштао се до дубине 1,20 m. Слој сивкастог песка, дебљине 0,40 m, готово без покретних налаза, раздвајао је неолитски слој од најстаријег слоја у коме су констатовани објекти трапезоидних основа, укопани око 0,30 m у здравицу. С обзиром на то да је максимална дебљина слоја била 2,10 m, дебљина најстаријег слоја износила је око 0,50 m. У односу на цртеже контролних профила, у том извештају недостају слој жуте глинасте земље испод хумуса, жути песковити слој – „стерил" и прахумус. Такође, у тако приказаном вертикалном пресеку остало је нејасно у који слој су биле укопане неолитске јаме. Ако је, како се наводи, неолитски слој од тзв. лепенског слоја био одвојен посебним слојем, следи да су се у оквиру 0,80 m дебелог неолитског слоја налазе и јаме, односно да су оне биле укопане у већ формирани неолитски слој, што се на овом делу налазишта никако не може доказати.

У другом извештају Д. Срејовића о истраживањима у периоду 1965–1967. године стратиграфска запажања су у извесној мери допуњена, а у културном слоју дебљине 2,15 – 3,50 m дефинисане су три културно-стратиграфске целине: Лепенски Вир Ia–e, II и IIIa–b. Констатовано је да је насеље Лепенски Вир I формирано на кречњачким стенама које покрива танак слој нестратификованог жутог песка. Тај слој песка, који у претходном извештају није поменут, у дневнику би одговарао слоју песковите жуте или жућкасте земље, у оквиру кога су се налазили објекти са трапезоидним основама, а на цртежима профила слоју прахумуса. С обзиром на то да се у извештају из 1967. године он описује као танак слој који је прекривао стеновиту подлогу, поставља се питање у који слој су били укопани објекти на вишим деловима падине, чије је зачеље било укопано и до 1 m. Очито је да то није могао бити танак слој жутог песка из наведеног извештаја, већ слој који је само у уском приобалном појасу био танак, док је у унутрашњости падине био знатно дебљи, а у доњем нивоу вероватно и различит по боји и структури.

Слој који покрива Лепенски Вир I дефинисан је као други културни стратум (Лепенски Вир II) и описан као лесолики смеђи песак неједнаке дебљине, са једним стамбеним хоризонтом. Он одговара слојевима који су у дневнику описани као мрки песак или као мрка земља са песком. Како приликом ископавања у основама откопних слојева нису издвајане целине различите по боји и садржају, а у дубљим откопним слојевима се појачавао интензитет присуства песка, прелаз из тамног слоја са керамиком у светлији, песковити слој без керамике, као ни прелаз из тог слоја у најдубљи слој жутог песка, који се никако нису могли дешавати у истој равни, нису ни могли бити детаљно и на ваљан начин описани у дневнику. Поготову што су у дубљим слојевима биле слабо изражене разлике у боји песка, који се при томе и брзо сушио, па су разлике у структури, садржају и боји слојева биле тешко уочљиве. Сасвим је извесно да ништа боља ситуација није била ни приликом издвајања и снимања тих слојева у профилима. С обзиром на то да тзв. лепенски слој у теренским описима фактички и не постоји у облику у коме је назначен на профилима, поставља се питање да ли се и у којој мери може, као на профилима, уопште повући јасна граница између тзв. лепенског и слоја изнад њега, односно да ли су испод неолитског слоја заиста постојала два јасно разграничена културна слоја, или се можда ради само о једном слоју, где тзв. лепенски слој представља само његов доњи ниво са незнатном разликом у боји и структури. Због тога, за разлику од става Д. Срејовића, сматрамо да песковити слој коме је приписана фаза Лепенски Вир II не представља посебну културну и стратиграфску целину, већ да он заједно са тзв. лепенским слојем испод њега документује целокупан период трајања објеката са трапезоидним основама и вероватно кратак период који је протекао од потпуног напуштања објеката Лепенског Вира I, односно гашења културе Лепенски Вир, до оснивања неолитског насеља.

У истом извештају је наведено да је најмлађем стратуму (Лепенски Вир IIIa–b) припадао слој испод хумуса дебљине 0,30 m и да се спуштао до дубина 1,11 – 1,45 m. Наглашено је да је стратиграфско преклапање неких објеката Лепенског Вира I и III резултат укопавања млађих, неолитских објеката, и да пећи на неким трапезоидним подовима припадају знатно млађим објектима који су укопани до подова кућа Лепенског Вира I. Ни у овом извештају, међутим, није разјашњено у који слој су биле укопане неолитске јаме. Осим тога, ни на једном цртежу профила из 1966. године, изузев у јамама, не може се доказати да је неолитски слој био дебљи од 0,30 – 0,40 m.

Да би се дошло до уверљиве слике вертикалне стратиграфије простора истраженог 1966. године неопходно је осврнути се и на извештаје о геолошко-стратиграфским запажањима Ј. Марковић-Марјановић. У монографији о Лепенском Виру геолошки профил (13,85 m) земљишта најниже речне терасе Лепенског Вира приказан је у виду табеларног приказа редоследа и дебљине слојева са пратећим подацима. У том профилу издвојено је 12 слојева, а редослед њиховог приказа је од најмлађег ка најстаријем.

Као резултат анализе приказаних слојева Ј. Марковић-Марјановић издвојила је четири фазе у стварању тог профила, истичући да је прва фаза ерозиона и да њој одговара чврста подлога терасе (слој 12 – надморска висина 59,40 m) од црвеног порфирита пермског порекла. Другој фази одговара флувијална акумулација Дунава са слојевима (11 –

груби шљунак и песак; 10 – фини муљевити песак) који су настали у позном глацијалу, када је Дунав текао преко стеновите терасе. Трећа фаза представља период настанка континенталних седимената, претежно еолских. Тој фази одговарају слојеви 9–5, уз наглашавање да су слојеви 8 и 7 (наслаге живог песка и леса) чисто еолски седименти, укупне дебљине 3 m. При томе је напоменуто да се за песковити слој 8 везују станишта насеља Прото-Лепенски Вир. Четврта фаза је време формирања културних слојева Лепенски Вир I, II и III (слојеви 4–2, укупне дебљине 3,0 m) и површинског земљишта (слој 1 дебљине 1,10 m).

У приказима стратиграфије геолошких и културних слојева Лепенског Вира такође се уочавају одређене нелогичности, као и неслагања са теренском документацијом и неким констатацијама у извештајима Д. Срејовића. Пре свега, изненађује чињеница да су по опису састава, боје, па и дебљини, слојевима испод неолитског насеља, описаним у дневнику и приказаним на профилима, најближа два геолошка слоја (7 и 8), чија укупна дебљина износи 3 m, што донекле одступа од укупне дебљине наведене у извештају из 1966. године, али је то одступање разумљиво јер је геолошки профил сниман у унутрашњости налазишта. Због тога је потребно разјаснити међусобни однос две групе слојева: 3 и 7, односно 4 и 8. Ово утолико пре, јер су на геолошком профилу објекти фазе Прото-Лепенски Вир повезани управо са слојем који је описан као песковити – у горњем нивоу као жути лесолики, а у доњем као чист жути еолски песак. Тај опис незнатно различитих нивоа једног истог слоја у потпуности одговара описима здравице (жути песак) и тзв. лепенског слоја у теренском дневнику, који су на цртежима профила приказани као прахумус и тзв. лепенски слој. При томе је важно нагласити да су у приказу геолошког профила објекти Прото-Лепенског Вира око 1,30 m испод слоја 4 коме је приписано насеље Лепенски Вир I, што је апсолутно немогуће доказати. Наиме, према наводима Д. Срејовића, објекти фазе Прото-Лепенски Вири били су концентрисани управо на најнижој приобалној тераси, у слоју леса дебљине 0,50 m. При томе не треба заборавити да су у извештају из 1967. године и објекти фазе Лепенски Вир I повезују са танким слојем нестратификованог жутог песка. Сасвим је јасно да су објекти који се приписују фази Прото-Лепенски Вир били у истој равни, односно на приближно истим котама, укопани у исти слој као и објекти фазе Лепенски Вир I, истражени 1965. и 1966. године. Тиме се у великој мери доводи у питање стратиграфски положај културних слојева приказаних на геолошким профилима Ј. Марковић-Марјановић.

Због тога је потребно тазмотрити да ли између чврсте основе од црвеног порфирита и површинског слоја има места за десет слојева приказаних на геолошком профилу, односно да ли су слојеви 7 и 8 управо они слојеви у које су укопани објекти културе Лепенски Вир и у којима су сачувани трагови живота на простору испод, изнад и око тих објеката. С обзиром на то да се чврста подлога дунавске терасе налази на коти 59,40 m, а да укупна дебљина геолошких слојева испод слоја фазе Лепенски Вир I износи 5,75 m, следи да је у залеђу насеља културни слој те фазе формиран на коти 65,15 m. Имајући у виду пад терена и чињеницу да висинска разлика између кућа у прибалном појасу и оних на југозападној периферији насеља износи око 4 m, слој фазе Лепенски Вир I би у приобалном делу требало да се налази на коти 61,50 m. Најнижи објекти истражени 1966. године подигнути су, међутим, на котама око 60 m или неких десетак центиметара испод 60 m, што значи да се између чврсте подлоге од црвеног порфирита и најнижих чврстих подова у приобалном појасу могао налазити слој дебљине једва 0,60 m, а никако неколико слојева чија је максимална дебљина износила 5,75 m, а минимална 1,50 m. Када се на све ово дода и 3 m културног слоја и 1,10 m површинског слоја, како је приказано на геолошким профилима, долази се до броја који надмашује све површинске коте укупно истраженог простора, тако да су, на изглед, културни слојеви вишак у тој стратиграфској слици. Због свега тога се стиче утисак да су на геолошким профилима, уз реалну слику геолошких слојева, подаци о културним слојевима, без критичког осврта, једноставно преузети од Д. Срејовића.

Цртеж попречног геолошког профила показује да су на површини терена пре формирања најстаријег насеља у мањој или већој мери била видљива три песковита слоја, као и масивни камени блокови, за које Ј. Марковић-Марјановић наводи да су их оснивачи насеља затекли *in situ*, а видљиви су и на фотографијама уз трапезоидне основе истражене 1966. године. На таквом терену, релативно равног приобалног појаса, подигнути су први објекти. На том делу терасе слој жутог песка (слој 8 на геолошком профилу), с обзиром на апсолутне коте објеката и чврсте стеновите подлоге није могао бити дебљи од 0,60 m. Објекти удаљени од обале Дунава, на вишим деловима падине, грађени су, односно усецани зачељем у тај исти слој, који је на тим деловима падине вероватно достизао максималну дебљину од 2 m, али и у слој изнад њега, такође жуте боје и песковит (слој 7 на профилу), чија ме максимална дебљина износила 1 m.

Анализа различитих интерпретација резултата истраживања Лепенског Вира 1966. године показује да постоје две групе докумената на основу којих се могу извести закључци о вертикалној и културној стратиграфији на приобалном делу налазишта. С једне стране је теренски дневник, који се чини најверодостојнијим документом, јер су у њему описивани културни слојеви онако како су виђени очима истраживача, односно директних сведока онога што се дешавало на терену. С друге стране су техничка документација, у првом реду цртежи профила, затим извештаји Д. Срејовића из 1966. и 1967. године, као и његова публикација из 1969. године, и на крају геолошки профили Ј. Марковић-Марјановић. У другој групи докумената, осим одређених неслагања са оним што је описано у теренском дневнику, уочавају се и нека међусобна неслагања о појединим стратиграфским целинама и њиховом културном опредељењу, па чак и одређене контрадикторности.

У свим наведеним документима, међутим, у сличној или истој форми констатовано је пет основних стратиграфских целина. Испод површинског слоја (хумус и жута глинаста земља) налази се неолитски слој који је као засебна целина издвојен у свим документима, осим на цртежима профила. Тај слој је најреалније представљен у теренском дневнику јер се, без обзира на неадекватан метод ископавања, на основу дневничких белешки сасвим поуздано може реконструисати дебљина неолитског слоја на појединим деловима површине истражене 1966. године, а постојање јама, и пре него што се то у дневнику јасно нагласи, може се претпоставити на основу запажања о концентрацији керамике.

Аналазама појединих докумената недвосмислено је утврђено да је овај слој у мањој или већој мери био заступљен на целој истраженој површини, као и да је неолитско насеље формирано на песковитом слоју који је, осим на цртежима профила, приказан као засебна стратиграфска целина. Стамбени објекти и јаме неолитских становника Лепенског Вира укопавани су управо у тај слој који је прекривао објекте трапезоидних основа, а зависно од нагиба терена и дебљине слоја испод неолитског, понекад је долазило и до директног контакта културно-хронолошки сасвим различитих објеката – неолитских укопа и чврстих подова објеката трапезоидних основа.

И на крају, регистровани су слојеви који се односе на културу Лепенски Вир. У ту групу спадају слој мрког песка (дефинисан као Лепенски Вир II, у коме нису констатовани непокретни објекти нити карактеристични покретни налази), затим тзв. песковити лепенски културни слој (чији су састав, боја и дебљина представљени на различите начине у анализираним документима) и слој који се дефинише као здравица, прахумус или као жути песак на коме је формирано насеље Прото-Лепенски Вир, односно Лепенски Вир I. Заједничка одлика та три слоја је њихов песковити или лесолики карактер, сасвим различит од неолитског, знатно касније формираног слоја. Недоумице о дефинисању, разграничењу и културно-хронолошком опредељењу тих слојева условљене у управо њиховим слабо израженим међусобним разликама.

Анализом свих докуметана, посебно геолошких профила, долази се до закључка да су носиоци културе Лепенски Вир, дошавши на ту локацију, затекли терен у виду не тако стрме падине, чије је подножје чинила уска и релативно равна тераса. Природну подлогу коју су затекли градитељи првих објеката чинила су два, односно три песковита еолска седимента: најнижи слој тзв. живог песка, који је прекривао целу површину терасе. Његова максимална дебљина, на вишим деловима падине, износила је 2 m, а минимална, у приобалном појасу, око 0,50 m. Изнад њега су били слој жутог копненог песковитог леса и кестењастог песковитог степског земљишта, који нису допирали до подножја падине, односно уског приобалног појаса. Формирањем тих слојева током позног глацијала, најнижа тераса Лепенског Вира је трансформисана, стекла изглед псеудо-плавине и потпуно изгубила терасни облик. Своје прве објекте носиоци културе Лепенски Вир подизали су управо у приобалном појасу, а касније и на падини. Због конфигурације терена објекти су ужом страном, односно зачељем усецани у падину. На тај начин, у приобалном појасу, где је терен био равнији и на површини само један геолошки слој, објекти су били плитко укопани у тај најстарији еолски седимент. У теренској документацији и извештајима Д. Срејовића он се помиње као здравица, прахумус или као слој жутог песка који је послужио као подлога за подизање најстаријег насеља. На вишим котама, због израженијег пада терена, зачеље објеката је било понекада и више од једног метра испод површине терена, тако да су приликом градње објеката пресецана два или сва три геолошка седимента која су прекривала најнижу терасу. На тај начин и ти објекти су били укопани у најстарији еолски седимент, али у његов горњи ниво – жути лесолики песак, док су млађи еолски слој (копнени песковити лес) и слој песковитог степског земљишта иза зачеља објеката остајали „изнад“ укопаних подних основа и на тај начин стварали утисак развијене вертикалне стратиграфије. Наиме, живећи у тим објектима, као и на простору око њих, носиоци културе Лепенски Вир су, у ствари, истовремено боравили на сва три наведена седимента, а својим објектима, сахрањивањем покојника и свим другим артефактима који су били саставни део њихових активности оплеменили су и „обојили“ те слојеве и временом их претворили у антропогене, односно културне слојеве, који у културно-хронолошком смислу представљају једну целину. Њихове природне особине, структура, састав и боја, уз покретне налазе и ограниченост непокретних објеката само на најстарији седимент, допринели су да се у вертикалном пресеку створи привидна слика развијене вертикалне стратиграфије. Међутим, управо елементи материјалне, али и духовне културе садржани у тим слојевима показују да се не може доказати њихова културна раслојеност, већ насупрот томе њихово културно јединство.

На крају, може се закључити да у вертикалној стратиграфији Лепенског Вира, на делу налазишта истраженом 1966. године, између слоја са остацима неолитског насеља и еолских седимената насталих у време позног глацијала није било посебно наталожених културних слојева формираних за време егзистирања културе Лепенски Вир, већ су за време њеног трајања еолски седименти постепено претворени у културне слојеве. Њихова укупна маса временом је повећана захваљујући непокретним и покретним археолошким налазима, али и деловању различитих облика ерозије.