

The archaeological excavations at Grumzeți – Neamț County. Part 1 – refitting the puzzle

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Abstract: The paper presents for the first time after 35 years, detailed information regarding the excavations of Grumzeți, an important Early Neolithic site in central Moldova. Seen as a first paper on a future series, it presents the methodology of excavation, careful rebuilding and interpretation of plans and fieldnotes in an aim to reconstruct the settlement architecture (dwellings, pit-features, burials) for the Early Neolithic-Star evo-Criș site, the Bronze Age (Noua culture) and the III-IV centuries AD, vital for the study and the understanding of the collections of finds resulted from the excavation of the site.

Rezumat: Articolul de față aduce la lumină, după 35 de ani de la încetarea săpăturilor, informații detaliate privind rezultatele cercetărilor din situl arheologic de la Grumzeți, o importantă așezare neolitică timpurie din centrul Moldovei. Constituindu-se doar ca un început al unei viitoare serii de articole, lucrarea încearcă o reconstituire și interpretare a documentației de săpătură referitoare atât la locuirea neolitică timpurie Star evo-Criș cât și la cea a culturii Noua și a celei datate în secolele III-IV AD. Un astfel de demers este esențial pentru studiul și interpretarea în viitor a materialului arheologic rezultat din săpături.

Keywords: Early Neolithic, Bronze Age, III-IV centuries AD, settlement architecture.

Cuvinte cheie: neolitic timpuriu, epoca bronzului, secolele III-IV AD, structura așezărilor.

◆ The present paper proposes to be only the first in a series of articles, aiming towards a complete study of the Grumzeți excavations and collections of finds. It will thus now focus mainly on the methodology of the excavation, the stratigraphy of the site, the identification of various archaeological features, as well as on the location and borders of the three different settlements existing on the site (Early Neolithic, Bronze Age, III-IV AD), based on the interpretation of the field notes and the existing plans. A general review of the major category of finds will be briefly presented. Future articles will focus on the results of the study on specific collections (lithics, pottery, faunal remains) from the three main ages present on site, together with perhaps ¹⁴C dates, studies for the provenance of the raw materials, use-wear analysis, etc.

My deepest gratitude and thanks go to dr. Silvia Marinescu-Bîlcu who allowed me to study the materials resulted from her excavations at Grumzeți and gave me full access to the original field documentation (plans and photographs). This first paper, focusing on the excavations proper, would have never been possible without her constant support and help.

The field documentation (nowadays part of the archive of the Institute of Archaeology "Vasile Pârvan") comprises:

- a notebook of fieldnotes for the five years of excavation;
- a series of plans:
 - general plan of SI-SVI;
 - general plan of SI and Caseta 1, squares 1-10 (dwelling L1);
 - plan of dwelling L2 in SII, squares 16-18;
 - southern section of SII;
 - general plan of SII and SIII (dwelling L2), squares 1-11;
 - general plan of SIV, squares 1-18;
 - plan of burial M1 in SIV and Caseta 5;
 - general plan of SVI, squares 12-15;
 - general plan of SVI, squares 6-9;
 - general plan of SVIII, squares 1-10;
 - general plan of SIX, squares 1-7;
- a black/white film from the excavations of 1971;
- a black and white film of some of the refitted Early Neolithic vessels;
- drawings of 5 stone axes and 16 Early Neolithic refitted pots.

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◆ Grum ze ti - the excavation: methodology and field documentation

The archaeological site of Grum zești (Neamț County) was identified by S. Marinescu-Bilcu in 1966, while excavating the nearby site of Târpe ti. Field surveys along the left bank of the Netedu creek, a tributary of the Topolița River (an area known to the locals as Deleni-Joseni) yielded pottery fragments identified then as Cri .

The excavations started two years later, in 1968 and continued, with time gaps, until 1978 (1968: 10-19 September, 1971: 20 September- 2 October, 1972: 21-30 August, 1977: 28 July-12 August, 1978: 21-30 August). They were directed by S. Marinescu-Bilcu (Institute of Archaeology "Vasile Pârvan") with the help of Al. Bolomey (Institute of Archaeology "Vasile Pârvan", Institute of Anthropology "Francisc Rainer").

During the 5 years of excavations nine trenches were investigated (SI - 20 x 2 m, SII, SIII - 45 x 1 m, SIV - 50 x 1 m, SV - 50 x 1 m, SVI - 42 x 1 m, SVII - 20 x 1 m, SVIII - 38 x 1 m, SIX - 38 x 1 m). They were all running from east to west, and were parallel to the slight natural sloping of the land. They were divided in squares of 2 x 2 m (SI) or 1 x 2 m (SII-SIX), their numbering advancing from east to west. Baulks of 2-3 m were left between the adjacent trenches (fig. 2).

Apart from these trenches, a number of extensions (named "caseta") were practiced, in order to better expose certain features when these were identified.

The trenches were so located as to determine the limits of the Early Neolithic settlement but this was possible within the tight bonds imposed by the existence annual agricultural crops and the availability of already harvested areas.

Excavating long narrow trenches was in accordance to the methodology of the time, but was also dictated by the limited funds allocated to the excavations each year. During the last two years of excavation, in order to recover information on the micro-stratigraphy and given the impossibility of opening new areas, transversal sectioning of certain Early Neolithic features was employed.

Digging was done in 15-20 cm spade spits, with trowelling employed when a feature was encountered (5-10 cm spits). Because of the lack of funds and the limited time allocated to the dig (an average of 10 days/year), dry sieving was not possible. Depths were measured both from the ground level and from a "0" point of origin, but in the fieldnotes is frequently quoted only the former.

Other than the remains of the Early Neolithic settlement, the excavations also exposed traces of habitation belonging to the Noua culture and to the III-IV centuries AD. Until now, little information regarding these excavations was ever published, and it only refers to the bone industry (S. Marinescu Bilcu, C. Beldiman 1997), pottery (shapes and decoration), general chronology and links with other Neolithic cultural areas (S. Marinescu-Bilcu 1975, 1993; VI. Dumitrescu et alii 1983). This observation actually goes for the entire Early Neolithic of Moldova, where, with the exception of one site, there are no site monographs available (E. Popu oi 1995). Most of the papers dealing with Early Neolithic focus on the "major issues" of the period (relative chronology, links with other cultural groups, origins and influences, etc.) but without having a very solid material base, as most of the results of the excavations or field surveys had only been briefly published, if at all.

The Grum ze ti archaeological material is nowadays located in the storing facilities of the Institute of Archaeology "Vasile Pârvan" in Bucharest, with a few of the most important artefacts (mainly Early Neolithic refitted pottery vessels) exhibited in the Piatra Neam County Museum (S. Marinescu-Bilcu, pers. comm.).

The present day collection of archaeological finds comprises pottery (from all the above mentioned ages), polished stone tools, a few ground stone tools, selected chipped lithic industry (worked implements and flint cores mainly), a few bone tools (belonging to the Noua culture), two small bronze fragments, charcoal (collected for ¹⁴C dating), Early Neolithic human remains. Until now it was not possible to locate the animal bone assemblage, the collection of obsidian implements and the Early Neolithic bone tools previously published (S. Marinescu-Bilcu, C. Beldiman 1997).

◆ The general stratigraphy of the site

The excavated area comprised two zones: a flat one, towards the west (where absolute and relative depths were comparable) and a second one, towards east, sloping downwards towards the valley of the Netedu creek. Sediments were thicker in the flat area (the Early Neolithic layer had an average of 50-60 cm and a maximum thickness of 80 cm). On the slope, the upper sediments had

been washed off by erosion, and thus the archaeological remains had been affected not only by natural processes but by agricultural works as well.

This situation is well illustrated in figure 4, showing the southern section of trench SII. Based on this plan, the stratigraphy of the site was as follows:

1. Top vegetal soil with a thickness of maximum 30 cm, heavily affected by agricultural works, containing (mainly towards the eastern end of the trench) mixed archaeological artifacts;
2. Dark brown soil with very few finds, mostly dating to the III-IV centuries AD;
3. Light brown soil containing mostly Early Neolithic and some Noua culture finds;
4. Yellow clayish soil, archaeologically sterile.

◆ The archaeological features

For a better understanding of the existing information on the Grum ze ti dig, a few things need to be made clear:

- Identification of features and feature numbers: generally the original feature names/numbers were preserved (L1, L2, L3 for the Early Neolithic dwellings, and G1-G6 for pit features excavated during the first two years of excavations). They also appeared on the markings of the finds. Additional F (feature) – numbers were given by the present author – based on the descriptions on the fieldnotes – to the features that were not assigned any names in the field documentation or that might have not been acknowledged as features. Where it was possible, this information was checked with the field plans. The description of each feature includes location (trench number, square, the depth where it was noticed). Base of features is stated separately – where known.
- Cultural assignation of features: the present paper focuses mainly on the field documentation issues and thus, until the collections of finds are carefully studied, the cultural attribution quoted here for the various archaeological features is the one resulting from the study of the fieldnotes.

As shown above, archaeological features were assigned to three periods: I: Early Neolithic (Star evo-Cri culture), II: Bronze Age (the Noua culture), III: III-IV centuries AD and for the sake of chronology they will be presented as such:

I. The Early Neolithic features

While just a few comments are generally made on the Bronze Age and III-IV AD habitations, it is clearly stated in the fieldnotes (and in the published information, S. Marinescu-Bilcu 1975, 1993) that, based mainly on the existence of only one dwelling type – the surface dwelling – Early Neolithic Grum ze ti only developed during one habitation phase, like most Early Neolithic sites in Moldova (N. Ursulescu 1983, p. 261).

Twelve features were identified in all, out of which three (L1, L2, L3) were considered surface dwellings:

L1 (SI, sq. 3-6, fig. 3/1)

In order to expose a larger area of L1, an extension was practiced on the southern side of SI¹.

Located in the sloping (eastern) area of the site, the feature appeared as a concentrated agglomeration of pottery fragments, daub, stone (some burnt) and bone, noticed quite close to the surface, at a depth 0.40-0.50 m from the walking level (0.55-0.65 m from the "0" point of reference). Although affected by agricultural and animal disturbances, L1 showed a thickness of 20-30 cm of archaeological deposits.

On the plan, L1 seems to be rectangular, oriented NW-SE. The hearth of the dwelling was located towards the south, in Caseta 1. The daub of the hearth contained chaff and fine sand.

The daub fragments found were numerous, small in size, chaff tempered and relatively well burnt. Many fragments retained the imprints of the sticks and poles the daub had been plastered on,

¹ In order to completely expose dwelling L1, another extension was planned on the northern side of SI, but lacking funds this was not possible.

pointing towards a light wattle-and-daub structure. S. Marinescu-Bilcu (in the fieldnotes) expressed the opinion that the dwelling had been destroyed by fire. Among the finds in L1 were mentioned polished stone tools (axes, chisels, and an adze), flint and obsidian implements, a weight made of fired clay and a large quantity of pottery.

Five broken ceramic vessels (refitted) were noticed inside and around the dwelling (fig. 3/1, fig. 11/1, 2, 4, 5).

After lifting the concentration of finds constituting L1, underneath it, in sq. 5, in the near proximity of the hearth, a pit (G5) was noted, with a base at 1.45 m. It contained a large number of pottery fragments (some refitting – fig. 11/3), stones and ashes. It was unclear whether the pit G5 and dwelling L1 were contemporaneous (thus making the pit a storage annex of the house) or whether the pit was anterior to L1.

L2 (SIII, sq. 3-7, 0.52-0.55 m, fig. 1/2, fig. 3/2, fig. 3/3, fig. 6/1)

In order to fully expose L2, two extensions were cut to the north (Caseta 4) and south (Caseta 2) of trench SIII.

L2 is described as an agglomeration of daub fragments, among which were scattered many pottery fragments and river pebbles of various sizes. It had been heavily disturbed by agricultural works and perhaps soil erosion, being also located in an area descending towards the Netedu creek. It also had a hearth and in figure 6/1 can be identified as the feature marked F23 – a concentration of daub in the south-east corner of the dwelling.

The daub fragments (part of the collapsed walls) were not very well fired but many of the stones found inside the feature were reddened by fire. Quite frequently the daub pieces preserved imprints of thin sticks, rarely of larger poles, suggesting that the wattle-and-daub walls were rather light and thin. Some of the daub fragments were also slightly “polished” on one side. The temper employed for the daub was chaff and sand in equal quantities.

From inside the dwelling came a few grinding stone fragments, clay-made spindles, clay-weights (fig. 12/a-c), obsidian and flint implements, polished axes (both complete and/or fragments, figure 13/1-4). S. Marinescu-Bilcu noted the extremely interesting ornamentation of the pottery, organized in several registers, differently decorated. The predominant shapes appeared to be bowls, vessels with short necks and bulging bodies. The reddish-orange pottery predominated, but several fragments were of the black or gray variety.

L3 (SVIII, sq. 1-5, 0.60-0.70 m)²

The remains of L3 appeared as a scatter of stones, a few daub fragments, pottery, some bones and charcoal. It was exposed over a length of cca. 8-10 m but a width of only 1 m. It was extending further to the east, north and south, but lacking funds, extensions to completely uncover it were impossible. Instead, it was sectioned N-S and excavated in two halves.

The same as in the case of L2, the daub was tempered with chaff and sand, but this time the fragments appeared to be heavily fired. Most of the daub fragments preserved the imprints of the sticks they were plastered on, indicating an average diameter (for the sticks) of 2-3 cm. The thickness of the daub was cca. 6-7 cm. Differently from L1 and L2, the remains of the dwelling contained a surprisingly large quantity of stones.

From the area of L3 came large range of well fired pottery vessels (a fragment decorated with incised meanders, several sherds coming from large carinated vessels with long straight necks, smaller globular vessels with short necks, and Vin a-type bowls, vessels with ringed bases), a several axes made of siltstone, a loom/fishing weight (with many intrusions in the paste, poorly fired, brown on one side, black on the other), flint (blackish-gray) trapezes, Balkan-type flint flakes and a microlithic blade, obsidian bladelets and blade-like flakes and a very little quantity of animal bones.

In the close proximity of the dwelling an interesting and uniquely decorated loomweight was found (fig. 12/e): rectangular in shape and with a decoration made of oblique deep incisions, suggesting two “fir-trees”. The clay was tempered with sand and the firing was rather poor (grayish on the inside).

² S. Marinescu-Bilcu noted that possibly L3 was in fact the northern part of L1 (SI, 1968) but as seen in the general plan in figure 8, L1 and L3 is likely to have been two different structures, since the NE limit of L1 is quite well defined.

After the analysis of the fieldnotes and the plans, a few other features might suggest themselves as 'candidates' for dwellings:

G6 (SI, sq. 9-10, 0.75-0.90 m) was an unclear feature, possibly disturbed, appearing as a scatter of finds, both horizontally and vertically. It was impossible to determine at the time of the excavation whether it was a pit or perhaps a sunken dwelling, continuing in the unexcavated areas. The quantity of pottery coming from it was impressive.

F1 (SII, sq. 9-10, 0.90-0.95 m and SIII, sq. 9-10, 0.90-0.95 m, fig. 4, fig. 6/1, fig. 6/2) is made of two concentrations of daub fragments (black core, badly fired, with a temper consisting of some chaff and a lot of sand), pottery fragments and stones, within what was seen as the "Cri layer" (the light brown soil) in the two trenches. Given the short distance between the two, the depth they both occurred and their rather 'linear' arrangement, the two were considered part of the same feature – a possible surface dwelling. Lacking funds, the area in between the two was never excavated to clarify the matter.

Still, when looking at the profile in figure 4, F1 appears in SII as a pit-feature, dug approximately 50 cm (maximum) into the light brown soil. Its base was rounded and the archaeological material from the infill (mainly daub and pottery) was evenly distributed from the upper part to the lower one, starting from the bordering level between the dark brown and the light brown sediments. Thus, if the two agglomerations from SII and SIII were in fact one, it is in fact a pit feature, with a length of over 4 m (the width of the two trenches plus the distance between them) and a width of another 4 m, so, either a sunken-hut dwelling or a very large (and shallow!) storage/garbage pit.

F2 (SII, sq. 17-18, 1.20-1.40 m, fig. 3/3, fig. 4)

When cleaned, the feature appeared as a concentration of extremely many animal bones (as opposed to the cases of L1-L3), many pottery sherds, daub fragments, stones and fragments of human bones (among which was immediately remarked a fragmented human skull). No hearth or hearth fragments were noticed. The base of the feature was at 1.60-1.65 m. Unfortunately, opening new areas to the north and south was not possible. When excavating SIII, nothing was noted in the corresponding squares (fig. 8), indicating thus that this feature was not extending that much further north. Also, F2 – as concentration of finds shown in figure 3/3, seems to stop some 20 cm north from the southern profile of SII.

On the other hand, on the southern profile of SII, the feature observed seems to have been much larger (wider) than the one noticed while excavating (fig. 3/3), as it seems to stretch in both squares 16 and 19. Also a slight sloping down of layer III can be observed on the profile, suggesting the existence of a pit feature, with a western limit located perhaps in the area left unexcavated. Additionally, a large pot was found in sq. 19, half embedded in the northern section and fixed at the base in a shallow pit dug into the yellow clayish layer (1.70 m)³. Its context and the depth it was found strongly suggest a link with the feature identified in the southern profile of SII.

The question that poses itself at this point is whether the feature observed in the southern section of SII and F2 (as it appears in fig. 3/3) are one and the same. It is possible that there had been two different features (F2 and a second one with less finds in the infill), difficult to distinguish, with F2 – a garbage pit (which would account for the mixture and abundance of finds in the infill) and the second, a shallow pit – as seen in figure 4 – perhaps a disturbed sunken dwelling.

The opinion expressed in the fieldnotes by S. Marinescu-Bilcu was that F2 (as in fig. 3/3) represented a surface dwelling containing the remains of a feast – given the large number of existing animal bones and pottery fragments, while the human remains were interpreted as a disturbed burial, located nearby the dwelling. But no disturbances were noticed in the upper geological layers (the fieldnotes clearly state the fact that the feature was covered by 1.20 m of archaeologically sterile soil) thus suggesting that the disturbance of the burial must have occurred during the Neolithic period. It follows that the burial was disturbed when the dwelling was built and human bones had been present in the house throughout its time of functioning...

When considering the second hypothesis – F2 as a garbage pit – analogies are many, as Early Neolithic human remains in non-funerary contexts are occur more frequent than the burials...

³ In order to completely expose and lift it, a small extension (Caseta 3) was practiced into the northern section of SII. The pot was made of a poorly fired paste, orange-red in colour that was exfoliating when lifted.

Pit features

F21 (SVIII, sq. 9-10, 0.90 m)

Feature of unknown shape, with the infill containing a substantial number of pottery fragments, bones, daub fragments, ashes, charcoal and stone – suggesting its use – at least in the final phase, as a garbage pit. The pit was circular (diameter cca. 3 m) and rather deep, having the base at 1.75 m. The yellow clayish soil was reached at 1.40 m – also suggesting that perhaps the initial purpose of the pit was the exploitation of clay for pottery and daub.

For a better understanding of the filling process, the feature was sectioned on the N-S direction.

Among the artefacts in the infill were: a bone spatula (S. Marinescu-Bîlcu, C. Beldiman 1997), flint and (quite a few) obsidian tools, large daub fragments with the imprints of relatively thick poles (5-7 cm diameter). The pottery displayed Vin a-like shapes – carinated bowls with prominences on the maximum diameter line - but also classical Star evo-Cris decoration patterns. No painted pottery was found.

F25 (SIX, sq. 4-5, 0.55-0.60 m, fig. 7/3) was a concentration of daub fragments, pottery sherds and stones. It had unfortunately been exposed over a very small area (cca. 1m²). It seemed to have reached down to 0.80 m. Although some distance away, refitting fragments of a pot were found at the border of sq. 3 and 4, at 0.7 m.

The plan in figure 7/3 shows a rather compact structure of daub towards its eastern half, but with a functionality difficult to infer. The daub fragments of F25 showed the imprints of thick sticks (1.5-3 cm), while the thickness of the daub was of 5-10 cm. The temper contained more sand than chaff.

S. Marinescu-Bîlcu suggested in the fieldnotes that F25 could have represented the northern part of L3. But when looking at the general plan of the features (fig. 8), it seems that L3 developed towards the east, while F25 was rather too small and far north. A storage pit, later used for garbage is the present author's suggestion, until the finds in the infill of the features are studied.

F26 (SIX, sq. 6-7, 0.70-0.75 m) was a small E-N agglomeration of stone and pottery, but no other details are known.

Other types of features

F24 (SIX, sq. 11-13, 0.95-1 m)

The fieldnotes do not explicitly mention a feature in this area. But they note a large number of fragmented and complete axes, adzes and chisels discovered there. Their exact location and depth is given, in some cases, with a sketch of the implement. Comparing the notes and sketches with the collection of polished tools it is very likely that a workshop for manufacturing such tools existed in the area. Together with the axes there was also a lot of debitage debris. The axes found in the area were in various stages of manufacturing (some only shaped, some partially polished, completely polished, in the process of resharpening the active edge, etc., fig. 13/4-8).

In the same area, a special find is the one illustrated in figure 12 (i). It is hook-shaped, displaying a small shallow indentation where the upper inner part of the hook would have been. It is well polished and carefully worked. The main raw material, both for the polished tools and the hook-like object is a white-grayish siltstone⁴.

Burials

F6 (SIV, sq. 7-8, 0.60 m) was a strangely shaped agglomeration of stones (mainly), pottery and a few daub fragments (fig. 5/1). The western part of F6 appears as almost a pavement of stones, having a rather straight western edge.

After the removal of the stones a skeleton (M1) was found (0.85-0.88 m, fig. 5/2). In order to fully expose the burial, an extension was made towards the south (Caseta 5).

The skeleton was crouched on the left side, arms bended and raised towards the head, hands under the head. The legs were tightly flexed. No grave goods were found. The skeleton itself was rather poorly preserved, with bones breaking when lifted.

In the fieldnotes S. Marinescu-Bîlcu expressed the opinion that F6 was actually a dwelling (hut) and the stones had been used for fixing and stabilizing either the rods/poles supporting the reed

⁴ Diatomite, according to the fieldnotes.

roof or the walls (made of soil mixed with chaff, turning into daub when the dwelling caught fire). No connection was made between the stone structure and the skeleton.

But the overlapping of the two separate ground plans (that of F6 and that of M1) indicated that F6 was actually right over the skeleton (fig. 5/3). Thus, the present author would rather suggest that the stone feature was actually covering the burial. Early Neolithic skeletons covered by/associated with pottery sherds are known in Moldova at Trestiana (E. Popu oi 2003) and Suceava (N. Ursulescu 2000a) while burials covered with stones exist in the Early Neolithic of the Iron Gates area, on the Serbian bank (A. Boroneanț 2012).

Summerizing the data on the Early Neolithic settlement

As shown in figure 9, the Early Neolithic settlement is confined to the eastern half of the excavated area. Although it was probably extending further north and east, towards the south the limit is clearly defined by SV and SVI.

Also, dwellings only seem to appear towards the eastern end of the trenches, suggesting that the more agglomerated area of the settlement was the one closer to the river. Three (perhaps five dwellings) were excavated, with the first three of the surface type and the last two possible semi-sunken huts. Based on the plans of L1 and L2, the surface dwellings appear to be rectangular, of medium size (cca. 4 x 4 m), with circular, simple hearths located in one of the corners. The structures were rather light – since the imprints in the daub suggest the use of sticks rather than poles.

All living structures appeared as concentrated agglomerations of pottery sherds (comprising at times vessels - refitted), daub fragments with the imprints of sticks – part of wattle and daub walls – fired stones, an important number of polished tools (axes, adzes, chisels), weights (fishing or loom), chipped lithic implements (made of flint, chert, obsidian, even quartzite), ground stone tools (grinders, punchers, handaxes).

The excavated pits were circular and some penetrated into the yellow clay layer, suggesting they were first dug for obtaining clay – necessary to build the huts or perhaps for pottery as well. Later they could have been used for storing food, or for throwing the garbage (including disarticulated human bones).

The burial uncovered is typical for the Early Neolithic: skeleton crouched on the right, limbs tightly flexed, no grave goods, apparently buried in a rather shallow grave. The novelty resides in the fact the grave appears to have been covered with stones.

Even before a detailed study, it is possible to claim that the Early Neolithic pottery from Grum ze ti, when compared with other Moldavian sites, has certain distinct characteristics. It exhibits a large variety of shapes, from globular pots to carinated bowls, from large, almost flat plates to necked carinated vessels with buttons/handles on the carination line.

Despite the fact no painted pottery was found (but one must bear in mind the real excavated surface of the settlement was not very large), red slipped pots (on the interior and/or exterior) were not uncommon.

Decoration occurs quite frequently – and what is most striking is the association of different patterns/types of decoration on various parts or registers on the same pot: while the upper part displays wide deep incisions on a barbotine, the lower part of the pot is smoothed and red slipped. No burnished pottery has been detected so far.

Most of the pottery has good parallels in other Moldavian sites (geometric incised patterns, the linear incisions, nail impressions, wavy deep incised lines, barbotine – at Trestiana and Suceava), while others suggest imports from the Dude ti cultural area (S. Marinescu-Bilcu, C.E. tefan, pers. comm.). A future detailed pottery analyses will be able to shed more light into these matters.

The temper used for pottery was both chaff and sand. It is more likely that the chaff tempered pots display a red slip and decoration, rather than the sand tempered ones.

Two altar legs exist in the collection of pottery finds, but none of them has a secure context. For one of them though, there are good analogies at Trestiana.

Other items made of clay were few: the lower part of an anthropomorphic figurine (from SI), one small clay "ball", one flattened cylinder (from L1) and a rather amorphous clay lump.

The bone and antler industry is remarkably poor: one spatula, one spoon and one inferior canine from a wild boar (S. Marinescu-Bilcu, C. Beldiman 1997).

The chipped lithic industry is characterized by medium sized blades (and fragments) and just a few small ones, most of them retouched. Trapezes were the second type present. There were very few flakes – suggesting a deliberate selection of the lithic industry during the excavation, given the fact that cores were also present. Some of the cores had been re-used as punchers.

The main raw material for the chipped lithic industry was flint, in a few well known varieties: the so called Balkan flint (both the yellow and gray) and the Prut flint also. Chert is the second raw material. One small blade is made of quartzite.

But the most remarkable category of finds are the polished stone tools (88 in total, 21 associated with the dwellings) – axes, adzes and chisels. Made of a rather porous, soft siltstone rock, they exhibit various stages of manufacturing. Very few were made of harder rocks – such as the only perforated axe found (fig. 13/9), or the large gritstone axes left unfinished (found inside L1).

II. The Bronze Age features (the Noua culture)

Very few features were assigned to the Final Bronze Age – based both on pottery and the occurrence of the decorated animal shoulder blades (3 pieces). The Bronze Age habitations seem to have been poor and covers only the southern part of the investigate area (trenches SVI and SVII).

These finds are probably linked to the Noua settlement from Târpe ti – Râpa lui Bodai (also excavations S. Marinescu-Bilcu), attributed to the first phase of the culture (A.C. Florescu 1991, p. 131). The future study of the finds from the features mentioned below will help clarify the relative chronology of this “re-discovered” Noua settlement.

F10 (SVI, sq. 8-9, 0.70 m) and F11 (SVI, sq. 12-13) represented two concentrations of pottery fragments and stones. Pottery was represented by bag-shaped vessels, with appliqué bands or horizontal prominences placed under the rim. Two decorated animal shoulder bones were also found, one in square 7 and the second in F11 (sq. 12).

F14 (SVI, sq. 14, 0.70-0.76 m, fig. 6/2) was a small agglomeration of stones (some burnt), many bones and a few small sherds. The Noua finds continued down to 0.80-0.85 m. Among them a few Monteoru sherds were also noticed.

F18 (SVII, sq. 7, 0.85 m, fig. 7/1, was a circular pit-feature (1.5 m diameter) containing many stones (small river boulders), daub fragments, charcoal, ashes, a few Early Neolithic sherds and more Noua pottery fragments. The pit, at 1.85 m, cut into the clay layer.

F20 (SVII, sq. 9, 0.70 m) represented an agglomeration of pottery fragments (and a spindle).

III. The III-IV AD features

There is little data on the III-IV AD settlement. Pottery was described as wheel-made, both reddish and gray in colour. Few other finds were mentioned.

From the plan in figure 10, the features appear both to the north and the south of the excavated areas, but they are conspicuously few in the central part. It is possible that in the sloping area of the trenches, the cultural layers and the features were destroyed by erosion and/or agricultural work. Few scattered pottery fragments appeared on the entire surface, though.

G1 (SI, sq. 9, near the northern section)

G2 (SI, sq. 8-9, on the southern side of SI, filled with black soil, fig. 3/1)

G3 (SI, sq. 6-7, near the northern section, fig. 3/1)

G6 (SII, sq. 11, 0.95 m, fig. 6/1). According to the plan in figure 6/1, the feature was circular and had 0.5 m in diameter (at 0.95 m). The infill contained yellow clayish soil (suggesting the pit was dug down into that layer) and some pottery sherds that dated it.

F8 (SV, 0.30 m) – scatter of IV century AD pottery fragments and disturbed remains of a hearth.

F9 (SVI, sq. 4, 0.30-0.40 m) represented the remains of a hearth, surrounded by a few stones, pottery fragments and bones. A small bronze unidentifiable item was also found. The hearth was extending in the southern section of SIV. It appeared to be 2-2.5 cm thick, gray on the surface and reddish-orange inside. Sand was used for tempering.

F13 (SVI, sq. 6-7) – agglomeration of pottery fragments (wheel made, fine paste, gray in colour), stones and complete pots. It was described as a pit-feature, possibly a dwelling.

F15 (SVI, sq. 15, 0.65 m, fig. 6/2) was a heavily disturbed hearth, oval in shape (0.55 x 0.70 m), with a crust of 0.10-0.12 m. Sand was used for tempering.

F16 (SVI, sq. 12, 0.63 m) – fragment of a hearth.

F17 (SVII, sq. 1, 0.20 m) – remains of large stone kiln, also extending further in the southern section. It was built using river boulders (0.25 x 0.15 m). The stones were heavily fired, acquiring a

reddish-orange colour. Fragments of daub coating (width 1.2 cm), having sand as temper, were found among the stones. As funds did not allow a further extension of the trench towards the south, the feature was sectioned N-S over a length of 0.95 m. The stone feature appeared to be 0.20-0.25 m thick, with the collapsed stones covering the crust of a hearth (2 cm thick), brown-reddish in colour. The base of the feature was reached at 0.40-0.45 m. It does not appear on the field plans.

F19 (SVII, sq. 9-10, 0.36-0.40 m) agglomeration of stones, daub, pottery and bones, assigned to the IV-V centuries AD (?). Lacking funds to extend the trench, the feature was sectioned N-S.

F22 (SIX, sq. 11-12, 0.80 m) – the remains of a small disturbed III-IV AD hearth (circular, 1 x 0.75 m).

IV. Features of indeterminate cultural attribution

G4 (SI, sq. 10, base at 1.35-1.40 m) – possibly Early Neolithic, based on location and depth reached at bottom.

F4 (SII, sq. 6-7) – a shallow pit is observable on the southern profile (fig. 4) – without being mentioned in the fieldnotes. The infill – in the profile – seems to have contained mainly stones.

F5 (SII, sq. 22-23) – a shallow pit, no cultural determination, having its base at 2.45 m.

F7 (SIV, sq. 1-2, 0.35 m) was a concentration of numerous daub fragments. Around it the soil was heavily pigmented. Judging by the plan in figure 5/1, the shape uncovered in the trench is rather regular (triangular), suggesting some sort of intentional arrangement. No cultural assignment was indicated.

* * *

Piecing together archaeological puzzles is never an easy job. The image proposed above for the site of Grum ze ti may not be complete but hopefully it is one step closer to a clearer image of the development of the Early Neolithic societies in the area of Moldova. We can only hope that the proposed course of the research on the collections of the archaeological materials resulted from this site will get us even closer.

◆ Acknowledgements

This paper was supported by the Sectorial Operational Programme Human Resources Development (SOP HRD), financed from the European Social Fund and by the Romanian Government under the contract number SOP HRD/89/1.5/S/59758.

◆ Bibliography

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|----------------------------|--|
| A. Boroneanţ 2012 | Aspecte ale tranziţiei de la mezolitic la neoliticul timpuriu în zona Porţile de Fier, Editura Mega, Cluj-Napoca. |
| V. Dumitrescu et alii 1983 | VI. Dumitrescu, Al. Bolomey, Fl. Mogo anu, Esquisse d'une préhistoire de la Roumanie, Editura tiin ific i Enciclopedic , Bucure ti. |
| A.C. Florescu 1991 | Repertoriul culturii Noua-Coslogeni din România. A ez ri i necropole, CCDJ, IX. |
| S. Marinescu-Bilcu 1975 | Asupra unor probleme ale culturii Cri , SCIVA, 26, 4, p. 487-506. |
| S. Marinescu-Bilcu 1993 | Les Carpatés Orientales et la Moldavie, J. Koszłowski, P.-L. van Berg (eds.), Atlas du Néolithique Européen, vol. 1, L'Europe Orientale, ERAUL, Liege, p. 191-243. |

- S. Marinescu-Bilcu,
C. Beldiman 1997 Industria materiilor dure animale în cadrul culturii Star evo-Cri pe teritoriul României. A ezarea de la Grum ze ti, jude ul Neam , MemAnt, 21, p. 273-296.
- E. Popu oi 2005 Trestiana. Monografie arheologic , Editura Sfera, Bârlad.
- N. Ursulescu, 1983 Contribuții la cunoașterea evoluției și poziției cronologice a culturii Star evo-Cri pe teritoriul Moldovei, Suceava, Anuarul Muzeului Național al Bucovinei, X, p. 261-382.
- N. Ursulescu 2000a Mormintele Star evo-Cri de la Suceava – Parcul Cet ții, N. Ursulescu, Contribuții privind neoliticul și eneoliticul din regiunile est-carpaticale României, vol.1, Editura Universit ții "Alexandru Ioan Cuza", 2000, p. 185-188.
- N. Ursulescu 2000b Influențe de tip Vin a în neoliticul vechi din Moldova, N. Ursulescu, Contribuții privind neoliticul i eneoliticul din regiunile est-carpaticale României, vol.1, Editura Universit ții "Alexandru Ioan Cuza", 2000, p. 207-213.



1



2

Fig. 1. 1: Satellite image of the Grumăzești site and the adjacent areas (Google 2012); 2: General view of the site during the excavations in 1968 (photo S. Marinescu-Bîlcu).
1: Imagine din satelit a zonei cercetate din situl arheologic de la Grumăzești (Google 2012);
2: Vedere generală asupra sitului în 1968 (foto S. Marinescu-Bîlcu).

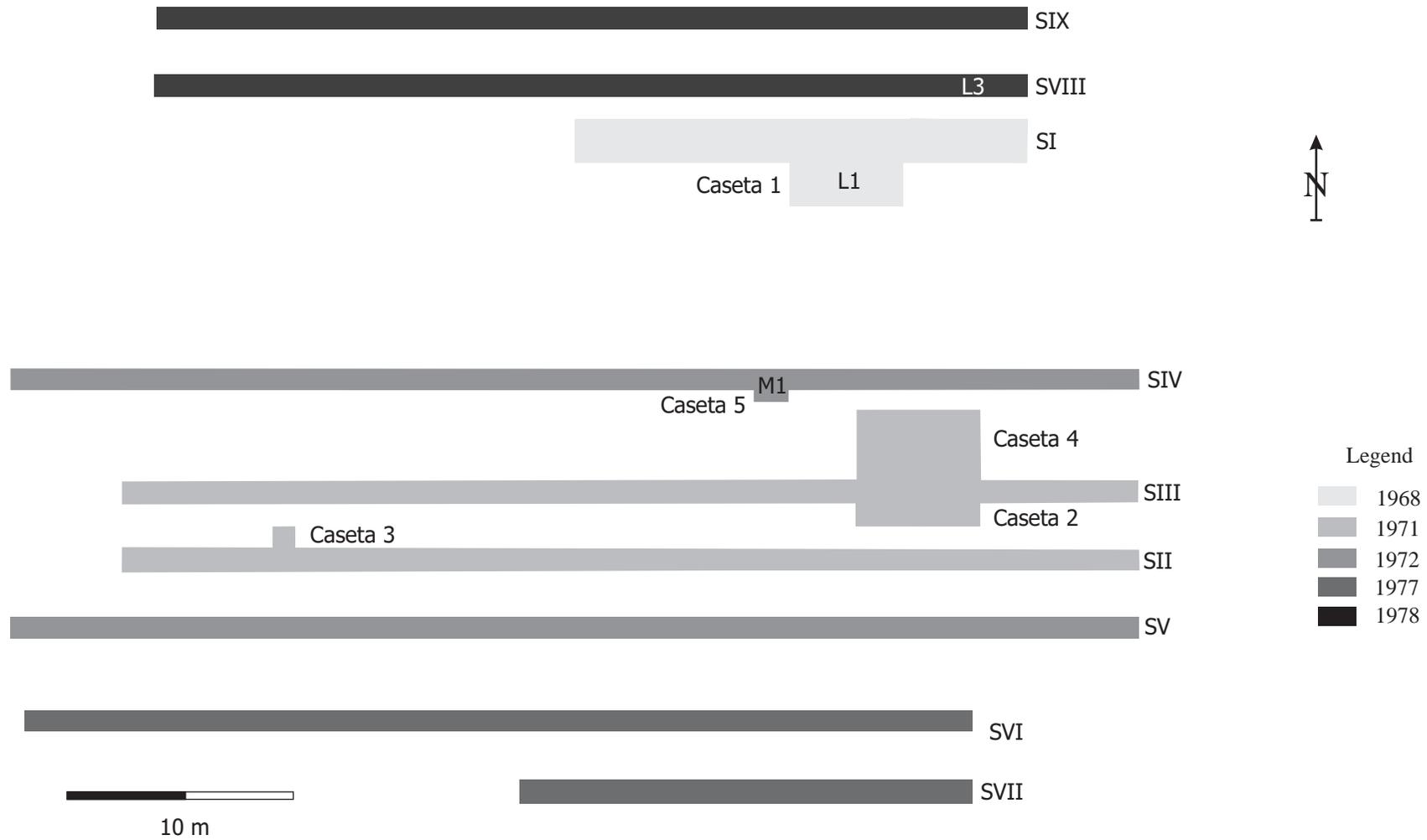


Fig. 2. General plan of the excavations (redrawn and adapted after the original field plans drawn by S. Marinescu-Bîlcu).
Planul general al secțiunilor (redesenat și adaptat după planul de șantier realizat de S. Marinescu-Bîlcu).

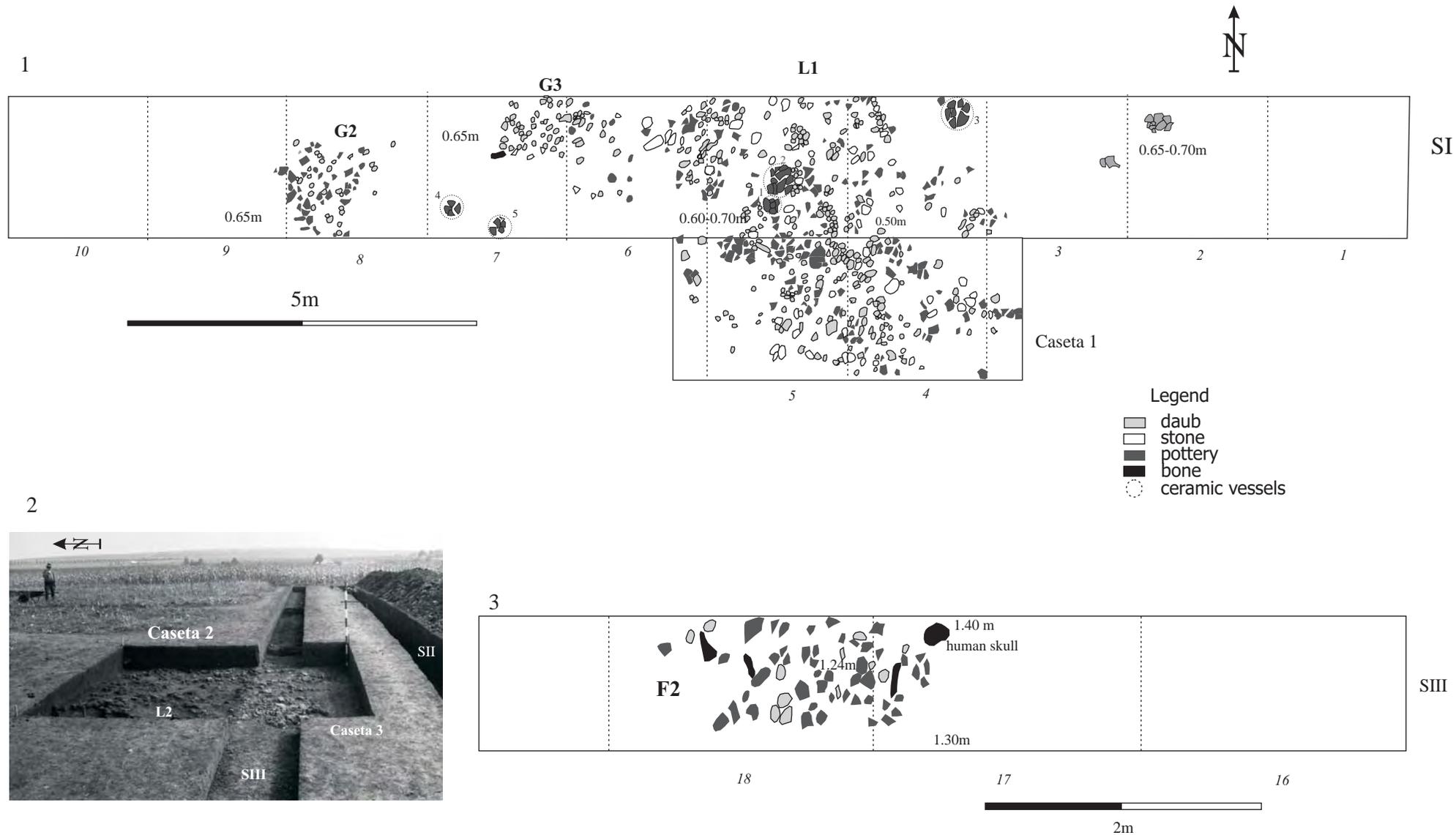


Fig. 3. 1: General plan of trench SI with dwelling L1 (Early Neolithic) and pits G2 (III-IV AD) and G3 (III-IV AD) (adapted and redrawn after the original plan of S. Marinescu-Bîlcu); 2: Dwelling L2 (photo S. Marinescu-Bîlcu); 3: Partial plan of feature F1 in SIII (redrawn after the original plan of S. Marinescu-Bîlcu).
 1: Planul general al secțiunii SI: locuința L1 (neolitic timpuriu) și gropile G2 (sec. III-IV AD) și G3 (sec. III-IV AD) (redesenat și adaptat după planul de șantier realizat de S. Marinescu-Bîlcu); 2: Locuința L2 (foto S. Marinescu-Bîlcu); 3: Planul locuinței F2 (surprins în secțiunea SIII - redesenat și adaptat după planul de șantier realizat de S. Marinescu-Bîlcu).

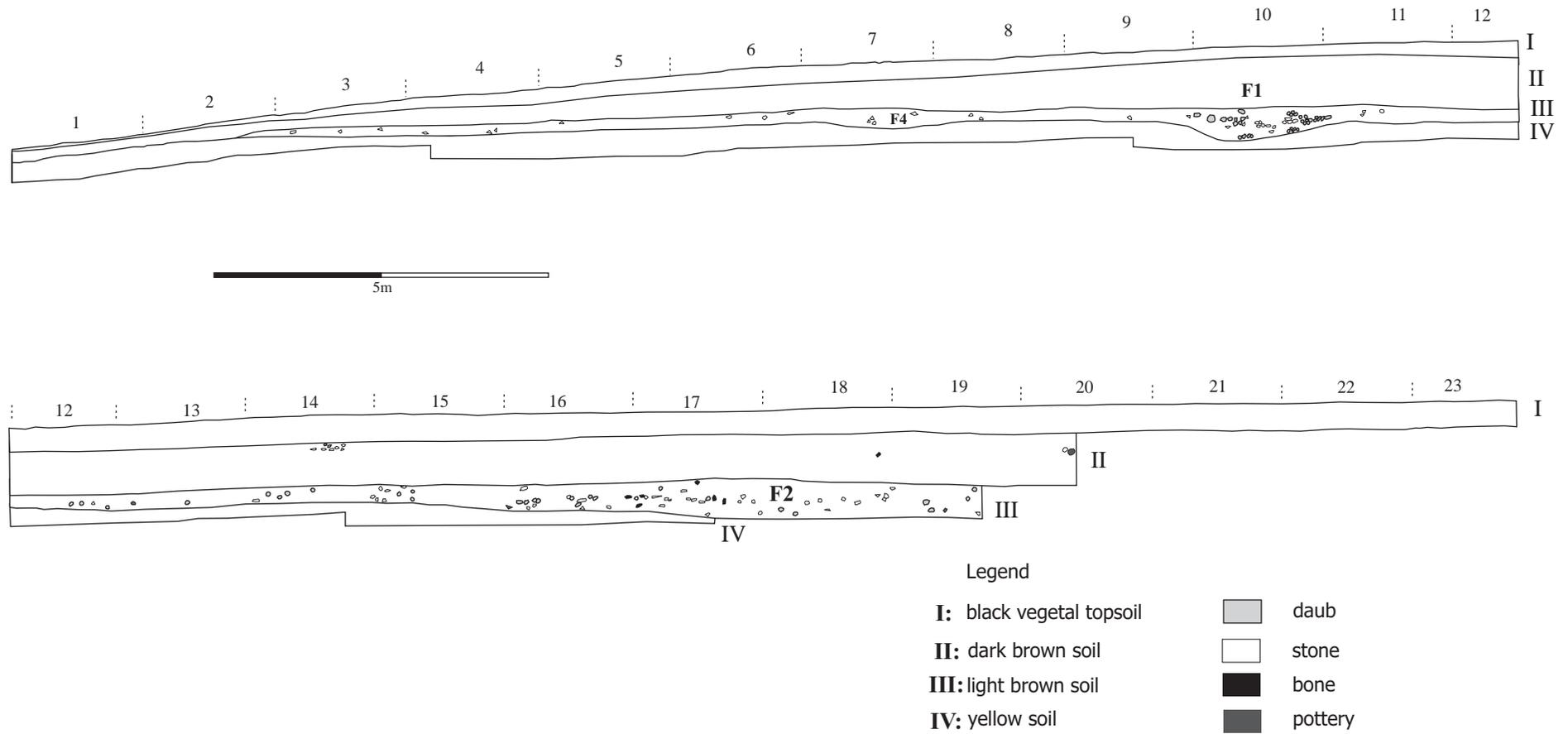


Fig. 4. Southern section of trench SII (redrawn and adapted after the field plan of S. Marinescu-Bîlcu).
 Profilul de sud al secțiunii SII (redesenat și adaptat după planul de șantier realizat de S. Marinescu-Bîlcu).

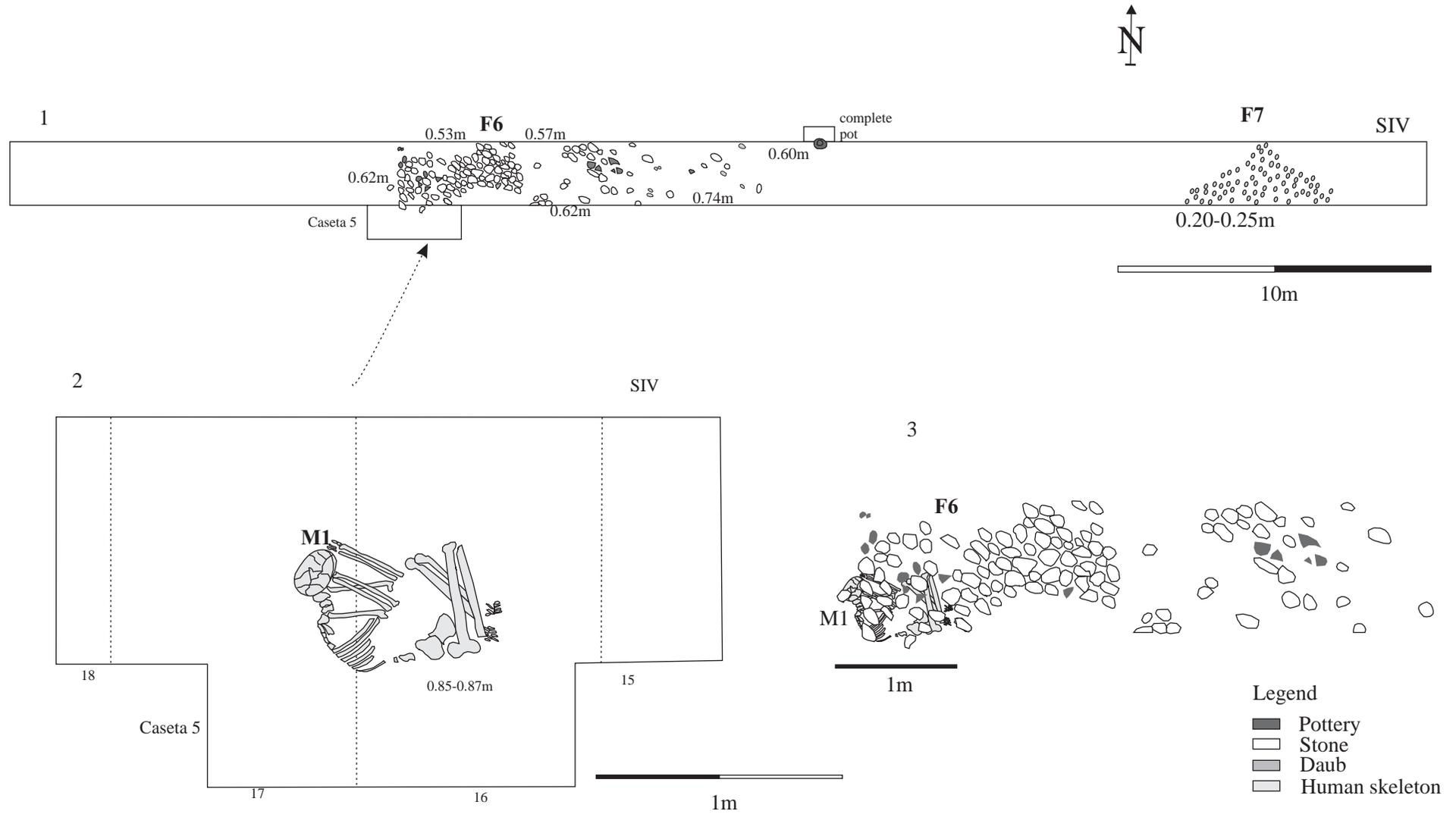


Fig. 5. 1: General plan of SIV; 2: Burial M1 from SIV; 3: Position of M1 in relation to the stone feature F6 (redrawn and adapted after the original plan of S. Marinescu-Bîlcu).

1: Planul general al secțiunii SIV; 2: Mormântul M1 din SIV; 3: Poziționarea lui M1 relativ la structura de pietre F6 (redesenate și adaptate după planurile de șantier realizate de S. Marinescu-Bîlcu).

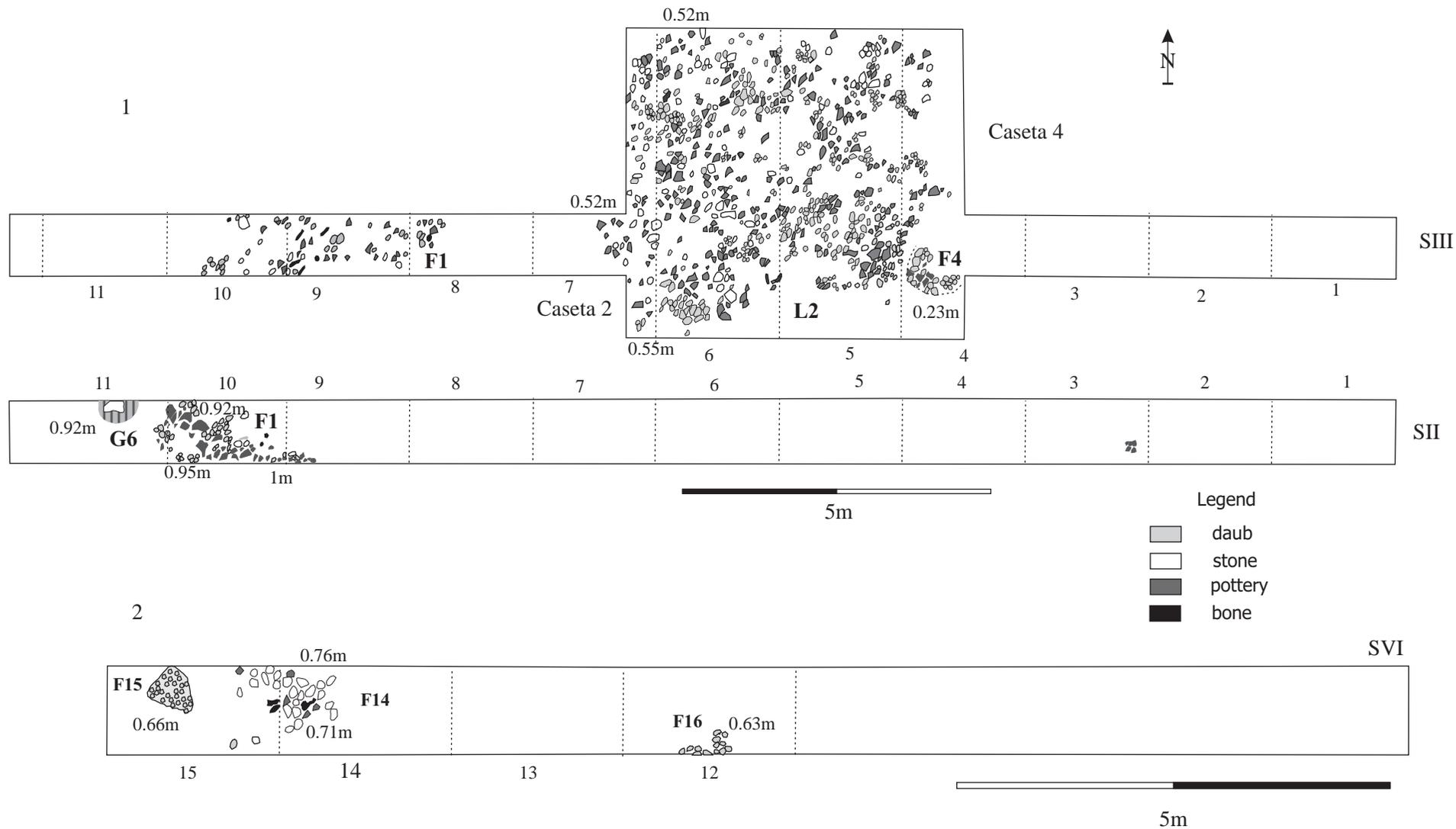


Fig. 6. 1: Plan of features in trenches SII and SIII- F1, L2 and F23 (Early Neolithic); 2: Trench SVI - F14 (Bronze Age -the Noua culture the the Noua culture) and F15, F16 - hearths (III-IV centuries AD) (adapted and redrawn after original plans of S. Marinescu-Bîlcu). 1: Planul complexelor din SII și SIII - F1, L2, F23, (neolitic timpuriu); 2: Secțiunea SVI - F14 (cultura Noua) și F15, F16 - vetre (sec. III-IV AD) (redesinate și adaptate după planurile de șantier realizate de S. Marinescu-Bîlcu).

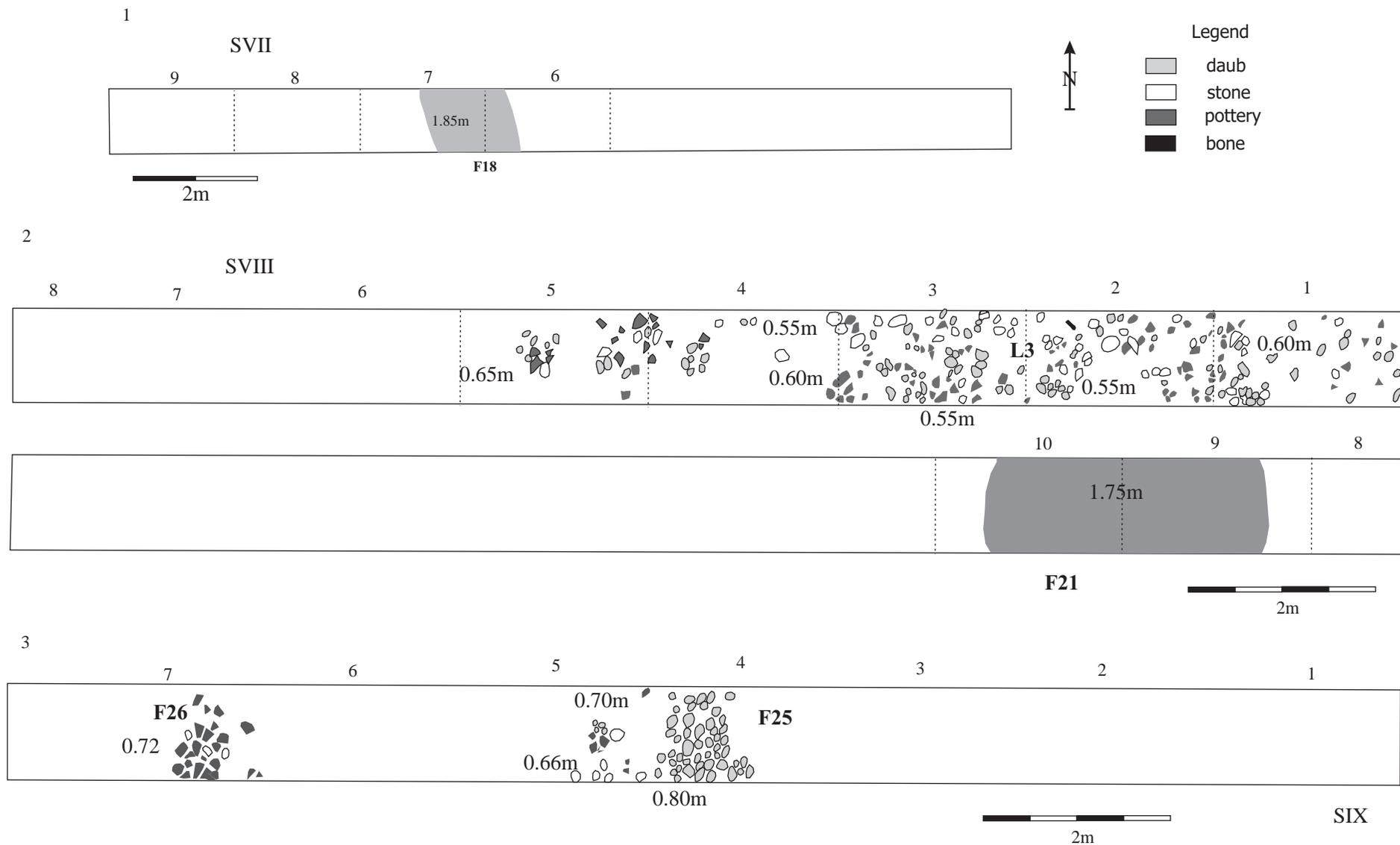


Fig. 7. 1: Pit F18 (Bronze Age - the Noua culture) in SVII; 2: Dwelling L3 and pit F21 (Early Neolithic) in trench SVIII; 3: Features in trench SIX: F25 and F26 - Early Neolithic (redrawn and adapted after the original plans of S. Marinescu-Bîlcu).

1: Groapa F18 (cultura Noua) din SVII; 2: Locuința L3 și groapa F21 (neolitic timpuriu) din SVIII; 3: Complexele din secțiunea SIX: F25 și F26 - neolitic timpuriu (redesenate și adaptate după planurile de șantier realizate de S. Marinescu-Bîlcu).

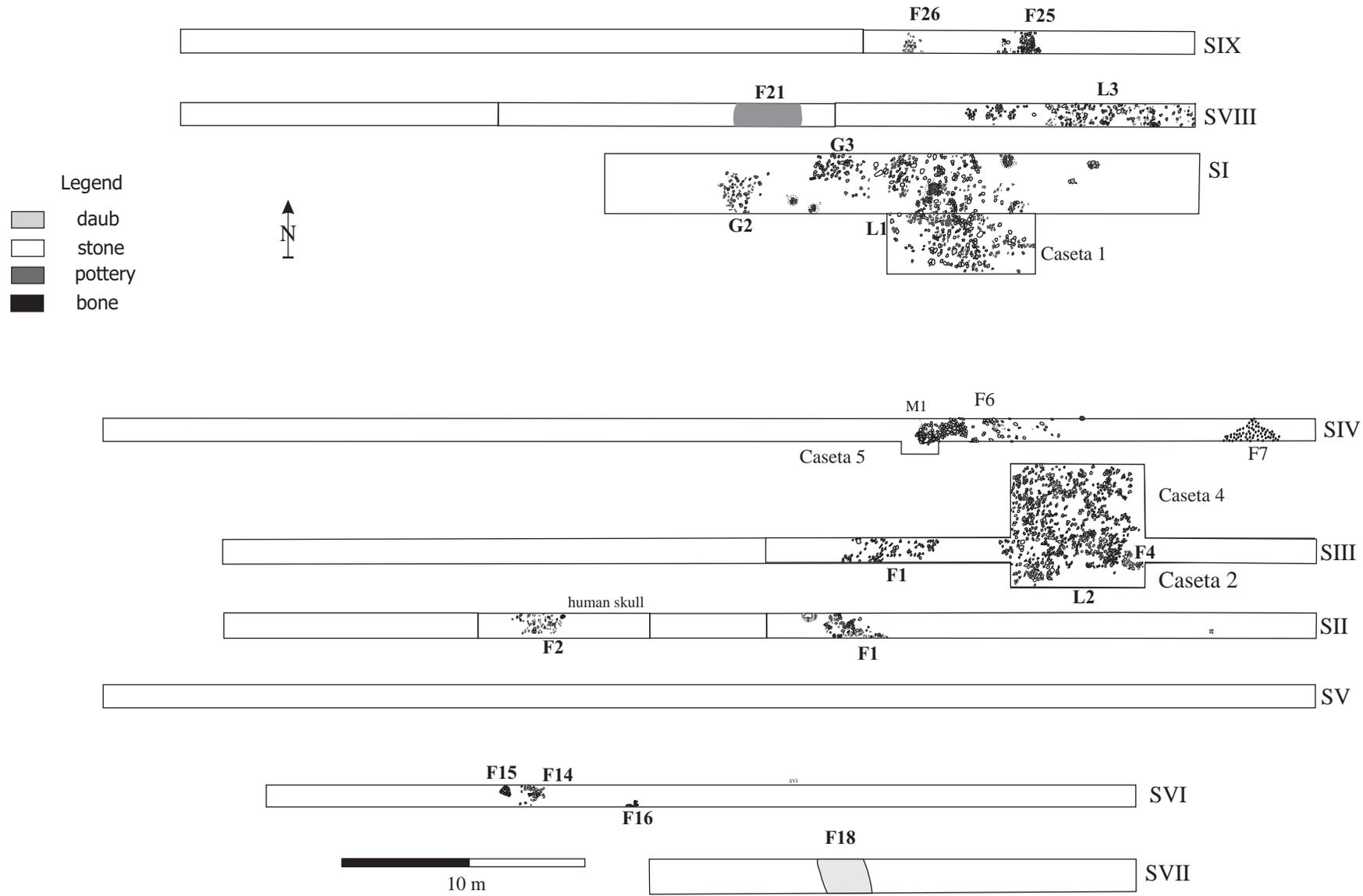


Fig. 8. General plan of the main archaeological features (redrawn and compiled after the original field plans of S. Marinescu-Bîlcu).
Planul general al complexelor figurate în planurile originale ale lui S. Marinescu-Bîlcu.

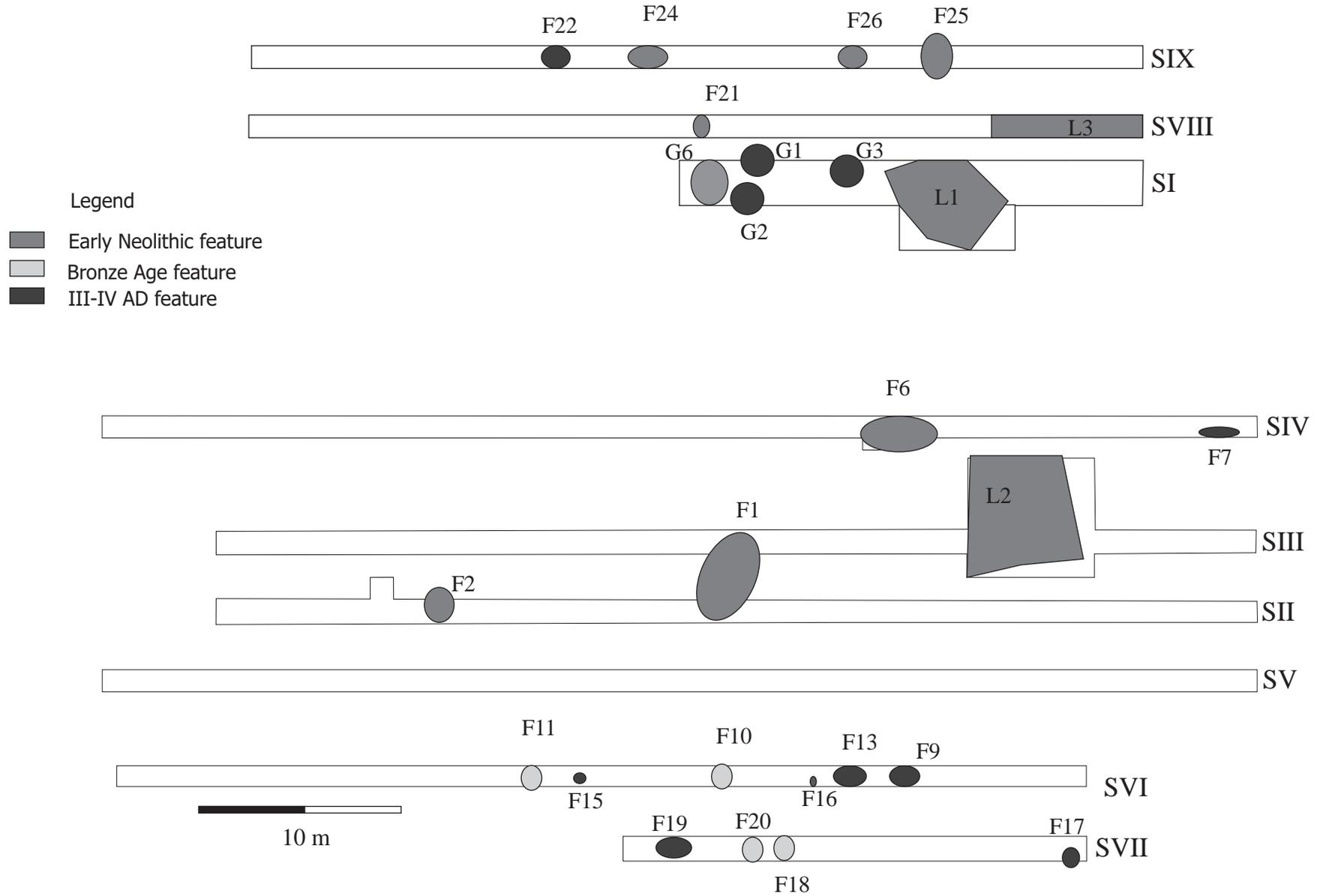
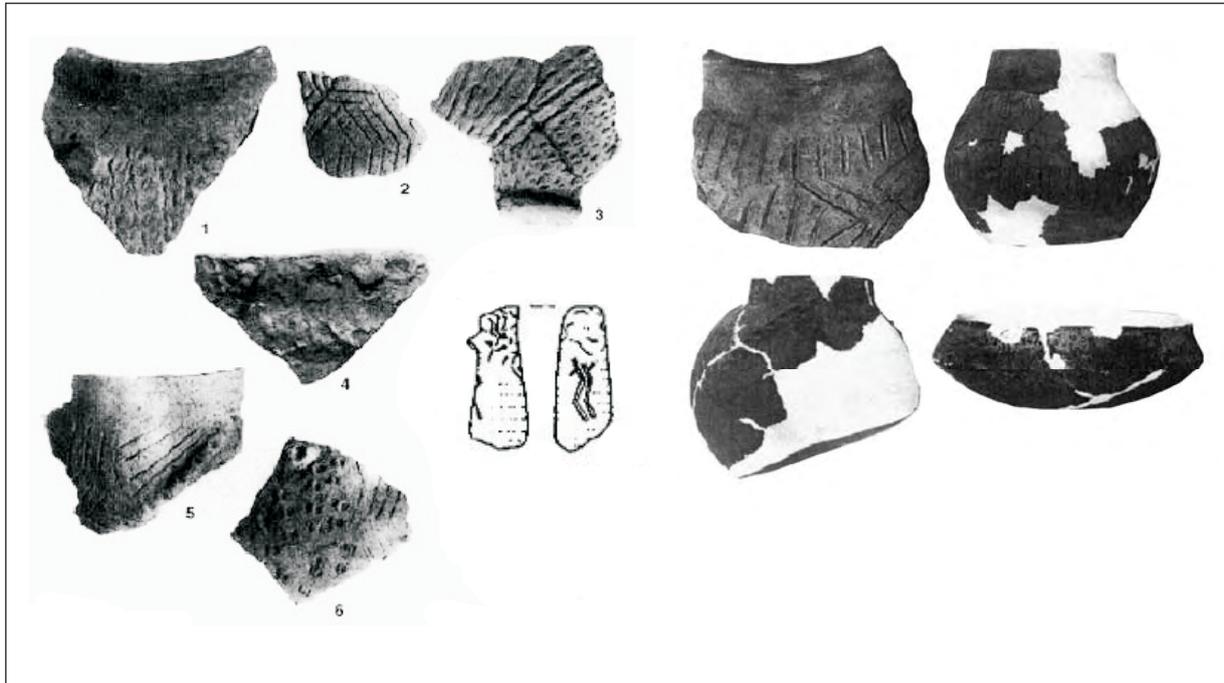


Fig. 9. The approximate mapping of the archaeological features by cultural age.
 Cartarea aproximativă a tuturor complexelor arheologice identificate.

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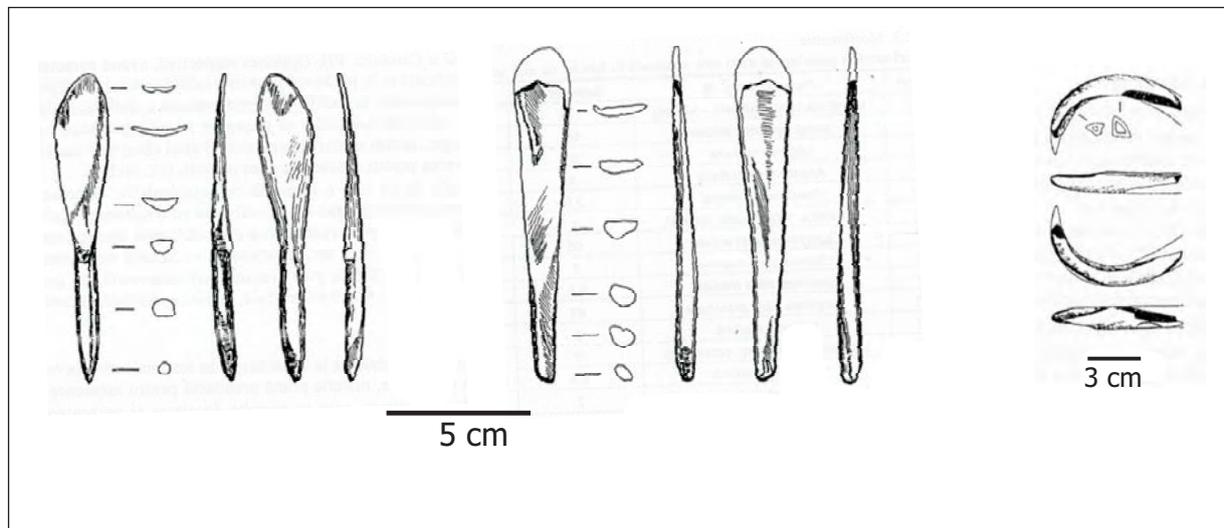


Fig. 10. Early Neolithic published finds from Grumăzești: 1. Pottery sherds, refitted vessels and antropomorphic figurine (after S. Marinescu-Bîlcu 1993; pl. 1-3); 2. Bone spoon, bone spatula and wild boar tusk (after S. Marinescu-Bîlcu, C. Beldiman 1997, fig. 3, 8).

Materialul arheologic publicat (neolitic timpuriu) din situl de la Grumăzești: 1. Fragmente ceramice, vase reîntregite, statueta antropomorfă (după S. Marinescu-Bîlcu 1993; pl. 1-3); 2. Obiecte de os și colț de mistreț (după S. Marinescu-Bîlcu, C. Beldiman 1997, fig. 3, 8).

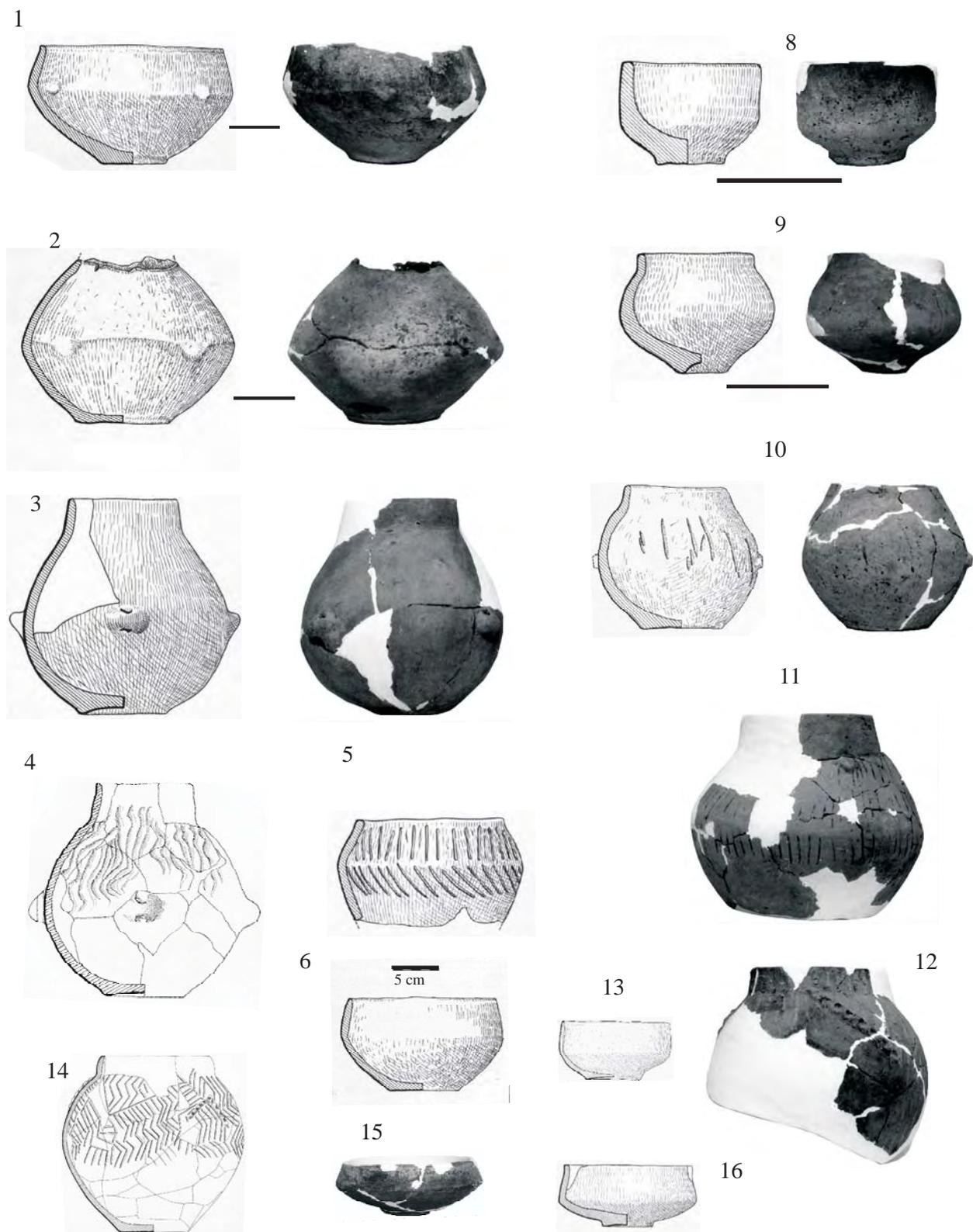


Fig. 11. Refitted pots from dwelling L1 (1, 2, 4-6), G5 (3) and the Early Neolithic cultural layer (7-16). Vase ceramice reîntregite din locuința L1 (1, 2, 4-6), groapa G5 (3) și nivelul cultural neolitic timpuriu (7-16).



Fig. 12. Clay weights, spindles (a- h) and stone hook (i). a, b, c (L2); d (in the proximity of L3), e-h from the Early Neolithic cultural layer (photo A. Boroneanț).
Greutăți și fusaiole de lut (a-h), cârlig de piatră (h). a, b, c din L2; d (din apropierea lui L3), e-h din stratul neolitic timpuriu (foto A. Boroneanț).



Fig. 13. Polished stone tools: 1-4 from L2, 5-8 from F24, 9 - passim (photo A. Boroneanț).

Piese de piatră șlefuită: 1-4 din L2, 5-8 din F24, 9 - passim (foto A. Boroneanț).