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NEOLITHIC CLAY TRINKETS

Hejce, situated at the foot of Zemplén mountains in the north-eastern part of Hungary, near the border between counties Zemplén and Abaúj is a well known archaeological site, producing among others neolithic finds too (MIHALIK 1898). In 1982 Ferenc Losits conducted excavations at Hejce-Püspöktábla.¹ During the writing up of the neolithic objects found there, a group of finds, described as “clay rings” in the inventory books – frequent here compared to other contemporary materials – attracted my attention. Studying these objects, it became obvious, that beside proper clay rings, objects belonging to another group of finds – pendants – were identified as clay rings too. The research of further analogous finds strengthened this recognition: in several former publications pieces belonging to these two groups were not separated. From time to time, in archaeological literature such pendants are mentioned as “little horn”, “tusk”, “clay phallus” or “crescent-shaped pendant” as well. The present publication on the basis of known finds, aims to define and analyse the function of these two types. Although I am sure, that my catalogue cannot be complete – the high number of unpublished finds hampered me –, still I consider it sufficient to call public attention to these groups of objects.

1. “Animal tooth shaped” clay pendants

First I will treat the type of pendants, which until now, due to the lack of analogies was ranged among clay rings.

Fragmentary objects, if the hole or the narrow end is missing, usually make confusion. With the help of the known forms, these fragments, can be identified, but we have to admit, that there are marginal cases, when it is almost impossible to make a distinction between a fragment of a pendant and that of a ring.² We have to note, that the term “animal tooth shaped” is purely conjectural, and we always use it with quotation marks. As we shall see it lower at the detailed study of the origins of form and function, these objects are not always copies of real animal teeth, more probably they are not even imitating shapes of animal teeth.

1.1. Catalogue³

1. Barca III (Košice)

Lit.: HÁJEK 1957, Fig. 17.4

Judging from the picture and description, fragment of a large sized pendant.

2. Bodrogkeresztúr – Széchenyi-Wolkenstein park

Lit.: KALICZ and MAKKAY 1977, cat. no. 28

MNM Ó 1924.8.56. (Fig. 1.1) Large sized fragment. Frontal perforation, lower end turns to the right.

l: 95, w: 19, th: 15.

MNM Ó 1924.8.57. (Fig. 1.2) Large sized fragment. Lateral perforation, round cross section.

l: 68, w: 17, th: 15.

MNM Ó 1924.8.59. (Fig. 1.3) Complete. Lateral perforation, very flat, oval cross section.

l: 41, w: 12, th: 8.

MNM Ó 1924.8.60. (Fig. 1.4) Fragmentary, but almost complete. Frontal perforation, lower end turns to the right. Round cross section.

l: 41, w: 8, th: 7.

3. Hejce-Püspöktábla

Lit.: unpublished.

The fifteen pieces listed below, can be ranged unambiguously among pendants, but a mention must be made, that there are further twenty fragmentary objects in the find complex which cannot be classified.

MNM Ó 84.2.292. (Fig. 2.1) Fragment. Lateral perforation, oval cross section.

l: 40, w: 12, th: 9.

MNM Ó 84.2.292. (Fig. 2.15) Fragment. Frontal perforation, small sized, round cross section.

l: 13, w: 10, th: 10.

MNM Ó 84.2.293. (Fig. 2.2) Fragment. Frontal perforation. Thin, slightly angular cross section.

l: 40.5, w: 8.5, th: 8.

MNM Ó 84.2.294. (Fig. 2.3) Fragment. Frontal perforation.

l: 22, w: 11, th: 10.

MNM Ó 84.2.295. (Fig. 2.12) Fragmentary in a slight degree. Toward its lower end tapering to a point, characteristic form.

l: 40, w: 9, th: 12.

MNM Ó 84.2.295. (Fig. 2.13) Fragment. Toward its lower end tapering to a point, characteristic form.

l: 30, w: 8.5, th: 12.

MNM Ó 84.2.295. (Fig. 2.14) Fragment of a large sized flat piece.

l: 30, w: 16, th: 11.

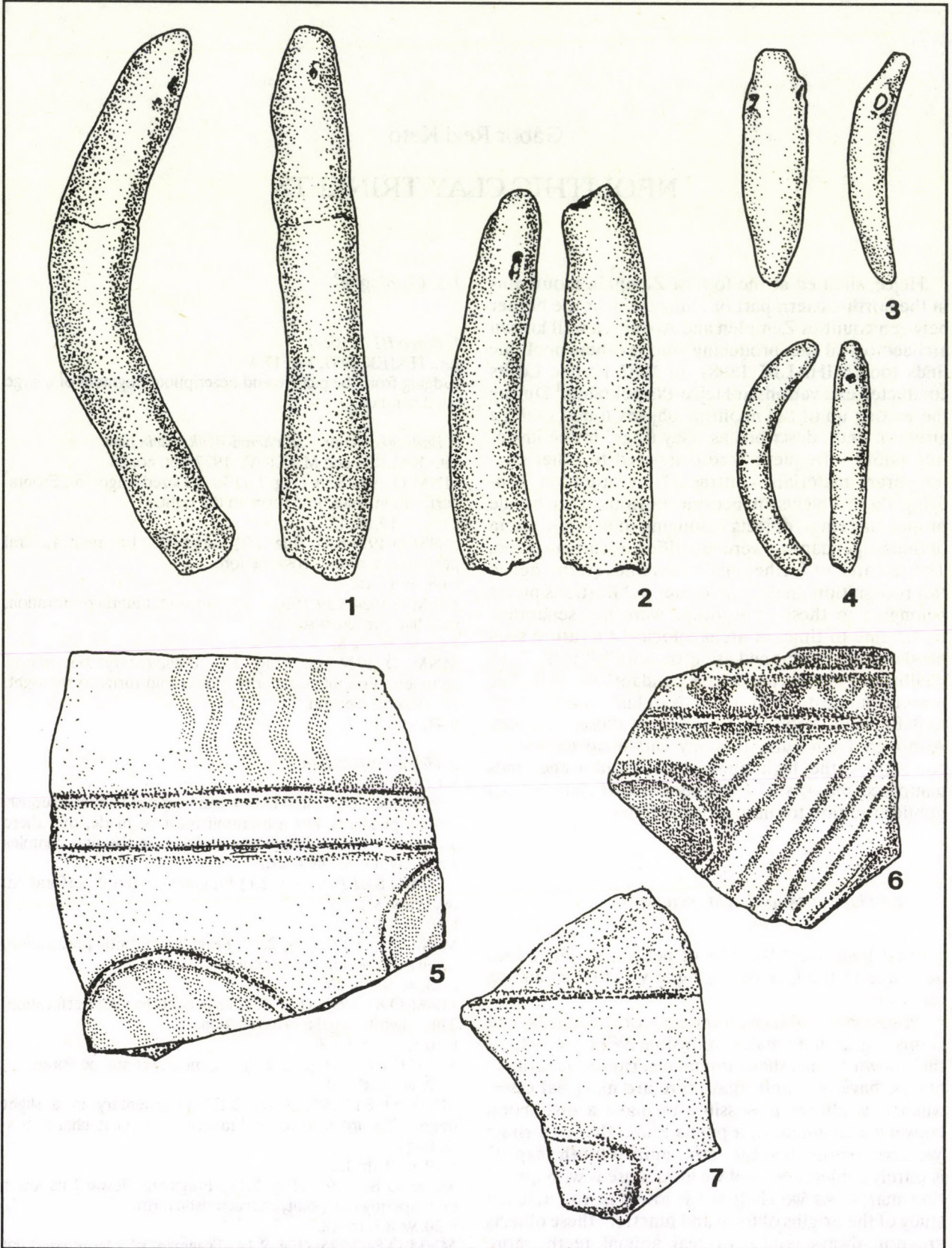


Fig. 1 Bodrogkeresztúr-Széchenyi-Wolkenstein park

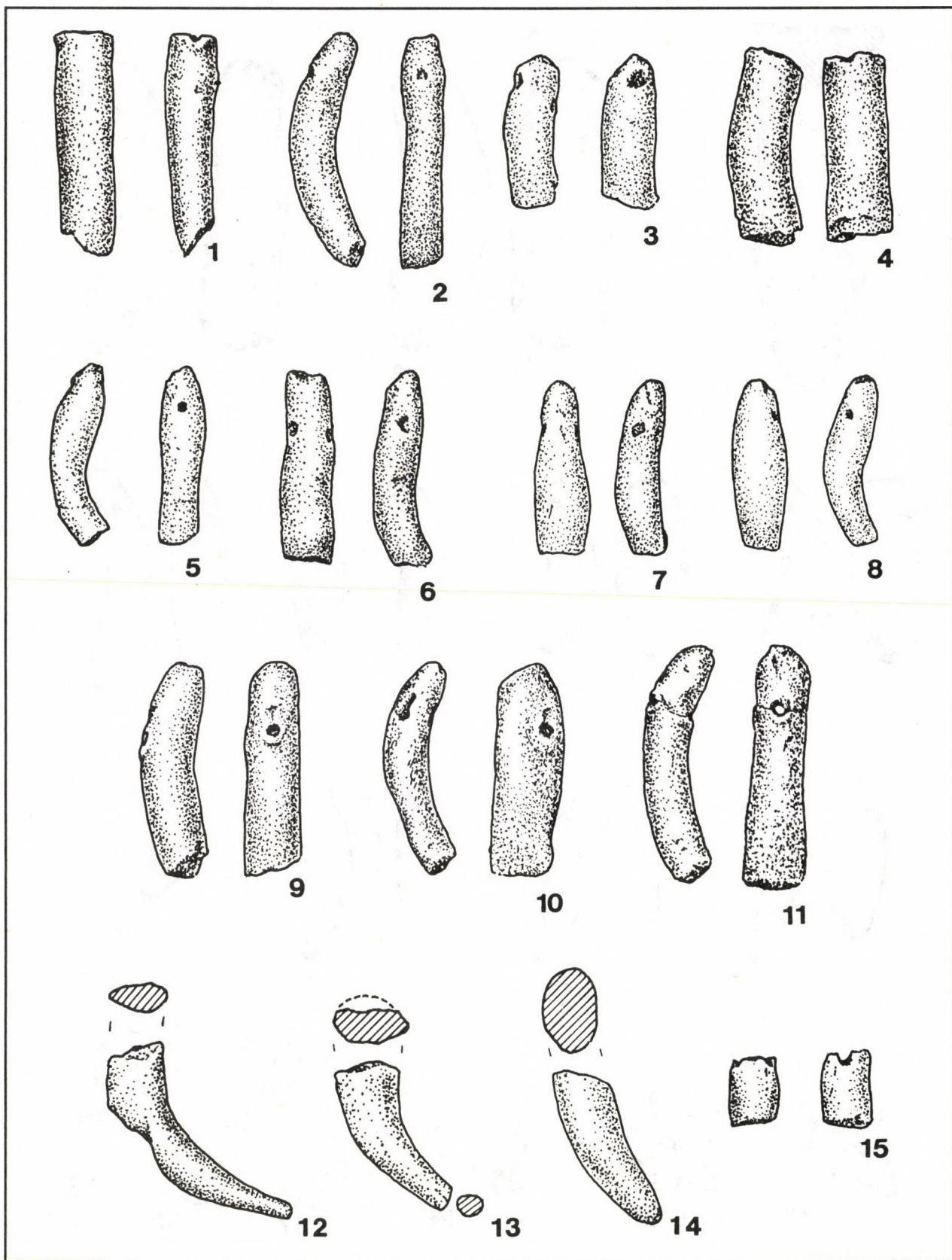


Fig. 2 Hejce-Püspöktábla

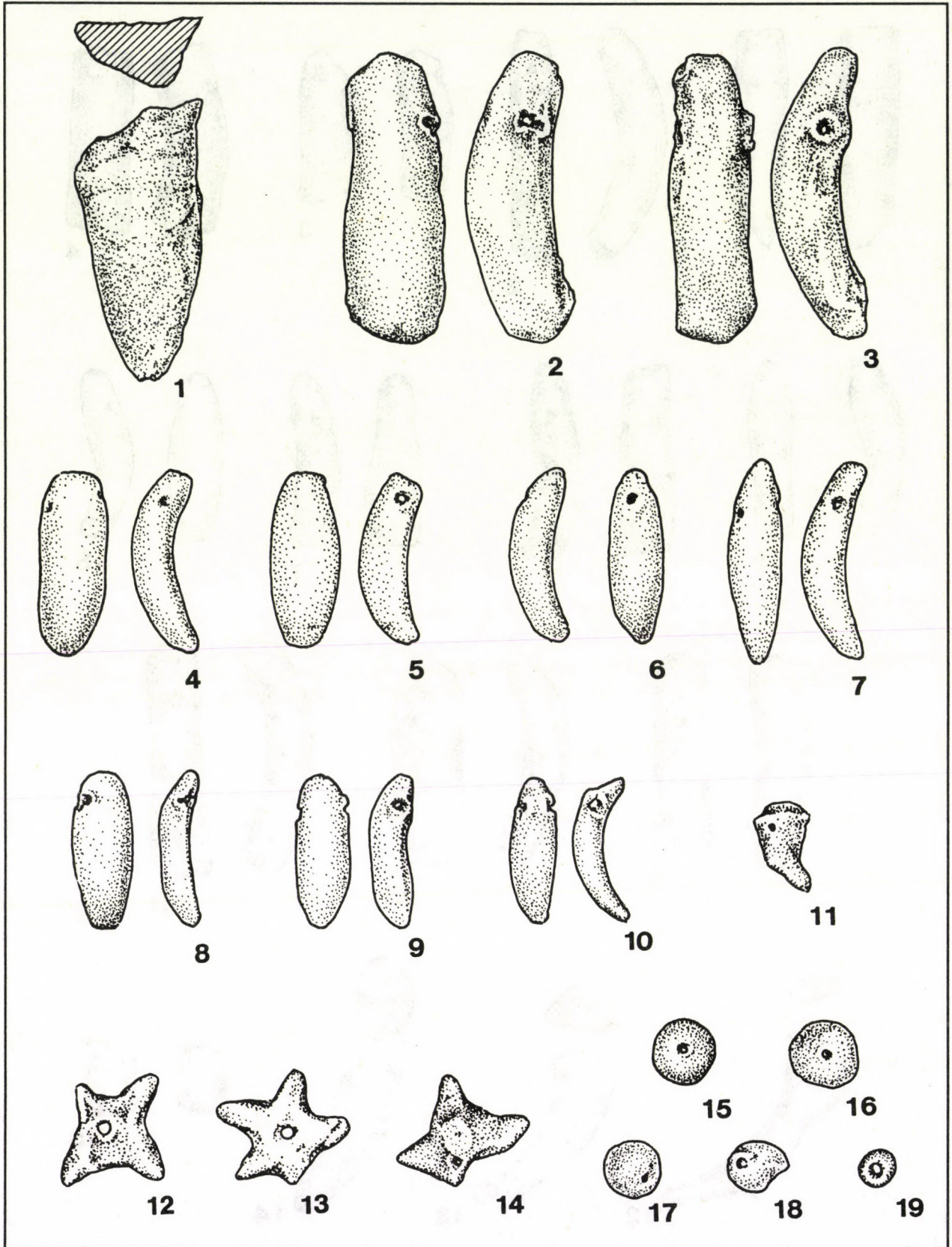


Fig. 3 Sátoraljaújhely-Ronyvpart

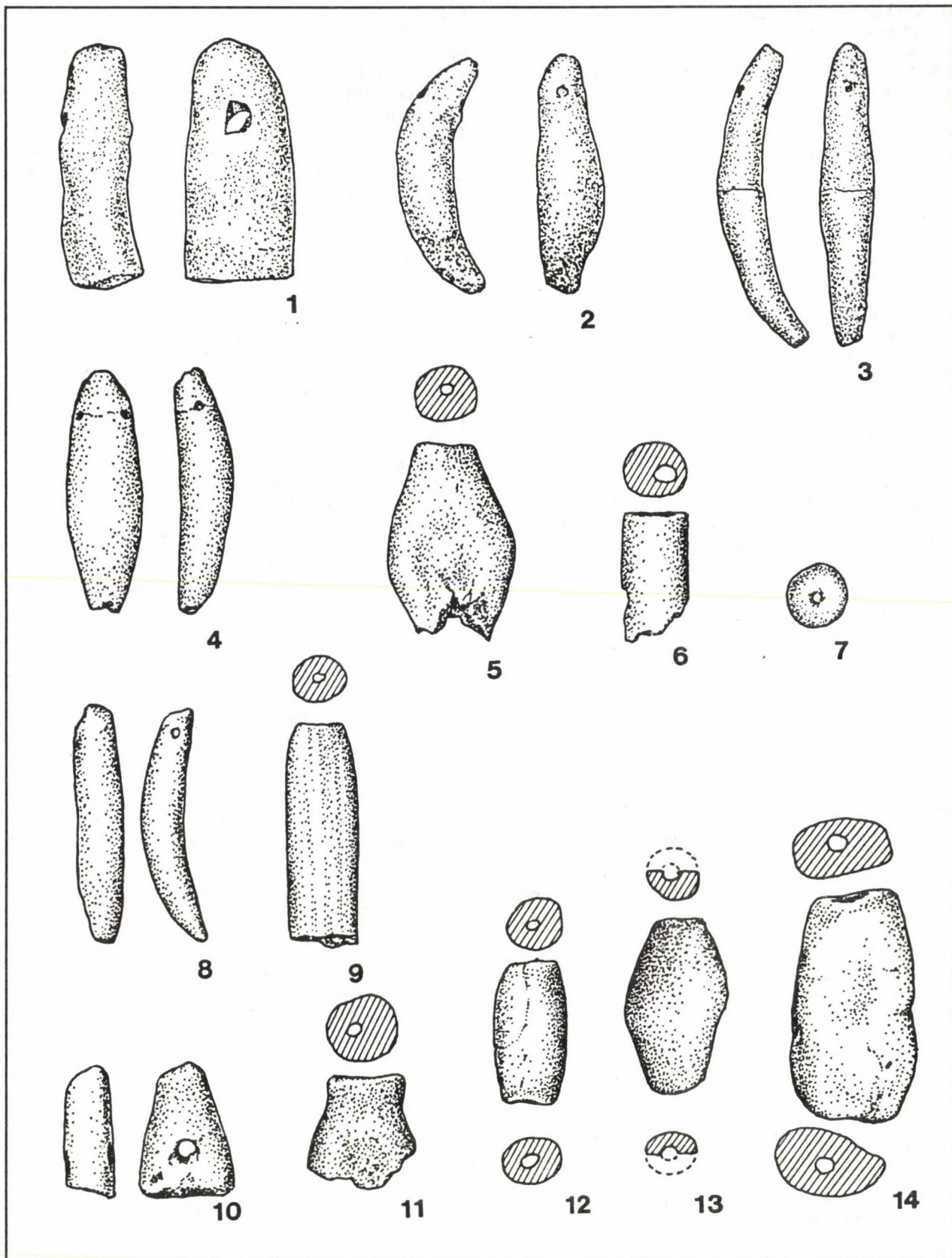


Fig. 4 1-3: Sátoraljaújrhely; 4: Unknown provenance;
5-7: Edelény; 8: Tállya; 9: Aggtelek; 10-14: Hejce

MNM Ó 84.2.375. (Fig. 2.4) Fragment. Frontal perforation. Round cross section.

L: 33, w: 12, th: 12.

MNM Ó 84.2.378. (Fig. 2.5) Fragment. Frontal perforation. Round cross section.

L: 33, w: 9.5, th: 9.

MNM Ó 84.2.378. (Fig. 2.6) Fragment. Lateral perforation. Round cross section.

L: 34, w: 10, th: 10.

MNM Ó 84.2.378. (Fig. 2.7) Fragment. Lateral perforation. Oval cross section.

L: 30.5, w: 10.5, th: 9.

MNM Ó 84.2.378. (Fig. 2.8) Fragment. Lateral perforation. Probably belongs to a shorter form.

L: 30, w: 11, th: 8.5.

MNM Ó 84.2.383. (Fig. 2.9) Fragment. Frontal perforation. Round cross section.

L: 38, w: 11.5, th: 11.

MNM Ó 84.2.630. (Fig. 2.10) Fragment. Frontal perforation. Wide and flat form.

L: 37, w: 19, th: 9.

MNM Ó 84.2.630. (Fig. 2.11) Fragment. Frontal perforation. L: 42, w: 11, th: 9.5.

4. Miskolc-Fűtőház

Lit.: KALICZ and MAKKAY 1977, cat. no. 249.

HOM 53.140.1-3. Judging from the picture the objects can be ranged among the representatives of this type, but it is uncertain how many of the three pieces belong here.

5. Sátoraljaiújhely-Ronyvapart

Lit.: VISEGRÁDI 1912, 24; KALICZ and MAKKAY 1977, cat. no. 332.

MNM Ó 27.1912.87.4 (Fig. 3.1) Large sized fragment. The object is in a very fragmentary condition, but its cross section is rather oval.

L: 49, w: 25, th: 17.

MNM Ó 27.1912.89. (Fig. 3.2) Complete. Lateral perforation. Wide, thick, stubby form with slightly angular-oval cross section.

L: 51, W: 19, Th: 16.

MNM Ó 27.1912.90. (Fig. 3.3) Complete. Lateral perforation. Wide, thick, stubby form with slightly angular-oval cross section.

L: 50, W: 16, Th: 12.

MNM Ó 27.1912.91. (Fig. 3.4) Complete. Lateral perforation. Wide, flat form.

L: 32, W: 13, Th: 9.

MNM Ó 27.1912.92. (Fig. 3.5) Complete. Lateral perforation. Wide, flat form.

L: 31, W: 13, Th: 9.

MNM Ó 27.1912.93. (Fig. 3.6) Complete. Frontal perforation. Flat form with oval cross section.

L: 31, W: 11, Th: 8.5.

MNM Ó 27.1912.94. (Fig. 3.7) Complete. Lateral perforation. Flat form with oval cross section.

L: 35, W: 11, Th: 8.

MNM Ó 27.1912.95. (Fig. 3.8) Complete. Lateral perforation. Flat form with oval cross section.

L: 28, W: 12, Th: 7.5.

MNM Ó 27.1912.96. (Fig. 3.9) Complete. Lateral perforation. Flat form with oval cross section.

L: 27, W: 11, Th: 8.

MNM Ó 27.1912.95. (Fig. 3.8) Complete. Lateral perforation. Flat form with oval cross section.

L: 28, W: 12, Th: 7.5.

MNM Ó 27.1912.96. (Fig. 3.9) Complete. Lateral perforation. Flat form with oval cross section.

L: 27, W: 11, Th: 8.

MNM Ó 27.1912.97. (Fig. 3.10) Complete. Lateral perforation. Flat form with oval cross section.

L: 25, W: 9, Th: 6.

MNM Ó 27.1912.98. (Fig. 3.11) Fragment. Lateral perforation. Its form differs from the previous ones. It is a small fragment, but rather similar to the type which is tapering to a point at the lower end, found mainly in the Hejce find (Figs. 2.12-13.).

L: 16, W: 9, Th: 11.

MNM Ó 50.1929.3. (Fig. 4.1) Large sized fragment. Frontal perforation. Flat, oval cross section.

L: 44, w: 23, th: 15.

MNM Ó 50.1929.5. (Fig. 4.2) Complete. Frontal perforation. Oval cross section.

L: 43.5, W: 13, Th: 11.

MNM Ó 50.1929.6. (Fig. 4.3) Complete. Frontal perforation. Round cross section, thin, long form.

L: 56, W: 11, Th: 8.5.

6. Sajókeresztúr-Homokbánya

Lit.: KALICZ and MAKKAY 1977, cat. no. 323.

Two pieces can be ranged with surety among the representatives of the type. Similarly to the situation in Hejce, here too, we find dubious fragments, so it is possible that we have to count with a higher number of relevant pieces.

HOM 71.19.177. Complete. Frontal perforation, round cross section.

L: 55.

HOM 71.19.373. Fragment. Lower part of a large sized pendant.

L: 52.

7. Szilvásvár-Ístállóskő

Lit.: KOREK and PATAY 1958, 42; LOSITS 1976, Pl. XXXIX. 15; KALICZ and MAKKAY 1977, cat. no. 386.

HOM. Lower fragment of a large sized pendant.

L: ca 95.

8. Tállya-Halastó

Lit.: KOREK and PATAY 1958, cat. no. 105; KALICZ and MAKKAY 1977, cat. no. 392.

MNM Ó 90.951.4. (Fig. 4.8) Complete. Lateral perforation, round cross section.

L: 43, W: 9.5, Th: 8.5.

9. Tiszadob-Ókenéz

Lit.: MAKKAY 1960, Pl. III. 9-12.; KALICZ and MAKKAY 1977, cat. no. 406, Pl. 37. 6-7.

JAM 61.15.5. The type is surely represented among the four pieces, but the exact number unknown due to ambiguous cases.

10. Tiszalúc-Sarkadpuszta

Lit.: unpublished.

MNM Ó 86.12.1055. and MNM Ó 92.1.61. two complete pendants.

11. Tiszaszőlős-Csontospart

Lit.: KALICZ and MAKKAY 1977, Pl. 140.5.

DJM 64.28. Judging from the picture it may belong to this type.

12. Tiszavasvári-Keresztfal

Lit.: KALICZ and MAKKAY 1977, Pl. 64.1-6.

JAM. The type is surely represented here (in case of nos. 1. and 6.), but the exact number cannot be determined from the picture..

13. *Valaliky (část Všečsvätých)*

Lit.: NOVOTNY 1962, Pl. II. 6.

Judging from the drawing it is a lower part of a large sized pendant.

14. *Unknown provenance*

Lit.: unpublished.

MNM Ó 1994.12.1. (Fig. 4.4) Complete. Lateral perforation, wide, flat form with oval cross section.

L: 45, W: 15, Th: 11.5.

1.2. Geographical and chronological limits

After mapping the above mentioned findsites (Map 1.) we can establish, that conspicuously, the distribution of the majority of them is limited to a certain area, with a centre covering the region of the river valleys of Sajó, Hernád and Bodrog. Comparing these data with the distribution maps of the middle neolithic cultures (KALICZ and MAKKAY 1977, map 3–6; ŠÍŠKA 1989, Fig. 2–3), we shall find that this pattern obviously covers the territory of two later “groups” (Tiszadob Group and Bükk Culture) of the Linear Pottery Culture (LP), in correlation with the chronological definitions below.

In connection with the chronological aspect, we have to mention some general chronological problems regarding the period. History of research shows, that the middle neolithic chronological horizon, and mainly certain territorial-chronological units thereof (e.g. Tiszadob Group, Sátorajújhely Painted Pottery) in respect of their chronological situation and relationship to the Alföld Linearband Pottery (ALP) and its later groups, were practically continuously the subject of debate.⁶ In this case the most serious problem is not the attribution of finds to certain cultures, but the proper consideration of cultural, chronological and territorial units, providing a base for such definitions. We are not able, even not intending to cut through the Gordian knot of these problems, but the chronological relationship of the find groups studied here, may help research in further precision, as they regard exactly the most problematic period and territory.

Surveying the canonical chronological system of the finds, we can range the findsites into two major chronological horizons. Sites and finds representing the older phase of LP are attributed to the first (earlier horizon). The early linear pottery of Barca III and Všečsvätých belongs here, and Tiszaszőlős-Csontospart represents this horizon too. We have to mention here Tiszalúc-Sarkadpuszta too, the neolithic finds of which are not yet published, but according to the statement of the colleague who will publish it, earlier ALP elements dominate in the material.⁷ Although only the minority of sites and finds belong to this early

group, they still form an important basis – in case their chronological ranging is correct – as according to the above mentioned data, we can date the first appearance, or even origins of this type to the early LP period. Formal diversity – both large sized and more common sized pendants are represented in the finds of the earlier period – are pointing nevertheless to an advanced typology.

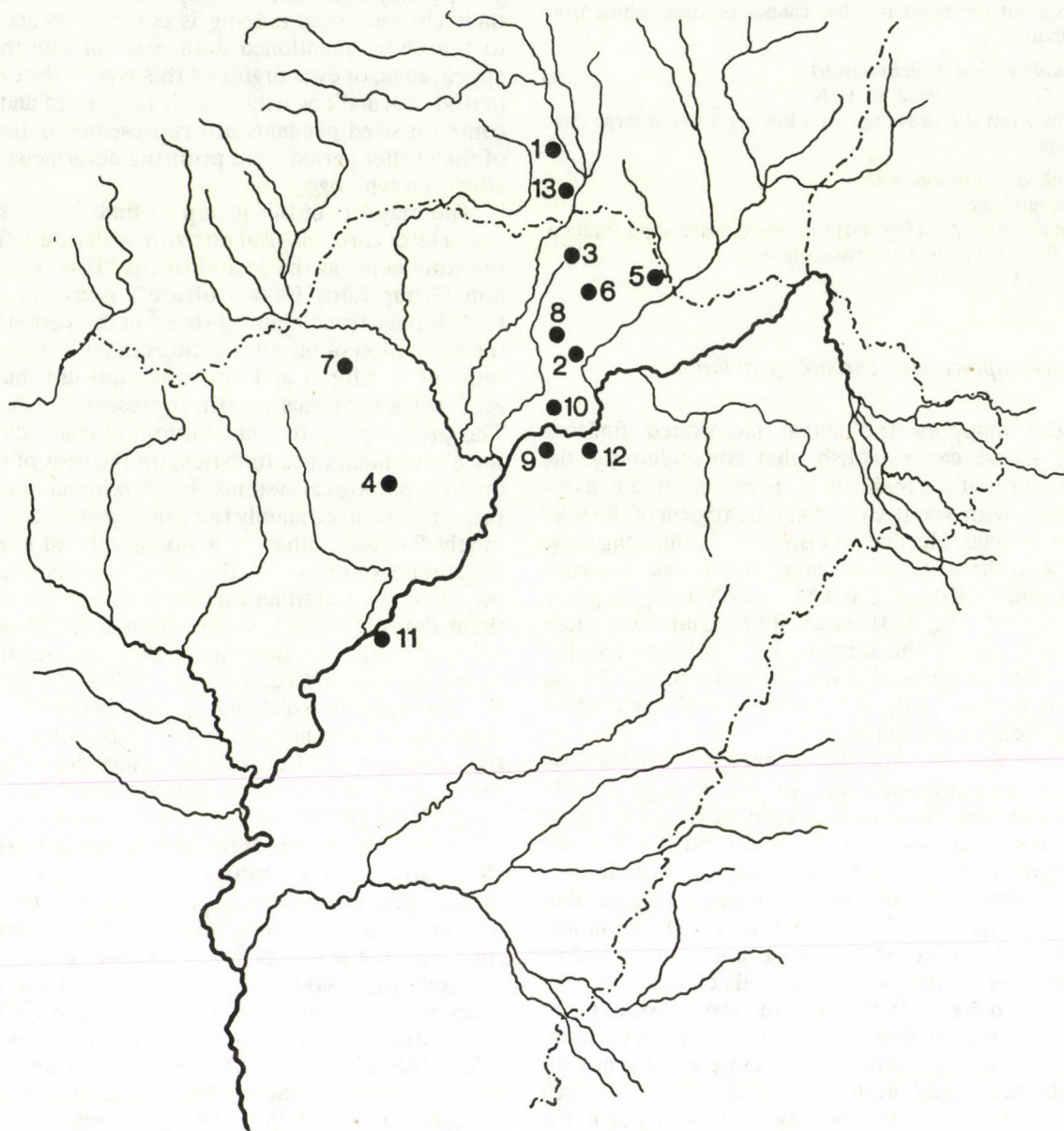
The majority of this group of finds can be ranged into a later chronological horizon, which we define for the time being as the period of the “Late ALP-Tiszadob Group-Early Bükk Culture”. According to the traditional chronological system⁸ in this period begins the formation of the later groups of ALP, but – in the ratio of territorial and chronological distribution – ALP types and forms are still represented in the finds. The presumption of a chronological concordance of the above mentioned findsites, on the basis of traditional chronological systems, is not without questions. From this respect, mainly the ranging of the Sátorajújhely Painted Pottery is a much debated question. Researchers are not on the same opinion regarding the chronological situation of this find group; some of them dates it to quite a late period (LICHARDUS 1974, 107–108). On the other hand, if we take into account the painted ceramics of Vel'ké Raškovec, or Bodrogkeresztúr-Széchenyi park, mentioned above (Fig. 1.5–7.), we must agree with those, who – in contrast to the former researchers – range this material to the horizon studied by us (ŠÍŠKA 1989, 117; PAUL 1992, Chart 2).

Beside the inner chronology, broader, relative chronological relationships are not clear enough. Researchers usually accept paralleling with the end of period Vinca A–B1 (beginning of B2). At the same time, beside the results based on classical typological methods (TROGMAYER 1978), application of C¹⁴ dates regarding this period, will raise new questions. Publications approaching the theme from this aspect (SZÉNÁSZKY 1983; HORVÁTH 1991) have contributed important statements to the elaboration of possible ways of solution. As our informations increase, it becomes sure, that our traditional chronological and territorial system of the middle neolithic period must be reconsidered.

1.3. Genesis of form and function

Contrary to the chronological questions outlined above, the determination of the function of this group of types is quite simple; as the described pieces can be defined obviously as pendants. A detailed analysis of these objects could add important data to the further research in many respects.

Studying the finding circumstances – inasmuch as we have such informations at all – of the pendants at our disposal, we can state, that some



Map 1. Findsites of "animal tooth shaped" pendants

characteristics are common; they were found on settlement sites. Quite surely, the relatively low number of burials known from this period have an effect on the distribution pattern, as burials contain – although not too frequently – clay beads among the grave goods too.⁹

Another common characteristic is the rather low quality of technological accomplishment. It becomes visible particularly in the rough finish of the Sátoraljaújhely pieces, or in the coarse tempering and forming of certain pieces from Hejce. In general, the aesthetic standard of the clay beads is relatively low, and this is

quite surprising compared to the ceramic technology of the period. Except a single piece from Aggtelek (Fig. 4.9),¹⁰ these objects, actually do not intend to disguise their proper raw material.¹¹ In a considerable part of the cases, the pendants imitate obviously some kind of animal tooth, or possibly even a row of animal teeth. The order according to size, of the Sátoraljaújhely and Hejce pieces, moreover the matching forms of the Sátoraljaújhely pieces, and the place of perforation, may refer to the latter possibility.

At this point we have to face a significant problem, notably the question: why did they prepare (imitate) a

pendant made of clay, original raw material of which – animal teeth – was within easy reach. Here we cannot adopt the explanation, usually so logical and simple in case of clay imitations, viz. the clay object is a copy made in the lack of original “precious raw material” (e.g. marble, spondylus, gold) available only in a limited mass. In view of the nature of the question and the limited information base at our disposal, one could make out several plausible explanations to this problem, but it would be almost impossible to prove them trustworthily.

A comparison to the clay bead types of the period, may provide us with important data to the supposed origin of the pendant type. An examination of these finds will lead us to the conclusion, that in the majority of cases, they imitate extant trinket forms, so to say calling into being the neolithic “bijouterie”. The pendant type defined by us, according to our assumption, fits into this series. This hypothesis can be supported with good examples, as to the basic bead types one can find analogous genuine trinkets (usually made of spondylus) easily.

1. *Globular beads*: not a frequent form, neither as spondylus (PLESL 1952, Fig. 15), nor as a clay bead. To the latter see the above mentioned finds of Sátoraljaújhely (Fig. 3.15–19)¹² and Barca III (HÁJEK 1957, Fig. 17.1)

2. *Disc shaped beads*: a basic type, mainly of spondylus (VENCL 1959, Figs. 265.5, 274.6–8; PAVÚK 1972, Fig. 24.18). Usually small sized. A clay piece is known from Edelény (Fig. 4.7)¹³

3. *Cylindrical beads*: it belongs to the basic types of spondylus beads ((Fig. 6.1); PLESL 1952, Fig. 15; VENCL 1959, Figs. 264.1–3, 266.4, 267.4, 273.5, 274.3; GALLAY and SCHWEITZER 1971, Fig. 2.2; PAVÚK 1972, Figs. 24.4.19, 26.6, 29.3–5)¹⁴ and perhaps the most frequent form among clay beads too. It is at present in Edelény (Fig. 4.6)¹⁵ and Aggtelek too (KÖREK 1972, Fig. 11.8). The Aggtelek piece republished here (Fig. 4.9), not only with its form, but with its carefully polished surface and light grey colour tries to imitate realistically the original spondylus beads. This third group contains variants, which would be unnecessary to handle as new types, e.g. the prismatic form with a rather square shaped cross section (*ibid.* Fig. 11.7). In some instances the form is somehow similar to the biconical beads in group 4. Such a clay piece is known from Hejce (Fig. 4.14)¹⁶ moreover one made of spondylus from Nitra (PAVUK 1972, Fig. 28.7).

4. *Biconical (barrel shaped) beads*: it belongs to the frequent forms too. Clay pieces are known from Hejce (Fig. 4.13)¹⁷, Hnojzné (ŠÍŠKA 1979, Pl. VI.3), and Aggtelek (KÖREK 1970, Fig. 11.6). Pieces made of shell were published from various sites, e.g. Mlynárce (PLESL 1952, Fig. 15), Nitra (PAVUK 1972, Fig. 27.6), Tiszavasvári (KURUCZ 1994, Fig. 2.3). A characteristic piece in the collections of the Hungarian

National Museum (Fig. 6.1) is of unknown provenance.¹⁸ From Endréd (MAKKAY 1992, Pl. 15.4) and from a grave at Tiszavasvári (KURUCZ 1994, 5–7) pieces made of limestone belonging to this form, were published.

5. *“Flat” biconical beads*: the type cannot be described precisely, but on drawings and photographs it is easily recognizable. A characteristic form. One can assume that it is a variant of the former group, but as a clay bead, it is so characteristic, that we can interpret it as an independent type. This form probably, imitates pieces, where spondylus was not thick enough to form a whole biconical bead. The fact, that on the spondylus of unknown provenance mentioned at type 4., this insufficiency of the material in a slighter degree is at present too, strengthens the assumption. Such a form is known from Zsáka as well (SÓREGI 1934, Fig. 25.2. above in the middle). The same type made of clay: Edelény (Fig. 4.5)¹⁹, Hejce (Fig. 4.11)²⁰ and Polgár-Kenderföldek (KALICZ and MAKKAY 1977, Pl. 90.6).

6. *Trapezoid or drop shaped, flat beads*: only one piece is known so far with surety, from Hejce (Fig. 4.10).²¹ Despite the unique occurrence, completely flat form and central perforation are serving as good indicators to recognize possible shell, bone and animal tooth analogies (VENCL 1959, Fig. 265.6; GALLAY and SCHWEITZER 1971, Fig. 21.2, Pl. 4 below, Pl. 5.1, 3, 6 and note 15; KAHLKE 1957, Fig. 22; CHERTIER and JOFFROY 1966, Fig. 2).

7. *Unique pieces*: there are relatively few pieces, which cannot be ranged into the above listed types. The boat shaped clay pendant of Čierne Pole (ŠÍŠKA 1979, Pl. II. 13.) – although it is fragmentary, and one can judge it only on the basis of a photograph – in my opinion belongs to the fifth type above. Approaching from the aspect of jewellery piece imitations, we must consider the Sátoraljaújhely “star shaped object” as a unique one (Fig. 3.12–14), as we do not possess analogies in contemporary jewellery. There is also a possibility, that in this case this is a copy of some other object, and not that of a jewellery piece (MAKKAY 1967–68). In the light of recent finds²² we may suppose, that we have to separate flat (Fig. 3.12–13) and three dimensional forms, according to the guessable different functions of their archetypes. In case of the latter, it is possibly related to weaving and spinning (CHAPMAN 1981, II.394, Fig. 152).²³ Thus, in the neolithic period of the region in question, we can talk about the imitation of beads not only in generalities (LICHARDUS 1974, 49; VENCL 1959), but we can state that almost all clay bead type known from this period can be ascribed to this intention. Further clay imitations of spondylus and stone trinkets²⁴ supposed by, and later treated in details in scientific literature, support this trend. Bearing all this in mind, in answer to the previous question – (who do they imitate an available raw material in clay?) – we can formulate the following hypothesis:

the contradiction can be eliminated, if we assume, that the raw material of the imitated model was not animal tooth, but some kind of customary raw materials for jewellery, i.e. we have to suppose the contemporary existence of such a jewellery type. This presumption is strengthened by several formal analogies.

We can regard as such an analogy, the spondylus pendant from grave no. 5. at Mlynárce (PLESL 1952, Fig. 15); beside the pendant we find the cylindrical bead here too. In the light of the ceramic material, these graves may be younger than the later ALP-Tiszadob-Bükk horizon, although in my view – supported by relevant data²⁵ – we should not consider the development of cultures with “notenkopf” decorated pottery and Zseliz as a dramatically straightaway chronological trend (MAKKAY 1970, 27, REZI 1993, 23). The Mlynárce find possibly does not differ too much from the chronologically strongly homogenous group of types in question.

The Erfurt spondylus find raises interesting issues (KAHLKE 1954, Pl. 21.b). Here we find several kinds of “crescent shaped” pendants on the same necklace, containing beside the animal tooth shaped form, a longer, flat form too. The same duality can be observed on the Sondershausen pieces too, published in the same work (*ibid.*, Pl. 21.a). Thus arises the possibility to interpret the difference between the longer, flat types (Fig. 1.1–2) and the animal tooth shaped ones – these formal variants can be found in the present catalogue too – not only as a difference in size. Recent finds in Hungary illuminate this issue in a similar way.²⁶ Clay fragments imitating bracelets (spondylus) corresponding in form and size to the large sized Bodrogkeresztúr pendants were published, whilst in case of the latter, perforations, moreover the presence of pieces belonging to the “general” type, certainly prove that they are pendants, then the shape of the former pieces refers to bracelets. The two ways of finish obviously imitates two kinds of working out of the same part of spondylus shells. This variety of forms justifies us in calling this group of types “animal tooth shaped” only hypothetically.

1.4. Conclusions

Instead of adding further types to the known ones, as a final conclusion it is worthy to emphasize the following facts: in connection with the group of objects defined above, we can state, that the distribution of the known pieces is concentrated on a geographical region with clear boundaries, and the majority of the finds belongs to a relatively compact chronological interval. Similarly to other clay bead types of the period, we consider the origin of the type's function – proved by data –, as imitations or substitutes of shell (spondylus) trinketry. The issue of the relationship between

trade and clay imitations – of which more later –, arises obviously in the light of the above statements.

2. Clay rings

After defining “animal tooth shaped” pendants and separating their representants, occasionally ranged among real clay rings, we can classify further the somehow mixed types of clay rings. Similarly to the pendants, at first we list known finds in a catalogue.²⁷

2.1. Catalogue

1. Barca III (Košice)

Lit.: HÁJEK 1957, Fig. 17.2–3.

Two large sized rings with round or oval cross section. According to the publication, beside these two completely reconstructable pieces, several fragments were also found.

2. Berettyószentmárton-Morotva

Lit.: SZ. MÁTHÉ 1978, 39.

“Among the finds of pit *a*, a fragment of a clay ring... In this case ‘little clay horn’ amulets appearing in earlier and later ALP finds must not be taken into consideration, as it is clearly visible here, that the piece was a complete ring.”

3. Dévaványa-Atyaszeg

Lit.: KOREK 1975–1977, 16.

MNM Ó 5.1949.8.²⁸ Six fragments, belonging to there or four clay rings. Very fine finish; flat, oval cross section.

4. Furta-Csátó

Lit.: SZ. MÁTHÉ 1978, 39.

The author mentions it as an analogy to the fragment of Berettyószentmárton.

5. Hejce-Püspöktábla

Lit.: unpublished.

MNM Ó 84.2.288. (Fig. 5.3). Fragment of a flat clay ring. Oval-oblong cross section. w: 12, th: 8, id: ca 60.

MNM Ó 84.2.290. (Fig. 5.4). Small sized fragment. Triangular cross section.

l: 28, w: 9.4, h: 11.5.

MNM Ó 84.2.292. (Fig. 5.5). Fragment of a small sized clay ring. At both ends, traces of horizontal perforation. Oval cross section.

l: 29.5, w: 10, h: 12.

MNM Ó 84.2.374. (Fig. 5.2). Half, broken piece of a ring, with oval cross section, and one side widening.

th: 9.5 (at the widening th: 12), h: 12, id: 39, od: 60.

6. Korlát-Arka

Lit.: Unpublished.

MNM Ó 62.49.137. (Fig. 5.11). Its cross section is almost a regular circle, but the diameter of cross sections of the fragment's two halves are different.

w: between 13 and 15, h: between 14 and 17, id: ca 80.

MNM Ó 62.49.138. (Fig. 6.2). Fragment of an irregular circle shaped ring with rough finish. Flat, irregular (amorphous) cross section.

w: between 18 and 22, h: between 12 and 16, id: ca 50, od: ca 87.

7. Krasznokvajda

Lit.: LOSITS 1980, Fig. 12.5.

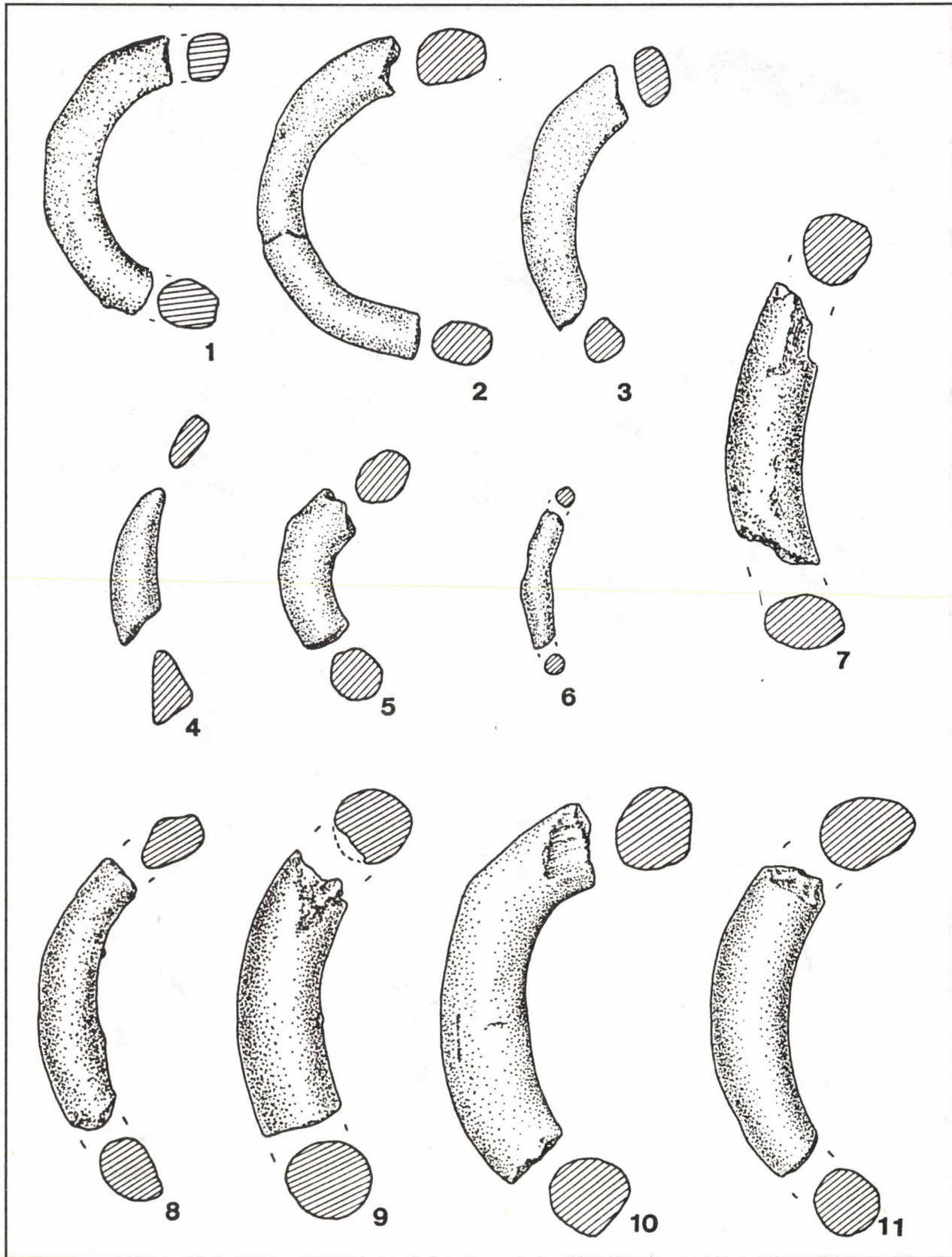


Fig. 5 1: Sátoraljaújhely; 2-5, 7: Hejce; 6: Krasznokvajda; 8-9: Tállya; 10: Tiszafüred; 11: Arka

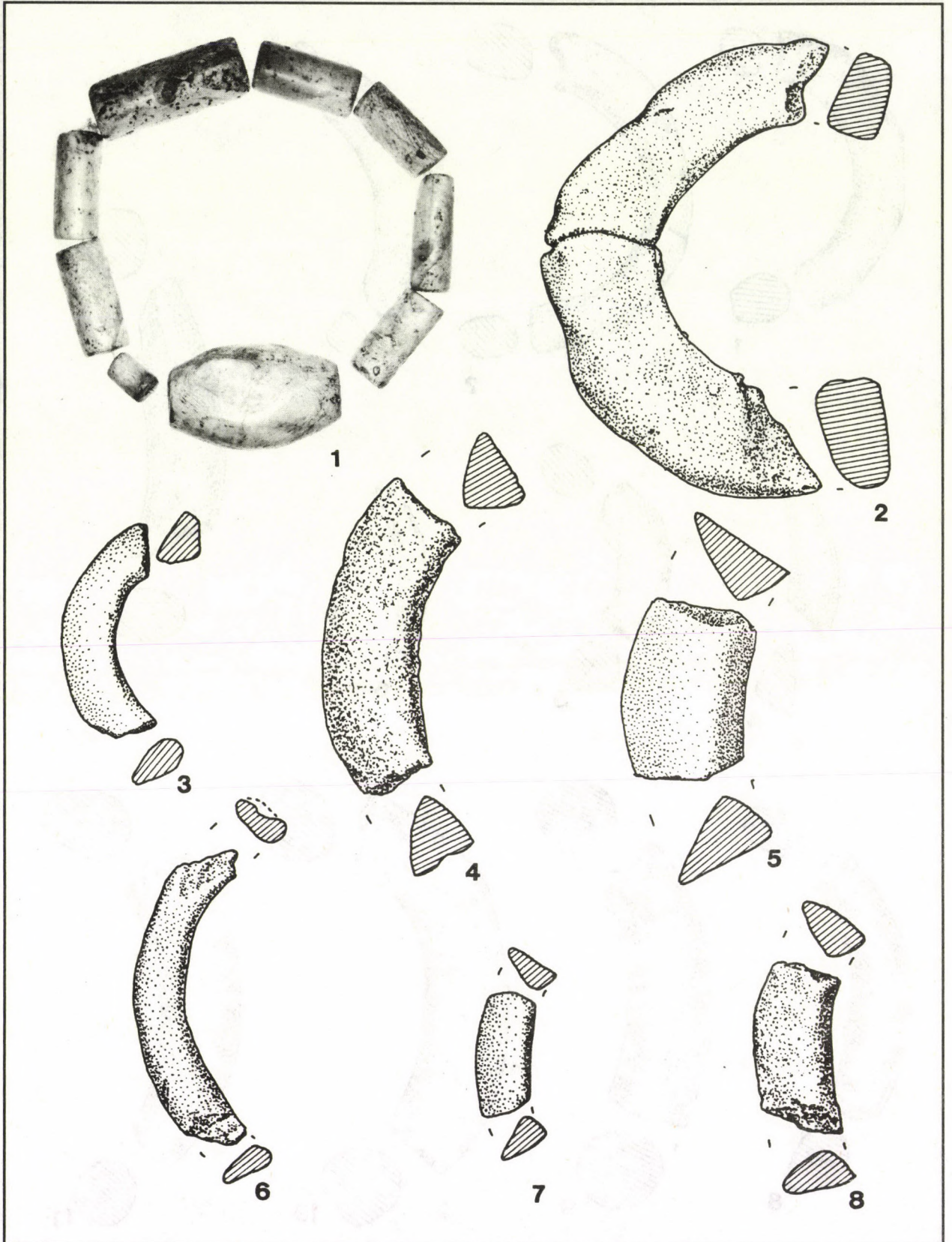


Fig. 6 1: Unknown provenance; 2: Arka; 3-5: Sonkád; 6-8: Szamossályi

MNM Ó 80.1.215. (Fig. 5.6). Very small, thin fragment, with circular cross section.
l: 25, w and h: 6.

8. Méhtelek²⁹

Lit.: unpublished.

JAM without inventory numbers. At least four types are represented among the finds. One of them with its brick-red colour and triangular cross section resembles strongly to the pieces from Sonkád and Szamossály. A flat bottomed fragment with a semicircular cross section, moreover a thin one with oval cross section, in its form resembles to the pieces from Dévaványa, but regarding finish, coarser than the latter, are known from this find too. The fourth type is different from the ones listed hitherto; small sized clay ring, formed secondarily from a potshred.

9. Michalovce: Obj. 2., Obj. 3.

Lit.: ŠIŠKA 1989, Pl. 19.10, 12., Pl. 18.13–16.

Six fragments, judging from the picture representing different types. One of the fragments (Pl. 18.14) may be identified as belonging to rings with triangular cross section.

10. Sajókeresztúr-Homokbánya

Lit.: KALICZ and MAKKAY 1977, cat. no. 323.

HOM 71.19. Beside the pendants mentioned above, rings with oval or circular cross section occur too. Because of the uncertain cases, their exact number cannot be determined.³⁰

11. Sátoraljaiújhely-Ronyvapart

LKit.: KALICZ and MAKKAY 1977, cat. no. 332.

MNM Ó 50. 1929.4. (Fig. 5.1). Fragment of a relatively small ring, with squarish-oval cross section.
w: 11, l: between 8 and 12, id: ca 40, od: ca 56.

12. Sonkád

Lit.: KOREK 1957–1977, Fig. 23.3–6.

MNM Ó 75.37.18. (Fig. 6.3). Relatively small ring, its cross section is a regular triangle.

w: 11, h: 10, od: ca 50.

MNM Ó 75.37.19. (Fig. 6.4). Its cross section is a regular triangle. Coarse, tempered with gravel.

w: 18, h: 13.5, od: ca 100.

MNM Ó 75.37.20. (Fig. 6.5). Its cross section is a regular triangle. Diameter similar to the previous piece, or slightly larger.

l: 35, w: 21, h: 15.

13. Szamossályi

Lit.: KOREK 1975–1977, Fig. 4.2–4.

MNM Ó 1.37.1964. (Fig. 6.6). Flat, with fragmentary surface, probably of triangular cross section.

w: 11, h: ca 8, od: ca 80.

MNM Ó 1.37.1964. (Fig. 6.8). Its cross section is a regular triangle.

l: 31, w: 15, h: 10.

MNM Ó 1.37.1964. (Fig. 6.8). Small fragment with regular, triangular cross section.

l: 24, w: 12, h: 8.

14. Tállya-Halastó

Lit.: KÖREK and PATAY 1958 cat. no. 105, KALICZ and MAKKAY 1977 cat. no. 392.

MNM Ó 90.951.5. (Fig. 5.8). Fragment of a ring with rough finish and irregular oval cross section.

l: 49, w: 12, h: between 14 and 15, od: ca 80.

MNM Ó 90.951.5. (Fig. 5.9). Fragment. Its cross section is a completely regular circle, its finish is of good quality.

l: 52, w and h: 16, od: ca 120.

15. Tiszaföldvár-Téglagyár

Lit.: unpublished.

DKM without inventory numbers. Fragments of clay bracelets.

16. Tiszafüred-Ásotthalom

Lit.: TITOV 1980, 133.18 and id. 148.1.

MNM Ó without inventory number (Fig. 5.10). Its cross section is an almost regular circle. One side horizontally flatter, due to forming or use.

w: 16, h: 15, od: ca 95.

17. Tiszalök-Hajnalos

Lit.: KURUCZ 1989, 38.

Three fragments under inventory entry JAM 92.1.346. One of them of oval-round cross section, near the bottom it is slightly flat. Similar to the piece from Tiszafüred-Ásotthalom. The two remaining pieces are fragments of triangular or trapezoid cross sections.

18. Tiszalúc-Sarkadpuszta

Lit.: unpublished.

Among the LP finds fragments of several clay bracelets were found.

19. Vel'ké Raškovce

Lit.: VIZDAL 1973, Fig. 6.1–5.

In the published material there are five fragments, but judging from the drawing, a fragment belonging to the above mentioned pendants, and a handle of a vessel may be found among them too. (See note 36).

20. Zemplínské Kopčány

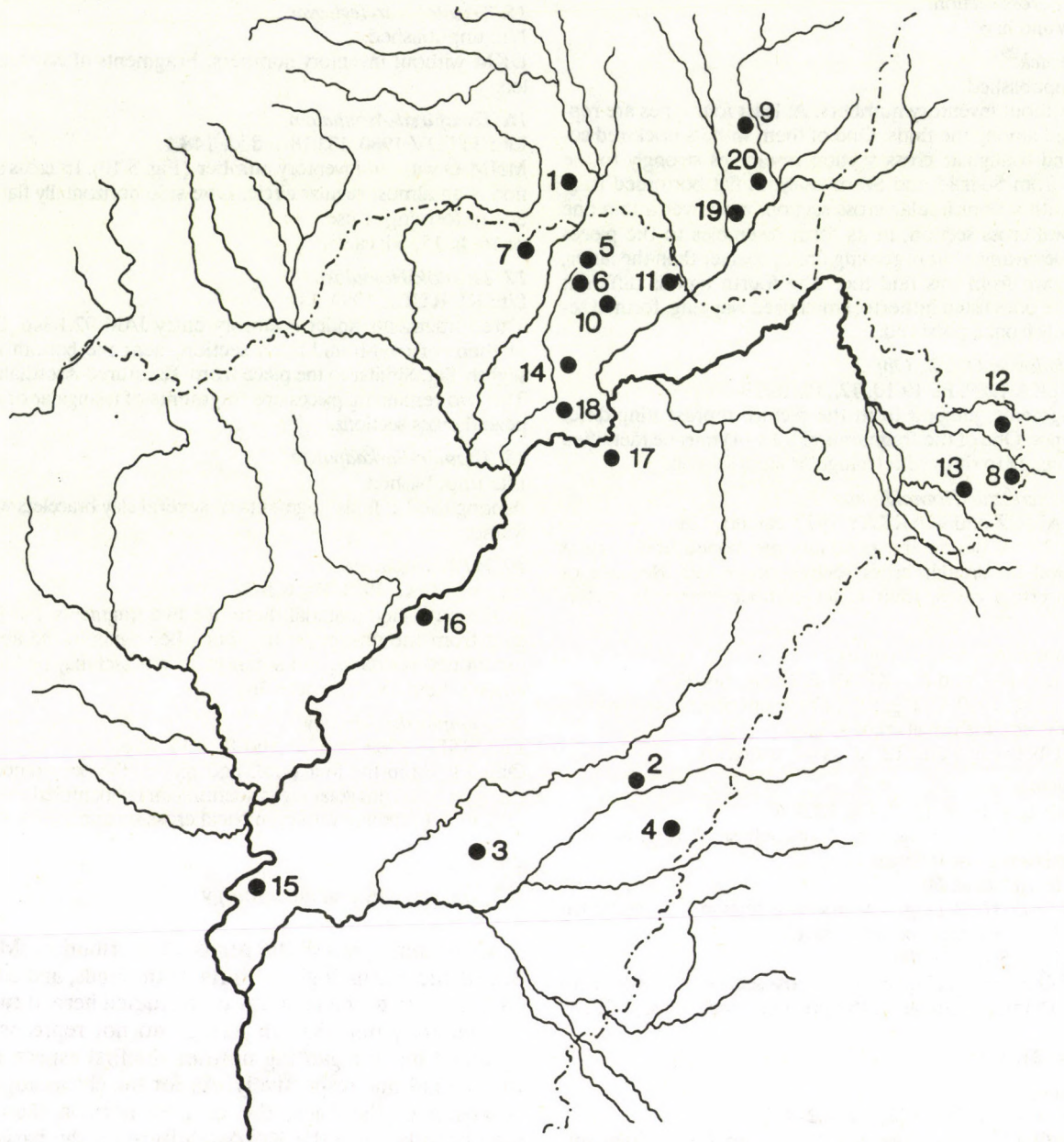
Lit.: ŠIŠKA 1989, Pl. 15.6. and Pl. 40.2–4, 6.

Obj. 13: From the four published pieces, the occurrence of the type with trinagular cross section can be identified.

Obj. 9/V: Fragment with cylindrical cross section.

2.2. Topography and chronology

Considering either the regional distribution (Map. 2.), or the chronological limits of the finds, and comparing them to the pendant type studied here, it turns immediately out, that clay rings do not represent a compact block regarding neither the first aspect, nor the second one respectively. As for the chronological situation of the finds, the earliest horizon thereof, may be related to the Körös Culture on the basis of the finds from Dévaványa-Atyaszeg and Furta-Csátó.³¹ Here we have to mention, that N. Kalicz has published a fragment of a clay ring from findsite Becsehely too (KALICZ 1990, Pl. 46.1), belonging to the Starčevo Culture, but we do not know of further analogies from the Transdanubian region, regarding this group of finds, neither from the early, nor from the middle neolithic period. It is not clear however, that this fact reflects a cultural difference between the eastern and western regions, or simply due to the nature of research activity.³² We may set up an almost complete chronological series on the basis of the known occurrences of these finds, first in the Körös Culture, then until the late LP horizon. Finds from Méhtelek represent a transitional period toward those of the



Map 2. Findsites of clay rings

early LP period from Barca III and Tiszafüred, while the remaining sites – in spite of the doubtful chronological ranging of the painted pottery groups – fill up the period in question. The formal variety in the find group of rings strengthens deconcentration, regarding distribution and chronology.

2.3. Typology and function

In contrast to the above mentioned pendant type, already at the first approach, problems arise during typological classification, regarding the fact, that pie-

ces cannot be ranged into a single group of types, as different forms and different chronological ranging renders it likely as well. Questions relating the definition of this group of objects, are not completely new, scientific literature had already treated the issue (VIZDAL 1973; KOREK 1975–1977; KALICZ and MAKKAY 1977; SZ. MÁTHÉ 1978; ZÁPOTOCKÁ 1984; KURUCZ 1989). Despite of all this, researchers rarely tried to enter into a detailed analysis, although J. KOREK has dealt with the question in a profound manner (KOREK 1975–1977, 15–16) separating two main types:

a) broad pieces with a flat base and triangular cross section

b) pieces with cylindrical cross section, which "could rather be ranged among trinkets".

In respect of the flat based rings (type *a*), Korek accepted and supported Vizdal's view, that they served as underlays for vessels of small size or with a narrow base. In his opinion, the "hollow-stem vessel support" (*ibid.* Fig. 22.4) found at Sonkád is the formal forerunner of the hollow-stem vessel supports of the Herpály Group. Undoubtedly, one of the most characteristic typological class, is that of the rings with flat base and triangular cross section. This type is represented beside Sonkád and Szamossályi, published by Korek, at Hejce (Fig. 5.4), Tiszalök-Hajnalos and Méhtelek too. We can reckon with its further occurrence – as one can judge it from the picture and description – at Mihalovce and Zemplínské Kopcány as well. A piece from Korlát (Fig. 6.2) seems to be functionally very similar; here the irregularities of cross section are probably due to the fairly rough finish. Obviously, one cannot find close cultural connections between the finds mentioned above, but characteristic formal identity cannot hardly be accidental, the functional purpose of these objects must have been identical. In this respect I have to argue with the definition as vessel holder or support, represented by Vizdal and Korek. I cannot consider as acceptable – strictly in the sense regarding forms – neither the analogies of the Herpály vessel supports, nor those of the Sonkád hollow-stem object. Insofar as we take into account the metric features and proportions of the above mentioned rings, we can hardly find a serviceable group of vessels, which corresponds to these requirements. The formal realization of the Sonkád object, referred to by Korek as a "transitional" analogy, cannot be compared to these rings. There exists a group of objects however, which we can accept as a hypothetical prototype, and we can find them among the bracelets made of stone.

Regrettably, considering the chronological limits, I cannot refer to analogies in this respect, although if we take into account the conservative nature of the forms of these types, in the knowledge of more distant parallels (ZÁPOTOCKÁ 1984, Fig. 7; GARASANIN 1979, Pl. LXXXII.1), we can venture a hypothesis to search after the origins and function of this type in those circles. This hypothesis otherwise, fits perfectly to our statements on the origins of clay beads as well.

In connection with stone bracelets, we have to deal with another group of clay rings too. In case of certain clay rings with circular or oval cross section, the possibility to interpret them as imitations of jewellery pieces, came up already (HÁJEK 1957, 6; VENCL 1959, Fig. 277). Korek himself refers to the pieces from Barca, in connection with the group "b" defined by him (KOREK 1975–1977, 15). The same type can be found at Korlát (Fig. 5.11), Tállya (Fig. 5.8–9), Tiszafüred (Fig. 5.10), moreover certain fragments from Tiszalök-Hajnalos and Vel'ké Raškovce belong pro-

bably here too. Taking into consideration the Méhtelek pieces, where the ring variant with one flat side occurs (this feature can be observed in other cases too, e.g. on the Tiszafüred piece, referred to above), thus the cross section resembling us to a semicircle, from all this we may conclude to some kind of a prototype made of stone (ZÁPOTOCKÁ 1984, Fig. 7.2–3). Beside the imitation of stone bracelets, there are certain traces of the imitation of classical spondylus bracelets too. These finds, regrettably, are unpublished yet, so we can call public attention to this group only in advance.³³ Beyond bracelet types mentioned so far, there is a group of rings, where the measure of diameter precludes this possibility of function, unambiguously. We find its representants at Sátoraljaújhely (Fig. 5.1), Hejce (Fig. 5.2–5), Sonkád (Fig. 6.3) and among the finds of Méhtelek too. These pieces have various shapes. The cross section of the Sonkád triangular object is identical with the above cited pieces interpreted as bracelets, the majority of rings in this group however, has an oval cross section. The Méhtelek piece may be perhaps an exception, as the ring here was formed secondarily from a potshred.³⁴ On a fragment from Hejce (Fig. 5.5) – a quarter of a ring – on both broken surfaces, traces of horizontal perforation are clearly visible. In this case we may suppose that it served as a pendant, whilst in case of the Sonkád and Méhtelek pieces, beside the improbability of this function, an occurrence of some kind of an interpretation of certain "bone rings" known from the Körös Culture (KUTZIÁN 1944, 87), is not impossible.

2.4. Conclusions

On the basis of the analysis of the listed clay rings, studying the totality of known items and types, it appears, that the general function, similarly to the pendant type dealt with above, may be traced back to the imitation of jewellery types of the period.

Considering the objects' chronological and regional pattern of distribution, we have to study their formal, chronological and cultural context with due circumspection.

Beyond all this, the above mentioned finds however, prove the occurrence of further typological groups of clay trinkets, during the early and middle neolithic periods. Beside the types identified or supposed on the basis of analogies – including even unclassifiable fragments below – we may suppose the existence of other functional groups of clay rings with good reason too, e.g. rings used at weaving (TEOCHARIS 1973, Fig. 123)³⁵, while in case of certain fragments – the finds from Hejce, provide us with further examples – we may not preclude the appearance of handle forms not typical but existing in the period.³⁶

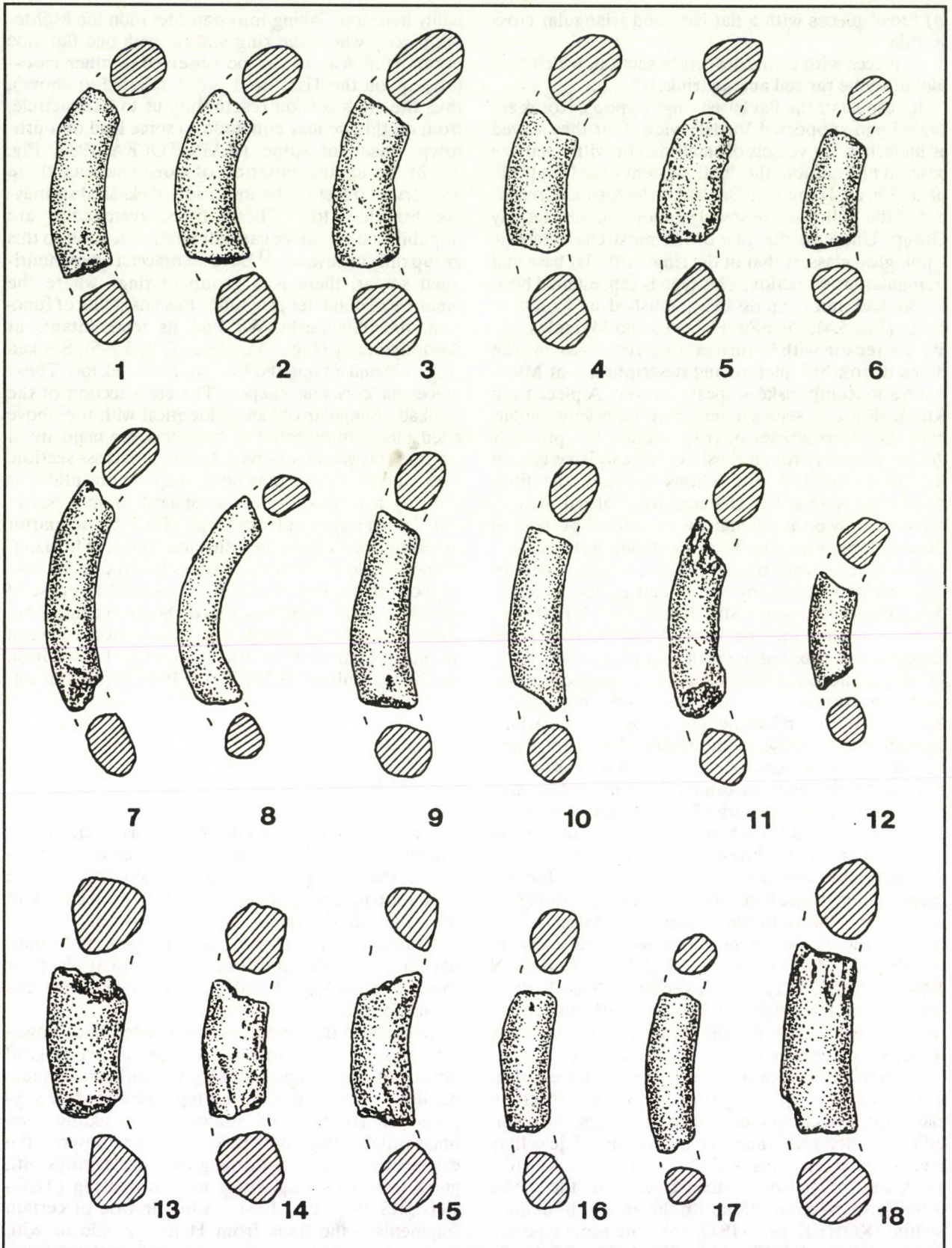


Fig. 7 Hejce-Püspöktábla

2.5. Unclassifiable finds

Beyond the two groups dealt with above, there are fragments, which, as to their forms, are very close to these groups, but one cannot decide with surety, whether they belong to the "animal tooth shaped" pendants, to clay rings, eventually to a third type, or not. They occur in a fairly large number in the finds of Hejce (Fig. 7.1–18)³⁷, but they were found at findsites Sajókeresztúr-Homokbánya and Mihalovce too.³⁸ The formal and metric variety of the Hejce pieces, renders the possibility likely, that there may exist variants of form and whole typological groups belonging to the scope of our study, but unknown to us.

3. The role of clay trinkets in the middle neolithic period

Hitherto we have dealt in details with the types of clay rings and bracelets, whose formal variety and the number of known finds, refer to the presence of "clay trinketry" as an independent unit during the early³⁹ and middle neolithic period. The identification of these groups of objects themselves as trinketry, propounds further questions. According to our present knowledge, instead of answering these questions, we must rather confine ourselves only to their recounting.

Scientific research shows a preference for the study of jewellery-finds, or their raw materials (VENCL 1959; COMŞA 1973; ZÁPOTOCKÁ 1984; WILLMS 1985), as it looks promising there to deal with the analysis of such issues (mining, trade, society, social status etc.), to which the majority of neolithic finds usually serves only as a minor source of information (RODDEN 1970; CHAPMAN 1981; HALSTEAD 1993). Generally speaking, the history of spondylus research (WILLMS 1985) supports this argumentation finely, which, in consequence of the possibility to localize raw material resources, came into prominence from the beginnings of prehistorical researches.

Research in Hungary lays stress on these issues mainly rather from the later neolithic period onwards, and regarding earlier periods, deals with it quite in a theoretical way.⁴⁰ Due to the constraint of scarce

informations, statements are confined only to generalities. Thus the conclusions became common knowledge, that from the early neolithic period we can count with the appearance of spondylus shell as jewellery, moreover the trade of Tokaj obsidian plays an important role, meanwhile their use became general rather in the later neolithic period (KALICZ 1992, 9; KOREK 1989, 55). The situation of researches on other possible raw materials for jewellery, shows an even less favourable picture (KURUCZ 1994, 128). The possibility of a "deficiency theory" comes up as the most obvious hypothesis, in connection with the first appearance of clay trinketry: viz. imitation in clay is a necessary step due to the lack of genuine raw materials. This assumption would evidently be inconsistent with the picture outlined by researches so far, regarding the significance and commercial role of the Tokaj obsidian. Although this assumption arises necessarily, after the survey of available informations, we have to reject it. Mainly the fact, known from researches done so far, contradict this "deficiency theory", the very type of find-complexes – burials – being recorded in a relatively small number, which would be of decisive importance in the judgement of the real number of jewellery pieces.⁴¹ Recent achievements of research support this picture (*ibid.*)⁴², as well as the survey of older finds too.⁴³

Another possibility – though inconsistent with the above hypothesis – is to interpret clay trinketry as an independent jewellery type (KALICZ 1992, 8. Serious doubts arise in this respect, if we take into consideration, that as a result of the analysis of clay trinketry types, it turned out, that almost in all cases, we can trace back these forms to known, really existing jewellery types. As a further argument we can advance the fact, that no typical and *independent* repertory of clay trinketry forms evolved, and moreover we should not forget the rather low quality finish of these pieces. Truth probably hides halfway between theories appearing in extreme forms, and surely certain kind of shortage in raw materials contributed to the emergence of clay trinketry, and possibly we may count with its presence beyond the function as a substitute as well. Further refinement of the issue may add valuable data to the historical-chronological researches of the region.

Notes

- 1 Finds in the Hungarian National Museum under inventory number MNM Ó 84.2. Here I would like to express my gratitude to Ferenc Losits for granting me the right of publication.
- 2 See section 2.5. lower.
- 3 The accessibility and/or publicity of the pieces listed below is quite accidental. In case of more than thirty objects in the Prehistorical Collection of the Hungarian National

Museum, forming a base of this recent study, I can give a full description, while at the evaluation of certain analogues I could only use informations accessible to me. In certain cases I had to form an opinion relying on published pictures or drawings (I am referring to such cases in the description of objects).

- DJM=Damjanich János Múzeum, Szolnok; MNM Ó=Magyar Nemzeti Múzeum, Prehistoric Collection, Budapest; JAM=Jósa András Múzeum, Nyfregyháza; HOM=Herman Ottó Múzeum, Miskolc. Here I would like to say thanks to the fellow researchers of the above museums for their kindness, with which they have helped my work. Other abbreviations in the catalogue: l, L = length, w, W=width, th, Th=thickness, maximum dimensions are in millimetres. Lower case letters refer to fragments, capitals were used in case of full dimensions. I have cited former literature in cases of reference to a certain object. Citation contains respective catalogue numbers of the monograph by KALICZ and MAKKAY 1977, if a given findsite is listed in the latter work.
- 4 According to the inventory book, items 27.1912.87–88. are “fragments of clay animal figurines”. Regrettably the object bearing the number 27.1912.88. cannot be found in the store rooms, but it is unambiguously identical with the object in the publication VISEGRÁDI 1912, 247. no. II. 11, and similarly to the object with inventory no. 27.1912.87. it was probably a fragment of a large sized pendant too.
 - 5 The object was bought by the Hungarian National Museum as part of the Mauthner bequest.
 - 6 In this respect a good synthesis, containing new informations on the above mentioned region is KURUCZ 1989, 44–48.
 - 7 Here I would like to say thanks to Pál Patay and Hargita Oravecz, for permitting me the inspection of the finds.
 - 8 KALICZ and MAKKAY 1972, Chart 2.
 - 9 Zsáka: SÓREGI 1934; Tiszavasvári-Paptelekhát: KALICZ and MAKKAY 1977, 173–179.
 - 10 MNM Ó 69.72.65.; and a photograph in KOREK 1972, Pl. 11.8.
 - 11 We cannot preclude the possibility of a painted surface to improve the quality of finish, but we do not possess informations to that effect.
 - 12 MNM Ó 27.1912.102.
 - 13 MNM Ó 15.1949.8.
 - 14 Literature mentions a cylindrical spondylus bead from findsite Megyaszó-Csákó grave no. 1. (KOREK and PATAY 1958, 35; KALICZ and MAKKAY 1977, 75, cat. no. 225). It is missing both from the finds (MNM Ó 1952.5.1–17) and the inventory book.
 - 15 MNM Ó 1949.15.11.
 - 16 MNM Ó 84.2.297.
 - 17 MNM Ó 84.2.297.
 - 18 MNM Ó 301.1876.81. The Hungarian National Museum acquired the spondylus necklace of unknown provenance as the gift of Arnold Ipolyi (Bishop of Besztercebánya [today Banská Bystrica in Slovakia]). Taking into account the known findsites of the objects under the same inventory entry, we are not far from truth, if we assume a provenance of this necklace near the geographical region treated by us in this study.
 - 19 MNM Ó 15.1949.83.
 - 20 MNM Ó 84.2.298.
 - 21 MNM Ó 84.2.296.
 - 22 On the findsite Tiszaföldvár-Téglagyár (RégFüz 1986, 29), four pointed, star shaped pendants belonging to the “flat” type came to light too. I say thanks to Andrea Vaday and Hargita Oravecz for permitting me the inspection of the finds. Similar pendant is known from a later – Tisza Culture – context too (RACZKY 1987, 74, 9–10).
 - 23 The fact, that in Sátoraljaújhely in the same time both types are represented as pendants, does not contradict this hypothesis. The function connected with weaving is related naturally to the original model of the pendant.
 - 24 We can mention as a complementary information, that a clay imitation of a rare type of spondylus pendants, recorded until now only from the burials at Nitra (PAVÚK 1972, Fig. 40. 5) came to light on findsite Tiszaföldvár-Téglagyár.
 - 25 HORVÁTH 1991, Fig. 4, moreover C¹⁴ dates of the excavations on the track of highway M1, based on the kind informations of András Figler.
 - 26 Tiszalúc-Sarkadpuszta, Tiszaföldvár-Téglagyár.
 - 27 Categories published in this catalogue are identical with those at clay pendants, there are differences only in measurements: l, L=length, oD, OD=outer diameter, iD, ID=inner diameter. In cases when the fragment is too small, given length can be used to estimate diameter.
 - 28 The objects are displayed in the permanent archaeological exhibition of the Hungarian National Museum, room II, showcase 2.
 - 29 Thanks to Nándor Kalicz and János Makkay for permitting me the inspection of the finds.
 - 30 There are only nine objects altogether in the finds, that can be defined as fragment of a pendant or a ring. (HOM 71.19.116, 117, 312, 325, 373, 456)
 - 31 According to the kind verbal communication by J. Makkay, among the finds from his excavations on sites of the Körös Culture period, a number of clay rings occur.
 - 32 As a matter of fact, I think of the difference between the number of sites and finds of the Stračevo-Körös culture and those of Transdanubian-ALP, excavated until now. This question naturally, arises in regards of the earlier pendant type too.
 - 33 Such sites are Tiszalúc and Tiszaföldvár, mentioned in the catalogue. In some other instances – e.g. Dévaványa, Sajókeresztúr, Méhtelek – arises the same possibility, but due to the scantiness of known types, it is hard to tell, in which cases we may talk about prototypes made of stone or spondylus respectively.
 - 34 This piece is rather “annular”, i.e. its inner diameter is not too much smaller than the outer, thus having nothing to do with clay discs, formed otherwise always secondarily too, well known mainly from the finds of the Tiszadob-Bükk culture. The function of these objects is not clear (TITOV 1980, 144–145).
 - 35 A stone ring with a possibly similar function is known from a Transdanubian LP find too (REZI 1993, Fig. 13.6).
 - 36 Vel'ké Raškovec: VIZDAL 1973, Fig. 6.5. Furthermore: Hejce, MNM Ó 84.2.374; Edelény, MNM Ó 1949.15.40, 112, 196.
 - 37 MNM Ó 84.2.287, 283, 288, 289, 376, 384, 385, 591, 631, 632.
 - 38 I would like to emphasize here, that in these cases the problem is not due to accessibility, mentioned above, as the number of items occurring in the finds of Hejce proves it. Actually, there are cases – e.g. Bodrogkeresztúr-Téglagyár (KALICZ and MAKKAY 1972, Pl. 29.5–6, Tarnasadány-Sándorrésze (KALICZ and MAKKAY 1972, Pl. 130.4), Tiszavasvári-Köztemető (KURUCZ 1989, 38) – when from the published photographs, one cannot judge the type (not even with an acceptable, denoted tolerance), and it was impossible to find the object in

- the store rooms. In case of the objects listed here, I could not classify them even after a thorough inspection.
- 39 Clay rings occurring in the Körös Culture are regrettably unpublished, so we cannot analyse them in detail here.
- 40 An example of such a nature is the indication of the Tokaj obsidian resources as an outstanding object of aim, in the chronological-cultural identification of the "Szatmár I" group, in connection with the northward movement of the Körös population. (See: N. KALICZ and J. MAK-KAY, *A méhteleti agyag istenek*. [The clay deities of Méhtelet]. A Jósa András Múzeum időszaki régészeti kiállításának vezetője. Nyíregyháza, 1974; "Szolnok me-gye a népek országútján." [County Szolnok on the high-way of nations] In: Szolnok megye története a régészeti leletek tükrében. Állandó kiállítás vezetője. Damjanich János Múzeum, Szolnok 1982, P. RACZKY, *Újkőkor*, 10)
- 41 See e.g. the "inventory of jewellery pieces" in the Nitra burials: PAVÚK 1972, 56–63.
- 42 According to the communication by P. Patay, a considerable amount of beads, for the time being of unidentif-ied raw material (not clay), were found at Tiszalúc too.
- 43 See e.g. the spondylus necklace mentioned in note 18.

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 1-12