

Gábor Rezi Kató

THE VESSEL FROM SZELEVÉNY-VADAS

The rectangular vessel with strange decoration was found at Szelevény near Tiszazug in 1893, more than a century ago. Since then, it has been published and interpreted several times and by several people. With regard to its noteworthy age, a pure science historical review would prove exciting. Here, however, we would like to go beyond it and, introducing new aspects, to examine the cultural and chronological estimation of this unique piece.

Research history

Albert Kovách, secretary of the 'Tisza-zugh archaeological private society' published the flowerpot-shaped vessel in the *Archaeologiai Értesítő* for the first time (KOVÁCH 1894, 191). It was donated, together with 123 other finds, to the Hungarian National Museum by the Society. A. Kovách sent the objects to József Hampel along with the documentation, the so-called museum diary (KOVÁCH 1895).

The following can be read in this diary about item No. 1721: "Clay vessel, probably a flowerpot, rectangular, its height is 10 cm, upper length 17 cm, lower length 14 cm, upper width 13 cm, lower width 10 cm. The two outer longer lateral sides display two deeply engraved V-shaped lines and dots and originally had lime incrustation since traces of lime can still be seen, the engraved patterns on the two narrower sides also used to hold lime incrustation, one side illustrates a female shape probably between two flowerpots, the other side two trees in leaf. The bottom of the flowerpot is not pierced, the vessel is burnt to a reddish colour. It was found at Szelevény-Vadas during turning the sand for vine planting in the year of 1893. Donated by Ernő Tarcsányi engineer." The date is 23. January, 1894.

This description is nearly identical with the first notice published in the *Archeologiai Értesítő*. J. Hampel also mentions the find as a new acquisition of the museum in 1897 (HAMPEL 1897, 83), although the vessel was not entered into the inventory book of the museum. Being aware of the fate of museum articles, a specialist will not be surprised by the fact that it was actually taken into inventory no earlier than in 1950.

Soon after the first publication, P. Reinecke analysed the find grouping it into the "ribbon-ornamented pottery cultural circle" (REINECKE 1898, 255–256). It was in the same volume of the *Értesítő* that a drawing of the

vessel was published (fig. 2. 2–3).¹ The next stage in the history of the object, as far as we can tell, was the book 'Az őskor embere és kultúrája' (The prehistoric man and his culture) by Jenő Hillebrand and Lajos Bella. They mention the vessel among finds from the Neolithic and named Szelevény-Menyasszonypart as the place of discovery, which was certainly a mistake (HILLEBRAND—BELLA 1921, 140). It can be seen on the drawing published here that the injured part of the vessel had not yet been completed.

After a long interval,² the object is mentioned again in entry No. 26 of the inventory book of the National Museum in 1950. József Korek, who entered the items into the inventory, added after the entry containing the 17 items from Szelevény: "Old material from the 1880's. Some of them might already have been entered into the inventory. They come from the collection of the Tisza-Berettyő Anti-inundation Society."³ Two things deserve mentioning with regard to the inventory. First, József Korek gave the chronological position of the objects so he attached the vessel No. 8 to the Copper Age. The second, that it turns out from his description that the injured, fragmented parts of the vessel had already been restored.

Nádor Kalicz set up a synopsis of Prehistoric settlements in the Tiszazug in his university thesis where he carried out a detailed analysis of the Vadas find:

"A great number of sherds from the Pécel culture can be found in the sand soil of the vine yards around the Hottinger farm. The flowerpot-shaped vessel from Vadas was probably also found at this site... Reinecke groups the vessel, based on its decoration and shape, into the circle of the ribbon-decorated pottery. Lajos Bella also assigned the vessel to the stone age. Finally, on the occasion of setting up an exhibition in the Szent-es Museum, János Banner placed it among the relics of the Pécel culture." (KALICZ 1957, 47–48)

N. Kalicz did not oppose the respected professor, to whom he wrote his thesis, and listed Vadas among the sites of the Pécel culture. At the same time, the quoted text contains his delicately but unambiguously expressed estimation according to which the vessel would belong to the Neolithic instead of the Copper Age.⁴

N. Fettich's article on Prehistoric wagon models appeared in 1969. The author deals in details with the Szelevény find, which he assigned into this category.



Fig. 1 1-2: The ornamented sides of the vessel

He was the first who carried out a comprehensive evaluation of the vessel and the depictions:

"The depictions all around and the wagon itself are definitely closely related. The representations, reduced in scale, refer to depictions painted or drawn over the sides of the original wagon. The representations on the two longer sides reveal for us what the original cargo of the wagon was: the dead destined to the womb of the goddess. Accordingly, the small wagon model from Szelevény, together with all its depictions, is nothing else than the representation of a burial in a reduced scale" (FETTICH 1969, 37).

Based on the lime incrustation technique that he himself stressed, he dated the item from the "Bronze Age I" period.

In "Clay gods" published in 1970, N. Kalicz expounds his point of view in relation to the vessel. He found its origin in the East-Hungarian Linear Ceramic Culture (Szakálhát group) (KALICZ 1970, 35). The same chronological analysis was supported by the comprehensive work on the Neolithic of the Hungarian Plain (KALICZ-MAKKAY 1977, 156). The standpoint, which crystallised by the 70's, offered a final evaluation of the vessel for international research.⁵ This may have caused that J. Korek, who had originally assigned the item to the Copper Age, grouped the vessel among the relics of the Linear Ceramic Culture in catalogues and exhibitions from the beginning of the 70's (KOREK 1973, 36; KOREK 1977, 24).

There is one more reference to the Vadas find in the technical literature that needs commentary. Marija Gimbutas published a major Prehistoric review under the title "The Language of the Goddesses". She dealt in details with the figural representation on the vessel and, accepting the dating of the pottery from the Neolithic,⁶ added her own theory (GIMBUTAS 1989, 239). We shall later return to her views.

Chronological evaluation of the find from the depictions and the decoration

It is evident from the above research history that there is hardly any starting point for the cultural and chronological grouping of the vessel outside itself. According to the diary of the Tiszazug Society, the vessel was found together with "other pieces of pottery" but nothing is known about the latter. I see relatively little opportunity to correctly identify the site since the above mentioned diary is the only source. N. Kalicz only suggested that it might be identical with the site yielding Pécel finds at the Hottinger farm. Scientific methods might be tried (petrology, the analysis of incrustation material) but comparative samples would be necessary. All in all, the greatest help for chronological definition is provided by the analysis of the depictions and the decoration. The most promising of them is the figural depiction, which has become the main theme of the vessel (Fig. 1. 1).

We have already cited A. Kovách's description who first interpreted the figure standing between 'flower-

pots', in his view, as a woman. Reinecke wrote the following about the depiction: "The shape depicted on the well preserved side is astonishingly similar to the engraved figure on the ceramic with ribbon ornament preserved in the Zagreb museum... At both human shapes, the body strongly narrows at the thigh, which is called an hour-glass waist shape in archaeology... The human figures on the two vessels only differ in the bending of the arms." (REINECKE 1898, 255).⁷

The first detailed scientific analyses of the depictions were made by N. Fettich and N. Kalicz with very similar results. "The depictions of the backside and frontal narrower side are related in both showing trees together with animals on the front,⁸ and a female shape on the back. Being conscious of the fact that no profane representation existed in the Prehistory, in both cases I see the depiction of the holy grove with the goddess herself on the one side and the sacrificial animals kept in the grove on the other side." (FETTICH 1969, 36).

"The shape of the highly stylised goddess probably depicted in a dress, perhaps a skirt, fills nearly the whole surface of the vessel. She keeps her arms uplifted in a blessing or receptive position. She is encircled by small trees. On the other narrow side of the vessel, there are only trees. The trunk and the branches are composed of branching lines while the foliage is built of a bunch of tiny circles. This is the first artistic composition from Hungary. The goddess was depicted among trees, maybe in a holy grove." (KALICZ 1970, 35).

The female shape described by Kovách has ultimately become a goddess⁹ depicted among trees in a "holy grove". Trees were first mentioned in the description of the fragmented side by A. Kovách where he spoke of "two trees in leaf" (KOVÁCH 1895, 191). N. Fettich seemed to see animals kept in the holy grove in his interpretation thus spreading the interpretation to the depiction of the other side. The "goddess in the holy grove" definition is a generally accepted standpoint in the research.

It was M. Gimbutas who dealt with the interpretation to the same details. She examined and interpreted the depictions within her own religious and art historical theoretical system sometimes with delicate, sometimes with rough and wilful misinterpretation. To sum up, M. Gimbutas stated the followings concerning the figural depiction: A V-shaped arm marked by claws or a wing is attached to the hour-glass shaped body. The head is represented with three lines. Three more lines can be seen in the lower triangle (womb) of the shape (GIMBUTAS 1989, 239-240).

It can be told even without analysing the elements of Gimbutas's system of symbols that the claw, the wing and the three lines all play an important role. It is in everybody's liberty to interpret the fingers as claws or the arms as wings (and everybody may decide to find this argument convincing). Nevertheless, it is a hardly acceptable practice that she omitted from the redrawn picture in her publication the transversal engravings in-

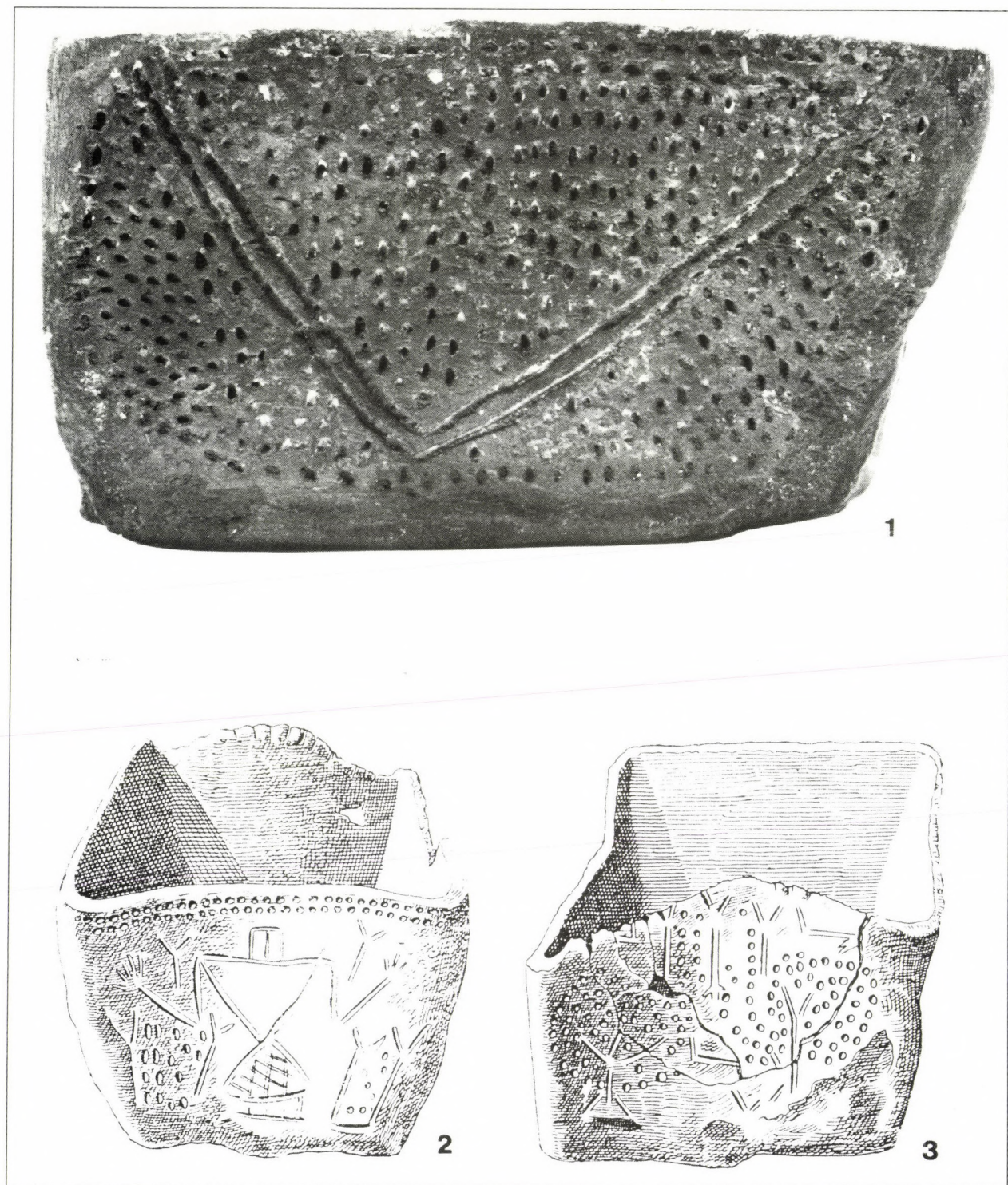
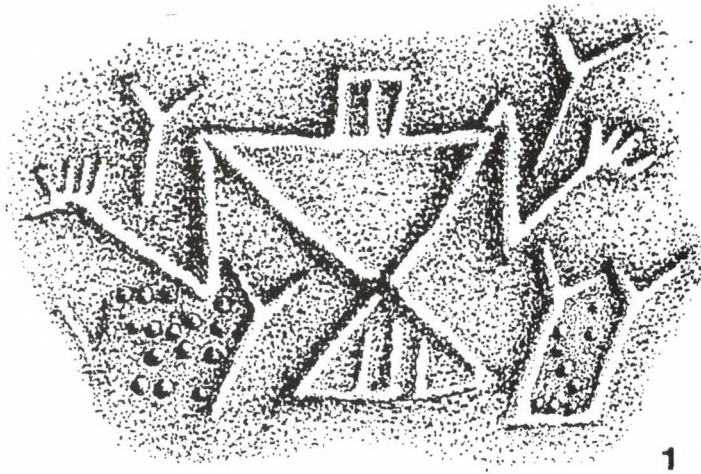


Fig. 2 1: The ornament of the longitudinal side; 2–3: Drawings of the ornamentation from 1898

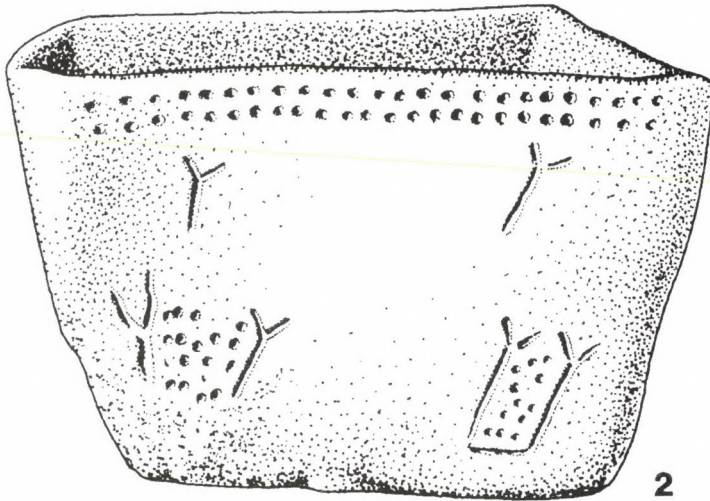
side the lower triangle of the body. The remaining three lines again support her own theory (Fig. 3. 1).¹⁰

Following the interpretation of the attributes of the figure, Gimbutas only mentioned the other depictions and details. According to her, the Y signs with the dots

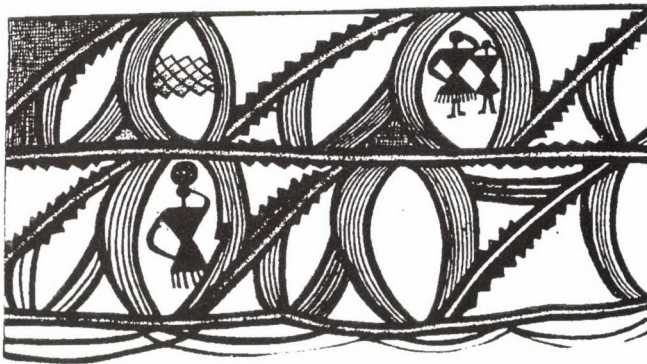
symbolise the growing plants and the rain. However, it is a merit of the publication that, disregarding Reinecke's analogue, this is the first interpretation that enlists a large number of analogues (GIMBUTAS 1989, Fig. 373, 1–2; Fig. 378, 1–4). This list makes it ob-



1



2



3



4



5



6



7

Fig. 3 1: Redrawing in the publication by M. Gimbutas; 2: The retouched figure; 3-7: Analogue delineations from Cucuten-Tripolje culture

vious that the closest analogues of the depiction of the "goddess" both in space and in time can be found in the Cucuteni-Tripolje cultural circle (ELLIS 1984, Fig. 30; MASSZON—MERPERT 1982, LXXIV 1–7, 9–13, 15–20; LXXVII, 37; XCII, 14). At least these are the closest ones we know to date (Fig. 3. 3–7).

After the summary of the earlier analyses, let us examine the depiction itself in more details. First, we must state that, contrary to earlier analyses, it does not seem certain that the depicted shape is a woman since sexual characteristics cannot be detected,¹¹ which would be rather unusual especially for a Neolithic depiction.¹² The same can be said about the fashioning of the figure as of the vessel itself: both the outlines and the decoration are poorly executed, a slipshod piece of work. Although the depictions were sketched with scampish lines, the details are well composed. Following the lines, the succession of incisions seems to unfold. It is thus most probable that on the side under discussion the human shape was first delineated¹³ then followed by further details. Similarly, the sequence of the engraving can be traced from the individual incisions. The composition of the head, a square divided with a vertical line in the centre, is a rather unusual feature, although formal analogues can be found to it among the head shapes of the idol figurines of the late Cucuteni-Tripolje (Usatovo) circle (MÜLLER-KARPE 1974, Taf. 674 C.2; Taf. 676, 1, 3; Taf. 678, 2; Taf. 680, 1–4, 7–8, 11). The same applies to the composition of the right shoulder with irregularly sliding lines. Although the scanty feature could correspond to the poor execution of the whole vessel, a closer examination of the junctions of the lines and their character may imply that this type of shoulder formation may have some significance especially since there are analogues with a similar implication (MASSZON—MERPERT 1982, LXXIV. 12; GIMBUTAS 1989, Fig. 377, 2).

Four vertical lines were drawn in the position of the feet, as it could clearly be seen in the first publication and somewhat less clearly on photos made recently.¹⁴ Regarding the fact that the arms were depicted with a single line, the same may be true for the feet. An explicit solution is offered to explain the multiplication of the feet with the suggestion that the lines do not indicate feet but the tassels of the dress, which is supported by good analogues in the relevant circle (Fig. 3. 3, 4, 7) (MASSZON—MERPERT 1982, Tab. LXI, 20, LXI, 20, LXXIV 1–5, 7, 13; GIMBUTAS 1989 Fig. 378, 6).¹⁵

In the interpretation of the Y-shaped signs as a tree or a sprouting plant, there is no significant difference between N. Fettich, N. Kalicz and M. Gimbutas although she added that the dots may mark rain. A closer examination of the depiction refuses these assumptions. First, it can clearly be seen in all the publications that the stem of the two Y shapes at the bottom on the right side are connected with a line. The same can undoubtedly be observed on the left side as well, although it is more fragmentary here. It can be stated that the lower

Y-shaped marks are connected two by two. The same is supported by the dotted pattern between the signs as filling elements. This fact further weakens the rather insufficiently argued 'tree' character of the Y shapes. A. Kovách already noted the connection between the each two signs since the depictions that he described as "flowerpots" (KOVÁCH 1894, 191) actually refer to this sign group. It can be added that there used to be a narrow connecting line between the sign groups on the two sides which was still indicated on the drawing from 1898.

The next step is to interpret the depiction composed of the Y signs as an independent composition. The picture completed in this concept displays a regular square composed of the signs (Fig. 3. 2). Drawing an imaginary line between the upper and lower Y elements (columns), we get a closed structure bordered with 'walls', a simple construction with square-shaped ground plan. If all the elements of the depiction are regarded, including the upper, irregular, double dot pattern,¹⁶ the construction will get a roof. It can be debated how to interpret the elements of the closed unit, the construction,¹⁷ still I think that this interpretation is not simply another subjective fiction but a logical solution of the depiction and it can be supported. Later we shall return to the function of the 'construction' and the interpretation of the figure inside it.

With the analysis of the depiction facing the figural side, we get confronted with a greater problem. N. Kalicz could not add anything to Kovách's solution of "trees in leaf". Fettich assumed to see animal shapes, while Gimbutas did not even mention this depiction. It is not so much the fragmentary state as the tangle of drawings that tempts the viewer to give up deciphering it (Fig. 1. 2).

As it has already been mentioned the objects was 'restored' sometime between 1921 and 1950, which means it was completed. It is not known where and when it was done but it certainly was not a success. In my opinion it made the vessel so much asymmetrical that it does not fit the original shape.¹⁸ At the same time, the completion resulted in smaller or larger changes in the depiction under discussion. It was N. Fettich who first noted and emphasised it (FETTICH 1969, 34). The alterations could be identified from the comparison of the drawing in first publication (Fig. 2. 3), Fettich's own "dashings" (FETTICH 1969, Plate II) and recent photos (Fig. 1. 1, Fig. 4. 2). It cannot be decided if the third (left side) Y sign in the drawing from 1898 disappeared in the course of restoration or the original drawing was inaccurate.¹⁹ There are smaller, less conspicuous changes in the foliage of the left side tree where the location and the number of the dots changed. This also might have led the researchers' eyes astray.

Similarly to the first depiction, the sequence of the incisions can be traced here, too. In my opinion, the dotted decoration of the foliage of the tree was first made followed by the Y shaped signs and other lines. It is thus justified to examine this element in itself, re-

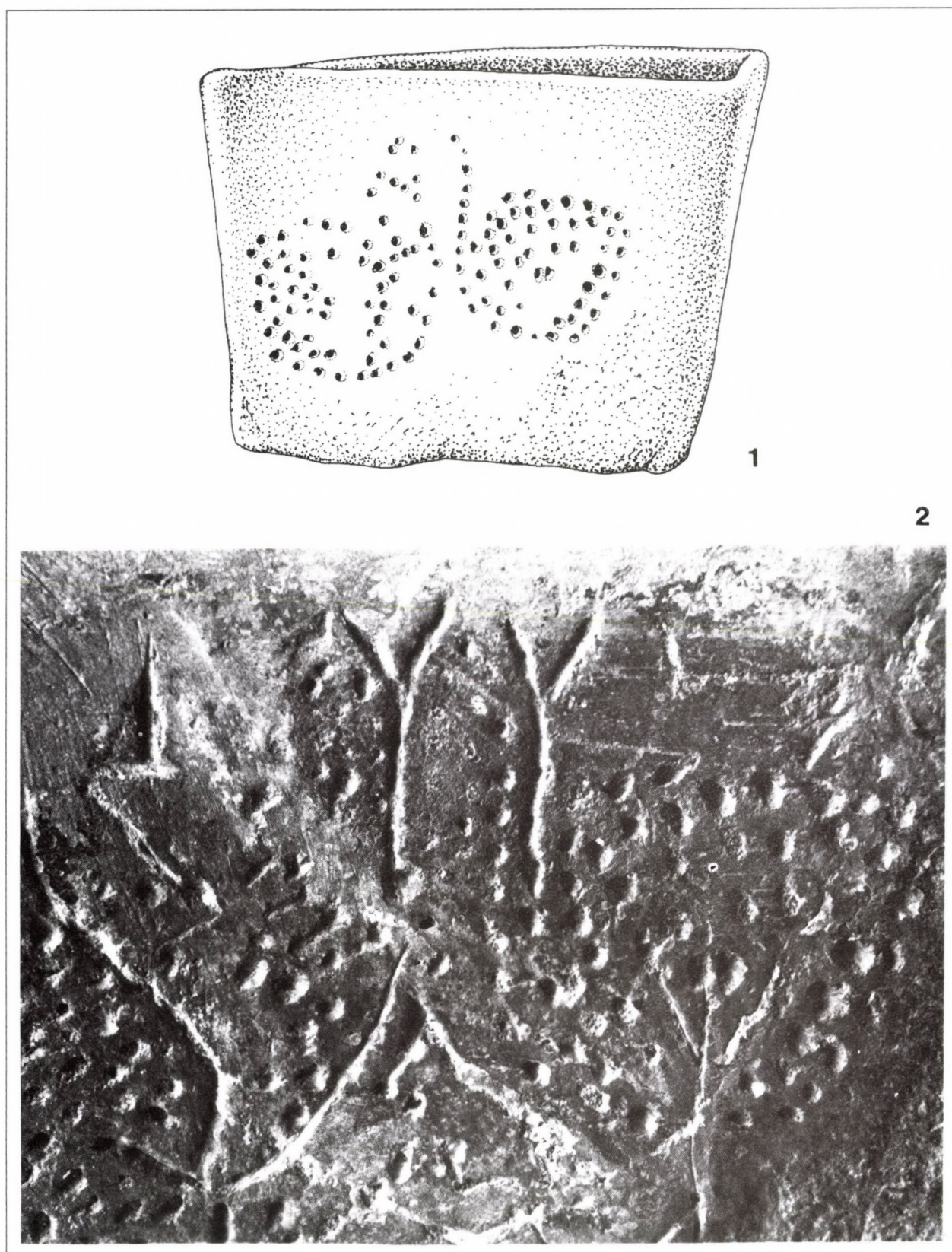


Fig. 4 1: The delineation of the retouched double-spiral; 2: The enlarged detail photo of the figure

moved from the composition, using the drawing which illustrates the condition in the last century and the recent picture (Fig. 4. 1).

Regarding the depiction this way, only the punctured dots, it can be seen that the two foliages are connected with an arched dot series. The line starting upwards from the right side foliage passes between the two Y signs. At the left foliage this line is not unambiguous on recent photos (due to the completion) but is clearly visible in the drawing from 1898. In my view, it can also be seen in the smeared depiction that the two foliages actually form a spiral connected with an upward arched loop. So we cannot speak of trees and foliages. The object that appears is well known among the finds of the Copper Age under the name double spiral.

The discovery of the depiction of the double spiral opens a new vista in the interpretation and mainly in the cultural and chronological grouping of the vessel, and this disturbingly fragmentary, complex "back side" may serve as a standpoint. Before, however, re-examining the vessel in this context, we must return, for the sake of totality, to the depictions "above" the spiral. Their meaning is regrettably not clear, the completion changed them a lot. In the case of several lines, it cannot be decided if they made parts of the original depiction or are posterior incisions. The comparison of earlier drawings and up-to-date picture analysing methods may help to some degree, still I am not convinced if ever the original meaning of the depiction can be found out. Perhaps, we can start from the facts that the emphasised, unambiguous details are composed of the same Y shapes as on the opposing sides.

Research has focused on the study and chronological definition of the double spirals in the last few decades (PAVELČIK 1979; KUNA 1981; PARZINGER 1992; MATUSCHIK 1996). N. Kalicz dealt with the problem in his study on the Balaton group (KALICZ 1982, 12–14). Reviewing the appearance of double spirals in Central Europe, N. Kalicz dates their spreading in the early phase of the Balaton-Lásinja (I) culture (so-called 3rd copper horizon) together with the Csáford-Stollhof type disks and with further reference to the large sized gold pendants appearing in phase "A" of the Bodrogkeresztúr culture. N. Kalicz separated the copper spiral pendant with hooked terminals from the double spirals and assigned them to the "Balaton II–III" period²⁰ mentioning, at the same time, that some researchers assume the find units with double spirals to be younger, grouping them in a 4th copper horizon within the Lažnany-Hunyadi-halom-Salcuța IV. period (KUNA 1981).

It would be difficult to discuss the chronological problems of a group from a drawing on a stray find, so with the broad chronological frame set up from the above assumptions, the vessel can be dated on the base of the depiction of the double spiral from the older phase of the Bodrogkeresztúr culture to the end of the Hunyadi-halom period.²¹ In the followings we shall try to narrow this interval.

Beside the chronological importance of the double spiral, other circumstances also seem to support the dating of the vessel from the Middle Copper Age. Research has only touched upon the decorations on the two longer sides of the vessel (Fig. 2. 1): "The meaning of the triangle open on one side ...is clear: the simplest symbolic representation of the earth goddess." (FET-TICH 1969, 36). "The two longer sides are decorated with simple linear pattern and circles." (KALICZ 1970, 35).

The interpretation of V-shaped depictions as female or fertility symbols is a self-evident idea in Prehistoric research, although decoration of the same manner is not common on vessels. At the same time, this type of depiction is known, in the relevant phase of the Copper Age, on another type of objects, the Csáford-Stollhof type disks, which can be found together with double spirals. It can be observed on the eponymous Csáford disks (MAKKAY 1985, Fig. 5, 21–22)²² and on one of the so-called "Jankovich-disks" (MAKKAY 1985, Fig. 1, 2)²³ and also on the Apostag disks (MAKKAY 1985, Fig. 4, 20). The triangles composed of 2, 3 or 4 rows of dots are obviously not simple decorations, they convey a symbolic meaning on the disks as well. It can always be observed on these objects that the V-shaped decoration is closed with 2 or 3 rows of pouncing along the edges of the disks. On the Vadas depiction, the punched decoration under the V sign is just for filling in the surface, it is not arranged in a composition. The punches within the V-shape, however, form a regular vertical line, while at the edge of the vessel, a double row of regular, horizontal punching can be seen as if closing the composition. The problems of dating of the disks, regrettably, does not help to narrow the chronological frame, although it confirms it (VIRÁG 1987; PAVELČIK 1979; MAKKAY 1976; KALICZ 1982; KALICZ 1991; PARZINGER 1992; RACZKY 1995).

Astonishingly, research has not paid too much attention to the formal characteristics of the vessel apart from its interpretation as the only wagon model. "Rectangular vessels were already made from the Neolithic to the Bronze Age" mention the authors with regard to the description of Sarmatian rectangular vessels citing the Vadas find (VADAY—MEDGYESI 1993, 80). The fact is true but it should be noted that it is not a simple task to find a formal analogue to the object under discussion. N. Kalicz dealt with rectangular vessels in more details in connection with the Paszab, then later the Tiszafüred finds (KALICZ 1958; KALICZ 1979–1980). He stated that the type is characteristic of the Hunyadi-halom period, although antecedents can be found in the Bodrogkeresztúr culture. Although many characteristics of the rectangular vessels of the Hunyadi-halom period are missing from the Vadas vessel (carinated rim, foot, rib ornament), still the finds of this period show the closest similarities in their proportions. First we may mention the Tiszafüred vessel published by Kalicz (KALICZ 1979–80, Fig. 2. 10)²⁴ or the Tiszalúc vessel published by P. Patay (PATAY 1987,

Fig. 17. 1). Both are twin vessels dated from the Hunyadi-halom period.²⁵ A further analogue is the small vessel which was inventorized in the National Museum as a stray find in 1936 (Fig. 5. 2).²⁶ According to the inventory book, it was found at Csabony- (today Szalkszentmárton) Bölcshalom. In my opinion, it was made in the Middle Copper Age.²⁷ It is a good formal analogue in its proportion to the Vadas find, against its simple perfection and small size.

Although the Vadas vessel does not show any sign of an inner (partitioning) wall, the comparison of the enlisted items (Table)²⁸ may serve as a convincing argument for the formal parallelization with the discussed find. Without the knowledge of exact measurements (thus omitted from the Table), another item from

A partly lost object

At this point, the list of evidence concerning the chronological grouping of the Vadas find could have been closed, but parallelly to the analysis of the vessel, in the course of the continuous checking of new data, produced an important new element to the problem, which significantly corroborates the above stated.³²

An important source regarding the find is the Tiszazug Museum diary sent to the National Museum by A. Kovách, which can still be found in the Archives of the museum (KOVÁCH 1895).³³ This was one of the possible sources which might have contained unpublished new information concerning the find or the site. Regrettably, the diary is rather laconic, the only pro-

Measurement	Vadas	Index A →	Index B ↓	Tisza-lúc	Index A →	Index B ↓	Tisza-füred	Index A →	Index B ↓	Csabony	Index A →	Index B ↓
1	140	1.4	—	140	1.4	1	180	1.6	0.77	55	1.5	2.5
2	100	—	—	95	—	1.05	110	—	0.9	35	—	2.8
3	175	1.7	—	200	2.1	0.87	300	2.7	0.58	80	2.2	2.1
4	130	1.3	—	130	1.3	1	160	1.4	0.81	60	1.7	2.1
5	90	0.9	—	125	1.3	0.72	200	1.8	0.45	45	1.2	2

Pécska may be mentioned from the same period showing similar proportions and also without inner wall (ROMAN 1971, Abb. 36. 1).

There is one more technical characteristic concerning the vessel which may bear importance for the specification of chronological limitations. L. A. Horváth dealt in details with the characteristics of the stab and drag decoration differentiating the imitation (local) finds of the Bodrogkeresztúr culture and the real finds of the culture of stab and drag ornament (in the followings: SDOC) (HORVÁTH 1993, 35–36; HORVÁTH 1994, 80–83). The author assumes the stab and drag decoration in graves 137²⁹ and 142³⁰ of Basatanya (Fig. 5. 1) of SD feature but local products, actually confirming P. Patay's earlier views (PATAY 1980, 106). We can tell, agreeing with the above, that the incrustation technique observed in the Szelevény vessel is identical to the one applied on the cited finds. The decoration used here is not a real SD technique but it cannot either be compared with the decoration system generally used in the Bodrogkeresztúr culture. Not a simple straight line was drawn during the incision of the lines in the Szelevény depictions, which can best be seen in the V lines on the two longer sides but present everywhere, but regular punches were inserted which affected the line decoration only in its depth and offered a better surface for the lime incrustation.³¹ With regard to the cited finds, the Szelevény vessel can be connected to the younger phase of the Bodrogkeresztúr culture (PATAY 1974, 60–61).

missing trace seemed to be entry No.1722. following the "flowerpot". A. Kovách wrote the following about it:

"Cup, one handle, incised semicircular concentric pattern on the black neck and the belly with traces of lime incrustation, height 9 cm, diameter of the belly also 9 cm, and the diameter of the mouth at the top 5 cm. Found at Szelevény-Vadas, similarly to the former one in 1893. Donated by Ernő Tarcsányi."

The date is 15. February, 1895.³⁴

Neither in the deposit nor in the documentation could I find the cup. I reviewed all the finds from Szelevény in the deposit listed in the inventory books. It took a long time to find item 1962. 1. 23 (Fig. 5. 3) as it also held an older inventory number and it was placed according to the latter.

The following is written about the object in the inventory book from 1962: "Cup. Globular belly, conical neck, one handle. The surface is decorated with incised lime-encrusted lines. Location: Szelevény-Vadas. Age: Early Bronze Age." The old inventory number is noted beside it in pencil:³⁵ 307.1876.1175. Hoping for further information I looked up the given entry number in the inventory book from 1876 which generated yet another problem: the relevant inventory number did not refer to the Vadas find, it marked a "figia from clay" from Szelevény-Ördögárok.³⁶ As the name Szelevény-Vadas is conspicuously written in china ink into the inside of the vessel, there is no doubt that the two locations are different. At the same time, the last numbers of the old inventory number are not clear, they may

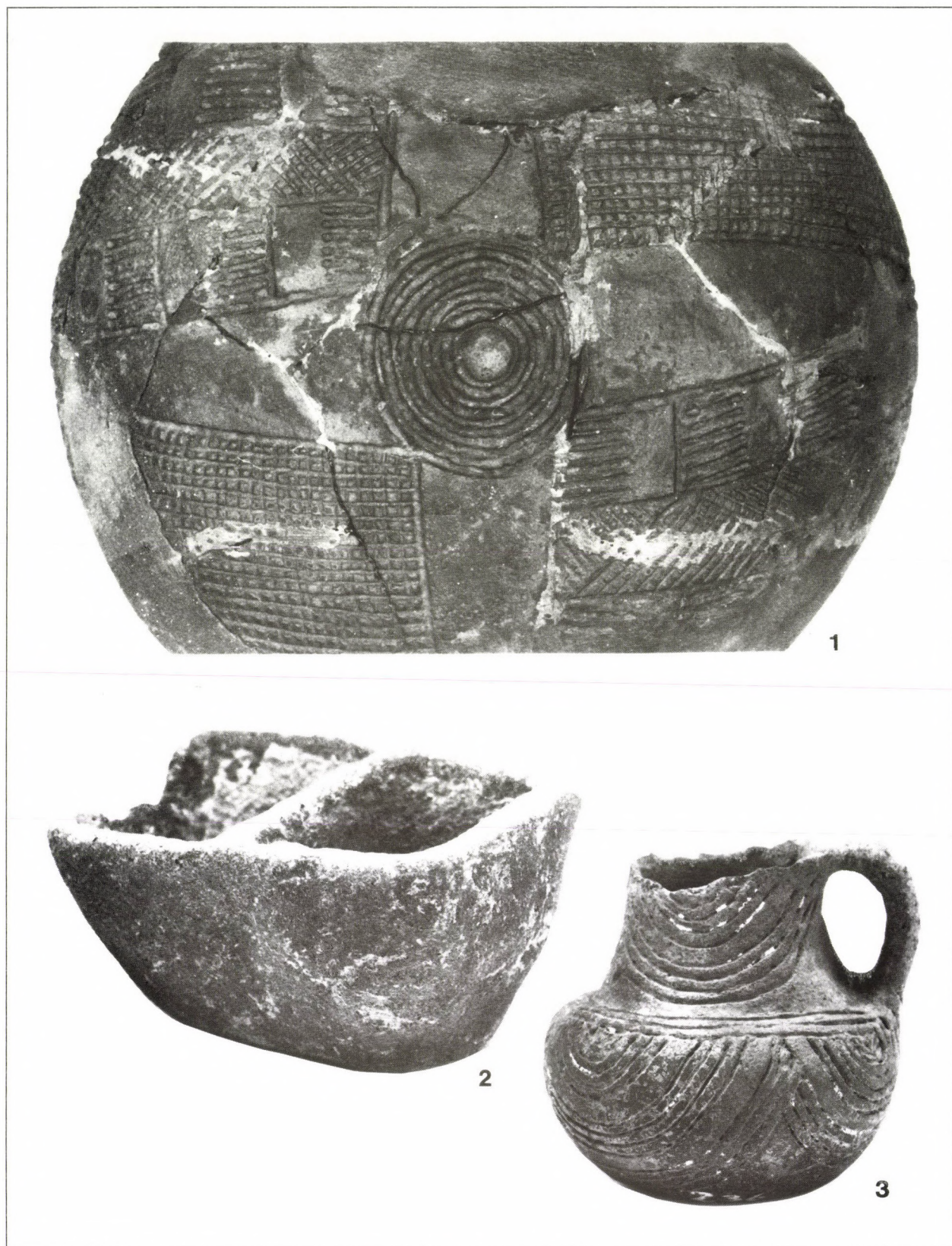


Fig. 5 1: Ornamentation of the pot from Polgár-Basatanya, grave 142.; 2: Small vessel from Szalkszentmárton; 3: Jug from Szelevény-Vadas

have been misread. I tried to confirm this so I checked all the items from Vadas under the serial number 307.1876. It was not difficult since there are only two of them. Number 1255 is a fragment of a vessel, No. 1321 is a clay ring. So none of the items from Vadas under this serial number can be identical with the jug.

In my reading, the hardly legible old item number is not 1175 but 1722. It is even more probable since the same number is clearly visible in the inside of the vessel beside the location. But according to the inventory number from 1876, serial number 307. does not contain an item number 1722!

As No. 1722. seemed familiar, I checked again the Tiszazug diary where it turned out that the formal description and the measurements of cited second find from Vadas (item number 1722) fits the jug.³⁷ So the picture became total. Somebody wrote the numbers 307.1876 mistakenly on the object but left untouched the No. 1722 which is a reference number in the Tiszazug diary. Accordingly, the small jug from Szelevény, similarly to the vessel, became a solitary find for a century. The consolidation of the two objects from Vadas is unquestionable in the light of the above. I may risk saying even without a graphological specialist's opinion that the name of the location on the libel from the last century, which is still kept within the rectangular vessel, and the china ink inscription inside the jug were written by the same hand.

Nevertheless, the jug itself has not been unknown for the research. N. Kalicz dealt with it from the respect of the Tiszafüred finds³⁸ and he dated the object exactly to the period which we designated for the rectangular vessel: The stab and drag decoration appears and becomes dominating in the Balaton II. group. It is perhaps the one-handed jug with stab and drag decoration, a stray find from Szelevény which represents this period." (KALICZ 1979-80, 52)

The object gained an important place in L. A. Horváth's dissertation as well (HORVÁTH 1993, 49-50, Plate 58). He discussed the problems of the location:

"...its location is, according to the old inventory book of the museum, Szelevény-Ördögárok... It cannot be told why, but at taking it again into inventory, the Szelevény-Vadas site is introduced as the location."³⁹ Although he did not get any further with the identification, Horváth, citing Kalicz's earlier dating grouped the object among the few authentic finds of the SDOC in the Hungarian Plain.

Regarding the connection between the two objects, the question naturally arises if the two finds from the same site but found as stray finds can really be considered as belonging together both in a chronological and a cultural sense. I am convinced that the circumstances of the finding,⁴⁰ the technique of decoration going back to the same basis and the connection long supposed by research between the late phase of the Bodrogkeresztúr culture (and the Hunyadi-halom period) and the SDOC suggest that there is a chronological connection. It is important to state this since L. A. Horváth in his earlier

cited study seemed to annihilate the base of an earlier supposed connection with differentiating between the real and local stab and drag techniques. "So the inner chronological succession of the Bodrogkeresztúr culture remains an unsolved question since there is not yet direct evidence for the coexistence of the SDOC in Transdanubia and the Bodrogkeresztúr culture" (HORVÁTH 1993, 45).⁴¹

I think that with connecting the Szelevény finds, the latter thesis seems to lose validity even if it cannot unilaterally be proved⁴² that the jug was produced by the *Transdanubian SDOC*.⁴³

Summing up the above, the chronological situation of the rectangular vessel from Szelevény can be defined with the help of comparing the various aspects. The double spiral depiction used as a starting point was only enough for setting up a rough chronological frame. Within the given interval, the role of the V decoration referring to the earlier period (Bodrogkeresztúr A-Balaton-Lasinja (I)) is less defining than the observations suggesting a younger period (rectangular shape, SD character technology, SDOC import). Accordingly, the *object can be dated with great certainty into the transitional phase between the end of the Bodrogkeresztúr culture and the Hunyadi-halom period*.⁴⁴

Regarding cultural identification, I find the lines described in the course of the analysis of the object definitive: both the shape of the vessel and the technique of the decoration suggest local execution so a possible origination from the SDOC, suggested by the analysis of the jug, cannot be supported. The object is the make of the Bodrogkeresztúr culture or of the Hunyadi-halom culture which is different from the former to an uncertain degree (PATAY 1987, 114; HORVÁTH 1993, 186). The symbolism of the depictions reveals a wide cultural interrelation which fits excellently our knowledge about the contact system of the period (KALICZ 1980; RACZKY 1988, 33-51; HORVÁTH 1993, 35-56, 202).

The place of the Vadas find in the Copper Age cults

Considering the above, we can establish several things that considerably contribute to our knowledge of the relatively unrevealed spiritual-religious life of this period of the Middle Copper Age and its material culture (PATAY 1988/89; KALICZ 1979-80, 55; HORVÁTH 1993, 180-187).

The shape itself suggests not a routine function. With regard to the rectangular vessels, research usually accepts their cultic character (KALICZ 1979-80, 43; HORVÁTH 1993, 145-146). This supposition is supported by the fact that the vessel was found in a rather good condition as compared to its size, shape and structural characteristics. So it was probably not a simple settlement find which is reinforced by the similarly good state of preservation of the SDOC jug from Szelevény. Concerning the latter, L. A. Horváth already discovered that it had come from a grave (HORVÁTH 1993, 54) which can be further specified

saying that sacrificial pits of cultic purposes from the Middle Copper Age can also be supposed as a possible feature (BÁNFFY 1985; KÁLLAY 1990; HORVÁTH 1990; MAKKAY 1980–81). Both suppositions are supported by the sacral characteristic of the depictions, the quality of execution and the shape of the vessel. The Szelevény vessel must have been a ritual object prepared for a single sacrificial event.

Finally we must go back to the contextual interpretation of the depictions. During the analysis of the figural side, we have stated that a figure with uplifted arms is depicted in some kind of a "closed space" (house, shrine, sacrificial spot). The known house types of the period do not contradict the construction depicted here (KALICZ 1982, 9; PATAY 1987, figs 3, 5, 6; HORVÁTH 1993, 97–102). We have also stated that the sex of the person earlier interpreted as a goddess cannot be decided and it is also not probable that it would be a deity. I would also defer from interpreting the arms as praying. Considering the analogues they would indicate some ritual event. In the case of analogues listed with reference to the figure, it can often be observed that people are depicted probably during a ritual dance or some similar action (Fig. 3. 1, 4, 7) and they are not depictions of deities.

M. Eliaide says the following concerning the early religion in Crete: "The sacrifice could be presented just as well on a hilltop as in the shrine of a palace or in a private house... It is from the beginning of the Middle Minoan Period that we have evidence of shrines on higher elevations; they are modest shelters at the beginning, later small buildings... The so-called agrarian or vegetation myths are more complex and as yet mystical. Against the rural origin, these customs were inserted in

rites of the palaces, at least in a symbolic way. Mainly, however, they were offered in sacral shelters. Judged from the convex engravings, the vase paintings and reliefs these rites included mainly dances, the round-taking of sacral objects and purifying rites." (ELIADE 1994, 117).

Keeping the moderate the limitations of adaptation, a similar rite may be supposed in the events depicted on the Vadas vessel and the object itself must have been a requisite of the rite.⁴⁵

Regarding all the above, it does not seem an exaggeration that the Szelevény vessel is one of the most important relics and sources of the religious concept of the Middle Copper Age. The new interpretation of the vessel and its depictions is an important new data for the research because it emphasises once more: the abrupt quantitative decrease of cultic archaeological objects in the Middle Copper Age (BÁNFFY 1987, 15–16) is not simply the result of an ideological change. I think that contrary to the cultic and symbolic system penetrating in all spheres of life during the Neolithic, the ritual, religious events step out of the common profane sphere in this period and appears in cultic places (shrines sacrificial spot, bothros) and objects. The depiction of the Vadas find mirroring various cultural influences suggests that in this period of the Copper Age, there was an ideological and sign system valid in a wider circle and generally known and accepted, at least, on a basic level. Religious ideas revealed by the vessel colour, from more than one aspect, our information about the relatively poorly known spiritual context of the period and offer a more livelier picture of the Middle Copper Age Prehistory unfolding so far mainly in objects.

Notes

1 Archeologiai Értesítő 18 (1898), figures on pp.137 and 157.

2 There is no evidence that the object would have been presented on the exhibition of the Hungarian National Museum in 1938.

3 It is true and supported by Kovách's list that some of the objects that got into the Hungarian National Museum came from here, but it is not valid for this very vessel.

4 See also note 5.

5 For good measure, it should be mentioned that N. Kalicz later changed his opinion about the Neolithic dating: "...this dating is not sufficient since the oblong form, the rectangular shape, and also the technique of decoration are different from the stabbing characteristic of the Vinča-Tordos culture and the Szakálhát group. Accordingly, no definite opinion can as yet be given. Recent find suggest that it may be assigned to the complex of the Bádén culture." (N. Kalicz's manuscript, Régészeti Kézikönyv, the part on Bádén culture, pp.1287–1288). I would like to express my gratitude to N. Kalicz for calling my attention to this quotation.

6 "Szakálhát group, c. 5000 B.C."

7 In the first publication A. Kovách, certainly being less familiar with the comparative material than Reinecke, compared the shape to the urn decorations from Varishegy and Purgstall (KOVÁCH 1894, 191). The depiction mentioned by Reinecke is probably identical with the item cited in Schmidt's comprehensive work (SCHMIDT 1945 Textbild 58,4).

8 Fettich, namely, starting from the shape of the wagon, considered the depiction on the more fragmented side to be the frontal side of the model.

9 Fettich created the status of the goddess saying that no profane depiction had existed in the Prehistory (FETTICH 1969, 36).

10 Since these incisions can be seen on the known photos of the vessel and Gimbutas herself had the opportunity to examine the vessel and take photos of it, we cannot assume technical problems.

11 I think we can forbear to justify the interpretation of a "skirt" in this case.

12 Although the analogue may lead us rather far away, still on an idol with highly similar shape the fashioning of the

breasts undoubtedly refers to the sex of the depicted figure (IDOLE, 107).

- 13 This is suggested by the position of the upper two Y signs, inserted in the centre of the open "scissors" created by the lower and upper arms or the position of the "dots" under the left arm.
- 14 Today this part is more worn than it must have been at that time although the lines can vaguely be seen.
- 15 L. A. Horváth mentions two bronze idols (IDOLE, 46 10/a-b) with reference to the generally known idols from Tiszafüred and Tiszalúc both from the Hunyadi-halom period. These two idols display similar tassels (HORVÁTH 1993, 185). The shape of their heads is very similar to figurines from the earlier mentioned Cucuten-Tripolje period.
- 16 This, for example is missing from the redrawn publication by M. Gimbutas.
- 17 E.g. the four outer Y's are foundation posts, the inner two flank the entrance or the two upper Y's bear the roof as inner posts or the whole construction is a gate.
- 18 Fettich understood this asymmetry as adaptation to the shape of a wagon (FETTICH 1969, 34).
19. According to Fettich the drawing is inaccurate because it showed a part of an "animal depiction" in the shape of a Y sign.
- 20 On the whole, Matuschik has the same point of view in his comprehensive work (MATUSCHIK 1996).
- 21 With regard to the fact that it is not a specific double spiral only its depiction, it is advisable to choose a more cautious, wider chronological grouping. Similar depiction is known from the Coşofen finds (ROMAN 1976, Pl. 43. 7).
- 22 HNM gold inventory number: Ó 958, Ó 959.
- 23 HNM gold inventory number: Ó 677.
- 24 The inventory number is wrong in the publication. The right one is: HNM Ó 70.31.12. The same number contains the fragments of one or two rectangular vessels as well. It is completed only in the drawing, so its measurements are not exact.
- 25 I prefer the term twin vessel to the bipartite vessel since it is not the partition of a dish but on the contrary, the duplication of an existing type. According to L. A. Horváth, the most interesting items of the rectangular vessels are the ones from Tiszafüred and Tiszalúc (HORVÁTH 1993, 142-147).
- 26 Inv. No.: HNM Ó 46. 1938.
- 27 It should be mentioned that the chronological grouping of the vessel has been rather varied. I. Zichy, director, in his letter to those who reported the finds assigned it to the late Bronze Age (HNM Archives 153, Sz. III). Banner published it among the bipartite vessels of the Baden culture (BANNER 1942, 82). Against the "suspicious" finding circumstances (the report was about perished, big pots full of ashes and covered with a cover) (HNM Archives, 134, B.III), we group the vessel into the Middle Copper Age mainly based on its shape and material.
- 28 In mm: measurement 1 = lower side of the bottom; measurement 2 = shorter side of the bottom; measurement 3 = longer site of the rim; measurement 4 = shorter side of the rim; measurement 5 = height; index A = ratio where the shorter side of the bottom is taken for a unit: index = measurement/unit; "→" indicates the direction of comparability in the data. Index B = ratio, where index = Vadas measurement /relevant vessel measurement; "↓" indicates the direction of comparability in the data.
- 29 HNM Ó 54.7.61. (KUTZIÁN 1963, Pl. CXXI.19)
- 30 HNM Ó 54.7.83. (KUTZIÁN 1963, Pl. CXXII.4)
- 31 Fettich also emphasised this technological feature, although he used it as an argument to date the vessel to the Early Bronze Age (FETTICH 1969, 37).
- 32 Since this "discovery" was really made after having finished the chronological estimation of the rectangular vessel, I did not insert the data into the previous demonstration. I think, this chronological order will make it tangible that the jug, as independent control material, corroborates the earlier statements.
- 33 Contrary to the accepted procedure it is not among the documents but separately inventorized in the archives.
- 34 It means that the two items came from the same site and donated by the same person at different times.
- 35 The same can be observed at the majority of items from the 'serial inventory' from 1962. Probably P. Patay, who inventorized the material observed the contradiction between the locations and grouped these objects in the category of insufficient identification.
- 36 Regrettably, this object seems to have been lost unless it also "hides" somewhere.
- 37 The "black" colour is less visible today but its traces can be seen.
- 38 The old inventory number cited there, the third variant is also wrong: 387.1876 (KALICZ 1979-80, note 117).
- 39 In the caption of the photo plate, the location is finally indicated as "Szelevény-Vadas (Ördögárok?)".
- 40 Including also the fact that both vessels got into the museum in an astonishingly complete state.
- 41 I think that even disregarding the Szelevény find, it is an exaggeration since the inner chronology of the Bodrogkeresztúr culture is not exclusively based on the appearance of the finds of the SDOC and discoid handles. See e.g. the superposition of graves L. and LVI at Magyarhomorog (PATAY 1976, 235).
- 42 I think, agreeing with L. A. Horváth's statements (HORVÁTH 1993, 54) that it cannot as yet be decided where the origin of the jug can be located within the area of the SDOC.
- 43 Based on finds from Becsvölgy (HORVÁTH 1994), the author thinks that the Balaton-Lásinja (I) culture survives until the appearance of the Moravian SDOC in Transdanubia (HORVÁTH 1993, 212-213; HORVÁTH 1994, 100).
- 44 The same period seems probable for the finds of the Békésszentandrás I/27 site (HAT 8, 73-76, Plate 12-13) and those from the earlier mentioned grave 142 from Polgár-Basatanya.
- 45 Without making the character of the action more precise, as anything may be included from the burial rite mentioned by Fettich to the earlier mentioned vegetation rites.

BIBLIOGRAPHY

- BÁNFFY 1985 BÁNFFY E., *Kultikus rendeltetésű leletegyüttes a Kis-Balaton középső rézkorából.* – *A middle copper age cult assemblage from the Little Balaton region.* ArchÉrt 112 (1985) 187–191; 191–192.
- BÁNFFY 1987 BÁNFFY E., *Kultusz és régészeti kontextus Közép- és Délkelet-Európában a neolitikum és a rézkor idején.* Kandidátusi disszertáció. Kézirat.
- BANNER 1942 BANNER J.: *Adatok a kétéosztású badeni tálak elterjedéséhez.* – *Angaben zur Verbreitung der zweiteiligen badener Schlüsseln.* ArchÉrt III/3 (1942) 73–87; 87–99.
- ELIADE 1994 M. ELIADE, *Vallási hiedelmek és eszmék története I.* Budapest 1994.
- ELLIS 1984 L. ELLIS, *The Cucuteni-Tripolje Culture BAR-IS 217* (1984).
- FETTICH 1969 FETTICH N., *Újabb adatok az őskori kocsihoz a Kárpát-medencében.* Ethn 80 (1969) 30–69.
- GIMBUTAS 1989 M. GIMBUTAS, *The Language of the Goddessess.* London 1989.
- HAMPEL 1898 HAMPEL J., *A Nemzeti Múzeum gyarapodása 1897-ben.* Budapest 1898.
- HILLEBRAND—BELLA 1921 HILLEBRAND J.—BELLA L., *Az őskor embere és kultúrája.* Budapest 1921.
- HORVÁTH 1990 L. A. HORVÁTH, *Eine kupferzeitliche Kultstätte in der Gemarkung von Bak.* Acta ArchHung 42 (1990) 21–44.
- HORVÁTH 1993 HORVÁTH L. A., *A Kárpát-medence középső-rézkorának történeti és kronológiai kérdései.* Kandidátusi disszertáció. Kézirat. 1993.
- HORVÁTH 1994 L. A. HORVÁTH, *Beiträge zur Chronologie der mittleren Kupferzeit in der Grossen Ungarischen Tiefebene.* Acta ArchHung 46 (1994) 73–105.
- IDOLE IDOLE, *Frühe Götterbilder und Opfergaben.* Mainz am Rhein 1985.
- KALICZ 1957 KALICZ N., *Tiszazug őskori települései.* RégFüz Ser I.
- KALICZ 1958 KALICZ N., *Rézkori lelet Paszab községben.* JAMÉ (1985)[1960] 9–23.
- KALICZ 1970 KALICZ N., *Agyagistenek.* (Clay Gods) Budapest 1970.
- KALICZ 1979–80 KALICZ N., *Újabb adatok a rézkori hunyadihalmi csoport időrendjéhez.* – *Neue Beiträge zur Chronologie der kupferzeitlichen Hunyadihalom Gruppe.* SZMMÉ 1979–80, 43–58; 59–62.
- KALICZ 1980 N. KALICZ, *The Balaton-Lasinja culture groups in Western Hungary, Austria and Northwestern Yugoslavia. Concerning the distribution and Origine.* JIES 8 (1980) 245–271.
- KALICZ 1982 KALICZ N., *A Balaton-Lasinja kultúra történeti kérdései és fémleletei.* – *The historical problems of the Balaton-Lasinja-culture and its metal finds.* ArchÉrt 109 (1982) 3–16; 16–17.
- KALICZ 1987–88 KALICZ N., *Kultúráváltások a korai és középső rézkorban a Kárpát-medencében. Culture changes in the Carpathian Basin during the late neolithic and copper age, 13–14.* ArchÉrt 114–115 (1987–88) 3–13.
- KALICZ 1991 N. KALICZ, *Beiträge zur Kenntnis der Kupferzeit im ungarischen Transdanubien.* In: *Die Kupferzeit als historische Epoche.* Ed. by J. Lichardus. Bonn 1991, 347–387.
- KALICZ 1992 KALICZ N., *A legkorábbi fémleletek Délkelet-Európában és a Kárpát-medencében az i. e. 6–5. évezredben.* – *The oldest metal finds in Southeastern Europe and the Carpathian Basin from the 6th to 5th millennia BC.* ArchÉrt 119 (1992) 3–12; 12–13.
- KALICZ 1995 N. KALICZ, *Die Balaton, Lasinja Kultur in der Kupferzeit Südost- und Mitteleuropas.* In: IPH VII (1995). *Neuere Daten zur Siedlungsgeschichte und Chronologie der Kupferzeit des Karpatenbeckens.* 37–49.
- KALICZ—MAKKAY 1977 N. KALICZ—J. MAKKAY, *Die Linienbandkeramik in der Grosse Ungarische Tiefebene.* Budapest 1977.
- KÁLLAY 1990 SZ. KÁLLAY A., *Rézkori áldozati együttes Füzesabony határában.* – *Kupferzeitliche Opferfundkomplex in der Gemarkung von Füzesabony.* Agria 24 (1990) 21–48; 49–50.
- KOREK 1973 J. Korek, In: *Prähistorische Idolkunst. Kultbilder und Opfergaben aus Ungarn. Ausstellung München 1973. Katalog der ausgestellten Funde.* München 1973, 31–45.
- KOREK 1977 KOREK J., In: *Magyarország népeinek története az őskortól a honfoglalásig. Újkőkor.* Budapest 1971, 19–27.

- KOVÁCH 1894
KOVÁCH 1895
KUNA 1981
KUTZIÁN 1963
MAKKAY 1976
MAKKAY 1980–81
MAKKAY 1985
MASSZON—MERPERT 1982
MATUSCHIK 1996
MÜLLER-KARPE 1974
MRT 8
PARZINGER 1992
PATAY 1974
PATAY 1976
PATAY 1980
PATAY 1987
PATAY 1988/89
PAVELČIK 1979
RACZKY 1988
RACZKY 1995
REINECKE 1898
ROMAN 1971
ROMAN 1971
SCHMIDT 1945
VADAY—MEDGYESI 1993
VIRÁG 1987
- KOVÁCH A., *A Szelevény-vadasi virágcserep*. ArchÉrt 14 (1894) 191.
KOVÁCH A., *A „Tisza-zughi régészeti magán társaság” leltára 1895*. Kézirat. MNM Adattára 11.T.I., Ltsz. 4156.
M. KUNA, *Zur neolitischen und äneolitischen Kupferarbeitung im Gebiet Jugoslawiens*. Godišnjak 19 (1981) 13–104.
I. BOGNÁR -KUTZIÁN, *The Copper Age Cemetery of Tiszapolgár-Basatanya*. Budapest 1963.
J. MAKKAY, *Problems concerning Copper Age in the Carpathian Basin: Copper Age Gold Disc in Central and South-East Europe*. Acta ArchHung 28 (1976) 251–300.
J. MAKKAY, *Eine Kultstätte der Bodrogheresztúr-Kultur in Szarvas*. MittArch-Inst 10–11 (1980–81) 45–57.
J. MAKKAY, *Copper Age Gold Disc on the Territory of the Later Pannonia Province*. ComArchHung 1985, 2–25.
V. M. MASSZON—N. J. MERPERT, *Arheologia SzSzSzR. Eneolit SzSzSzR*. Moszkva 1982.
I. MATUSCHIK, *Brillen- und Hakenspiralen der frühen Metalzeit Europas*. Germania 74 (1996) 1–43.
H. MÜLLER-KARPE, *Handbuch der Vorgeschichte. Band III. Kupferzeit*. München 1974.
Magyarország Régészeti Topográfiája 8. A szarvasi járás. Szerk.: Makkay J., Budapest 1989.
H. PARZINGER, *Hornstaad-Hlinsko-Stollhof. Zur absoluten Datierung eines vor-Baden-zeitlichen Horizontes*. Germania 70 (1992) 241–250.
P. PATAY, *Die Bodrogheresztúr-Kultur*, BRGK 55 (1974) 1–71.
PATAY P., *A magyarhomorogi rézkori temető. – Das kupferzeitliche Gräberfeld von Magyarhomorog*. DMÉ 1976, 173–250; 251–254.
PATAY P., *A rézkori bodrogheresztúri kultúra*. Kézirat.
PATAY P., *A Tiszalúc-sarkadi rézkori telep ásátásának eddigi eredményei. – Bishere Ergebnisse der Ausgrabung in der kupferzeitlichen Siedlung von Tiszalúc-Sarkad*. FolArch 38 (1987) 89–117; 118–120.
P. PATAY, *Beiträge zur Kunst der Kupferzeit*. MAG 118/119 (1988/89) 33–43.
K. PAVELČIK, *Depot měděných šperků z Hlinska u Lipníku N/Beč – Hortfund des Kupferschmucks aus Hlinsko bei Lipník*. A. D.: Bečva. PA 70 (1979) 2, 319–339.
RACZKY P., *A Tisza-vidék kulturális és kronológiai kapcsolatai a Balkánnal és az Égeikummal a neolitikum, rézkor időszakában*. Szolnok 1988.
P. RACZKY, *New data on the absolute chronology of the Copper Age in the Carpathian Basin*. In: IPH VII (1995). Neuere Daten zur Siedlungsgeschichte und Chronologie der Kupferzeit des Karpatenbeckens, 51–60.
P. REINECKE, *Reinecke Pál kőkori emlékekről*. ArchÉrt 18 (1898) 253–256.
P. ROMAN, *Strukturänderungen des Endäneolithikums im Donau-Karpaten-Raum*. Dacia 15 (1971) 1–169.
P. ROMAN, *Cultura cotofeni*. București 1976.
R. R. SCHMIDT, *Die Burg Vučedol*. Zagreb, 1945.
A. VADAY—P. MEDGYESI, *Rectangular Vessels in the Sarmatian Barbaricum in the Carpathian Basin*. ComArchHung 1993, 63–90.
M. VIRÁG ZS., *Adatok a Balaton-Lasinja I. kultúra fémművességéhez*. ZGy 26 (1987) 3–19.

