NEW SPONDYLUS FINDINGS AT VINČA–BELO BRDO: 1998–2001 CAMPAIGNS AND REGIONAL APPROACH TO PROBLEM

Abstract. – Distribution of spondylus findings on prehistoric sites is remarkable and encompasses the whole European continent except West Mediterranean and North Europe. Approximately two hundred sites with spondylus findings are known in Europe ranging from the Early Neolithic to the Late Eneolithic. A long lasting interest for these findings results out of spondylus exotic origin as well as peculiarity of artifacts themselves that are mostly limited to decorative forms. The inventory of type-site of the Vinča culture – Belo Brdo is especially important in this respect, but there are only few data published about spondylus findings from Belo Brdo. New research showed that we should expect them in large quantity. It is the aim of this paper to present spondylus items found during last research campaigns (1998, 1999, 2001) at Vinča – Belo Brdo, to fulfill emptiness in apprehending exotic materials from the site, as well as to point to some particularities and further research directions in regard to this kind of findings on the Vinča culture sites.

Key words. – Spondylus ornaments, Central and North Balkans, Neolithic, exchange.

Various species of oysters belonging to the genus Spondylus have wide geographical distribution and considerable geological age. They have existed since Jurassic (before 190 million years) until today in warm seas worldwide. The massive shell is made up of two unequal valves, hinged by an elastic ligament. In the hinge area there are large dental sockets and hinge teeth. The animal lives attached to solid substrate by cementation of the lower (right) valve. The shell is milk-white, purple or yellowish-brown colored and ornamented by strong radial ribs and large, irregular spines. Due to unequal size of the valves and attachment to the ground, there is great variability of shells by their shape, color and ornamentation.

SPONDYLUS IN EUROPEAN PREHISTORY: TIME, SPACE AND CONTEXT

During last hundred years several important attempts were realized in order to view the importance and role of spondylus shell in the life of prehistoric communities on European continent through synthetic reviews on distribution, chronology of use and artifact type. A long lasting interest for these findings results out of spondylus exotic origin as well as peculiarity of artifacts themselves that are mostly limited to decorative forms (bracelets, pendants, and beads). These researches were especially intensive during several last decades when the expansion of natural sciences and their influence to the archaeology enabled taking of more exact conclusions and solving of some enduring dilemmas. One of them certainly was origin of spondylus items that are found on archaeological sites. The origin was previously determined according to the concentration of the findings, so the Black Sea and fossiliferous deposits in the various parts of the Central Europe were recognized as locations of prime importance for initial distribution of spondylus. But, strontium isotope analyses showed that fossil shells were not used, and that cold water of the Black Sea is not a

1 Arduini & Teruzzi 1986.
2 The name of the genus is written in italic, but when mentioned as the shell itself, or raw material for ornament manufacture, the word spondylus is written normally.
3 Clark 1952; Vecl 1959; Willms 1985; Müller 1997.
4 Chapman 1981.
5 Shackleton and Elderfield 1990.
suitable environment for *Spondylus* development. On the other hand, results of these analyses indicate to the Mediterranean as its natural environment, consequently Aegean and Adriatic should be considered indissolubly as the very place from where distribution of spondylus started.

The distribution of spondylus findings on prehistoric sites is remarkable and encompasses the whole European continent except West Mediterranean and North Europe. The detailed recognition and comprehending of geographical conditions with significant certainty enable determination of directions, via which the exchange was practiced (fig. 1). Distribution inside the Balkans was likely directed along river valleys confirmed as communication arteries in prehistory (valleys of Vardar, Struma, Mesta, Marica and Neretva), and was not limited only to the continental hinterland, but it naturally continued along the river Danube and Tisa into the whole Carpathian Basin until the western Europe. Additionally, it is intriguing that majority of sites with spondylus findings are located in the Black Sea region, Carpathians, and further in the Central Europe while, against expectations, a small number of findings is encountered in Mediterranean, in the immediate vicinity of *Spondylus* life environment. This significantly differs spondylus items distribution as compared to other types of exotic articles (for example obsidian) that are concentrated in the region of raw material origin, and declines in amount of findings in relation to the increasing of distance from the source area.

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7 Willms 1985; Müller 1997.
9 Renfrew and Bahn 1991; Tykot 1996.
This is a little bit strange that majority of spondylus findings is related to sites and cultures that have no direct contact with Spondylus natural environment, and so neither the possibility of their simple and easy supply. It is obvious that wide distribution is achieved only in the cultural-historical periods characterized by complex mechanisms of exchange and socio-economic systems that could support it. But, this exchange is accompanied by categories of meanings that are not exclusively limited to practical use, nor can they be simply explained by evident inclination to esthetics and utilitarian value of spondylus. A good example of the role and meaning of spondylus articles is given by B. Malinowski\(^\text{10}\) in his brilliant ethnographic study of exchange on the Trobrian Islands in Polynesia. There, spondylus necklaces were included in ceremonial exchange, they represented both symbol and status attribute, but at the same time had practical importance since they influenced on keeping and intensifying contacts through which the exchange of goods for every day consumption was also carried out. Regardless to the fact that this kind of exchange is uneasy to transfer into the other time, and to the other continent, still this ethnographic example remains as one of the most important for the explanation of the context of spondylus objects exchange.

Approximately two hundred sites with spondylus findings are known in Europe ranging from the Early Neolithic to the Late Eneolithic.\(^\text{11}\) By establishing precise chronology for particular regions, two cultural zones within which those articles circulated were also approximately determined. Namely, except the findings of unmodified spondylus that have been recorded in Aegean and Adriatic region even since 7\(^{th}\) millennium BC, it is noticeable that artifact chronology between those two regions shows certain divergence\(^\text{12}\). Regarding the Adriatic area, including its continental hinterland as well as the central and north Balkans, ornaments made of spondylus have appeared since 5500 calBC, while distribution towards the central Europe began somewhat latter, around 5400 calBC. In the Aegean and at west coast of the Black Sea appearance of spondylus ornaments is chronologically unique and happens around 5100 calBC. In both regions findings definitely disappear after 4300 calBC. Because of partial difference in time use, it is justified to distinguish two cultural cycles, i.e. two trade networks for the exchange of spondylus and ornaments made of spondylus. The first one includes the central and the west Balkans, Carpathians and the central Europe, while the second covers the Aegean region and the west coast of the Black Sea. Dividing on these two regions becomes even more obvious if we take into the consideration that the particular types of spondylus items are limited to a single distribution zone and not appearing in the other.\(^\text{13}\) Although this division may look correct and has its confirmation in the chronology and typology of artifacts, there are plenty of reasons why we need not to fully reject notion that during 5\(^{th}\) millennium BC the limited exchange of spondylus also existed in those two regions.

Spondylus items do not have wide assortment of designs. Mostly we are dealing with the basic forms of ornaments: bracelets, necklaces and pendants. Pendants are found in several shapes while particular types are limited to only one region, in contrast to beads and bracelets that are universal categories of ornaments and show slight differences between two distinguished zones. Contexts in which those objects are deposited also significantly vary, as they are found in settlements, in the cultural layers or within hoards, in isolated graves or in necropola. In the Aegean region and on the eastern coast of the Adriatic spondylus items are found almost exclusively in settlements\(^\text{14}\). On the west coast of the Black Sea they are often deposited in graves\(^\text{15}\), while in the central Europe the importance of ornaments made of spondylus is reflected by their exclusive use in burial practice, thus accentuating prestige status of deceased.\(^\text{16}\) By analyzing of contexts we can actually see that spondylus value increase according to the growing distance from the area of origin. In areas where this distance represented barrier heavy to surmount it is most obviously manifested in the deposition of spondylus items in graves, as goods or some pieces of personal belonging of deceased. But, why spondylus items are more common in regions distant from the Mediterranean? What initiated their participation in exchange? What concrete motives it was caused by? These are only few questions that we may ask. Answering, on the other side requires different kind of analyses which will equally review cultural and social factors, and ethnographic facts, but firstly the complete presentation of findings from museum collections and from new excavations must be done.

\(^{10}\) Malinowski 1979.
\(^{11}\) Willms 1985; Müller 1997.
\(^{12}\) Müller 1997.
\(^{13}\) Müller 1997.
\(^{14}\) Müller 1997; Benac 1971: 97–100.
BELO BRDO: NEW FINDINGS
(CAMPAIGNS 1998–2001)

There are a few data about spondylus findings from the type-site of the Vinča culture. In the field report of 1908, M. Vasić publishes nine fragments of bracelets made of shells. Although the shell species is not mentioned in the text, on the base of presented photographs it can be accepted that the larger part of them is made of spondylus. Unfortunately, the similar objects are not published in the reports on later campaigns. In his monograph on the Vinča culture Chapman points to the pendant earlier presented in M. Vasić's publication, but in the authentic publication M. Vasić speaks about it as plaque which bears traces of red color, and even mentions that it is made of marble. Identical observation in relation to this pendant is expressed by D. Antonović, supporting M. Vasić's opinion, in her detailed review of objects made of polished stone from Vinča. In the survey of bone made implements and ornaments from this site, meanwhile, findings of spondylus are also mentioned, although it is not specified on which objects these notes are related. The presentation of spondylus items found during last research campaigns (1998, 1999, 2001) therefore has an aim to fulfill emptiness in apprehending exotic materials from this site, as well as to point to some particularities and further research directions in regard to this kind of findings on the Vinča culture sites.

CATALOGUE

98/62 (Plate I: 9)
Sector II, block E III, square 1, locus 2
The length of the fragment along outer curve 64 mm, width 7.5 mm, thickness 7.4–3.4 mm. In places observable shell structure (growth lines) and in places original purple color preserved. Perforation on the thinnest preserved bracelet part.

99/155 (Plate I: 15)
Sector II, block D IV, square 2, locus 1.
Length of the fragment along outer curve 35 mm, width 8.2 mm, thickness 7.0 mm. On inner curve dental sockets of the shell hinge.

99/283 (Plate I: 3)
Sector II, block E III, square 1, locus 12
Length of the fragment along outer curve 77 mm, width 2.6–9.0, thickness 6.3–8.6.

01/80 (Plate I: 10)
Sector II, block D III, square 3, locus 12
Length of the fragment along outer curve 58 mm, width 6.6 mm, thickness 2.6–6.4 mm.
In places shell structure observable (growth lines) and well preserved original purple color.

01/82 (Plate I: 1)
Sector II, block D III, square 3, locus 12.
Length of the fragment along outer curve 87 mm, width 10 mm, thickness 4.7 mm.
In places shell structure (growth lines) and traces of original purple color observable.

01/105 (Plate I: 11)
Sector II, block D IV, square 1, locus 22.
Length of the fragment along outer curve 60 mm, width 6.6 mm, thickness 3.2–7.2 mm.
In places shell structure observable (growth lines) and in places original purple color preserved.

01/106 (Plate I: 5)
Sector II, block D III, square 3, locus 12.
Length of the fragment along outer curve 92 mm, width 5.1–5.9 mm, thickness 5.4–8.0 mm. Traces of original purple color of the shell are observable.

01/113 (Plate I: 4)
Sector II, block D III, square 1, locus 10.
Length of the fragment along outer curve 75 mm, width 5.8–7.5 mm, thickness 2.2–4.5 mm. Well preserved structure (growth lines) and original purple color of the shell.

01/122 (Plate I: 6)
Sector II, block D IV, square 1, locus 6.
Length of the fragment along outer curve 39 mm, width 11.6 mm, thickness 5.9 mm.
Original yellowish-brown color of the shell preserved and dental sockets of the hinge area; in places growth lines of the shell observable.

18 Vasić: 1910: Pl. 10, b.
20 Vasić 1932: 38, Pl. XV, fig. 62.
22 Srejović and Jovanović 1959.
Plate 1. Spondylus findings from 1998–2001 campaigns at Vinča – Belo Brdo
Two perforations in the middle of the bracelet width, diameter 2 mm, in between distance 25 mm.

01/132 (Plate I: 2)
Sector II, block D III, square 3, locus 11.
Length of the fragment along outer curve 73 mm, width 5.7–107 mm, thickness 2.5–5.0 mm.
Traces of original purple color of the shell.
Perforation on the narrowest and thinnest part of the fragment, diameter 1.5 mm.

01/179 (Plate I: 12)
Sector II, block D III, square 3, locus 16 and 17.
Length of the fragment along outer curve 59 mm, width 7.7 mm, thickness 2.2–7.7 mm.
Original purple color of the shell in traces, sockets on the inner curve, which are part of hinge area of the shell.

01/211 (Plate I: 8)
Sector II, block D III, square 3, locus 11 and 16.
Length of the fragment along outer curve 46 mm, width 6.8 mm, thickness 6.6–7.2 mm.

01/218 (Plate I: 13 a, b)
Sector II, block D III, square 3, locus 14.
Length of the fragment along outer curve 31 mm, width 11 mm, thickness 4.9 mm.
In places growth lines of the shell observable.

01/236 (Plate I: 14 a, b)
Sector II, block D IV, square 3, locus 11.
Length of the fragment along outer curve 41 mm, width 5.4–8.3 mm, thickness 4.7 mm.
Well observable growth lines of the shell and in places original purple and yellowish-brown color. One perforation on broader end part of the fragment, and another one on the narrow end part. Diameter of both wholes approximately 2 mm.

01/238 (Plate I: 7)
Sector II, block D IV, square 3, locus 11.
Length of the fragment along outer curve 41 mm, width 6.4 mm, thickness 3.5 mm.
Shell structure observable in places (growth lines) and original purple and yellowish-brown color preserved.

Fossil shells of the genus *Spondylus* are found in Cretaceous and Tertiary deposits in the region\(^{23}\). But, for the manufacture of the bracelets discovered on the site of Belo Brdo, beyond doubt fossil shells were not used. Their color testifies to this – milk white on some specimens, honey-yellow and brownish on the others, while on some specimens characteristic purple like color of the outer shell layer in traces is preserved, which does not occur in fossils. These observations are additionally confirmed by the results of the strontium isotope analyses worked out on the spondylus samples from this particular site, from previous research campaigns, indicating their Mediterranean origin\(^{24}\).

In 1998–2001 campaigns fifteen fragments of spondylus bracelets in total are found (fig. 2). In the process of the bracelets manufacture, a curvature of the valve is used: a band to form a bracelet is cut out bellow the hinge and along the as possible maximal diameter on the valve width. In the upper half of valve the bracelet band is perpendicular to the diameter, while in its middle it spirally curves and continues into the horizontal position – parallel to the valve diameter. The spiral curving is a particular reason for an attractive and recognizable appearance of the bracelet. Another feature, due to which spondylus primary attracts attention, is its color – purple color of the outer shell layer. This color is well preserved in some specimens (Plate I: 4, 10), while in others it is noticeable in traces or missing. Shell growth lines are also observable on some bracelets fragments on the longitudinal and cross-sections (for example Plate I: 1, 14), as well as dental sockets of the hinge area (Plate I: 6). Except for minor differences in the thickness and width, all fragments belonged to bracelets of similar shape and «cut out» of valve in similar manner.

There are carefully bored perforations on four bracelet fragments. In two cases perforations are made in the thinnest part of the bracelet band parallel to diameter (Plate I: 2, 9). The other two fragments bear two perforations each. On one there are two perforations on perpendicular part of the band (Plate I: 6), and on another one perforation is situated on perpendicular while another is on horizontal band part (Plate I: 14a, b), thus their axes form right angle. There are no traces of remaking on any fragment, which might signify that there were attempts to repair broken bracelets, or modify their fragments into the pendants or other kind of ornaments. Breaks on all fragments are old, which is presumable that we are dealing with broken ornaments, uninteresting for further use, and thus rejected. This kind of treatment of spondylus artifacts can be consi-

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SPONDYLUS IN THE REGION OF CENTRAL AND NORTH BALKANS: SITES AND CONTEXTS

The central and north Balkans represents the zone of dividing of the Adriatic region and Carpathian Basin. Consequently, Neolithic communities of the region probably acted as intermediaries in supply and further distribution of spondylus towards the North. By discoveries on the sites Obre I27 and Obre II28 in the central Bosnia the continuous line of exchange was established on relation Adriatic coast (Danilo) – central Bosnia (Kakanj, Butmir) – lower Danube area (Vinča) – Carpathian Basin. The period between the first appearance of the spondylus artifacts (around 5500 calBC)29 and their definite disappearance from the culture inventory of the prehistoric communities (around 4300 calBC),

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27 Benac 1973: 44.
29 Müller 1997.
on the central and north Balkans is marked by the end of the Starčevo culture, as well as with the beginning, development and disappearance of the Vinča culture.  

**Spondylus findings in the Starčevo culture**

In the Starčevo culture spondylus items are not numerous (fig. 3). Their presence is recorded on only few sites, sometimes with interesting accompanying context, but mostly without data on the chronology of findings and sites. There is an evidence of spondylus findings on the Starčevo settlement on the Lepenski Vir site. Related to this site, phase IIIb, a necklace is found made of beads, which are allegedly made of spondylus and paligorskite. According to the statement of the author, this necklace is found in deeper pottery vessel.

According to J. Chapman, findings are registered also on the sites Srpski Krstur, Besenova Veche and Anza, while «amulet» of unknown shape originates from the site Tržnice in Vinkovci. This amulet was found in a child grave, together with two vessels of the Vinča type and fragments of Starčevo pottery. The child was buried in the contracted position in the grave located inside the settlement.

The relation between spondylus and burring ritual is also confirmed on the site Zlatara near Ruma. On the edge of the settlement two grave pits are discovered housing three buried individuals. Several spondylus beads are found in the grave of a woman, aging 40–45, who is buried in the contracted position, lied on the left

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30 Müller 1997: 95; Gläser 1996.
33 Dimitrijević 1979: 241.
side and oriented west east. Burial was practiced with complex ritual what is visible by numerous offerings: pottery fragments, few whole and several fragmented vessels, two stone made axes, two flint blades, two bone points, a clay weight, and several pieces of quartzite. The ritual was improved with over 7000 snail shells of Helix pomatia and a large number of domestic and wild animals bones.35

Out of the central Balkans, but within the distribution range of Starčevo–Körös–Kris complex several more spondylus findings are known. One fragmented bracelet was discovered on the site Gura Baciului, in the layer belonging to the beginning of the Starčevo–Kris culture.36 This finding might be considered dubious, since the author states that the fossil clam of the genus Pectunculus is in question.37 But, similar findings should be expected in future in the Carpathian Basin as pointed by a fragment of the spondylus bracelet found in the rubbish pit on the site Endrod 119.38 So far, this is the most northern finding of spondylus within Starčevo–Körös–Kris complex. This finding is very difficult to date since the pit was found in contained material from different periods of Körös culture, including the pottery with white painting from the early phase, but also typical forms of Proto–Vinča.39

These are the only known spondylus findings in Starčevo–Körös–Kris complex till now. Surveying their distribution and chronology the importance of the sites Anza and Gura Baciului should be pointed out. The first site is located in FRY Macedonia, at the distance of around 45 km southeast of Skoplje, in the region called Ovče polje. It is a multi-layered site, with four distinguished stratigraphic phases. According to the Anglo–Saxon literature the first three phases are included in the pre-Vinča horizon or in the Starčevo culture40, although M. Garašanin made distinguish of several akin sites in this region and termed them as the group Anzabegovo–Vrsnik.51 Spondylus ornaments were found in all phases (beads), from approximately 6100 calBC till around 5200 cal BC, while bracelets were discovered only in phases II and IV.42 The position of this site situated between southeast zone (the eastern part of the Balkan peninsula), which probably was supplied from Aegean, and northwest zone (west Balkan, Carpathians and central Europe), which was supplied from the Adriatic, offers in addition some other indications and opens new dilemmas. For example, how comes that so deep in continental hinterland spondylus findings originated chronologically much earlier appear that by no means could be coordinated with similar findings in Aegean and Adriatic. V. Milojčić severely criticized the chronology and conclusions made on stratigraphy in his survey of this site monograph.43 But even if we put aside this critique and division on four phases and rely only on presented C 14 chronology, still till now known conclusions on chronology of the spondylus objects use are questionable. Possible assumptions are:

• spondylus in the earlier phases of the Anza settlement originates from the east Adriatic coast. This would mean that chronology of spondylus exchange in the region should be regarded at least 500 years older, and even there is no convincible trace of the manner it was happening. There are no sites with spondylus findings at central and west Balkans from that period and it is not possible to prove this kind of connection for the time being,

• spondylus comes from the Aegean area to which this region naturally inclines. In this case, the absolute dates for the early layers in Anza (around 6100 calBC) would really indicate the exchange whose beginnings would be much earlier than beginnings of the exchange in the northwest circle. But, paradoxically, spondylus findings in this region begin intensively to appear much later, only around 5100 calBC44, so this space and geographic relation is not, as in previous case, supported by archaeological evidences.

Further research would certainly settle this dilemma either in one of presented direction, or confirm Milojčić’s doubt. Until that moment, this dilemma has, for the central and north Balkans, much wider implications. There is a question as whether spondylus in the Starčevo culture arrives through contacts with then contemporary settlements of the Vinča culture, or, on the other hand, this kind of exchange has deeper roots and dates back to the Early Neolithic. Intensive exchange of this article in the north Balkans followed immediately after establishing the Vinča culture in the lower Danube area, and probably manifested also in the particular peripheral regions. This could be especially the case on the borders as places of encounter with surviving

36 Lazarović and Maxim 1995: 154, fig. 26, 1.
41 Garašanin 1979: 84.
44 Müller 1997.
tradition of Starčevo type, furthermore characterized by strong exchange mechanisms. Although precise chronology for the majority of the Starčevo culture sites with spondylus findings is missing, it should be supposed that at least some of them are contemporary with the beginning of the Vinča culture. The evidence of fragmented bracelet (made of spondylus?) from Gura Bacului site, in the layer dated to late 7th millennium BC, namely the beginning of the Starčevo culture, shows possibility of other solution. Translated into the regional context, that would mean that spondylus articles trade, though limited in volume, began much earlier than 5500 calBC. This is evidenced by sporadic findings in the Early Neolithic sites of southeastern Europe (Achileon, Karanovo I, Čavdar). The real fundamental capacities for such kind of exchange existed in the Starčevo culture, but for its realization the motifs beyond practical and economical requirements were also needed.

Spondylus ornaments on the Vinča culture sites

Difference in relation to the Starčevo culture is easily recognizable since spondylus items are found on more sites and they are much more numerous (fig. 3). However, spatial distribution is not substantially different, for they are still being found on the sites along the Danube banks and northward. Exchange network is not limited only to the north Balkans but is developing deeper in the hinterland of the continent throughout entire Carpathian Basin. This is why the Vinča culture bearers, besides ensuring spondylus for their own need, probably acted as intermediaries in this exchange providing northern population with valuable raw material and taking at the same time something in return on the reciprocity base. Spondylus objects in the Vinča culture are mostly localised in the Danube area, but again with the exception of Anza, which is situated much further on the south and stands isolated from the other sites of the Vinča culture with its spondylus findings. In Anza out of this phase (IV) there are numerous findings (fragmented bracelets and beads), and it seems that this settlement was supplied with spondylus out of the Aegean area.

Concerning Pannonian Vinča sites spondylus items are discovered in various contexts. In the sites Novi Knjaževac, Aradac, Višac, Potporanž, Guj-Čolak, Vinča and Opovo they are generally related to the settlements without closer information on the context. The circumstances are even more uncertain with three bracelets and one necklace from Kikinda, for which it is not known neither cultural affiliation (the Vinča culture?) nor general references about the sites (settlement, grave, etc.). There are no precise data about findings from Romanian sites Racăsdia, Ostroval Corbului, Ljubcova and Parta, while a hoard with spondylus beads is related to the settlement of Alba Iulia.

But, there are sites showing significantly different picture and the real value of spondylus is possible to evaluate only on these examples. Such a case is with the findings in the site Živaničeva Dolja, near by the village of Botoș in the Zrenjanin surroundings. Here a large number of the whole and fragmented bracelets were found inside necropolis of the Vinča culture as well as several pendants and necklaces made of spondylus. But, the most remarkable is the item (pendant, amulet or belt buckle?) which is found in the site Mostonga near by Odžaci in the grave of the Vinča culture member. The item shows visible traces of use, but it seems that its value for the deceased actually comes out from its six symbolic representations that are arranged in a semicircle and explained by Seferiades as mythogram. This is, for time being, a unique finding in the frame of spondylus world and to a certain extent the parallel could be made only to famous Tartaria tablets.

The site of Tartaria became famous just because findings of three clay tablets, out of which one depicts the hunting scene while the other two present so-called Vinča symbols. While most of attention was paid to this group of findings, other objects found in the context somehow remained neglected. These tablets are found in a pit together with 26 clay figurines, two figurines made of alabaster, and one bracelet made of spondylus. The pit was filled with ash, and certainly it is important to notify that inside it were found disarticulated human bones (individual age 35–40 years). As it was the case with the unique finding from Mostonga, here the context that yielded spondylus

48 Gimbutas 1976.
49 Milleker 1938.
52 Marinovček 1998.
54 Milleker 1938: 113, 148.
55 Karmanzki 1977: fig. 22.
bracelet is unusual. The analogy to this finding also might be searched in a hoard from the site Kremenjak near Čoka of the Tisa culture. On this site in one biconical amphora, high around 30 cm, there were fragmented and whole pieces of the spondylus ornaments (bracelets, a pendant, beads), together with 3 marble idols, 105 marble buttons, an ochre lump, as well as several unidentified objects. A fragment of a human bone found inside the amphora gives a special meaning to this finding.

Spondylus findings from the Gomolava site also arise some dilemmas. Two spondylus items are found near by a pottery pile, in a layer of the phase Gomolava II, which is related to post-Vinča life on the site, and is characterized by the material very similar to that of the Sopot–Lendjel and Tiszaopolgar culture. In this period numerous settlements of the late Vinča culture in the eastern Srem and the lower Danube area continue to exist, as well as those of the Lendjel culture in west Srem, Slavonia and Transdanubia. Consequently, spondylus items might come to Gomolava site either through the contacts with the late Vinča or Lendjel culture bearers. It seems that distribution of spondylus required stable mechanisms of exchange, which could be established only in the settlements of strong economic potential and developed contacts. The Vinča culture centers in the Danube area, during the long history of their existence had these basic preconditions, above all, due to their location, which itself gave such guaranties. On the other hand, it is more than obvious that spondylus exchange towards north happens until the end of the existence of the large centers of the Vinča culture, and the time when its basic socioeconomic unit become small settlements, probably composed of a few households.

FURTHER RESEARCH PERSPECTIVES

The research of the early modes of the trade, the identification of the objects to be exchanged and ways of its happening are certainly some of the most important tasks of prehistoric archaeology. This kind of research consider the items made of spondylus due to their exotic origin and significance of the context within they are found, often analogous with the ethnographic examples out of different parts of the world. The central and north Balkans, the region situated between raw material sources and central Europe, acted as intermediary in the transfer of these items towards the North. But, this was not its mere role. The cultures that flourished in the Neolithic of this region received these items, as well as knowledge about exotic places of their origin, and took part in creation of their meaning and evaluation in its further transfer toward the North. It is unnecessary to prove value of spondylus in this respect, since the spondylus items presence in the graves certainly indicate the prestige of the buried individuals and their distinction from the other members of the society. It is much more important, in this case, to understand the meaning of the items, i.e. what was the story that made them valuable and initiated the exchange throughout the European continent. So far the territory of the Vinča culture with its spondylus findings is the only one that offers the potential for answering to these questions. An amulet from Mostonga with its symbolic presentations probably hides some more connotations of possible meanings of spondylus, and Seferiades is absolutely right when pays the utmost attention to this item. Though, it is much more uncertain if partially the solution is found in Tartaria tablets. It is to be reminded that these tablets were recovered in a ritual pit, together with other articles of the cult, among which there was a spondylus bracelet. By analyzing the nature and content of the pit it becomes evident that the explanation of the circumstances of its creation, requires mosaic-like composing of all available information about it. The presence of the spondylus bracelet therefore could not be put aside. Coexistence of all the items in the pit indicates that maybe their meanings are complementary. Because of that, it is not too pretentious to point out that Tartaria tablets are not fully understandable without previous comprehending of the role of this spondylus bracelet, neither the opposite approach is possible.

Precisely, in this kind of situation the main obstacle to interpreting spondylus findings could be seen. Its surfacing is however possible, and requires publication and detailed analyses of as much as possible items in the regional context. Presentation of the spondylus findings from the type-site of the Vinča culture has for a goal compensation of these shortcomings. Although we are still in situation not to insist on final solutions, it is evident that findings from this site may direct these researches in other directions. The number

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58 Kalicz et al. 1990: 150.
of spondylus findings in the Vinča culture sites significantly varies and we need to establish what made these differences. Belo Brdo, Botos and the group of sites near Vršac are distinguished by numerous findings, but we do not know whether their nonexistence on the other sites is the outcome of insufficient study, or nonrecognition of the material, or they are really missing. A good example is Belo Brdo, from where we have only fragmentary data of spondylus, but new research showed that we should expect them in a large quantity. By directing the attention to this kind of material it might be solved a dilemma whether they appear in the central Balkans south of the Danube, which would in the same time mean significant widening till now known distribution area of the spondylus findings. According to the published material related to the sites Boljevac\textsuperscript{62}, Drenovac\textsuperscript{63} and Divostin\textsuperscript{64}, these indications seem justified, but they have to be confirmed by reexamination of data of the row material kind.

Translated by:

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\textsuperscript{62} Mrkobrad 1982: 29.
\textsuperscript{63} Chapman 1981: fig.143, 18.
\textsuperscript{64} McPherson, Rasson and Galdikas 1988: 330, fig. 11.5.
BIBLIOGRAPHY:


Тодорова, Х. 1978. Енеолит Вълнария, София.

Тодорова, Х. Вансов, И. 1993. Новокаменна епоха в България, София.


Васић, М. 1932. Преисториска Винча I, Београд.


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НОВИ НАЛАЗИ ОД СПОНДИЛУСА У ВИНЧИ: КАМПАЊЕ 1998–2001 И РЕГИОНАЛНИ ПРИСТУП ПРОБЛЕМУ

Током протеклих стотина година остварено је неколико значајних покушаја да се кроз синтетичке осните на дистрибуцији, хронолошку употребе и врсту артефаката јавида значај и улога спондилуса у животу праисторијских заједница на европском континенту. Дуга историја интересовања за ове налазе присутне у егзотичним пореклом шкољке као и из специфичности самих артефаката који су углавном ограничени на декоративне форме (наукине, привисне, перле). Црно море и фосилна лежишта у различитим левенима централне Европе су дуге времена фигурирали као локације од велике важности за инцидентану дистрибуцију спондилуса. Анализе изотопа стронцијума, урађене током последњих деценија су, међутим, показале да је фосилне шкољке нису употребљаване, као и да хладна вода Црног мора не представљала биотоп погодан за развој спондилуса. Резултати ових анализа упућују на Мелитеран као њихову природну средину те, према томе, Егеј и/или Јадран треба посматрати као место одакле је кренула дистрибуција спондилуса.

Дистрибуција налаза од спондилуса на праисторијским археолошким локалитетима обухвата читав европски континент, северниМедитерана и северно Европе. У унутрашњост Балкана је највероватније била усмерена долази ма река које су у праисторији поткрчена као комуникације (долине Вардар, Струме, Марче и Нерете), али није била ограничена само на континентално залеће, већ се Дунавом и Тисом природно даље настављала кроз читав Критск басен, све до западне Европе. При томе је инцесантно да је највећи број локалитета са налазима спонди люса лоцирани у приморској области, Критском басену и дале у централни Европи док се, супротно очекивању, ма ли број налаза среће у митеранској области, у непосрелној близини њихове животне средине. Тиме се налази од спондилуса чланка значајно разликују у поређењу са другим врстама егзотичних роба (нпр., уоднос о позицијама), које показују изузетна културних у региону порекла си ровине и значајно опадање у количини налаза са повећаним удовица от извора.

Помало је чудна ова ситуација да се највећи број нала за од спондилуса среће на локалитетима и у културама које немају директан контакт са природном средином шкољке, па тако ни могућност једноврстне и лаке набавке. Очигледно је да велико разпрострање достизе тек у културно-историјским периодима које карактеришу сложени механизми размене и социо-економски системи који су могући достизању. Али, ову размену прате и категорије значаја које немају искључиво практични значај пиши се могу једноставно објас нити израђеном склоношћу ка естетичкој или употребној вредности спондилуса. Добар пример улоги и значаја пред мета од спондилуса дао је Б. Малиновски у свом египатском студије размене на тробрижским островима у Полинезији. Тамо су ограничена од спондилуса употребавала у церемо нијалној размени, поседовац су симболичку и статусну ли мезију, али и практичну јер су утицале на одржавање и по јављање кон таката током којих је разменивана и роба за сва куличку употребу. Без обзира што је у овај врсту размене темпо аналогијом пребацива у друго време и на други континент она и даље остаје један од најзначајнијих примера за објашњење контекста размене у којој су употребљавали и арте факты израђени од спондилуса.

У Европи је познато око 200 локалитета са налазима спондилуса и то у разној од раног неолита до касног неолита. Утврђивањем прешиве хронолошке за поједине области приближно су одређене и културне области и у коме су открића разубавала. Највећи у северној Европи, укључујући континентално залеће као и централни Балкан, накит са спондилуса је срећу од 5500 кал.Б.С., док је дистрибуција ка централној Европи започела нешто касније, око 5400 кал.Б.С. У егејској области и на западној области Црног мора појава на kita спондилуса је хронолошки једностепена и лепса се око 5100 кал.Б.С. У овој региони налази једнинично иншеви зењу након 4300 кал.Б.С. Услов делимичне размени у хронолошку употребе ограничено је изгражавање два културних круга, односно две трговинске мреже за размену спондилуса. Први обухватале централни и западни Балкан, Критски басен и централну Европу, али су у други укључени егејско област и западна област Црног мора. Попис на ова две области постоје још очигледно ако се има на уму да су поједини предмети од спондилуса типологије ограничени на своју дистрибутивну зону и да не се јављају у другој. Мада се ова пописа на зоне чини исправна, а мада има своју потпуну у хроноло ги и типологији артефаката, постоји бројне разлози због чега је потребна потпуна обрађивање ни висока да током 5. миле нијум к.н.е. између ова два подручја постоја ограничена размена спондилуса. Они су угледном социјалном природи и тину се специфичних услова или околнosti која се раз мена одговара, а не мање доказ су и снажнији културни контак ти са источним Балканом (према винчанске култура) као и лака могућност комуникације Дунавом.

Предмети од спондилуса немају велики репертар обли ка. У највећем броју случајева су у питању основне форме накита: паруљаче, отрлице и привисне. Причеси се јављају у неколико облика и поједини типови су ограничене само на један регион, за разлику од првих и наукине које су унiver залне категорије накита и показују мало разлика између

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Дефинисана зона. Контекст у који су ови предмети депониране такође значајно варирају па се налазе у насељима, у културном слоју или као остатке, у изолованим гробовима или у некрополама. Кроз анализу контекста се заправо виђа како вредност споцилуса расте са повећањем растојања од извора. У подручјима где су ове дистанце представљале тешко премесну бариеру депонираног споцилуса имају и веома конкретну манифестацију, као гроб, као прилог или власништво преминутих индивиду. Због чега се споцилуси најчешће јављају у подручјима која су удаљена од Мезителтана. Шта је покренуло њихово учешће у размени? Какви су конкретним мотивима ова била изазвана? Ово су само нека питања која су могуће поставити. Одговори на њих, пак, захтевају другачију врсту анализе која ће појединима узети у обзир и културне и социјалне факторе и етнографске студије, али најпре би урађени комплетан презентација налаза из музежких збирки као и са нових исконалава. У старевачкој култури налази од споцилуса нису чести. Њихово присуство је забележено само на неколико локалитета, углавном у подунавској области, понекада у заимљивом контексту (гроб, останак) или уз одећом без података и о хронолошким налазима или налазиштима. Слога се постања јавља и као доказ изношења времена у којем се налазили најчешће споцилуси у старевачкој култури лоцати кроз контакте са истовременима насељима винчанске културе или, пак, ова врста размене има дубље корене и се- же до самих почетака неолита на овој простору. Основни капацитети за такву размену у старевачкој култури јесу постојали, али за њено остварење су били неопходни и мотиви изазивачи практичних и економских. У касном неолиту централног Балкана, у винчанској култури, споцилуси се срећу на више локалитета у зна- тно већем броју. Територијална распрострањеност се, међутим, бити не ће кој јер се и даље јављају на локалитетима уз обалу Дунава и северно од ње. У ово време мрежа разме- не није ограничена само на Балкан већ се шире и дубже у унутрашњости континента, кроз читав Карпатски басен. Због тога су припалици винчанске културе, се обезбеђивани споцилуси за властите потребе, вероватно деловали као и остали у овој размене, обезбеђујући вредну сировину и за севернозападе попунације и узимајући од њих и неопходни на баци рецифире. Захватајућа размена споцилуса због чега се могло бити оста- рани старац само у насељима са јаком економским потенцијалом и израђеним контактима. Центри винчанске културе у Подунављу су током дугог периода свог постојања ове основне предлозе испуштају између осталих и зато што је њихов постојање, само по себи, гарантовано таје контакте. Сем тога, више је него увечељено да се размена споцилуса према северу јешћа све до треткуга када велики центри винчанске културе престају да постоје. Превазилажеље диплома које су у овом раду изнете неза детаљан анализу и публиковање што већег броја нала- за у регионалним освирима. Преглед налаза од споцилуса са споменика локалитета винчанске културе има за циљ да ло ових пропушта находим. М. Васић у њему у извештају о ис- копавањима овог налазишта у 1989. години публиковао де- вет фрагмената наружника од шкољки док слични предмети из каснијих ископавања нису објављени. Нова извештајна локалитети да су на овом налазишту предмети од споцилуса веома ретки и сложени у великим броју. Током кампања 1998–2001 укупно је пронађено 14 фраг- мента наружника од споцилуса, који су, единац, уплио за простор куће. Овим се не мисли искушено на унутра- шњем простор грађевине, јер су неки фрагменти пронађени у фундаменту куће и ипакима стубова. За израду ових наружника нису кохецијени фосиле цивила о чему све дочуди њихова боја – млечно бела на неким примерима, медено-зелена на другим, док се на неким примерима очувала у груповима и карактерисана ручним ствара- ма боја споцилуса споцилуса лоцати у налазишту на рањаји кам- пања извештаја, према којима је извесно њихово ценов- терате спајајко. У изради наружника испоручено је докриће која се испраћа али не максимал- ном пречнику који допуштају иначе капац. У горњој половини капака кампањи наружнике је урађен на пречнику, а у сред- ђим делу се спријало савија и прелази у хоризонтални положај – паралелно пречнику капака. Спорона повијацом имало је за последицу атрацион, посебно и претеране облик наружника. Друга особина, због које је споцилус примарно привлачила пажњу, је његова боја – ручки био боја споцилуса спајајко груповима у већој мери, а на другима само у груповима или не- достаје. На израђеним наружницима, препознају се истиченички и нараштајни претуци које се виде на назначеном и по- знатом пречнику капака, као и њиме израђиван. Осим мањих разлика у дебљини и црви, ски фрагменти су при- падали наружницама сличних облика и њих је упечатљиве у ло- шиме на сличним начином. Прегледтовање споцилуса, пронађених током послед- ћих кампања извештаја (1998, 1999, 2001.) има за циљ да попуни празнице у познавању егзотичких материјала са овог налазишта, али и да указе на неке специфичности и да- ље практичне извештаја ове врсте налаза на локалитетима винчанске културе.