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Anthropomorphic Figurines with Hunched Backs and Deformed Breasts in Kodjadermen–Gumelniţa–Karanovo VI Culture

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Abstract. A number of unusual anthropomorphic figurines featuring hunched backs and conical protrusions on their chests have been unearthed in several settlements that belong to the area of the Kodjadermen–Gumelniţa–Karanovo VI culture. The figurines have not been subject to a special study in scholarly literature so far and hence, no attempt at their interpretation has ever been made.

The study discusses the possibility that these unusual images reflect a physical disability caused by Pott's disease. Anthropologic research on skeletal remains of the Eneolithic population of Europe has established pathological changes that are consistent with this disease. Its cause, Mycobacterium tuberculosis, has been identified also through biomolecular study of human bones, which confirms the spread of tuberculosis in this period. The author furthermore argues about the possible use of this type of figurines in magic rituals. In addition, some ethnographic data is supplied for the use of clay anthropomorphic images in health-bringing and healing rites.

Keywords: anthropomorphic figurines, eneolithic, tuberculosis, magic rituals.

Kodjadermeno-Gumelnicos-Karanovo VI kultūros antropomorfinės figūrėlės su kupromis ir deformuotomis krūtinėmis

Anotacija. Keliose kasinėtose gyvenvietėse, priklausančiose Kodjadermeno-Gumelnicos-Karanovo VI kultūrai, buvo rasta keletas neįprastų antropomorfinių figūrėlių su kupromis ir kūginiais krūtinių išsikišimais. Iki šiol minėtos figūrėlės nebuvo tirtos ir aprašytos mokslinėje literatūroje, todėl niekada nebuvo bandoma jas interpretuoti.

Tyrime aptariama galimybė, kad šie neįprasti vaizdai atspindi fizinę negalią, kurią sukėlė Poto liga. Remiantis antropologiniais Europos eneolito populiacijos skeletuotų palaikų tyrimais, rasta patologinių šios ligos sukeltų pokyčių. Šios ligos sukėlėjų, Mycobacterium tuberculosis, randama atliekant papildomus biomolekulinius tyrimus; šie tyrimai patvirtina tuberkuliozės plitimą tuo laikotarpiu. Straipsnio autorė teigia, kad šio tipo figūrėlės galėjo būti naudojamos magiškuose ritualuose. Straipsnyje taip pat pateikiami kai kurie etnografiniai duomenys apie molinių antropomorfinių atvaizdų naudojimą sveikatos stiprinimo ir gydymo apeigose.

Reikšminiai žodžiai: antropomorfinės figūrėlės, eneolitas, tuberkuliozė, magiški ritualai.

Introduction

In the corpus of anthropomorphic small plastic art from the Late Eneolithic cultural complex Kodjadermen–Gumelniţa–Karanovo VI (KGKVI), a group of figurines that originate from settlement mounds in the territory of Bulgaria and Romania stands out. These figurines constitute specific depictions of human bodies with double hunched backs – one on the back and one on the chest, shaped as conical or spherical protrusions.

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The present study takes into consideration figurines originating from the settlement mounds of Dolnoslav, Hotnitsa, Karanovo, Ruse, Sveti Kirilovo, Gumelniţa, Vidra, Zavet, Smyadovo, and Căscioarele. It is remarkable that half of them have no indicated gender, while four of them are obviously male, only two are female and one figurine possibly represents a bisexual image. All of them are depicted with the same gesture – widespread arms, positioned horizontally. Only one figurine of considerable size has its arms slightly raised upwards. According to the typology accepted in Bulgarian archaeological literature, the figurines belong to various types – standing, cylindrical, and busts. The specimens whose archaeological context is known come from buildings.

The present study aims to summarize and analyze the known archaeological evidence about them, without claiming to be exhaustive, for the lack of full publications on most of the Eneolithic sites under consideration. An attempt is made to offer possible interpretations, drawing on evidence from anthropological research, later-period cult practices and ethnographic parallels. The article examines the possibility that the unusual images reflect a physical disability caused by Pott's disease. Anthropological research conducted on the skeletal remains from the Eneolithic population in Europe has established pathological changes consistent with this disease (Köhler et al., 2014; Pósa et al., 2015; Russeva V., 2021; Spekker et al., 2012). The cause, Mycobacterium tuberculosis, has been identified also through the biomolecular study of human bones, which confirms the spread of tuberculosis in this period (Masson et al., 2013, p. 4–5; Osztás et al., 2016, p. 191). The present paper discusses the possible use of this type of figurines in healing rituals.

The Figurines in Their Archaeological Context

The figurines featuring a hunched back and a protrusion on the chest are distributed within the area of the KGKVI cultural complex (the second half of the 5th millennium BC) and are dated predominantly to its last phases. Such specimens have been found in Thrace – Karanovo, Dolnoslav, Sveti Kirilovo settlement mounds; Central North Bulgaria – Hotnitsa settlement mound; Northeast Bulgaria – Smyadovo settlement mound; along the Lower Danube – Ruse settlement mound; Southeast Bulgaria – Zavet settlement mound; Romania – Vidra, Gumelniţa, Căscioarele settlement mounds; and one item is of unknown provenance (Table 1).

Two cylindrical figurines with double hunched backs were discovered in the burnt uppermost horizon of Hotnitsa settlement mound. The figurine found in building No. 9 is cylindrical, with a slightly widened concave base and short chipped arms raised to the sides, the right one of which slightly curved forward. The head is schematic, of triangular shape; the nose is formed by two side grooves and is partly broken off. Found within the same building were also: two anthropomorphic lids, a leg from a hollow figurine, a loom weight with an anthropomorphic image, a seated clay figurine, a vaulted and a flat bone figurine, a fragment from a hollow zoomorphic figurine. The figurine from the second building No. 12 is also cylindrical, its head and lower part chipped off and its arms spread and broken at the shoulders. The published settlement map shows that these are the largest buildings, containing two rooms each (Fig. 1). Building No. 9 has an area of 57.30 sq.m and building No. 12 of 50.15 sq.m (Chohadzhiev, 2009, p. 75).

An impressive number of over 500 clay anthropomorphic figurines originate from Dolnoslav settlement mound (Chapman, Gaydarska, 2006, p. 118). In the absence of a detailed archaeological report, the greater part of them is unknown to academia. Among the published materials, three figurines with double hunched backs stand out, but their number must be in fact larger, since at least three other unpublished specimens of the same type are displayed in the permanent exhibition of the Regional Archaeological Museum – Plovdiv (personal observations of the author). One of them is cylindrical, with a hollow lower part; its arms are spread sideways, and it features relief male genitalia that are partly broken. It was discovered in building No. 19, from which no less than six clay anthropomorphic figurines have come to light (Fig. 2). A fragment of a cylindrical figurine with a hunched back, whose left arm is placed underneath a large conical protrusion on the chest, without gender characteristics, was unearthed in building No. 17, together with four other anthropomorphic figurines. Of special

Table 1. Examples of figurines with hunchbacks and deformed breasts in Kodjadermen–Gumelniţa–Karanovo VI Culture.
1 lentelė. *Kodjadermen–Gumelniţa–Karanovo VI kultūros figūrėlių su kuprotomis ir deformuotomis krūtinėmis pavyzdžiai*

Site	Type	Size (cm)	Gender	References
Smyadovo	cylindrical	7.4 × 5 × 4.4	sexless	Миткова, Попов 2011, p. 103
Ruse	cylindrical	7.6 × 2.6	sexless	Георгиев, Ангелов 1957, p. 109
Hotnitsa	cylindrical	6.7	sexless	Илчева 2014, p. 86
Hotnitsa	cylindrical	6.6 × 5.4 × 4.4	indefinable	Илчева 2014, p. 86
Dolnoslav	cylindrical	6.7	male	Chapman 2020, p. 141
Dolnoslav	cylindrical	9.5 × 5.7 × 4.5	sexless	Chapman, Gaydarska 2011
Dolnoslav	realistic	about 60	male	Стоянова 2017
Sv. Kirilovo	realistic		male	Перничева 2004, p. 462
Karanovo	cylindrical	5.8 × 4.9	sexless	Berger 2005
Vidra	cylindrical		sexless	Zgibea 1963, Pl. 1.2
Vidra	cylindrical		sexless	Hansen 2007, Taf. 400.1
Căscioarele	cylindrical		sexless	Andreescu 2002, Pl. 11.3
Căscioarele			female	Andreescu 2002, Pl. 11.5
Căscioarele	cylindrical		male	Andreescu 2002, pl. 22.10
Căscioarele			bisexual	Andreescu 2002, Pl. 22.11
Căscioarele			female	Ştefan 1925, Fig. 39.12
Gumelniţa	cylindrical	5.6	sexless	Marinescu-Bîlcu, Ionescu 1967, Pl. XV.2
Unknown	cylindrical	4.6	sexless	Frănculeasa 2004, p. 34
Zavet	cylindrical	5.5	sexless	Миков 1961, p. 291

interest is a large standing sculpture of ca. 0.60 m height, with legs set slightly apart, hollow upper torso and partly preserved hollow arms raised sideways and upwards (Fig. 3). The head is broken off. The male gender is indicated through a bulge in the pubic area and a belt fastened around the waist. On the chest protrusion there are two carvings that resemble eyes. The sculpture has been published only as an image, without information about the context of its discovery, but most likely it comes from a dwelling, since the existence of large statuettes in Dolnoslav is reported (Bánffy, 1991, p. 208).

In a horizon dating to Phase III of KGKVI in the fully excavated Ruse settlement mound, an intact cylindrical figurine was found with a concave base, conical pegs on the back and breasts, a schematic face and widespread arms (Fig. 5.1). A fully preserved cylindrical figurine with a double hunched back comes also from Zavet settlement mound (Fig. 6.5). A roughly shaped cylindrical figurine of the same type was discovered in the third horizon of Smyadovo settlement mound (Fig. 5.2). A cylindrical figurine with protrusions on the back and chest, its head broken off and arms open, is known also from Karanovo settlement mound (Fig. 4.2). A realistically modeled figurine with a proportionate body, narrow pelvis and emphasized male genitalia, with two symmetrically placed protrusions on the chest and the back, originates from Sveti Kirilovo settlement mound (Fig. 6.6). It is of unclear context, but L. Pernicheva dates it to the Late Eneolithic.

In the collection of anthropomorphic figurines from Căscioarele settlement mound there are five specimens with double hunched backs – one is pronouncedly male (Fig. 6.3), two are female with a depicted triangle (Fig. 6.2), and one has no gender indication (Fig. 4.3). The fifth one possibly represents a bisexual image – on the

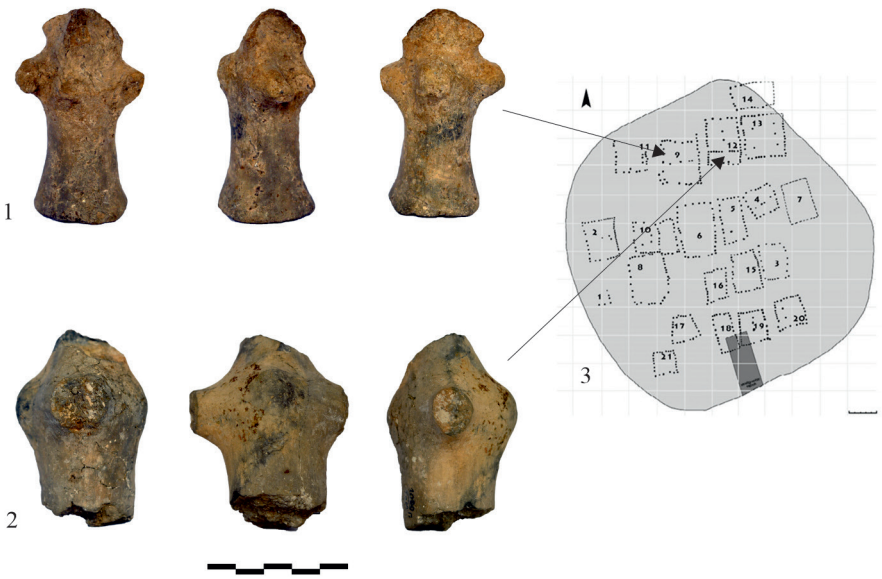

Fig. 1. Figurines from: 1, 2 – Hotnitsa (photos by V. Stavreva). Plan of the last Late Eneolithic layer of Hotnitsa settlement mound (after Chohadzhiev, 2009, 74, fig. 3).

1 pav. *Figūrėlės iš: 1, 2 – Hotnitsa (V. Stavrevos nuotraukos). Datuojamo vėlyvuoju neolitu paskutinio Hotnitsa gyvenvietės sluoksnio planas (pagal Chohadzhiev, 2009, 74, 3 pav.)*

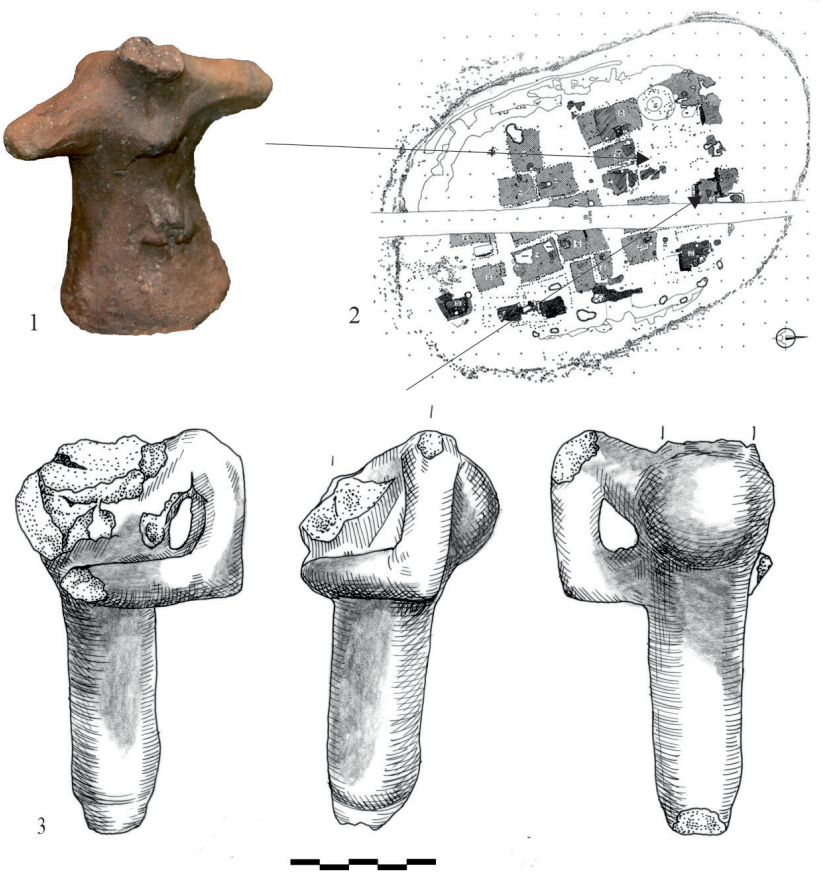

Fig. 2. Figurines from Dolnoslav: 1 (photo by V. Stavreva), 3 (Chapman, 2020, p. 141, fig. 4.31.e). Plan of the last Late Eneolithic layer of Dolnoslav settlement mound (after Koleva, 2018, 17, fig. 3).

2 pav. *Figūrėlės iš Dolnoslav: 1 (V. Stavrevos nuotrauka), 3 (Chapman, 2020, p. 141, pav. 4.31.e). Paskutinio vėlyvuoju eneolitu datuojamo Dolnoslav gyvenvietės sluoksnio planas (pagal Koleva, 2018, p. 17, pav. 3)*

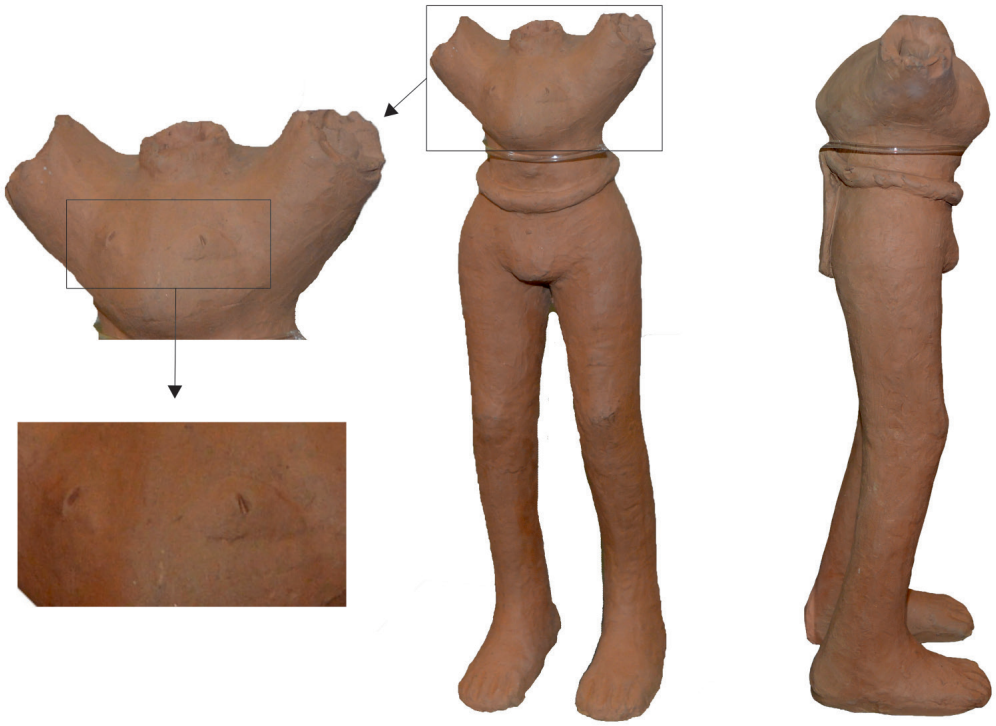

Fig. 3. Figurine from Dolnoslav (*photos by V. Stavreva*).
3 pav. *Figūrėlė iš Dolnoslav (V. Stavrevos nuotraukos)*

one side there is an incised triangle and on the other one there are indications of male gender (Fig. 6.1). However, the lack of a head makes the interpretation uncertain. Two cylindrical figurines that feature the same deformity are known from Vidra settlement mound (Fig. 5.3, 5.4). In County Museum of History and Archaeology Prahova in Romania a figurine of the same type is kept, of unknown findspot (Fig. 6.4). Similar iconography can be observed also in a cylindrical figurine from Gumelniţa settlement mound, but it is possible that in this case the front protrusion indicates the abdomen (Fig. 4.1).

The iconographic properties of the artefacts reviewed above and the three unpublished figurines from Dolnoslav outline certain patterns. It is worth to note that the figurines of cylindrical shape – fifteen in number – prevail. Four figurines are realistic, with legs set apart, and two are fragmented under the thighs, thus making it uncertain how their lower parts were shaped. In the arms' position, some repetitiveness can be observed – in eighteen cases the arms are spread wide open or turned slightly upwards, while in the remaining three specimens only one arm is preserved. In one of the figurines, the left arm touches the chin ("The Thinker" type), while the right one is broken; in the other two, the left arm is folded at the abdomen directly under the chest protrusion and the right one is broken. Nine figurines have intact heads and schematic faces, formed by the intersection of two planes. When gender characteristics are available, another tendency can be noted – fifteen specimens lack any such indication, only two figurines are female, four figurines feature emphasized male attributes, and one is possibly androgynous. The fully preserved specimens range between 5.6 and 7.6 cm in height, but among the fragments there are items of 9.5 cm, showing that some figurines were of medium size. An exception is the statuette from Dolnoslav which is about 60 cm high.

The archaeological context of discovery is of particular significance because it offers additional arguments for the interpretation of the artefacts. In our case, an attempt at an analysis is significantly challenged by the lack of context information about the major part of the figurines. The only certain fact is that all of them originate

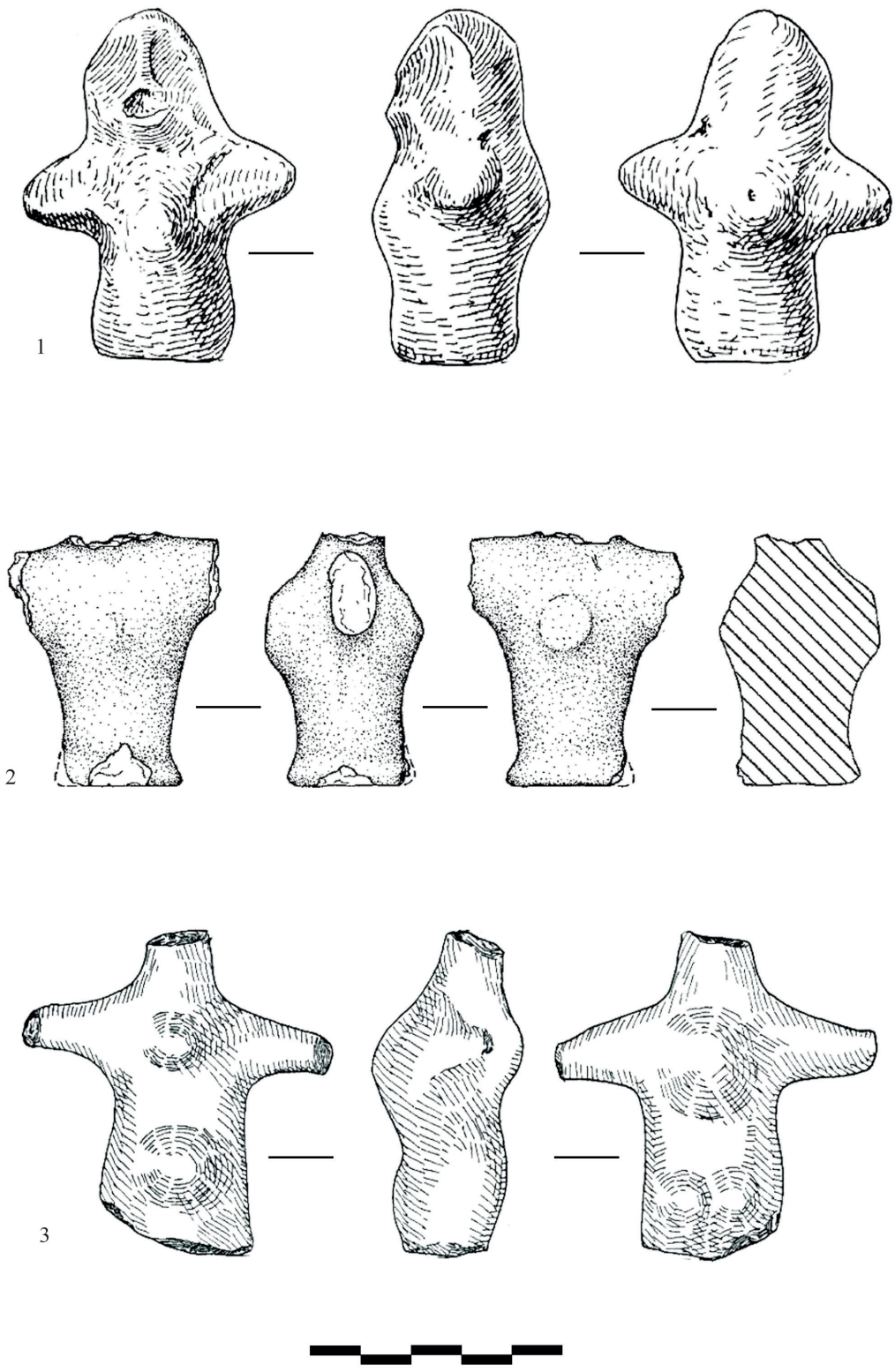

Fig. 4. Figurines from: 1 – Gumelniţa (Marinescu-Bîlcu, Ionescu, 1967, pl. XV.2); 2 – Karanovo (after Hiller, Nikolov, 2005, taf. 165.12); 3 – Căscioarele (*Andreescu, 2002, pl. 11.3*).

4 pav. *Figūrėlės iš: 1 – Gumelniţa (Marinescu-Bîlcu, Ionescu, 1967, pl. XV.2); 2 – Karanovo (pagal Hiller, Nikolov, 2005, taf. 165.12); 3 – Căscioarele (Andreescu, 2002, pl. 11.3)*

Fig. 5. Figurines from: 1 – Ruse (photo by V. Stavreva); 2 – Smyadovo (after Миткова, Попов, 2011, p. 103); 3 – Vidra (after Institutul Național al Patrimoniului, Romania, http://clasate.cimec.ro/Detaliu.asp?tit=Statueta-antropomorfa&k=2215E8DCA40841C290221C3D0FA55597); 4 – Vidra (after Hansen, 2007, taf. 400.1).

5 pav. *Figūrėlės iš: 1 – Ruse (V. Stavrevos nuotraukos); 2 – Smyadovo (pagal Миткова, Попов, 2011, p. 103); 3 – Vidra (pagal Institutul Național al Patrimoniului, Romania, http://clasate.cimec.ro/Detaliu.asp?tit=Statueta-antropomorfa&k=2215E8DCA40841C290221C3D0FA55597); 4 – Vidra (pagal Hansen, 2007, taf. 400.1)*

Fig. 6. Figurines from: 1, 2, 3 – Căscioarele (after Andreescu, 2002, pl. 11.5; pl. 22.10; pl. 22.11); 4 – Romania, unknown (after Frănculeasa, 2004, p. 34); 5 – Zavet (after Миков, 1961, p. 291); 6 – Sveti Kirilovo (*photo by V. Stavreva*).

6 pav. *Figūrėlės iš: 1, 2, 3 – Căscioarele (pagal Andreescu, 2002, pl. 11.5; pl. 22.10; pl. 22.11); 4 – Rumunija, nežinomos (pagal Frănculeasa, 2004, p. 34); 5 – Zavet (pagal Миков, 1961, p. 291); 6 – Sveti Kirilovo (V. Stavrevos nuotraukos)*

from settlements, and not a single specimen has ever been found inside a grave or from the territory of necropoleis. The four figurines of which precise data is available were found in dwellings in Hotnitsa and Dolnoslav. For the remaining items there is no indication whether they originate from buildings, waste or ritual pits, or come from the strata of the settlement mounds.

Due to the inadequate state of published information, the findspots of the other double hunched back figurines from Dolnoslav as well their precise number remain unknown, and therefore a very tentative analysis can be made on the specimens from this settlement and Hotnitsa. In the first place, it is of importance that the figurines come from burnt settlement horizons, which lends a certain degree of reliability to the archaeological context. Another thing in common is that other anthropomorphic images of various types were present too in the buildings where they were discovered. The existence of a number of figurines is documented also in other buildings in both settlements: in building No. 6 in Hotnitsa, for instance, fourteen clay and bone figurines have been unearthed (Еленски, 1997, p. 85–87; Илчева, 2014, p. 69), and in building No. 17 in Dolnoslav the number of figurines is as high as seventeen (Chapman, Gaydarska, 2011).

A. Raduncheva, the investigator of Dolnoslav, defines the settlement as a cult complex and the excavated buildings as temples dedicated to various gods (Радунчева, 1996, p. 169). Probably the room known as "Complex 2" was assigned to a special function: a sacrificed suckling pig, in anatomic order, was discovered on the floor in front of its central altar. In the trench of the north wall a lid and a zoomorphic vessel were found, and at the base of the east wall – a cult table with a leg from an anthropomorphic figurine placed on it, together with a small chair interpreted as a building votive that predated the construction. On the wall there was a depiction of a life-size male head with eyes colored in yellow (Koleva, 2018, p. 22–24). The interpretation of the site is not straightforward, considering that the buildings contain a great number of tools and vessels – a fact which has been remarked upon by some scholars who argue that those items were employed both for cult and everyday needs (Bánffy, 1991, p. 208). Undoubtedly, based on the available archaeological evidence, it is clear that Dolnoslav is distinctive with its singularity, making it unique for the KGKVI cultural complex at the current state of research. On the east-west oriented street paved with gravel, clay and pot shards, and in the open-air spaces between the clusters of buildings, four zones that amount to a total area of 550 sq. m have been identified. These zones demonstrate a great concentration of artefacts mixed with ash and charcoal and are designated by the researchers as "depots" (Koleva, 2018, p. 22). In these depots, some 208 clay anthropomorphic figurines have been found; 196 were discovered inside the buildings and 113 in the open-air spaces, but without a published comprehensive study, we lack information about their distribution on microcontextual level or their typological diversity. There is no data where the clay statuette comes from; based on its large size, it may be connected to a space with public functions.

N. Angelov, who studied the uppermost burnt layer of Hotnitsa settlement mound, defines as a building of cult function a relatively small dwelling, No. 4, which is located almost in the center of the settlement. It features no hearth, quern or tools, but is painted red on the outside; in its northern room a gold treasure was found consisting of 44 artefacts, four of which are of the so-called anthropomorphic ring-shaped figurine type, one flat bone figurine and five clay vessels (Ангелов, 1959, p. 38–40). Whether such a small dwelling whose walls measure merely 4.80 x 4.40 x 4.80 x 5 m could have a cult function, and the criteria to define a certain building as a shrine or temple, are points of discussion that are beyond the subject of this paper. We are not to examine here the norms for the interpretation of pits as waste or ritual ones, nor to give the definition of specific zones for cult activity within the dwellings. What matters in this particular case is that, apart from public buildings or spaces where members of the community gathered in order to conduct initiations or cult ceremonies, house interiors also kept artefacts of nonutilitarian function such as anthropomorphic figurines which may have been used to an apotropaic effect or in the context of domestic or magic rituals. The discovery of figurines inside dwellings does not exclude the possibility that they were worn or used in some cases outside the house, considering their miniature size and portability.

It is obvious that the contextual data from Hotnitsa and Dolnoslav is far too insufficient to make any conclusions or outline a definitive pattern for the archaeological context of the type of figurines under consideration. The discovery of figurines in pits or in open-air spaces outside archaeological structures poses further questions: whether they were deposited deliberately or ended up there accidentally, whether they were lost or discarded – considering that discarding in itself may be part of a social practice after the figurines had been used in a particular way and subsequently become obsolete.

Realistic and Surrealistic Representations

These unconventional depictions have remained largely unnoticed by scholars or have been only briefly mentioned. Specimens of this type are included in some studies among the illustrations of the category of hunchbacked figurines (Chapman, 2020, p. 140; Müller, 2015, p. 358), without, however, a note on the existence of an identical protrusion on the chest, or a comment on this significant difference in iconography. A. Raduncheva mentions depictions with double hunched backs among the hunchbacked figurines, but does not identify them as a separate type (Радунчева, Холевич, 2001, p. 172). Some authors discern them by defining the conical protrusion on the frontal upper part of the torso as a schematic depiction of the breasts or the abdomen (Илчева, 2010, p. 86; Миткова, Попов, 2011, p. 14; Frănculeasa, 2004). For the figurine from Gumelniţa, S. Marinescu-Bîlcu and B. Ionescu write that "just as in front, on the back side there is a hunched back, the former one indicating pregnancy and the latter – steatopygia" (Marinescu-Bîlcu, Ionescu, 1967, p. 16). L. Berger, who published a figurine of this type from Karanovo settlement mound, identifies it as a female pregnant figurine, without commenting on the hunched back (Berger, 2005, p. 219).

The analysis of the figurines points to an explanation beyond those so far proposed. The deformity on the back presented in the figurines in question is placed too high on the body to be considered steatopygia (Müller, 2015, p. 358), even more so that in some of the specimens (Dolnoslav, Sveti Kirilovo, Căscioarele) the rear parts are modeled in a realistic way and the hunched back is clearly shaped above them. It is also unconvincing to interpret the protrusions on the front side as pregnancy: on the one hand, they are depicted at arms' level and not in the abdominal area, and on the other, such an interpretation is hardly possible for the figurines with emphasized male genitalia.

In order to answer the question what these figurines show – realistic or imaginary persons – it is important to examine, in the first place, whether actual conditions of the human body exist that can lead to these deformities. Such pathology can be observed in the severe forms of Tuberculosis spondylitis, also known as Pott's disease, which harms the spinal cord and leads to serious invalidization (Spekker et al., 2012, p. 116). The lung form is the most frequent form of tuberculosis, when the pathogen Mycobacterium tuberculosis infects the lungs. In some of the patients with chronified development of the disease occur morphological changes on the bones and specific skeletal changes. Pott's disease is a combination of osteomyelitis and arthritis which involves multiple vertebrae. A possible effect of this disease is vertebral collapse and when this occurs anteriorly, anterior wedging occurs, leading to kyphotic deformity of the spine (Fig. 9). The thoracic spine is involved in about 65% of cases, and the lumbar, cervical and thoracolumbar spine in about 20%, 10% and 5%, respectively. Males are affected more often than females in most series, and the disease generally affects young persons (Cherian, Thomas, 2011, p. 116–120).

Anthropomorphic and paleopathological research conducted over the last years offer data on the diffusion of spinal tuberculosis among the Neolithic and Eneolithic populations. Cases of tuberculosis have been identified in the analysis of human skeletal remains from the Pre-Ceramic Neolithic Period C (6200–5500 BC) in the Near East, in Atlit Yam and at the synchronous ʿAin Ghazal settlement in Jordan (Hershkovitz et al., 2015, p. 125).

The earliest confirmed cases in Europe come from the territory of today's Hungary (Fig. 7). Severe lesions that occurred due to spinal tuberculosis or brucellosis, have been documented in the skeletal remains of a male adult in grave No. 1078, dated approximately to 5025–4845 BC, at the Versend-Gilencsa settlement (Köhler et al., 2016, p. 8–9).

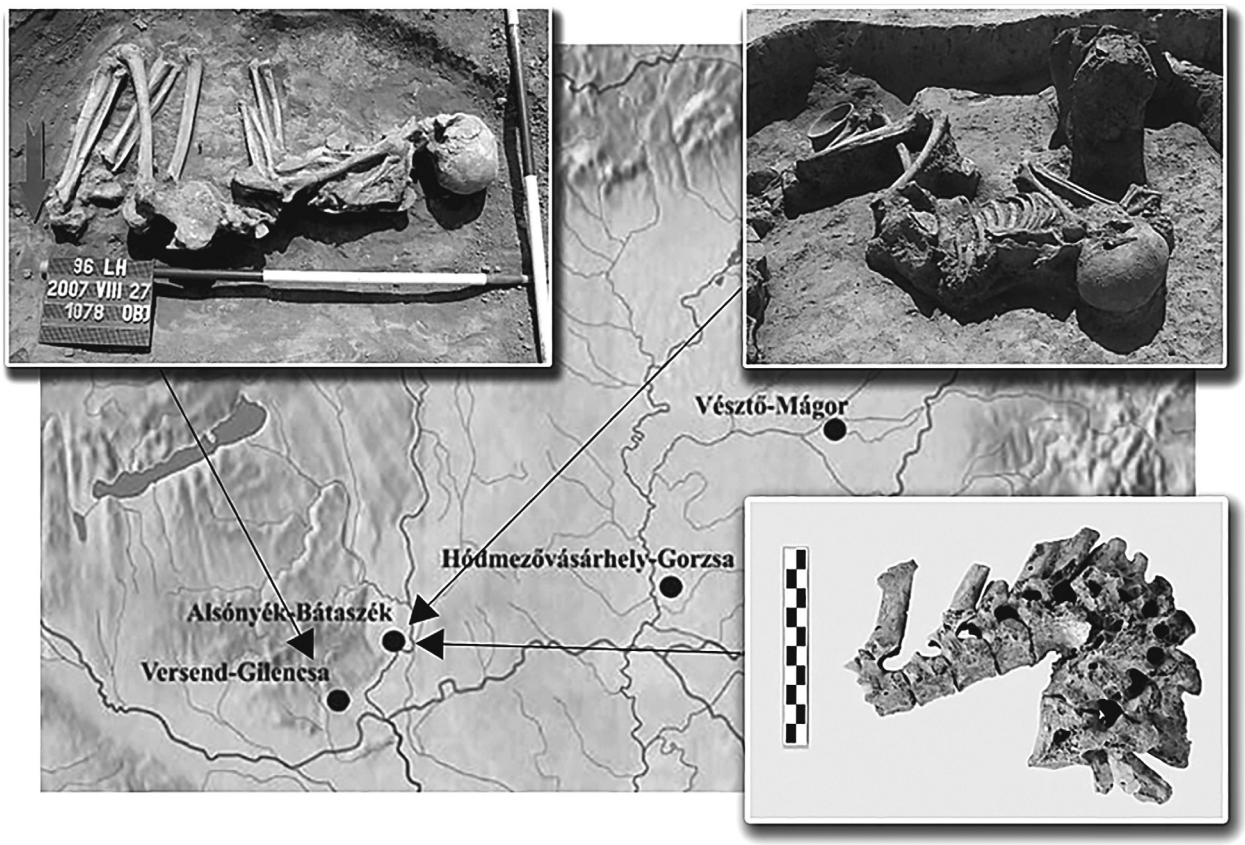

Fig. 7. Map of Late Neolithic cases of Pott's Disease in Hungary (after Köhler et al., 2016, fig. 8); Versend-Gilencsa, grave No. 1078 (after Kohler et al., 2016, fig. 1); Alsónyék-Bátaszék, grave No. 4027 (after Köhler et al., 2014, Fig. 2; Posa et al., 2015, 19, fig. 2).

7 pav. *Vėlyvojo neolito Pott'o ligos atvejų žemėlapis Vengrijoje (pagal Köhler et al., 2016, 8 pav.); Versend-Gilencsa, kapas Nr. 1078 (pagal Kohler et al., 2016, 1 pav.); Alsonyék-Bátaszék, kapas Nr. 4027 (pagal Köhler et al., 2014, 2 pav.; Posa et al., 2015, 19, pav. 2)*

Skeletal tuberculosis was spread among the population of the Late Neolithic Tisza culture. In the Hódmezővásárhely-Gorzsa settlement mound, in five out of 71 studied skeletons, symptoms of the disease were found, and in three of them the diagnosis was confirmed through an analysis of lipid biomarkers and paleo-DNA-analysis. Among them is a young male aged 19–20 from grave No. 64, where hypertrophic pulmonary osteopathy secondary to tuberculosis was established, with changes in the ribs and the vertebrae (Masson et al., 2013, p. 4–5). In the analysis of skeletal remains from Vésztö-Mágor settlement mound, four cases of skeletal tuberculosis were attested: in two male individuals aged 16–18 and 30–40, in a female individual aged 50–60, and in a child aged 10–12 (Spekker et al., 2012, p. 117–120).

In a necropolis in the area of Alsónyék-Bátaszék in Southern Hungary, 2359 graves dated to the first half of the 5th millennium BC that belong to the Lengyel culture have been studied. The graves are distributed in grave groups, which the researchers assume to be established on family principles. In the anthropological study, a case of Pott's disease was identified in a male aged 30–35 from grave No. 4027 of grave group 13 (Pósa et al., 2015, p. 21–22). Severe pathological changes were found in the lower chest and lumbar areas, which is a classic example of the advanced stage of spinal tuberculosis. Due to the disease, the hunchbacked man probably had difficulty moving and his physical activity may have been reduced in the second half of his life (Köhler et al., 2014, p. 699–701). The contagion was confirmed in three other individuals among the remaining 38 buried in the same grave group. The paleo-DNA analysis has found tuberculosis DNA in the skeletal material of a child aged 11–12,

a male aged 40–50 and an individual aged 23–26. The ongoing anthropological study of the osteological material from the necropolis continues to find more cases, suggesting that the disease may be regarded as endemic in the community of Alsónyék (Osztás et al., 2016, p. 191).

Data on the spread of tuberculosis in the territory of today's Bulgaria in Eneolithic times comes from the necropolis of Kozareva Mogila. Pathological changes in the bones as a result of a bacterial infection, possibly with Mycobacterium tuberculosis, were established in one of the skeletons (Russeva, 2021, p. 215–216, 220–221).

Next, it is important to answer the question about the social status of those who suffered from skeletal tuberculosis. We can explore the attitude towards people with congenital or acquired physical disabilities based on the data from necropoleis. The abovementioned case from grave No. 4027 from the necropolis at Alsónyék-Bátaszék permits us to suggest that despite the impairment of the buried man, he was not socially excluded and perhaps received care in the hardest periods of his disease. A confirmation of this is the fact that he lived long with the disease and was buried with a large number of grave goods – six vessels, a polished stone adze and a flint flake, which places his burial among the rich graves of group 13 (Köhler et al., 2014, p. 699–701; Osztás et al., 2016, p. 215). The cited case from grave No. 12 from Kozareva Mogila gives grounds to assume that despite the disability of the man buried in it, he was of high social status, as he was buried with objects – signs of prestige. This is the only tomb with a scepter ax made of serpentinite and a 33 cm long flint blade (Georgieva, Danov, 2021, p. 55, 83).

Valuable information comes from Tărtăria. In the pit where the so-called Tărtăria tablets were found, were deposited also two alabaster figurines, twenty-six fragmented clay figurines and the bones of a female individual without the skull. A later reinterpretation connects the pit to the neighboring dwelling and suggests that it held a special place in the performance of magic or religious rites. The bones of the buried woman were possibly placed in the pit after the decomposition of the soft tissues, i.e. as a secondary burial. It has been ascertained that she was aged 50–55 and had skeletal malformations since young age – she was severely hunchbacked and had a limp in the right leg. The radiological expertize and clinical analogies demonstrate that most likely these owed to gummatous osteoperiostitis, osteomelite or tuberculosis, the last diagnosis being the most probable (Lazarovici et al., 2011, p. 131–134). The analysis of the human remains in the context of the ritual pit gives grounds to G. Lazarovici and M. Merlini to define the deceased as a "revered holy woman" that played a key role in the community.

Physiological Conditions and Diseases Reflected in Prehistoric Anthropomorphic Plastic Art

The mentioned data from the necropoleis point to the assumption that the producers of "double hunched back" figurines reflected in them an actual medical condition which they saw in real life. If we accept that this is a credible explanation for their unusual iconography, then these figurines are no exception.

The interest in anatomy and the depiction of physiological peculiarities or conditions such as pregnancy, malformations and diseases has been attested ever since the Early Neolithic. It found an expression in a figurine from the area of Istanbul, which combines a female representation on the front part with an anatomical depiction on the back – spinal cord, pelvis, shoulder blades (Meskell, 2007, p. 152–153); in the "Adam of Govrlevo" figurine (Fig. 8.2; Митревски, 2019, p. 41); in a head from Western Thessaly with indications of Down's syndrom (Diamandopoulos, 1997, p. 87–88); in the Çatalhöyük figurines that show obesity (Meskell et al., 2016, p. 142–143) etc.

Various medical conditions were probably represented also in figurines from the Late Eneolithic. Such is the head from Ruse settlement mound which depicts an individual with Down's syndrome (Fig. 8.1); the female figurine from Dolnoslav with a misaligned spinal cord, bad posture and a slightly curved back – possibly scoliosis; the figurines with hunched backs resulting from Tuberculosis spondylitis (Fig. 8.5; Радунчева, Холевич, 2001, p. 169–171); the figurines with unnaturally twisted arms which perhaps reflect the pathological condition *manus*

Fig. 8. 1 – head from Ruse which depicts an individual with Down's syndrome (photo by V. Stavreva); 2 – "Adam of Govrlevo" (after Митревски, 2019, p. 41); 3 – figurine with unnaturally twisted arm from Kozareva Mogila (photo by V. Stavreva); 4 – obese male from Dolnoslav (photo by V. Stavreva); 5 – figurine with a hunchback from Smyadovo (*photo by V. Stavreva*).

8 pav. *1 – galva iš Ruse, vaizduojanti Dauno sindromu sergantį asmenį (V. Stavrevos nuotraukos); 2 – „Adomas iš Govrlevo" (pagal Митревски, 2019, p. 41); 3 – figūrėlė su nenatūraliai susukta ranka iš Kozareva Mogila (V. Stavrevos nuotrauka); 4 – nutukęs vyras iš Dolnoslav (V. Stavrevos nuotrauka); 5 – figūrėlė su kupra iš Smyadovo (V. Stavrevos nuotrauka)*

vara congenita, known from Vidra, Dolnoslav (Радунчева, Холевич, 2000, p. 169) and Kozareva Mogila (Fig. 8.3); the obese male from Dolnoslav (Fig. 8.4), and many more. The iconographic properties of the figurines with a hunched back, but without a protrusion on the chest, which are spread in the Late Neolithic (Vinča, Karanovo III–IV cultures) and in the Eneolithic, give reasons to distribute them in two groups. One of them contains figurines that perhaps show the physical disability kyphosis, and the other – a load or a child borne on the back.

Function and Use

Despite the fact that it is impossible to give a straightforward answer as to why these figurines were produced – having in mind that a scriptless prehistoric society is under consideration here – some observations can still be made.

According to A. Raduncheva, a social group which stood out of the framework of normal human condition and health was thus defined through the help of art (Радунчева, 2003, p. 134). The schematically shown faces of figurines with hunched backs and other physical disabilities prompted the scholar argue that these were sculpted representations of deities that were included as personages in the mythological order and played a role in the religious and ritual practices that aimed at healing or disease prevention (Радунчева, Холевич, 2000, p. 169; 2001, p. 173). Later, J. Chapman studied some specific types of anthropomorphic plastic art (hydrocephalitic heads, figurines with boils on the back, hunched backs, legs of unequal length etc.) and reached the conclusion

that these demonstrated how the prehistoric people on the Balkans recognized dangerous somatic conditions and represented them as part of material life, perhaps during healing rituals (Chapman, 2020, p. 140). According to A. Diamandopoulos, the figurines that indicate diseases show idealized human types which later evolved into deity archetypes; they are not portraits of concrete people and their health status. The author offers as evidence art works that show malformations caused by chromosomal anomalies known from Tutankhamun's grave (1334–1325 BC) and the Hellenistic period (Diamandopoulos et al., 1997, p. 87–88).

The unusual figurines may represent concrete individuals or may materialize oral narratives about such persons, since, in the absence of historical script, the preservation of information relied on the use of various artefacts as memory carriers. Such figurines could be used in didactic procedures, in various rites or ir order to illustrate a mythological narrative through the participation in a play, ceremony or a rite in front of a select audience (Marangou, 2018, p. 203).

Viewing the figurines as functional objects would give us another perspective for their understanding, since they are modeled in a way which fulfils their function in an optimal manner. The craftsman's choices in the production process were led by the desire to optimize functionality, but at the same time included underlying social and symbolic reasons to present an image that contained the crucial properties for the correct function of the figurines (Meskell et al., 2016, p. 151). As already remarked, most figurines with a hunched back and a protrusion on the chest are cylindrical, with arms raised sideways. As for their state of preservation, five are intact, two lack heads, and the remaining are missing a head, one or two arms. Their intactness owes to their compact cylindrical form, as most of the depictions with hunched backs or pregnancies are produced this way. Unlike other types of figurines, the cylindrical ones are shaped in a relatively simple manner and are therefore less easily fragmented, which explains the fact that the majority of specimens are intact to a high degree and the breakages occur in the weak points, such as the neck and the arms. This poses some difficulty to the assessment whether their fragmentation occurred mostly in the course of their use, after it, or happened later.

H. Todorova argues that the cylindrical pregnant figurines with spread arms were used in magic rituals related to birth (Тодорова, 1974, p.13). By analogy, it is possible to suggest that the cylindrical firguines with a hunched back and a protrusion on the chest were used in magic healing practices or health-bringing rites. It is possible, however, that they depicted not just one particular individual with an affliction, but also an anthropomorphized image of the disease itself or the supernatural power that caused it; i.e. a collective image of people with the disability, which, based on the data from Tărtăria, could be a person credited with magic functions.

The hypothesis for their use in magic rituals can be tested according to P. Ucko's criteria which could help us indentify figurines made with magic purposes: firstly, the source material should be accessible. The figurines should be small, portable, of anthropomorphic or zoomorphic appearance, and can be male, female, or sexless. They are employed individually and less often as a group of figurines, and can remain in use in the course of a long time – for instance, when worn as amulets – but are usually created on a particular occasion and then discarded, the last act frequently accompanied by breaking or burning. Then they are deposited in domestic context, in the midden or within pits in the open-air spaces of the settlements (Ucko, 1962, p. 47–48). M. Voigt adds that sometimes parts of the broken figurines are separated at the deposit stage and are not found together in the same location (Voigt, 2000, p. 263). The figurines with double hunched backs comply with the first few criteria. They are made from a widely accessible raw material, i.e. clay. With the exception of the sculpture from Dolnoslav, the remaining specimens are of small size and anthromorphic shape. As for the archaeological context of their discovery, the challenge is in the lack of sufficient information.

The large clay sculpture from Dolnoslav apparently does not match the idea that it has been used in healing rituals or for the visualization of mythological narratives (Fig. 3). Apart from its impressive dimensions, it stands out with its iconographic properties – the realistic modelling of the body, the emphasized male gender and the existence of a belt which is considered to be a male accessory, but could also hold an additional connotation. Of exceptional interest are the two relief eyes carved on the front of the hunched back. Seen together with the

arms raised sideways, they leave the viewer with an impression of a horned animal head, where the muzzle is depicted through the protrusion on the chest and the horns through the widespread arms. The hybrid imagery of man and horned beast is not an exception for the Eneolithic, but so far there is no other known depiction quite like this one. We can hardly decipher the exact meaning that the ancient sculptor invested in this image and any hypothesis would be debatable and hard to prove in practice. As far as the personage is related to the figurines with the double hunched backs, we can suggest that this is a collective image of the particular physiological condition. The data from Tărtăria and the Alsónyék-Bátaszék necropolis give grounds to believe that these people were regarded with reverence or awe.

Such a hypothesis is confirmed to a certain degree by the overview of burial practices of the Late Eneolithic in Bulgaria, which reveals the ambivalent treatment of individuals that suffered from a disease and received special attitude after their death. A tuberculous etiology is assumed for the systemic bone disease of the individual from grave No. 63 in the Varna I necropolis (Маринов, 2018, p. 36, 45). According to anthropologists, this is a burial of bones rather than a corpse. It is possible that the grave had been opened after the decomposition of the soft tissues and, after performing a ritual, the bones were reburied or transported elsewhere. The archaeological and anthropological analyses demonstrate that the persons with physical or mental disability were subject to different burial treatment in comparison to other members of society. This difference may range from reverence towards those persons "marked by the gods" to irrational fear of them. In the settlement mound of Aldeni, South Romania, a mandible was found of a child who had suffered from a benign tumor that deformed the bone, which was perhaps the reason for the madible to be separated and used as an amulet after the child's death. In a Late Eneolithic horizon of Borduşani-Popina settlement mound, five children's graves were unearthed between the dwellings. Some of the deceased children had suffered from congenital disorders. Under the floor of a house in Hârşova settlement mound, another grave of a child with congenital malformations was attested. The burial of these children within the dwelling space and not in a necropolis was perhaps done with a ritual purpose (Stavreva, 2018, p. 120–121). The anthropological study of one of the human skull rondelles (artefacts of circular shape with an opening in the middle) found in Kozareva Mogila shows that it was crafted from the skull of a patient who underwent an attempt at reducing intracranial pressure which had caused pain or affected their psychic condition. Such individuals, like those who survived skull trepanation or trauma, were perhaps regarded to be in possession of a special prowess that granted their skeletal remains magic and apotropaic properties. The human skull rondelles, according to Petya Georgieva, should be considered as magic objects. In support of this statement, the scholar points out ethnographic parallels from Europe, North Africa, North America, and Tibet, where goods made from human skulls, similar to the rondelles, were used for the making of rattles and small ritual drums (Georgieva, Russeva, 2016, p. 19).

Anthropomorphic Figurines Representing Diseases from Later Periods

The making of anthropomorphic figurines with physical disabilities is widespread also in later periods. Small items of plastic art dating to the 4th millennium BC are known from Egypt, depicting people with the characteristic deformations of the vertebrae and kyphosis caused by Pott's disease. Synchronous to these finds are mummified skeletal remains that display symptoms of the disease (Бужилова, 2005, p. 94).

The closest chronological and territotrial examples come from Crete where ca. 25 mountain sanctuaries dating to the Bronze Age have been studied and to which healing powers were attributed. A number of clay figurines of people and animals, as well as models of human arms and legs called "votive limbs", have been discovered in them. The sanctuaries are dated between 2200 and 1650 BC, but in two of them – Atsipadhes and Traostalos – materials from the final stage of the Neolithic have also been found (Morris, Peatfield, 2014, p. 54–55). Although such figurines are encountered also in other contexts, what is indicative is the great quantity attested namely in these sanctuaries; moreover, "votive limbs" are found exclusively there, thus prompting the discussion on the

ritual role of these locations. At the turn of the 20th century, John Myers who found clay models of body parts at the Petsophas Peak Sanctuary, and A. Evans who studied the Jouktas Peak Sanctuary, hypothesized that those were votive objects; according to another interpretation, the items could be doll parts or ritually fragmented offerings, in a type of a proto-Dionysiac human sacrifice; or they could be related to the Egyptian god Osiris. Anatomic terracotta offerings that represent internal organs and body parts are known from the territory of Italy. Some of the figurines indicate diseases and pathological conditions and were perhaps used in healing rituals, but most of them display no pathological changes. The possible expalantation for this is that they were gratitude offerings for a fulfilled healing (*ex-voto*), rather than such that request it (Morris, Peatfield, 2014, p. 58–60).

Ancient Greek medicine involved secular medical practices and cults like those of Asklepios, in whose temples votive replicas of body parts are found, but folklore medicine that used amulets and magic for healing purposes was also common (Oberhelman, 2014, p. 48–49). The pasting of wax figurines on the doors of neighbors and grave stones, or their discarding at crossroads was a means to transmit the disease to another person (Frazer, 1922, p. 544). Italic anatomic votive offerings are discovered deposited and buried in cult pits in sanctuaries or hanged on walls, placed upon altars or at the feet of cult statues. In the sanctuary of Ponte di Nona dedicated to an unknown deity, an impressive amount of anatomic votive offerings – over 8,400 body parts – was discovered in two pits, grouped in three specialized healing areas – limbs, heads, eyes (Oberhelman, 2014, p. 49–55). In Diana's sanctuary at Nemi, a great number of limbs were found too (Frazer, 1922, p. 1–6).

Ethnographic data for the use of anthropomorphic figurines in healing rituals

According to the folklore beliefs of the Bulgarians, supernatural invisible creatures exist which possess human character and are not of divine origin. Diseases fall into in the same category. They are usually anthropomorphized and female (Маринов, 1994, p. 279–280). In the traditional culture, anthropomorphic imagery is used in healing rituals or in health-bringing rites. One such personification is Mara-Lishanka, usually an ugly hunchbacked figurine which is used for the purging or annihilating of diseases and harmful forces. Similar was the function of the ritual rag doll "little Todor the sickly baby" which was burned as a sacrificial attribute that secured health (Миков, 1986, p. 28–29). Through the act of burning, the population sought to exterminate in a magic way the carrier of afflictions. Metal or wax votives with male and female figurines – substitutes for the real person – were hanged on the icons of healing saints in the case of a severe disease (Попов, 2013, p. 277–280).

Anthropomorphic figurines were used for birth relief or infertility treatment by the Batak tribe on Sumatra (Frazer, 1922, p. 14). It was believed that, through magic rituals, the disease could be sucked out of the ill person and passed on to a dummy. For the purpose, the healer makes a clay model of the diseased, and then a relative rubs it on their back, after which it is buried in the road or hidden. It was thought that the first person to step upon the figurine or pass by it, would contract the disease. Primitive tribes use different rituals to purge disease. On Timor-Laut Island, at low tide they would put a small sailing boat with a human figurine that represented the disease and chase it away with shouts (Frazer, 1922, p. 493, 539–540). Similar magic acts were performed on Borneo, where one or more human figurines were produced from the core of a sago palm tree, after which they were put in a boat and released at low tide. It was believed that the figurines would allure the disease and carry it away. A similar rite was performed by the Dusun people (Frazer, 1922, p. 564–566). L. Talalay cites ethnographic data about South and North America, Africa and Malaysia for the use of figurines in healing rituals to extract the patient from the disease which is thus transferred to the image, but in most cases the figurines are made from wood by the family members of the diseased or by the magus or healer in charge of the ritual.

The diverse use of healing figurines in West Africa is ethnographically documented. In Burkina Faso, the Dagara kôtomè figurines measure between 25 and 50 cm and are made from termite mound soil. They are placed under a shed next to the house, in one or three pairs, and above them three gourds are placed – one containing kaolinite, the others filled with black and white medicine. The clay *assongu* figurines from the Southeast

Ivory Coast are also produced for a healing purpose. They are about 11 cm high and sometimes feature breasts or genitalia. *Assongu* are used not only for healing, but also for causing of diseases (Insoll, 2017, p. 171–172).

Conclusion

In the corpus of anthropomorphic figurines from the KGKVI cultural complex, the ones that feature a hunched back and a protrusion on the chest amount to nearly twenty. Despite their small number in comparison to the thousands of anthropomorphic specimens of plastic art, their discovery in more than ten settlements across different geographic regions shows that the depicted personage was recognizable among the communities of the entire cultural complex. In the synchronous cultures KSB and Varna, for instance, this iconographic type is not encountered and it may therefore be regarded as a chronological and cultural indicator.

Certain patterns seem to have been observed in the crafting of the figurines – the cylindrical shape, the widespread arms, the schematic head, and the shaping of the hunched back and the chest protrusion as spherical or conical pegs – and there are very few deviations. The specific iconography perhaps reflects an actual medical condition of patients in an advanced stage of Pott's disease. The data from synchronous necropoleis confirms the spread of the disease in Southeastern Europe in this period. There is the reason to suggest that these people were not socially segregated because of the disease, and some of them received special treatment. The existence of only one figurine with distinctly marked female gender perhaps can be explained to the unequal distribution of spinal tuberculosis among men and women – according to contemporary medical data, the disease affects men significantly more often.

The cylindrical figurines of small size were used in magic healing rituals, but the Dolnoslav sculpture also points to other possibilities for interpretation. With regard to the data from Tărtăria, it could be suggested that this physical condition was associated with people who practiced magic or to whom supernatural powers were attributed. Until today, many folklore worldviews preserve the idea that those who deal with magic practices are usually hunchbacked.

The hypotheses put forward on the function and use of these figurines in the present study may be confirmed or refuted when new empirical material comes to light. The availability of information on the archaeological context and the association of this type of figurines with other artefacts will significantly aid their interpretation.

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