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Looking closer: the eastern gate of the Early Bronze Age fortifications on Zyndram's Hill and its relation to ritual practices

ABSTRACT

In the oldest phase of the Early Bronze Age settlement on Zyndram's Hill in Maszkowice (Western Carpathians), the hilltop plateau was partially surrounded by massive stone fortifications which were extensively excavated between 2015 and 2020. In our paper, we shall focus on the unusual element of this fortification system, described as the "eastern gate". This passage functioned only in the oldest phase of the Early Bronze Age settlement (ca. 1725-1690 BC) and was later filled in and partially destroyed – a change that could have been of a violent nature. Various features of this structure suggest that its function was not purely utilitarian, instead being to some extent related to ritual practices. We shall try to justify this assumption based on various categories of evidence: the layouts of the entire defensive system of the settlement on Zyndram's Hill and of similar fortifications in the Balkans, the landscape and astronomical context, the symbolism of some of the elements used in the gate (stone stelae) and the artefacts discovered in it (anthropomorphic figurines), and finally, the results of archaeological-botanical and microstratigraphic analysis of sediments.

KEYWORDS

Early Bronze Age, stone fortifications, ritual practices, ash deposits, anthropomorphic figurines

I. INTRODUCTION

Although in studies of ancient societies, it is common to attribute certain artefacts or structures to ritual practices, very often this attribution is purely intuitive. The methodological difficulties associated with the identification of traces of cult behaviour result from the very nature of the latter. Contrary to economic practices, which at least with some approximation can be treated as adaptive and consequently subject to universal rules, rituals should be considered to a much greater extent as closed in a specific cultural context. Moreover, while it can be expected that the remnants of everyday economic life, and to some extent also social life, through their repetition and continuity, will leave behind regularities legible in an archaeological excavation, even despite post-depositional processes distorting them (Binford 1981), cult behaviours are characterized by discontinuity and unpredictability, related to accompanying emotions. As a result, the potential history of everyday socio-economic structures can be contrasted with the history of episodes that intensified ritual behaviour (deaths of important people, astronomical events, moments of fear or triumph). It is no coincidence that archaeologists studying cult practices prefer biographical approaches, focused on capturing single events in the history of historic objects and structures. For example, research on the chalcolithic of south-eastern Europe saw the ritual act not so much in the process of making anthropomorphic clay figurines or in their potentially long-term use as in the very act of their destruction (Chapman 2000). Similarly, in the "life" of buildings, their "death" as a result of the fire was associated with the symbolic sphere (e.g., Stevanovic 1997; Cotiuga 2009). The episodes that stand out against the background of the structures are what may signal the presence of ritual practices.

In our article, we shall try to develop this idea using a biographical approach in the study of a selected element of prehistoric fortifications discovered on Zyndram's Hill in Maszkowice (Western Carpathians) (Fig. 1). During the research in the years 2010–2020, extremely rich remains were discovered at this site, including complex stratigraphic systems (up to 2 m thick) and relics of buildings and fortifications that are associated with several hilltop settlements (fortified or not) existing here between the 18th and 1st century BC (Przybyła 2016; Jędrysik, Przybyła 2019a; 2019b; Przybyła 2024a). The time of use of the first of these settlements may have been – based on a large series of radiocarbon dating – between about 1725 and 1550 BC, which corresponds to the end of the Early Bronze Age (BA2-BB phases, e.g. Stockhammer *et al.* 2015)

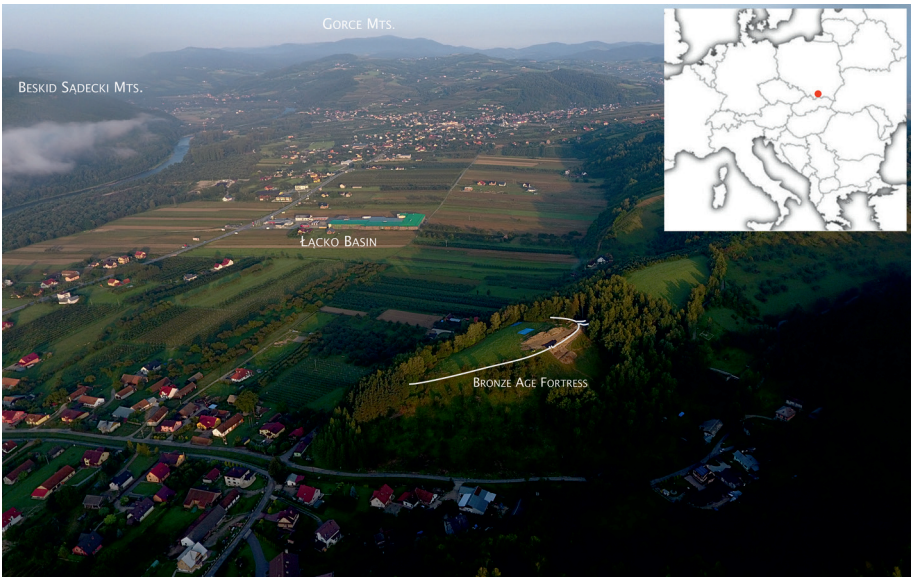

FIG. 1. Location of the site on Zyndram's Hill in Maszkowice in the landscape of the Dunajec River valley and the surrounding mountain ranges (photo by M. S. Przybyła)

in this part of Europe. In this period, several fire episodes and changes in settlement layout took place, which allow us to distinguish further phases, both in the history of the entire Early Bronze Age settlement and in the individual histories of the structures that make up it. The oldest of these phases (ca. 1725–1690 BC) is represented primarily by a set of stone fortifications, which, in addition to the wall (preserved in places up to 1 m high), consisted of two gates: the northern – located on the most accessible side of the top plateau – and the eastern, located above the relatively gentle, north-eastern slope of Zyndram's Hill. The subject of our study will be the second of the structures listed here.

The presentation of arguments in favour of a special, non-utilitarian purpose of the eastern gate of the architectural complex discovered on Zyndram's Hill will have a two-stage course. First, we shall try to demonstrate the separateness of this element of the fortifications from other structures related to the settlement from the Early Bronze Age. Following the concept of "odd deposits" established in archaeozoology and archaeobotany (e.g. Brück 1999; Garrow 2012), we will try to show that even in the absence of references to the cultural context, the eastern gate has unique or inexplicable features from a functional perspective. These include features that may indicate the culmination of

remnants of episodes here, including rapid rather than structured activities related to daily use. The methodology adopted by us will consist in capturing the peculiarities of the eastern gate not only in one aspect, but from the perspective of various categories of observations and archaeological sources. Their presentation will follow the individual history of this building, from its location and details of its architecture, through traces related to its brief time of use, to the episode of its destruction and readaptation.

The eastern gate and the entire complex of fortifications from Zyndram's Hill and the remains of the buildings inside them did not function in isolation from the broader cultural context. All the pottery discovered in the Early Bronze Age strata represents the style of the Otomani-Füzesabony Cultural Complex (hereinafter referred to as OFCC), known especially from the sites in the middle Tisza area (Przybyła 2024b). The same direction is also indicated by bronze artefacts (Przybyła, Jędrysik, Markiewicz 2024), which, together with other categories of objects made of rare materials (e.g. amber and faience), testify to the key role of this hillfort as a transport hub. In turn, the specific features of stone architecture – details of the masonry and layout of both gates – with the simultaneous lack of similar assumptions throughout Central Europe, justify treating the fortifications discovered on Zyndram's Hill as a manifestation of proto-Cyclopean architecture located extremely far to the north (Przybyła 2024c). This building tradition spread at the same time as the stronghold on Zyndram's Hill (i.e. in the 18th-17th centuries BC) on the Adriatic coast and in mainland Greece. In further arguments, we shall assume that the people who founded the discussed fortress at the end of the Early Bronze Age shared the worldview with the then inhabitants of south-eastern Europe. Therefore, we also believe that it is legitimate to seek insight into the nature of the peculiarities of the eastern gate, using the method of analogy, also referring to slightly later periods of time (e.g. Mycenaean Greece) and regions strongly associated culturally with the Balkans (the steppe zone of Eastern Europe).

II. CONSTRUCTION PROJECT – LOCATION OF THE EASTERN GATE FROM THE PERSPECTIVE OF PROFIT AND LOSS ANALYSIS

The special meaning of the structure we are discussing can be considered in three "biographical" stages, sequentially analysing those features that (1) must have been inscribed in its original "construction design", (2) are related to the

period of its use, (3) and testify to the moment of its destruction and burial. Let us begin with a brief description of this assumption (Fig. 2). The eastern gate is a narrow (150–164 cm) gap in the circuit wall, which is 2.1 m thick in this zone. The southern part of the gate structure is offset by 1 m into the interior of the settlement area, in relation to its northern part. The latter is extended to a length of 345 cm by a transverse wall. This element supported two of the six vertically placed stone orthostats that formed the facing of the northern and southern walls of the corridor (three on each side). Currently, only two of them have preserved their original height; the others were destroyed in prehistory. Fragments of other orthostats were deposited in a passage at the line of the outer facade of the wall, suggesting that the gate had a kind of lintel. The wooden doors also had to be located precisely on the outer side of the fortification. Their location on the inner side of the passage was impossible due to the layout of the terrain and the presence of a transverse wall and within the corridor because of the orthostats set there.

It should be noted that setting the gateways from the outside deprived the eastern gate of the basic advantage of narrow, corridor-like gates, which is to cram potential attackers attempting to force the doors in a tight passage between two sections of the wall towering over them. This is significant as far as the presence of the entrances in general should be seen as a factor weakening the defence line (a section of the fortification easier to force through and

FIG. 2. The eastern gate during exploration in 2015 (photo by M. S. Przybyła)

requiring more defenders). From the point of view of the effectiveness of fortifications, the number of gates should therefore be limited to a functional minimum. Meanwhile, their surprising abundance is one of the specific features of proto-Cyclopean buildings from the 18th–16th centuries BC. At sites from the Peloponnese and Southern Italy, gates are usually located every 30–60 m of the wall circumference (Aegina-Kolonna: Gauss, Smetana 2010; Rom 2013; Coppa Nevigata: Cazzella, Moscoloni, Recchia 2012; Recchia, Cazzella 2019; Kiapha Thiti: Lauter 1996; Malthi: Worsham, Lindblom, Zikidi 2018; Roca: Gorgoglione 2001; Pagliara 2001; Scarano 2011; 2017). In Monkodonja in Istria – the stronghold that reveals the most similarities to the architecture from Zyndram's Hill and the one geographically closest to it – the distance between the two gates in the outer line of fortifications was 78 m but in the acropolis wall, it was only 28 m. The connection between Istria and Dunajec valley is also evident in the pottery: in Monkodonja, pottery influenced by OFCC was present, including pieces that find good counterparts in the Zyndram's Hill pottery collection (Hellmuth Kramberger 2017; Przybyła 2024b).

The eastern gate of the fortress in Maszkowice is located 57 m (along the line of the wall) south of the next passage, which we refer to as the northern gate (Fig. 3). Research from 2017–2019 – confirmed by the results of work in later seasons – allows us to assume that this structure was monumental in nature, occupying an area of over 150 m^2. Although the described parts of the fortifications were largely destroyed during the prehistoric (Iron Age) and modern stone extraction, it can be assumed that the northern gate consisted of two massive walls, located transversely to the circuit wall (structures C17 and C18 in Fig. 3) and flanking a road about 2 m wide. The path arched up the slope and led to an open space, located inside the circuit wall. This space was surrounded by paving (structure C14) and may have been a type of porch.

The northern gate had a more elaborate, representative character than the eastern gate, but it was in the most convenient entrance to the plateau of Zyndram's Hill; even before the start of excavations in 2017, a passable path leading to the hillfort led over its remains (Fig. 4). While below the eastern gate the terrain regularly sloped down, the northern passage emerged towards the base of the promontory, where there are traces of Early Bronze Age settlement (pottery) and which may have served as the economic base of the hillfort. The main cultivation zone, on the other hand, in the Early Bronze Age was on the floodplain terrace of the Dunajec valley, south-west and west of Zyndram's Hill. This is shown by the results of research on plant macro remains (Przybyła *et al.* 2024). Again, it was much faster to get there from the

FIG. 3. Photogrammetric plan of the Early Bronze Age fortifications, uncovered in 2015–2023 (prepared by M. S. Przybyła)

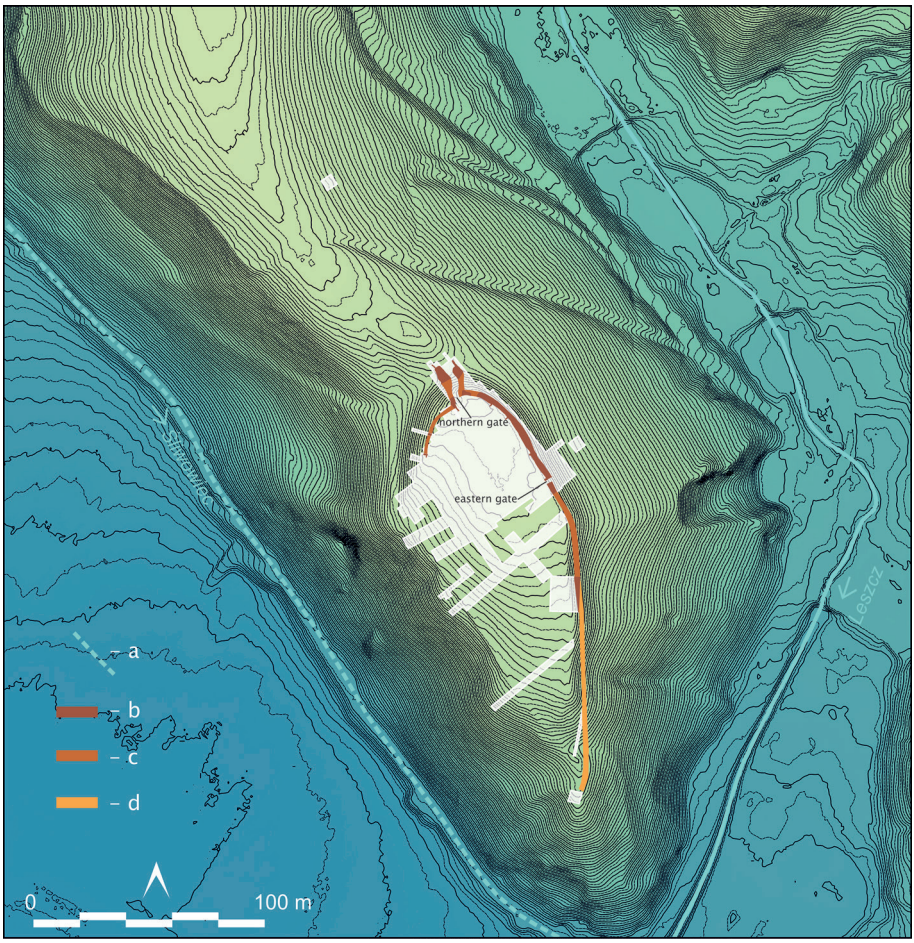

FIG. 4. Location of fortifications from the Early Bronze Age in the topographic context: a – the course of the Śliwowiec stream before its regulation at the beginning of the 20th century; b – stone architecture documented during excavations; c – the most probable course of the fortifications in very heavily damaged zones or between excavations; d – presumed course of the fortifications in the southern part of the site, based on geophysical research (prepared by M. S. Przybyła)

northern gate than from the eastern gate. Also, in terms of access to water, the latter does not seem to be better located than the northern gate. The straight-line distance from it to the stream flowing at the base of the promontory is 117 m, while the same distance for the northern gate is almost identical and amounts to 124 m. In conclusion, the northern gate is an ideal candidate for

a natural and functional passage into the fortification precinct, used in the implementation of all daily activities. The eastern gate, on the other hand, is an element that weakens the tactical effectiveness of the fortifications, for which it is difficult to find an explanation. This observation is emphasized by the fact that after the abrupt end of the oldest phase (around 1690 BC) this passage was buried, meaning that it was no longer needed by the next generations of inhabitants of the Early Bronze Age settlement.

III. THE CONSTRUCTION PROJECT: LOCATION AND ORIENTATION OF THE EASTERN GATE IN RELATION TO ASTRONOMICAL PHENOMENA

Since the eastern gate was not adapted to the layout of the terrain and communication needs or to economic requirements, it is worth considering another plausible reason for this exact location of this passage. Why is it situated at this point on the circuit wall, 57 m from the north gate, and not, say, 30 m or 80 m from it? The key to finding the answer to this question may be that architecture was inspired by the material world that surrounds it, especially those aspects of it that could affect people's emotions and shape their perception of the world more than three and a half thousand years ago. Although the phenomenological trend of research on the relationship between culture and landscape emphasises the need to take into account a variety of sensory experiences, including those that are not obvious (cf. Brück 2005; Johnson 2012), in highly transformed environments, the only relatively constant points of reference from the distant past to the present day remain the characteristic points on the horizon (landscape dominants) and phenomena visible in the sky. Among the latter, the most notable is the Sun: a celestial body whose movement in the sky and its changes during the year can undoubtedly be treated as having always shaped the perception of people and the world of their imaginations. With regard to the younger prehistory of Europe, this is evidenced by the universality of solar symbolism (Pásztor 2011), the consistent adjustment of the arrangement of corpses in graves to the directions of sunrise or sunset (e.g. Kadrow 2001: 111–134), the universality of mythological content explaining the phenomenon of its journey (e.g. Olmsted 1994: 103–155) and, finally, the results of numerous archaeological-astronomical studies (e.g. Blomberg, Henriksson 2001; Goodison 2001; Lozano *et al.* 2014; Zotti, Neubauer 2019). In the latter, attention is paid to the relationship between the

points of sunrise and sunset on selected days during the year, and the key axes on which the architecture (usually funerary) is arranged.

The existence of this kind of convergence can also be found in our case. Due to the lack of traces of buildings inside the fortifications and the incomplete recognition of the fortifications on Zyndram's Hill, it is possible to delineate only two axes organizing the architecture of interest to us (Fig. 5). The first connects both gates (the place of passage in the circuit wall within the northern gate and the internal entrance to the short corridor of the eastern gate). This axis crosses the area of a potential square surrounded by a stone pavement and continues along the inner face of the wall, through the zone that was not covered by buildings in the oldest phase of the settlement from the Early Bronze Age. The second axis can be marked within the eastern gate and leads either through the middle of its corridor or along the line of orthostats decorating it.

Based on a correction made with the Stellarium 0.21.3 software – already used in archaeological-astronomical research (e.g. Zotti, Neubauer 2019; Zotti *et al.* 2021) – it is reasonable to assume that around 1750 BC, the azimuth of sunrise on Zyndram's Hill on the summer solstice day was 52°. This point is close to the axis of the eastern gate (looking from the inside, it closes in the range of 55–58°). The second axis – the one from the northern gate to the eastern gate – points to the azimuth of 132°, which is completely coincident with the position of the sun at sunrise on the day of the winter solstice (132°). On this shortest day of the year, the sun climbs in the morning above a group of summits (approx. 1,150–1,200 m above sea level) of the highest part of the Radziejowa Range, which dominate the landscape surrounding Zyndram's Hill and are visible starting from the azimuth of 133°.

To conclude this stage of our considerations: there are no functional criteria explaining the location of the eastern gate, which is also an architectural element limiting the tactical effectiveness of the prehistoric fortifications from Maszkowice. What can be ascertained, however, is the striking convergence of the axes determined by the location of this passage and its orientation in relation to astronomical phenomena with a key role in shaping the imaginary world. This makes it possible to hypothesise that at the time of planning the fortification's construction, the location of this passage was adjusted to the layout of the site and to the location of the main gate (optimised in terms of communication) to fit in with the symbolism associated with the movement of the Sun.

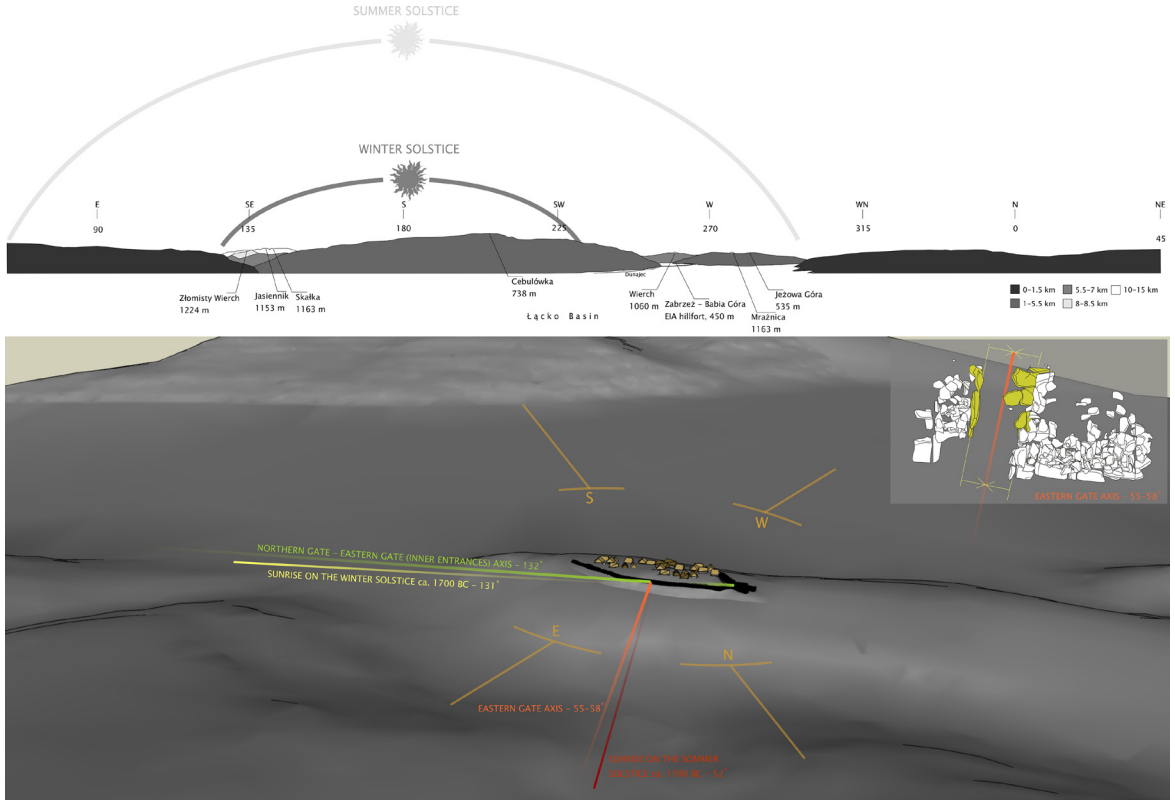

FIG. 5. Diagram of the panorama from Zyndram's Hill and the location of two axes determined by stone architecture from the Early Bronze Age (the line connecting both gates and the axis of the eastern gate – in the close-up) in relation to the azimuths of sunrise on the days of the winter and summer solstices (prepared by M. S. Przybyła)

IV. THE CONSTRUCTION PROJECT: THE SYMBOLIC MEANING OF ORTHOSTATS

A characteristic feature of the eastern gate is the decoration with six vertical orthostats, set opposite each other in two rows, on the northern and southern sides of the passage. Four of them have survived only in the lower parts, while two survived almost intact, and their damage – more on that later – occurred immediately after the end of the gate's use. The larger of the two orthostats is 190 cm and weighs almost half a ton, while the smaller one is 157 cm. Their arrangement excludes the structural function; moreover, a low transverse wall was erected to support two of them. This allows us to assume that their presence in the gate passage was related to the way the space was arranged. Detailed observations also indicate that the orthostats were placed parallel to the erection of the lower parts of the wall, which means that they were a consistently implemented element of the original design of the building.

The use of vertically aligned orthostats is occasionally found in other early examples of stone architecture, representing the proto-Cyclopean style (Fig. 6). At Kiapha Thiti in Attica – in a relic of a fortification dated to the MH III period (ca. 1700 BC - Lauter 1996: 74) – the presence of orthostats was recorded near a structure identified as a staircase. An unambiguous interpretation of their functions is not possible. Some of these, which were smaller in size, were entirely at the foundation level of the wall and could protect against washing out. Other vertical plates – reaching 150 cm in height – protruded above the ground surface, and it was assumed that they could have been a kind of "armour" at the base of the wall (discussion in: Küpper 1996: 28; Lauter 1996: 22, 43–46). In a similar context, orthostats occur in the Karaštak fortifications in Istria, where they form the facing of the wall in the place where the most convenient access to the gate leads along its facade (Mihovilić *et al.* 2001: 58). It is worth noting that in the same area, vertically arranged orthostats are also used in monumental funerary architecture, including a layout identical to that of the eastern gate in Maszkowice, as is the case with orthostats marking the *dromos* of a beehive tomb from Maklavun in Istria, dated to 1500–1200 BC (Hänsel, Teržan 2000; Mihovilić *et al.* 2001: 62).

Although the application of orthostats for facing the wall is a feature of the architectural tradition represented by the creators of the fortifications from Maszkowice, we can assume that this structural element did not have a purely aesthetic significance for them. Both completely preserved orthostats from the eastern gate have a similar outline: a slightly narrower base and

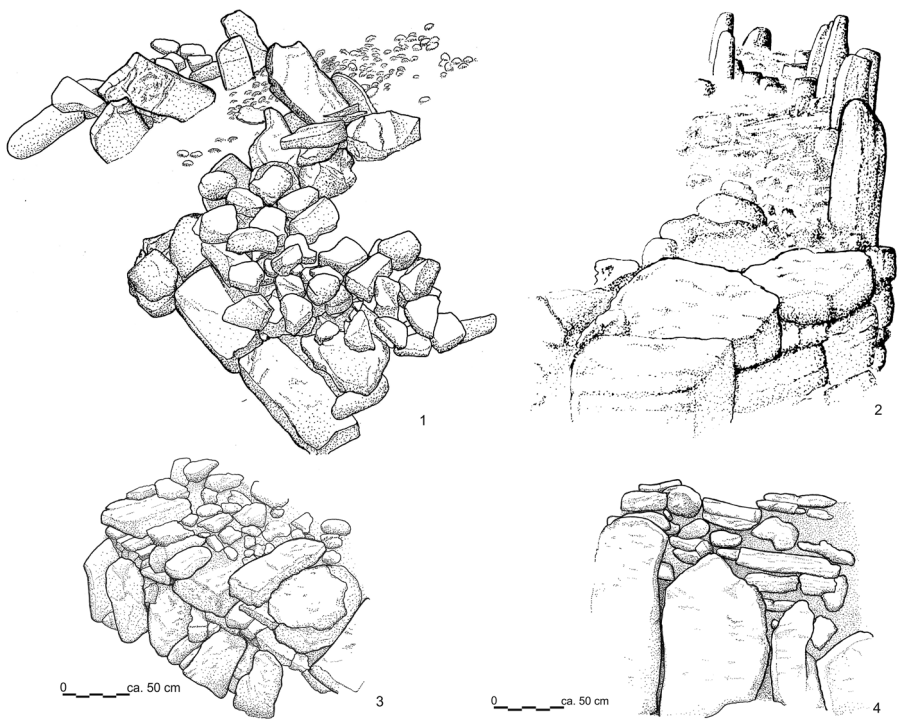

FIG. 6. The use of vertically placed stone slabs in proto-Cyclopean architecture from the first half of the 2nd millennium. BC: 1 – Maszkowice – Zyndram's Hill, eastern gate, (as documented during excavations); 2 – Gradina Karaštak (Istria), fortification facing; 3–4 – Kiapha Thiti (Attica), wall facing near a structure interpreted as a staircase (drawing by M. S. Przybyła, after Lauter 1996; Mihovilić *et al*. 2001)

a triangular top. These are the features that make them like life-size human figures and allow us to hypothesise that we are dealing here with anthropomorphic stelae (Fig. 7).

This category of monuments is known from different periods of time and cultural areas. In Europe, however, it is particularly common between about 3500 and 2200 BC. (e.g. Vierzig 2020: 119). Anthropomorphic stelae from this period are concentrated in the northern Pontic zone, as well as in the northern Balkans, where they are associated with the Pit Grave Culture (e.g. Kaiser 2019: 205–211). The second zone, where they are often found, extends from the south-western margin of the Alps to the Pyrenees (e.g. Vierzig 2020; D'Anna, Masson Mourey 2021). Although the specimens with a rich decoration

FIG. 7. Two best-preserved stelae from the eastern gate (1–2) and an example of a contemporary (Catacomb Grave Culture), undecorated anthropomorphic stele from Priviľne (Ukraine) (3). 1–2 – photo: M. S. Przybyła, 3 – after Vierzig 2020

(depictions of anatomy, weapons or other elements of equipment) are particularly attractive, most of the anthropomorphic steles represent a simplified form, only in shape – identical to the orthostats from the eastern gate – referring to the human figure (e.g. in the North Pontic zone, it is 65% of known specimens - Vierzig 2020: 112). Nevertheless, it is known that some of them were originally decorated with ochre (Kaiser 2019: 206). It should be noted that both better-preserved panels from Zyndram's Hill have the upper part of their surfaces facing the gate corridor chipped off; therefore, the parts where they could have been engraved or painted on have been destroyed. We shall return to this issue later.

Although the period of the most common occurrence of anthropomorphic stelae in Europe ends five hundred years before the construction of the hillfort on Zyndram's Hill, this form of representation was also known in

the following millennia (e.g. in the Iron Age in the steppe areas and in the Hallstatt Culture). There are many indications that in aspects of culture that are generally more conservative (religious ideas or an ideal image of society), the set of norms formed in the third millennium and largely related to the heritage of tradition from the North Pontic zone was still alive in the Early Bronze Age in central and south-eastern Europe. We can see this in the continuation of the funeral ritual. The presence of anthropomorphic stelae in the stone architecture of the first half of the 2nd millennium BC would, therefore, appear to be natural. In the three examples of fortifications mentioned above, orthostats were placed near the entrances (Kiapha Thiti, Karaštak) or within it (Zyndram's Hill), which may be related to the desire to expose them. It is worth emphasizing once again that the stone slabs from the eastern gate were embedded in the ground at the time of erecting the fortifications and were not a later addition. Therefore, all six stelae were included in the original "construction project" of the stronghold, brought in the minds of its creators. We can assume that, according to this vision, the use of the eastern gate meant passing through a narrow row of silent figures: images of gods, heroes or people of flesh and blood.

V. USE STAGE – AN ODD LAYER DEPOSITED IN THE EASTERN GATE

In the history of the eastern gate, from its erection to its backfilling, nine stages can be distinguished, some of which have the character of events occurring in a brief time sequence. Most of these stages are related to the destruction and sealing of this passage, while only the first two date back to the time of its use (Fig. 8: 1–2). Radiocarbon dating obtained for three samples taken from layers deposited within the gate and several more from contexts that have direct stratigraphic relations with them indicate that the former were deposited during a time span of several decades from the mid-18th to early 17th centuries BC (Fig. 9). An analysis of dating in the lower probability range (68%) even suggests that the beginning of the gate's use could have been as late as the last quarter of the 18th century BC, which would mean that the structure was used within a single human generation.

It is even more interesting that in such a brief period within the eastern gate, not only were sediments up to 25 cm thick formed, but also a clear change in the character of these layers can be observed. Of the two contexts filling the space between the orthostats and lying in the inner foreground of

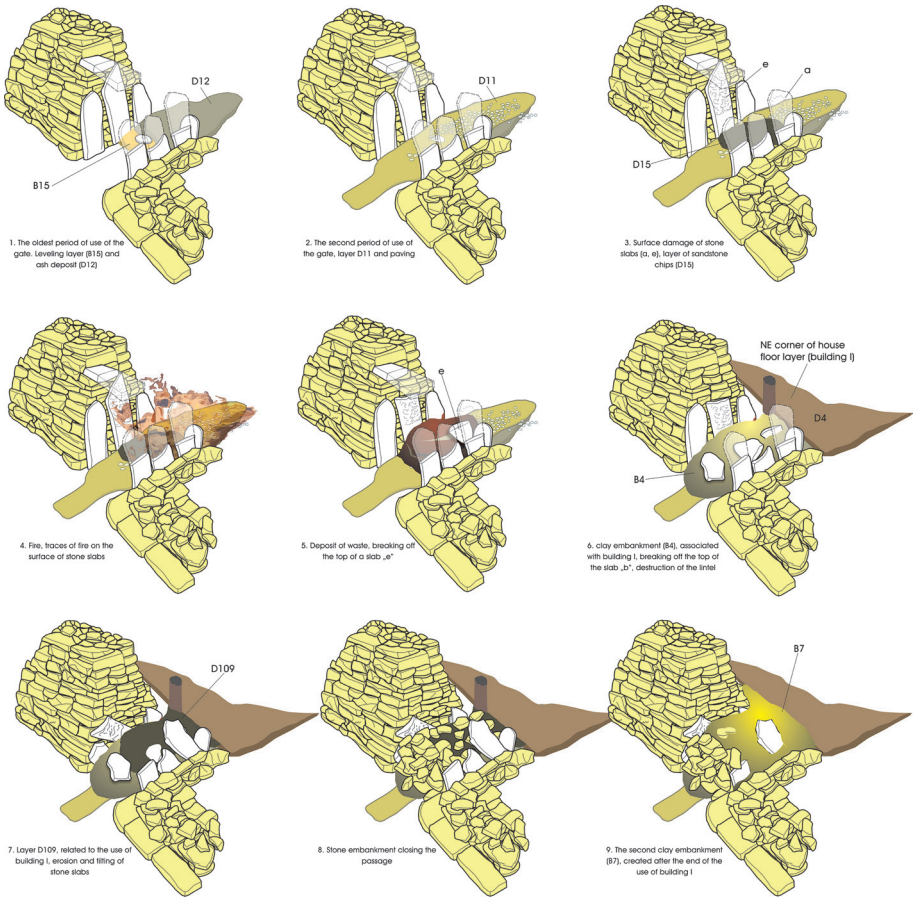

FIG. 8. Diagram of the formation of the sequence of layers filling the eastern gate (prepared by M. S. Przybyła)

the gate, the deeper layer is D12. About halfway through the gate corridor, it was confined by a small mound of clay (B15), covered by a flat stone, which probably functioned as a step to reduce the inclination of the ground (Fig. 8: 1).

During exploration, the D12 layer stood out from other Early Bronze Age contexts: it was loose and unusually light grey in colour. Its oddity was also confirmed by the results of subsequent analyses more precisely characterizing the sediment and its contents. In relation to the area occupied and the whole collection of artefacts retrieved from it, it contained an unusually high amount of animal bones (in this regard, it was the second most abundant

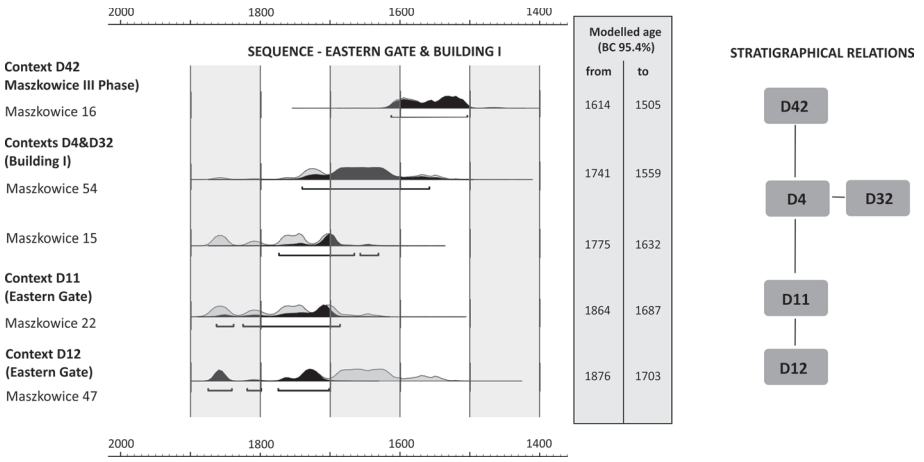

FIG. 9. Bayesian modelling of radiocarbon dates (95.4%) for the group of contexts deposited from the interior of the eastern gate (prepared by M. S. Przybyła, OxCal 4.4 program chart)

of all contexts). Among the soil samples taken for archaeobotanical analysis, it was characterized by the highest saturation with charcoal among all layers, while micromorphological analysis made it possible to conclude that this sediment was composed of ash from hearths (Makiel, Szymanski, Stolarczyk 2023; Przybyla *et al*. 2024). This conclusion is confirmed by a study of its chemical composition. The D12 layer has by far the highest proportion of carbon of all the contexts studied in this regard, and one of the two highest ratios of phosphorus in mineral form (Fig. 10). The latter factor should be linked to the large amount of decomposed animal remains in the context in question. The younger D11 layer covered the D12 layer, but also reached further east, lying on the slope below the outer side of the gate. Within this sediment was a compact cobblestone of pebbles, a kind of paved path. The colour (dark greyish brown) and texture of the D11 context, more than that of the D12 context, resembled layers deposited on the floors of houses. Furthermore, in terms of chemical parameters, context D11 fits the standard of "domestic" Early Bronze Age layers, although it has the highest proportion of organic phosphorus among them (Fig. 10). This characteristic is related to the decomposition of plant material and may indicate the presence of faeces.

Not all categories of artefacts can be unambiguously assigned to either layer D11 or D12, hence the observations resulting from their analysis should

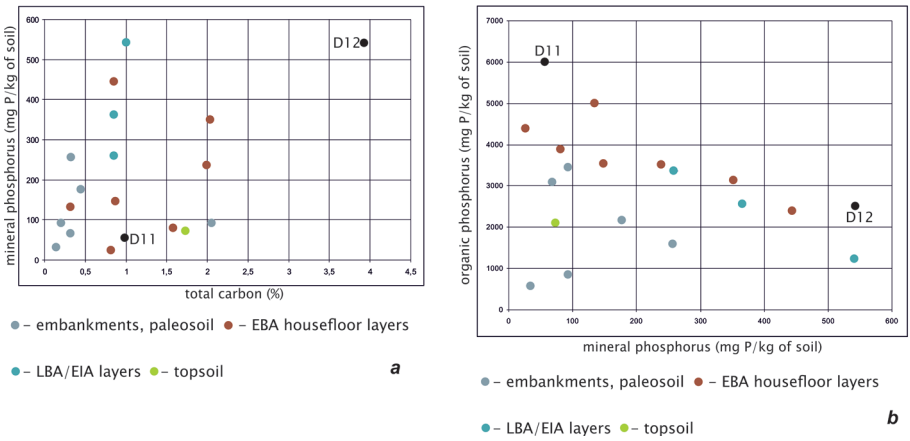

FIG. 10. Usable levels of the eastern gate (D11 and D12) compared to other contexts in terms of the content of carbon and phosphorus in mineral and organic form (prepared by M. S. Przybyła, data according to Makiel *et al.* 2023)

be collectively referred to the stratifications associated with the use of the eastern gate. Nevertheless, in the case of plant and animal remains and pottery, the presence of some oddities can be detected. Among the charred plant remains from the Early Bronze Age house-floor layers, wheat grains and chaff predominate, as well as seeds of weeds and, more broadly, vegetation of open areas (Fig. 11). In the eastern gate, on the other hand, there are taxa that are much less common at the site: seeds of blackberry (*Rubus* sp.) and goosefoot (*Chenopodium* sp.), as well as barley (*Hordeum* sp.) grains and chaff (Przybyla *et al.* 2024). At the same time, there is a certain tendency for the latter taxon to occur mainly in samples from layer D11, and the other two in layer D12, but given the difficulties in assigning some of the material to one of these two contexts and the very small size and susceptibility to transport of the plant remains of interest, this observation should be approached with caution.

Analysis of animal skeletal remains provided another interesting observation. While in the entire collection of bones from the Early Bronze Age settlement (consisting of 3,848 remains), there are quite numerous instances of clear traces of the use of cutting tools. In the layers of the eastern gate, and in the layers of the north-eastern corner of Building I above them, almost all of the 39 bones bearing traces of axe chopping are grouped together. (Wilczyński *et al.* 2024). It should be noted here that, due to the principle adopted

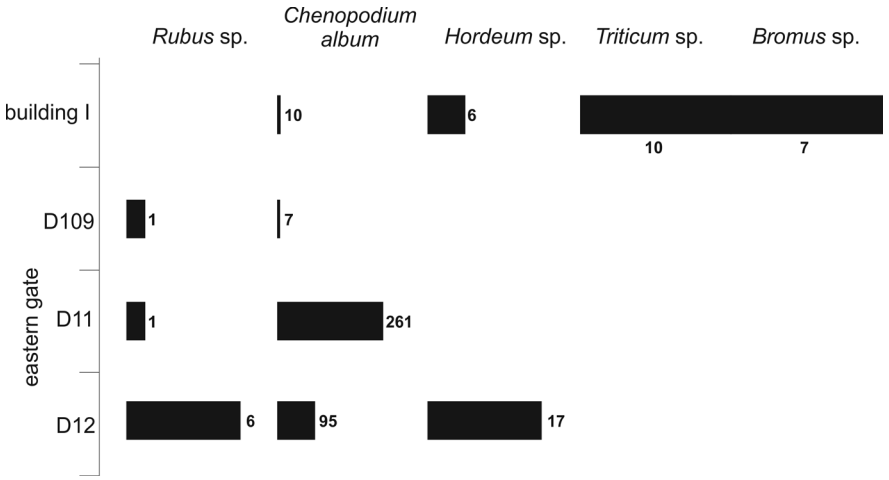

FIG. 11. Frequency of selected taxa in the layers of the eastern gate (D11, D12) and those related to building I and its contemporary context D109 (prepared by M. S. Przybyła)

during our research of assigning material from the border zones of the layers to contexts lying higher up (stratigraphically younger), there is a possibility that this collection was mainly associated with the eastern gate, or more precisely with the area of a few square meters in its inner foreground. Traces of cutting can be associated with later stages of carcass dissection, food preparation or consumption. On the other hand, the chopping marks found near the eastern gate come from the initial stages of carcass dissection: cutting off the head and portioning the torso along the axial skeleton (Wilczyński *et al.* 2024).

The pottery deposited in the eastern gate's layers exhibits features of the Preclassic and Older Classic phases of the OFCC and constitutes the stylistically oldest set among the collections attributed to the respective Early Bronze Age structures (Przybyła 2024c). However, what is much more important for the issue discussed here is what follows not from the stylistic but from the functional analysis of the ceramic material. Ceramic fragments allowing the reconstruction of entire vessels were used to distinguish fourteen functional classes, assigned to four purposes: meal serving and consumption, food preparation, storage, and transportation. Then, based on the collection of 586 sherds, the proportion of each type in the whole collection from the Early Bronze Age settlement and in individual structures was analysed.

The premises behind the process of functional classification of the pottery and the course of its confrontation with the materials from Zyndram's Hill have been discussed elsewhere (Przybyla 2024b). Only the results of the generalization of the observed variability, obtained with the help of correspondence analysis, will be relevant to us (Fig. 12). This study provided a picture in which vessels representing the four main pottery functions occupied distinct parts of the chart. This is due to the existence of a relationship between individual functional classes and specific contexts. Among the layers assigned to buildings and their immediate surroundings (the ceiling of the building terrace), combinations of ceramics with distinct functions can be found, which is understandable given that these were places where various forms of activity

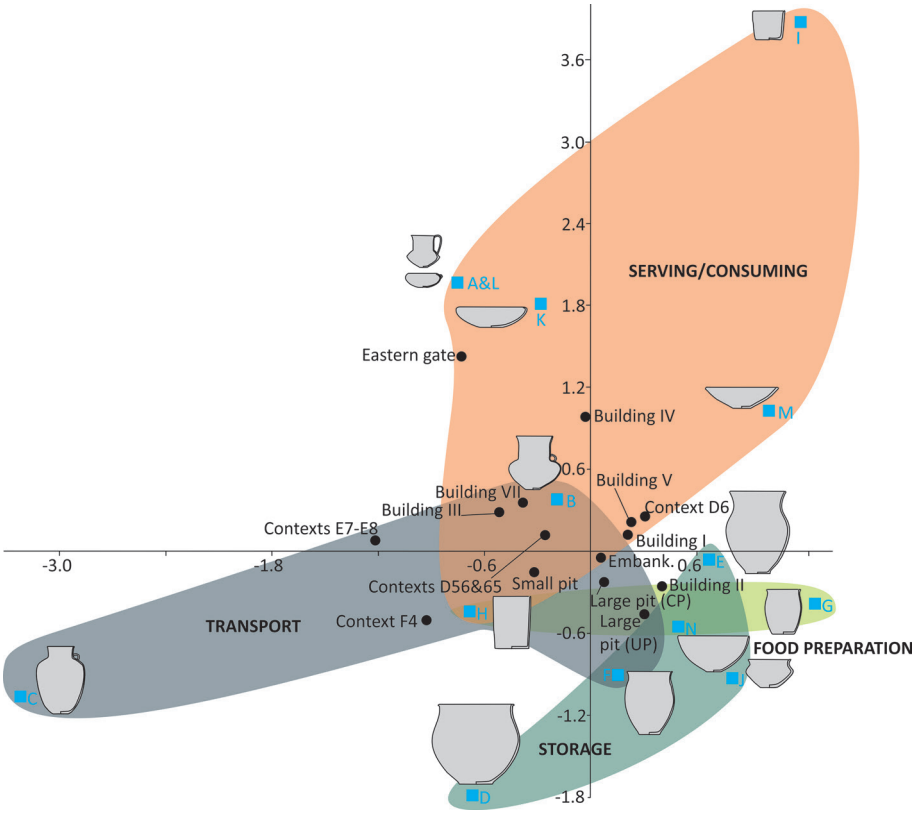

FIG. 12. Share of functional classes of pottery in the Early Bronze Age contexts. The correspondence analysis chart reflects 47.87% of the variability in the examined set (prepared by M. S. Przybyła)

intersected. However, two sets of contexts showed a clear deviation. The first is the layers deposited outside the fortification, in which a surplus of vessels with a transport function, especially tall amphorae, can be found. This group of vessels, relatively few in the entire assemblage (6.1%), may have been used to transport water to the settlement, and its presence just below the wall, on the slopes leading toward the stream, meets a common-sense expectation. A second deviation from the combination of different functional classes characteristic of the layers from the buildings was shown by the layers of interest related to the use of the eastern gate (contexts D11 and D12). Among the fragments that can be reconstructed, there is a clear surplus of vessels associated with serving meals and consumption, particularly fragments of jugs and small bowls (types A and L, accounting for a total of 9.7% of the entire assemblage). Completely absent, however, are the sigmoidal pots fragments that are most common in building relics, as well as the deep, large bowls (which make up as much as 51.7% of the full set of diagnostic pottery pieces from the Early Bronze Age settlement).

In conclusion, while it is difficult to point to an explanation for the surplus of table pottery in the eastern gate's layers, and even more so for the concentration within it of bones with traces of chopping, or the combination of charred remains of blackberries, goosefoot, and barley, all of these features represent a clear aberration from the norm observed for other contexts. Analysis of pottery as well as plant and animal remains tells us only that whatever was going on within the eastern gate was different activity than that which occurred daily in the residential space. Of course, it should be remembered that the remains of the buildings are younger than the structure in question, but, as we have already stressed, the chronological difference is so small that it cannot impinge on the dissimilarity observed here. More so, since the settlement continuity between Phase I (the erection of the fortification) and Phase II (the buildings uncovered on a walled earth terrace) of the fortress on Zyndram's Hill is not in doubt.

The collections of three distinct categories of sources from the eastern gate fit into the concept of odd deposits: they deviate from the standard, inherent in other contexts at the site, and it is not possible to identify a functional explanation for them. However, this does not yet prove that they were formed following ritual practices. This line of inference becomes possible only when we expand our field of observation to include phenomena found for other cultural areas in the Bronze Age. Of particular interest in this regard are the parallels for the unusual characteristics of layer D12, as a deposit composed of ash and heavily imbued with animal bones.

Similar examples of concentrations of burned material, forming so-called ash mounds or *zolniks*, are known from the eastern part of the Carpathian Basin and from the Pontic steppes. This type of structure has been present since at least the 15th century BC (Noua-Coslogeni-Sabatinovka Cultural Complex) and is explained variously as the remains of buildings, waste places, mass feasts or religious practices (Sava 2005; Dietrich 2012 - further literature there). The latter interpretation is accepted unreservedly regarding ancient Greece, where a complex ritual called *thysia* (sacrifice), described in detail by literary sources, was behind the formation of sites of accumulation of ashes and animal bones, part of which was the incineration of selected fragments of sacrificed animals (Menzer, Gilman Romano, Voyatis 2017: 1024). This practice, which continued over an extended period, may have resulted in the formation of large-scale ash mounds, such as the massive structure about 30 meters in diameter that occupies the entire top of Mt. Lykaion (1,382 meters above sea level) in Arcadia. This object is interesting in that its oldest layers are still dated to the LH period (Menzer, Gilman Romano, Voyatis 2017). Although the existence of a *thysia* ceremony or similar ritual in the Mycenaean world has been suggested before (Isaakidou *et al.* 2002; Hamilakis, Konsolaki 2004), this is the first case of unequivocal demonstration of the continuation of this practice between the Bronze Age and the Classic period.

According to the interpretation given by Hesiod (*Theogonía*: 532–557), the practice of burning the bones and fat of animals as gifts to the immortals was supposed to have been widespread, and at its origin was a dispute between the gods and humans over the first cattle sacrifice, in which – as a result of Prometheus' trickery – the gods received smoke and the humans received meat. The consequence of this event and the subsequent punishment of Prometheus was to be the final formation of the cycle of ritual exchange between gods and humans and the entry of the latter into the age of agricultural civilization (Vidal-Naquet 2003: 39–40). It is worth noting that, in the same context, the burning of animal sacrifices appears in attempts to reconstruct mythology from the period of differentiation of the Indo-European language family; that is, from the turn of the Neolithic and Bronze Ages. Regardless of the debatable nature of these studies, their results remain the best-founded picture of the imaginary world that may also have been shared by the people living on Zyndram's Hill more than 3,500 years ago. In Proto-Indo-European cosmogony, the sacrifice would have been a consequence of the recovery – through **Trito*: the warrior god – of cattle previously seized by the forces of chaos. **Trito* was then to hand over the animals directly to

the priests so that they, by fulfilling the sacrifice, would ensure the continuation of the cycle of exchange between gods and humans (Lincoln 1981: 103–124; Anthony 2007: 134–135).

VI. USE STAGE – DEPOSIT WITH ANTHROPOMORPHIC FIGURINES

A structure discovered on the slope of the eastern terrace, opposite the gate and about five meters below it (context D100), might also relate to sacrificial practice. . It takes the form of a shallow (15 cm) pit with a square outline and a side length of about 100 cm, filled with animal bones (including burnt bones) and pottery. It was located at the intersection of the layer going down the slope and being a continuation of context D11 (the younger of the layers filling the eastern gate) and layer D18, which traversed the incline below the fortification (Fig. 13) A few pottery fragments from the D100 pit allowed the reconstruction of one of the vessels that can be attributed to the pre-classical OFCC style (Fig. 14: 1), which would correspond to the very beginnings of

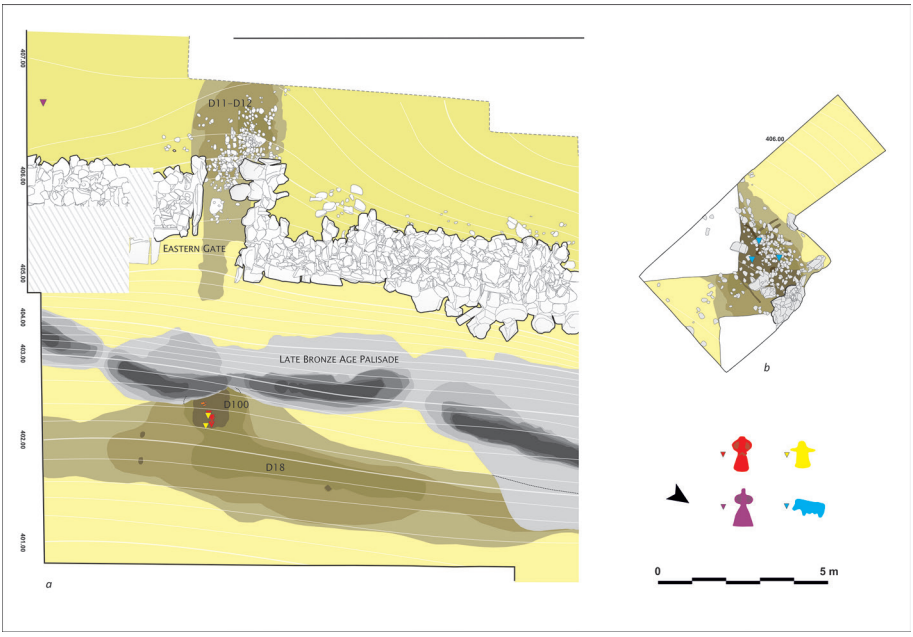

FIG. 13. Location of figural representations around the eastern gate (a) and in the trench located in the northern part of the site (prepared by M. S. Przybyła, J. Ledwoń, A. Wójcik)

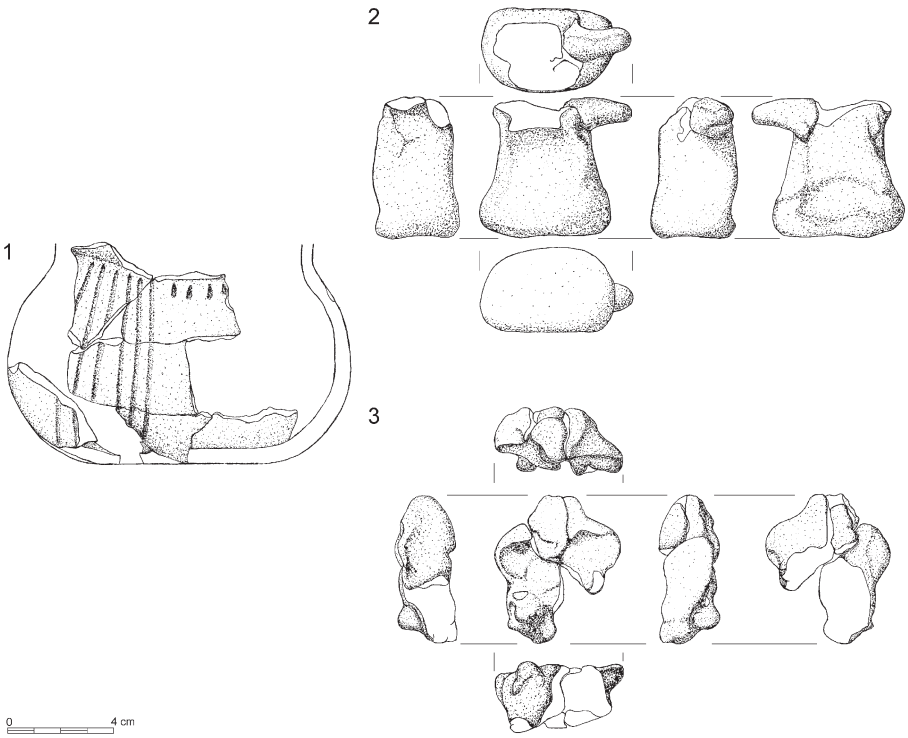

FIG. 14. Artefacts from the feature D100: the lower part of a jug from the pre-classical phase of the OFCC (1) and anthropomorphic idols (2–3) (prepared by A. Wójcik)

the settlement on Zyndram's Hill. The two radiocarbon dates obtained for the structure, on the other hand, are not consistent, although the earlier one (3335±35 BP) corresponds well with the chronology of the oldest buildings.

The most interesting artefacts discovered in pit D100 are two fragmented anthropomorphic figurines. The first has a massive conical base and hands (one of them is preserved) clearly distinguished and directed to the sides (Fig. 14: 2; 15: 4). This type of representation is found – although not very often – at sites from the eastern part of the Carpathian Basin, including OFCC settlements from Slovakia and Hungary, geographically close to the find from Zyndram's Hill (e.g., Hájek 1957; Marková 2001; Dietrich 2011; Kiss 2019). It should be regarded as a simplified variant of the much more common X-shaped idol type (with arms and legs spread apart) found in this cultural tradition and throughout the Carpathian Basin.

FIG. 15. Anthropomorphic and zoomorphic figurines from the Early Bronze Age settlement in Maszkowice (photo by M.S. Przybyła)

The method of stylization of the human figure adopted by the creator of the second artefact (Fig. 14: 3; 15: 1) is different and represents the same convention as another fragmentarily preserved figurine, which was discovered about 50 cm from the southeastern corner of building I, and thus also in the immediate vicinity of the eastern gate (Przybyła, Skoneczna 2011: fig. 19). In both cases, we are dealing with the representation of a hand in the form of a semicircular protuberance. This is a mannerism peculiar to the group of anthropomorphic imagery generally referred to as violin idols, which – although sporadically found in the Stone Age (Hansen 2007b: 170–182) – became particularly popular in the middle of the second millennium BC in southeastern Europe, more specifically in two of its regions and cultural traditions. The first is the area surrounding the Iron Gate: the Danube Gorge on the border of Romania, Serbia, and Bulgaria. Figurines from this area come from settlements and cremation cemeteries of the Dubovac-Žuto Brdo-Gîrla Mare type. The second concentration of violin-type idols is formed by finds from the Mycenaean culture area, especially from the Peloponnese and Attica (Fig. 16).

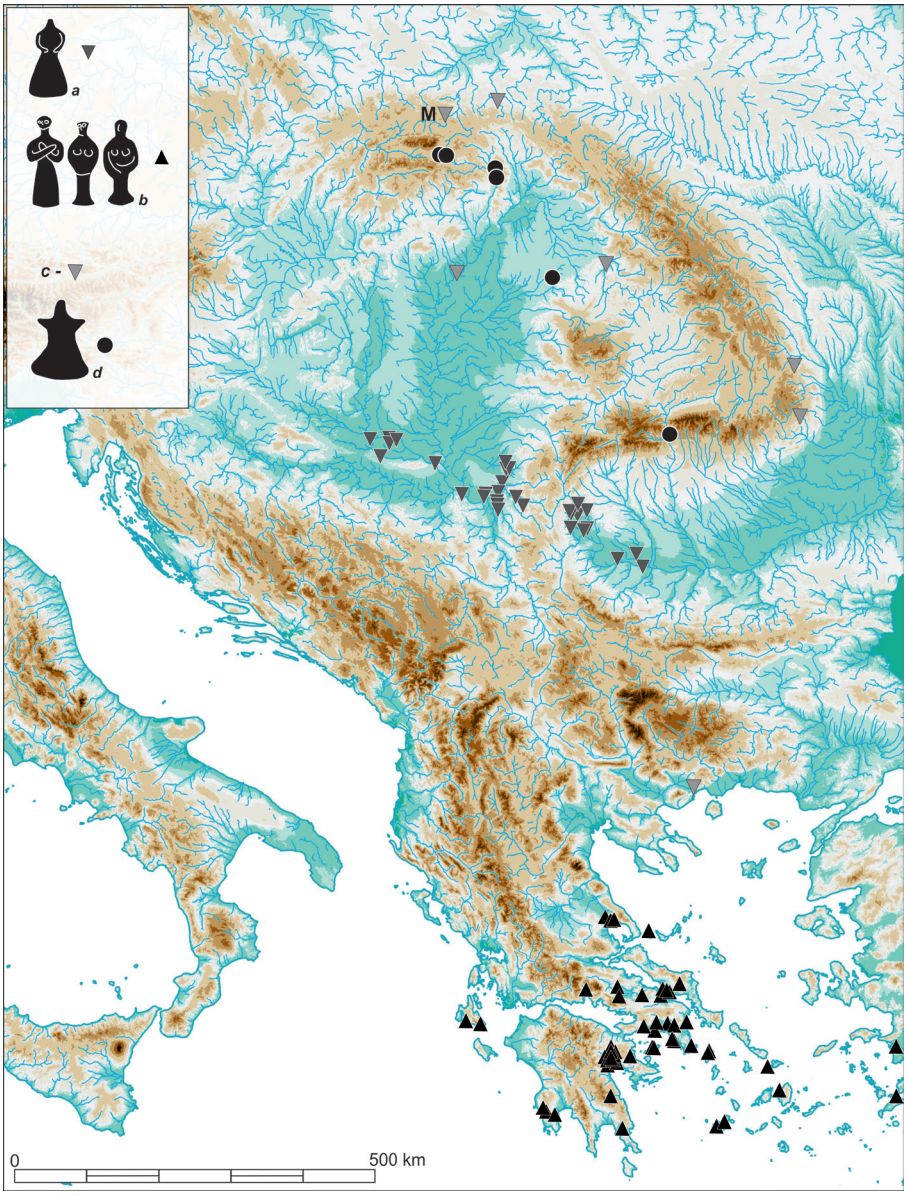

FIG. 16. Distribution of the oldest varieties of violin idols in the Danube variety (a - Phi type or types C and D according to Holenweger 2011) and Mycenaean (b - proto-Phi and Phi figurines according to French 1971), as well as artefacts representing this group from outside main areas of occurrence of violin idols (c - according to Dietrich 2010; 2011 with an addition; M - Maszkowice) and figurines with a massive conical base and hands pointing to the side (d - after Dietrich 2011) (prepared by M. S. Przybyła)

Leaving aside uncertain findings regarding the direction of inspiration behind the similarity of Balkan (Danube and Mycenaean) anthropomorphic statuettes (French 1971: 103–106; Chicideanu-Şandor, Chicideanu 1990: 56–59; Holenweger 2011; Dickinson 1994: 177; Tartaron 2007: 8), the fundamental argument for treating them as a single phenomenon is difficult to dispute. Violin idols are a manifestation of stylization in the depiction of the human body, which is not due to the limited skills of their creators (French 1971: 174), but to the deliberate omission or accentuation of selected features. This conscious choice of which features of the mapped object to depict and how to simplify them makes abstract, reality-reducing art forms much more sharply reflect the imaginary world and value system than its realistic manifestations (Morris *et al.* 2019: 55; cf. Palincaş 2010: 81–86). And precisely the manner of depicting the human (or more specifically, female) figure – a simplified head, sometimes with a birdlike face, hands poorly modelled and generally reduced to two semicircular or crescent-shaped protuberances, a flat torso, sometimes with marked breasts, and a lower body in the form of a bell-shaped or cylindrical stand – was the same in the Danube areas and in the Aegean zone. At the same time, this form appeared in two regions not far from each other and almost nowhere else in Europe, immediately on a very large scale (more than 350 artefacts on the Danube and much more in Greece – 1,100 pieces in Mycenae alone – French 1971: 106; Holenweger 2011: 37), and on top of that at the same time. The oldest statuettes of the type in question from mainland Greece date from phases LH IIB and LH IIIA1, i.e., around 1450–1400 BC. (e.g., French 1971: 104; Tartaron 2007: 84), while the beginning of this tradition in the Iron Gate area on the Danube can be traced to the BrB2(C1) phase (Chicidianu 1986; Reich 2002: 175–178) and therefore dated to around 1450 BC. (Müller, Lohrke 2009). The concurrences are too many for us to seriously consider convergence. And their list can be further augmented by the same sizes of statuettes from both regions (generally fitting in the palm of the hand – e.g., Morris *et al.* 2019: 55), a single but notable case of finding a figurine of the Danube variety in the northern periphery of the Mycenaean culture of the LH period (Dikili Tash in eastern Macedonia – e.g., Minkov 2018: Fig. 5: 1) and, finally, significant contextual similarities, which will be discussed further on.

There are also differences between the two regional groups of violin idols. Leaving aside details related to ceramic production technology, the most significant differences relate to decoration. On the Danube, decoration was done with the help of incrustation and sometimes includes realistic representations of ornaments in addition to geometric motifs (Ruttkay 1983; Kovács 1994).

In Greece, on the other hand, the ornamentation was done with painting and mostly limited to an arrangement of vertical wavy lines. In both areas, however, there are also specimens without decoration.

Outside of the two centres of occurrence of violin statuettes – Danube and Mycenaean – only single specimens of artefacts representing this group are known. To the variety typical of the Dubovac-Žuto Brdo-Gîrla Mare culture belong two figurines from sites included in the Monteoru Culture from Moldova (Dietrich 2011: plates 3: 1–2), and certainly a specimen from Satulung in Maramureş province can be so classified (Dietrich 2010: 162–163). The specimens discovered on the OFCC tell in Füzesabony (Kovács 1990: 35, Fig. 2: 2) and in a layer from the Epi-corded phase (Mierzanowice Culture) of the defensive settlement in Trzcinica (Gancarski 2002: 115, Fig. 129; 2011: 18, Fig. 142) appear – in terms of the bell-shaped lower part or the shape of the hands – like violin idols, but they also have an interesting vertical rib (nose?) on the axis of the body.

This small collection of violin idols outside the range of the Dubovac-Žuto Brdo-Gîrla Mare culture and the Mycenaean culture is augmented by the two artefacts from Zyndram's Hill discussed here. Both can, despite their fragmentary state of preservation, be confidently classified as Phi-type figurines (with semicircular shaped hands), and, in suggestions for the division of Danube specimens, as groups with a poorly defined base (types C and D according to Holenweger 2011). These types are considered the most archaic (French 1971: 117; Chicideanu-Şandor, Chicideanu 1990: 56–57). The specimen discovered below the eastern gate is further distinguished by the presence of plastically marked breasts (one of them is preserved). This feature is unheard of among Danubian figurines, while it is common for Phi type statuettes discovered in Greece. The representation of the semicircular arms in the Mycenaean specimens, however, is flatter than those from Maszkowice, which have thickened edges.

In comparative studies of figural art, it is important to analyse both formal and contextual similarities of monuments from different regions (Lesure 2011: 1–11, 26). Only in this way can we authenticate the arguments indicating that we are dealing with the manifestation of a single set of imagery and a corresponding manufacturing mannerism, rather than convergent phenomena. Taking a closer look at the context in which the discussed group of monuments was found at the Maszkowice site, three trends should be noted.

First, the figurines and their fragments are clearly concentrated in two zones of the site (Fig. 17). One is the area surrounding building I and the east

FIG. 17. Distribution of figural art in two concentrations at the site in Maszkowice (prepared by M. S. Przybyła)

gate, where, in addition to the anthropomorphic statuettes described above, a fraction of a cattle figurine was found in 1972. The second cluster is located at the northern edge of the hilltop plateau, where the end of the circuit wall may have been located. In 2020, three pig figurines were found in an Early Bronze Age layer that have a radiocarbon age designation (3360±40 BP) very close to the dating of the utility levels of the eastern gate. Interestingly, despite being deposited in a small area and in the same stratigraphic context, the objects show – in terms of ceramic mass, styling, technique of execution of some details and firing method – noticeable differences that may suggest that the figurines were produced within different periods or even by different individuals. Realistic depictions of pigs or wild boars are quite clearly chronologically limited in the cultural traditions of the northeastern part of the Carpathian Basin. Almost all known monuments of this type come from the sites of the Hatvan culture from the early second millennium BC (Kalicz 1968: 160), while only single specimens are known from settlements classified as OFCC (e.g., Olexa 2003, 82–87; Gancarski 2011: 274; 2012, 87, 90; Molnár 2014).

The second feature to note is the presence of concentrations of animal skeletal remains in both zones of figural art on Zyndram's Hill. Two anthropomorphic figurines from pit D100 were accompanied by numerous bones, including burnt bones. Moreover, this structure is an extension of the utility layers of the eastern gate, which, as we wrote earlier, have one of the highest relative proportions of animal bone remains. A comparably high relative frequency was recorded only for this very layer, from which the clay pig finds originated. Finally, a fragment of a violin idol from the vicinity of building I and the eastern gate was found on a spot from which an unusually high number of bones were recovered despite the low thickness of the stratum.

The third contextual feature is that most of the figurines have been preserved fragmentarily. Notable here is the case of two statuettes from the pit located below the eastern gate. They were discovered in the form of several fragments, forming a single cluster. Despite the thorough exploration and the small chance of the post depositional processes affecting the dispersion of these artefacts (they were in the pit), it was still not possible to reconstruct complete objects.

To some extent, parallels to the above-mentioned three contextual features of figural art from Maszkowice can also be found in southeastern Europe. Although the bulk of the vast collection of figurines from Mycenaean Greece lacks a well-described context of discovery (French 1971: 107), and many specimens discovered contemporaneously were found in redeposited

layers (e.g., Alram-Stern 2006: 118), we still have a large amount of data on the circumstances of the discovery of violin idols. Two particularly typical contexts are tomb complexes and mass deposits at ritual sites (Ayios Konstantinos, Mycenae, Melos, Nichoria, Tiryns). Within dwellings, on the other hand, figurines were found in selected places suggestive of domestic ritual practices, such as in thresholds or by hearths (French 1971: 107; Richardson 2001: passim; Konsolaki-Yannopoulou 2003). Particularly suggestive – as a reference to the situation found on Zyndram's Hill – may be such phenomena as the clustered deposition of figurines at the approach to the gate in the fortification system (Mycenae - Richardson 2001: 49), their presence in layers containing skeletal remains and burnt remains (cult foundation at Ayios Konstantinos - Konsolaki-Yannopoulou 2003; Hamilakis, Konsolaki 2004: 136–137) and the repeated co-occurrence with animal figurines, especially cattle (Richardson 2001: passim; Konsolaki-Yannopoulou 2003).

It is unclear whether the terracotta figurines were representations of several different supernatural beings (Dickinson 1994: 286–287; Richardson 2001: 84) or of a specific female protective deity (French 1971: 108, further literature there). The latter interpretation could be supported by an iconographic analysis of some processional depictions (frescoes and glyphs – Immerwahr 1990: 114, 119–120, 158; Jones 2009), and especially by the regularity already observed by Carl Blegen (1937: 255) and confirmed by later observations, namely the definite predominance of child burials among the tomb assemblages containing the statuettes in question (French 1971: 108; Richardson 2001: 22–36, 81–82; Konsolaki-Yannopoulou 2016: 163–164, 167).

As Monica Şandor-Chicideanu and Ion Chicideanu (1990: 73) noted, this last feature is the most important contextual analogy that, in addition to formal similarity and chronological coincidence, makes it possible to treat Balkan violin idols as reflecting a single set of imagery. In the cremation cemeteries of the Dubovac-Žuto Brdo-Gîrla Mare culture, such statuettes were generally found in the burials of children, including often in graves distinguished by the number of ceramic inventories (Chicideanu 1986: 23; Şandor-Chicideanu, Chicideanu 1990: 70; Holenweger 2011: 254; Şandor-Chicideanu 2003).

Another common feature, also shared by artefacts from Zyndram's Hill, is the deliberate fragmentation of figurines, common among finds from Mycenaean Greece (e.g. Richardson 2001: passim), but also affecting as many as 80% of such artefacts from the Danube (Holenweger 2011: 37–38). While sedimentary finds may sometimes be about the operation of post depositional processes (e.g. Schallin 2004: 263), the presence of figurine fragments

in well-preserved grave inventories raises no doubt about their intentional fragmentation. The practice of fragmenting anthropomorphic statuettes was, moreover, common in the Balkans and Carpathian Basin, both in the Bronze Age and Stone Age (e.g. Chapman 2000, passim; Olexa 2002: 91; Šteiner 2009: 72–73).

To summarize the interpretation of the figural art from Zyndram's Hill, two issues must be noted. The first is, recurring in the context of discussions of figural art, the dilemma of whether we are dealing with everyday objects, especially toys, or objects used in ritual practices. In doing so, it should be noted that this is, in part, a dilemma that cannot be resolved based on formal criteria, since both play and ritual are based on the same principle of enacting real or imagined scenes with the help of props-symbols (see, for example, Sommer, Sommer 2017). Accordingly, the features intuitively accepted as hallmarks of toys – miniaturization or simplified performance – were and are, in pre-modern societies, universal attributes of mobile objects used in ritual procedures. The far-reaching stylization of the figurines is not, as we have already mentioned, a manifestation of the lack of skill of their creators, but of the convention ascribed to these representations. Even clearly sloppy workmanship is not necessarily associated with the maturity of the creator but may be a deliberate procedure or the result of the ad hoc making of an object during a ritual procedure. This is perfectly illustrated by the mass-produced figurines of the Mycenaean culture, but also by the carelessly refined anthropomorphic statuette from the Rotbav settlement (Wietenberg Culture), which bears the fingerprints of an adult on its surface (Dietrich 2011: 96). In our collection, this remark can be applied especially to the two figurines discovered in pit D100, which give the impression of being ad hoc and barely fired (by the standard of daub) – far below the level of pottery and pyrotechnic skill evidenced by the table pottery produced at the same time.

Consequently, the decisive factor in considering the function of small figural artefacts should not be their form, but their context. Such features as the formation of concentrations by these figurines in the building space, including grouping near passageways and in areas of accumulation of animal skeletal remains, as well as deliberate fragmentation, may indicate the special, ritualistic character of these objects. At the same time, these are features that apply not only to the objects of the category in question from Zyndram's Hill but are also repeated at sites from southeastern Europe.

The Balkan connections of the two violin idols is another issue that requires attention. Undoubtedly, both artefacts are part of the tradition of

human figure stylization inherent in southeastern Europe. As we emphasized above, this is a feature of considerable importance, as it reflects the conscious decisions of the artists regarding which features to emphasize in a simplified image and how to do so. It is therefore an expression of a certain artistic convention and the value system behind it. The chronology of the artefacts from Maszkowice, which is at least several decades earlier than the oldest objects of this type known from both Mycenaean Greece and the Dubovac-Žuto Brdo-Gîrla Mare culture, remains problematic. It should be noted that in both of the aforementioned areas, the mass appearance of female statuettes in the second half of the 15th century BC coincides with a quantitative and qualitative leap in the source base (including the beginning of the Mycenaean palatial centres). Therefore, it is impossible to exclude the possibility that the set of imagery behind the type of representation of interest to us and the inherent convention of simplification of the human body image was earlier and more universal, but before the mid-15th century BC much less frequently represented in the record of archaeological sources. Consequently, we can hypothesize that the presence of violin figurines on Zyndram's Hill is not the result of contacts or "influences" from the south, but the materialization of an older tradition shared by people living in southeastern Europe and the founders of the settlement we studied and their descendants.

VII. POST-USE STAGE - RATIONALIZATION OF THE PROJECT AND MATERIALIZATION OF EMOTIONS

Most of the stratigraphic sequence of the eastern gate is related to its post-use stage. This involves contexts that are traces not of long-term processes, but of events that partially followed each other over a noticeably short period. This stage opens with the destruction of the inner surfaces of two orthostats, which have been preserved completely until our time (Fig. 8: 3). In both cases, the surface of these stones was chipped off from a height of about 80–90 cm to their top. The consequence of this event – which did not have a natural cause but resulted from the violent bruising of the two stelae – was the formation of a several-centimetre thick layer of sandstone flakes (context D15), paving the ceiling of layer D11 over an area of about 1 m2 (Fig. 18). Subsequently, a fire must have occurred in the gate corridor (Fig. 8:4). Traces of the elevated temperature, operating at a height of about 70 cm above the ceiling of layer D11, can be seen on most of the orthostats in the form of red stains. This kind of

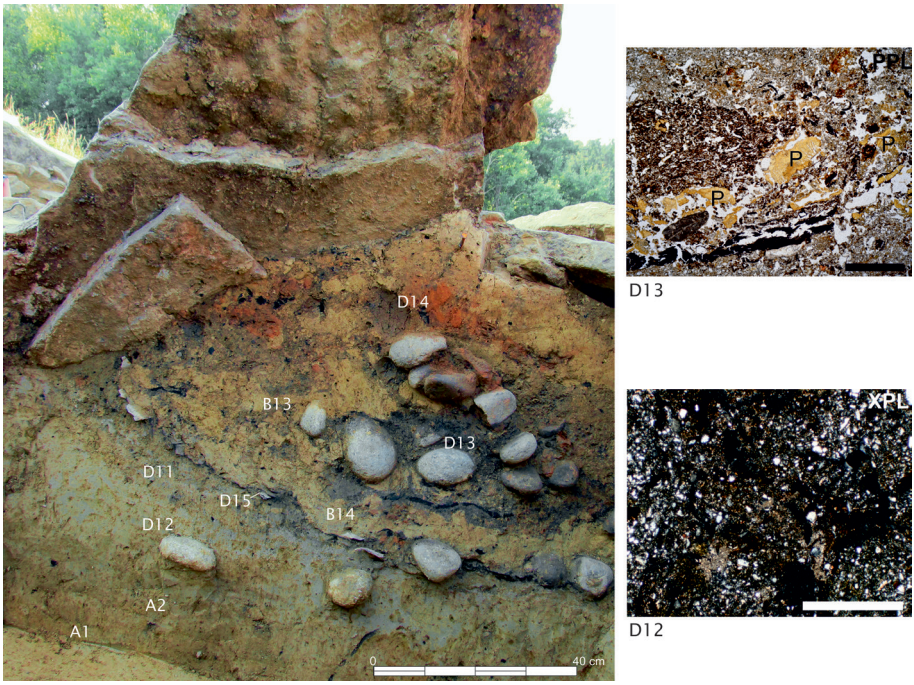

FIG. 18. Stratigraphic sequence within the eastern gate and an image of the micromorphology of contexts D12 (the oldest usable layer) and D13 (one of the layers of waste and remains of the burn site deposited after the end of the gate's use). Context D15 is a layer of sandstone flakes, which is associated with the destruction of two orthostats (photo by M. S. Przybyła, M. Makiel)

discoloration occurs at temperatures as high as 600°C (Małkowski, Skrzypkowski 2013; Kompaníková *et al.* 2014).

Probably, a sequence of layers, consisting of alternating pure clay and burnt material (contexts B13–B14, D13–D14 - Fig. 8: 5) and totalling up to about 80 cm in thickness, was deposited within a very short time after the episode associated with the presence of the fire within the gate. The daub found in these layers bear imprints identical to those known from the relics of slightly younger buildings from the Maszkowice II phase, which makes it plausible to hypothesize that we are dealing here with the burned debris of the oldest houses, contemporary with the period of use of the eastern gate. At the same time, micromorphological studies have shown that a large quantity of organic debris, including excrement, found its way into the eastern gate along with burned structural elements.

The apex of the largest of the stelae was broken off during this episode. Again, the influence of natural factors can be ruled out here. The apex, weighing almost 100 kg, was found embedded in a package of burnt layers at the inner gate outlet, on a slope above, not below, the orthostat's foundation site. The slab in question, moreover, is a natural, extremely hard and water-laden sandstone monolith, which could not have spontaneously cracked across the layers that compose it.

The abrupt stage of the formation of the eastern gate fill was closed by the backfilling of the fire layers with an arid clay layer (B4), which, in the stratigraphic sequence of this part of the site, corresponds to the formation of the building terrace and the erection of building I on it (Fig. 8: 6). The radiocarbon chronology suggests that this episode took place around 1690 BC. The next phases are already associated with the final elimination of the breach in the wall, which was the eastern gate. After a period of deposition of a layer associated with the habitation of the neighbouring building I (context D109 - Fig. 8: 7) on the surface of the gate's backfill, the passage was sealed with a rampart of irregularly piled stones (Fig. 8: 8). During these events, the orthostats must have been further damaged (the top of one of the slabs at the northern wall of the gate corridor broke) and leaned to the inside of the gate and down the slope. This process was already of a natural character and certainly completed before the location of the former gate was covered with another thick layer of clay (B7 - Fig. 8: 9), which had already occurred during the Maszkowice III phase (approximately between 1610 and 1550 BC).

The events the sequence of which led to the entombment of the eastern gate in the first half of the 17th century BC were mostly intentional in nature. Hence, it is reasonable to try to indicate the motivations behind them; however, such an endeavour would be speculation set within the framework set by the available facts. We can speak of two factors here. The first is rationalization. As we have already pointed out, it is difficult to identify a practical reason for the creation of the eastern gate. On the contrary, it weakened the defensive value of the costly stone fortifications. Instead, the entire process of reorganizing the space of the Early Bronze Age settlement at the beginning of the 17th century BC, of which the backfilling of the eastern gate is an element, seems to have been motivated by practical considerations. First, the conversion of the function of the circuit wall from a free-standing structure to a retaining structure, supporting an extensive embankment and thus dramatically increasing the buildable area of the promontory, should be seen as a rationalization measure.

It should be emphasized, however, that the rationalization of the original "building plan" also meant questioning the ideas behind it, and to do so in the noticeably short (perhaps encapsulated in a single generation) time since the arrival of settlers from the south to the Dunajec Valley (Przybyła, Skoneczna 2011; Przybyła 2024d). And here we reach another potential motivation, which is negative emotions. The sealing of the eastern gate coincides with a fire episode, traced by both the fire stains visible on the orthostats and the layers containing debris from the burnt buildings. This may suggest that the change in the use of the stone fortifications was of a violent nature and associated with conflict (within the community living in the fortress?). Moreover, while the presence of fire traces in the gate does not necessarily involve actions directly aimed against the original "building project", but simply certifies the anxieties accompanying its questioning; the breaking of the top of the largest of the stelae, and earlier damage to the surfaces of at least two of them, must be treated as a deliberate act of violence against the architecture: as the materialization of negative emotions directed against the ideas behind the building. This special treatment of the premise discussed in this article is also the last of the features that indicate its non-utilitarian role. The same objects with an unambiguously symbolic message, which are created to inspire religious reverence or respect, used to focus aggression on themselves in altered realities (cf. Fernández-Götz 2017: 274–275). History provides countless examples of such behaviour - from the ancient practice of vandalizing representations of deposed rulers to the ruthless removal of objects of worship during periods of religious conversion, to the destruction of political symbols at the dawn of the 21st century.

VIII. SUMMARY

As we have shown above, at every level of analysis and in terms of each category of sources, the eastern gate and its associated stratifications deviate from the norm found for other contexts from the Early Bronze Age settlement. These oddities are summarized in the table below (Table 1). Based on the references cited there to areas of southeastern Europe (i.e., the area from which the population of the founders of the settlement on Zyndram's Hill originated) or more broadly to phenomena occurring universally in a variety of areas and times, the following hypothesis can be made. The eastern gate, built to indicate the locations of the sunrise during solstices and decorated

TABLE 1. The oddities of the eastern gate and a proposed interpretation of them

Stages of "biography" of the gate	**Oddities of the eastern gate**	**Interpretation through analogies in the same cultural context**
Design stage	Location on a steep slope, in close proximity to another entrance	None, but examples of similar solution known from stone architecture from southeastern Europe. E.g., a close analogy in Monkodonja, Istria
Design stage	The location of the eastern gate is dictated by the locations of the Sun's rising on solstice days	Orientation in relation to key points in the Sun's journey is common in various cultural traditions and is most often associated with buildings used in cult practices
Design stage	Orthostats within the gate	Shape and size of stones identical to anthropomorphic stelae commemorating humans or supernatural beings.
Use stage	Ash and bone deposit (context D12)	Ash mounds in southeastern and eastern Europe. The later custom of *thysia* in Greece - the ritual deposition of the remains of burnt animal sacrifices
Use stage	Presence of anthropomorphic figurines in the surroundings of the gate, including the deposit directly below it. Fragmentation of figurines	Figurines of the same type (violin idols), often fragmented, are common in southeastern Europe, mainly in contexts associated with ritual practices (graves, sacrificial sites)
Use stage	Unusually high proportion of thin-walled ceramics	None, although this is about vessels used in OFCC funerary rituals
Use stage	Unusual for building layers and their surroundings composition of taxa among charred plant remains	None
Use stage	Concentration of bones with chop marks rather than the much more common bones with cut marks	None, but may relate to which parts of the carcass were used in ritual practices
Post-use stage	The presence of traces of fire within the gate, the deposit of burnt buildings remains	The phenomenon of change in the use of fortifications, including the eastern gate, may have been violent
Post-use stage	Tearing off the surface of two orthostats and intentionally breaking the top of the largest one	The universal phenomenon of aggression directed against symbolic objects associated with a contested value system
Post-use stage	Complete backfilling of the eastern gate in the first half of the 17th century BC.	The lack of need for the eastern gate to continue functioning within a generation or two after it was erected. This indicates that there was no practical (dictated by economic or communication needs) reason for its existence

with stelae depicting people or mythical beings, was a place where activities different from those conducted in and around the residential buildings took place. The nature of the layers deposited within the gate and the artefacts uncovered in its surroundings suggest that these activities were associated with ritual practices: the sacrifice of animals, the burning of their remains or the deposition of the remains from this process, as well as the putting into the ground or the ad hoc making of anthropomorphic figurines. These practices were integrally linked to the ideology behind the original design of the settlement layout, which was brought by the population colonizing this section of the Dunajec valley in the late 18th century BC. However, a brief time after this event, in the early 17th century BC, the original design of the fortress on Zyndram's Hill had already been abandoned. This was accompanied by violent events (a fire in the oldest phase of the settlement) and the deliberate devastation of the eastern gate.

FIG. 19. Summary of an analogous system of two gates. In Monkodonja (a), the extensive western gate (on the right side of the photo) could have served as a communication entrance, while the northern gate is located above a steeper slope and had a designated path leading to the cave, associated with cult practices (after Hänsel, Mihovilić, Teržan 2015). In Maszkowice (b), a convenient entrance to the top of the hill is located where the northern gate is located (one of the stone structures flanking it is visible on the right side of the photo), while the eastern gate shows several features suggesting its connection with the ritual sphere, including the presence of a deposit of anthropomorphic figures on the steep slope below the entrance (photo by M. S. Przybyła)

At the end of our discussion, it is worth noting one more analogy, this time relating both to the location of the eastern gate itself and to the D100 context below it and the figures discovered therein. In the fortress in Monkodonja, Istria – the closest formal and geographic reference to the fortifications of Zyndram's Hill – the same arrangement as the northern gate and eastern gate at our site is formed there by the western gate and the northern gate of the outer line of walls (Fig. 19). The first was expanded over time to become a very extensive complex and is located in a way that indicates that it was the primary communication passage in the fortifications. The second is located only 78 meters from the western gate, towering over a rather steep slope, in which – 35 meters below the gate – is located the entrance of a cave, probably serving as a sacrificial site. Between the gate and the cave, low foundations, now visible to varying degrees, mark a zigzag path (Hänsel, Mihovilić, Teržan 2015: 189; Urankar 2015). In Maszkowice and Monkodonja, therefore, we are dealing with the same pair of two closely located passages in the line of fortifications, one of which has a location indicating a practical, communicative function, while the other – while it may also have been used for utilitarian purposes, of course – seems to have been created as a place to leave the settlement and enter it during ritual practices.

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