SETTLEMENT, COMMUNICATION AND EXCHANGE AROUND THE WESTERN CARPATHIANS

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# Table of Contents

**Preface**

Tobias L. Kienlin – Paweł Valde-Nowak – Marta Korczyńska – Klaus Cappenberg – Jakob Ociepka

3

**The Western Carpathian Highlands During the Neolithic**

Peter Bogucki

13

**TransCarpathian Contacts in the Neolithic and the Early Bronze Age**

Sławomir Kadrow

27

**Long Houses on Hilltop – Camps in the Mountains: Some Aspects of the Neolithic in the Dunajec Project**

Paweł Valde-Nowak

51

**Landscape as a Feature: Using GIS and Statistics to Compare Two Types of Early Neolithic Sites in Lesser Poland**

Klaus Cappenberg

67

**One Too Many Settlements: Das bandkeramische Eythra im Kontext weiterer Siedlungsregionen in Nordwestsachsen**

Harald Stäuble

95

**Technology of the Earliest Vessels in the Upper Vistula River Basin – Imports against Local Production**

Agnieszka Czekaj-Zastawny – Anna Rauba-Bukowska

109

**Long-Distance Exchange at the End of the 5th Millennium calBC – Bodrogkeresztúr Culture Pottery at the Baltic Coast**

Agnieszka Czekaj-Zastawny – Jacek Kabaciński – Thomas Terberger

125

**Settlement and Economic Transformations in Western Little Poland between 3500 BC and 2500 BC: Internal Development vs. External Implantation**

Marek Nowak

143

**Settlement, Economy and Climate between 3200 and 2500 BC: Late Neolithic Transformations in South-Eastern Poland**

Andrzej Pelisiak

159

**Alternative Trajectories in Bronze Age Landscapes and the ‘Failure’ to Enclose: A Case Study from the Middle Dunajec Valley**

Tobias L. Kienlin – Marta Korczyńska – Klaus Cappenberg

201

**Erwägungen zur geomagnetischen Prospektion im mittleren Dunajectal, Kleinpolen**

Jakob Ociepka

207

**Plant Remains Found in Archaeological Sites in the Carpathian Foothills – Preliminary Report**

Maria Lityńska-Zając – Magdalena Moskal-del Hoyo – Katarzyna Cywa

223

**Stones Collecting and Preliminary Discrimination on the Archaeological Site – Janowice (AZP 106-65 no. 61) Case Study**

Michał Wasilewski

231

**Dynamics of the Depositional Processes: The Example of the Tree Windthrow Structure at the Graveyard in Janowice, site 44 (AZP 106-65/103)**

Marta Korczyńska

249

**Preliminary Results of the Anthropological Analysis of Human Bones from Janowice (AZP 106-65 No. 103)**

Anita Szczepanek

253

**The Remains of the Medieval Settlement in Janowice, Comm. Pleśna, Site 44**

Michał Wojczenko

265

**The Bronze Age Settlement in Maszkowice (Western Carpathians) – Analyses and Interpretations**

Marcin S. Przybyła – Magdalena Skoneczna

287

**The West Carpathians as a Contact Zone in the Bronze Age in Light of Hoards and Isolated Finds of Metal Objects**

Wojciech Blajer

297

**Transcarpathian Influences on the Bronze Age and the Early Iron Age Settlement at Wierzchosławice Site 15**

Ireneusz Miraś – Łukasz Oleszczak
Magnetic Prospection and Excavation Verification of a Site from the Late Pre-Roman Period in Wielka Wieś (District Tarnów) .......................................................................................................................... 317

Artur Buszek

Settlement Strategies in the Early Bronze Age in South-Western Slovakia .......................................................................................................................... 325

Jozef Bátor – Peter Tóth


New Geophysical Data on the Internal Structure of the Gáva Sites of Andrid-Corlat and Căuăș-Sighetiu in North-Western Romania .......................................................................................................................... 381

Tobias L. Kienlin – Liviu Marta
The Bronze Age Settlement in Maszkowice (Western Carpathians) – Analyses and Interpretations

Marcin S. Przybyła – Magdalena Skoneczna

Abstract: The complex and intriguing character of archaeological record identified in Maszkowice has been recently explored by the project run in the Archaeology Department of the Jagiellonian University in Krakow. The special emphasis has been put on the earliest phases of the settlement, dating to the Early and Middle Bronze Age. Both building structures and ceramic materials coming from those times represent foreign connections. The Late Bronze Age and the Early Iron Age bring significant changes into the character of Maszkowice hillfort. Microregional studies indicate the emergence of new settlements in the area, which must have imposed certain changes on the local economic and social relations, and the role Maszkowice settlement played in this network might have been dominant.

Keywords: Carpathians, settlement patterns, hillforts, Early and Middle Bronze Age, Late Bronze Age, Early Iron Age

Introduction

Site location and topography

Maszkowice is a small village in the northern part of Western Carpathians, on the upper course of the Dunajec river. The site lies on the southern end of promontory (the hill called ‘Góra Zyndrama’) spreading from the north to the south, to the direction of the river valley. It has a central position within the northern edge of the region called Łącko Basin, which is the first widening of the valley when coming from the south. The hill is elevated above the river floodplain at a height of about 50m, lying at the same time the closest to the river among all the elevated landforms at this side of the valley. This particular location offers certain advantages, such as possibility of effective exploitation of the natural resources available within the valley zone, a large viewshed encompassing especially areas within the western part of Łącko Basin and, last but not least, a chance to avoid the unfavourable effect of thermal inversion – a climatic phenomenon characteristic of mountain valleys (Figure 1) (different aspects of the site location were largely explored in Przybyła et al. 2012).

The archaeological site in Maszkowice consists of two parts (Figure 2). The oldest one – the hillfort – is limited to the southern plateau of the hill and separated from the northern part by an earth rampart, visible on the surface until today. To the north there is an open settlement dating most probably to the Late Bronze Age. Apart from the rampart another remarkable element of the topography of the site is a terrace observed at the eastern edge of the
hill (Figure 3). These forms of landscape drew attention of archaeologists already in the 19th century, when the place was for the first time recognized as an archaeological site. It was, however, not earlier than in the late 50s of the following century when the first excavation campaign was carried at the site by Maria Cabalska from the Jagiellonian University. Her research continued until the beginning of the 1970s and encompassed about a half of the total hillfort area (Figure 4).

Aims and objectives

Final results of those works have never been released. What is more, the quality of field documentation, as well the methods applied, impose serious limitations on any potential analyses of the findings. These are the main reasons why new excavations were organized, starting in 2010. They focused mainly on the eastern edge of the site, where a thick sequence of cultural layers had been recorded. The primary aim was to verify chronology suggested by M. Cabalska and to identify the methods she used for the sake of more accurate interpretation of her documents and reports. For this purpose, the excavated areas were small but explored very carefully using planigraphy method for each 10cm thick arbitral layer. Samples for environmental analyses were prepared as well. The fieldworks continued for the two following seasons and resulted in revealing some new data and bringing additional aspects to our understanding of Maszkowice settlement.

The article seeks to present the main results of this research as well as suggested interpretations, with special attention given to the issue of character of the hillfort against local background, and the role it played within the regional settlement network. Although the site can be dated to the very long period of time starting from the Early Bronze
Age and finishing in the early La Tène period (Przybyła et al. 2012: 230–233), due to the current state of research the analysed time span will be limited to the older stages of occupation – from the Early to the Late Bronze Age. To begin with, we will present the spatial distribution of materials and structures from particular phases, outlined basing on the results of both old and new research. Since the main focus has been put on the eastern edge of the site, the stratigraphic relations identified in this section during new excavations will be presented subsequently. This will be followed by the analyses of artefacts which aims at establishing chronology and tracing cultural connections. Eventual conclusions can be treated as an attempt to interpret the archaeological record from Maszkowice settlement in the context of local and regional prehistory.

Presentation of results

Distribution of structures and materials

After careful review of ceramics excavated in particular trenches during the old fieldworks we can see that the materials from the Early and Middle Bronze Age concentrate mainly in the northern and eastern parts of the site (Figure 5). Three among seven distinguished concentration zones include the trenches where more than a hundred pieces (usually about 500–1000 pieces) of pottery were found. This is a fairly remarkable amount, especially considering the size of those trenches which were 25m² each. In two of those zones the cultural layer from the Early and Middle Bronze Age was recorded as well. Interestingly, however, the oldest materials occurred also in the places where no cultural layer from this period was recorded. An explanation for this problem could be found thanks to some observations carried during the new fieldworks, which will be presented further in the text. A very original feature was discovered in 1971 at the eastern edge of the site. That was a pit four and a half metres deep, where about five thousand pottery pieces dated to the Early and Middle Bronze Age were found, together with numerous animal bones. The chronological order of artefacts coming from subsequent layers, though slightly disturbed, can be still visible within the feature. It enabled us to distinguish the main phases in the process of pit filling and correlate them with the building phases which will be presented below.

The spatial distribution of relics of the Late Bronze Age settlement can not be characterised in detail at the current state of research. What can be stated, though, with certainty is that the cultural layer from this period was deposited along the entire northern and eastern ends of the hillfort, unlike the older one which can be recorded only in some sections (see Figure 4). In the trench number 4, at the western end of the site (Figure 4), the Late Bronze Age cultural layer was also identified, but the context suggests
that it had been deposited as a result of mass movements taking place on the western slopes of the hill. After a review of materials and documentation from the 1968 and 1971 excavation seasons, we assume that some of the pits located in the central part of the plateau (Figure 4) can be dated to the Late Bronze Age. The majority of them, however, seem to be dating from the Iron Age (Vitoš 2011: 137).

**Figure 4: Late Bronze Age and Iron Age cultural layers and features against the background of trenches from 1959–1975 (grey) and area excavated in 2010–2012 (black).**

**Stratigraphic units and relations**

The careful analysis of thick cultural deposits excavated within three trenches at the eastern edge of the hillfort resulted in distinguishing thirty stratigraphic units (Figure 6). They can be divided into several groups, with respect to the character of materials and processes contributing to their formation: (I) natural layers, (II) layers of clay
material used to raise the embankments and to level the terrain, dating to the Early and Middle Bronze Age, (III) elements of a stone construction localised at the edge of the terrace, (IV) cultural layers and occupation levels from the Early and Middle Bronze Age, (V) layers of surface levelling from younger stages of the settlement occupation, (VI) cultural layers and occupation levels from the Late Bronze Age, Early Iron Age and La Tène period, and (VII) contemporary humus.

Interrelations between particular units can be traced in three cross sections where, despite some local differences, a very similar sequence can be observed (Figure 7). It opens with a loess-like sediment deposited on sandstone rocks forming the hill (layer I A). In its upper part, a layer of buried soil of yellow-grey colour (I B) is distinguishable in all the sections. In their eastern parts there is a stone construction (III A) erected of large sandstone slabs placed directly on the buried soil (Figure 8). In better preserved
sections the slabs lie tightly upon one another, though in the adjoining layers loose stones can be found being the debris of the upper parts of the original construction (III B).

Within the inner side of the wall there are layers of clay connected with actions of raising the embankment and levelling the dwelling surface during the earliest phases of settlement development, dated to the Early and Middle Bronze Age (layers II A–F in trench 2 and II G–I in trench 1). The earliest embankment lies on the paleosol and leans against the wall on its eastern side. In its western part the clay is covered either by the Early and Middle Bronze Age cultural layers (IV A–I in trench 2) or by the layer interpreted as a buried soil run-off from higher parts of the slope (I D in trench 1), containing small number of pottery pieces dating to the earliest settlement phases. This observation brings explanation to the problem outlined above, that is the presence of the Early and Middle Bronze Age materials at the depth of 80–100cm over the eastern edge of the site, also in the areas where cultural layer from the discussed period certainly did not form.

The units related to the Early and Middle Bronze Age are covered by layers built of clay with the admixture of humus and reinforced with stone pavements (V A in trench a and V B in trench 2), interpreted as a result of ground levelling action at the beginning of the Late Bronze Age settlement phase. A black cultural layer about 50cm thick (IV A) lies upon them being the remains of intense occupation of the investigated zone during this episode. One may notice that the layer in question partially covers the stone structure (III A and III B) on its outer side. This proves that during the successive phases of clay embankment construction the stone structure played a role of a retaining wall whose outer façade was exposed. It became covered only in the Late Bronze Age, due to the run-off of finer fraction of cultural layer, and after the settlement on the hill ceased to function, when the sedimentation of contemporary humus (VII) started.

Settlement phases

The long sequence of occupation activities recorded at the site in Maszkowice can be divided into two main episodes: the older connected with the Early and Middle Bronze Age and the younger one dated from the Late Bronze Age to the La Tène period. The boundary between them is marked in stratigraphy by the levels of ground levelling (layers V A and V B). The most significant difference between the two settlement phases, as far as the archeological records is concerned, lies in the character of cultural layers connected with each of them. The older phase is represented by the very complex sequence of stratigraphic units identified in trench 2. After a careful analysis of this sequence we find it possible to indicate three basic stages of settlement activity which have occurred within the eastern edge of hill during the older settlement phase. Following the definition suggested by Sławomir Kadrow (1991: 56–57) we call them ‘building phases’. As we suspect, they may

**Figure 6: Relations between stratigraphic units distinguished in trenches 1 and 2 excavated in 2010–2012.**
Figure 7: Cross-sections of trenches 1 and 2 from 2010–2012.

Figure 8: Segment of the stone wall uncovered during excavations in 2012.
Figure 9: Structures associated with the Maszkowice I building phase.

correspond with what can be found in other parts of the site. The current state of research, though, does not give enough evidence of that.

The first building phase, Maszkowice I, is represented by the defensive structures raised on the eastern slope, namely the stone wall and the first clay embankment, as well as by the oldest dwelling. The latter is constituted by a set of cultural layers including organic materials, ash, burnt clay and charcoal as well as by the two postholes identified on the southern and eastern sides of this dwelling. It is highly probable that the posthole recorded during the old excavations in a neighbouring trench could be also an element of the same structure. We can assume then that the house has been constructed on a north-south axis. It is worth noting that the same orientation can be indicated in the case of the stone wall, which belongs to the same building phase as the oldest dwelling (Figure 9).

Among the stratigraphic units associated with the first building phase, the strips of ash layers should be also indicated. They can be interpreted as relics of wooden beams, coming from the roof or from the base construction of the house. It is worth mentioning that such elements are quite common at the sites from the Early and Middle Bronze Age in the Carpathian Basin. Another feature identified within the lowest levels, however not entirely explored yet, is the furnace situated between the dwelling and the stone wall (Figure 10). It is open towards the house, with two walls made of large sandstone slabs and the filling of burnt clay, charcoal and cobblestones.

The most significant structure connected with the oldest phase of settlement activity at Maszkowice hillfort is the

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dry stone wall excavated at the eastern edge of the site during the new research (Figure 8). According to the old fieldworks documentation it appears also at the northern edge, which means that the oldest settlement has been enclosed by the stone wall at least from the two sides. This has been recently verified by the geophysical survey. The wall has been made of the sandstone blocks fitting tightly in the bottom part, but rather destructed in the upper parts where the rocks are separated by clay. The primary base of the wall might have been about 1m wide and its current height is 80cm on average.

The following building phase, Maszkowice II, starts with the clay embankments leaning on the wall, partially covered by the stones being a result of the wall destruction. There is a set of cultural layers constituting the remains of a dwelling, which seem to have been spread on the east-west axis in this phase. The structure was again reoriented in Maszkowice III phase. It is represented by the widespread cultural layer and by another clay embankment separating the household area from the wall.

Finally, the younger settlement phase, starting in the Late Bronze Age, is represented by the cultural layer which, unlike the older one, does not reveal any stratification. The only elements which may be related with subsequent episodes of a potential dwelling are sandstone blocks arranged in more or less rectangular shape along the west-east axis, found in trenches 2 and 6 (Figure 11). Further identification and interpretation of potential structures from the younger settlement phase will be hopefully carried out in the future.

Analysis of pottery

The pottery pieces excavated in a huge number during both old and new fieldworks serve as a main source of information in establishing chronology and cultural affiliations for particular stages of site occupation (see further in the text). At the current state of research, much more detailed observations can be made on the older settlement episode, represented by the complex sequence of deposits and thus demanding higher precision of the applied methods. The conducted analyses focused on both technological and stylistic attributes of pottery excavated in 2010–2011 seasons in trench 2. Some observations were also made on the assemblages from old research. The results were broadly described in recent studies, in relation to older phases (Przybyła/Skoneczna 2011: 19–24) and here we will briefly present only the most important information. In relation to the Late Bronze Age settlement episode, the observations made so far are based on random data, coming mainly from the stylistic analyses of materials found in 1971 in trenches located at the eastern end of the site.
Pottery from Maszkowice settlement shows distinct differentiation in terms of technological traits. To analyse their changeability within cultural layers, we have distinguished several groups, each of which represents particular set of attributes. The attributes taken into consideration are: wall thickness, temper type and fraction, surface processing, firing conditions and hardness. As a summary of our observations, it can be stated that pottery with coarse, brown-grey surfaces, characterised by their high degree of hardness and fine quality of manufacture is clearly predominant among the Early and Middle Bronze Age materials. It is the most numerous component in every package of cultural layers from this phase, although a downward tendency may be observed in Maszkowice III building phase. The same trend can be indicated for the pottery of hard but smoothed or polished surface. The two technological groups are hardly present in younger settlement phases. An opposite tendency may be recorded for the less hard, light colour vessels of smooth, matt surfaces. Materials representing this group become particularly numerous in later stages of the settlement development, during the Late Bronze Age and Early Iron Age. The share of thin-walled pottery also increases with time, which applies both to the vessels of light colour and to those whose both surfaces are black. Among the early materials very sparse are fragments of thick-walled vessels fired in reducing atmosphere, or relatively poorly fired vessels with coarse surfaces of light colour. Sporadically, in the layers dated to the Early and Middle Bronze Age were found fragments of vessels representing technological groups whose common trait is the presence of chamotte temper. At the same time, pottery fragments attributed to those groups form the bulk of material from the younger, upper layers of the Maszkowice settlement (Late Bronze Age and Iron Age – compare Przybyła et al. 2012: 234).

As far as stylistic features of pottery are concerned, a schematic model applied in the analysis of early materials excavated in 2010–2011 (Przybyła/Skonieczna 2011: 21–24) helped us identify major trends in pottery production in the older settlement phase. What can be easily remarked is the higher amount of fine and decorated pottery in the oldest building phases than in the Maszkowice III phase (Figure 12:3–6,8–9,1). There are for example the vessels decorated with horizontal turban-like flutes occurring frequently within the oldest layers, but absent within the youngest ones (Figure 13). The spiral motifs and lens-like grooves are also much more numerous in the older phases. What can be associated with the youngest (Maszkowice III) building phase then are such features as the decoration with sets of narrow vertical dashes, appearing mainly on the amphores with the funnel-shaped neck, or the common occurrence of big storage vessels (Figure 12:16–17,19–20). Having applied the same methods of analysis to the materials coming from the deep pit excavated in 1971 and 1972 at the eastern end of the site, we tend to conclude that the stylistic variance of ceramics deposited within that feature corresponds with the main trends observed in the case of stratigraphic units distinguished during new research (Figure 14). Simplifying, we can state that the time when the lower part of the pit was being filled was contemporary with the Maszkowice I or II phases, whereas the upper part of the pit corresponds to the phase Maszkowice III.

As for the younger materials the observations can be made thus far only in relation to the mechanic layers distinguished arbitrarily by M. Cabalska in 1971. Pottery decorated with plastic cordon, typical of the Early Iron Age (especially HaD period), occurs the most frequently at the depth of 20–40 cm. The clay 'plates', dated to the Late Bronze Age and Early Iron Age are numerous in
Figure 12: Examples of distinctive pottery pieces from the layers connected with the building phases dated to the Early and Middle Bronze Age.

Figure 13: Share of selected vessel types in layers connected with particular building phases (seasons 2010–2011).
the layers 20–60cm, whereas below they can be found very scarcely. At the same time, frequency of ceramics characteristic of the older period of the Late Bronze Age (Figure 15) remarkably increases below 40cm. It occurs as deep as at 100cm, although below 60cm its amount gradually reduces. The same observations can be made when analysing artefacts excavated in 2010 (Przybyła et al. 2012: 244–245), which implies that similar trends should be expected in the case of the entire eastern edge of the site. What can be concluded from these remarks is that the lower levels (about 20–30cm) of the younger cultural layer represent the Late Bronze Age settlement episode, whereas the upper ones should rather be linked with the Iron Age.

Discussion

Chronology and cultural connections

The abundant assemblage of ceramic materials excavated at the site in Maszkowice find numerous analogies in many different cultural areas. All distinctive pottery fragments connected with the older settlement phases represent the style of the Otomani-Füzesabony culture. In order to refer it to the results of our analysis, we have adopted a chronological scheme of this culture development based mainly on the recent studies of Matthias Thomas (2008) (Figure 16). Subsequent chronological stages are referred to using the terminology introduced by Slovakian archaeologists (e.g. Vladár 1973; Olexa 1992), which corresponds well with Thomas’s periodization. Having examined the general trends in the Otomani-Füzesabony pottery development (Przybyła/Skoneczna 2011: 26–28), one can notice that they perfectly correlate with the tendencies observed at the Maszkowice settlement. In both cases the older stages of stylistic development are represented by the vessels decorated with fluting and spirals (compare Figure 17), whereas the younger ones produced pottery decorated with vertical strokes, knobs encircled by grooves, or forms such as carinated bowls. This concurrence, together with some other chronological

Figure 14: Share of selected vessel types in particular arboreal layers of the pit explored in the years 1971–1972.
Figure 15: Examples of distinctive pottery pieces from the layers dated to the Late Bronze Age at the eastern edge of site.
<table>
<thead>
<tr>
<th>phase</th>
<th>Absolute chronology</th>
<th>North Alpine chronological sequence</th>
<th>Stratigraphy of settlement in Barca near Košice (Šteiner 2009)</th>
<th>Stylistic phases of funeral pottery of the Otomani-Füzesabony Culture (Thomas 2008)</th>
<th>main stylistic tendencies</th>
<th>pottery types at EBA-MBA Maszkowice (dominating forms bolded)</th>
<th>building phases</th>
<th>Stylistic phases in Dunajec valley (Przybyła 2009)</th>
</tr>
</thead>
<tbody>
<tr>
<td>preclassic</td>
<td>19th-18th c. BC</td>
<td>early BA2</td>
<td></td>
<td>1</td>
<td>decoration relatively rare, spiral motifs made with a fine lines, hatched fields</td>
<td>H, L</td>
<td>-</td>
<td>Maszkowice 1-Marcinkowice 1 (classic Otomani-Füzesabony Culture and late Mierzanowice culture)</td>
</tr>
<tr>
<td>earlier classic</td>
<td>18th-17th c. BC</td>
<td>BA2</td>
<td>Barca II</td>
<td>2</td>
<td>domination of fluted pottery – particularly horizontal or &quot;turban-like&quot; arrangements, often knobs surrounded by arc-like grooves, spiral decoration; among forms: sharply profiled mugs and bowls with inverted rims</td>
<td>F, G, H, J, K, N</td>
<td>Maszkowice I</td>
<td>Maszkowice I (classic Otomani-Füzesabony Culture and late Mierzanowice culture)</td>
</tr>
<tr>
<td>younger classic</td>
<td>17th-16th c. BC</td>
<td>late BA2 (BA3–BB)</td>
<td></td>
<td>3</td>
<td>replacement of sharply profiled mugs by softly profiled forms and &quot;turban-like&quot; ornament by spiral decoration made by fluting, more often profiled bowls</td>
<td>F, G, H, J, K, N, R</td>
<td>Maszkowice I</td>
<td>Maszkowice II (postclassic OTF)</td>
</tr>
<tr>
<td>postclassic</td>
<td>16th-15th c. BC</td>
<td>BB</td>
<td>Barca I</td>
<td>4</td>
<td>domination of motifs based on groups of vertical lines and bands of hollows, often bowls with knobbed decoration and footed vessels</td>
<td>D, E, F, G</td>
<td>Maszkowice II</td>
<td>Maszkowice III (postclassic OTF)</td>
</tr>
<tr>
<td>terminal</td>
<td>15th-13th c. BC</td>
<td>BC1–BD</td>
<td></td>
<td>5</td>
<td>compound of OFC and Tumulus Culture traditions; extinction of spiral ornamentation; large knobbed vessels; often decoration with geometrical motifs: hatched fields, groups of vertical fine lines and bands of hollows</td>
<td>D, E, G, M</td>
<td>Maszkowice III</td>
<td>Chełmiec (Tumulus-post-Otomani style)</td>
</tr>
</tbody>
</table>

Figure 16: Chronological table for the older stages of Maszkowice site occupation.
observations, enables us to correlate the Maszkowice I building phase mainly with the younger classic phase of the Otomani-Füzesabony culture and date it to the 17th century BC (late BrA2 or so-called BrA3 phase). In this time span the transcarpathian elements coexisted in the Dunajec valley with younger Mierzanowice culture assemblages (Kadrow/Machnik 1997: 100, 130; Przybyła/Skoneczna 2011: 28). The next stage of settlement development should be connected with the post-classic phase and synchronised with BrB1 period (c. 1600–1450 BC), and finally the third building phase may be generally referred to the postclassic and terminal styles of the Otomani-Füzesabony culture pottery (phases BrC1–BrD, c. 1450–1200 BC).

When discussing cultural affiliations of the early Maszkowice settlement, not only ceramic vessels can be taken into account, but also some other elements should be considered. Particular attention should be given to the fragment of a clay anthropomorphic figurine, found in the deposits connected with Maszkowice III building phase (Figure 18). Apart from similar artefacts discovered on fortified settlements at Trzcinica (Gancarski 2002: 116; 2006: 18) and Füzesabony-Őregdomb (Kovács 1990: 35), it finds no other parallel in a relatively large collection of X-shaped anthropomorphic idols, typical of the Early and Middle Bronze Age in the northern part of the Carpathian Basin (e.g. Hájek 1957; Dietrich 2011). However, there are two geographically distant groups of artefacts that should no doubt be mentioned in this context. The first group comprises statuettes known from the northern Balkans and lower Danube basin (Dumitrescu 1961; Holenweger 2011). They are similar in shape to the Maszkowice figurine, but richly ornamented, and the context of these finds is also different – they are usually discovered in graves, and apparently only in those of children (Chicideanu 1986: 15, 71a, 89, 102; Chicideanu-Şandor/Chicideanu 1990: 70; Holenweger 2011: 254). However, in terms of chronology they correspond precisely with the object from Maszkowice – they are dated approximately within the range 1450–1300 BC (BrC1–BrD, compare e.g. Reich 2002: 175–178). A similar chronology (phases LH IIIA2–B, c. 1420–1340 BC) applies to Mycenaean statuettes of the Phi and Tau types (French 1971). They are linked with the Maszkowice idol by their schematic rendering of the human figure, and with the North-Balkan specimens also by the context of their appearance – many of these artefacts come from cemeteries and were discovered in child graves (e.g. Richardson 2001: 22–36, 81). They were also discovered in great numbers in house relics, often accompanied by statuettes representing cattle. This last remark is particularly important, as it fully corresponds with the situation recorded at Maszkowice, where a fragment of such statuette (Figure 18) is known from M. Cabalska’s excavations. It was discovered in the upper part of the fill of the deep pit, in the layer that most likely chronologically corresponds with the dwelling from phase Maszkowice III – the one where the anthropomorphic figurine was found.

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2 [e.g. Dickinson 2001: 286–287, 177; Richardson 2001: 13, 43–44, 83; Vetters 2012: 36; Alram-Stern 2006: 118.]

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**Figure 17:** Examples of pottery pieces associated with the classic phases of Otomani-Füzesabony culture found in trenches at the eastern edge of site in Maszkowice.
What proves southern connections of the early phases of Maszkowice settlement are not only the artefacts found at the site, but also the character of building structures identified there. The defensive works in the form of a dry stone wall, discovered on the eastern edge of the site during the 2011 to 2012 excavation seasons, represent the kind of fortifications very rare on sites from the end of the Early Bronze Age in the Carpathian Basin. The scarce examples known from this area come from a few sites of Maďarovce and Otomani-Füzesabony cultures in Slovakia (e.g. Bátora/Rassmann 2008: 86–87; Němejcová-Pavúková 1978: 26–28; Vladár 1973: 280–286; 1976) and two sites in Transylvania connected with the younger phase of Wietenberg culture (Boroffka 1994: 100–101; Székely 1999: 109–110). Highly similar features can be found also in the mountains of Bosnia (the so-called ‘gradina’). Although most of them are dated to the Late Bronze and the Iron Age, the oldest ones originate rather undoubtedly from the 17th century BC (e.g. Oreč 1978; Kosorić 1983: 74; Čović 1989: 108–109). Several other examples of very early dated stone fortifications come from Alpine valleys.3

All of the mentioned structures – including the one from Maszkowice – are not only highly similar to each other in construction, but also can be dated to the 17th and 16th century BC.

In the case of the younger settlement phase in Maszkowice, cultural affiliations can be traced – at the current state of research – only qualitatively, basing on the stylistic attributes of pottery. The materials connected with the Late Bronze Age period can be successfully linked with the already established local cultural development sequence (Przybyła 2009: 230–249). Some pieces from these assemblages might be related to the phase Marcinkowice 4, represented in the middle Dunajec valley by the finds from settlement in Zawada Lanckorońska (Leńczyk 1950; Bąk 1996) and cemetery in Gwoździec (Szpunar/Szpunar 2003), and recently excavated settlement in Janowice (Kienlin et al. 2010: 205–207). At the same time, the presence of vessels decorated with vertical flutes (Figure 15:1–2,7) can be interpreted as a stylistic link with younger phase of the Piliny culture and the beginning of the Kyjatice culture to the south of Western Carpathians (Przybyła 2009: 123–124, 237–238). However, the context of those finds indicates that they could have been redeposited and in fact we should rather link them with the Middle Bronze Age tradition. The relatively small amount of pottery pieces dating more certainly to the HaA phase does not provide a firm evidence of settlement activity taking place during that period in Maszkowice. A relatively large series of pottery decorated with vertical or oblique dashes on the bodies and horizontal lines or bands of hollows on the necks (Figure 15:13,15–16) can be related to the Stary Sącz phase (Przybyła 2009: 240–244) and dated to the HaB1 period (c. 1050–900 BC). Some other richly decorated vessels (Figure 15:14), including those with big, horn-shaped knobs, belong to the Maszkowice 6 phase, which closes the sequence of Late Bronze Age stylistic development in the Dunajec valley. In terms of forms of vessels and decoration patterns they reveal links with the Lusatian culture from the upper Wisła river (so called Upper Silesia-Lesser Poland group) as well as the terminal phase of Gáva culture in eastern Slovakia, Transylvania and western Ukraine (Przybyła 2009: 245–246).

As indicated above, the southern affiliations of the Maszkowice settlement in its early phases are no longer

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3 Burkart 1946; Krause 2007; Steiner 2007; Lanzerein 2009.
so strong in the Late Bronze Age period. The ceramic materials connected with the younger settlement phase represent a diverse character, combining both ‘northern’ and ‘southern’ traits. The stylistic complexity of assemblages from this period stands in contrast with the very coherent tradition of the preceding settlement phase in Maszkowice.

Local settlement background

The naturally isolated area of the Łącko Basin provides a good background for micregional studies, and these are also a part of our research project. The data for these studies come from the surface surveys carried within the Polish Archaeological Record (AZP) programme on the area in question, complemented by our own survey made in 2011. We examined the results of these surveys and made an attempt to verify chronology of the identified sites. For this purpose we divided the original artefacts into several groups, basing on their diagnostic, mainly technological features (compare Przybyła et al. 2012: 259). Among the 43 identified sites, which can be dated to the period of our interest, only two might be coming from the Early Bronze Age – the chronology, though, is very uncertain in these cases. Six of the settlements are most probably dating to the Late Bronze Age (including the open settlement in Maszkowice), of which two may have existed also in the Hillstatt and La Tène periods. One of them (site ‘09/8’) provided among others a glass bead, which is dating precisely to HaD phase. Four sites can be dated to the Hillstatt period exclusively, including a hoard of bronze objects from Łącko, site 1 (Kostrzewski 1964: 45–46). Eight other sites seem to be dating to this time span as well, of which five may have supposedly developed also in the La Tène period. All the remaining sites can be dated with uncertainty to the time span from the Late Bronze Age to Hallstatt or La Tène period (Figure 19).

Despite the obvious limitations imposed on us when using the surface survey record, the review of materials found in the Łącko Basin area lead us to a very important observation. It is highly probable that the only settlers of Maszkowice hillfort were the only inhabitants of the entire area and it was not earlier than at the beginning of the Late Bronze Age when other settlements emerged. They occupied elevated landforms in the immediate vicinity of the Dunajec river valley (e.g. sites Łącko 6 and Czerniec 6), as well as those situated further in the upland (e.g. sites ‘09/5’ and ‘09/8’) (Figure 19).

Conclusions

Archaeological record of the Maszkowice site represents a sequence of long lasting settlement activities, encompassing the period between the Early Bronze Age and the La Tène period. Several striking differences in character of this record can be observed between the two discussed stages of occupation: the older dated to the Early and Middle Bronze Age and the younger one associated with the Late Bronze Age. Distribution and structure of cultural layers from these two periods indicate possible differences in intensity of settlement activities, if not in their character. The presence of early dwelling structures can be stated only in certain zones, whereas the Late Bronze Age settlement remains form thick deposits covering all the examined area of the site. Moreover, the materials found in the two sets of stratigraphic units differ both in technology and in style. Changes in vessel technology can be summarized as a tendency to worsen the quality of pottery manufacture, and of its firing in particular. This trend is noticeable already at the end of the Middle Bronze Age (in Maszkowice III building phase) and intensifies in the Late Bronze Age. Stylistically, the coherent assemblages from the Early and Middle Bronze Age stand in contrast with diverse pottery sets dated to the Late Bronze Age phase.

In our attempt to interpret the presented research results we tend to conclude that the oldest settlement in Maszkowice was established by a foreign group, originating from the area south to the main Carpathian range. This is indicated by the pottery found in the lowest cultural levels and the type of defensive constructions identified at the eastern edge of the site. In our view these were primarily economic motives, especially the need to control exchange routes, that prompted one of the groups representing the ‘Danubian’ model of culture to cross the Carpathians in the mid-17th century BC and establish a small fortified settlement in the upper Dunajec valley. Also during the following building phases, dated to the Middle Bronze Age, tight contacts kept with southern territories are proved by stylistic and technological traits of ceramic vessels, as well as by the other artefacts associated with this period, namely anthropomorphic and zoomorphic figurines. The participation of the Maskowice settlement in exchange of goods between the ‘north’ and ‘south’ of Central Europe is additionally demonstrated by the finds of a piece of raw amber and a faience bead, both excavated in the deep pit in 1972. All the mentioned elements contribute to the outstanding character of Maszkowice hillfort against the local background.

This character must have certainly altered in the younger stage of occupation, dated to the Late Bronze Age. The strong local links are proved by the stylistic traits in pottery production, including clear ‘northern’ connections, which definitely did not occur in the preceeding phase. Apart from the mentioned changes observed in archaeological remains at the site, the local settlement background for this period is also much different. Unlike during the first about 400 years of Maszkowice hillfort existence, at the following times the discussed settlement was one of several sites in the Łącko Basin area. The problem of mutual relations between the settlements and the position of Maszkowice hillfort is still open to discussion (see Przybyła et al. 2012: 261–264). Considering the location of sites identified in surface surveys two alternative concepts can be suggested. The settlements situated very close to the Dunajec river may be treated as potential competitors in exploring...
Figure 19: Probable chronology of sites identified in Łącko Basin.

Figure 20: Location of Bronze Age-Early Iron Age sites in the northern part of Łącko Basin.
agricultural resources of the valley, whereas those located in the upland might have played an important role in husbandry, satisfying needs of a local leading population. The latter idea would perfectly fit the ‘central site model’ (e.g. Bernbeck 1997: 164–169), where the central role could be supposedly assigned to the Maszkowice hillfort. Its potential for controlling the economic activities in the entire area is suggested by the intense occupation proved for the Late Bronze Age settlement episode, as well as by the central position of the site within the Łącko Basin.

The problem presented above, as well as many others, can be solved only after further investigations including both excavations and analysis of materials, and representing broad, interdisciplinary approach. Focus should be put not only on artefacts but also on archaeobotanical and archaeozoological assemblages, and physicochemical properties of cultural deposits. Paleoenvironmental analysis of the area of the site is also of our great interest for future research. What is more, the intriguing character of the Maszkowice hillfort against the local background provokes further microregional studies.

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