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Selection of the ceramic collection from Jerusalem Hill

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Jerusalem Hill (Jeruzalemberg, Jeruzalemský Vrch) is an important archaeological site in Slovakia, lying in Kežmarok city in the Spiš region. It is mainly of Iron Age date, specifically, Púchov culture. The pottery assemblage from the site is particularly abundant. Remains from Jerusalem Hill include fragmentary jugs with handles decorated with one or two animal heads; parallels are known from several fortified settlements in the Spiš and neighbouring regions. Recently, Jerusalem Hill was excavated in 2013. The paper offers some preliminary results of the archaeological research, in particular selected ceramic shapes from Jerusalem Hill, coming from the different localities and different excavations (including an earlier salvage dig and the most recent, as yet unpublished project carried out in 2013). The site is placed in context with other Hallstatt and Pre-Púchov and Púchov culture hillforts in this region (Spiš), taking into account however the trans-regional nature as well.

KEY-WORDS: Jerusalem Hill, Pre-Púchov culture, Púchov culture, Kežmarok, pottery

THE SPIŠ REGION TOPOGRAPHY

Spiš lies in northeastern Slovakia with just a very small part of the region being located in southeastern Poland (Fig. 1). It is a district that is relatively closed in geographical terms, between the Vysoké Tatry and the Dunajec river in the north, the springs of the Váh river in the west (Liptov region), the Slovenské Rudohorie mountains and Hnilec river in the south and a line running from the town of Stará Ľubovňa via the Branisko Mountain to the town of Margecany in the east. The core of the Spiš region is formed by the basins of the rivers Hornád and Poprad, and the Vysoké Tatry mountains (Homza *et al.* 2003: 78).

Spiš was settled from the Pleistocene (Gánovce, for example), occupation continuing through the Neolithic, Bronze Age and Hallstatt periods (Novotná *et al.* 1991: 41). In the middle, late and final La Tène period, this region was intensively settled by the Púchov culture (including the so called Pre-Púchov horizon). The most intense

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Fig. 1. Map of the Spiš region

settlement at Jerusalem Hill was from the late La Tène period. The most important archaeological sites are located near the modern cities of the Spiš region: Poprad, Kežmarok, Stará Ľubovňa, Spišská Nová Ves etc.

GEOGRAPHY OF KEŽMAROK AND JERUSALEM HILL

The city of Kežmarok is situated in the northeastern part of Poprad valley (Fig. 2). The site of Jerusalem Hill lies at the confluence of the water courses (the river Poprad and Ľubica brook) and on the southwestern slope of the Levočské hills (701.9 m a.s.l.) (Fig. 3). The site has several locations, the most important of which were surveyed and/ or excavated (Fig. 4).

RESEARCH HISTORY AT JERUSALEM HILL

Archaeological research has a long tradition among the local intellectual elite in Kežmarok, going back to the Middle Ages and contributing quite probably to the survival of various antiquities in the city and region. Jerusalem Hill attracted G. Bohuš (1687–1722) because of the finds of old coins (Bohuš 1919: 105). He also described a formation of intersecting circles on the hill slope, the center of which was commonly referred to as *Unbezwinglich* or invincible. J.A. Hefty mentioned numerous prehistoric remains from Jerusalem Hill (Hefty 1925). According to I. Spöttl (1885) the name on contemporary military maps *Galgenberg* (Gallows) was commonly used for places where bones or other 'strange' things were found. Names like Jerusalem or Golgotha



Fig. 2. Map of Kežmarok with marked Jerusalem Hill. Second military mapping 1806–1869



Fig. 3. Map of Kežmarok Jerusalem Hill with the top of the hill marked. Topographic map. www.geoportal.sazp.sk



Fig. 4. Known sites with Puchov Culture finds. I – Jerusalem Hill and its locations (Amphitheater, Hotel Štart, tennis courts); 2 – hill site settlements related to Jerusalem Hill on Pod Lesom Street (Vartovníkovo pole or Pod Lesom site); 3 – Kežmarok Castle; 4 – Michalský vrch; 5 – Teheľňa (salvage work by Dr. Greisiger in the end of the 19th and early 20th century); 6 – isolated finds from the old town of Kežmarok (Starý trh, Nová ulica, Hlavné námestie)

were given in medieval times to localities with a chapel or cemetery. All are typical of sites with ancient remains.

The last third of the 19th and the first third of the 20th century witnessed extensive archaeological research by several scholars (I. Spöttl, M. Greisiger, B. Hajts, and J.A. Hefty) in Poprad valley and also on Jerusalem Hill. The results were published in several periodicals, e.g., *Zipser Bote, Karpathen-Post, Jahrbuch des Ungarichen Karpathenvereines*, or *Turistik, Wintersport und Alpinismus*. Jerusalem Hill was noted as a pre-historic hilltop site. Spöttl in particular made a detailed examination of Jerusalem Hill during his visit to Kežmarok in 1880, reporting a fortified acropolis protected by burned ramparts (Spöttl 1885: 42), a cult place and urn field on the eastern slope of

the hill. The prehistoric burial ground was mapped by M. Greisiger as a Columbarium (Greisiger 1890). This scholar observed the remains of the Jerusalem hillforts, destroyed because of quarrying in the 15th to 17th centuries, as well as the terraced slopes on Jerusalem Hill and other ancient localities in Kežmarok territory (Greisiger 1890).

B. Alexander noted in 1924 that deep subsoil ploughing on the southeastern side of Jerusalem Hill had unearthed numerous ancient potsherds. A ground survey by Prof. B. Hajts with his students yielded an abundant collection of La Tène period pottery and daub. Archaeological excavations by Hajts in 1925 recorded several cultural layers of prehistoric finds. Artifacts from both the walking survey and the digging are now in the Carpathian Museum in Poprad (Hefty 1925: 78, 161–162). Hefty also discovered pottery and charcoal deposits in association with remains of clay walls; his finds also ended up in the Poprad museum collection (Hefty 1925: 162).

Ladislav Kiefer (1912–2003), long-time member of the Slovak Archaeological Society (Baráthová 2009: 153), focused much of his historical and archaeological interests on the site on Jerusalem Hill. As a schoolboy he participated in Hajts's 1924–1926 excavations, then continued to monitor it, fieldwalking it every year. He was supported in this by the Kežmarok professors, J.A. Hefty and J. Lipták, In 1949, he carried out his own small excavation on Jerusalem hill. From the 1990s L. Kiefer cooperated with M. Soják and especially amateur archaeologist P. Wavrek. From the second half of the 1990s archaeological research has been carried out by M. Kučerová from the Museum in Kežmarok, fieldwalking archaeological sites in Kežmarok and conducting rescue digs in rural and urban areas, including Jerusalem Hill in 1998, 2000 and 2013 (Giertlová *et al.* 1998: 71–72; Giertlová and Mihok 2000: 75–76; the most recent project from 2013 has not been published yet).

JERUSALEM HILL AS AN ARCHAEOLOGICAL SITE

The oldest remains of human activity in this area, in the form of isolated finds with only a very general chronological attribution, are dated to the Paleolithic and Mesolithic (Hefty 1925: 78; Soják 2002: 265), as well as Neolithic and Bronze Age. Kiefer uncovered in 1949 a red layer 100–130 cm thick on the southwest spur of Jerusalem hill; the deposit contained Neolithic ceramics, which were later lost unfortunately. In 1972–1973, during a rescue dig he uncovered Neolithic pottery again (Kiefer 1974); these are attributed to the Baden culture based on their description. Some modest pottery finds attested to the presence of Piliny culture in Kežmarok (Eisner 1933: 145). Of greater interest is a bronze hammer-axe, today in the collection of the Museum in Kežmarok. Kiefer also noted several Bronze Age localities at the top of Jerusalem Hill when the cultural and sports complex Štart was being constructed; the assumption is that they represented the same Piliny culture known from other finds near Kežmarok. In the Iron Age, however, the region was dominated by hillforts. Jerusalem Hill was one of several hillforts of this kind, situated in the basins of the Hornád and Poprad rivers (Fig. 5). The situation was similar in the neighbouring regions of Liptov and Orava, as well as the adjacent valley of the Dunajec river already in Polish territory. An ancient trail is assumed to have existed down the Dunajec river from the south along the Hornád flowing north in the Carpathian arc (Miroššayová 1992: 134).

Kiefer recorded pottery he believed to be of Halstatt date from the locality of Strielnica on Jerusalem Hill. This particular pottery features jugs decorated with one or two horn heads, vessels with graphitized surface or with graphite present in the fabric. The term 'horn-handled' bowl refers to a specific type of single-handled bowl



Fig. 5. Map of fortified and unfortified settlements, caves, depots and iron axes (black dot – fortified settlement; empty dot – unfortified settlement; black triangle – bronze depot; empty triangle – iron axes; number 8 – cave). I – Gánovce – Hrádok; 2 – Hrabušice – Zelena Hora, Pod Zelenou horou;
3 – Jánovce, časť Machalovce – Hradisko; 4 – Kežmarok – Jerusalem Hill; 5 – Letanovce – Kláštorisko;
6 – Levoča – Fitrift, Burg; 7 – Poprad, časť Kvetnica – Zámčisko; 8 – Letanovce – Čertová diera;
9 – Nová Lesná – Hliník; 10 – Stará Ľubovňa – okolie hradu; II – Veľký Slávkov;
12 – Vítkovce – Tureň; 13 – Žehra – Spišský hrad (after E. Miroššayová 1992: 135)

with handles in the form of stylized animal horns. It was restricted to the earlier part of the Central European Iron Age and, more specifically, to the late Halstatt and early La Tène periods, the chronological horizon still having to be clearly defined on archaeological grounds (Tankó 2005: 153). K. Tankó produced a typology and chronology based on finds of horn-handled bowls or jugs from the territory of their distribution (Tankó 2005: 153–163). Parallels from Slovakia were dated to the beginning of the La Tène Age (5th century BC) (Pieta 1982: 93–94; Novotná *et al.* 1991: 40–41). This type of horned decoration is find at other fortified sites in Spiš: Hrabušice – Zelená hora, Spišský Štvrtok etc. (Benediková 2007: 199) and recently in the settlement in Spišský Hrhov (Soják and Fecko 2012: 255).

Púchov culture formed on the Halstatt period base in Jerusalem Hill (Beninger 1937) and it is clear that a Pre-púchov phase was also present on the site and that Kežmarok belonged to the tribal region forming Púchov culture (Baráthová *et al* 2012: 83). Kiefer's finds of Hallstatt date could actually represent either the Pre-Púchov or Púchov phases, demonstrating the long survival of Hallstatt traditions in the region.

The most notable evidence from Kežmarok is for the existence of Púchov culture. A massive settlement developed with a centre at the top of Jerusalem Hill (the location of the modern amphitheatre). The culture is represented by thousands of potsherds, vitrified clay, iron (assuming advanced iron production and processing) and bronze objects, glass beads and coins minted in Slovakia (Baráthová *et al.* 2012: 83–84). Traces of Púchov culture settlements surrounding Jerusalem Hill occur on Michael's Hill, in the courtyard of the Kežmarok castle, as well as at the Teheľňa (*Ziegelei*) locality (Baráthová *et al.* 2012: 84). Spöttl and Greisiger described abundant pottery from cultural layers at the very top of the Jerusalem Hill and on the terraces. The collection of pottery from Jerusalem Hill obtained until 1925 was one of the most comprehensive in the Carpathian Museum according to Heft (it has yet to be processed and published). Kiefer contributed more than 1,800 sherds from his own collection and excavations carried out after 1925. In 1998 and 2000, the pottery count from layers 80 to 100 cm thick, no more than 2 x 1.5 m in area, exceeded 1500 (Baráthová *et al.* 2012: 85).

Prior to the building of the modern architectural complex on Jerusalem Hill, it was apparently a step-shaped hill, partly destroyed by quarrying (Spöttl 1880: 34–49), which however allowed the stratigraphy to be established. Spöttl, as well as Hajts, identified defence walls, which they both described as literally vitrified with sintered pieces of clay and stones.

The overall view is of a location that looked like an acropolis in ancient times (today the location of the amphitheatre), semi-destroyed by historical quarrying in the 14th–15th centuries that presumably uncovered the tumbled ancient fortifications (Púchov culture) made of stones and wooden stakes at least 10 cm thick and from 80 to 100 cm long, found charred in the layers which covered the entire hill with a mantle 80–100 cm thick. Theses accumulations contained an abundance of charcoal, large

amounts of pottery remains and burnt animal bones. A burned layer of clay approximately 10 cm deep overlay the north side of the hill and the southeast slope, covering a glassy layer of vitrified clay and stones. According to Greisiger, simple semi-sunken wooden dwellings had stood on the terraces whereas the top of Jerusalem Hill was occupied by a sort of fortified *lapis refugia* which he thought was a cult place or sacrificial ground (Greisiger 1890).

The existence of bounded areas of settlement in the Jerusalem Hill area, each presumably a separate economic unit, was confirmed by archaeological excavations and field walking by L. Kiefer, P. Wavrek, as well as Marta Kučerová. The location Strielnica– –Oravcová lúka (also designated as 'Vartovníkovo pole'), examined by P. Wavrek and L. Kiefer in 1974, contained a 'burned building' described as 'Hallstatt and Púchov cultures' that was verified archaeologically and found to contain charcoal, daub clay, animal bones and pottery as expected, of the Púchov culture (Giertlová *et al.* 1998: 71).

Similar settlement units existed probably also on the opposite bank of the Poprad in the Kežmarok district. A settlement was also found in the courtyard of the Kežmarok castle (Polla 1971: 65–68).

CHARACTERISTIC OF THE CERAMICS FROM JERUSALEM HILL

The term ceramic is understood as various types of pottery, but also artifacts made of clay, such as spinning whorls, ceramic wheels, loom weights etc., considered a perfect source for deeper studies of the social and cultural situation. Ceramic material is prolific on almost all the sites within the Jerusalem Hill complex (Amphitheater, Strielnica, Hotel Štart etc.). Forms are extremely differentiated, but for the most par (80%) are made up of utility wares (transport amphoras, storage vessels with inverted rims = arrel form, jugs, vases etc.). The most common form are jars (storage vessels). Most of the pottery represented a coarse thick-walled ware; whole vessels were rare and the prevailing form were large fragments of pottery (handles, body sherds, rims and bottoms). Typically, the pottery was stained due to deposition in an iron oxides--rich soil. Much of the pottery is handmade and only a small part is thrown on the wheel. The color range is differentiated, presenting a whole range from black, graphite through very dark brown to light brown and red.

CHARACTERISTIC OF THE POTTERY FROM THE EXCAVATION IN 2013

As already mentioned the amount of finds of pottery from Jerusalem hill is abundant. This paper focuses on pottery findings from the excavation in 2013. The research in 2013 had a number of priorities, one of these being to ascertain how much of the fortified settlement had been damaged by the construction of modern buildings and sports facilities. Four trenches with the total area up to 36 m² were opened at places suggested by the results of earlier amateur digging. During the excavation, remains of the stone oven have been found and the remains of a domestic house construction. Probably the corner of the frame house in depth of I m has been caught. This house was unfortunately not all examined, only a part of it with the oven (Fig. 8).

The pottery material from the trenches was abundant, representing mostly the Pre-Púchov and Púchov culture. Undiagnostic fragments amounted to more than 2000 sherds, as is typical of Jerusalem Hill as an archaeological site and attests to the high population density at this time, as indicated already in earlier studies (Mirrošayová 1992: 134; Homza *et al.* 2003: 152; Novotná *et al.* 1991: 41, etc.). Other finds included animal bones, daub, iron slag, semi-finished artifacts, domestic oven construction material and a bone needle (Fig. 6).

The pottery data has been entered in a database and a detailed study of some pieces is forthcoming. Here we present the results of a preliminary analysis of the material



Fig. 6. Bone needle, Jerusalem Hill site. Photo Marta Kučerová

in the context of the database construction strategy and method, as well as a selection of the more interesting finds, like horn handles, spindle whorls, and fragments of decorated pottery. The collection of diagnostic fragments consists of 537 pieces (vessel bottoms, rims, handles, and body sherds). Special categories include spindle whorls, strainers, crushers and other similar small objects. The material was divided into five groups based on the fabric as observed macroscopically. The method obviously narrowed the possibilities for identifying other distinctive characteristics of the fabric.

Five fabric groups were established as criteria for examining the pottery.

Fabric group 1: Soft material without identified impurities or with a minimum share of impurities. Not present in our material.

Fabric group 2: Fabric with slight impurities. Group 2a: fabric containing fine sand, polished surface. Group 2b: fabric with little sand and stones, polished surface. The group is not abundantly represented in the collection.

Fabric group 3: Coarse fabric. Group 3a: a coarse ware with a large sand fraction and small stones. Group 3b: sand and pebbles mixed into the fabric.

Fabric group 4: The most abundantly represented group (see Graphs 1–2). Group 4a: granular material with a heavy presence of gravel and sand, usually rough grainy surface. Group 4b: same as 4a plus traces of ferric impurities.

Fabric group 5: Coarse-grained fabric with abundant coarse sand and substantial share of stones, probably not floated. Represented about the same as group 2 in the collection.

Problems with assigning individual sherds to one of the above groups resulted in a series of combined identifications: 2a-2b, 2a-3a, 2a-3b, 2b-3a, 3a-3b, 3a-4a, 3a-4b, 3b-4a, 3b-4b, 4a-ab, 4a-5a, 4b-5a (see Graph 2).

Two kinds of pottery surface were distinguished: burnished and smoothed, the latter being the prevailing form. More than half of the collection represented handmade



Graph 1. Material structure without combinations. Groups: 2a - material with poor composition usually fine sand, polished surface (35 pieces); 2b - material with low sand and stone content, polished surface (34 pieces); 3a - coarse pottery with big sand and small stone content (69 pieces); 3b - fabric mixed with sand and pebbles (96 pieces); <math>4a - granular material with heavy gravel and sand content, usually with rough grainy surface (148 pieces); <math>4b - same as 4a plus residual ferric impurities (41 pieces); <math>5a - coarse-grained material with much coarse sand and often a considerable share of stones, probably not floated (49 pieces)





Graph 3. Pottery surface – smoothed pottery (410 pieces); burnished pottery (119 pieces), not pottery (8 pieces)

Graph 4. Total sherd count 537. Decorated – 36 pieces. Not decorated – 497 pieces. Not certain, if originally decorated – 4 pieces

Graph 5. Most frequent vessel parts: body – 257 pieces; rims – 158 pieces; bottoms – 67 pieces; handles – 23 pieces









wares. Quality is poor and firing mostly bad. Not one vessel was found complete. Rims, bottoms, part of bodies and handles were distinguished as diagnostic categories (see Graph 5). Rims were relatively varied: flaring, claviform, vertical, and bent being fairly common. The dominant category was utility pottery: big pots, storage vessels and amphoras. Vases, jugs, and bowls were fairly frequent. There were one-piece and biconic vessels. Body shape variability appears to have been substantial considering the differentiated rims and bottom shapes. Frequent are barrel-shaped pots, also abundant egg-shaped, situlate, globular, piriform, sharply or ovally biconic, saccate. No one color predominated: dark brown, black, grey and milk coffee were quite common. Shades of red were present in a small quantity.

A preliminary examination of the pottery indicates that it is comparable with the finds from older excavations and from the archaeological field survey in terms of the range of shapes, colours, quality and other mentioned features (Giertlova *et al.* 1998: 71–72; Giertlova and Mihok 2000: 75). The collection serves the purpose of analyzing settlement density in different locations of Jerusalem Hill in the Púchov and Pre-Púchov culture horizon. A typological analysis can be proposed, but only if pottery from older excavations is taken into account. However, it is not possible on these grounds to go into deeper analyses of the economic and social relations, as well as ethnic issues. In any case, we are dealing here primarily with Pre-Púchov and Púchov culture (Giertlova *et al.* 1998: 71–72).

SPINDLE WHORLS

Spindle whorls, which document weaving activity, should be considered in terms of their shape, weight and dimensions, which have an impact on the function of the spindle when spinning. The decoration is also important as a cultural indicator for finds from a wider region of Hallstatt and La Tène Central Europe and a broader chronological range (Belanová et al. 2007: 419; Šalkovský 2009: 51). We don't have enough stratigraphy informations, which could prove with 100 percent their competence to be the certain archaeological culture and time (Hallstatt, La Tène, Early Roman time). Only possible but still not surefooted way could be trough the analogies of the forms and types characteristic for certain cultures and time horizons. Of the 10 spindle whorls excavated in 2013, six are intact and four are incomplete. Two of this set are decorated (Fig. 7: 1–3). The complete example is from topsoil. It is of biconical shape with rounded bulge, black in colour and decorated with three sets of dot impressions, each forming a triangle, placed on the upper surface. The decoration may have been damaged to some extent. A parallel spindle whorl was found at the fortified settlement of Detva-Kalamarka (Salkovský 2009: 51). Two similarly decorated biconical and conical spindle whorls came from archaeological features of the Kalenderberg Group of Molpír in Smolenice, phase HC2 to beginning of HD1 (Dušek and Dusek 1984: Fig. 83: 8, 116: 16; Parzinger and Stegmann-Rajtár 1988: 167 ff.). A very similar spindle whorl was among the grave goods discovered with inhumation 76/62 IB from a bi-ritual burial ground of the Vekerzug culture from Chotín (Kozubová 2013: 127). The parallel all come from sites dated to the Hallstatt through La Tène period, but the chronological range spindle whorl types is very broad as stated above. Therefore, this particular spindle whorl from Jerusalem Hill can be dated from the Hallstatt to the La Tène (Púchov culture).



Fig. 7. 1 – decorated spindle whorl; 2 – decorated spindle whorl, view from the missing inside;
3 – decorated spindle whorl; 4 – decorated spindle whorl with cuts; 5 – preserved half of a spindle whorl; 6 – conic spindle whorl; 7 – spindle whorl, bulbous form; 8 – spindle whorl, ring shape form with cylindrical profile and flat surface on either side; 9 – spindle whorl, probably conical form;
10 – spindle whorl, circular with flat sides, broken; 11 – spindle whorl ,cylindrical form; 12 – spindle whorl, bulbous form

The second decorated spindle whorl is biconical, decorated with plastic ribbing and five oblique grooves (Fig. 7; 10: 4). It originates from the archaeological dump and is thus problematic, as the type of decoration is very specific and not usual for the Púchov culture. Some similarity of the decoration can be seen in finds from the late Hallstatt and early La Tène burial ground in Bučany, grave 29 (Bujna and Romsauer 1983: 289, Fig. VII). Nevertheless, the dating of this particular spindle whorl is questionable

The remaining eight spindle whorls are undecorated. Two are preserved in half, one is cracked into two pieces and five are preserved without bigger damage. Four of them come from different layers. Interestingly, the shape variation in this small set was

quite extensive (see Graphs 6–8). Starting with trench 1, the first to be discussed is a half preserved piece (topsoil layer) of bulbous or possibly conical form (Fig. 7: 5), black-coloured with sheets with rusty shade. A conical spindle whorl (Fig. 7: 6) (topsoil layer) is typical of the finds from Hallstatt period burial grounds and settlements in the northeastern Alps. Decorated and undecorated forms are known (Ranseder 2006: 321 f., figs 14: 10, 45: 10, 73: 5; Rebay 2006: 112–115; Romsauer 1993: 19; Stegmann-Rajtár 2009: 84f., fig. 4: 1, 15: 6; Čaplovič 1987: pl. LXXII: 1, 2). The spindle whorl from Jerusalem Hill could thus be dated to the Hallstatt or pre-Púchov stage. The third spindle whorl (topsoil layer) is of bulbous conical form, black in colour, its surface burnished with some small damages (Fig. 7: 7). Parallels are as above, falling in the late Hallstatt and early and middle La Tène period, discovered at different settlements and burials in Slovakia and elsewhere in the region.

The remaining spindle whorls were either not clearly of Púchov or late Hallstatt date or representing a very wide horizon. One of these (topsoil layer) is ring-shaped, mainly black, with a sintered crumbly surface (Fig. 7: 8). It is flat on either side and has rounded edges. A half of a spindle whorl from a cut in trench 3 was of a lighter black colour and featured probably secondary damages to its surface (Fig. 7: 9). It may have been conical, which could make it like the said parallels from the Hallstatt period. A whorl broken into two (trench 3, layer 6, 0.53–1.10 m) (Fig. 7: 10) is an atypical grey colour with small sinter and iron oxide marks. It is circular, flat on one side, but since the other side is damaged, the original shape cannot be identified with certainty. The next spindle whorl (trench 3, layer 14, depth 1.12–1.26 m) is black in colour with small secondary damages on the surface (Fig. 7: 11). It is the smallest in the present collection with uneven rims and ring-shaped form, much like the example from trench 1 but with different edges. The last spindle whorl (trench 3, layer 2, depth 0.30–0.50 m) is black and brown in colour, possibly burnished originally and with small secondary damages (Fig. 7: 12). It is of bulbous shape, very close to the whorl from trench 1.

DECORATED POTTERY

Of the pottery sherds recorded from the 2013 excavation, 40 pieces were decorated. We have included the horn-handled bowls and jugs, as well as pieces with decoration that could be secondary damage (see Graph 4) and the sole fragment of painted ware. Even so, it is comparably much less than on attested Púchov culture sites, such as Liptovská Mara (Pieta 1996: 52–57) in Liptov and Dolný Kubín in Orava (Čaplovič 1977).

The painted ware fragment (from trench 3, layer 3) is very small, too small to identify the vessel type (Fig. 8: 1). Several forms have been identified in the record, all wheelmade: vases, bottles, bowls etc. (see Pieta 1982: 119–122). It could be good evidence for the late Púchov culture horizon on Jerusalem Hill, because this type of ware



Fig. 8. I – painted ware sherd; 2–12: decorated ceramics

starts in phase LT CI–LT DI (Pieta 1982: 118–119). A total of 13 Púchov culture sites has yielded this type of late La Tène pottery (see Pieta 1982: 120), Spiš included (Pieta 1982: 119). In Spiš territory, these are Jánovce-Machalovce (Novotná and Novotný 1971: 16) and Spiššský hrad (Vallášek 1976: 6–9). One fragment comes from an earlier field survey on Jerusalem Hill (Pieta 1982, Pic. 11, no. 22) and the ware has also been found in Batizovce (Budínsky and Krička 1965: 168).

The rest of our decorated pottery is handmade. All the fragments from trench 1 feature a plastic cordon (Fig. 8: 2–8), whereas the pottery from trench 3 has finger-pressed decoration, one relief cordon and one piece with engraved decoration (Fig. 8: 9–12). The first two kinds of decoration are typical of the La Tène period (Púchov culture in the case of Jerusalem Hill) (Březinová 2001: 203–207), but also of an older, late Hallstatt tradition. The plastic cordon is also very close to decoration motifs on Dacian pottery (Luštíková 2007: tab. 4). Therefore, it is difficult to be certain, whether the decorated pottery from Jerusalem Hill is connected with the late Hallstatt horizon or early and late Púchov culture horizon.

HORN-HANDLED BOWLS OR JUGS

The three horn handles from the excavation in 2013 are each seemingly different in Károly Tankó's typology (Tankó 2005: 154–155) and cannot be attributed with certainty to either jug or bowl (Fig. 9: 1–3). All three appear to have been made in Jerusalem Hill and were influenced by contemporary models from the Spiš region. In his key study of the Puchov culture, K. Pieta (1982) suggested that the horn-handles in pre-Púchov and Púchov horizons could have been imports (Pieta 1982: 95), but the assemblage from Jerusalem Hill includes no pottery or other artifacts that could be identified with certainty as imported.

The horn handle from trench I (topsoil layer) is the most interesting (Fig. 9: 2). It is an unusual light brown colour with orange tint. It has an atypical perforation in the middle (Fig. 9: 4) and the horns, both broken off, were obviously *irregula*; they may be classified among finds of the La Tène type D according to Tankó (2005: 155).



Fig. 9. 1–3: horn handles; 4 – perforation on one side of the horn handle; 5 – horn handle from the older excavation on Jerusalem Hill; 6 – horn handle from an earlier archaeological field survey (1892), now on exhibiton in the Poprad museum; 7 – horn handle from an earlier fied survey in 1895, now on exhibiton in the Poprad museum

It may have been a bowl (or jug), in secondary use in the Púchov horizon. The role of the perforation is not known. The possible analogy is subject of our later interpretation. Closest analogies from Spiš territory, or neighbouring regions (Liptov, Orava or Horehronie) we could not find yet and it is a subject of our research.

The second example (trench 3, layer 5, depth 0.49–0.96 cm) is of black colour, originally burnished on the surface presumably but the surface is very sintered (Fig. 9: 3). The handle is fully preserved and has one small stopper horn, the other missing. This type could correspond to Tankó's type B (Tanko 2005: 154). This type of horn-handled bowl is not very frequent. The closest parallels from Slovakia come from Ploštín, Liptovská Mara and Veľký Bysterec (Pieta 1982: 93). Chronologically, this type of horn handle may be classified in the late Hallstatt D period or pre-Púchov culture (La Tène B–C) (Tankó 2005: 157–158; Pieta 1982: 93).

The last horn handle (trench 3, layer 12, depth 1.2–1.8 m) is black in colour, the horns are handmade and are of unequal size and height (Fig. 9: 1). The vessel to which this handle belonged has not been preserved, but judging from the preserved rim thickness, it must have represented a finer ware than most of the assemblage. The form is common on several fortified settlement sites in Spiš and is also present in the material from earlier surveys and excavations on Jerusalem Hill (Fig. 9: 5). Many are on display at the Podtatranské Museum in Poprad (Fig. 9: 6, 7). Judging from their relative frequency in Spiš territory, mostly from the high hill settlements, they could represent a local fashion in pottery design, reflecting a regional artistic trend. The Spiš exemplars are less sophisticated in terms of their design than the southern and western counterparts. They can be find in several regions in Slovakia (Liptov, Detva, Orava, southwestern Slovakia etc.), in Hungary (Párducz 1966: 35–91; Patek 1983: 59–84) and even in the Balkan area (Gabrovec 1987; Teržan 1990). In the Tankó typology, this handle represents type C: Vekerzug type, dated to Halstatt D2–D3 or La Tène AI (Tankó 2005: 156).

In conclusion, the horn handles from Jerusalem Hill represent the older, probably late Hallstatt horizon in this settlement; a more precise chronological differentiation is still not possible. They disappear at the end of La Tène B in central Europe, no later than La Tène C (Pieta 1982: 93; Tankó 2005: 156). However, their development in the Spiš region may have taken place with some delay and this should be taken into consideration in their dating.

CONCLUSION

The main aim of this study was to give an overview of the hillfort site on Jerusalem Hill in Kežmarok, an important archaeological site in the Slovakia Spiš region. We have looked briefly at the site topography, history of research, the nature of archaeological remains, overall characteristic of the pottery, specific pottery remains (horn-handled jugs) and the finds from excavation in 2013. The conclusions are preliminary as the site merits further closer examination in the future. The pottery from Jerusalem Hill should be studied further in the context of other Púchov high hill settlements or lowland settlements from the Spiš region and then compared with Púchov culture settlements in Slovakia, Poland and the Czech Republic.

REFERENCES

- Baráthová, N., Fábrová, K., Kučerová, M. and Vráblik, V. 2013. *História Kežmarku do polovice 18. Storočia*. Kežmarok.
- Baráthová, N. (ed.) 2009. Osobnosti Kežmarku 1206–2009. Kežmarok.
- Belanová, T., Čambal, R. and Stegmann-Rajtár, S. 2007. Die Weberin von Nové Košariská Die Webstuhlbefunde in der Siedlung von Nové Košariská im Vergleich mit ähnlichen Fundplätzen des östlichen Hallstattkulturkreises. In M. Blečíć, M. Grešnár, B. Hänsel, A. Hellmuth, E. Kaiser and C. Metzner-Nebelsick (eds), *Scripta praehistorica in honorem Biba Teržan*, 419–444. Ljubljana.
- Benediková, L. 2007. Die Hallstatt und Latènezeitlichen Siedlungen in der Nordslowakei. *Slovenská Numizmatika* XVIII: 69–110.
- Bohuš, G. 1919. *Historisch-geographische Beschreibung des in Oberungarn berühmten Zipser Landes.* Kežmarok.
- Březinová, G. 2001. Výzdobné motívy na keramike z laténskeho sídliska v Nitre-Šindolke. Študijné zvesti AÚ SAV 35, 203–207. Nitra.
- Budinský-Krička, V. 1965. Archeologické nálezy z Batizoviec. Štúdijné zvesti AU SAV 15, 167–176. Nitra.
- Bujna, J. and Romsauer, P. 1983. Späthallstatt-und Frůhlaténezeitliches Gräberfeld in Bučany. *Slovenská* Archeologia 31: 277–322.
- Čaplovič, P. 1977. Halštatské popolnicové pohrebisko. Martin.
- Čaplovič, P. 1987. Orava v praveku, vo včasnej dobe dejinnej a na začiatku stredoveku. Martin.
- Čurlík, J. and Šurina, B. 1998. Príručka terénneho prieskumu a mapovania pôd. Bratislava.
- Dušek, M. and Dušek, S. 1984. Smolenice-Molpír. Befestigter Fürstensitz der Hallstattzeit I. In *Materialia archaeologica Slovaca* 6. Nitra.
- Eisner, J. 1933. Slovensko v pravěku. Bratislava.
- Gabrovec, S. 1987. Praistorija Jugoslavenskih zemalja. Sarajevo.
- Giertlová , M., Soják, M. and Wavrek, P. 1998. Prieskum na lokalite Kežmarok-Jeruzalemský vrch. AVANS v roku 1998, 71–72. Nitra 2000.
- Giertlová, M. and Mihók, Ľ. 2000 (2001). Prieskum na lokalite Kežmarok-Jeruzalemský vrch. AVANS v roku 2000, 75–76. Nitra.
- Greisiger, M. 1890. Kesmark in Steinzeit. Karpaten-Post 11 roč., 19 Juni 1890, č. 25.
- Hefty, J.A. 1925. Vom Karpathenmuseum. Touristik, Alpinismus, Wintersport 6 (II): 78-79.
- Homza, M. et al. 2003. Terra Scepusiensis, Stav bádania o dejinách Spiša. Levoča–Wrocław.
- Javorský F. 1982. Prieskumy výskumnej expedície Spiš. In Avans v roku 1981, 110–134. Nitra.
- Kiefer, L. 1974. Úvodná správa k archeologickému nálezu z doby: Púchovská kultúra popolnicových polí a o zničení hradiska pri stavbe amfiteátra. In L. Kiefer (ed.), Nálezová správa o záchrannom archeologickom výskume za roky 1969/1973.1974, Nitra. (Copy of site report deposited in Museum of Kežmarok, original in AÚ SAV Nitra).

- Kozubová, A. 2013. Pohrebiská Vekerzugskej kultúry v Chotíne na juhozápadnom Slovensku. Vyhodnotenie. Bratislava.
- Kropilák, M. (ed.) 1977. Vlastivedný slovník obcí na Slovensku II. Bratislava.
- Luštíková, L. 2007. Dácka keramika na území Slovenska. Východoslovenský pravek VIII: 77–95.
- Miroššayová, E., Javorský, F., Mihok, Ľ. and Hollý, A. 1991. Metalurgická činnosť na lokalite Pod Zelenou horou v Hrabušiciach. *Nové Obzory* 32: 71–97.
- Miroššayová, E. 1992. Osídlenie Spiša v dobe halštatskej. In S. Czopek (ed.), Ziemie polskie we wczesnej epoce żelaza i ich powiazania z innymi terenami, 133–138. Rzeszów.
- Miroššayová, E. 2003. K problematike tzv. skýtskych nálezov z regiónu Spiša. In Gancarski J. (ed.), *Epoka brązu i wczesna epoka żelaza w Karpatach polskich. Materiały z konferencji*, 357–378. Krosno.
- Novotná, M. and Novotný, B. 1971. Katalóg archeologickej zbierky Spišského múzea v Levoči. Bratislava.
- Novotná, M., Novotný, B. and Kovalčík, M. 1991. Popradská kotlina v dávnej minulosti. Košice.
- Párducz, M. 1966. The Scythian age cemetery at Tápiószele. Acta archaeologica Hungarica 18: 35-91.
- Parzinger, H. and Stegmann-Rajtár, S. 1988. Smolenice-Molpír und der Beginn skythischer Sachkultur in der Slowakei. *Prähistorische Zeitschrift* 63 (2): 162–178.
- Patek, E. 1983. Die nordosttransdanubische Hallstattgruppe: Ein Uberblick. Mitteilungen des Archäologischen Instituts 12/13 (1982/1983): 59–84.
- Pelíšek, J. 1961. Atlas hlavních půdních typů ČSSR. Praha.
- Pieta, K. 1982. Die Púchov Kultur. Nitra.
- Pieta, K. 1996. Liptovská Mara. Včasnohistorické centrum severného Slovenska. *Monumenta archaeologica Slovaciae* 5. Nitra.
- Ranseder, Ch. 2006. Eine Siedlung der Hallstattkultur in Wien 10, Oberlaa. *Monographien der Stadtarchäologie Wien* 2. Wien.
- Rebay, K.C. 2006. Das hallstattzeitliche Gräberfeld von Statzendorf in Niederösterreich. Möglichkeiten und Grenzen der Interpretation von Sozialindexberechnungen. *UPA* 135. Bonn.
- Romsauer, P. 1993. Nové nálezy vekerzugskej skupiny z Nitry. Slovenská Archeológia 41(1): 5–39.
- Šalkovský, P. 2009. Detva. Praveké a včasnohistorické hradisko k dávnym dejinám Slovenska. *Monumenta archaeologica Slovaciae*. Nitra.
- Soják, M. and Fecko, P. 2012. Sídlisko púchovskej kultúry v Spišskom Hrhove na Spiši. In G. Březinová and V. Varsík (eds), *Archeológia na prahu histórie. K životnému jubileu Karola Pietu*, 247–226. Nitra.
- Soják, M. 2002. Osídlenie horného Spiša na sklonku staršej doby kamennej. In J. Gancarski (ed.), *Starsza i środkowa epoka kamienia w karpatach polskich*, 255–278, Krosno.
- Spőttl, I. 1885. Von der Donau zur Popper. Jahrbuch des Ungarischen Karpathen-Vereines 12: 43.
- Stegmann-Rajtár, S. 2009. Žiarové pohrebisko východohalštatskej a vekerzugskej kultúry v Nových Zámkoch. *Slovenská Archeológia* 57 (1): 57–116.
- Tankó, K. 2005. Horn Handled bowls of the Central Europe Iron Age. In H. Dobrzańska, V. Megaw and P. Poleska (eds), *Celts on the Margin*, 153–162. Kraków.
- Teržan, B. 1990. *Starejša želena doba na Slovenskem Štajerskem. The Early Iron Age in Slovene Styria*. Ljubjana.
- Vallášek, A. 1976. Spišský hrad na prelome letopočtu. Pamiatky Príroda 4: 6–9. Ružomberok.