half of BA III – first half of BA IV). It is also possible that this form continued in use to the end of BA IV, i.e., until Ha B1 (Kaczmarek 2002, p. 92, 9).

The axe-head from Gliwice is a new addition to our list of early Lusatian Culture axe-head finds

from Silesia. However, lacking a context, it cannot improve our understanding of bronze metallurgy in the region or of the connections the people of the Lusatian Culture had with societies in other regions of Central Europe.

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2. THE USES OF THE MARKET SQUARE IN THE LIGHT OF ANALYSIS OF METAL FINDS

Most of the metal finds from the Market Square in Gliwice date from the 14th–15th century. Chronologically, they range from the bronze axe-head discussed in the preceding section to lead shot and metal fittings of wooden water pipes (Fig. 53).

Analysis of this series lends support to the conclusion that a builders' guild was active at some time in the Market Square, possibly involved in the construction of the Town Hall. This is suggested both by the fairly numerous finds which include stonemasons' broad bladed stone chisels, heavy iron wedges (or punches ?), carpenters hand-drills and heading tools (Fig. 63), as well as lumps of raw lead and copper alloy, slag, scraps of metal sheet, wire and bars. There were also quite a few very short nails with very large heads tentatively interpreted as decorative features of gates (Fig. 64a-g). The number of ordinary knives (Fig. 65b-f) was unexpectedly small in comparison. Moreover, there is reason to believe that the obvious overrepresentation of horseshoes in the series of metal finds from the Market Square is related to

the activity of the builders' guild, which would have needed frequent supplies of material necessary for their work (Figs. 54, 66). Another possible explanation is that there used to be a smithy and a foundry on the site. Bearing in mind the difference of scale, the number of horseshoes recovered in the Market Square in Wrocław is much smaller (admittedly, this site was investigated less comprehensively) than the large number of horseshoes recorded e.g. in Szewska Street in Wrocław (Jastriemska, Jaworski 2010). As regards numerous finds of architectural elements such as brackets, hinges, hooks, keys, padlocks, hasps, etc. (Figs. 55, 64h–o), it is unclear whether they can be attributed to the activity of the builders or originate from derelict buildings, none of which have been identified in the Market Square.

If we are to believe the view put forward in earlier analyses of everyday life in towns, the Market Square would have been the site of commercial activity and



Fig. 53. Gliwice, Market Square. A metal water pipe fitting (coupling piece). Photograph W. Turkowski



Fig. 54. Gliwice, Market Square. Horseshoe. Photograph W. Turkowski



Fig. 55. Gliwice, Market Square. Key. Photograph W. Turkowski



Fig. 56. Gliwice, Market Square. Iron half-scythe. Photograph W. Turkowski



Fig. 57. Gliwice, Market Square. Fighting knife. Photograph W. Turkowski



Fig. 59. Gliwice, Market Square. Medieval belt chapes: a – openwork; b – longitudinal; c –longitudinal with roundel. Photograph W. Turkowski



Fig. 58. Gliwice, Market Square. Battle axe-head. Photograph W. Turkowski

a meeting place for the privileged urban classes. This somewhat bucolic view was challenged recently by e.g. the discovery in the Market Square in Krakow of evidence of copper and lead metallurgy, and by references found in the written sources to a silver foundry in the same square. All of this industry would have required the presence of furnaces (emitting smoke),

Fig. 60. Gliwice, Market Square. Bronze finger-ring. Photograph W. Turkowski



Fig. 61. Gliwice, Market Square. Handel: a – copper cup weight; b – lead seal. Photograph W. Turkowski



Fig. 62. Gliwice, Market Square. Iron knife with a bone handle. Photograph W. Turkowski



Fig. 63. Gliwice, Market Square. Tools: a – drill fragment; b–e – wedges/punches; f – axe-head; g–h heading tools; i – drill fragment. Drawing R. Polaczkiewicz



Fig. 64. Gliwice, Market Square. Metal fittings: a-g – nails; h – hinge; i – bracket; j – fragment of a padlock; k – hinge fragment; l-o – keys. Drawing R. Polaczkiewicz

and indeed, their remains were identified, along with a great quantity of waste and half-finished products of lead, copper and silver, and an unexpectedly high metal content in the soil (Buśko, Dereń, Garbacz-Klempka 2009).

The discovery of the remains of metallurgical production in the Market Square in Krakow is by no means an isolated phenomenon. A much less comprehensive investigation carried out in the market at Kaunas identified, at a small distance from the Town Hall, a cluster of eight masonry structures associated with a wax workshop. Some of them were more than 4 m in length (Žalnierius 2009). The scope of this rescue investigation was too limited to identify the location of ovens – if any – in the Market Square. Nevertheless, we can expect that the principal square in Kaunas was also the site of some disruptive industry.

In urban medieval deposits, it is not uncommon to find farming implements, which would have been



Fig. 65. Gliwice, Market Square. Tools: a – half-scythe; b–f – knives; g – shovel iron. Drawing R. Polaczkiewicz

used in urban gardens found next to the dwellings, etc. This could explain the presence of a sickle and a shovel iron in the Market Square in Gliwice (Figs. 56, 65a, g). They could have been brought to a smithy in the Market for repairs or resharpening.

The series of weapons and assorted horse gear discovered in the Market includes a stirrup, battleaxe, fighting-knife, falchion hilt, arrow- and boltheads and rowel spurs (Figs. 57–58, 67). The series of rowel spurs recorded in Poland may not be very large but the form appears to be diagnostic for sites that lack a 13th-century horizon. The latter would have been defined by the presence of prick spurs, a type of long duration (Hilczerówna type II). Several iron rings may be elements of horse-bits. Dress accessories are represented mostly by the elements of the belt set. Whereas buckles are relatively few and do not stand out in any particular way, being a continuation of early medieval D-buckles (Fig. 68i–m), belt chapes turned out to be rather more interesting. Here, we are referring to three different types modelled on western chapes of knights' belts.

Until recently finds of openwork belt chapes (Figs. 59a, 68a), whether rectangular or half-round, were not recorded in Upper Silesia (cf. Wachowski 2007). Of late, they surfaced in regions of interest at Stare Kolnie (research of Lech Marek), Gliwice and at Dąbrowa Górnicza (Rozmus, Szmoniewski 2010, Fig. 5h). The pattern of distribution – with an evident concentration in Silesia-Moravia and solitary finds

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Fig. 66. Gliwice, Market Square. Horseshoes: a-b - fragments; c-f - complete. Drawing R. Polaczkiewicz

to the north of this region, e.g., in Greater Poland – Poznań (Wachowski 2007, Fig. 1d) and Żerniki-Jaryszki (Stępnik 2010, Fig. 13) and in the historic province of Dobrzyń – at Sadłowo (Wachowski 2007, Fig. 2f), suggest that these are local forms manufactured in Silesia-Moravia. Their exceptionally ornate form and presence of various symbols (e.g. crown, wings and lilies) and initials or monograms, help to associate this form of strap-end with the culture of chivalry and the court, or, outright, with courtly love.

The series from the Market Square in Gliwice includes a very long and narrow longitudinal belt chape (Figs. 59b; 68c, d), a form known previously only from the region of Silesia-Moravia (cf. Wachowski 1997). This form of chape may include initials in its



Fig. 67. Gliwice, Market Square. Weapons and equestrian equipment: a–c – spur fragments; d – fragment of a stirrup; e – fighting knife; f – fragment of a falchion; g–k – bolt-heads; l – axe-head. Drawing R. Polaczkiewicz

design. On the specimen from Niemcza there is the letter "M", popular in the Middle Ages (Wachowski 1997, Fig. 1a), which may refer both to Mary and to

Minne, the Germanic goddess of love who during the medieval period supplanted Venus. Unfortunately, the letters on the belt chape from Gliwice, like those on

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Fig. 68. Gliwice, Market Square. Belt fittings: a-e - chapes; f-h - belt mounts; i-m - buckles. Drawing R. Polaczkiewicz

the specimen discovered at Świbie in Upper Silesia (Michnik 2006, Fig. 5), are not easy to identify. Letters are also visible on some belt chape finds of this type from the Czech Republic (Wachowski 1997, Fig. 1b, c).

The most spectacular find in the group of belt mounts is a complete chape modelled on a western form which is described as a roundel belt chape, with various representations (Figs. 59c, 68b), including letters (Fingerlin 1971, 121 f., Figs. 215–248). Until now, we have had only fragments of this type of chape from Moravia and Silesia, in the form of a roundel, or, a disc, which were not identified correctly either in Poland or in the Czech Republic (cf. Nekuda et al. 2004, Figs. 3-4). Now the complete find from Gliwice makes it possible to identify these discs as surviving elements of a belt chape (Fig. 68c, e). A common feature of the finds from Poland and Moravia is the presence on the disc of an initial or a monogram.

Also associated with the strap of the belt are mounts, which were meant to prevent its warping (*Bortenstrecker*) (Fig. 68f–h). Other dress accessories include a small number of hook-and-eye fasteners,



Fig. 69. Gliwice, Market Square. Dress accessories and ornaments: a–d – buttons; e–f – fasteners; g – finger-ring; h – disc. Commerce: i – cup weight. Drawing R. Polaczkiewicz

dress pins and flat buttons made of lead (Fig. 69a–e, h). There were also solitary finds of metal heel plates and crampons.

The number of typical personal ornaments was unexpectedly small, to be precise, they are represented by a single plain finger-ring (Figs. 60, 69g). No temple rings were found, a popular form still in use during the 13th century. This fact, taken in combination with the absence of prick spurs, shows that the metal objects discovered in the Market Square originate from the advanced period of the High Middle Ages.

Next to coins (cf. chapter by B. Paszkiewicz), finds associated with commerce include lead seals and a cup weight (Figs. 61, 69i), an extremely rare find in Poland, noted only from 1300 onwards, that is, from the monetary reform of Wenceslaus. The earliest, certain find of a cup weight is probably the one recorded in Trzebnica, where it was discovered together with weighing scales and coins (Wachowski, Kamińska 1993). Currently, the mass of the cup weight from Gliwice (7.6 g) does not permit it to be linked with any known weight or monetary unit. Finds of this form of weights are relatively rare in Poland and are noted mainly in the North – in the Hanseatic zone, as e.g. in Elbląg (Marcinkowski 2002, Figs. 3:2, 5) and in the south of the country, mainly in Silesia and, recently, in larger numbers, in Krakow (*Kraków* 2007, kat. VI. 3–6, 9–11, 19). Recently a larger assemblage of cup weights found in the Czech Republic was published complete with a review of comparative material (Doležel 2008). Cup weights are extremely hard to date given that they continue in use, in an almost unchanged form – mostly in laboratories and pharmacies – nearly up until the 20th century.

The finds series from the Market Square in Gliwice includes a negligible number of objects associated with wealth. The only certain find is a small knife with a decorated bone handle (Figs. 62, 65f). With some reservation, we can include in this group also a fragment of a spoon head, made of copper alloy. Finally, games are documented only by the most commonplace astragali.

Finds of metal cooking pots (*Grapen*) are exceedingly rare in Poland. From the Market in Gliwice we have recovered a fragment of a thick-walled vessel made of copper alloy – presumably a *Grapen*. Earlier finds of this form of vessel recorded in Poland were mostly complete, used as containers for hoards of coins and jewellery as e.g., a deposit discovered in Szczecin.

The evidence from the investigation carried out in the Market Square in Gliwice has raised a number of more general questions. Was the model that is presented by Krakow, Kaunas and Gliwice universal, or does it apply only to a specific zone or time? The answer to this query is not easy because only a handful of market squares in Poland have been investigated by area excavation. Moreover, on some occasions, as for example in Bielsk, the studies tended to focus on the architectural aspect, which makes it difficult to resolve the issues of interest to us as regards the uses of market squares during the High Middle Ages. It may be possible to comment on the question of economy pursued in the Market Square in Gliwice after completing a chemical analysis of the amorphous pieces of raw metal, slag and metal ore (?), which were discovered in fairly large quantities.

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3. COINS

DISCUSSION

The archaeological investigation carried out in 2010 in the Market Square in Gliwice yielded a series of 32 coins. This is not a significant number, especially from a site where one would have expected it to have been the scene of the frequent use of minor coins. Still, currently, we have no larger published coin series from a similar urban site in Poland. This class of material may be available (in particular, from the recent investigation of the Main Market Square in Krakow) but it has not yet been published. We only have a very general report on the coin series collected in the Market Square in Bielsko (Chorąży 2008).

The coin series from Gliwice spans the period from the early 14th until the mid-19th centuries, with evident peaks during the 14th and the 18th centuries (each with nine coins). In between, the coin frequencies are much lower with respectively, in the 15th century – three coins, 16th century – a single coin and the 17th century – three coins. After the 18th century peak the decline is less pronounced - for the 19th century we have six coins, the latest of them from 1851 – but the series ends there with no younger coins at all. At the same time, we need to state at this point one reservation that the dividing line between the 14th and the 15th century is arbitrary, because not less than six coins may belong in the late 14th or to the early 15th centuries, and were separated arbitrarily, perhaps, incorrectly. The same applies to one more coin, from the turn of the 15th–16th century.

In spite of these reservations, we have to conclude that the domination of the14th and possibly, the early 15th century is evident and that there are almost no 16th century coins. We are not in a position to say, for the time being, whether this chronological distribution of the cumulative finds is typical for Silesia because we do not have a sufficiently large coin series from long-functioning sites with which to make a comparison. Definitely, this distribution is altogether different from that in Poland. Although a similar downward trend in deposition is noted there during the 16th century, the peaks are observed in the 15th and the 17th century, which corresponds to the period when small coins of low value were most pervasive on the market.⁴

The denominations' structure in the coin series from Gliwice essentially does not deviate from the general rule according to which coin groups of this type tend to be decidedly dominated by the smallest denominations – such as are available (Mikołajczyk 1987, p. 208). This is mainly because the size of these coins made them easy to lose and their minor value discouraged a determined search for them. Hellers from the 14th and the 15th centuries fit this description, as do groeschels, kreutzers and groschen of the 17th and 18th centuries, and copper pfennigs of the 19th century. Simultaneously, the fact that during the modern age various denominations of minor coins were in circulation is reflected by their wide selection in the series. This confirms that – at least in the main - we are dealing with lost coins which would have been dropped during the business of daily living in the market square of an Upper Silesian town, e.g. in making small purchases and – possibly – of-

⁴ Mikołajczyk 1987. This author did not include 15th century material, which was not given any more general discussion. Cf. on this subject e.g.: Horbacz, Muzolf 1998; Piniński 2004–2007; Paszkiewicz 2010a, p. 13.