in playing this game in the early 20th century, used as target rings bone or leather, animal toe bones, and skulls with additional holes drilled in them, as well as other similar objects (known at first hand to the author).

The last find linked to recreation is a 210 mm fragment of a runner from a sledge fashioned from a horse radial. On its inner face a square-shaped hole was cut with a knife, 21 × 23 mm, the outer surface was levelled and smoothed (Fig. 75a). The fragment was discovered in a layer dated to the 13th–14th century (grid square no. 25, quadrant A, s. u. 14, inv. no. 471) and suffered damage during exploration (a fresh break). The construction of this type of sledge consisted of two bone runners connected by means of four vertical supports – directly with the seat – or with horizontal linking pieces of the sledge seat (Fig. 75b). The whole sledge was assembled with iron nails or wooden pins. Similar bone runners were recorded in numerous sites in Europe, with a chronological span from the Neolithic to the 19th century. Medieval specimens are known from for e.g. Gniezno, Olsborg, Köpenick, Potzlow, Teterow, Wolin, Szczecin, Oslo, Bergen (MacGregor 2001, p. 1, pp. 143–145, Fig. 76 c, f) and Wrocław (Jastrzębski 2004, p. 256, Fig. 10a).

At first, sledges were presumably mainly used for transport. Next to large sledges for carrying people, small ones were also used, with a length of a few dozen centimetres, to transport small bundles. It is possible that sledges were used also outside the winter season (Robak 2009, p. 181). In time, sledges came to be used also for riding for pleasure, a favourite pastime not only of children and teenagers but also of adults. Sledging was promoted so well that in 1883, the first official sledging competition was held in Switzerland. There is a known 19th century description of sledges with bone runners used by fowlers on frozen lakes (MacGregor 2001, p. 145).

Games and play had an important role in the life of the townspeople and villagers giving them respite from the daily toil and providing them with some entertainment. They are connected inextricably with human playful behaviour and considered as a culture-forming and educational element.

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## 5. THE CERAMIC SERIES FROM THE TOWN SQUARE IN GLIWICE

Archaeological investigation carried out in the Market Square in Gliwice yielded a series of 38,580 fragments of pottery vessels. This material is varied, both from the point of view of technology and chronology and is representative for the period starting from around the mid-13th and early 14th century, the early urban phase of the city, until its late modern period (17th–19th century).

The mass character of the ceramic finds secured during the investigation in the Market Square made it necessary, when undertaking its first evaluation, to adopt one of the systems of classification of late medieval and post-medieval ceramics developed previously for other urban centres. Use was made, with some modification, of for e.g. the system developed and applied successfully to ceramic series recovered in the Old Town in Wrocław (e.g. Buśko, Piekalski, Wiśniewski 1992, pp. 136–138; Rzeźnik 1998, pp. 221–223; Niegoda 1999, pp. 159–161). This choice was dictated by the nature of the Gliwice ceramics that in many technological aspects resemble the late medieval and post-medieval series from Wrocław. We have to note in this context that more comprehensive analyses of medieval and post-medieval ceramic vessels from urban excavations in Upper Silesia are lacking at present. Similarly, the ceramic vessel finds from the Old Town in Gliwice have been discussed only in general, and mostly in the form of brief reports (Stankiewicz-Węgrzykowa 1957, pp. 11–13; Stabrowska 1986, pp. 198–199; Furmanek, Kulpa 2001, pp. 18–22; Furmanek 2004, pp. 365–366; Michnik, Zdaniewicz 2009, pp. 21–23). The criteria used in the present analysis to identify specific technological groups included, primarily, the methods of shaping, firing (evidenced by the vessel quality and colour of breaks), type of filler and, in some cases the surface finish. Due to serious fragmentation of the ceramics, the identification of vessel forms and their metric parameters was only an auxiliary criterion. We have to note that the findings and classification to specific technological groups was based on results from macroscopic examination.

Six groups of ceramic vessels were distinguished. (Fig. 76). Group A includes fragments of pottery fired under oxidizing conditions that resulted in a creamy, brick red, and in some cases, brown or grey hue. These vessels were wheel made presumably mostly using the method of kneading and sliding

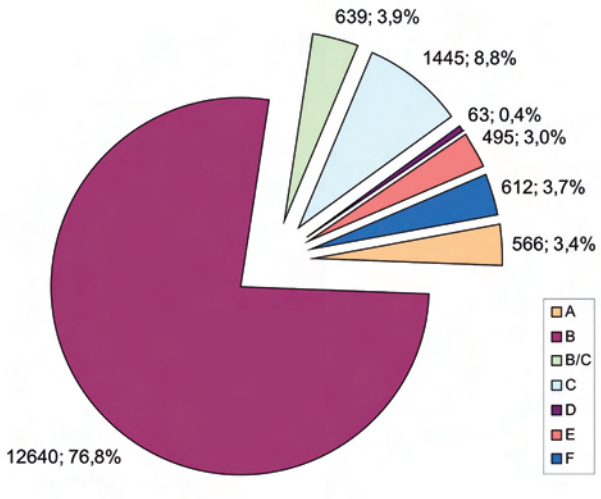


Fig. 76. Gliwice, Market Square. Ceramic vessels from s.u. 14, 14/62 and 83, by type. Critical analysis R. Zdaniewicz

techniques, from clay tempered by adding sand and finely crushed rock, used in various ratios. Some vessels were made from clay tempered with dusty filler; others had this type of filler and sand or crushed rock added. On the internal vessel surface there is rilling (i.e. horizontal streaks) – evidence that the vessels were turned on a wheel. In this, the technique of execution largely resembles early medieval methods of pottery production. Ceramics of this type are often described as "traditional".

Group B includes fragments of vessels that display features of late medieval pottery production. Their most outstanding attribute is their firing method – under strongly reducing conditions that gave the sherds and the break a uniform hue, steel grey and black. Firing, as shown by the "hardness" of the vessels walls, varied in quality. These vessels were made on a wheel, from clay tempered by adding a substantial amount of carefully selected sand, and an occasional grain of crushed rock. The vessels were built using sliding techniques, and subsequently were turned on the wheel right down to their bottom, as evidenced by variously pronounced rilling visible on the inner side of the sherds.

Group C are fragments of vessels that display features typically seen in late medieval and post-medieval pottery, i.e., uniform and clear firing under oxidizing conditions which produced a range of colours from cream to brick red, and more seldom, white. It is notable that many fragments have secondary discolouration, the result of use and of post-depositional processes. The technology of production of Group C vessels was varied as indicated by the presence in this group of specimens, which in their execution technique resemble Group B vessels. Thus, they were wheel made, mostly using sliding techniques, from clay tempered with a substantial amount of sand. At the same time, a part of the vessel fragments classified to Group C are of clay containing a filler of sand of a much finer grade than the aforementioned, or dust even. These vessels tend to have thinner walls, and feature fine plano-convex ridges that document energetic turning, and a part of them were definitely produced using the turning technique.

Fragments classified as Group B/C are similar to Group B and C vessels in their execution technique. The group was distinguished based on its non-uniform firing, which resulted in dull grey, dark brown and brown colours. The vessel breaks were mostly in two, sometimes, in three colours.

Technologically, group D are stoneware vessels. They are marked by the considerable hardness of their walls and the presence of very fine-grained filler. Wall thickness indicates that the fragments originate from vessels produced mainly using the technique of turning. When fired, the vessel surfaces were pale cream or white in hue, and in most cases were given a coat of glaze. Group D vessels available in the series from Gliwice must be regarded as the certain product of post-medieval pottery production.

Group E are fragments of vessels displaying features of late medieval and post-medieval produced pottery. They were glazed and fired under oxidizing conditions and, similarly as in the case of Group C wares, varied in their method of production. Quite incidental are glazed vessels – Group B1. Glaze was applied to the vessel surface in various ways, both unifacially and bifacially.

Group F are fragments of vessels with special technological attributes. Included here are vessels with a burnished surface or with traces of painting, specimens containing graphite, as well as faience and china vessels.

The oldest ceramics discovered in the course of the investigation of the Town Square in Gliwice are associated with the town's functioning during the Middle Ages – stratigraphic units (subsequently s.u.) 14, 14/62 and 83. Ceramics secured during excavation of these levels account for over 43% of all the pottery finds discovered during the fieldwork. This material is mostly datable to the second half of the 13$^{th}$–14$^{th}$ century, i.e. phase I of occupation in the Town Square. Single finds of 15$^{th}$ century coins discovered during exploration of the oldest layers confirm that this level does not represent a homogeneous deposit and that there was some mixing with

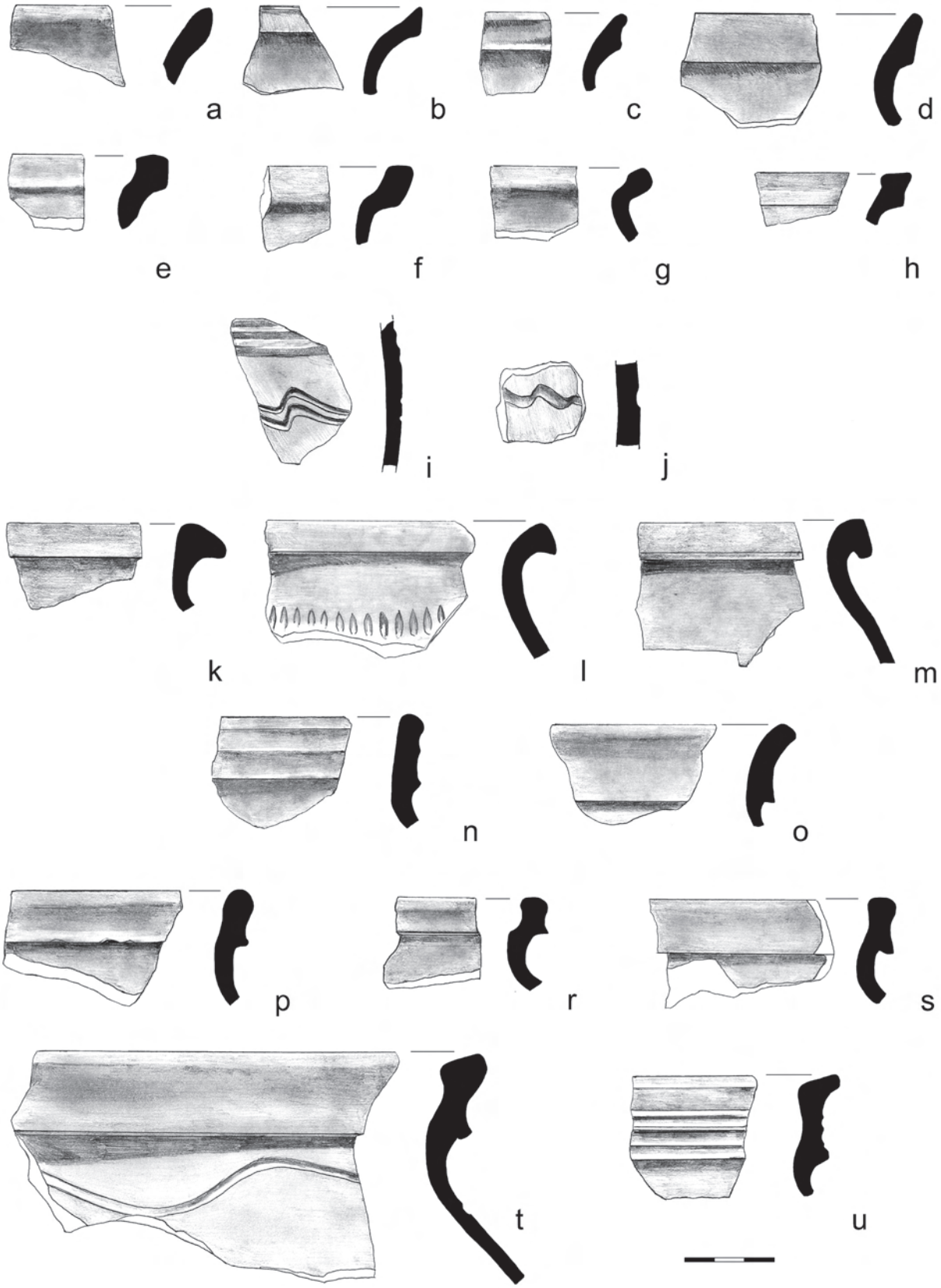


Fig. 77. Gliwice, Market Square. Ceramics: a–n – s.u. 14 (Group A); k–u – s.u. 14 (Group B); g–h – s.u. 14/62 (Group A). Fig. R. Polaczkiewicz

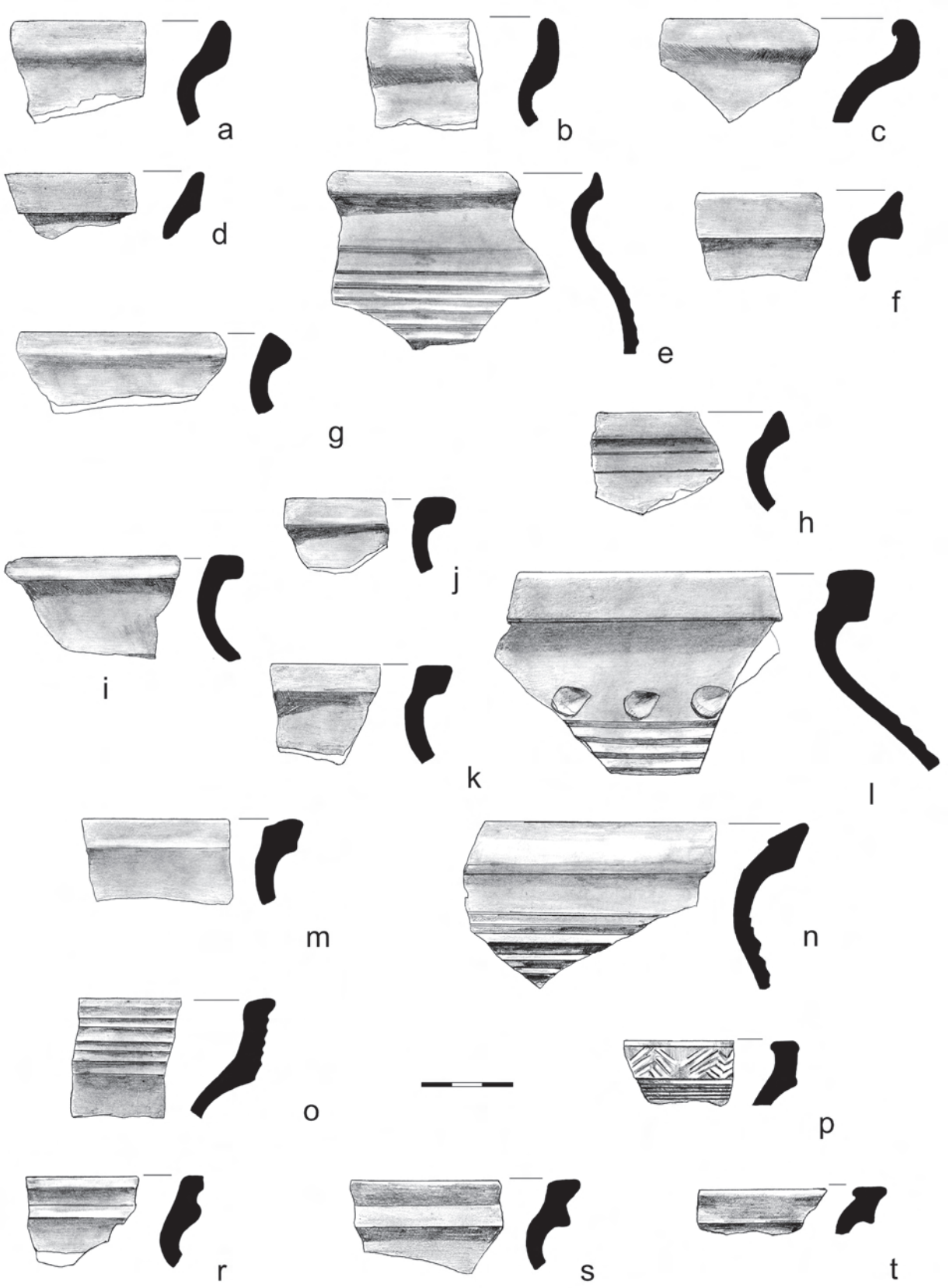


Fig. 78. Gliwice, Market Square. Ceramics: a–t – s.u. 14 (Group B). Fig. R. Polaczkiewicz

Fig. 79. Gliwice, Market Square. Decorated vessel fragments from technological Group B. Photograph W. Turkowski

younger strata. Consequently, some of the ceramics in question could belong to the 15th century.

Pottery sherds recovered during the exploration of s.u.14, 14/62 and 83 mostly belong to vessels fired under reducing conditions, technological Group B, with some fragments of vessels from Group A, C and B/C (Fig. 76). Regrettably, this material is seriously fragmented and larger vessels forms could not be reconstructed.

Fragments of Group A "traditional" vessels attributed to the youngest, 13th century early medieval pottery production, made up slightly over 3% of all the sherds from s.u.14, 14/62 and 83. Most of them belonged to cooking pots, too fragmented to specify their taxonomic position. These vessels mostly had a slender and attenuated profiled rim (Fig. 77a–d). Produced using the early medieval technique, a part of these vessels had a thick rim, profiled on many sides, already similar to the late medieval forms with a ledge (Fig. 77e–h) (Rzeźnik 1999, p. 130). Vessel decoration was limited to shallow but sharply profiled circumferential grooves, sometimes complemented by bands of engraved wavy lines (Fig. 77i–j). The decorative elements were observed mostly on the vessel body, and on the rim in a very small number of cases.

A larger group of fragments associated with phase I of occupation in the Town Square were sherds from Group B vessels (c 77%). It is notable that this group included both fragments of vessels fired under reducing conditions, with evidence of energetic turning in the form of rilling, and vessels with a surface marked by much less pronounced evidence of rotation, with less pronounced rilling on their inside and, on occasion, only surface marks of turning. It seems that this combination results from the lingering of traditional methods of vessel building in the local pottery production industry. This is indicated by the fact that a new technique of firing under reducing conditions was employed for genetically older, traditionally built wares. At the same time, this phenomenon is nothing out of the ordinary and has been observed e.g. in 13th century pottery wares from Wrocław (Rzeźnik 1999, pp. 128–130).

Rim sherds from Group B belonged mostly to variously profiled pots, pitchers, large bowls/basins, and presumably, beakers. The pots and pitchers had variously shaped rims. There are numerous sherds with bulbous rims, rounded or angular, usually strongly carinated (Fig. 77k–m). Also common are forms with a rim profiled both internally and externally, with a ledge (Fig. 77n–u). However, making a chronological distinction for different rim forms is extremely difficult. It seems that older dating (second half of the 13th to the first half of 14th century) applies to rims with slender edges, sometimes, with a visibly trimmed upper edge, and to thicker rims profiled on many sides (Figs. 78a–t, 79). This is suggested by the fact that some similarly shaped rims were also seen on vessels made using the "traditional" technique, classified to the technological Group A.

The edges of pitchers also had the form of a high and profiled strip to which strap handles were attached (Fig. 80a–c). In bowls, on the other hand, the rims were strongly everted, and sometimes had a thickened edge (Fig. 80d–f).

In vessels fired under reducing conditions, the wall thickness was in the range of 0.4–0.8 cm. Unfortunately, the metric attributes of the vessels are hard to establish. Based on the better preserved, larger sherds retaining a fragment of the rim it was determined that the rim diameter of pots ranged between 10 cm and 18 cm, and that rim diameter of *c*. 14–16 cm was the most common. At the same time, it is difficult to establish whether this data can be representative for the entire vessel series in this group since, as was mentioned earlier, size analysis was possible only for a specific group of sherds.

Decoration was limited mostly to horizontal usually gently profiled grooves, covering the vessel body, with less than 7.5% sherds having any decora-

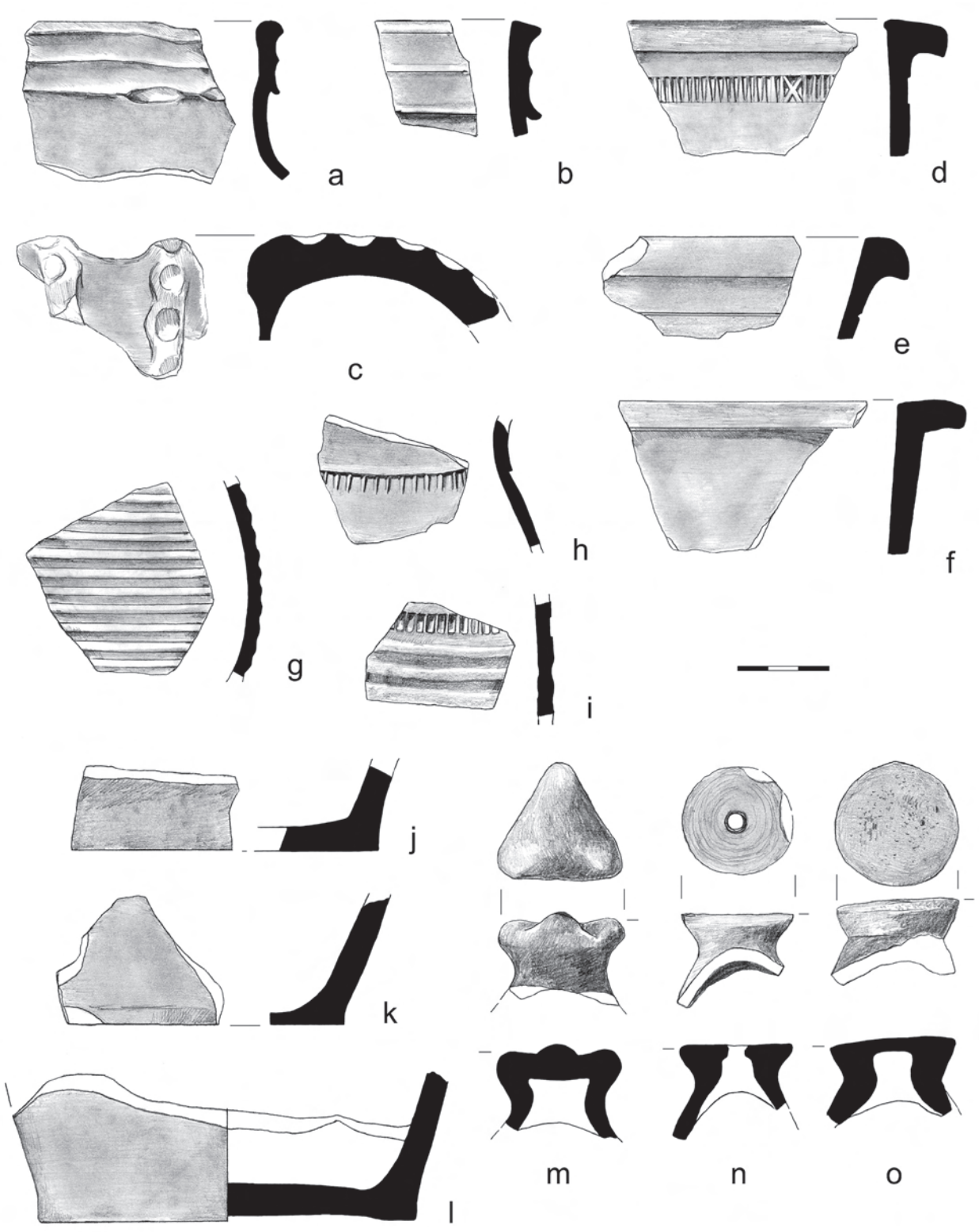


Fig. 80. Gliwice, Market Square. Ceramics: a–e, g–k, m–o – s.u. 14 (Group B); f, l – s.u. 14/62 (Group B). Fig. R. Polaczkiewicz

tion (Fig. 78, e, l, n; Fig. 80g, i). Single sherds were decorated with a stamp-impressed or roulette ornament (Fig. 80d, h–i), and on occasion, with the more "traditional" frieze ornament (Fig. 78l). Exceptionally, also the external surface of the vessel rim and the edges of handles were decorated (Fig. 78o–p and Fig. 80c, respectively). Base sherds confirm that Group B vessels were mostly flat-bottomed (Fig. 80j–k), and some bases had a diameter in the range of 8–13 cm. Only in rare cases did the vessel base retain traces of

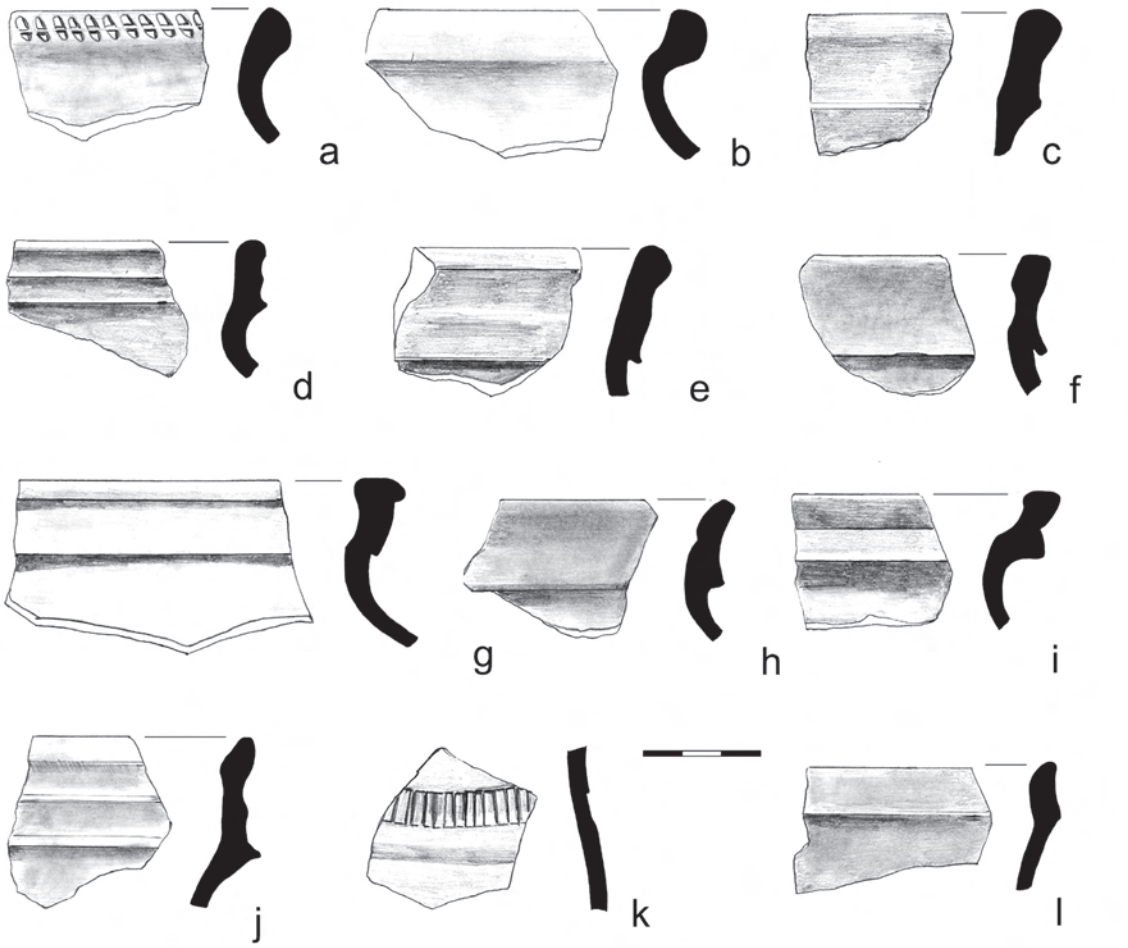


Fig. 81. Gliwice, Market Square. Ceramics: a–j – s.u. 14 (Group C); l – s.u. 14/62 (Group F). Fig. R. Polaczkiewicz

a raised surface on which the vessel had stood when it was being built (Fig. 80l). During this process, the working surface would be spread with ashes, in rare cases there was evidence that the vessel was cut off from the wheel-head. A separate category were vessel lids. Among what is a relatively small group of lid fragments the most important features are their handles, oval or angular of form, some of them with a hole through them (Fig. 80m–o).

Fig. 82. Gliwice, Market Square. Fragment of a vessel with painted decoration (Group F). Photograph W. Turkowski

Ceramic sherds classified to Group B were accompanied by fragments of vessels assigned to Group B/C (c 4%) and C (c 6%), fired under oxidizing conditions. Although they had been fired under different conditions, these wares were mostly produced in the same technological manner. Vessel rims were roughly bulbous (Fig. 81a, b), some with moulding to accommodate a lid (Fig. 81b). A somewhat more common form was an even rim with some profiling (Fig. 81c–i). Apparently, these rims belong mostly to pots, and presumably, also to pitchers (e.g. Fig. 81i–j)

Vessel surfaces were seldom decorated, and where this was the case, it was usually with bands of gently profiled grooves, occasionally with a stamp-impressed or roulette ornament (Fig. 81k). Due to the seriously fragmented condition of the pottery finds, it is extremely difficult to reconstruct the vessel forms in the group. As noted earlier, the surviving

rim sherds show that the dominant form in this group were pots and pitchers.

Among vessels attributed to phase I of occupation in the Town Square was a small number of Group E and F wares. Group E vessels resembled in their technology Group B, C and B/C wares, differing from them only by having a glaze. The glaze was dark green or honey-coloured and was usually applied to the upper part of the vessel. On some sherds, the glaze was visible only as isolated speckles.

Among vessels' fragments classified to Group F, there were sherds with a surface covered with a black, or occasionally, black-metallic paint. Interestingly, these pigments were applied only onto the part of the vessel that was fired under reducing conditions. The surface of vessels fired under oxidizing conditions was applied only with narrow (c 3–4 mm) bands of brown-red paint (Fig. 82). Sherds of specimens decorated in this manner were exceedingly rare.

Also more noteworthy in technological Group F is a series of sherds with traces of burnishing (c 0.02%). These wares definitely represent full-fledged late medieval pottery production. Burnishing usually covers the entire surface, extending also to the edges. Only sporadically did it take the form of narrow horizontal bands. It is notable that all the vessels with this type of finish are close technologically to Group B (Fig. 81l). It also seems that prior to burnishing, the surface of part of these vessels had been painted with black paint.

Ceramic materials datable to the late medieval period (14th–15th century) derive from the excavation of levels attributed to phase II of occupation in the Town Square (s.u. 14A, 14B, 107, 119, 144 and 155).[16] Similarly as with older levels, ceramic materials discovered in them did not form chronologically uniform assemblages. This is presumably because of the nature of these deposits – associated with levelling – and their substantial mixing with the older occupation levels.

Ceramic vessels discovered in s.u. 14A, 14B, 107, 119, 144 and 155 were classified mostly to technological Groups A, B, C, B/C and F.

Group B, C and B/C vessels were mostly made of clay with a substantial amount of sandy filler and

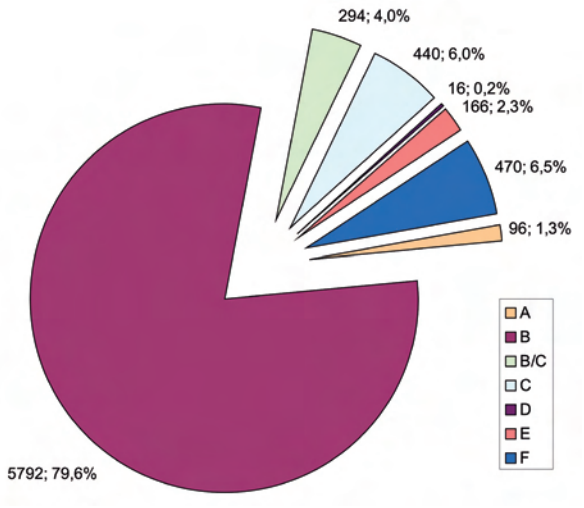


Fig. 83. Gliwice, Market Square. Ceramic vessels from s.u. 14A, 14B, 107, 119, 144, 155, by type. Critical analysis R. Zdaniewicz

a rare grain of crushed rock. As to the other technological attributes, these elements are quite similar to sherds of Group B vessels, associated with occupation level I. Group B vessels were the dominant component of the entire series (c. 80%). Vessels from other groups were only a minor component – Group A – c 1.5%, Group B/C – c 4%, Group C – c 6%, Group D – c 0.02%, Group E – c 2.3% and Group F – c 7% (Fig. 83).

In Group B, most sherds are from vessels with observable rilling, typical of full-fledged late medieval pottery production. Once again, the ceramics are too fragmented to specify more closely the frequency of individual vessel types. The rim sherds suggest that the dominant vessel form were pots and pitchers, with some bowls/basins, beakers and lids. The pots and pitchers mostly have a bulbous rim (Fig. 84a–j) or a rim of a more slender and straight form, with some profiling and with a ledge (Fig. 85a–c). More rare are slender, attenuated, gently or more sharply profiled, rims (Fig. 85g–i). Identifiable as rims of pitchers are specimens with a high and profiled rim (Fig. 85l–o). Distinctive everted rims belonged to deep bowls/basins (Fig. 85p). We have to note that a part of the vessel rims discovered in the layers attributed to phase II of occupation in the Town Square may have an earlier chronological position (second half of 13th to the first half of the 14th century). This is true mainly of the slender attenuated rims (Fig. 85d) and of the thicker rims profiled on many sides, reminiscent of rims with a ledge (Fig. 85e–h).

Vessel surfaces are decorated quite seldom – only c 7% sherds retain traces of ornament. Most frequent

[16] Admittedly, stratigraphic unit no. 155 was attributed to phase IV of occupation in the Town Square but the post-medieval material was restricted to the uppermost section of the fill. In the main, the ceramics discovered in this layer come from the bottom of this unit where there were numerous fragments of vessels made in a late medieval production methodtechnology, originating from older destroyed strata, mainly s.u. 14, 83 and 119.

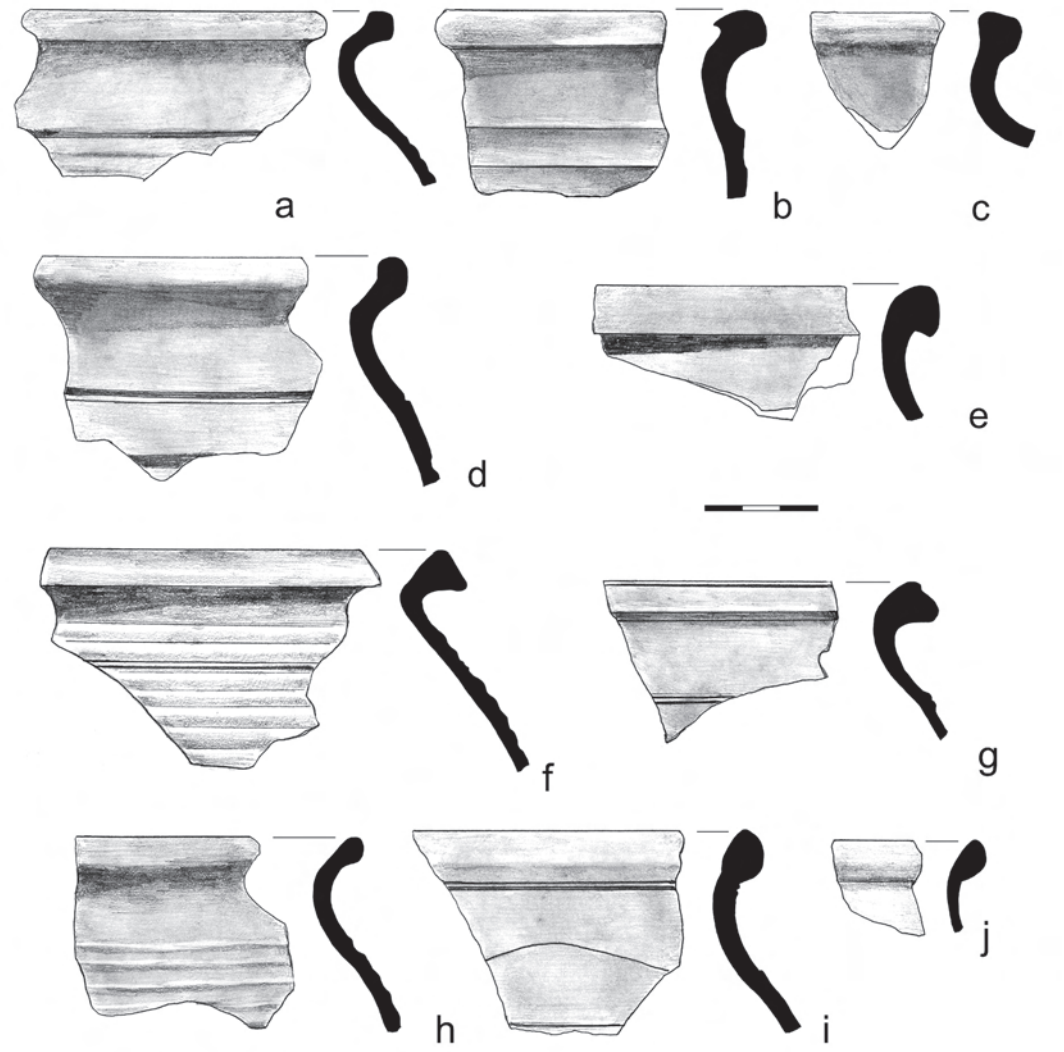


Fig. 84. Gliwice, Market Square. Ceramics: a–b – s.u. 14A (Group B);
f–j – s.u. 119 (Group B); c–e – s.u. 155 (Group B). Fig. R. Polaczkiewicz

are motifs of horizontal gently profiled grooves which, next to their decorative function, enhanced the useful properties of the vessel (Fig. 84f–h). In some specimens, the ornament was limited to a single circumferential groove (Fig. 84d). On occasion, the circumferential grooves were accompanied with engraved wavy motifs (Fig. 85r). In a dozen-odd cases, ornament in the form of a band of oblique grooves was visible, which tended to be placed in the upper part of the vessel under the neck (Fig. 85 t). A small group of rim sherds also had decorated rims (Fig. 85b, h). An interesting stylistic treatment was the plastic profiling of the rim edge (Fig. 85o). Also rare is roulette ornamentation, in the form of a band of impressed rectangles or rosettes (Fig. 85i, s). The vessels in this group usually had a flat base and had been set over a layer of ash during production (Fig. 85u). Some of the vessels had been cut off from the wheel-head with wire, as evidenced by loop-like marks observed on the bases.

Group B/C and C vessels, fired under heterogeneous and oxidizing conditions, were similar in their technology to Group B vessels. The rim sherds usually had a bulbous top (Fig. 86a–b) or a profiled rim with a ledge (Fig. 86c–d). Vessel surfaces were seldom decorated, only c 4 % of vessels retained traces of decoration, usually in the form of bands of gently profiled circumferential grooves (Fig. 86e–f). Group C vessels had a flat base (Fig. 86g–h). The seriously fragmented condition of this material makes it extremely hard to reconstruct the vessel forms in this group. Nevertheless, the surviving rim sherds prove that the dominant form were pots and pitchers.

Next to fragments of Group B and B/C, ceramics there were also sherds of Group A, E and F wares. Group A vessels mostly had slender and attenuated

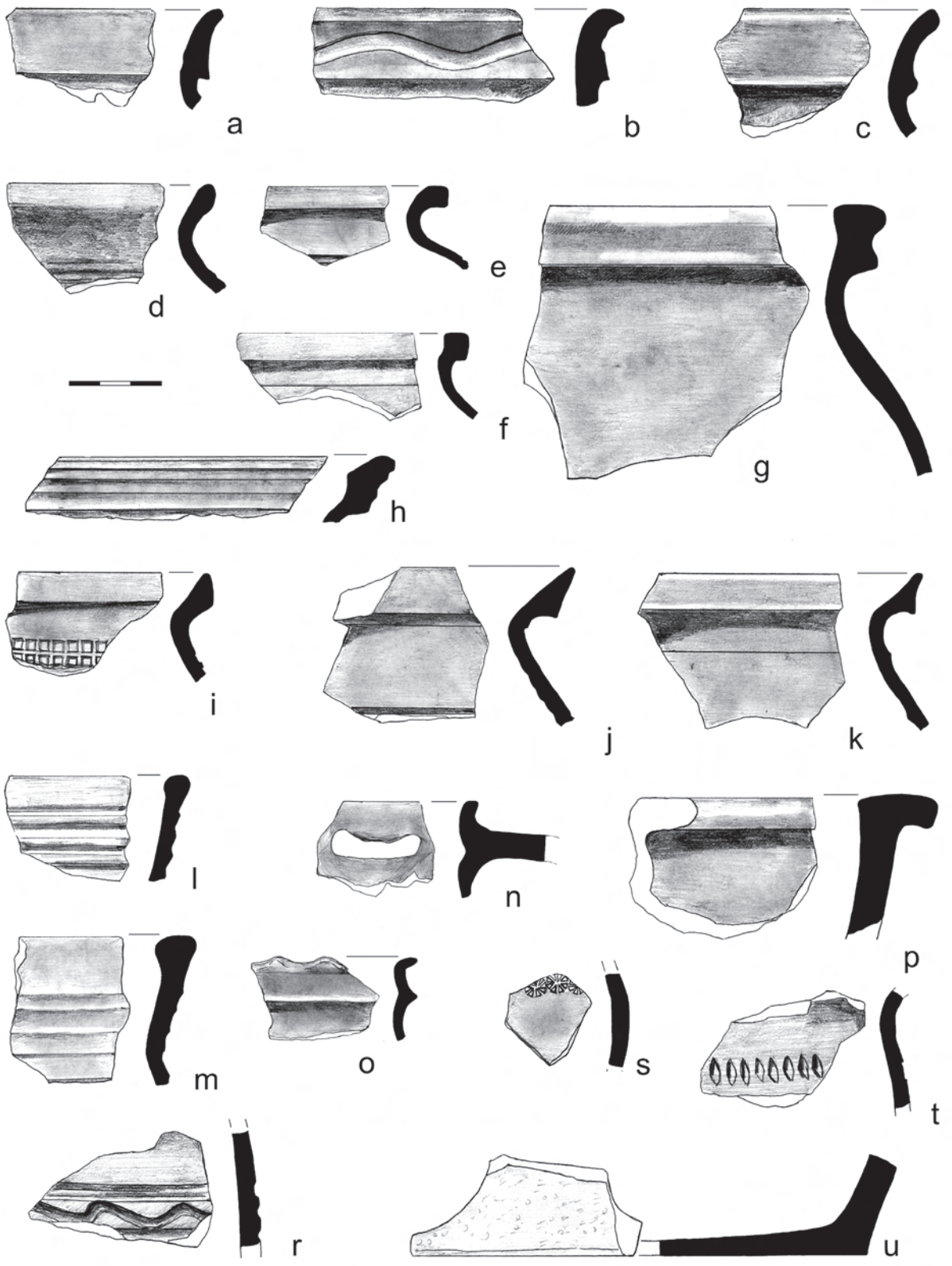


Fig. 85. Gliwice, Market Square. Ceramics: l–m – s.u. 14A (Group B);
a–k, n–s – s.u. 119 (Group B); p, t–u – s.u. 155 (Group B). Fig. R. Polaczkiewicz

rims, with a truncated or straight tip (Fig. 86 i), or a straight attenuated rim with some profiling (Fig. 86l). There was decoration in the form of bands of circumferential grooves with pronounced edges, sometimes capped with droplet-shaped grooves (Fig. 86j, k–m). Groups E and F were represented by a very small

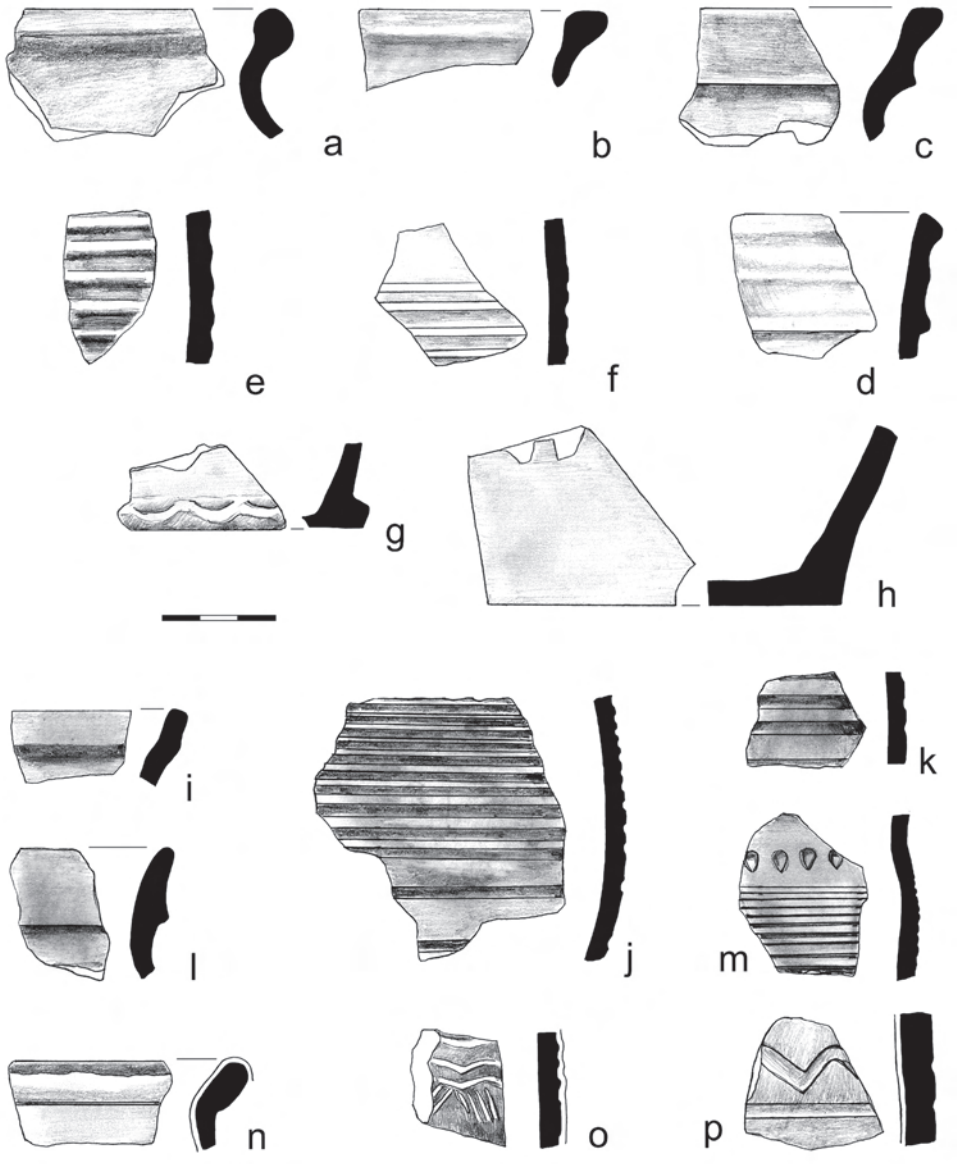


Fig. 86. Gliwice, Market Square. Ceramics: i–m – s.u. 119 (Group A); b–d, g–h – s.u. 119 (Group C); n–p – s.u. 119 (Group E); a, e–f – s.u. 155 (Group C). Fig. R. Polaczkiewicz

number of vessel sherds similar in their features to those discussed in the previous section on ceramics associated with occupation phase I. As such, Group E vessels resembled in their technology wares classified to Groups B, C and B/C, differing from them only by the use of glaze (Fig. 86n–p). The glaze was dark green or honey-coloured, and was applied to both the internal and the external vessel surface. On a part of these vessels glaze was visible only in the form of single speckles. Among fragments in Group F, there were some with a surface covered with a black, occasionally, black-metallic paint. It is notable that these pigments were applied only onto the part of the vessel that was fired under reducing conditions. The surface of vessels fired under oxidizing conditions was applied only with narrow (c 3–4 mm) bands of brown-red paint. The sherds of vessels decorated in this way were quite rare. Also notable among Group F vessels is a set of sherds with evidence of burnishing (c 4 %). These wares definitely represent full-fledged late medieval pottery production. The burnishing usually covers the entire surface, extending right to the edges. Vessel fragments with this form of surface finish were close technologically to Group B ceramics (Fig. 86o–p). Nevertheless, a small group of vessels with burnished surfaces is marked by having somewhat different technological parameters, observable mainly as high quality firing, absence of grainy filler, and a wall thickness of 0.3–0.4 cm. It seems that these vessels were produced using the

Fig. 87. Gliwice, Market Square. Fragment of a graphite vessel (Group F). Photograph W. Turkowski

technique of turning and are more likely to belong to the post-medieval period.

Also included in Group F are a dozen-odd vessel sherds with some graphite content. Graphite was observed usually in the form of solitary grains up to 0.3 cm in size. This group of vessel fragments containing graphite is documented by mostly featureless body sherds. The only larger fragment containing graphite was a rim sherd (Fig. 87). These fragments, while they account for a negligible percentage in the ceramic series from Gliwice, may attest to contacts with Moravia.

It is possible to attribute to the post-medieval period of the Town Square (16th–19th century) mainly ceramics classified as Groups C, E and F. The were discovered during investigation of occupation levels 6, 85, and various archaeological features (s.u. 24A, 24B, 44, 79, 82, 93, 95, 97, 122, 130, 134, 141, 148, 150, 167, 185 and 204) associated with phases III and IV of occupation in the Town Square. In most cases, the fragmented condition of the ceramics was too great to separate with precision the early modern material from the late modern. This situation is aggravated by the inadequate levels of study of post-medieval Silesian ceramics and the scarcity of firmly dated ceramic assemblages for reference.

Post-medieval ceramic vessels were discovered in quantity when excavating s.u. 6, 85 and archaeological features 24, 24A, 24B, 44, 44A, 82, 93, 97, 167 and 185. The dominant component in these levels were fragments of vessels from technological Groups C (38%) and E (42 %) (Fig. 88). Nevertheless, we need to note that the fill of some of the stratigraphic units attributed to the post-medieval period also yielded sherds of late medieval vessels fired under reducing conditions, characteristic for phases I and II of the Town Square (e.g. s.u. 6, 44 and 85). Their presence may be explained by various types of dislocation and levelling which occurred in the Square, mostly during the early modern and modern period. This lack of homogeneity is confirmed by the coin series discovered in this deposit, which spans a period of several centuries, the 14th to the 19th centuries.

Group C and E vessels were produced employing technology similar to that of the late medieval one, on a potter's wheel, using sliding techniques and tempering the ceramic paste with carefully selected filler. Nevertheless, in some sherds, we identified the presence of very fine-grained filler (dust), and

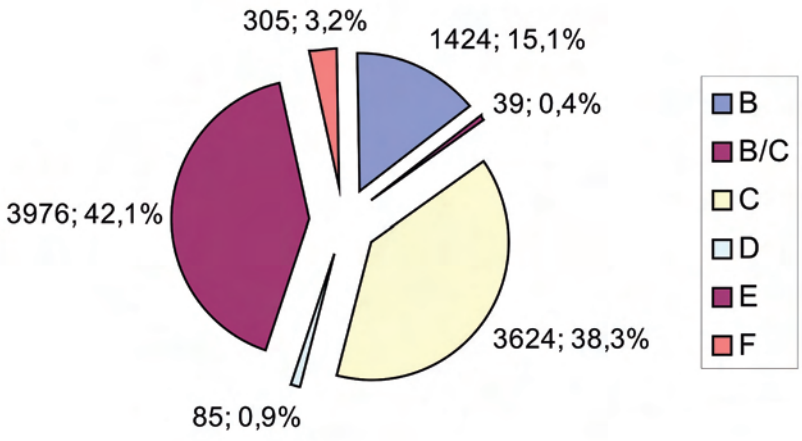


Fig. 88. Gliwice, Market Square. Ceramic vessels from s.u. 6, 24, 24A, 24B, 44, 44A, 82, 85, 93, 97, 167 and 185 by type. Critical analysis R. Zdaniewicz

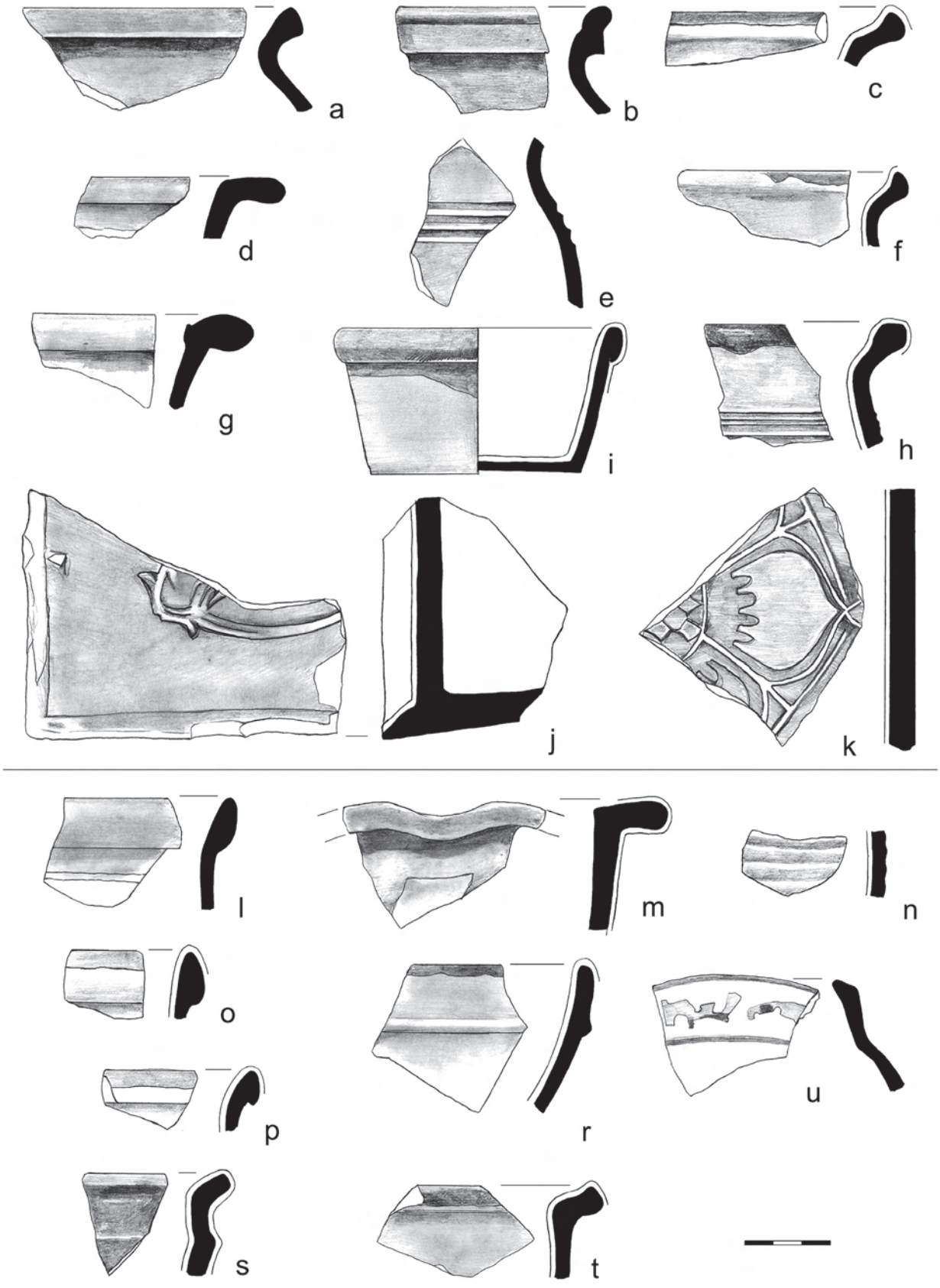


Fig. 89. Gliwice, Market Square. Ceramics: a–b – s.u. 6 (Group B); d, e, g – s.u. 6 (Group C); c, f, h, i – s.u. 6 (Group E); l – s.u. 85 (Group C); m– t – s.u. 85 (Group E); u – s.u. 85 (Group F); stove tiles: j–k. Fig. R. Polaczkiewicz

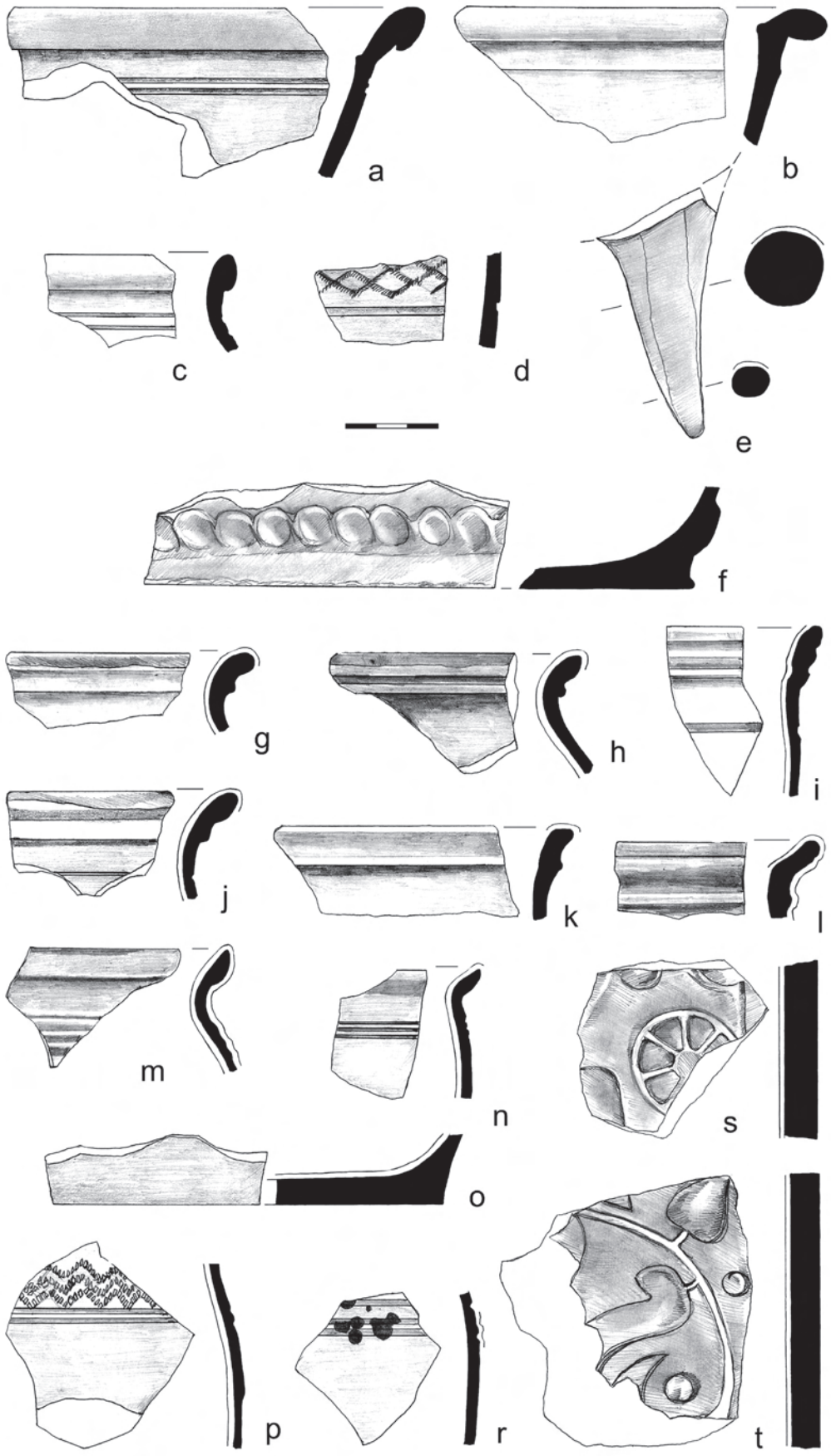


Fig. 90. Gliwice, Market Square. Ceramics: a–f – s.u. 44 (Group C); g–r – s.u. 44 (Group E); stove tiles: s–t. Fig. R. Polaczkiewicz

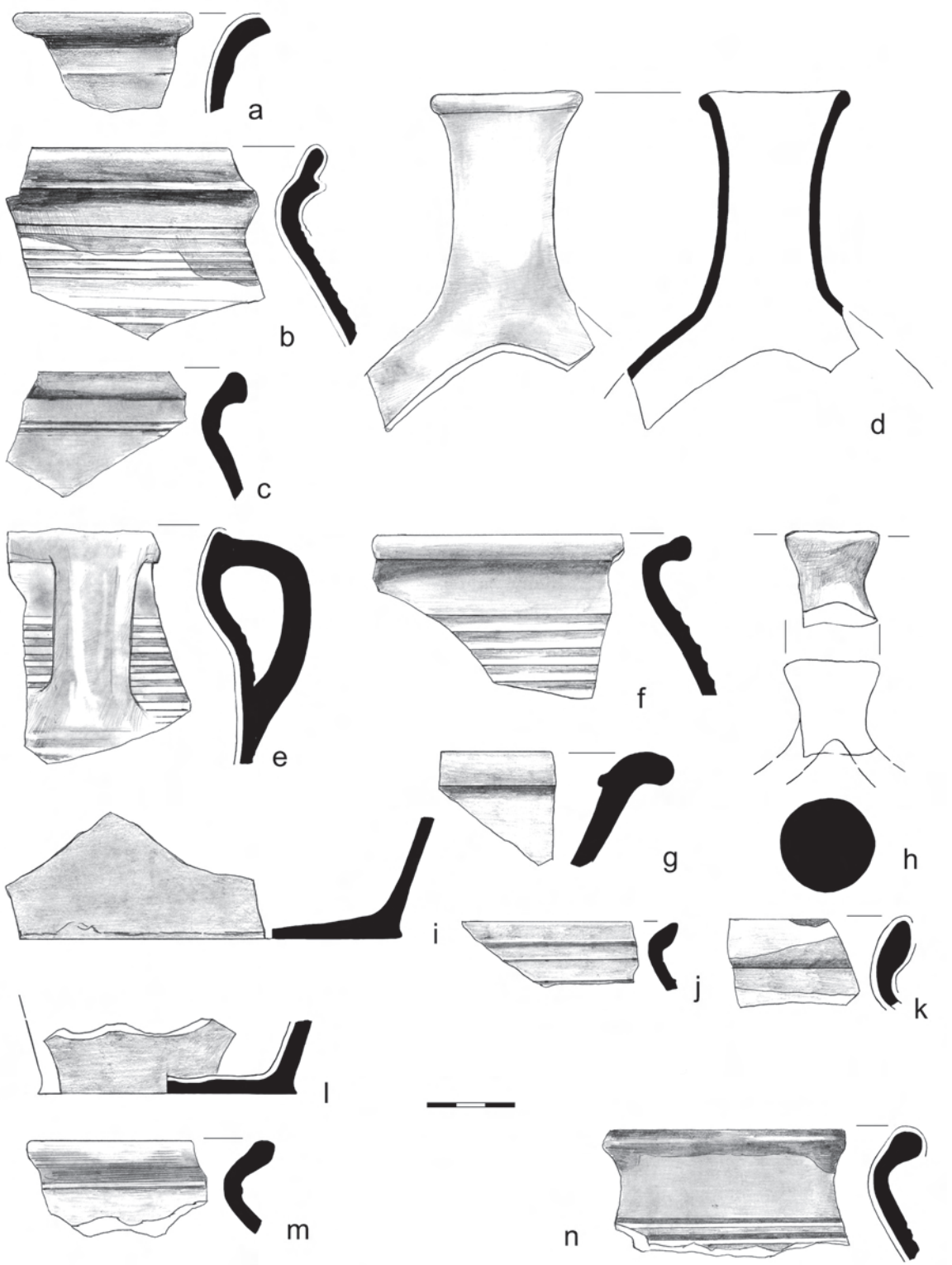


Fig. 91. Gliwice, Market Square. Ceramics: a–b – s.u. 24 (Group C); c – s.u. 24 (Group F); e – s.u. 24A: (Group E); f–j – s.u. 24B (Group C); k–l – s.u. 24B (Group E); m – s.u. 82 (Group C), n – s.u. 24B (Group E); glass: d.
Fig. R. Polaczkiewicz

these wares presumably were mostly turned on a wheel. These vessels were marked by having thinner walls, in the range of 3–4 mm, and by their very strong firing, perceptible in the substantial hardness of the vessel walls (Figs. 90m–n, p, r; 92a, n, p). This co-occurrence of different techniques of pottery production is entirely natural in a modern city, as its internal market, next to specialised potteries,

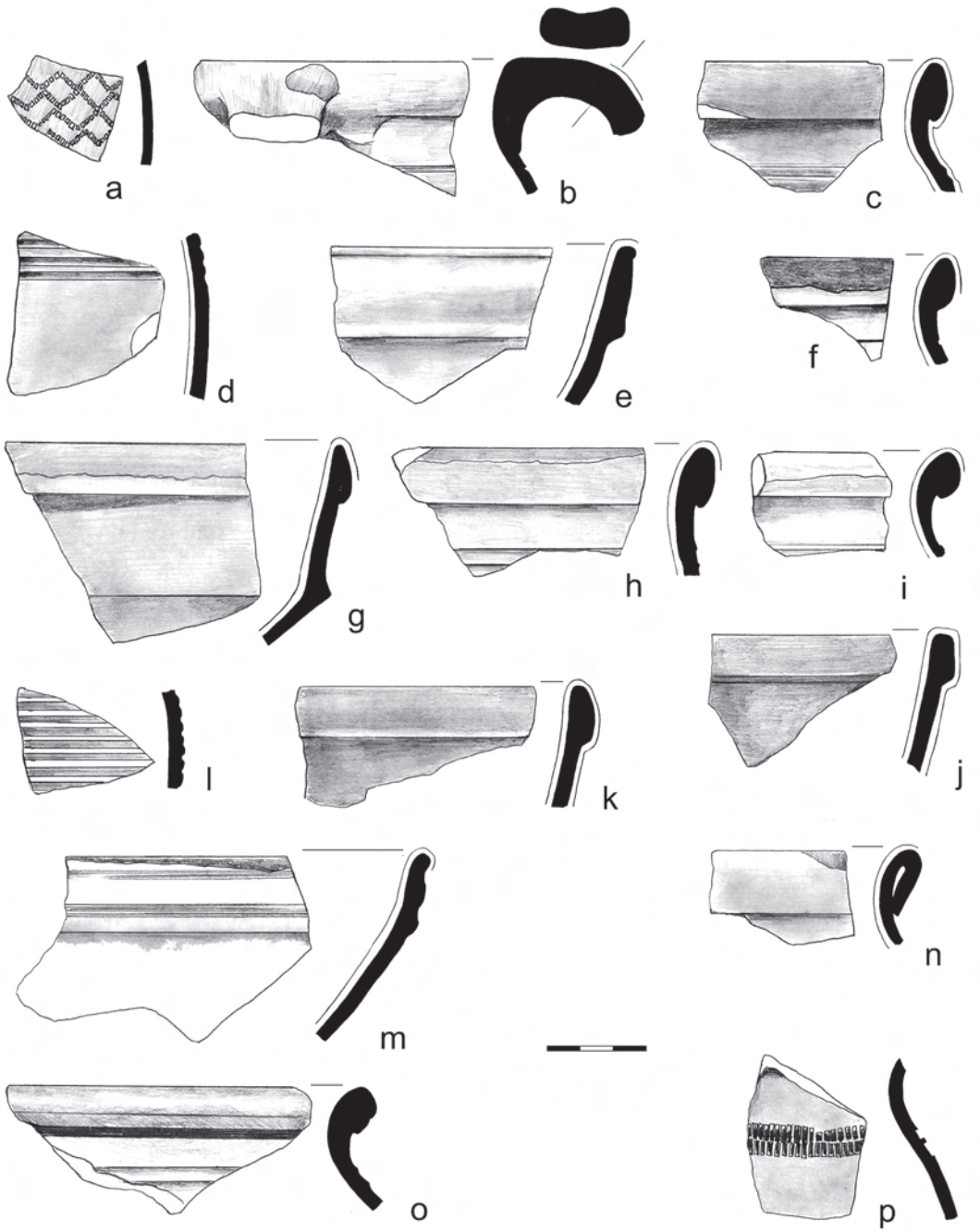


Fig. 92. Gliwice, Market Square. Ceramics: a – s.u. 93 (Group C); b–f – s.u. 93 (Group E); g–l – s.u. 97 (Group E); m–n – s.u. 150 (Group E); o–p – s.u. 167 (Group E). Fig. R. Polaczkiewicz

would have received wares turned out by traditional rural potteries.

Vessel forms were reconstructed based mainly on the surviving rim sherds. The most frequent form were bulbous rims – lenticular, rounded, sometimes flattened (Figs. 89c, f, h, l, o; 90c, m–n; 91f, j–k, n; 92b, f, j–k). Also popular were bulbous rims with strongly carinated edges (Figs. 89p; 90c, h–i; 93a–d); there were also rims with unremarkable ledges (Fig. 90g–h, j). Rims of these types usually belonged to pots or pitchers. The post-medieval series also included sherds of bowls/basins, skillets (Figs. 89g, m, r; 90a–b; 91g; 92e, g, m; 93h) and plates (Fig. 89u). It appears from the surviving base sherds that vessels were mostly flat-bottomed and were cut off from the wheel-head using wire (Fig. 89i; 90f, o; 91i, l; 93e).

Because of the heavy fragmentation of this material, it was difficult to specify the metric attributes of these ceramics. Rim diameters of the pots and pitch-

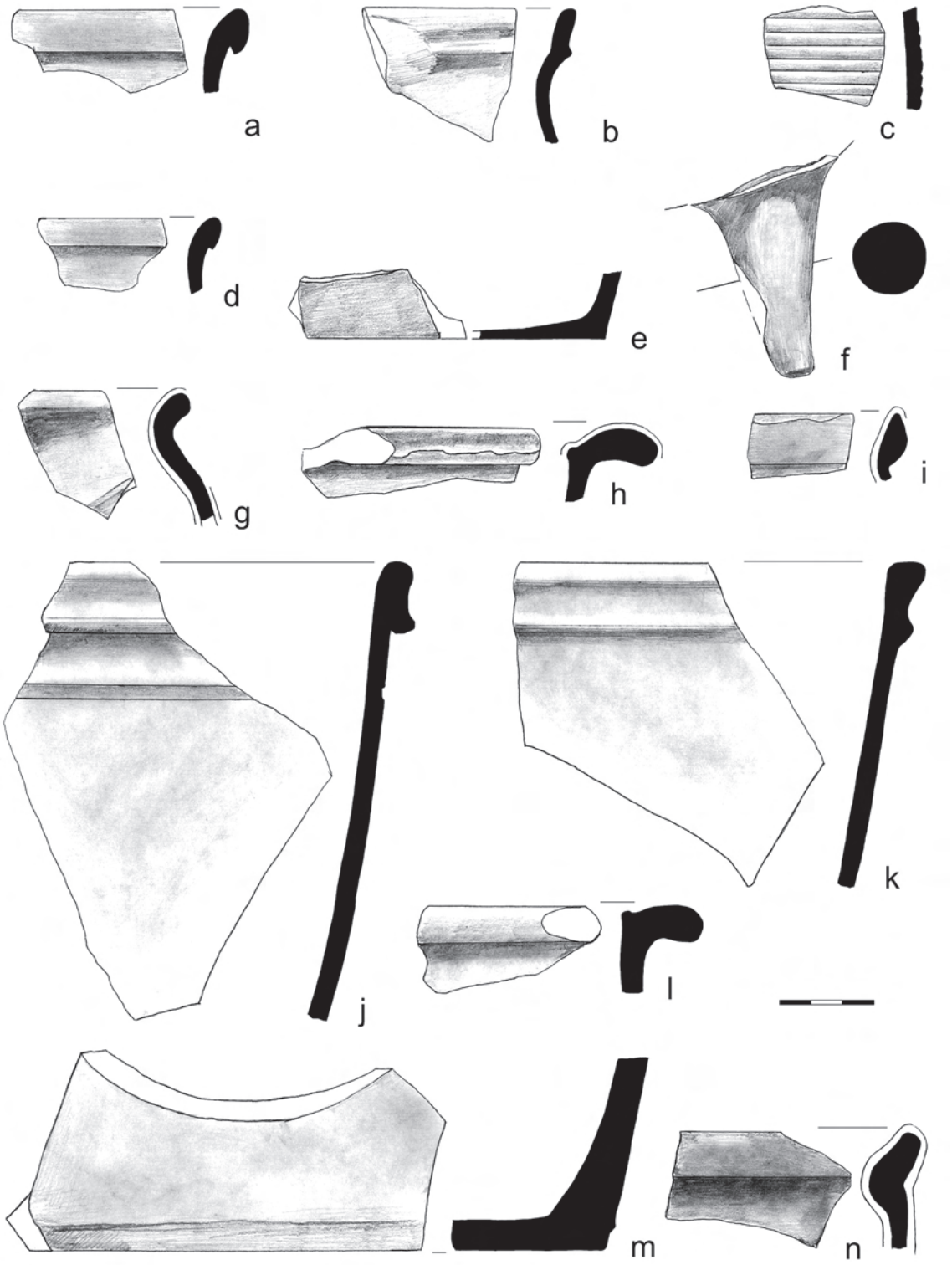


Fig. 93. Gliwice, Market Square. Ceramics: a–f – s.u. 185 (Group C); g–i – s.u. 185 (Group E); j–m – s.u. 187 (Group C); n – s.u. 187 (Group D). Fig. R. Polaczkiewicz

ers are in the range of 10 – 15 cm. At the same time, the series included some rim sherds from vessels with a rim diameter of up to 30 cm. In case of bowls/basins, skillets and plates, the diameter was usually in the range of 18 – 25 cm. But this was not a rigid rule, as suggested by the reconstruction of a small cup with a rim diameter of c. 10 cm (Fig. 89i)

Decoration tended to be simple, often only in the form of a single, or possibly, a series of horizontal grooves (Figs. 89e, h, n; 90i, m–n, r; 91b, e–f, n; 92d, l; 93c). Much more rare are specimens decorated

using a stamp/roulette, this ornament, interestingly enough, was observed mostly on thin-walled vessels (Figs. 89d, p; 92a, p). The lower vessel body was decorated with various forms of plastic ornament (Fig. 90f).

The surface of sherds assigned to the technological Group E was covered with glazes in different shades of green, yellow, orange and light brown (Figs. 89c, f, h–i, m–t; 90g–p; 91 a–b, e, l, k, n; 92c–i, j–n; 93g–i). Glaze was applied both to the internal and external vessel surfaces. Also frequent are traces of flecking the vessel's surface with glaze, which was observed on the external surface of the neck and the body of the vessel (Fig. 90r). It seems that the use of glaze inside the vessels was more utilitarian, applying it to external surfaces, more decorative in character.

The technology of production of the modern wares, the ways of shaping the rim and the decoration in many cases resembles early-modern (16th–18th century) pottery vessel finds from Wrocław (Rzeźnik 1998, pp. 227–231; Szwed 2004, pp. 331–381). Nevertheless, as was noted earlier, it is impracticable to separate the early modern ceramics from the late modern in any reliable manner.

The group of modern wares included a small number of specimens with a smooth black surface decorated by burnishing which were classified to the technological Group F (Fig. 91c). These vessels were marked chiefly by their excellent quality of firing, use of a very fine-grained filler, and wall thickness in the range of 0.3–0.4 cm. They were definitely produced using the technique of turning. Also assigned to Group F were solitary sherds of painted plates (Fig. 89u).

The only group of ceramics attributable to the 18th–19th century period are sherds of vessels discovered in the backfill of the water well – s.u. 187. These vessels had been fired under strongly oxidizing conditions that gave them various shades of a creamy hue. They were wheel-made using the technique of turning, and had flat bases (Fig. 93m). There were some fragments belonging to deep bowls/basins and jars (Fig. 93 j; k, l). Group C ceramics were accompanied by small fragments of stoneware coated with a dark brown glaze (Fig. 93n).

In addition to the ceramic vessels, there was a series of a dozen-odd small fragments of flat stove tiles. Most of them had surfaces covered with a yellow or green glaze. Their face was decorated typically with a raised vegetable ornament, mostly simple rosettes, although some patterns were more elaborate (Figs. 89i–k; 90s, t). It seems that the majority of these tiles may be linked to the Renaissance style. Another group identified among the ceramic materials were solitary fragments of glass, which may be interpreted as remains of containers or tableware. The most remarkable among them is the upper section of a bottle/carafe with a long neck and a thickened rim (Fig. 91d). The other glass fragments belonged to stemmed glasses or small-sized vials.

In conclusion, we can say that the late medieval and modern period ceramic series obtained in the course of the sondage excavation in the Town Square in Gliwice documented the presence of technological trends typical for the area of Silesia in general. Regrettably, the fragmentation of this material did not permit a reliable examination of the metric and taxonomic attributes of these vessels within individual stratigraphic units. We have to note however that a series of observations was made, related to the production technology of vessels used within the town during the Middle Ages. From past archaeological research we have had only very limited data on the forms and techniques of vessel production used at this time in Gliwice (Stankiewicz-Węgrzykowa 1957, pp. 11–13; Stabrowska 1986, pp. 198–199; Furmanek, Kulpa 2001, pp. 18–22; Furmanek 2004, pp. 365–366; Michnik, Zdaniewicz 2009, pp. 21–23). Of special significance is the ceramic material dating from the period of the foundation and development of the chartered town, discovered mainly within s.u.14, 14/62 and 83. Even though these levels did not produce homogeneous assemblages, based on the analysis of technological attributes of individual vessel fragments and on comparisons made, e.g. with reliably dated pottery finds from Wrocław (Rzeźnik 1999, pp. 128–130), we could identify a group of ceramic vessels which definitely have an older, 13th century date. Consequently, it is to this period that we can possibly date the first episodes of occupation in this part of the town, a subject on which previously we only had modest evidence from the historical sources.

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