

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY. A RECONSTRUCTION BASED ON ANALYSES OF THE CULTURAL DEPOSITS AND REMAINS OF BUILDINGS

The main square of historic Gliwice, traditionally referred to as Rynek (the Market), was an integral element of the town's regular plan, approximately designating its centre. In planning the urban layout, the Market was given a square plan, its dimensions identifiable today as c. 73 × 74 m. According to unpublished bills for the repairs of its surface made in 1777, the area of the Market Square covered by that project was 32 × 32 fathoms (1 fathom = c. 1.9 m, cf., Reclaw, Małusecki, Kulczyk 2010, p. 5), or, approximately 61 × 61 m. The difference in the values cited here could be the result of the different qualification of zones in the neighbourhood of buildings fronting onto the Market. Another open question is whether these buildings had a front with arcades or a perron (Radziewicz-Winicki, Małusecki 2002, pp. 15–18).

The square had been laid out in an area with only a slight difference in altitude. Investigation of its original topography revealed a minor south-west to north-east gradient. The absolute altitude, measured during the archaeological excavation, was 221.80 m in the south-west corner of the Market and 219.63 m in its north-east corner. The difference is thus one of 2.17 m over an area of roughly 90 m. This value could be lower, as the original level was not identified anywhere in the square. The layer of the native soil and the upper level of the natural layer had been substantially altered during the earliest occupation phase in the Market Square.

The upper level of the quaternary layer was sand of various grain size and colour, recorded during the fieldwork as stratigraphic units (subsequently, s.u.) 17 and 56. The former consisted of yellow sand with a marked content of iron oxides that locally gave it

a red to brown hue. Stratigraphic unit 56 was white or pale grey fine-grained sand subsoil. The original soil did not survive anywhere in the square.

Analyzing the layout of the square in the past and the character of consecutive transformations, we distinguished several phases of its use:

Phase I (see appendix: plan 1) marks the beginning of its functioning and is reflected by several stratigraphic units. The earliest feature identified in the square was a water well, or possibly, a cellar, dug in the northern area of the market (Figs. 15–16). Its age is suggested by its stratigraphic position. This feature did not contain any small finds helpful for determining its origin more closely. The oldest level certain to be associated with a regular use of the square is s.u. no. 14 – a layer of humus that developed when the primary soil became mixed with material introduced during the intensive use of the unpaved surface of the market in conditions of high moisture. The oldest cultural layer survived in large patches over the entire surface of the square and varied in its preservation. It was a few to a dozen-odd centimetres in thickness. Although in some areas, especially in the eastern zone of the square, it could be as much as 30–40 cm in thickness. Presumably, local variations in the composition of this layer are the result of differences in land use in different parts of the square. Locally, in the northern zone its colour was a deep black (s.u. 14/62), the result of a higher content of organic matter (Figs. 17–20). As the muddy conditions in the square became troublesome action was soon taken to have the area paved. This is evidenced by the remnants of the first pavement (s.u. 83) in the form of a layer of pebbles, lumps of sandstone and

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY

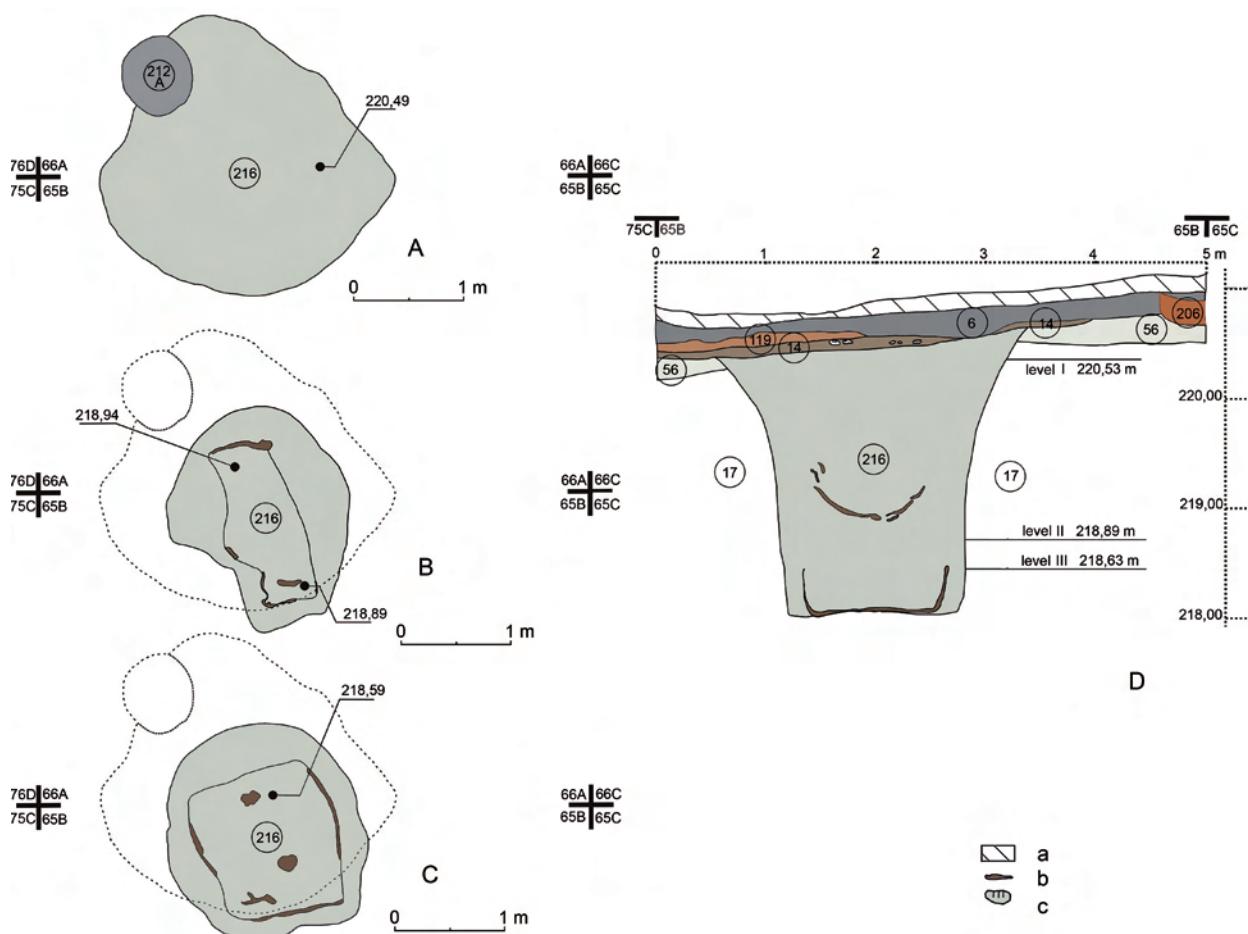


Fig. 15. Gliwice, Market Square, grid sq. 65B/66A. View of the construction of the cellar or water well (s.u. 216):

A – ground plan at the level of detection; B – plan at level II; C – plan at level III; D – W section.

s.u. 6 – brown soil with fine brick debris (17th–18th century); s.u. 119 – grey humus mixed with sand (14th–15th century); s.u. 83 – stone pavement; s.u. 14 – grey humus (13th–14th century); s.u. 206 – brown humus with lenses of yellow sand and fine brick debris (trench excavated for the water supply system), 17th–18th century); s.u. 212A – grey humus with yellow sand (posthole); s.u. 56 – light grey sand of the subsoil; s.u. 17 – yellow sand (natural layer); a – modern pavement, b – wood, c – stone pavement. Fig. A. Młyńska, R. Zdaniewicz

marl of an irregular thickness. Its dominant element were pebbles, 4–8 cm in diameter, a smaller quantity of larger pebbles, with a diameter of 8–12 cm, and sporadically, irregular cobbles, some of them broken, up to 40 cm in diameter. The arrangement of the stones was fairly compact but lacked any observable order. No evidence for kerbs or of a sub-base was identified, which are characteristics of professional paving work. The remains of the pavement survived at the bottom of the layer under discussion confirming its early origin, possibly even dating to sometime during the 13th century. Due to the unskilled method of paving, the cobblestones were soon trampled down to the level immediately above the natural sand. It should also be noted that the entire area of the square was cobbled rather than being restricted to areas of heavier traffic.

We can attribute a small number of poorly preserved and what are tentatively interpreted as remains of the Market Square's infrastructure to this earliest phase. These include a number of post-holes and pits (s.u. 161), and a drain for waste- or rainwater (s.u. 109), identified in the south-east area of the square.

In attempting to date the oldest layers in the Market analysis was made of small finds recovered from them. One group were fragments of pottery vessels, which were sorted into two distinct categories. The older, smaller group are fragments typical for traditional pottery classified as early medieval. The second group is pottery produced using late medieval technologies. The status of research on medieval pottery in Upper Silesia is not advanced enough to date the two categories on more than indirect premises. We know that the first group of pottery was going out of use during the 13th century, giving way to the

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY



Fig. 16. Gliwice, Market Square, grid sq. 65B/66A. View of the bottom of the feature (s.u. 216) with remains of a wall casing (?) Photograph M. Michnik



Fig. 17. Gliwice, Market Square, grid sq. 65C. Upper layer of s.u. 14/62. Photograph M. Michnik

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY



Fig. 18. Gliwice, Market Square, southern area. Cleaning the medieval pavement (s.u. 83). Photograph M. Michnik

technologically more sophisticated late medieval pottery. The presence of “early medieval” ceramics in s.u. 14 validates the claim made in literature that the area of the Market Square was already in use during the first half of the 13th century even before the town had been established in a legal sense (cf. Rodziewicz-Winnicki, Małusecki 2002, p. 10). It is unclear whether the well or cellar, older than s.u. 14, recorded as s.u. 216, can have an equally early dating. The oldest cultural layer accumulated mostly during the second half of the 13th and the 14th century. This is also the period in which we place the first, makeshift pavement. The long duration of the deposition of the layer and its continuous mixing is confirmed by the presence within it of coins issued during the 14th, and even, the 15th century, i.e. a Prague groschen of Wenceslas II from 1300–1305, a Breslau heller and a bracteate from the turn of the 14th and the 15th century, and finally, an Upper Silesian and a Görlitz heller from the 15th century.²

Phase II (see appendix: plan 2). The makeshift cobbling (s.u. 83) soon ceased to play its role and, as refuse continued to accumulate on the surface in the Market Square, its level rose. Eventually, organic waste not removed from the square and new layers

of mud were covered over with a layer of sand. The result of the mixing of these two deposits is a layer of humus mixed with sand, recorded as s.u. 14A, 14B, 107 and 119. The upper level of one of the layers (s.u. 119) contained many stains from decomposed wood (Fig. 21), suggesting that at least some areas in the square had a timber surface, which was typical in the medieval towns of Central and Northern Europe (Gläser 2004; Piekalski, Konczewski 2010).

With this phase, we can link a number of features typical for a marketplace. Their presence is evidenced by post-holes from the wall timbers or elements supporting the roofs of lightweight post structures, interpreted as market stalls. The better-preserved sequences of post-holes were approximately rectangular in plan, and up to a dozen-odd square metres in area. They were identified mainly in the southern (s.u. 41A–C, 80A–B, 132A–O and 171A–I), western (s.u. 192 A–F', 194 A–G and 195A–I) and northern area of the Market Square (s.u. 68A–J, 199A–B, 202, 213A–E', 219A–M, 152A–E and 156B–F). The absence of similar traces in the eastern zone could be due to the poor level of preservation of the stratigraphic sequence. Other features include a number of solitary post-holes, a few pits of obscure function (s.u. 138), and remains of gutters which drained off wastewater (s.u. 118, 135 and 192R, Fig. 22).

² See the contribution on the coin finds by B. Paszkiewicz.

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY

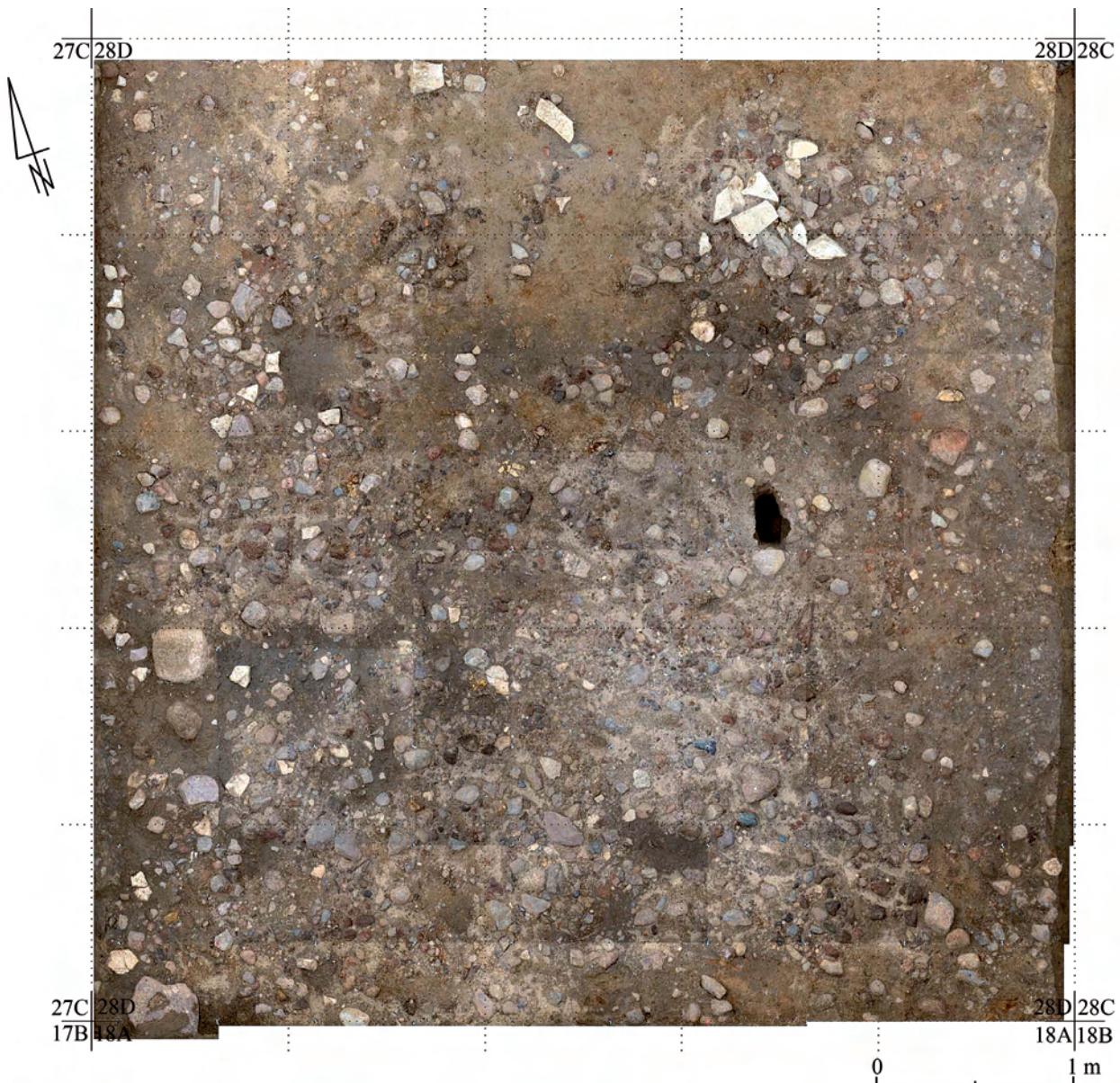


Fig. 19. Gliwice, Market Square, grid sq. 28D. Composite photograph of the pavement (s.u. 83). Critical analysis J. Nastaszyc

The main element in the Market associated with phase II is the oldest masonry building of the Town Hall. The discovery of medieval walls of this building did not come as a surprise as the earlier researches of the Town Hall had already documented them (Maurer 1968; Procek 1977; Stachurski 1989; Radziewicz-Winnicki, Małusecki 2002). Our research made it possible to refine the existing observations and make some new ones.

Designed in a Gothic style, the seat of the municipal government was placed nearly at the centre of the Market Square being only slightly offset towards its southern margin. At present the distance from the southern and the northern frontage is 21 m and 37 m respectively. The Town Hall was rectangular in plan,

15.10 m × 19.90 m, its longer axis orientated east to west. The test trench exposed the outer face of the foundations of its southern wall and long stretches of its eastern and western wall (Fig. 23). The trench dug for the foundation extended from the top level of the medieval layers, marked as s.u. 14 and 119, to a depth of more than 3 metres. Measured from the modern ground level in the Market (2010), the depth was on average 3.45 m, with minor differences in individual sections. The wall of the foundation had been laid inside a narrow trench. Only in its top part, the last 75 cm, did it widen considerably. Building material consisted of glacial boulders, yellow sandstone and lime mortar. The foot of the foundation is comprised of large boulders that form a c 35 cm thick layer,

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY

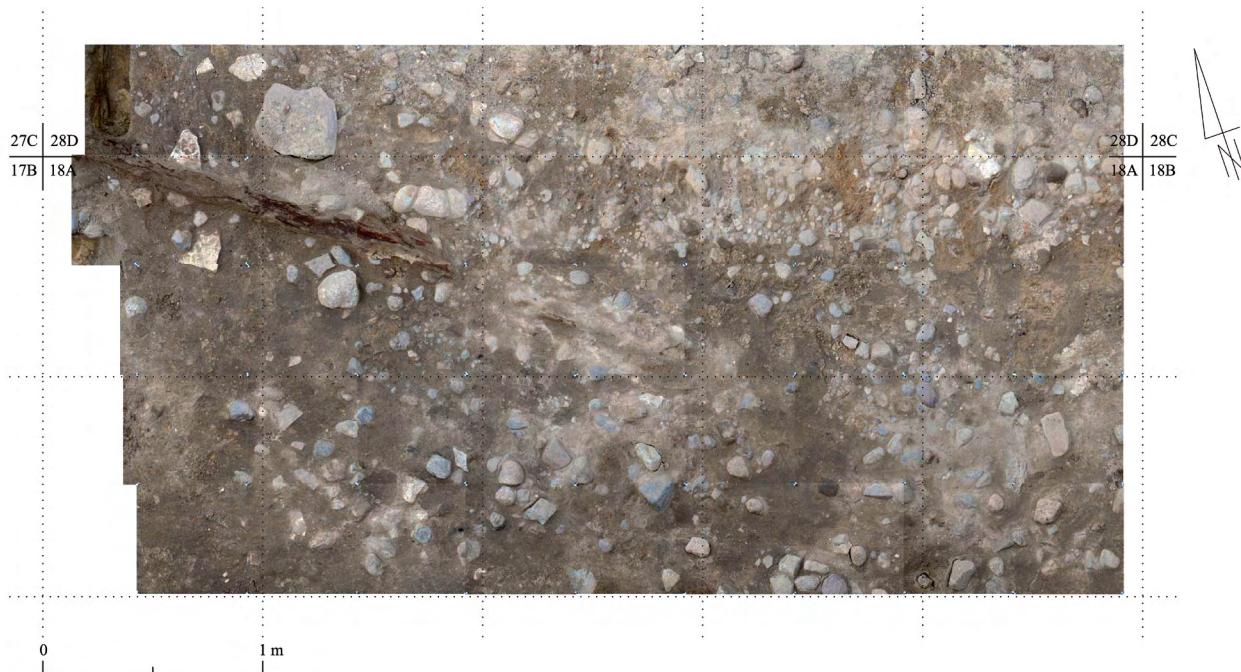


Fig. 20. Gliwice, Market Square, grid sq. 18A. Composite photograph of the pavement (s.u. 83) with the remains of a gutter (s.u. 118). Critical analysis J. Nastaszyc

which was levelled at the top using smaller stones. Higher up, the foundation wall also has a layered structure, and the thickness of individual layers is not uniform, ranging from 43 cm to 55 cm. The layers were of rough pebbles laid, if possible, with their flat surface facing up. The largest of these surfaces were 62 × 37 cm, 53 × 30 cm and 44 × 35 cm in

size. The spaces between the boulders were filled in with smaller stones, lumps of yellow sandstone and broken bricks. This material was bonded with mortar made of lumpy lime and filler that gave it a creamy hue. The mortar overflowed from the joins between the boulders on their outside face in a manner typical of masonry laid directly inside a narrow trench.



Fig. 21. Gliwice, Market Square, grid sq. 26BC. Upper layer of s.u. 119 with a stain mark from decomposed wood (s.u. 135) (marked with an arrow). Photograph M. Michnik

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY



Fig. 22. Gliwice, Market Square, grid sq. 18A. Remains of a wastewater pipe (s.u. 118).
Photograph M. Michnik

The corners of the building, also laid inside a narrow trench, did not differ in their construction from the stretches of wall between them. The thickness of the foundation, measured in boreholes (made when drying the walls) is 1.20 m.

In the southern wall of the Town Hall we identified the original entrance down to its lowest level (Figs. 24, 27–28). It was 9.70 m away from the south-west corner and 8.60 m away from the south-east corner. The construction of the outer staircase was contained



Fig. 23. Gliwice, Market Square, grid sq. 35A/45D. Composite photograph of the foundation of the west wall of the Town Hall. Critical analysis J. Nastaszyc

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY



Fig. 24. Gliwice, Market Square, grid sq. 36D. The medieval entrance to the Town Hall (s.u. 170). Photograph M. Michnik

in a trench directly adjacent to the face of the southern wall. It was rectangular in plan, 3.9 m (east to west) × 1.95 m (north to south), its depth, measured from the top of s.u. 14, was about 1.12 m (2.1 m from the present-day level in the Market Square). At the

edges of the trench for the staircase, at right angles to the walls of the Town Hall, retaining walls were laid. The base of the eastern wall was 1.12 m wide (Fig. 25) and was built of a single layer of boulders and bricks bonded with mortar. Higher up, the wall was less wide, at 0.8 m, with a 0.45 m wide offset left by the outer face. It was built of pebbles, whole and fragmented, their size in the wall face: 39 × 32 cm, 41 × 22 cm, 41 × 22 cm, and smaller; flat pieces of split sandstone (up to 9 cm thick and bricks measuring 9; 9.5; 94 × 13, 12.8 × 27–26.5 cm. They were bonded with lime mortar, yellow to cream-coloured, with some lumps of unslaked lime evident. The retaining wall by the western edge of the trench for the staircase had a similarly laid footing. It was 1.1 m wide, higher up; the wall had a thickness of about 0.76 m. It was built of similar material and using methods similar to those used in building the eastern wall. The open areas of the trench had been backfilled with light brown clayey humus containing a great quantity of sand, brick debris and small lumps of lime mortar. The bottom level of the inside of the trench had been spread with demolition debris consisting of pebbles and broken bricks. The construction of the staircase – five brick steps – was set between the retaining walls (Fig. 26). The size of the steps corresponds to the length of a brick, i.e. about 28 cm. The width of the interior of the staircase was 1.6 m and corresponded to the width of the entranceway. At the top, the doorway had a pointed arch, of which five bricks from its western section now survive. The masonry



Fig. 25. Gliwice, Market Square, grid sq. 36D. Eastern retaining wall of the staircase (s.u. 170), east section. Photograph M. Michnik

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY



Fig. 26. Gliwice, Market Square, grid sq. 36D. Remains of the brick construction of the stairway (s.u. 170). Photograph M. Michnik

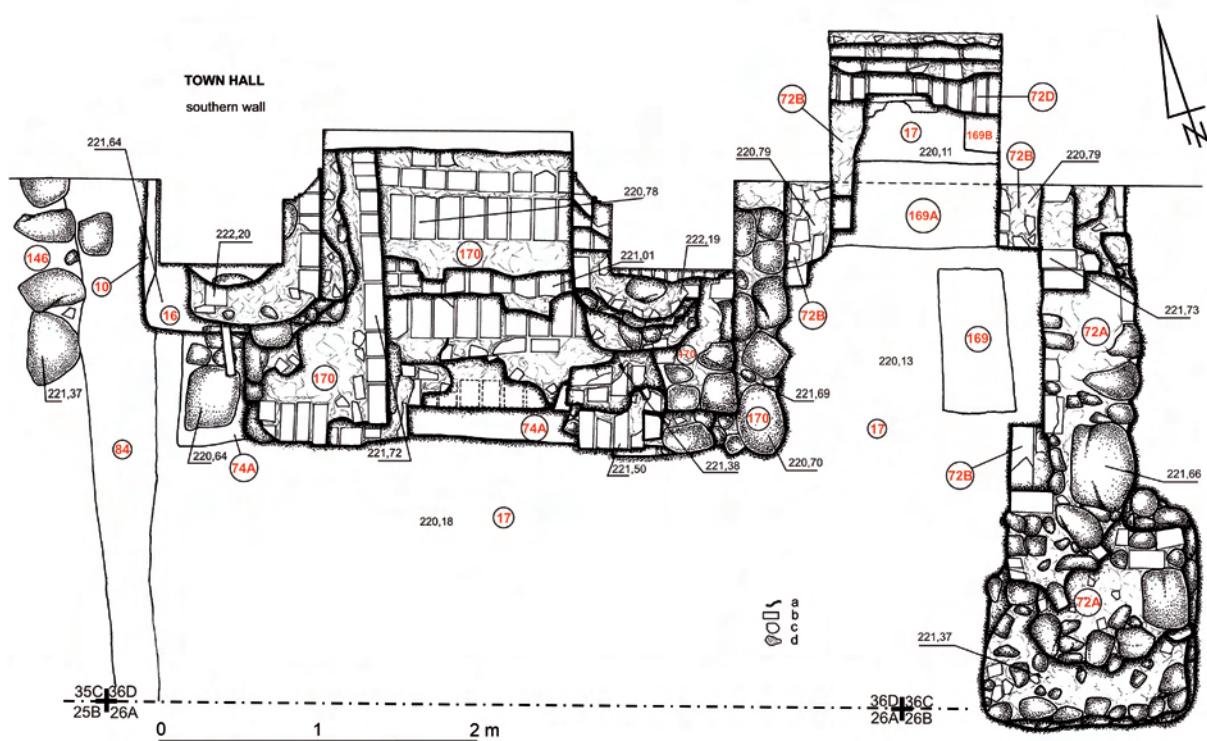


Fig. 27. Gliwice, Market Square, grid sq. 36D, C. The medieval entrance to the Town Hall (s.u. 170) and modern period entrances to the Town Hall cellar (s.u. 72). Plan of: s.u. 10 – lime mortar (construction layer of the wall s.u. 8); s.u. 16 – trench excavated for a service line; s.u. 72 – modern construction associated with the entrance to the Town Hall cellar: s.u. 72A – construction phase I (17th–18th century), s.u. 72B – Phase II, s.u. 72D – Phase IV (2nd half of the 19th century); s.u. 146 – modern period trench excavated when improving the Town Hall; s.u. 169, 169A, 169B – trenches excavated when building the staircase (s.u. 72); s.u. 74A – trench associated with s.u. 170; s.u. 170 – the medieval entrance to the Town Hall; s.u. 84 – modern installations trench; s.u. 17 – yellow sand (natural layer); a – differences in levels, b – brick, c – stone, d – lime mortar.

Drawing A. Młyńska

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY

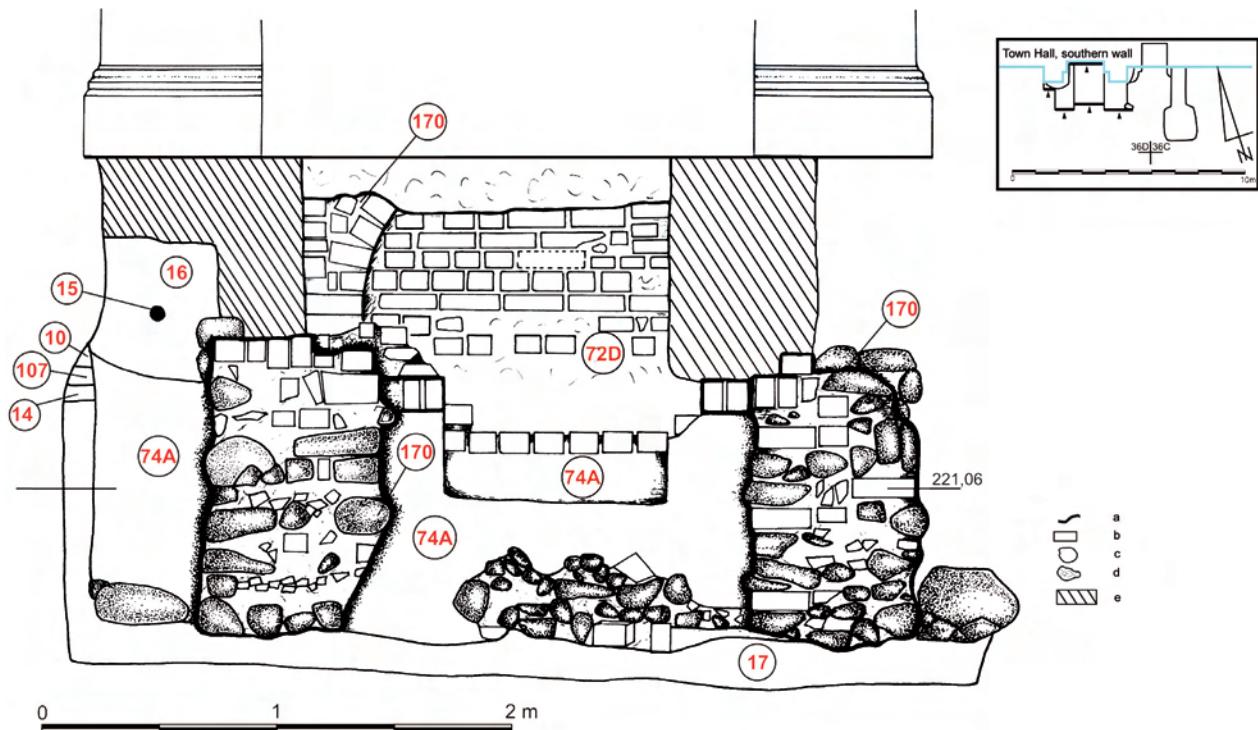


Fig. 28. Gliwice, Market Square, grid sq. 36D. The medieval entrance to the Town Hall (s.u. 170), N section: s.u. 10 – lime mortar (layer associated with construction of the wall, s.u. 8); s.u. 14 – layer of grey humus (13th–14th century); s.u. 15 – power line; s.u. 16 – trench excavated for a service line; s.u. 72D – construction phase IV (2nd half of the 19th century); s.u. 107 – layer of maroon-coloured humus; s.u. 74A – trench associated with s.u. 170; s.u. 170 – the medieval entrance to the Town Hall; s.u. 17 – yellow sand (natural layer); a – differences in levels, b – brick, c – stone, d – lime mortar, e – destroys area. Drawing A. Młyńska

mortar used was the same as that in the retaining walls and there was evidence in the inner face of the western wall of relaying (local replacement of the wall face). The brickwork in the wall was irregular, with sporadic remains of plaster.

In attempting to define the chronological boundaries of phase II we have to agree to the lack of a sharply defined boundary with phase I, and moreover, to their overlapping. Due to its intensive use the cultural deposit in the Market Square was exposed to trampling and penetration of small objects into the lower lying layers. Nevertheless, we know that the upper boundary of phase II does extend beyond the 15th century. This is evidenced by small finds secured during the investigation – a large selection of fragments of pottery vessels made in the late medieval technique, and metal finds, including coins issued during the 15th century. Examining the time of the construction of the Gothic Town Hall building, we have to note that both the method of construction and the technique of building the entrance to the cellars do not disagree in terms of chronology with the events of 1475, when the powers of the town council were strengthened in a significant manner (Reclaw *et al.* 2010).

Phase III (see appendix: plan 3). Intensive use of the Town Hall associated with the development of local government functions at the turn of the Middle Ages and the early modern period soon made it expedient to expand the existing masonry building.

The eastern wall of the Town Hall, by its south-east corner, was provided with an extension (s.u. 174) rectangular in plan, its outer dimensions 6.9 m (south wall), 8.65 m (east wall) and 6.8 m (north wall) (Fig. 29–31). The thickness of the extension wall, measured in the north at a height of 220.77 m above sea level, was 1.6 m, which made it thicker than the wall of the main building. The lowest storey of the extension was partly below ground level; its interior space survives to the present in the underground part of the Town Hall. The walls of the extension were laid inside a narrow trench, stabilized with a wooden shoring. The outer face of the walls was laid flush with the sides of the foundation trench which had been dug into the natural sand. The shoring was an incomplete openwork of rough planks and vertical and horizontal timbers. Only in the longest, eastern wall did the horizontal elements predominate. They were stabilised by means of three timber uprights. The first of these, set farthest to the

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY



Fig. 29. Gliwice, Market Square, grid sq. 37. The lower storey of the extension of the Town Hall (s.u. 174).
Photograph M. Michnik

north, had a thickness of 37 cm, the second and third, a thickness of 27 cm and 20 cm respectively. The first of remains of the posts was identified 2.75 m

from the northern corner, the second and the third, 5.7 m and 6.4 m from it, respectively. The base of the foundation was at a depth of 3.73 m from the

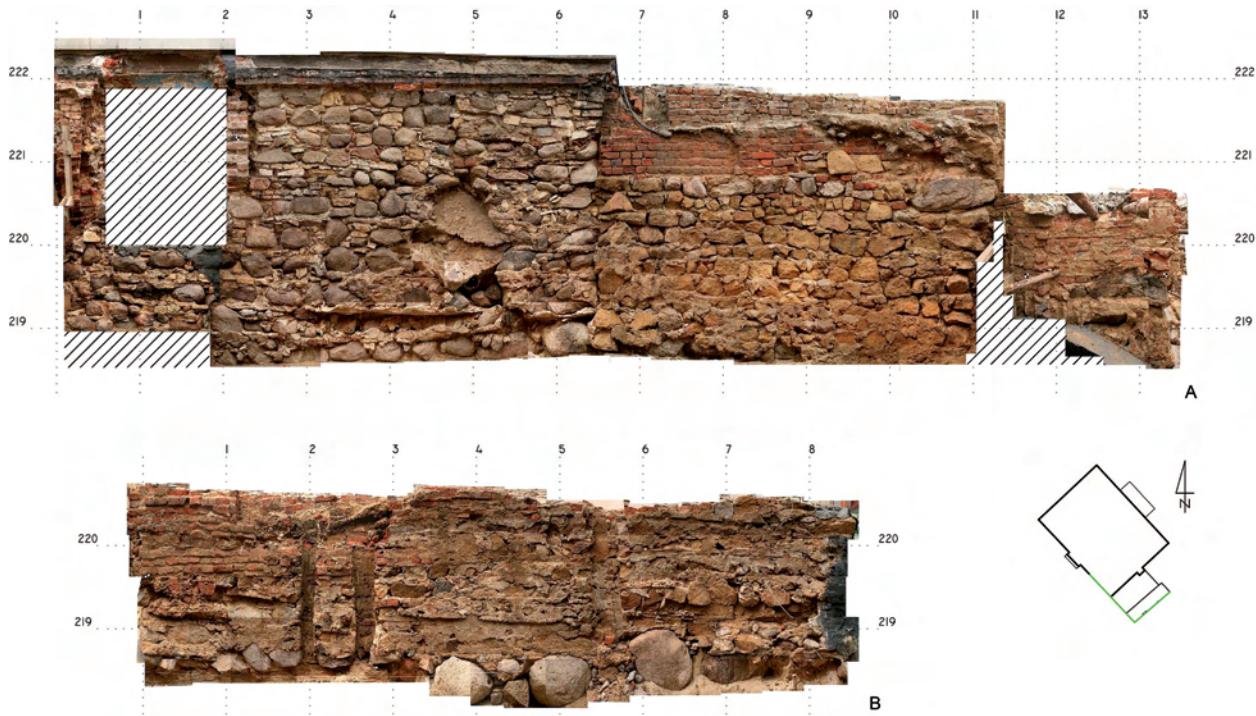


Fig. 30. Gliwice, Market Square, grid sq. 38D, C. Composite photograph of the foundation of the southern wall of the Town Hall (s.u. 39) with extension (s.u. 174) and east section of its foundation. Critical analysis J. Nastaszyc

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY



Fig. 31. Gliwice, Market Square, grid sq. 48D, C. Composite photograph of the northern wall of the extension (s.u. 174).
Critical analysis J. Nastaszyc

level of the Market Square, i.e. at 218.30 m above sea level. It was built of glacial boulders, with some care taken to have their level surfaces a part of the wall face. The area of these surfaces is 95 × 26 cm, 98 × 50 cm, 80 × 65 cm, 75 × 65 cm, 40 × 30 cm and similar. Also identified in the foundation base of the southern wall were similarly sized lumps of yellow sandstone. The wall above the foundation base was laid with dressed irregular slabs of the same sandstone with a filling of small pebbles and broken bricks. The arrangement of the flagstones was approximately in layers, their thickness ranging between 24 cm and 37 cm. The sandstone slabs were 42 × 20 cm, 40 × 24 cm, 26 × 17 cm, 18 × 18 cm and similar. They were bonded with lumpy cream-coloured lime mortar and mineral filler. At 64 cm above the level of the foundation base, the first offset was laid, changing the thickness of the wall by 15–20 cm. The second offset was identified 1.44 m above the level of the foundation base (79 cm above the first offset), the third, at 2.20 m measuring from the level of the foundation base, or, at 220.50 m above sea level. The width of the second offset was 8–10 cm, of the third – 34–36 cm, above the third offset, the wall was comprised of more bricks.

In addition, sections of a brick face laid in a header or in an irregular course survived in the upper part of the walls. The bricks used in this section were 8 × 13 × 28 cm in size.

Another possible remnant of construction work is a layer (s.u. 40) discovered in the area to the east of the extension. This was a patch of brick debris mixed with humus, between 8 cm and 20 cm thick, resting over the medieval occupation level and dated by us to the 16th century.

The south-eastern corner of the extension shows traces of rebuilding. Destruction and subsequently, repairs, affected the last 2.2 m of the wall on the south side and a similar section of the wall on the east side. The new construction was comprised of a foundation of boulders, piled up within the trench to about 0.6 m in height. They were overlaid with a layer of stones bound with mortar of poorly slaked lime. At a height of 0.9–1.3 m, measuring from the level of the foundation base, the wall was laid of bricks measuring 7 × 14 × 27 cm. In the wall face the brickwork was irregular, the mortar light cream in colour. The thick mortar joins retained traces of the wooden shoring of the foundation trench. The repaired wall survives to a height of 2.32 m.

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY



Fig. 32. Gliwice, Market Square, grid sq. 35D, C. Southern extension of the Town Hall (s.u. 8) viewed from above. Photograph M. Michnik

In trying to resolve the question of the spatial form of the extension, we have to take into account the substantial thickness of its foundation, at least 50 cm thicker than that of the main building of the Town Hall. This suggests that the extension may have been designed as a structure of several storeys. We believe that it is valid to pose a research question of whether the analysed remains represent the remains of the first tower of the Town Hall. The answer to this question would benefit from an investigation conducted inside the building, which at present is used as a part of a restaurant. Our interpretation of the structure as the Town Hall tower finds support in the position of the Town Hall tower shown on a view of the town from 1626 (the Siege of Gliwice from All Saints Church in Gliwice, cf. also, Maurer 1968, p. 203). In this depiction, the tower is on the eastern side of the Town Hall, and not on the northern, as in the building known to us from a later age. Traces of alterations made to the south-eastern corner of the extension suggest that the construction of the “tower” was not sufficiently sound and eventually resulted in its removal, with only the cellar left in place. Alternately, the tower could have been destroyed during the early modern period by a fire in the Town Hall. This question we leave open for further debate.³

The dating of the extension with a cellar was based on the analysis of the masonry technique and stratigraphy. We know it is younger than the main building, which dates from the 15th century. The mortar used has properties typical for the late medieval ages and the early modern age. At the same time, no materials were identified in the main phase of the masonry that would be typical for a Baroque building. The time of the building of the extension has been defined broadly as the 16th century, possibly with minor corrections to the end of the 15th or the beginning of the 17th century. The rebuilding of the south-eastern corner of the extension, probably combined with the dismantling of the storeys above the ground, took place during the modern period. The size of bricks used there suggests that this happened in the 17th–18th century.

A second extension (s.u. 8) was added to the western stretch of the southern wall of the Town Hall (Figs. 32, 34). Its walls, together with the wall of the Town Hall, which confines it from the north, encloses an area 2.52 m (north to south) × 3.93 m (east to west). All the walls were laid inside a narrow trench, dug 49 cm below the surviving upper level of the natural sand and 97 cm from the upper level of the construction layer. The thickness of the southern wall is 90–100 cm, of the eastern and western, 76 cm and 90 cm, respectively. They were built of both intact and broken pebbles measuring 30 × 26 cm, 30 × 20 cm,

³ We are grateful to Professor J. Radziewicz-Winnicki for these discussion and suggested interpretation.

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY



Fig. 33. Gliwice, Market Square, grid sq. 35D, C. Fragment of the southern wall of the extension (s.u. 8), south section. Photograph M. Michnik

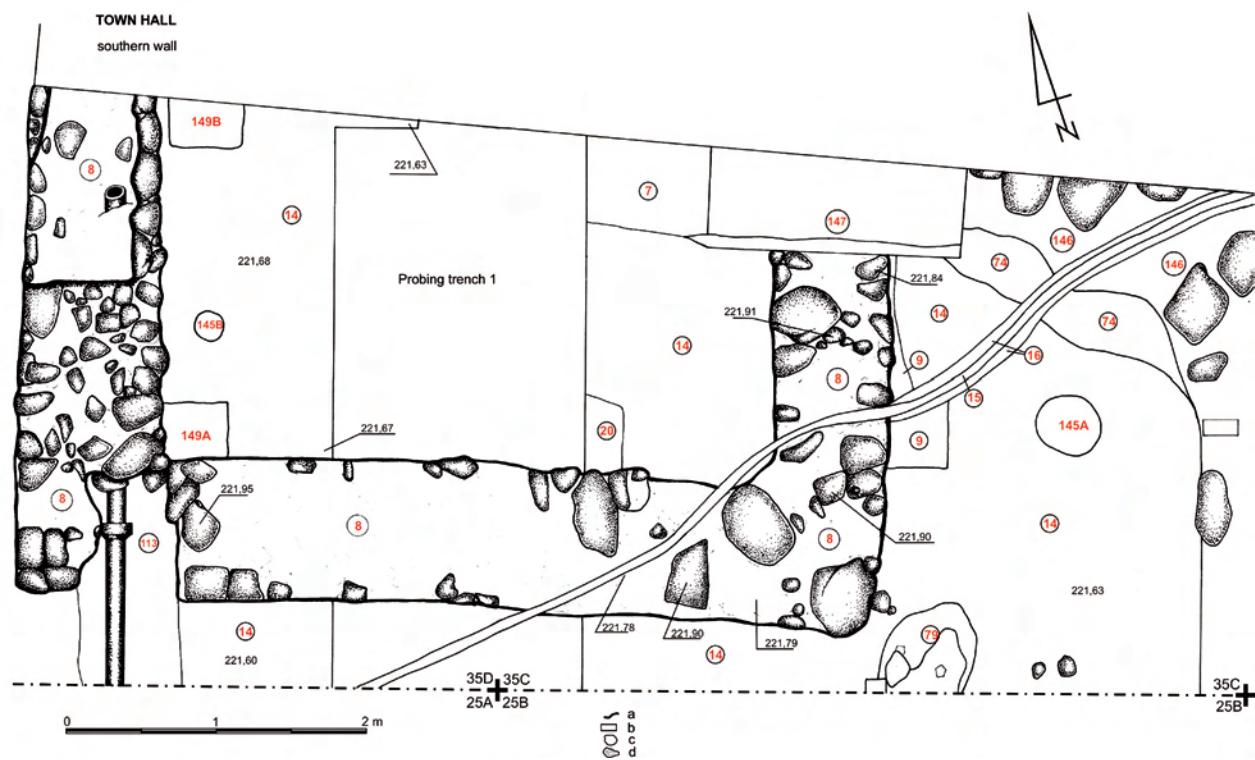


Fig. 34. Gliwice, Market Square, grid sq. 35D, C. Southern extension of the Town Hall (s.u. 8). Plan of: s.u. 7 – modern trench excavated to repair the foundations of the Town Hall; s.u. 8 – stone wall of the extension (16th century); s.u. 9 – brown humus mixed with brick debris; s.u. 14 – grey humus (13th–14th century); s.u. 15 – service line; s.u. 16 – trench excavated to lay the service line (s.u. 15); s.u. 20, 79, 113, 147 – modern cut features; s.u. 74 – cut feature associated with s.u. 72; s.u. 145A, 145B – postholes; s.u. 146 – modern cut feature associated with improvements made to the Town Hall; s.u. 149A, 149B – modern cut features; a – differences in levels, b – brick, c – stone, d – lime mortar.

Drawing A. Młyńska

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY



Fig. 35. Gliwice, Market Square, grid sq. 89A. Remains of the foundations of a town house (s.u. 100) identified in the northern frontage, now in Zwycięstwa St. Photograph M. Michnik

25 × 10 cm and smaller, which were bonded with a strong lime mortar, probably slaked inside the trench, but still retaining a small number of lumps. The wall face was formed of natural, less frequently, broken, surfaces of the stones (Fig. 33). The interior has no cellar. Its occupation level is designated by a surviving fragment of a stone pavement, presumably its floor, loosely laid of fieldstones ranging in diameter between 8 cm and 20 cm.

The stratigraphic position of this extension indicates that it is younger than the medieval cultural deposit and the medieval wall of the Town Hall, but older than the modern period layers. This relationship is in chronological agreement with the masonry technique used and helps us date the structure broadly to the turn of the medieval and the early modern period.

Parallel to the extension of the Town Hall, residential buildings were built around the Market Square. This is evidenced by the remains of a town house discovered on the eastern edge of the northern frontage (s.u. 100). One of its elements was a section of a cellar built of glacial pebbles and with a fill of broken sandstone and brick, in a technique similar to the one used in the Town Hall building (Fig. 35). The inner face of the cellar wall was given a sort of a rudimentary plaster finish by spreading it with the mortar, which had seeped from the joins between the stones. We know that the western wall, from the

direction of today's Zwycięstwa Street, had a length of more than 5 m.

During phase III, after the masonry extensions of the Town Hall were built; the square was given a new pavement of cobbles, laid on a sub-base of sand (s.u. 35). The remains of this layer were identified across the entire surface of the Market Square. It levelled the irregularities of the eroded medieval surfacing, and reached an average thickness of 20 cm, reaching at most, 60 cm. Locally, in a number of places, the top of the sandy layer retained solitary cobblestones – postglacial pebbles, whole or broken – or their impressions.

Observation of the upper level of the sandy layer identified traces of posts, interpreted as the remains of lightweight timber structures, presumably stalls associated with the trading function of the square. Five such structures were identified, one of them (s.u. 92) found in the eastern area of the market, one (s.u. 115A–K) in its south-eastern area, and three (s.u. 153A–C, 165, 211, 208A–W and 212A–B) in the northern area (Fig. 36). The surviving traces indicate that the stalls were rectangular in plan, 5–8 m long and less than 2 m wide. The posts were driven or dug into the ground every few dozen centimetres.

The dating of phase III is made possible by the analysis of the stratigraphy of the cultural deposit, the small finds it contained, and the building methods used in the extensions of the Town Hall. The results

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY



Fig. 36. Gliwice, Market Square, grid sq. 66A. Remains of a lightweight structure – a market stall (s.u. 208).
Photograph M. Michnik

help to date this phase to the post-medieval period. This is supported by both the sequence of layers and the pottery finds contained in them, and is not in contradiction with metal finds discovered in the same deposit. The identified building methods continued in use for a long period, from the close of the Middle Ages until as late as the 17th century.

Phase IV (see appendix: plan 4). The early modern history of the Market Square in Gliwice is relatively well illuminated by the written sources, with a fairly rich resource of material remains investigated using archaeological methods. Nevertheless, reconciling these two categories of evidence and identifying the material traces of historical events

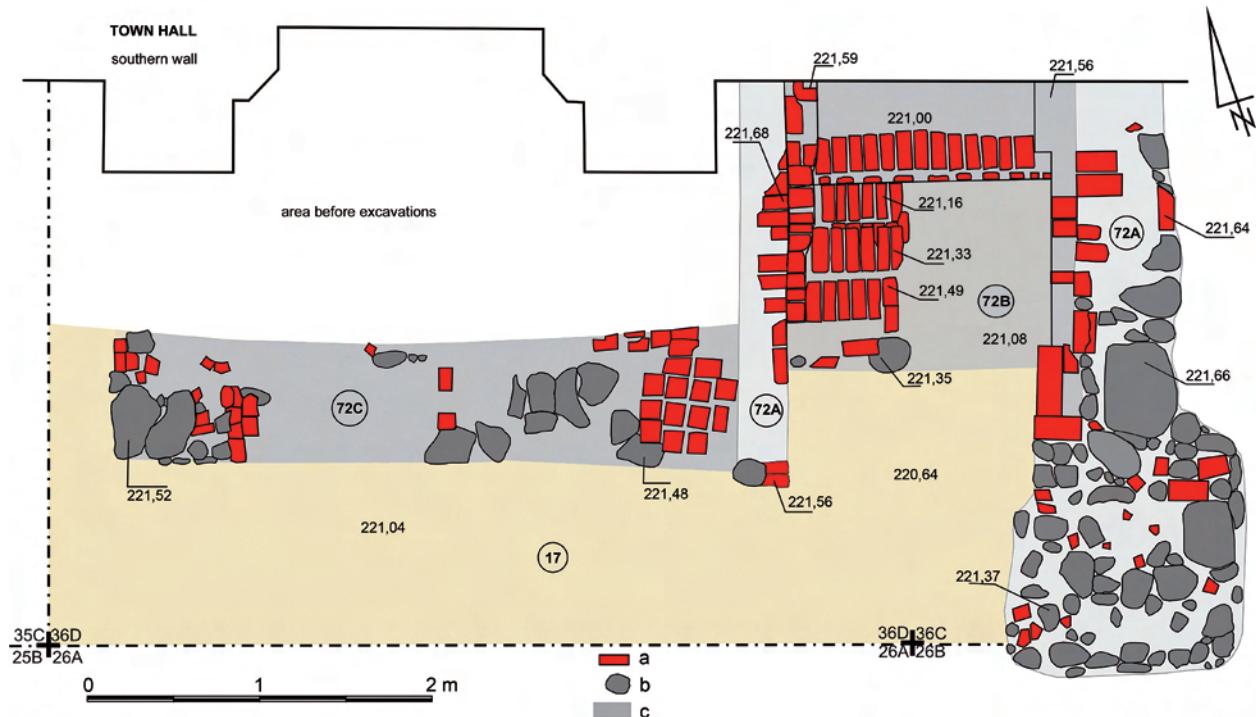


Fig. 37. Gliwice, Market Square, grid sq. 36D, C. Modern period entrances to the Town Hall cellar (s.u. 72). Plan of: s.u. 72 – modern construction associated with the entrance to the Town Hall cellar; s.u. 72A – construction phase I (17th–18th century), s.u. 72B – Phase II, s.u. 72c – Phase III (foundation of a porch to the ground floor of the Town Hall), s.u. 72D – Phase IV (2nd half of the 19th century); s.u. 17 – yellow sand (natural layer); a – brick, b – stone, c – brick-stone mortar.

Drawing A. Młyńska

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY

is not easy. Linking the identified traces of building activity or the repaving of the surface of the square with concrete historical references is weighted with great risk. Errors of interpretation are possible not the least because, as a matter of course, archaeologists and historians tend to use different dating methods. As a result, archaeological evidence attributed to this phase is placed in a relatively broad time period, which nevertheless does not preclude the presentation of an overview of changes in the Market Square during the turbulent post-medieval age, a difficult period for the town.

We know that during the 17th and 18th centuries the building of the Town Hall suffered from a number of fires and underwent a few alterations (Radziejewicz-Winnicki, Małusecki 2002, p. 10). In addition, as a matter of course, its medieval walls, laid in the *opus emplectum* technique and bound with relatively weak mortar, became eroded. It is no surprise then that the top of the unearthed foundations of the western, southern and eastern wall show traces of repair. At the same time, there is also evidence that the older

building material and structures were taken to pieces, to be replaced with new ones. Nevertheless, the plan of the main building of the Town Hall remained the same. Only its extensions underwent major alterations. The eastern extension, originally with several storeys, possibly a tower, was reduced to its bottom level, i.e., the basement. This made it necessary to relay and strengthen the south-eastern corner. The small extension by the south-western corner of the Town Hall was dismantled.

The foundations of the main building were repaired using bricks, of a type distinctive for Baroque architecture, and broken sandstone. The repairs covered the section between the present-day level of the square to a depth of between 60 cm and 1.20 m, in places even as much as 1.60 m. The mortar used at this time contains well slaked lime but its quality suffered from an excessive content of mineral filler.

The original entrance to the basement in the southern wall of the Town Hall building was walled up using bricks laid in header and irregular courses. At the same time, just around the corner, in the eastern



Fig. 38. Gliwice, Market Square, grid sq. 36D, C. Eastern retaining wall of the staircase (s.u. 72A), east section – in the foreground; in the background, the construction of the staircase with the remains of the stairs visible (s.u. 72B). Photograph M. Michnik

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY



Fig. 39. Gliwice, Market Square, grid sq. 36D, C. Modern period entrances to the Town Hall cellar. Construction phase I (s.u. 72A) – blue arrow, construction phase II (s.u. 72 B) – yellow arrow. Photograph M. Michnik

wall, a new doorway was constructed, which was also provided with an outer staircase (s.u. 72). The use of the same mortar to wall in the old entrance and build a new staircase confirms this was done as part of same building project.

The new staircase was built in the same way as the old one, also laid inside a trench (s.u. 169) adjacent to the outer wall of the Town Hall. The steps of the

stairway were set between retaining walls. The whole structure was repaired a number of times (Figs. 37; 38; see also Fig. 28)).

Originally, the staircase consisted of retaining walls, built of brick in the modern period format ($6.5 \times 12.5 \times 26-27$ cm), bonded with a yellow mortar with a large admixture of mineral filler. The brick-work in the western wall was uncoursed, its thickness



Fig. 40. Gliwice, Market Square, grid sq. 36D, C. The remains of a staircase (s.u. 72B). Photograph M. Michnik

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY



Fig. 41. Gliwice, Market Square, grid sq. 36D, C. The remains of the arcade/porch? of the Town Hall (s.u.72C). Photograph M. Michnik

corresponding to the length of a single brick. The wall was given a coat of plaster. The entrance had a width of 1.61 m, the same as the distance between the walls. The eastern wall, built of brick and pebbles, was sturdier; its thickness in the northern and the southern sections was 63 cm and 1.10 m, respectively. The steps of the original construction of the staircase did not survive.

The first alteration project (recorded as phase II) reduced the inside of the doorway to 1.13 m and replaced the stairway (Fig. 39). Of this new construction, five steps survive, the length of a single brick. The next project (phase IIa) focused on the entrance to the ground floor of the Town Hall building. The recorded remains indicate that in front of the Town Hall wall, to the west of the stairs to the basement,



Fig. 42. Gliwice, Market Square, grid sq. 25C. The remains of a modern pavement (s.u. 101). Photograph M. Michnik

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY



Fig. 43. Gliwice, Market Square, grid sq. 67C, D. The remains of a modern pavement (s.u. 101). Photograph M. Michnik



Fig. 44. Gliwice, Market Square, grid sq. 48A. Traces of a wooden water pipe (s.u. 44). Photograph M. Michnik

directly in front of the original medieval entrance, there was a porch or an arcade leading to the doorway (Fig. 41). This structure was built of broken bricks, pebbles and limestone. The southern wall of the porch was parallel to the wall of the main Town Hall building, at a distance of 2.40 m from it.

During the second half of the 19th century, the entrance to the basement was walled up using pebbles and recycled bricks. The entrance to the ground floor was relaid. The level of preservation of the remains associated with this project is too poor to determine the character of the new construction.

Alterations made to the Town Hall building and the opening up of the new entrance to the cellars was accompanied by a repaving of the Market Square. The stone pavement laid during the preceding phase (16th century), had in the meantime accumulated a layer of clayey humus (s.u. 6 and 85). When the cobblestones were lifted, this layer blended with crushed brick and dust. The new pavement was laid directly over the levelled upper layer of the humus, presumably, using stones salvaged from the older pavement (Figs. 42–43). The cobbles of this new pavement (s.u. 101), preserved only in places, had an average diameter of 15 cm, at most, 25 cm. The absence of a sandy sub-base suggests that the new pavement was less expensive but also technologically inferior to its predecessor.

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY



Fig. 45. Gliwice, Market Square, grid sq. 28A, B. Bottom level of the pediment for the statue of Our Lady (s.u. 28, 43 and 53). Photograph M. Michnik

After repairs were made to the pavement, a large number of wooden stalls were erected in the Market Square. Their construction rested on posts, dug or rammed into the ground. During this phase, the stalls in the square were given a new plan. In the earlier period, their layout apparently was irregular. Now they were ranged in several long courses. One of these probably abutted the southern wall of the Town Hall. This is confirmed by a sequence of posts

recorded 3.20–3.60 m to the south of the wall (s.u. 136). This line of stalls continued east, beyond the extension of the Town Hall building (as documented by s.u. 73A–H), where it veered north and followed the line of the eastern wall of the Town Hall (s.u. 96A–L, 49–51 and 89A–S). Less well-preserved remains of post structures suggest that a similar line of stalls stood along the western facade of the Town Hall. In the southern and western area of the Market



Fig. 46. Gliwice, Market Square, grid sq. 28A, B. The pediment for the statue of Our Lady in close up (s.u. 43). Photograph M. Michnik

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY

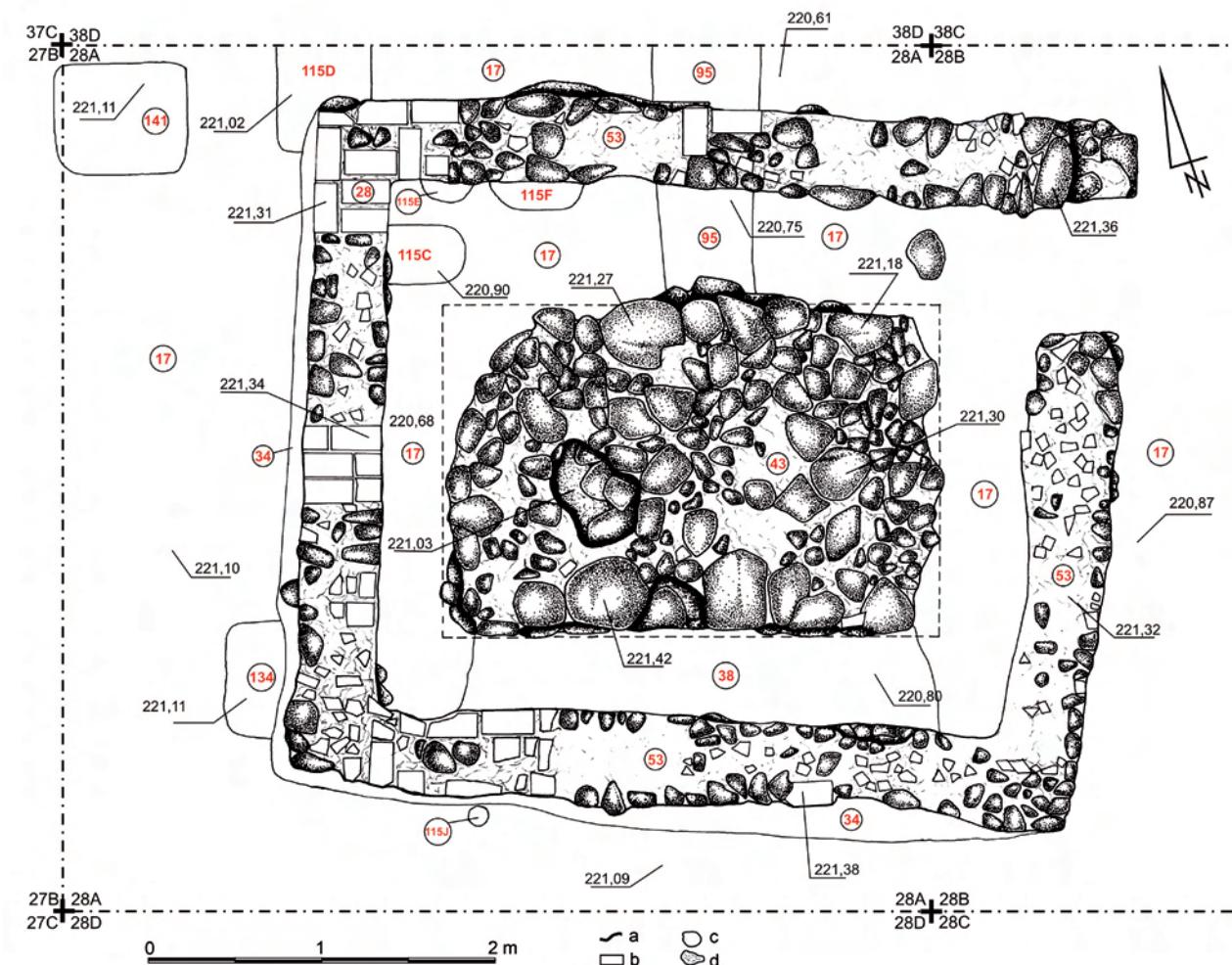


Fig. 47. Gliwice, Market Square, grid sq. 28A, B. The stone-and-brick pediment for the statue of Our Lady (s.u. 28, 43 and 53).

Plan of: s.u. 28 – brickwork; s.u. 34 – trench excavated for s.u. 28, 53; s.u. 38 – trench excavated for s.u. 43; s.u. 43 – masonry; s.u. 53 – foundation s.u. 28; s.u. 115 C-F, J – postholes; s.u. 134, 141 – modern excavation; 17 – yellow sand (natural layer); a – differences in levels, b – brick, c – stone, d – lime mortar. Drawing A. Młyński

Square, a second line of stalls was identified (s.u. 155 with post-holes 155 A–L and 154 A–S). They occupied the space between the Town Hall and the frontage of the town houses around the square. The width of the line of the stalls in the southern part of the Market Square was about 4 m; its length was over 22 m. The presence of stalls in the northern area of the Market Square is confirmed by two groups of posts (s.u. 218A–S) but their preservation is too poor to conclude anything other than they were rectangular in plan.

An important element of infrastructure during this phase was the water supply system which had wooden piping. They were identified in different areas of the Market Square. The longest recorded stretch (s.u. 44) ran along the eastern side of the square, diagonally to its frontage, approximately north to south. In its northern section (in grid square no. 48),

it forked into two branches. The second stretch (s.u. 206), discovered in the northern area of the Market Square, ran east to west. The least well-preserved lengths of piping were identified in the western area of the Market (s.u. 24A and 191). Some of them had been repaired and re-laid during a later age. The water pipes were placed in trenches at a depth of 50 – 60 cm from the upper level of the modern period layers. Locally they survived as brown stains of humus (Fig. 44) and a number of iron pipe couplings.

Also associated with the same phase are several pits and cut features of unclear function. They mostly had an irregular, presumably random, shape, and are at a depth of a few metres (s.u. 79, 82, 95, 130, 134, 141, 148 and 204). Their fill was rubble or sand. They have been tentatively attributed to cleanup works.

Phase IVa. The basis for distinguishing this phase are traces observed in the stratigraphic sequence

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY

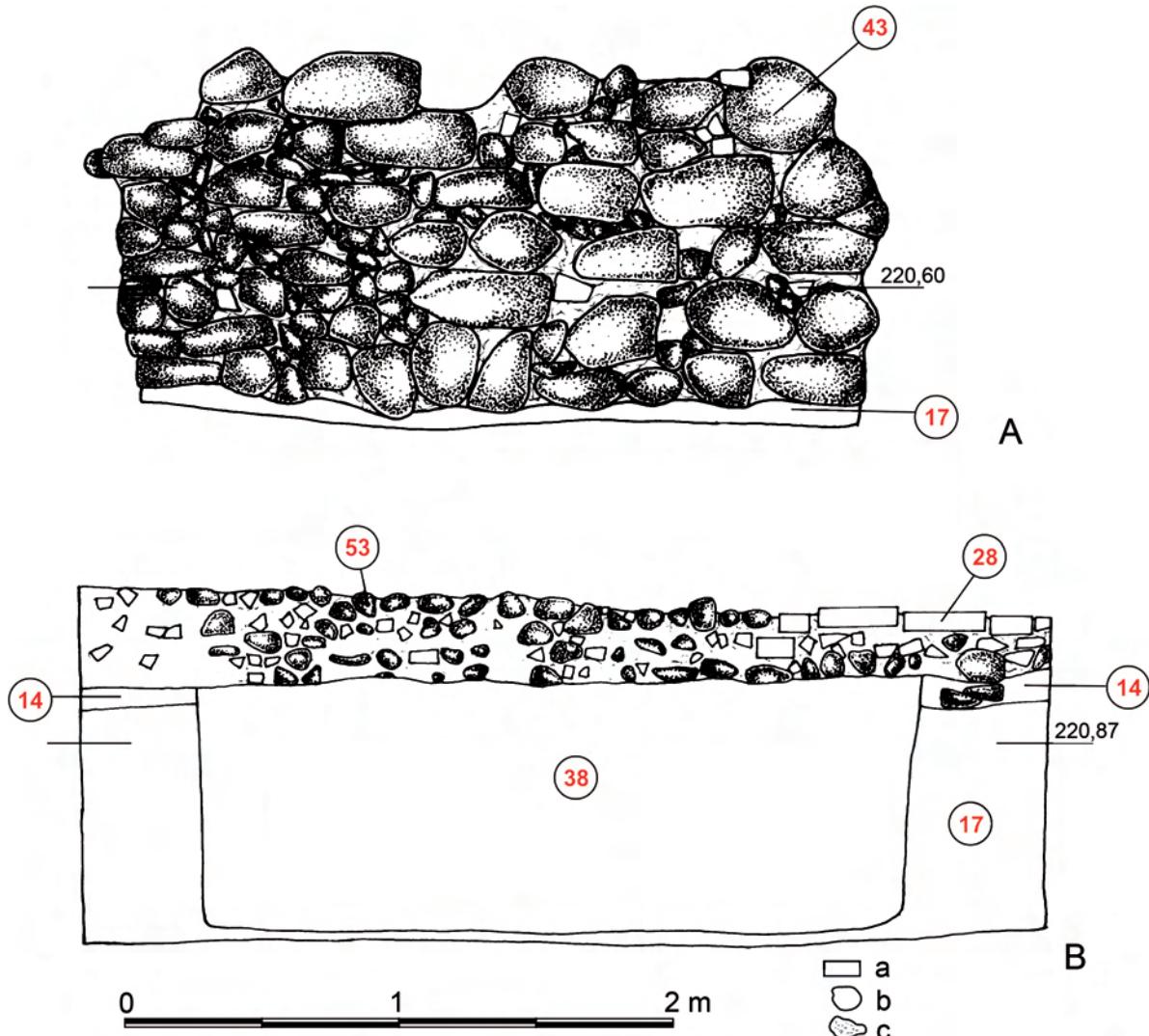


Fig. 48. Gliwice, Market Square, grid sq. 28A, B. The stone-and-brick pediment for the statue of Our Lady: A – S section s.u. 43; B – N section of south wall s.u. 28 and s.u. 53; s.u. 38 – trench excavated for s.u. 43; s.u. 14 – grey humus (13th–14th century); s.u. 17 – yellow sand (natural layer); a – brick, b – stone, c – lime mortar. Drawing A. Młyńska

of construction projects post-dating the use of the pavement associated with layers recorded as s.u. 6 and 85. Presumably, the focus of these activities was the Town Hall building. Their traces are evidenced everywhere in the square by the presence of s.u. 30 and 190 – a deposit of brick debris and lime rubble. Its thickness of up to 10 cm, leads to the conclusion that it was used to level and dry the surface of the square.

Possibly the most important development attributable to phase IVa was the construction of a pedestal in the south-eastern area of the Market Square (Figs. 45, 47), as evidenced by the presence of s.u. 43, 53 and 28. This construction was in two parts. One was a solid foundation, approximately rectangular in plan (Figs. 46, 48), 2.9 m (east to west) × 1.98 m (north to south), laid of glacial pebbles, whole and broken,

and pieces of brick, with an average height of 9 cm. Its face is in courses of large pebbles levelled with finer material. The thickness of these layers is roughly 31 cm, which presumably corresponds to the standard of 1 foot used by the builder. The mortar was of lime, slaked directly inside the trench, and a large quantity of sand. On top of the foundation was a layer of screed made of mortar, and around it was a wall, marked as s.u. 53 and 28, rectangular in plan, its outer measurements 3.87 m × 4.55 m (east to west), extending 26 cm below the ground level as it was then. The width of this wall was determined as 44–50 cm. It was built of fine pebbles, presumably salvaged from a disused pavement, and broken bricks (Fig. 48). This material was cast into the excavation and covered over with mortar, the same as in the pediment. The role of this structure is still open interpretation. We

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY



Fig. 49. Gliwice, Market Square, grid sq. 34A, B. Top layer of the modern period water well (s.u. 184). Photograph M. Michnik



Fig. 50. Gliwice, Market Square, grid sq. 34A, B. The well during excavation (s.u. 184). Photograph M. Michnik

II. CHANGES IN THE MARKET SQUARE AND THE TOWN HALL, THE 13TH TO THE 18TH CENTURY

propose to identify it as the foundation of the Baroque pediment for the statue of Our Lady, the work dating from the first half of the 18th century and presumably designed/carried out by Johann Melchior Osterreich. This pediment was marked on a map of the town from 1788–1791 (*Charte des Beutener Wasser vom Anfang oberhalb der Stadt Beuten*). Presumably, before 1890, the statue was moved to the eastern facade of the improved Town Hall.

During the same phase, the water supply system was given the status of a landmark and a symbol, complete with a Baroque statue of Neptune, set in the western area of the Market Square and still in place today.

At a distance of a few metres to the south of the fountain, a public water well was built (s.u. 184) (Fig. 49). It had a cylindrical casing with a diameter of 2.55 m (inner diameter of 1.58 m), of irregular flagstones laid in layers (Fig. 50). The inlet of the water pipe, which fed the well, is evidenced by an iron plate installed to block the installation after the well went out of use. The depth of this reservoir was over 2.3 m.

Other features associated with the same phase include pits and cut features of unclear function (168, 191, and 213). Their shapes and fill varied – from pits

rectangular in plan to solitary post-holes filled with rubble, sand or humus. Presumably, they are associated with maintenance works and local repairs made to the paving in the square.

Phases IV and IVa were dated based on stratigraphy, building methods and materials, as well as small finds. The sequence of layers, masonry structures and sunken features assigned to this time segment overlaps with the early modern level; its uppermost layer was disturbed by earth moving activity during the 19th and 20th centuries. The deposit accumulated over a relatively long time, spanning the 17th–18th, and possibly, the beginning of the 19th centuries. Bricks used in the masonry work are of a type typical for this particular period. The mortar binding them is of poorer quality than the one used in the buildings of the preceding phase. In general, we may say that the masonry has qualities typical for Baroque construction work observed in Silesia. Similar conclusions are suggested by the analysis of the small finds. The relatively rich coin series includes specimens mostly from the 18th century, but also, from the 19th century. Other metal finds, as well as a large assemblage of pottery fragments, are broadly datable to the 17th–18th century.

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