WRATISLAVIA ANTIQUA 19

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PRAGUE, WROCŁAW AND KRAKOW: PUBLIC AND PRIVATE SPACE AT THE TIME OF THE MEDIEVAL TRANSITION

IV. ORGANIZATION OF THE BURGAGE PLOT SPACE

Ownership of a plot according to the rules in force in communal towns was a condition necessary for obtaining full town rights. The plot is understood as a separate fragment of town space that was available for the residential and economic activity of craftsmen or traders. The plot was not fully the property of the townsman. It was a tenancy leased out for perpetual use, subject to inheritance, sale, completely or in part, but also taxed, in favour of the lord of the town. In the written sources from the High and Late Middle Ages, it is referred to as *area*, *hereditas*, *curia,* or *hof* (Strahm 1945, 35–40). Jointly with the house, the plot represented the private space of the townsman, his family and other co-residents, in contrast to public squares and streets.

Traditionally it is accepted that plots were laid out at the time of the granting of the incorporation privilege. At least this is suggested by the situation known from Freiburg im Breisgau, which is regarded as a classical example. In 1120, the dukes of Zähringen granted land to traders, divided it into 50 × 100-foot plots and charged rent for them (Schich 1993, 81–83; Schadek 1995). Was this also the case with Prague, Wrocław and Krakow? In their case, the direct adoption of this model is complicated by the fact that each of these towns had pre-existing communities of colonists – traders and craftsmen – dating from their pre-incorporation phase. At the same time, little is known about the rules that governed their use of the ducal land.

In attempting to draw a distinction between the burgage plot and tracts of land in the neighbourhood of houses in pre-incorporation centres, Rudolf Procházka proposed using the term 'proto-plot' (Procházka 2007, 6–15). Examples of such 'proto-plots', or 'proto-burgage' plots (Piekalski 2001, 217) are known from commercial emporia (*vics*), spread across northern Europe from the British Isles all the way to the eastern coast of the Baltic and Rus during the early medieval period. For some of these centres a reconstruction was made of their original planned parcels. The example of Dorestadt – a major Carolingian proto-town at the mouth of the Rhine – is usually cited as evidence of carefully carried out plot division (Fig. 35) as are Haithabu and Ribe on the Jutland Peninsula, and numerous other northern proto-towns (Jankuhn 1986; Müller-Wille 2002; Schofield and Steuer 2007, 145–146). Parcels in the shape of an elongated rectangle were set with their shorter side to the waterfront, convenient for trade in the port (Fig. 36). The plot pattern was orderly with timber-lined streets laid out between rows of houses. In most cases the buildings were tightly packed. It seems that larger plots could have accommodated several houses, as in Bergen (Fig. 37), or Sigtuna (Fig. 38), which raises a question as to the relationship between the ownership rights to plots and houses (Herteig 2002; Tesch 2001). Written sources from Western Europe suggest that rent was levied upon such plots. The terms of use, tenancy or inheritance varied. Plots available for use or sale were measured in feet, ells or rods. Based on archaeological findings the size of plots at Haithabu was reconstructed as 6–10 × 12–20 m (Jankuhn 1986, 92–99). Thus, the land in proto-towns had a value that was tangible (Strahm 1945, 22–30; Steuer 1995, 99; Procházka 2007, 6). Most of the northern commercial emporia had faded away before transformation to the communal phase. Nevertheless, we find examples of plot continuity inland from the proto-urban period well into the High and Late Middle Ages such as in Osnabrück. During the 11th century, the area next to the bishop's marketplace, reclaimed and raised by dumping, had been divided into plots and built on with timber houses (Fig. 39). The layout of these plots was accepted during subsequent stages of the development of the town (Schlüter 2002, 82–83).

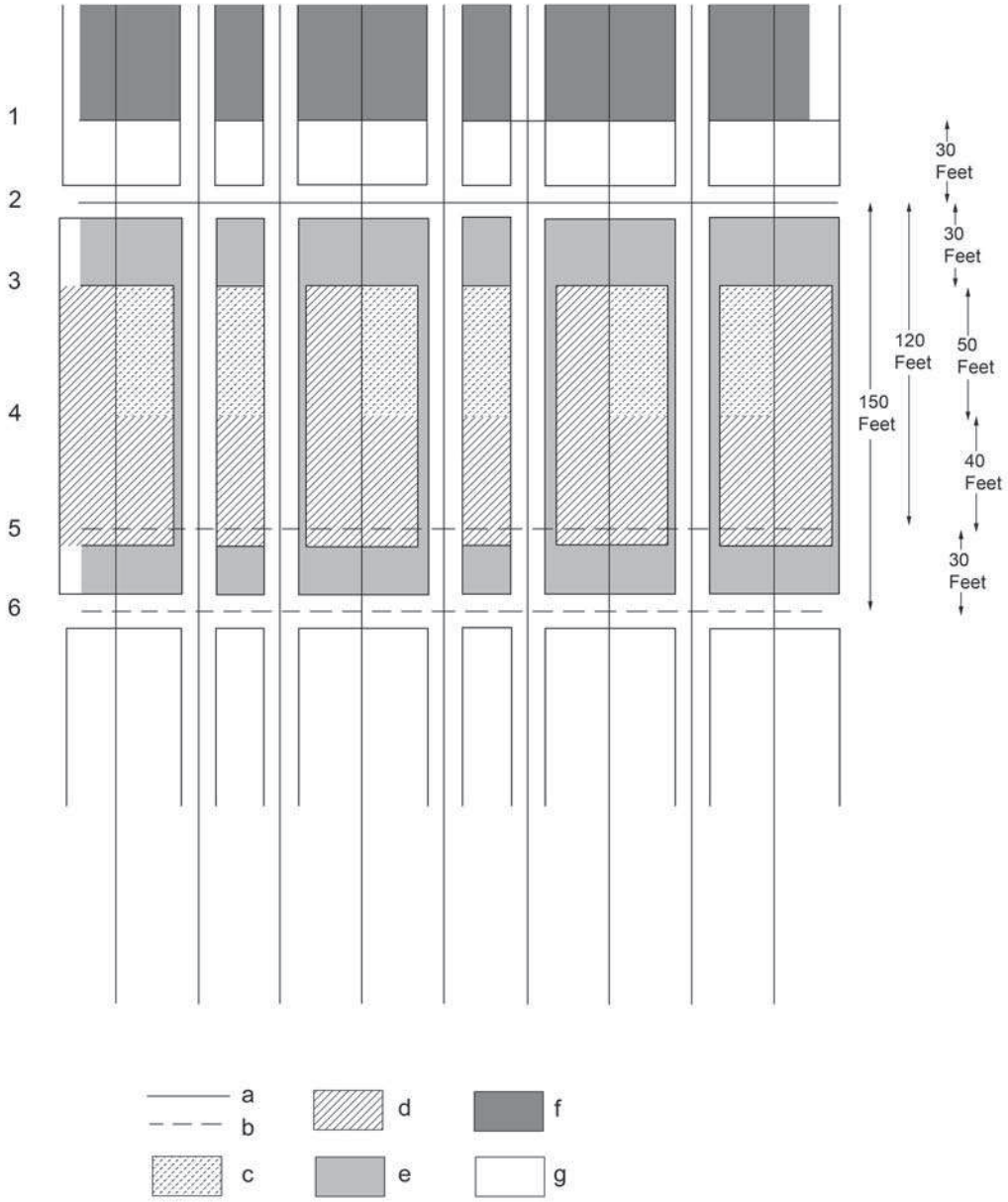

Fig. 35. Dorestad. Projected layout of plots, the 8th–9th century: 1, 2 – waterfront; 3 – frontage; 4 – back; 5–6 – projected rear boundary of the plot; a – plot boundary; b – conjectured plot boundary; c-d – houses; e – plots; f – waterfront; g – second row of plots. Van Es and Verwers 2002

In Novgorod, in an entirely different legal situation where there was no transformation associated with incorporation, the continuity of several centuries' duration is accepted as self-evident (Fig. 40).

Therefore, there is evidence that in proto-towns across Western Europe traders' parcels and their legal status were subject to an evolution similar to other regulations which later added up to form the town law. In such cases, to seek the origin of the burgage plot or, at least, to seek a conclusive answer, seems beside the point. We will not establish decisively whether the burgage plot in Central Europe derives from the tradition of the northern proto-towns (Vogel 1986, 256–262) or from the early communal towns of Italy, France or Flanders (Lavedan and Hugueney 1974, 59–116; Benevolo 2000, 328–451; Verhulst 1986/1996, 382–384). What we can study is the evolution of its form, uses and legal regulations related to ownership and taxation.

The research problem outlined in this manner exceeds the methodological scope of one discipline of research. The inquiry is pursued, jointly or separately,

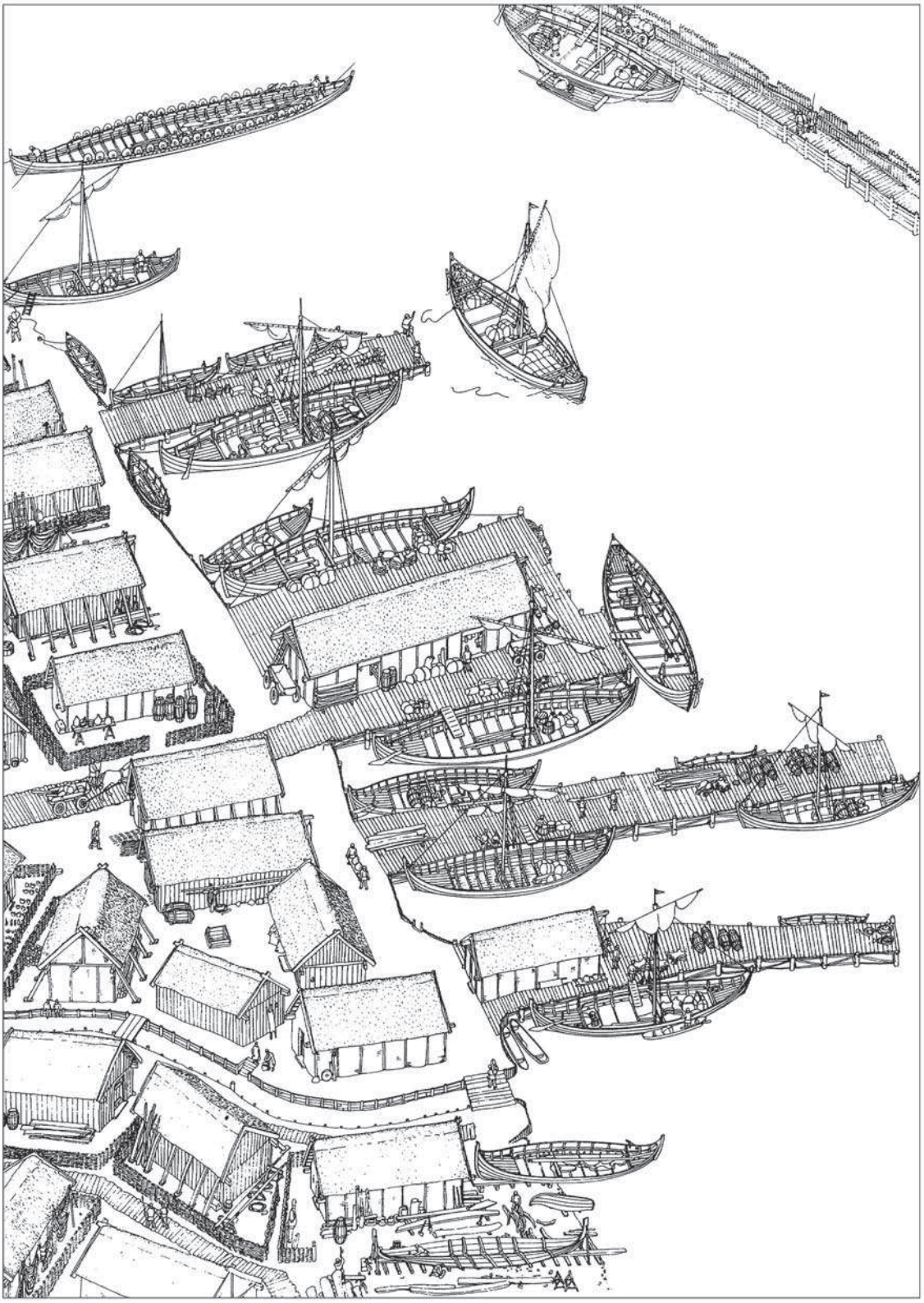

Fig. 36. Haithabu. Built-up area by the waterside of the trading settlement. Elsner 1994

by historians, architectural historians and urban ones as well as by archaeologists. Each of these fields makes use of methods of inquiry specific to it and the obtained results are based on sources appropriate to it. Historians have at their disposal information about the size of plots in many towns of Central Europe – ranging from Freiburg to the towns in Poland. However, they do not date from the period of the original

Fig. 37. Bergen. Built-up area prior to the fire of 1170/1171. Herteig 2002

laying out of the town plan only from a later time, of which we know that plot size was far from uniform (Schich 1993). This information formed the basis for the claim that at the time of its incorporation the town was divided into plots of equal size. It is accepted, and not just in traditional publications that this plot division extended over the entire area of a town or its substantial portions (Strahm 1945; Blattmann 1986; Krasnowolski 2004; Eysymontt 2009). The changes in plot sizes with came later were supposed to be the result of divisions and sale. The belief in the invariable size of the 'incorporation plot' was accepted rather consistently, especially by architects and urban researchers (Pudełko 1964; Rogalanka 1977, 1988). The measurement method used by them sought to reconstruct this ideal, the initial plot recorded in modern and contemporary town plans. This method is improved upon and corroborated by using input from archaeological investigation. Materials secured in the course of this research owe much of their value to their direct character. The unearthed remnants of buildings, early masonry houses in particular, are of essential help in tracing plot boundaries from the time of plot division (Stephan 1990, 306–313; Chorowska and Lasota 1995). The value of the investigation of the surviving remains is also decided by their ever-increasing range, rapidly enriching the source base.

According to Martin Ježek, separating the evidence on pre- and post-incorporation Prague is not feasible. Neither the material culture nor the house constructions afford this insight. Archaeological finds from the first and second third of the 13th century have too many features in common (Ježek 2011, 629). The same is true of plots in the Old Town of Prague. The town's irregular plan with streets converging on the main marketplace gained, still prior to the incorporation, at the latest around 1200, the key stabilizing element in the form of grand Romanesque stone houses. To-date close to ninety have been discovered, only a small number of which were found outside the boundary of the incorporated town (Dragoun et al. 2003). None of them has been dated more closely, but details of their masonry link them unambiguously with Romanesque architecture. The researchers of Prague propose to date the houses to the late 12th–first half of the 13th century (Dragoun et al. 2003, 358–359). Except for a few palaces, the vast majority of these edifices were built next to a pre-existing street. Furthermore, the walls of some of them delimit, even today, the corners of residential blocks and plot boundaries (Fig. 41). The results of archaeological excavation have shown that these stone houses were not the only structure in their respective plots; rather, they were its distinctive and finest feature (Fig. 42).

Analysis of plots, nos. 553–555, at the north-eastern corner of the main marketplace of the Old Town by Celetná Street, revealed that they had a width of 20–25 m and a length of over 80 m. They were formed around 1200, and were in the shape of

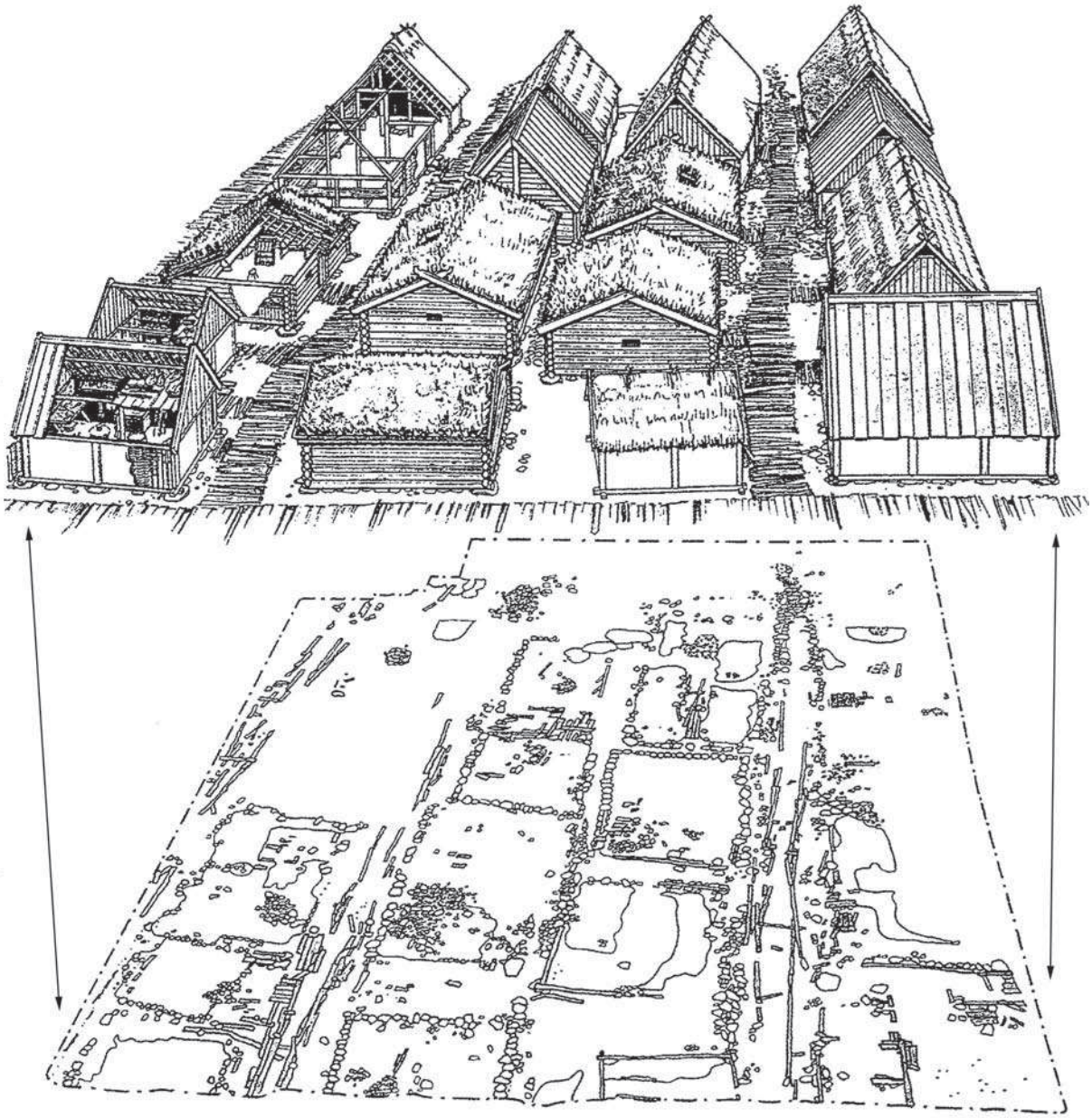

Fig. 38. Sigtuna. Fragment of built-up area in plan and reconstruction, the mid–11th century. Tesch 2001

a triangle tapering towards the rear of the residential block, that is to say, their irregularity was typical for Prague (Fig. 43). Their investigators claim that the plots are not the result of a planned plot division project but of the natural evolution of the town's plan and the division of its terrain according to the economic and residential needs. There is evidence of production activity at the rear of these plots datable to the 13th century. Starting from the 14th century, this part of the plot is more likely to have been a typical townhouse backyard – with wells, rubbish dumps and cesspits (Bureš, Kašpar and Vařeka 1997, 208–209; Bureš et al. 1998). The stone house stood in the street and had a passageway for vehicles or pedestrians, typical not only for Prague but also for smaller towns in Bohemia, ensuring communication with the back area of the parcel (Richter and Smetánka 1987, 84; Hauserová 1995).

Thus, at least some plots of the post-incorporation town based their development on pre-existing structures. The legal regulation effected in 1234 by King Wenceslaus I did not cause any radical changes in the area within the boundaries of the incorporated town. The existing plots were subject to change that was also observed in other towns, i.e. the sale and purchase of land and divisions dictated by testamen-

Fig. 39. Osnabrück, Market Square in the 11th century: a – gravestones; b – earthen graves with wooden coffins; c – conjectured extent of the open marketplace; d – merchant's house; e – destroyed area; f – Blessed Virgin Mary's church; g – extent of trench. Schlüter 2002

tary dispositions gave rise to a tendency to create parcels with a narrow upper end. On the other hand, plots laid out in the newly planned Gallus Towns had a wider upper end and were regularly shaped in plan. Researchers mostly agree that at least some of the early Gothic masonry houses in Gallus Town were positioned with their front to the street (Muk 1964; Líbal, Muk and Mílan 1966; Líbal and Muk 1996, 67–69; Huml 1992; 1996). Earlier archaeological research did not yield details on the uses of the yards and the rear area of the plots. More advanced in this respect are studies of other towns in Bohemia and Moravia, Most and Brno in particular (Klápště 2002; Procházka 2000; 2007, 24–25).

Moving on to the discussion of burgage plots in Wrocław, we can start by saying that their shape owed nothing to the pre-incorporation phase. This does not mean that there were no 'proto-parcels' in this town. Much of the area of the castle precinct on Ostrów Tumski was divided into plots referred to as *area vel curia* (SUB, vol. 2, no. 247). However, their function is not mentioned by the written source. In the archaeological record, they are presumably represented by fenced in complexes with one or two timber buildings and other structures apparently associated with economic activity. To set them apart from the burgage plots they were described as proto-urban plots, as if to associate them with a rural tradition (Buśko et al. 1985). Additionally, there was no evidence to connect these fenced-in units with crafts or trade.

This was not so with early plots identified in the settlement *ad sanctum Adalbertum* where craft activity, e.g. metallurgy, is clearly confirmed. Stratigraphical sequences discovered along the reconstructed main communication axis of this settlement justify the claim put forward by Jerzy Niegoda, their excavator, on the continuity of plots laid out during an earlier period. In the late 12th century, these plots were supposedly separated by fences. During the

Fig. 40. Novgorod. Plan of built-up area, second half of the 12th century. Troitsky Excavation. Choroschev 2001

Fig. 41. Prague. Romanesque houses in the Old Town market square. Dragoun et al. 1997

Fig. 42. Prague. Pre-incorporation buildings in Husová Street: a – Romanesque stone house; b – timber building with a sunken ground floor. Hrdlicka 1983

1220–1230s, along the western edge of the street six or more buildings were constructed. The analysis of distances between them has led the researchers to conclude that these structures stood on plots laid out using the standard of 25 or 26 feet. The concept presented by the research team associated the plots with the first incorporation of Wrocław, supposedly carried out in the time of Duke Henry I (Buśko 2005a; Niegoda 2005, 70–80), but in my view this is not sufficiently documented by the sources (*cf. supra*) and the plots go back to the pre-incorporation phase. This matter is viewed similarly by Małgorzata Chorowska (2010, 79, 82) who, at the same time, is in favour of the 50-foot plot standard.

What remains a puzzle is *curia Gerungi* recorded in the sources, donated in 1202 by Duke Henry I to

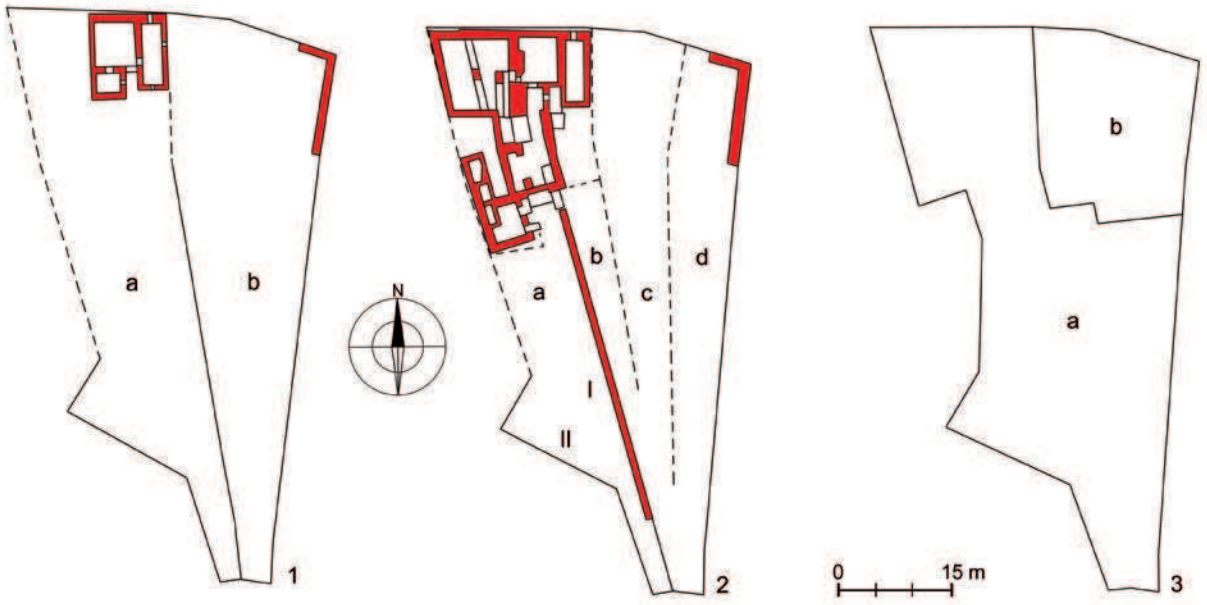

Fig. 43. Prague. Old Town Square. 1–3 – reconstruction of medieval development in plots nos. 553–555. Bureš, Kašpar and Vařeka 1997

the Cistercian Order. It is unclear whether this was a plot with or without buildings, and what the nature of such buildings could have been. It is evident that the plot was the duke's to dispose of as he wished, consequently, not private property or hereditary tenancy (CDS Maleczyński, I, no. 91, 225; Młynarska-Kaletynowa 1986, 48–49). We may well ask whether this was the legal status of all the plots of pre-incorporation Wrocław.

In contrast to Prague, in Wrocław the incorporated town developed next to an earlier crafts-and-market settlement in an area without pre-existing buildings. Regardless of the time we decide to date the incorporation to, the town plan, including plots forming the larger urban blocks must have proceeded without any major obstacles without the need to clear the land of earlier buildings. Starting from this assumption it was proposed in studies on Wrocław that during the initial plot division, the plots were divided to be of equal size. Drawing on input from the metrology analysis of townhouses now extant in the Market Square and its comparison with early modern tax records the *curia integra* laid out during the incorporation is reconstructed as having a width of 60 feet (1 foot = 31.3 cm). The length of the plots in the Market Square would have been 240 feet, in urban blocks at a greater distance from the marketplace – 120 feet (Golachowski 1956; Golachowski and Pudełko 1963; Pudełko 1964; 1964a). The standard of 60 feet (4 rods) was also used, according to Janusz Pudełko, in other urban blocks indicating the extent of the zone regularly planned out during the first incorporation. The same width of the plot was then, according to that author, also used in other Silesian towns.

The model of the burgage plot proposed by Janusz Pudełko was an approximation. His research was continued and validated on some points with the help of the archaeological method, primarily by Czesław Lasota and Małgorzata Chorowska. Long-term regular investigation of the interiors of a few score of townhouses provided a basis for the detailed analysis of plot size. Especially useful was a series of brick houses from the 13th century, built no later than a few decades after the incorporation. Analysis of several boundary walls in the urban blocks on the Market Square and at some locations in the nearby streets demonstrated that the 60-foot plot standard was actually used in this area (Chorowska and Lasota 1995; Chorowska 2010, 69–72; Lasota 2002; Chorowska and Lasota 2010, 162–167). The boundary lines, fixed during the 13th century by the walls of townhouses, were mostly respected during the construction of subsequent late medieval and early modern houses. Thus, it is assumed that most plots really had been laid out as a whole.

This does not mean that the practice had no exceptions. There is evidence that some of the 13th century houses do not conform to the reconstructed scheme.

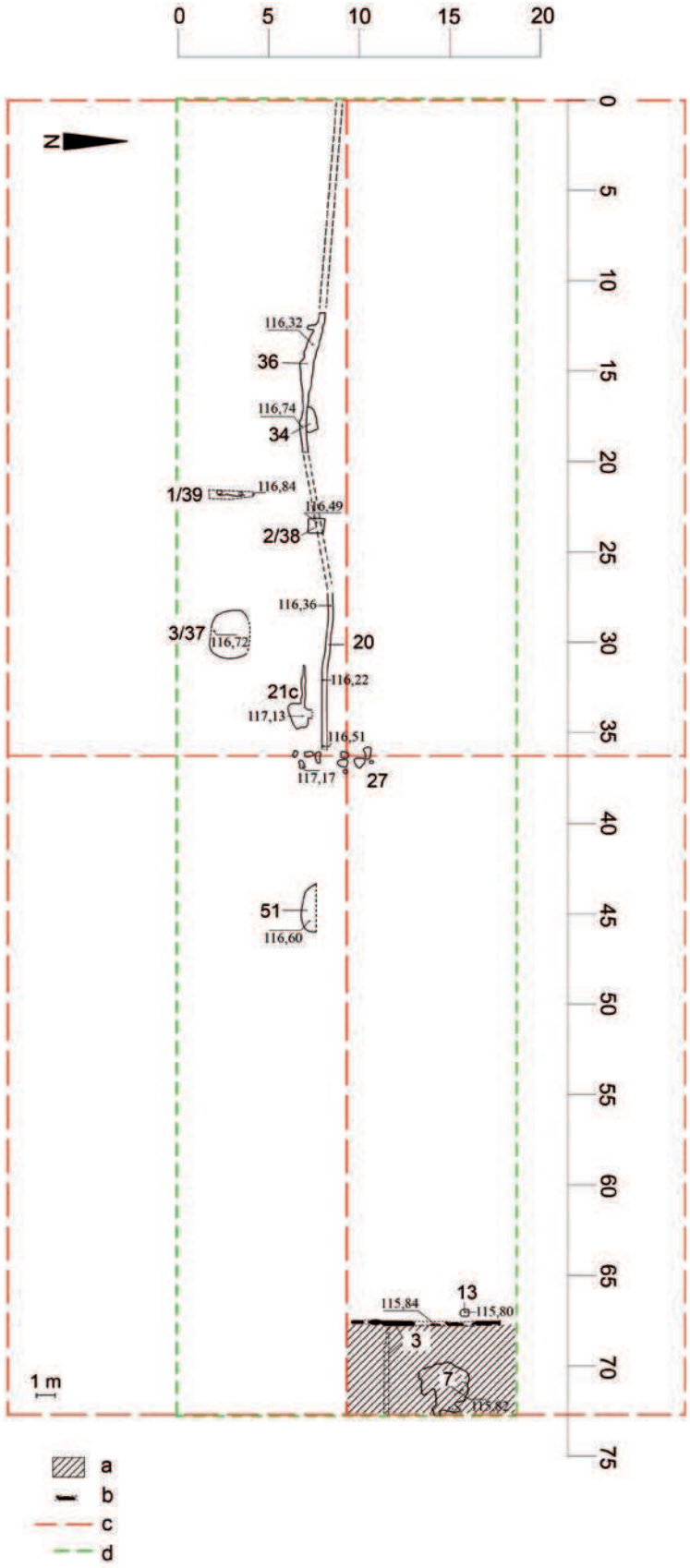

Fig. 44. Wrocław, No. 6 Rynek – No. 5 Kiełbaśnicza Street. Timber buildings: a – conjectured extent of area with timber buildings; b – timber; c – projected layout of the incorporated district; d – modern property boundaries. Drawing Nicole Lenkow

On the southern frontage of the Market Square, in what today is plot No. 17, a house was built, the most impressive of all those unearthed, occupying parts of two neighbouring parcels. Similarly, on plot No. 7, on the western frontage of the Market Square, along with a house is a baffling structure with four entrances to the ground floor. That the ideal division into equal parcels was not the norm is evidenced by the situation found during the investigation of townhouses at Nos. 6 Rynek–5 Kiełbaśnicza Street, on the western block in the Market Square. The extent of the medieval parcel is not consistent with the reconstructed plan of the incorporated town. It is obvious that the projected boundary of the original layout runs down the middle of this particular plot (Fig. 44). The results of the archaeological excavation of the backyard included the material remains of the boundaries of the original plots. The line dividing the plots facing the Market Square and Kiełbaśnicza Street is evidenced by a row of postholes interpreted as traces of a fence erected along the N-S axis. Its course coincides with the projected boundary of plots 120 feet deep (Chorowska 1994, 24–25, Fig. 39; Chorowska, Lasota and Rozpędowski 1995). Along the central axis of the present day plot Nos. 6 Rynek–5 Kiełbaśnicza Street, thus in line with the projected E-W boundary, a ditch was identified, dug during the early phase of occupation of the area, and cleaned repeatedly in a later period. Its function was that of a drain with time it became a timber-lined gutter. That the ditch really functioned as a boundary is suggested by the extent of the timber building identified at the edge of the Market Square. Its southern wall was situated 0.7–1.0 m from the conjectural boundary line. Apparently, the building was planned to respect this line complete with space next to it, left for passageway to the back of the parcel. This boundary was abolished and a plot of the form known to us today was created presumably only in the 14th century. This was the time when a single Gothic house was built that brought together all the pre-existing segments (Chorowska et al. 2012, 66–67).

We cannot rule out that some plots were given the size of half a *curia integra* already at the time of the plot division and as such were charged only half rent. Such a situation may be suggested by houses that occupy half of a 60-foot plot. Especially striking is the example of plot No. 8 Rynek, where the house occupied the southern half of the upper end of the incorporation plot and had another house added to it later, its frontage of 60 feet occupying a half of two neighbouring plots. Adjacent to it is the earlier discussed, problematic parcel no. 6, which would be easier to see as two 30-foot plots (Fig. 45). If we assume that the reconstruction of the original plot division of the urban blocks on the Market Square is correct, we have to accept that the original design and its practical execution were at variance. The existence of plots of double size and of others, split into smaller units already at the time of the plot division, appears quite probable.

The original division into parcels was not stable, and was soon disrupted by divisions dictated by testamentary dispositions and real estate transactions, and conversely, by amalgamation (Fig. 46). The change in plot boundaries ended only in the late Middle Ages after their being full fixed by masonry buildings. This happened through the partial absorption of earlier 13th-century houses by new constructions and, partly, through the construction, from scratch, of Gothic townhouses (Lasota 2002, 75–76).

The conclusions reached by Janusz Pudełko with regard to the residential blocks lying at a greater distance from the Market Square were not validated. The zone where the 60-foot plot was used may have extended only two blocks north of the marketplace. For more distant urban blocks laid out, as Małgorzata Chorowska claims (2010, Fig. 26), around the mid–13th century, the projected plot size would be 40 feet. At the same time, the reconstruction of this new *curia integra* is not based on boundary walls from the 13th century but on later features, from the 14th century at the earliest (Chorowska 1994, 21–25; Lasota and Chorowska 1995, 77). A further complication in reconstructing the full plot is the presence in the northern area of the Old Town of markedly irregular urban blocks. Archaeological studies carried out there, at Nos. 10–11 Więzienna Street, revealed no traces of the original division into full plots. On the other hand, this was the district occupied by the Jewish commune that may have had its own standards of land division. The division, by means of a boundary, into two parcels (halves of a *curia*?) is legible at Nos. 10–11 Więzienna Street only starting from around 1450, i.e. the time of the construction of the first brick houses. The course of the masonry walls does not coincide with the reconstructed boundary of the incorporation parcel (Buśko 1999, 204–210; Piekalski 1999a, 39–41). Moreover, the authors of the 40-foot plot concept caution that there is a need for more research, similar to the question of plot size in the eastern part of the Old Town in the area included in the incorporated town during the second half of the 13th century at the expense of the pre-incorporation *civitas*. A similar situation is observed in the south-eastern part of the Old Town. In the conclusion to

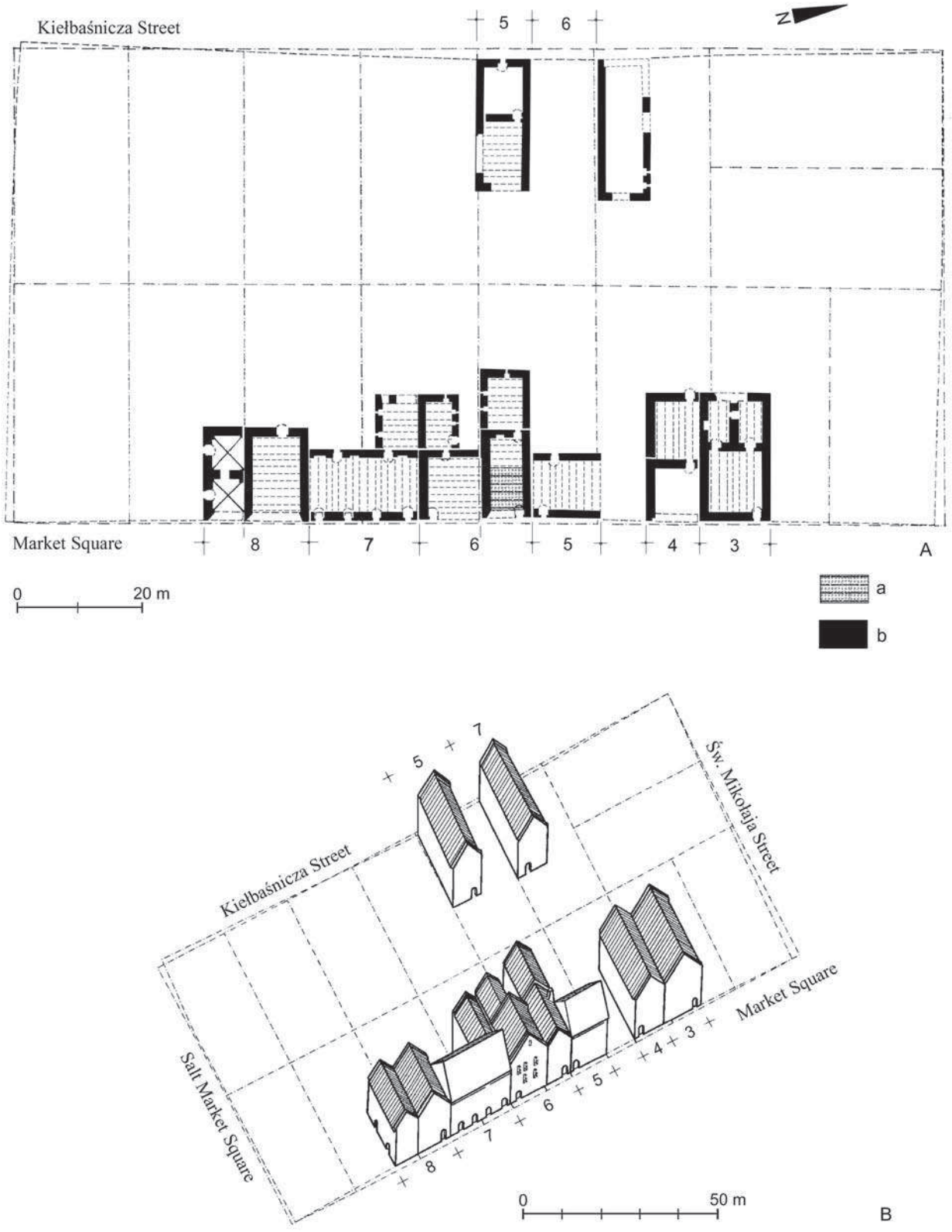

Fig. 45. Wrocław, Market Square. Earliest building phase in the western block. A – plan at the ground level: a – area with timber buildings; b – masonry laid in double-stretcher courses. B – reconstruction. Chorowska and Lasota 2010

his analysis of plots in this part of the town Paweł Konczewski noted that 'the possibility that properties were laid out according to the parcellation model known from the area around the Market Square was negligible (…) most of the investigated parcels were much smaller' (2007, 99).

Organization of the inner space of a Wrocław parcel was described by Cezary Buśko (1995, 1995a, 1995b) and by Paweł Konczewski (2007), who made a detailed analysis of a plot in the south-eastern part of the medieval town. The scheme proposed by Cezary Buśko was a model, outlining general tendencies in the process of the formation of the structure of the plot, and was not just typical for Wrocław. This author distinguished five zones of the parcel depending on its use.

Zone I – the frontage end of the plot, described as formal. Occupied by a trader or craftsman's house, usually cellared or with a sunken feature. Its construction could be of timber, masonry or a combination of the two. At first, the house filled only part of the plot front and occupied its entire width only with time, but there was always a passage, for vehicles or pedestrians to the back of the plot.

Zone II – behind the urban domestic house, usually with outbuildings, a kitchen or production hearths, storage pits and craft workshops. In Wrocław, this zone usually extended 5–7 m.

Zone III – with rear buildings (*Mulczhäuser, Hinterhäuser*). Their function was economic or residential. Some were rented out to people of the plebeian order, sometimes as charity.

Zone IV – sanitary with wells and cesspits and assorted pits many of them of obscure function.

Zone V – garden, found in more sparsely settled districts of larger towns or in smaller settlement centres.

The zones named above, but not always all of them, were a stable feature in Wrocław's burgage plots. Their boundaries were not too clear and individual elements were interchangeable. This led Paweł Konczewski to conclude that the character of the internal division of parcels is better reflected by a simplified division into three zones: (1) the frontage building, (2) zone immediately behind the house and (3) the economic-storage zone (Konczewski 2007, 100). Analysis of specific examples reveals that the individual traits of plots were dependent on the material status and occupation of their owner, its location within the town and, presumably, other private circumstances. In practice, their stable element is the position of the main residential house in line with the street.

Plots at Nos. 6 Rynek and 5 Kiełbaśnicza Street were investigated comprehensively and were discovered to be part of the elite, patrician part of the town. They lay in a single line that cut across the western urban block on the Market Square (Chorowska et al. 2012, 49–53). At the front end of each plot, a high quality brick house was built during the 13th century (Fig. 47). Behind a multi-phase building in the Market Square, the remains of a smokehouse consisting of a two pits with a roof over them were discovered. The smoking pit was fed with smoke through a flue from a hearth with a pit attached to it. The siting of the smokehouse confirms the phenomenon observed in Wrocław during a later period where at least some of the kitchen activities took place outdoors. The presence of similar facilities in plots on the Market Square was noted by M. Chorowska (1994, 65–66). The smokehouse was accompanied by several pits of undetermined function, some filled with fire debris. A part of the area behind the house was paved with poorly fired, warped bricks. An amenity shared by four (?) neighbouring plots was a timber-lined gutter, running the length of the boundary dating from the incorporation plot division project (Fig. 48). Its starting point was some 25 m from the edge of the Market Square, behind the back wall of a house. The slight slope of the terrain helped drain the wastewater to Kiełbaśnicza Street where there was a municipal gutter, which drained sewage to the Odra River. The deposit in the yard was mainly sand and contained no litter. A readily observable feature of the backyard was its cleanliness, which set it apart from other plots investigated in Wrocław. There was no evidence for the intentional storage of waste. During the 14th century, concern for sanitation in the Market Square plot is confirmed by the construction of a brick-lined cesspit, the first in Wrocław. Around 1350 the plot underwent a major transformation, both the house and the yard. The ditch was filled in and the entire surface covered with a walkway of rough planks. Similar walkways were identified in other plots, both in the Market Square and other parts of the town. They usually covered a part of the yard or only the paths, facilitating movement over a muddy surface (Piekalski, Płonka and Wiśniewski 1991, 235–236; Guszpit and Wiśniewski 2002, 187–189, 202–203, Fig. 167; Konczewski et al. 2010, Fig. 3).

Much more consistent with the 'zone' model is plots at Nos. 10–11 Więzienna Street, so far the most fully analysed and published of the Wrocław parcels (Buśko and Piekalski 1999). At the back of a timber urban domestic building evidence of production activity was discovered, mainly tanning, but also

Fig. 46. Wrocław, Market Square. Northern area, evolution of development and transformation of plots: A – 13th century; B – 15th century; C – 16th century; a –13th century masonry; b – porch; c –14th- mid–15th century masonry; d – masonry from the second half of the 15th-first half of the 16th century. Lasota 2002

later stages of leatherworking, documented by an impressive quantity of trimming waste. Traces of tanneries in the backyard have surfaced elsewhere in Wrocław, mainly in the Odra riverbank area, but also by the south-eastern section of the inner moat (Konczewski et al. 2010, 313; Konczewski 2007, 81). In various places in the town, plots were the site of bone and antler working on a commercial scale (Jaworski 1999, 2002). Based only on written sources, some outlying plots have been linked with

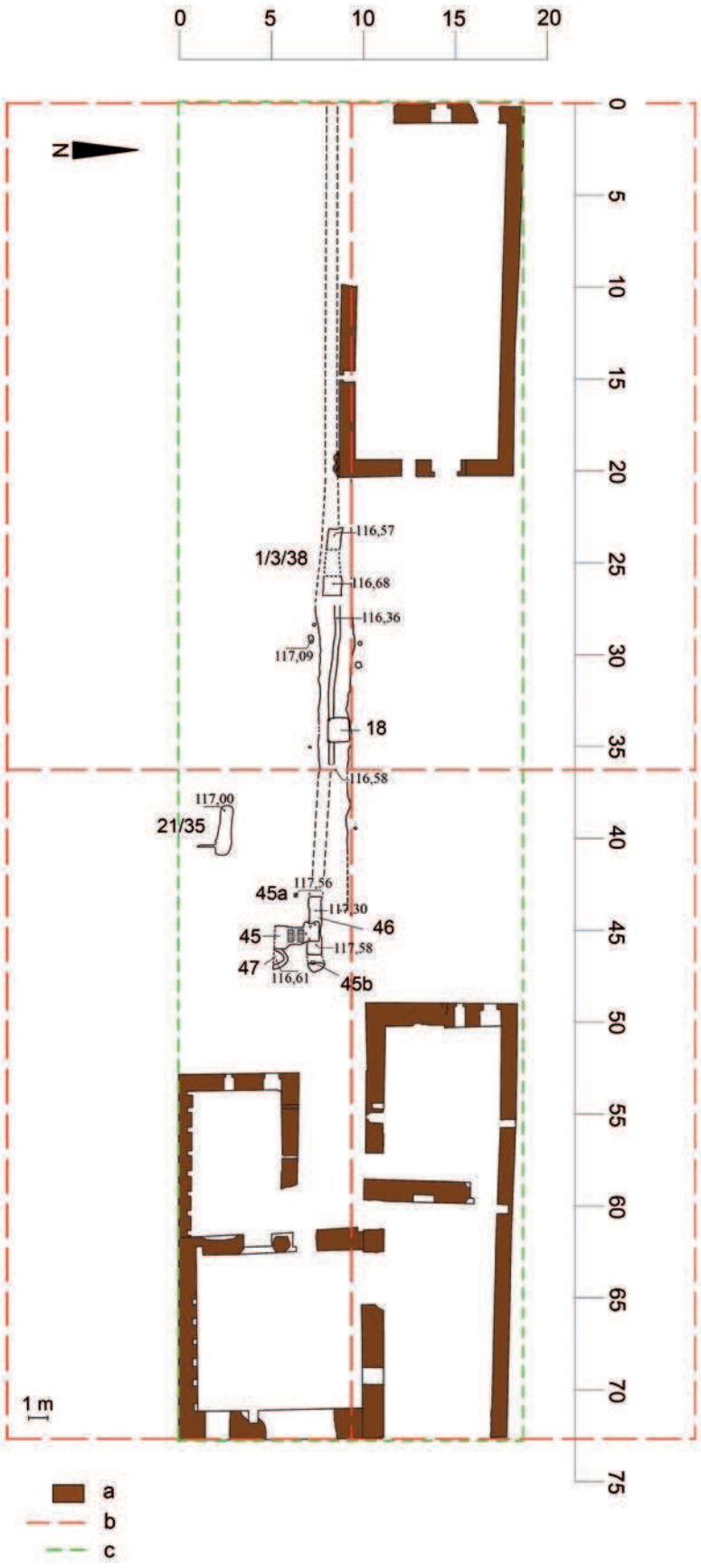

Fig. 47. Wrocław, No. 6 Rynek – No. 5 Kiełbaśnicza Street. Earliest brick houses; a – 13th century; b – projected layout of the incorporated district; c – modern property boundaries. Drawing Nicole Lenkow

Fig. 48. Wrocław, No. 6 Rynek 6 – No. 5 Kiełbaśnicza Street. Gutter in the yard. Photo. Witold Wierzbicki

weavers who dried their wares by spreading them over a large surface (Goliński 1997, 409; Jastrzębski, Piekalski and Wysocka 2001, 335–341). In almost all of the investigated plots evidence was found of various sanitary constructions ranging from unlined pits to well made, periodically emptied, cesspits with walls lined with rough planks. They appear during the late 13th century indicating the increasingly marked sanitary function of the backyards. Apart from the cesspits, this is evidenced by the accumulation of rubbish deposits. Presumably, with the increasing pollution of the backyards the sinking of wells in this area was discontinued. During the 14th century, the water supply function was taken over by the municipal water mains (Buśko 1995; Piekalski 2004, 347–348). Rear buildings were an infrequent feature during the 13th century. To-date they are best confirmed at Nos. 10–11 Więzienna Street, and with a lower frequency, in the south-eastern district of the town (Konczewski 2007, 57–58). New elements observed during the 14th century are buildings that we can describe as the back wings of urban domestic buildings, or outbuildings (Chorowska 1994, 30–33; Chorowska et al. 2012, 70–71). To-date, one zone of the Wrocław plot from the list proposed by researchers not confirmed by the archaeological method is gardens or areas of greenery (zone V). This, however, does not mean that they did not exist. Using the Weiner's plan from 1562, we can say that also during the early modern period when the urban environment had become more crowded, we find small areas of greenery in the regularly planned inner town, and everywhere between the inner and the outer line of fortifications.

The study of burgage plots in Krakow is conditioned by the nature of source evidence. Firstly, we

know that plots were definitely laid out in the wake of the incorporation privilege of 1257. The size of a full plot (*ganzen hof*) in Krakow was 36 × 72 ells (72 × 144 feet), reconstructed by Władysław Grabski as 21.1 × 42.2 m (Grabski 1961, 99). We also know the amount of rent charged for a full plot by the decision of the city council of 1385, thus from a period when plot size was anything but uniform (KD Krakowa, no. 277). The full plot was used at this time as a calculation module. Full rent was collected from plots in the Main Market Square, plots situated between the square and the first street intersection were taxed at 2/3's of this rate, while those found even farther away – a half of the rate. It should be stressed that these zones dictated the tax rate but not the plot size. The actual amount of the payment was calculated depending on the size of the parcel (Grabski 1968, 190; Jamroz 1983, 40–42; Schich 1993, 99–100).

The highly speculative concept, established in older publications on the division of urban blocks into twelve plots, seems no longer tenable (Borowiejska-Birkenmajerowa 1975, 113). Progress made over recent decades in archaeological-architectural studies of townhouse interiors has led to the conclusion that each block contained eight full plots (Łukacz 1999, 2010, 79). The distribution of plots within residential blocks varied depending on their position in the structure of the town. The established rule was to arrange the plots with their narrow side to the marketplace or the main street. Marek Łukacz distinguished not less than six possible patterns of incorporation plots within a residential block (1999, 97, 2010, 79).

A small number of full plots had their boundaries fixed during the late 13th or early 14th century by masonry houses that occupied their entire front end. This is most evident in town houses at Nos. 47 Rynek and 35 Rynek on the main Market Square, on the corner with Szczepańska Street where the palace 'Pod Krzysztofory' is today (Łukacz 2010, 79; Sławiński 2010, 85). In newer reference publications, parcels of this type are viewed as elite, therefore non-typical, indicating the very early splitting of the incorporation period *ganzen hof*. The division of plots into two was, from the outset, sufficiently widespread to prompt some researchers to treat half a parcel as the most frequently used module (Łukacz 2010, 77; Sławiński 2010, 85–86). This is supported by the results of the investigation of townhouse cellars as well as by the written record. From 1302, we have a reference to the division of a *ganzen hof* into two. From later documentary evidence, we know of division into quarters, and irregular parts too. Property

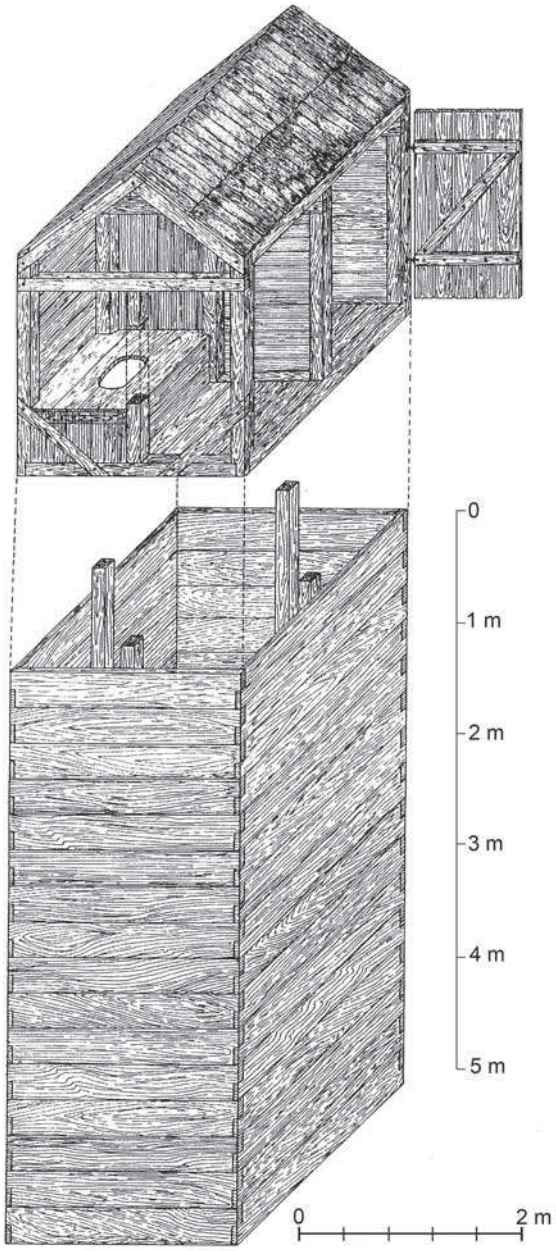

Fig. 49. Krakow, 24 Gołębia Street, trial reconstruction of a cesspit. Niemiec 2007

divisions do not always find reflection in the actual structure of the built-up area. We know, for instance, of a room that was divided into two (Grabski 1961, 92, 1968, 190).

The example of Krakow shows that it is not safe to assume, as is now common practice that plots laid out following the incorporation were of equal size. This assumption disregards social and financial differences among the colonists. It is with good reason that researchers of Krakow have described the full plot as modular thus, the tool of the surveyor, but also

of the town headman (*Vogt*), the collector of various taxes. The widespread division into half-plots, completed prior to the construction of masonry houses, suggests that this was the plot size and the tax levied upon it that suited the townspeople of Krakow best. The full plot, regardless of whether it was actually laid out, proved to be unrealistic even prior to the construction of the stone houses which would fossilize its boundaries.

The understanding of the organization of the area of the plot behind the urban domestic house in Krakow is rather modest. Analysis of the earliest masonry buildings leads to the conclusion that backyards were accessed from the street through a passageway having a width of about 2.6 – 3.8 m. During the later Middle Ages, these passages were walled in (Łukacz 2010, 84). There was ancillary buildings of light construction as well as sanitary facilities – unlined cesspits, or timber-lined cesspool shafts in the yard. More data is available from the area of the later-day university district (Fig. 49) investigated by Dariusz Niemiec (2007, 90). Similar to other towns, cesspits were used as universal rubbish dumps and have yielded a rich harvest of small finds (Myszka 2002, 54).