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ROAST IT AND SAVE THE JUICE! MEDIEVAL CERAMIC DRIPPING POTS FROM GDAŃSK

Abstract

Many aspects of medieval cuisine may be identified through material sources discovered during the archaeological investigations, one of which is the use of spit-roasting equipment, particularly ceramic dripping pots. The paper presents the largest collection of such finds, comprising 133 artefacts from Gdańsk discovered during excavations carried out at 3 Maja and Sukiennicza Streets. Although some examples from this city have already been mentioned in literature, they have never been studied in a wider context.

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Introduction

A spit-roast was usually not an elaborate piece of equipment, and its main advantage was its portability. In its most basic form, it potentially required just a single point of support for the spit, while its other end could be manually adjusted (Fig. 1:1).1 In the Middle Ages, wooden, brick, and metal stands with adjustments were also used (Fig. 1:2-3). The spit-roasts could also have had symmetrical supports on both sides or several support points on one side to allow for changing the height of the spit above the fire.² In the modern period, more elaborate, multi-level stands were also developed (Figs. 1:3 and 3:2). As a rule, spit-roasts were placed near the fire – and not directly over fire – to prevent the meat from smoking and to facilitate the dripping of meat juice.3

From the archaeological perspective, there are very few studies on medieval roasting equipment (Fig. 2), presumably due to potential misidentification of finds, including partly preserved elements, such as iron spit supports or bars. The research carried out to date includes interdisciplinary studies on the artefacts from the excavations in Norwich, East England,⁴ which have resulted in the identification of many medieval metal artefacts, including portable spit-roasting equipment (Fig. 2:2).⁵ Brick stands (Fig. 2:1), known from the Netherlands,⁶ Germany,⁷ Poland⁸ and Czechia,⁹ are somewhat better known, but their use seems to be limited to specific locations rather than widely spread in town areas.¹⁰ In Gdańsk, neither metal nor brick spit supports have been identified thus far.

KEYWORDS

- Gdańsk
- archaeology
- Middle Ages
- · dripping pots
- ceramics

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¹ Heidinga and Smink 1982, 63-82.

² Heidinga and Smink 1982, 63-82; Carter et al. 1985, 82.

³ Heidinga and Smink 1982, 63-82.

⁴ Atkin et al. 1985, 56, 61, 63; Carter et al. 1985, 82.

⁵ Atkin et al. 1985, 56, 61, 63.

⁶ Heidinga and Smink 1982, 63-82.

 $^{^7}$ Lung 1956, 366-367; Erdmann 1992; Kluttig-Altmann 2015, 42.

⁸ Nawrolski 1990; Sulkowska 2009, 16-18.

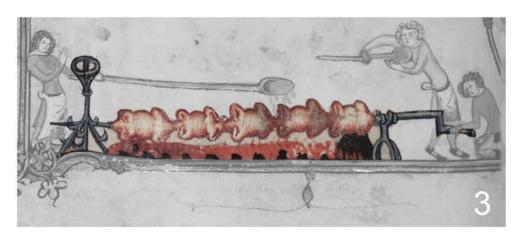
⁹ Cymbalak and Dejmal 2015.

¹⁰ Kluttig-Altmann 2015, 42.

Fig. 1. Depictions of spit-roasting (1-3). Manuscript Romance of Alexander, Alexander and Dindimus, Li Livres du Graunt Caam, ca. 1400. Bodleian Library MS. Bodl. 264. © Bodleian Library OC.







Other functional utensils were associated with roasting, such as basting spoons used for coating the meat with juice, fire shovels,¹¹ and dripping pots (Fig. 3:1-2).

In this article, the term 'dripping dish' or 'dripping pot' is used to describe the vessel forms from Gdańsk, as it is more accurate than the term 'dripping pan' commonly used in British literature. Indeed, the name 'dripping pans' refers to locally made flat ceramic forms that can be compared to 'pans,' even though British historical sources described these dishes as 'dripping pots'. ¹² Furthermore, the

Medieval dripping wares may have differed in shape but usually had distinctive common attributes. They were long, narrow, flat containers with one or two handles and pouring lip on one or both sides. ¹⁵ Some of them may have had small stands ¹⁶ attached to the bottom part (Fig. 2:3). They were made of clay or metal. Dripping containers were produced in Western Europe from at least the

French, Dutch, and Flemish names of such vessels appear to be the most accurate for their purpose: *vet-vanger*¹³ and *lèchefrite*. ¹⁴

¹¹ Atkin et al. 1985, 56.

¹² Moorhouse 1981, 115.

¹³ Bartels 1999, 110; De Groote 2018, 147-149.

¹⁴ Horry 2015, 48, 872.

¹⁵ Moorhouse 1981, 115; Bartels 1999, 110.

¹⁶ Bartels 1999, 729.

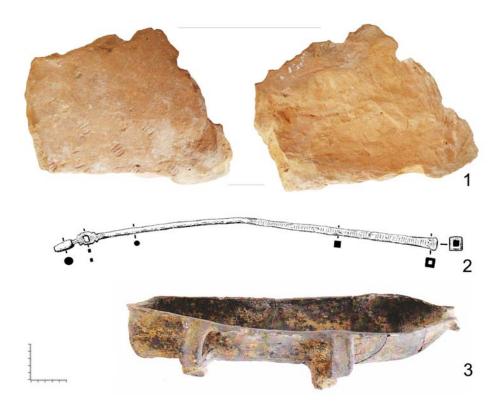


Fig. 2. Archaeological finds: 1 – Spit brick support from Barczewo (PL); 2011. Photo: K. Szczepanowska; 2 – Iron spit from Norwich. Source: Atkin and Evans Margeson 1985, 61; 3 – Dripping pot from Gdańsk. Source: Kościński 2021, 110; © Archaeological Museum in Gdańsk.

13th century.¹⁷ Finds dated to this period were discovered in the Netherlands,18 Flanders,19 and Great Britain.20 This type of equipment is depicted in 14th-century iconography, for instance, on the drawings in the Book of Hours, Use of Maastricht ('The Maastricht Hours') (British Library, Stowe MS 17, folio 176 r) (Fig. 3:1) and The Hours of Catherine of Cleves, ca. 1440.21 Dripping pots frequently occurred in the 14th and 15th centuries in Sweden,22 Denmark,²³ Germany,²⁴ Netherlands,²⁵ Great Britain,²⁶ France,²⁷ and Poland (Fig. 4). Medieval dripping dishes were found mainly within the historic city areas. This also applies to finds from the territory of Poland, including those discovered in Kołobrzeg,²⁸ Puck,²⁹ Elblag,³⁰ Wrocław,³¹ Brzeg,³² Kraków,³³ and Warsaw³⁴ (Fig. 4). They are dated between late 13th-early 14th,35

¹⁷ Vince 1985, 46, 58, 64-65; Bartels 1999, 110; De Groote 2014, 274-275.

- ¹⁸ Brujn 1979, 71; Bartels 1999, 110.
- ¹⁹ De Groote 2018, 147-149.
- ²⁰ Vince 1985, 46, 58, 64-65.
- ²¹ Carter et al. 1985, 82.
- ²² Wahlöö 1976, fig. 281-284.
- ²³ Majantie and Muhonen 2007, 201.
- ²⁴ Heege 1995, 41; Gaimster 2006, 246.
- ²⁵ Bartels 1999, 729.
- ²⁶ Moorhouse 1981, 115; Atkin et al. 1985, 41.
- ²⁷ Ravoire 2006, 194.
- ²⁸ Rębkowski 1992; Rębkowski 1995, 55-56, 70-71.
- ²⁹ Starski 2016, 76, 172-173.
- ³⁰ Nawrolska 2014, 109-111.
- 31 Szwed 2004, 370.
- 32 Rodak 2017, 165.
- 33 Wałowy 1979, 87.
- ³⁴ Kruppé 1967, 180-181.
- 35 Rębkowski 1995, 55-56, 70-71.

and 16th century.³⁶ Some published examples from Poland were misidentified as tripods. Furthermore, there are several artefacts from the published excavations from Gdańsk (Fig. 4), in Grząska Street³⁷, Szklary³⁸, and Długi Targ-Powroźnicza³⁹, and previously unpublished finds from Św. Ducha and Świętojańska Streets (Fig. 5). They are all dated to the period between the 14th and 16th centuries. All of the discussed finds were found in cesspits,⁴⁰ which proves that they were used at homes in the area of the Main Town (historic *Rechtstadt*). The low percentage of archaeological finds of this type might be caused by their misidentification, as mentioned above, possibly as building materials or half-cylindrical stove tiles, due to the material of which they were made.

CERAMIC DRIPPING POTS FROM GDAŃSK

The analysed assemblages of finds were excavated at two archaeological sites located at number 4, 3 Maja Street (years 2011 and 2024) and number 19a, Sukiennicza Street (2018/2019) in Gdańsk (Fig. 4).⁴¹ In both cases, the ceramic forms have survived only in fragments (Fig. 6). Nonetheless, the total number of 133 fragments (82 minimum number of vessels hereinafter as MNV) allows us to imagine the scale on which these vessels were used (Fig. 6).

³⁶ Wałowy 1979, 87.

³⁷ Kościński 2021, 110

³⁸ Trzeciecka and Trzeciecki 2002,

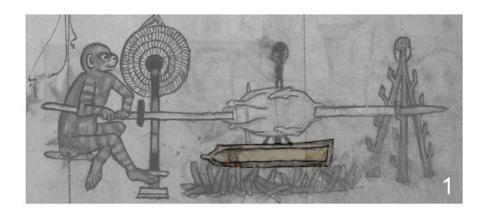
³⁹ Starski 2022, 182, 189.

⁴⁰ Dąbal 2018, 65-70.

⁴¹ Kocińska et al. 2021, 295-303.

Fig 3. Depictions of spitroasting:

1 – 14th century illustration.
Stowe MS 17, folio 176 r.,
Book of Hours, Use
of Maastricht
('The Maastricht Hours').
Approved license by the
British Library;
2 – 'Kitchen interior' by
David Teniers the Younger,
1644. © Mauritshuis OC.





Both assemblages came from locations with similar archaeological contexts. At 19a Sukiennicza Street, 58% of finds were acquired from the levelling layers deposited after the Teutonic Order's castle was abandoned in the year 1454, and the area remained unoccupied. The finds include ceramics (6298 fragments) dated to the late 15th and early 16th centuries, among them redware, greyware, Siegburg, Waldenburg, and early Raeren stoneware, as well as Spanish lusterware. Further finds (42%) were deposited in the levelling layers from the Early Modern period with the archaeological material generally dated to the 17th to 19th centuries, also accompanied by numerous finds dated to the Middle Ages.

The archaeological excavations at 3 Maja Street no. 4 were conducted in two campaigns in the years 2011 and 2024. During the first season, only 25% of the dripping pots were acquired from levelling layers dated mostly to the end of the 15th-beginning of the 16th century based on the common, chronologically correlated materials, including pottery (420 fragments: redware, greyware, Siegburg, and early Raeren stoneware). The larger

part of the assemblage (75%) was obtained from the modern period levelling layers and 18th-century refuse dump. The second excavation season provided a very coherent context for the 77% of the dripping pots analysed in this paper, since the pottery found in the levelling layers included redware, greyware, Siegburg, Waldenburg, Langerwehe, and early Raeren stoneware (2396 fragments) dated to the end of 15th-first quarter of 16th century, which the remaining finds (23%) were excavated from a layer of debris and were accompanied by medieval finds. According to their archaeological contexts, the dripping pots from the site at 3 Maja Street no. 4 are secondary deposits.

In both cases (3 Maja and Sukiennicza St.), the correlated finds are typical of artefacts used by town dwellers,⁴² although at 19a Sukiennicza Street, the artefacts that accompanied the dripping pots are more differentiated, e.g., in terms of the varieties of redware forms and the high percentage of stoneware and metal finds.⁴³ In this case, the

⁴² Kocińska et al. 2021, 295-303.

⁴³ Kocińska et al. 2021, 295-303.

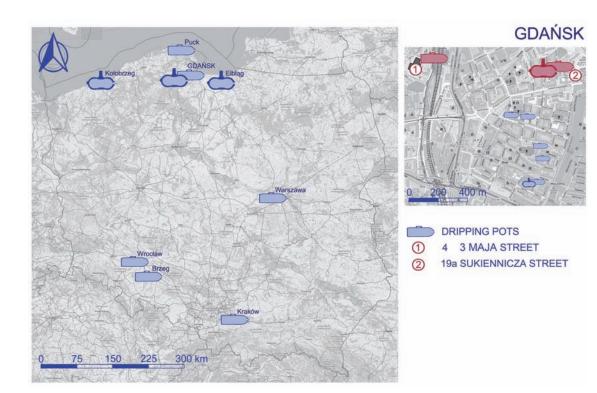


Fig. 4. Dripping pots
– finds from Poland,
including finds from
Gdańsk. Graphic design:
J. Dąbal.

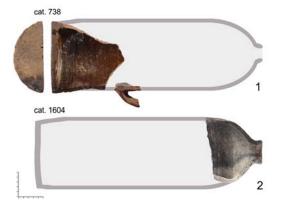
dripping pots may have been associated with the inhabitants of the medieval Main Town (his. *Rechtstadt*), particularly their waste or building activity. In the case of 3 Maja Street no. 4, the secondary deposit of dripping pots is accompanied by a more humble assemblage (although still typical of the material culture of the town). Here, metal objects are less frequent but still representative, e.g., taps and book fittings. These artefacts are probably associated with waste (pottery production and metal casting) rather than with the building activity of the craftsmen and merchants from the Old Town (historic *Altstadt*).

CHARACTERISTICS OF THE FINDS

The assemblage discussed in this paper comprises 133 fragments from both above-mentioned excavations sites, with the minimum number of vessels being 82 (Fig. 6). Although the overall state of preservation (as entire forms) is poor, their interpretation as parts of dripping pots is undisputed.

Raw material

All vessels represent lead-glazed redware. After the firing process, the fine-grained clays gained a buff or reddish colour (Fig. 7:1-4). In cross-sections, small additions of lighter clay, white medium-sized grains, and organic inclusions are discernible. Fabric structure can be described as compact, with occasional oblong blisters. The dripping dishes were either wheel-turned (129 sherds,



78 MNV) or moulded (4 sherds, 4 MNV) (Fig. 7:10). In some cases, there are visible traces of turning in a form of parallel grooves on the inner surface (Fig. 7:15). The outer side of the vessels is rather smooth (Fig. 7:8-9), sometimes textured with delicate thin grooving (Fig. 7:6) and only a few examples have a bit of a rough exterior (Fig. 7:5). On larger fragments, a single or double line of deep grooves occur on the outer walls (Fig. 7:7), usually near the handle. On the other hand, the moulded forms are made of less compact clays, and their unglazed ridges have chipping on their surface (Fig. 7:10).

All dripping pots are glazed on the inside (Fig. 7:11-15). In the analysed materials, three general colour tones have been distinguished (Fig. 8). The largest group comprises wares covered with reddish glaze (78%). This is also the most varied group containing many shades and taints, due to natural or intentional inclusions or firing conditions.

Fig. 5. Dripping pots from Gdańsk: 1 –7 Świętojańska Street; 2 – 68 Św. Ducha Street.
Photo: J. Dabal.

Fig. 6. Gdańsk, 3 Maja Street no. 4, and 19a Sukiennicza Street. Frequency of dripping pots based on their state of preservation.

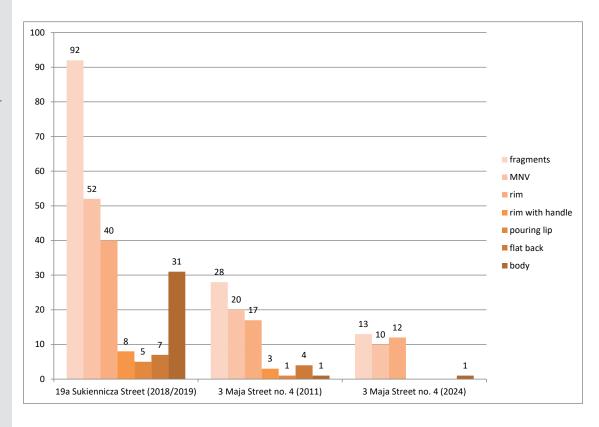
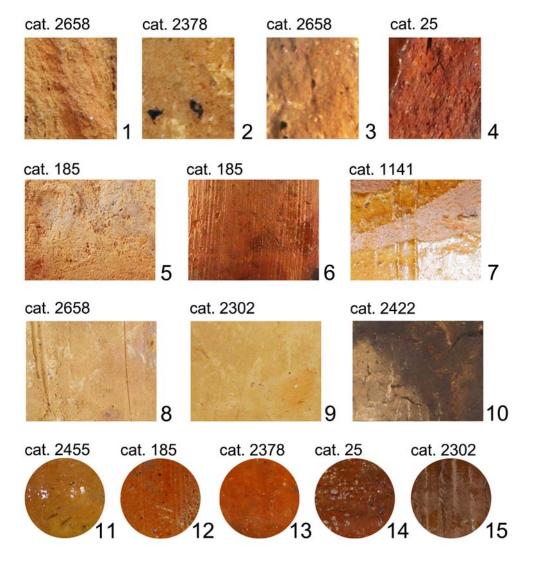


Fig. 7. Gdańsk, 3 Maja Street no. 4, and 19a Sukiennicza Street. Dripping pots – raw material. Photo: J. Dąbal.



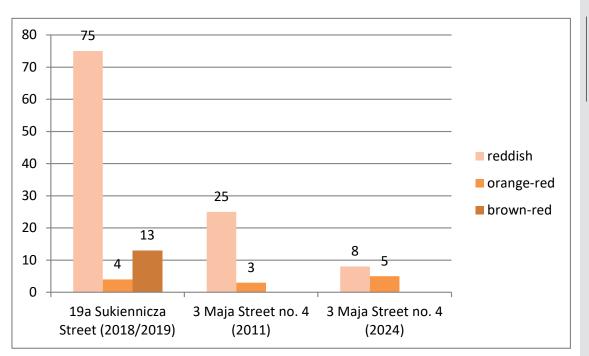


Fig. 8. Gdańsk, 3 Maja Street no. 4, and 19a Sukiennicza Street. Frequency of dripping pots based on the colour of glaze.

The next group (8% of shards) includes vessels with orange-red glaze, where the coat of glaze is usually thick and of very good quality. In this case, colour tones are less varied than in the other groups. The last group of glazed containers, which were discovered only at 19a Sukiennicza Street site, includes vessels covered with brown-red glaze (14%) of varied quality and colour tones. On most vessels, the layer of glaze is thin, and only a few of them had a noticeable thick, fine brown coating.

Forms

The analysed material is very fragmented; nonetheless, it was possible to distinguish two main groups of forms (Figs. 9 and 13). The largest one (129 sherds, 78 MNV) comprises half-cylindrical forms with flat endings (Fig. 9:4), sometimes with edges cut aslant (Figs. 9:1-3 and 10), and pouring lips located on the opposite side (Fig. 9). While the thickness of walls ranges from 7-8 mm to 17-18 mm (Fig. 11), 10-11 mm on average – and the most common vessels in the discussed assemblage are those with walls about 10 to 11 mm thick. The width of dripping pots ranges between 14 and 18.4 cm, while their height ranges between 6.2 and 8.2 cm (Fig. 11:1-4). The most numerous forms in the assemblage are vessels 14-15 cm wide and 6.5-7.5 cm high (preserved full metric parameters: w. 14.5 cm, h. 6.2 cm; w. 14 cm. h. 5.8; w. 15.7 cm, h. 6.6 cm; w. 15.2 cm, h. 7 cm; w. 15.6 cm, h. 6.7 cm; w. 18.4 cm, h. 8.2 cm). It has been noted that the doubled height value is usually about 2 cm lower than the width.⁴⁴ The length of the dripping pots was not measurable due

to their state of preservation. Given the metric data of fully preserved⁴⁵ containers, the probable length of dishes of about 18 cm width was equal to 42 cm, and in the case of other vessels, it was probably a bit smaller, ranging between 33 and 36 cm.46 All dripping pots of that type had one (Fig. 12:1-2) or two handles (Fig. 12:3-4), while no traces of additional stands were registered. All the handles were horizontal, 5 to 10 cm long. They were placed halfway along the length of the vessel, symmetrically in the case of pairs, and their cross-sections vary. One handle stands out due to its decorative form (Fig. 12:3). The common technical feature of handles is that they are slightly bent down towards the bottom. Perhaps this was unintentional and happened during the firing process, but it could also have been a deliberate shape. Some vessels have handles attached more than 3 cm under the rim (almost near the bottom) - in these cases, the handles could also play the role of stands. It is also worth noticing that the side with the handle is always a bit heavier and goes down a little. The pouring lips are barely preserved. Only one is measurable – its outer diameter is 7 cm, and the width of the inner pouring part equals 4.2 cm, with the rim slightly bent outwards and thickened.

Vessels assigned to the second group of forms cannot be comprehensively characterised due to their poor state of preservation. Thus the sherds were classified as one general group (4 sherds, 4 MNV), although they probably represented two forms.⁴⁷ These

⁴⁴ Only one vessel has different proportion w. 15 cm, h. 7 cm.

⁴⁵ Majantie and Muhonen 2007, 201; Kościński 2021, 110.

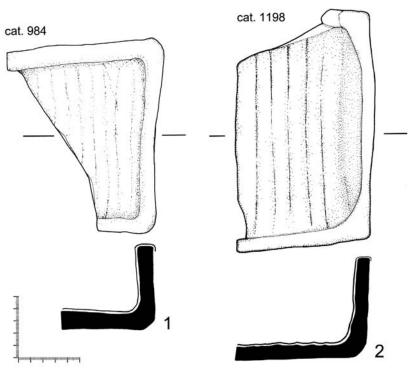
 $^{^{\}rm 46}$ According to proportions of the wholly preserved examples.

⁴⁷ Bartels 1999, 729; Ravoire 2006, 194.

Fig. 9. Gdańsk, 3 Maja Street no. 4, and 19a Sukiennicza Street. Dripping pots. Photo: J. Dąbal.



Fig. 10. Gdańsk, 3 Maja Street no. 4. Dripping pots. Drawn: A. Dmitruczuk.



are large, flat, oval or semi-oval pots with a 10 cm-long strip handle (or 2 handles), and a pouring lip. They could have different outlines of rims, ⁴⁸ hence,

the schematic illustration shows only a probable appearance of the dish (Fig. 13). Three pots have a single or double groove along the edge (Fig. 13:1-3). Vessels in this group were moulded. Their walls are about 10 to 11 mm thick, and their upper parts

⁴⁸ Klijn 1995, 140-142.

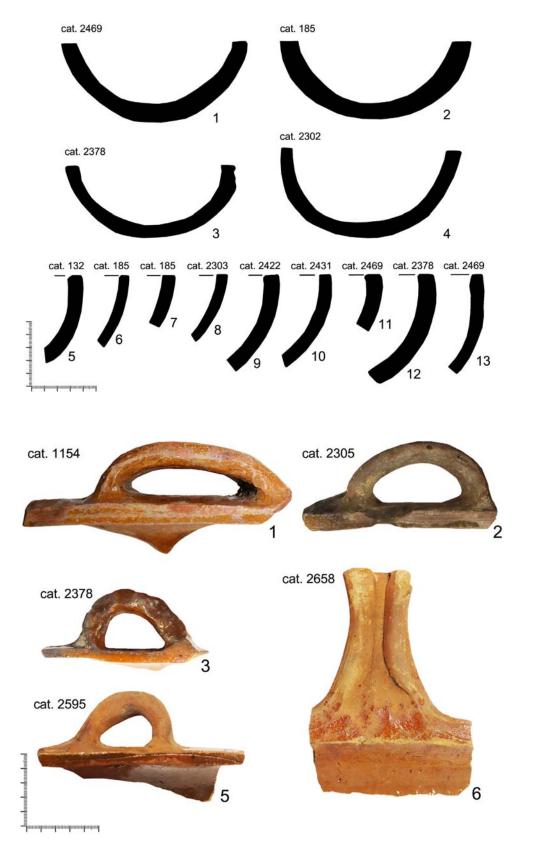


Fig. 11. Gdańsk, 3 Maja Street no. 4, and 19a Sukiennicza Street. Dripping pots. Drawn: J. Dąbal.

Fig. 12. Gdańsk, 3 Maja Street no. 4, and 19a Sukiennicza Street. Dripping pots. Photo: J. Dąbal.

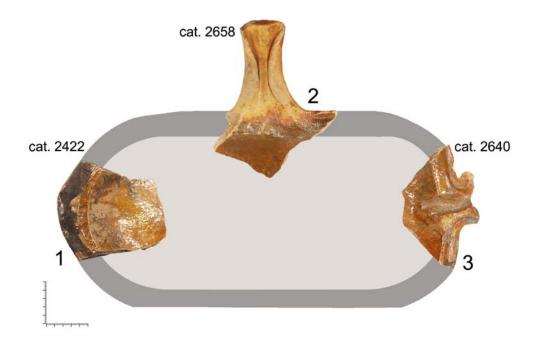
expand to 15-18 mm, with height exceeding 6 cm (the largest preserved part). The width of the pouring lip equals 6.4 cm on the outside, while the deep, inner pouring channel is 2 cm wide. It should be stressed here that the part of the body and the strip handle are probably parts of the same type of oval dish, but they were excavated in different contexts

(layer: 508, layer: 2). No further metric analyses were possible.

Traces of use

Several types of traces of use were registered on the analysed dripping pots (Fig. 14). They are the effects of direct contact with the open fire, handling the

Fig. 13. Gdańsk, 19a Sukiennicza Street. Dripping pots. Photo: J. Dabal.



dishes after roasting, and storing. Soot is found on the external surfaces and usually placed asymmetrically – more frequently on the side opposite to the handle and on the flat back of the vessel (Fig. 15:1-3).⁴⁹ Almost all sherds bear traces of fire (82%). Remains of burned organic matter are preserved on 5% of the total number of fragments (Fig. 15:6), mainly on the outside, near the rim. Contact with open fire could cause damage to the glaze on the inner surface – such 'bubbles' (Figs. 7:14 and 15:5) are not frequent (10%) but appear in overfired parts of the wares (especially in the back). Traces registered on wares suggest that they were close to the fire, lined up neatly. Moreover, they were usually placed with one edge slightly raised.

Another type of trace may be associated with removing the contents of pots after roasting. Potentially they were designed to collect the meat dripping and pour it into another container. Slight scratches (Fig. 15:4-5) may be associated with attempts to remove the solidified fat with cutlery when the juice was left in the dish and not poured into another container. That is not the common feature, only 9% of sherds have little mechanical scratches inside, usually on the bottom. The second probable interpretation is the use of vessels for purposes other than containers for collecting meat dripping.

The last group of traces might be related to how these containers were stored. The rims of dripping wares are worn (Fig. 12:1). That could be caused by placing them upside down on a rough surface. They are relatively heavy, so it is possible that the edges were scratched when dishes were put aside and retrieved for use. This type of use-wear traces was registered on about 28% of rim pieces, which suggests that these vessels were usually cleaned and stored empty while not used.

CHRONOLOGY AND PROVENANCE

The chronology of the analysed secondary-deposited wares may not be very precise. However, 53% of vessels in the assemblage were accompanied by a large group of finds with a relatively good chronology. In the case of both sites (3 Maja Street no. 4 and 19a Sukiennicza Street), they can be dated to the period between the end of the 15th century and the first quarter of the 16th century. The rest (47%) co-occurred with artefacts dated to the early modern period, although there was also a high percentage of late medieval finds.

As already mentioned, even though we have some publications cited above, medieval dripping pots are not very well recognised. Although there are very accurate studies of workshops where local forms were produced, 50 there is no wider synthesis of their occurrence and geographical distribution. This is due to their low frequency in assemblages or a relatively high degree of fragmentation, which hinders the correct attribution of single sherds. In Poland, flat oval-shaped dripping pots occur in contexts dated to the period from the end of the 13th century up to the beginning of the 14th century. In general, they are interpreted as probable imports

⁴⁹ In the case of semi-cylindrical forms, the second one bears fire traces on the side without pouring lip, no further observation were possible.

⁵⁰ Brujn 1979, 71; Vince 1985 46, 58, 64-65.

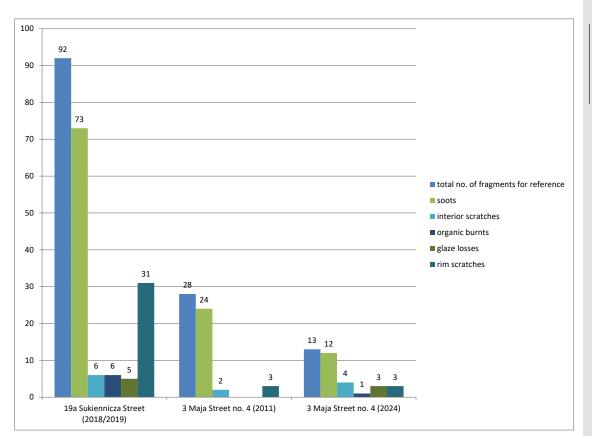


Fig. 14. Gdańsk, 3 Maja Street no. 4, and 19a Sukiennicza Street. Frequency of dripping pots based on traces of use.

from the Netherlands.51 Semi-cylindrical forms are not common in Europe. Outside Poland, analogous vessels have been discovered in Lund⁵² and Stockholm,⁵³ and are dated roughly to the 15th-16th century. They are attributed to Dutch workshops. According to the analyses of the technological characteristics of the materials from the sites at 3 Maja Street no. 4 and 19a Sukiennicza Street, vessels with fine orange-red and reddish glazes were undoubtedly produced in the Netherlands, probably in workshops located in the northern part of the country (Figs. 7:11-13 and 12:1).⁵⁴ Although features of the raw material are common to Dutch pottery, the semi--cylindrical forms are not typical of vessels in the local Dutch market. This indicates that they were most likely made for export. However, further research and more data are needed before we can draw definitive conclusions. The analysed vessels from 3 Maja Street no. 4 and 19a Sukiennicza Street are dated to the late 15th to the first half of the 16th century. At this stage of research on pottery from Gdańsk it is difficult to refer to large data sets, but it is worth emphasising that semi-cylindrical dripping dishes were also locally produced from the late 14th to the early 15th century⁵⁵ (not present in analysed assemblage)

(Fig. 5). They included greywares and unglazed redwares (Fig. 5:2). Furthermore, in the 15th century, redwares covered with low-quality glaze appeared (Fig. 5:1). At this stage of the research, the first indications were put forward that a certain percentage of analysed vessels might have been produced locally in Gdańsk (Figs. 7:14 and 9:4). This applies primarily to narrow pots, 14-15 cm width and up to 7 cm height, rarely 18 cm width and up to 8 cm height, covered with reddish or brownish-red glaze. These vessels may be a continuation of early local products recorded in the first half of the 15th century. Items discussed here are dated generally to the late 15th - early 16th century. At present, it is not possible to clearly answer the question of where the semi-cylindrical forms developed. The wares do not have very elaborate shapes. Although in Gdańsk the same forms were identified as the earlier ones, in the second half of the 15th century and the first half of the 16th century, Dutch products were certainly more attractive in terms of their quality, and were present on the city market.

The second group of oval flat dishes is more difficult to date due to their poor state of preservation. Among the diagnostic features, we should mention single or double grooves on the rims and the shape of pouring lips. Analogous forms occur only in the 15th century (Fig. 13).⁵⁶ The fourth item

⁵¹ Rębkowski 1992; Rębkowski 1995, 55-56, 7071.

⁵² Wahlöö 1976, fig. 281-284.

⁵³ Majantie and Muhonen 2007, 201.

⁵⁴ Bruijn 1979, 69-71; Bartels 1999, 110.

⁵⁵ Kościński 2021, 110.

⁵⁶ De Groote 2014, 275.

Fig. 15. Gdańsk, 19a Sukiennicza Street. Dripping pots – traces of use. Photo: J. Dąbal.



included in the discussed group, the strip handle with flat rim edge, appears to be slightly later and can be dated to the first half of the 16th century (Fig. 12:5).⁵⁷ Oval flat pots can be undoubtedly attributed to Dutch workshops, particularly those located in the Northern Netherlands.⁵⁸

While the research on the chronology of dripping pans is still ongoing, it is possible to formulate some general remarks on their forms and presence in Gdańsk. Based on the current state of research, we can distinguish two types of late medieval forms: semi-cylindrical and flat oval vessels. At present, the semi-cylindrical pans, probably of local origin, can be regarded as the earliest ones, dated to the end of the 14th or beginning of the 15th century. During the 15th century, pots, which are the earliest confirmed Dutch imports, started to appear on the local Gdańsk market - flat oval dripping pans and wide semi-cylindrical vessels. During that period, the local production of semi-cylindrical dripping dishes was continued. Such forms persisted into the 16th century, while the flat ones evolved into deeper, oval vessels with a more modern shape and without decorated top rims.

Conclusion

To sum up, the main use of dripping pots was to collect fat from meat while roasting it on spit. Undoubtedly, they may have been used also for other purposes, especially the flat oval forms. However, traces of use recorded on the inner surfaces of the analysed dishes are very rare and could be caused

by different actions, like extracting solidified fat with cutlery, as mentioned above. The interpretation of dripping pans as vessels for frying fish is not convincing. Firstly, marks left by contact with fire would be different than those registered on the analysed forms. The second argument against such an interpretation can be traced to historical recipes. Although no medieval cookbooks exist in Gdańsk archival sources, medieval English recipes can be used here as a general reference. In this case, recipes concerning fried fish are very rare — fish was usually boiled or roasted. Such cooking methods are also present in the 19th-century recipes from Gdańsk, in which most of the fish dishes are boiled or roasted in an oven.

The appearance of dripping dishes is very meaningful, given the context of medieval cultural changes. These pots are material evidence of changes in the household economy and, partly, a diet. The original French and Dutch vessel names vetvanger and lèchefrite mentioned earlier, as well as the proposed generic English term 'dripping pots,' indicate the new phenomenon in the Middle Ages – further use of the material, in this case, meat drippings. Any fat in medieval times was considered luxurious. In late medieval and early modern times, the fat was processed by tallow chandlers. It was a basic raw material for candles, soaps and other substances for commercial purposes.⁶² The use of fat within medieval households required control over its purchase, consumption and collecting. This

⁵⁷ Klijn 1995, 140.

 $^{^{58}\,\}mathrm{Bruijn}$ 1979, 69-71; Bartels 1999, 110; De Groote 2014, 275.

⁵⁹ Black 2014.

⁶⁰ Black 2014, 58, 70, 103.

⁶¹ Grzyb 2007, 83-92.

⁶² Lowengard 2023, 244-245.

role usually belonged to a senior kitchen staff.⁶³ The fat was distributed with care, so collecting liquid fat was also part of these actions. The solidified fat could have been used as a cold rationed 'good' in daily diet. In medieval times, the presence of 'new' containers for meat dripping in city households was associated with waste rationalisation. It seems to be a common habit in medieval Gdańsk. The dispersion of dripping pots in Gdańsk in their prime usage

context seems to be clear and for now, is restricted to the Main Town. The analysed materials from 3 Maja Street no. 4 and 19a Sukiennicza Street suggest further use of dripping pots in households within the town walls in the 15th and 16th centuries.

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⁶³ Lowengard 2023, 243.

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