

# Colnaburch/Cologne, the Medieval Centre of Power and Economy and its Contacts with the North

## ABSTRACT

In the Carolingian period, Cologne had intensive economic, political, missionary and military relations with the peoples in the North. Archaeologically, several findings are known that reflect these relations. However, given the importance of the city, the material has so far been meagre. Foreign traders – especially of Frisian origin – settled mainly in the harbour district. The exact location of a proper Frisian quarter can only be surmised at present. Raids by Normans, which are mentioned several times in 9<sup>th</sup> century sources, seem to have affected the architectural substance of the town only slightly. However, the Cologne monasteries outside the city walls suffered particularly from robbery, murder, hostage-taking and extortion. Archaeological destruction horizons have not yet been reliably proven despite intensive investigations.

## KEYWORDS

Cologne / Carolingian period / Frisian quarter / Norman raids

The commonly accepted image of the well-traveled, politically connected and often »excessive« Cologne merchant is a product of the high medieval tradition. A good example is the Cologne merchant, Gerhard, whose life the poet Rudolf von Ems (c. 1200–1254) portrayed in »Der guote Gêrhart«. According to this account, Gerhard took 50,000 marks and embarked on a three-year journey by ship on a route that included the land of the Kievan Rus, Livonia, the land of the Prussians, Nineveh, Damascus, Morocco and also Utrecht and London. He was accompanied by experienced sailors and a trusted chaplain. On his journey, Gerhard stocked up on sable furs and silk fabrics, hoping to sell them at a threefold profit<sup>1</sup>. The character of the good Gerhard is based on the Colognian merchant Gerhard Unmaze (before 1145–1198)<sup>2</sup>,

a wealthy merchant who rose to the top of Cologne society through property ownership and lending. Although only a smaller number of Colognian merchants could have been as exceptionally successful as the »excessive« (Unmaze) Gerhard, their number was large: In 1074, over 600 wealthy merchants (*mercatores opulentissimi*) who temporarily left the city due to a conflict with the archbishop were mentioned<sup>3</sup>.

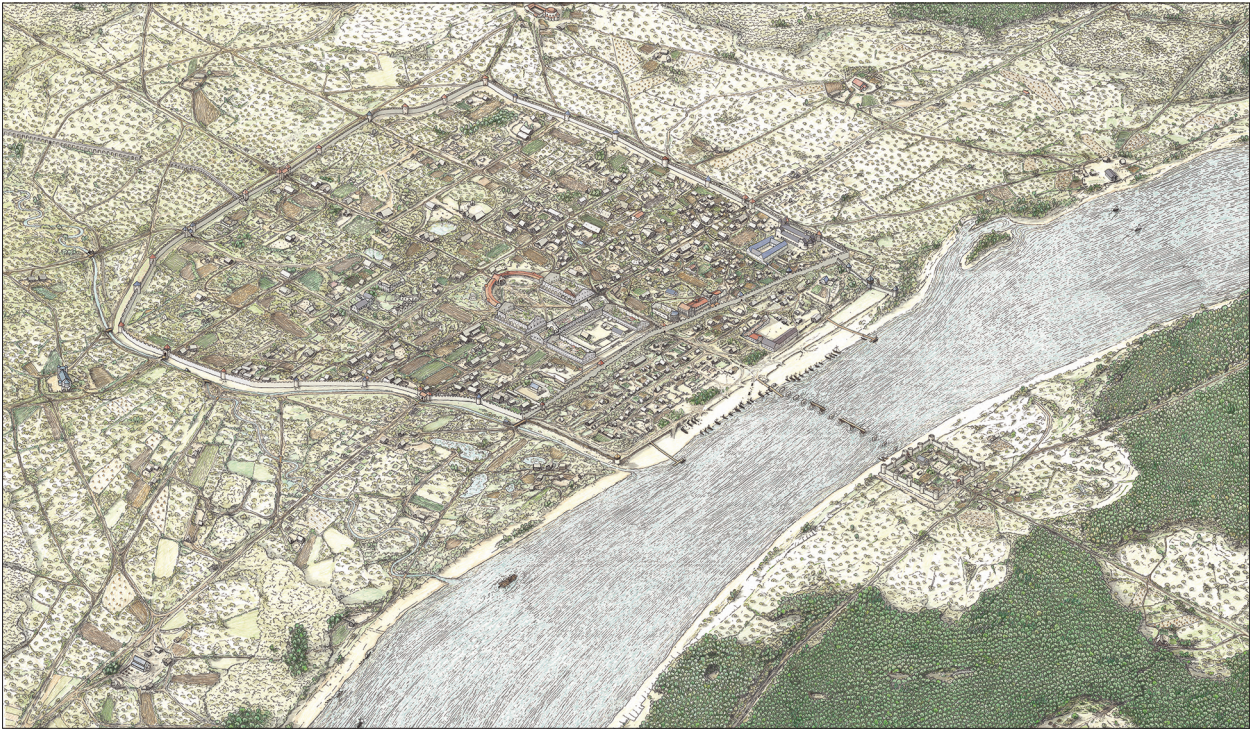
Accordingly, the traffic must have been lively in Cologne's Rhine harbour in the 11<sup>th</sup>/12<sup>th</sup> centuries and trade with countries in the North was a firmly established part of the economy. However, only the 12<sup>th</sup> century written sources that describe Cologne's participation are concrete: In 1157, Henry II of England protected the *homines et cives Colonienses* and their settlement in London<sup>4</sup>. For the pre-existing

1 Haupt 1840, 41–42. 88.

2 Zöller 1993, 334.

3 Hesse/Wattenbach 1892, 168–177.

4 Ennen 1975, 143.



**Fig. 1** Cologne in around 850. – (Map S. Smalle / T. Höltnen, Römisch-Germanisches Museum, Köln).

trade with Scandinavia and the Baltic Sea, the *fraternitas danica*, the Cologne Brotherhood of Danish sailors, which was probably formed in the 12<sup>th</sup> century, was of central importance<sup>5</sup>. One of its members was Wiman de Colonia, who died in Denmark between 1145 and 1170 and is listed in the *Necrologium Lundense*<sup>6</sup>. In Cologne, in turn, people with names like »Normann« or »von Norwegen« are encountered<sup>7</sup>. Gerhard Norman, for example, owned several houses near the Rhine in Rheingasse, Holzmarkt, and Große Witschgasse in around 1200<sup>8</sup>. The journey of the Colognian merchants may have reached the northern edge of what was then the known world: According

to the wonder stories (around 1220) of Cäsarius von Heisterbach, Canon Reinerus of St Andreas commissioned merchants traveling to Norway to obtain a polar bear skin (*pellem ursi albam*) to be placed in front of the altar of St Andreas<sup>9</sup>.

These examples suggest that a substantial export business and network of trade routes existed in Cologne during the Carolingian period, which led to its high medieval prosperity<sup>10</sup>. However, corresponding written sources are missing; therefore, the archaeological evidence that points to Cologne's trade contacts with the North Sea region in the 8<sup>th</sup>/9<sup>th</sup> centuries has yet to be compiled.

## Cologne and the Frisians

In the following, the Colognian finds will be examined for cultural references or for evidence of object migrations from the North, focussing on contacts with the Viking, Anglo-Irish, and mainly Frisian areas. First indications date back to the late Merovingian period. The idea that Cologne was geographically, and thus economically and politically, in a marginal position in the Merovingian period, as it had been in

ancient times is, due to recent archaeological results, seen differently today, as the city was at least temporarily at the centre of political events (fig. 1)<sup>11</sup>. Nevertheless, the neighbourhood was marked by conflicts, especially before the incorporation of Frisia and Saxony into the Frankish empire. In 716, the city was threatened by a Frisian army under Duke Radbod. After the besiegers extorted a large amount of

<sup>5</sup> The Brotherhood or its house is mentioned for the first time in the year 1246: Kellenbenz 1967, 10.

<sup>6</sup> Kellenbenz 1967, 10.

<sup>7</sup> Kellenbenz 1967, 10.

<sup>8</sup> Keussen 1910, vol. 1, 67. 69. 72; vol. 2, 21. 63.

<sup>9</sup> Strange 1851, 129-130.

<sup>10</sup> Ennen 1975, 109.

<sup>11</sup> Müller 2017, 8-11.

money from Plektrudis, the wife of Pepin of Herstal, they returned home<sup>12</sup>.

Another connection to the Frisian peoples is related to Frankish missionising. King Dagobert I (608–639) gifted the castle of Utrecht with its church to the diocese of Cologne around 630, on the condition that the bishop of Cologne, Kunibert (about 600 – about 663), teach the Christian faith to the Frisian people residing there<sup>13</sup>. However, these efforts were not rewarded with much success because, as St Boniface complained in 753, the Colognian bishops had not adequately kept their promise. Through the campaigns of Charles Martel (734) and Charlemagne (785), the Frisians were finally subdued and the church was able to establish itself permanently. From then onwards, Frisia was a permanent part of the Frankish empire, as is reflected in the occupation of the Colognian episcopal chair: The combative Archbishop Gunthar (850–863) probably came from a Frisian noble family<sup>14</sup>.

Bishop Kunibert was also one of the prominent supporters of the Iro-Frankish reform movement. The church of St Clemens (later St Kunibert), built by Kunibert, may have served as a mission base in this context<sup>15</sup>. Pepin of Herstal buried the bodies of the two holy Ewalds (the black and the white Ewald) – Anglo-Saxon missionaries who were killed in Saxony – in the building<sup>16</sup>. Monks from the British Isles were frequently encountered in the city at that time: At the end of the 10<sup>th</sup> century, »Scotts« (Irish monks) were settled at the church of Groß St Martin<sup>17</sup>.

Apart from territorial and religious differences, Frankish merchants along the Rhine and Moselle

carried out lively trade with the Frisian coast. In the middle of the 9<sup>th</sup> century, Wandalbert of Prüm reported on Rhine-shipping Frisian merchants<sup>18</sup>. The written sources from along the river suggest the presence of Frisian merchants and their trading stations in Worms (829), Mainz (886), Duisburg (893) and Xanten<sup>19</sup>. For Cologne itself, there is no information from this time about the presence of Frisians, but it would be odd if this place was left out. Cologne, which the Frisians called Colnaburch<sup>20</sup>, was most probably a key location for trade and cultural exchange between the Rhineland and the North Sea and England.

The most important Frisian trading settlement of the early Middle Ages was Dorestad near Utrecht. The economic relationships between the merchants of Dorestad and the Rhineland are shown by the enormous amounts of Rhenish pottery and millstones from Mayen found in Dorestad. The pottery produced at the Cologne-Bonn Vorgebirge was loaded onto ships for long-distance trade at Cologne's Rhine harbour. The ships followed the known trade routes upstream to the coast and from there to the North and Baltic Seas<sup>21</sup>.

The extent to which trade was carried out by Frisian or Cologne merchants and how they competed with each other cannot be quantified<sup>22</sup>. Exported goods included – in addition to ceramics – wood, wine, wheat, glass, weapons and building materials, such as ancient tuff and valuable spolia<sup>23</sup>. Imported goods included cloth, wool, furs, leather, amber, spices and slaves. Goods from the Orient, such as spices, textiles and jewellery, also reached Cologne through foreign trade.

## Archaeological Finds

Naturally, only a small archaeological residue from organic materials is to be expected from the goods imported to Cologne. This also applies to the preservation of the famous Frisian coats (*pallia fresonica*), which were probably worn by the dignitaries of the city. Although there are some finds made of durable materials, such as metal and bone, that suggest the

exchange of objects with the North, they are not numerous.

They include three brooches that were found during the excavations at the Alter Markt (**fig. 2, c**)<sup>24</sup>. The first example is a silver bracteate with a Christ(?)-portrait<sup>25</sup> in front of a Cross pattée and is dated to the Carolingian period (**fig. 3, 1**)<sup>26</sup>. A corresponding

<sup>12</sup> Müller 2017, 3–4.

<sup>13</sup> Oediger 1978, 21 no. 32.

<sup>14</sup> Ennen 1975, 90.

<sup>15</sup> Müller 1987, 185.

<sup>16</sup> Müller 1987, 187.

<sup>17</sup> Oediger 1978, 167 no. 547.

<sup>18</sup> Wandalbert: Vita et miracula s. Goaris 1887, 370.

<sup>19</sup> Lebecqz 1999, 71.

<sup>20</sup> Old Frisian legal text (Asega-bôk): »Colnaburch hit bi alda tidon Agrip anda alda noma«. Keussen 1910, vol. 1, p. \*46.

<sup>21</sup> Steuer 1987, 129. – On the question of whether the ceramics came to the respective places of discovery as pure tableware or representative

goods, wine containers or as the property of merchants: see Steuer 1987, 138.

<sup>22</sup> This is also followed by logistical constraints, such as the transshipment of cargo from Rhine ships to ocean-going (Frisian) ships: Dietmar/Rakoczy 2002, 30.

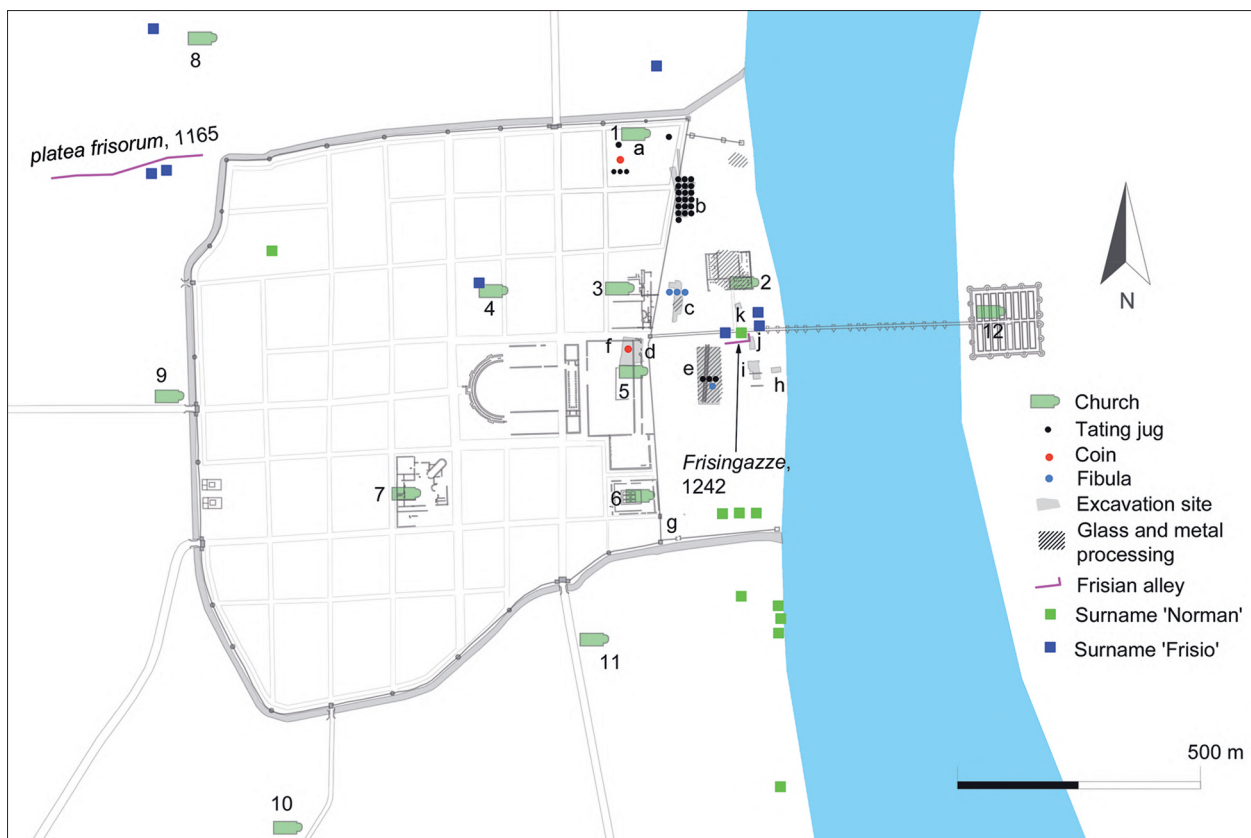
<sup>23</sup> Steuer 1987, 131–183.

<sup>24</sup> Daubner et al. 2005.

<sup>25</sup> Frick 1992–1993, 308.

<sup>26</sup> Report B. Paffgen, Munich. – The depiction resembles the disk-brooch (Heiligenfibel) of Benzingerode (Kr. Wernigerode/DE): Frick 1992–1993, 383 pl. 9, 1.





**Fig. 2** Cologne in the 8<sup>th</sup>/9<sup>th</sup> century: **a** Domhof. – **b** Kurt-Hackenberg-Platz. – **c** Alter Markt. – **d** In der Höhle/Albansviertel. – **e** Heumarkt. – **f** Gülichplatz. – **g** An der Malzmühle (FB1982.15). – **h** Buttermarkt/Frankenwerft (FB1986.026). – **i** Auf dem Rothenberg I (FB1937.009a/b). – **j** Auf dem Rothenberg 7–9 (FB1938.046). – **k** Lintgasse (FB1937.040). – **1** Dom/Cathedral. – **2** Groß St Martin. – **3** St Laurentius. – **4** St Kolumba. – **5** St Alban. – **6** St Maria im Kapitol. – **7** St Cäcilien. – **8** St Gereon. – **9** St Aposteln. – **10** St Pantaleon. – **11** St Georg. – **12** St Urban. – (Map T. Höltken).

parallel exists from Bolsward (Prov. Friesland/NL)<sup>27</sup>. The second piece, a disc brooch – made of a lead or tin alloy – with a central plateau and pearl edge (fig. 3, 3), also has parallels in Frisian finds. However, its dating cannot be securely fixed between the 9<sup>th</sup> and 11<sup>th</sup> centuries<sup>28</sup>. For the third object from the Alter Markt, a double-armed brooch made of a copper alloy with forked ends (fig. 3, 2), no exact parallel can be quoted, but its individual components are encountered in the brooches of the Frisian trading centres, such as Dorestad and Walcheren<sup>29</sup>. A dating to the 8<sup>th</sup> or 9<sup>th</sup> century is quite likely. A bronze brooch from the Gülichplatz (figs 2, f; 3, 4) is dated to the second half or the end of the 9<sup>th</sup> century. Corresponding pieces are known from Haithabu, Domburg on Walcheren and Oost-Souburg<sup>30</sup>.

Among the remarkable finds in Cologne is a pseudo coin fibula with a wide rim of pearl wire imitations, found at the Heumarkt (figs 2, e; 3, 5). The object, with a diameter of 4.3 cm, is cast in lead-tin alloy and bears the left-facing bust of King Otto I (OTTO REX) in the centre<sup>31</sup>. The fibula can therefore not have been created before 936; it was probably not made until after his death in 973. The corresponding fibula type dates to between the 9<sup>th</sup> and 11<sup>th</sup> centuries, with a concentration in the coastal area<sup>32</sup>. A remarkable parallel originates from a settlement near Uitgeest (Prov. North Holland/NL), which was found together with Pingsdorf ceramics. The cast specimen is 3.6 cm in size and has a wide pearl rim; the central coin or pseudo coin has been broken, but the remains of an inscription TOREX are visible and can

<sup>27</sup> Bos 2007–2008, 770 fig. 4 no. 2.7.2.2.

<sup>28</sup> Bos 2007–2008, 720 fig. 4 nos 2.1.2.5. and 2.1.2.6.

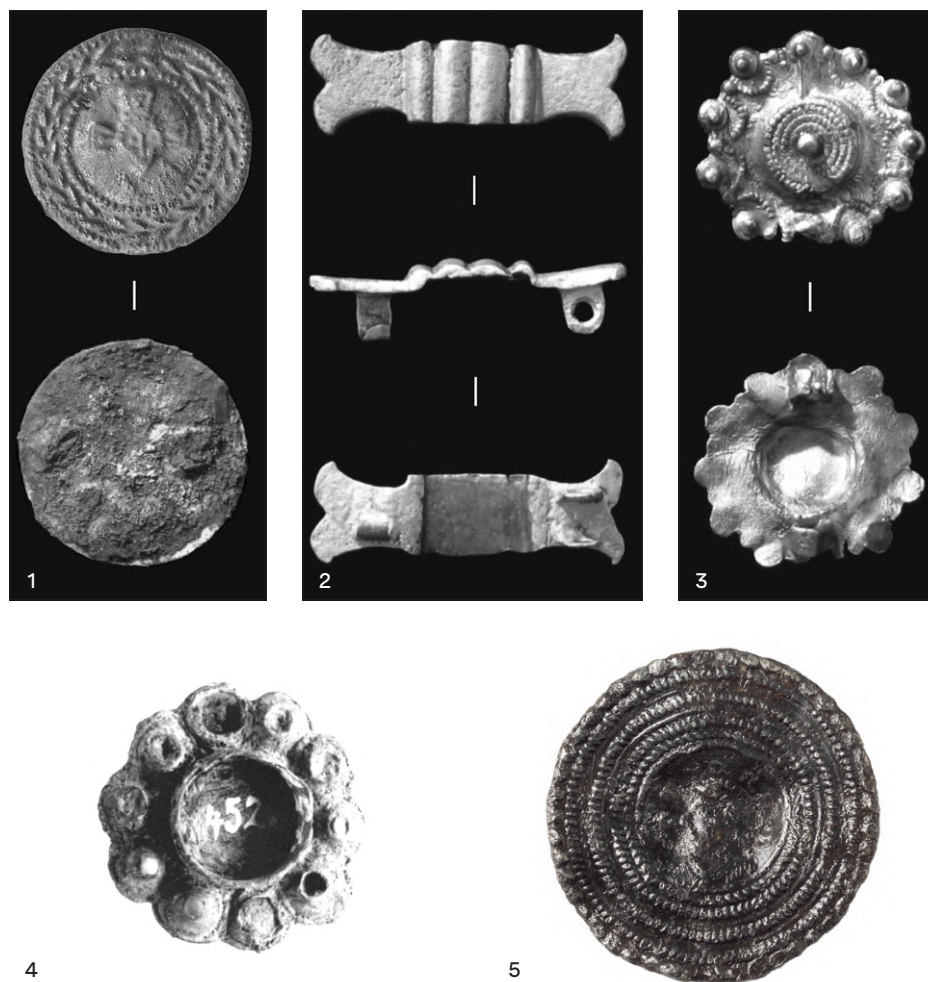
<sup>29</sup> Daubner et al. 2005; Capelle 1976, pls 2–6. – See finds from the Prov. Friesland (NL) with a similarly cross-ridged bow and Cross pattée-shaped arms: Bos 2005–2006, fig. 5 nos 1.5.2.1 and 1.5.2.2 as well as equal-armed brooches with bud-shaped arms: Spiong 2000, 83.

<sup>30</sup> Riemer 2006, 276.

<sup>31</sup> The object originates from the »preliminary survey« (1992–1994), the results of which have so far been presented in a short report: Gechter/Schütte 1995. A correlation with the results of the main campaign (1996–1998) is still pending. However, it is very likely that the location of the brooch can be equated with the first market pavement from the main campaign to be dated shortly after 957: Aten 2001b, 624.

<sup>32</sup> Cf. Schulze-Dörrlamm 1999, 276; Frick 1993, 280. 307; Spiong 2000, 59. 69. 77. 114; Grundwald 2011, 382–383; Bunte 2013, 106.

**Fig. 3** Fibulae: **1-3** Alter Markt. – **4** Gülichplatz. – **5** Heumarkt. – (Photos Römisch-Germanisches Museum, Köln). – Scale 1:1.



now be cited as another example of an [OT]TO REX coin fibula<sup>33</sup>. The brooch from Uitgeest is also made of a lead-tin alloy. While the site of the find can be characterised as a rural settlement of stable houses, the Cologne specimen may have come from a Frisian merchant who was staying in the city<sup>34</sup>.

For the examples mentioned, it remains uncertain whether they are components of Nordic or Frisian clothing that arrived in Cologne with merchants or if they are objects produced in Cologne that were both locally worn and traded downstream on the Rhine. Furthermore, the number of Colognean fibulas is too small to distinguish settlement areas of Frankish and Frisian households. Nevertheless, it is noteworthy that at the Heumarkt – where fibulas were produced – only the disk fibulas, which were common throughout the Frankish empire, have been proven<sup>35</sup>.

A large number of ceramics from the Vorgebirge region were distributed, using the Rhine, to remote areas in the North and Baltic Seas via the port of Cologne<sup>36</sup>. It is therefore not surprising that the people of Cologne also made use of these products on a large scale: The ceramic dishes of Carolingian households in Cologne consist of over 90 % of Vorgebirge vessels and the rest are almost exclusively made in the Mayen region<sup>37</sup>.

Little can be said about the extent of the ceramic exports from Cologne as few archaeological investigations have been carried out in the harbour area or the assumed stacking areas<sup>38</sup>. The finds from the settlements in the rear area of the harbour (Heumarkt, Alter Markt, Kurt-Hackenberg-Platz) primarily reflect the households of the people of Cologne<sup>39</sup>. It is therefore also not surprising that the spectrum of finds in this zone does not reveal any interruption

<sup>33</sup> Bestemann 1990, 327–328 fig. 23.

<sup>34</sup> Spiong 2000, 137; Grunwald 2011, 383.

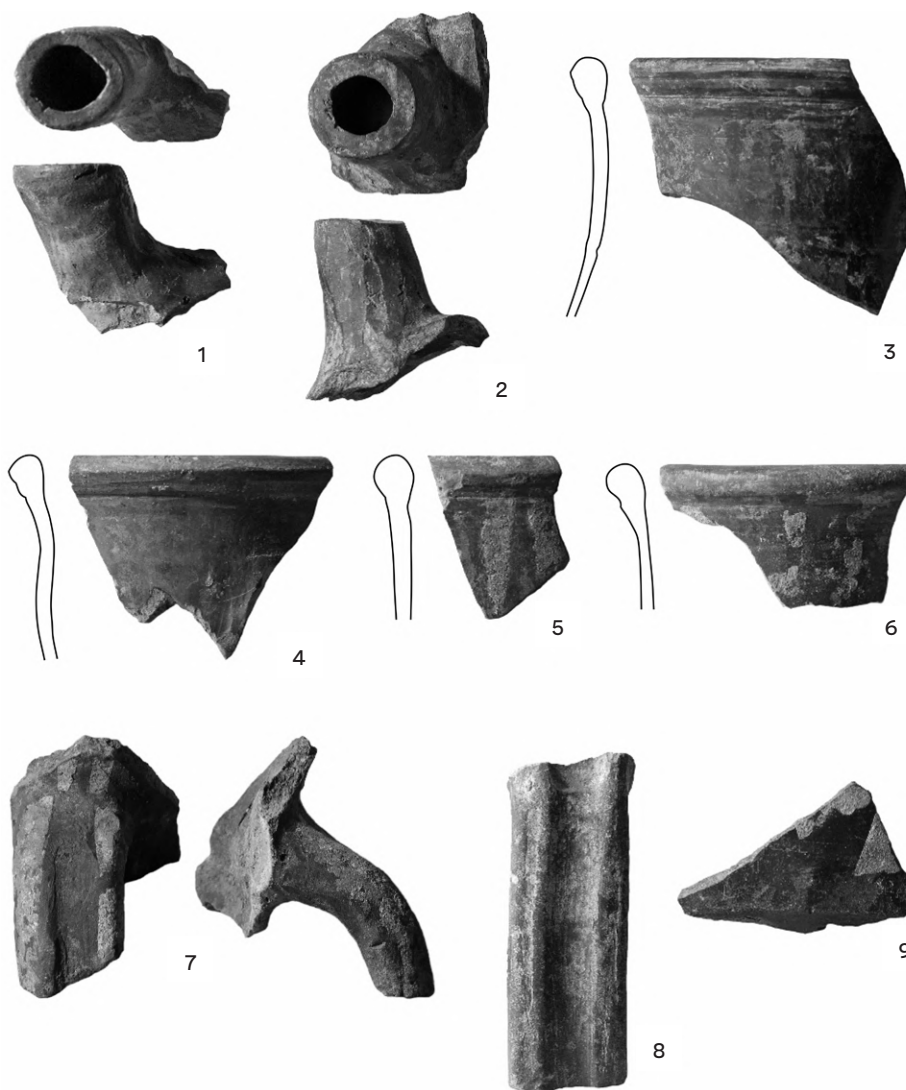
<sup>35</sup> Roth/Trier 2001, 775–779 figs 14–15. – One of the brooches could conceivably be addressed as a coin brooch: Roth/Trier 2001, 778 no. 35.

<sup>36</sup> Steuer 1987, 134–143. 191–192.

<sup>37</sup> For the black-brown, handmade pots, occasionally decorated with single stamps, which I have addressed as Frisian pots (Höltken 2012a), a renewed study is necessary. An origin from potteries in the Selfkant is also conceivable: Rademacher 1927, pl. 7, 3 (friendly note by C. Keller, Bonn).

<sup>38</sup> Höltnen 2021, 183.

<sup>39</sup> Höltnen 2003, 539; Kemme 2021, 269.



**Fig. 4** Tating jugs. Kurt-Hackenberg-Platz. – (Photos Römisch-Germanisches Museum, Köln). – Scale 1:2.

in the supply of pottery, in contrast to the places of sale such as Dorestad, Ribe, or Kaupang, where trade broke down due to the ongoing Norman invasions in the second half of the 9<sup>th</sup> century<sup>40</sup>.

Among the rare finds are the »Tating jugs«, grey-black polished pottery decorated with tin foil ornaments. The place of discovery and the early distribution maps in the North Sea area also gave the vessels the name »Frisian jugs«. Their distribution currently ranges from the Main region and the Rhineland to Scandinavia. The location of their production is still unknown; perhaps they were produced by several potteries from different regions<sup>41</sup>.

So far, 27 shards of this type are known in the inner city of Cologne (figs 2, 4)<sup>42</sup>. The majority of jug fragments (24 pieces) come from the area around the Cathedral: its »immunity«. A fragment with a

cross decoration was also present here, which suggests that these vessels were used in a Christian/liturgical context. The fact that the jug from Tating, which gave its name to the type of vessel, was used as a funerary urn on the Eiderstedt Peninsula and was also decorated with crosses, suggests that it played a role in the Frisian Christianisation<sup>43</sup>. Corresponding jugs are also encountered in the Viking area in connection with burials: Fragments of Tating jugs are present in the backfill of Haithabu graves. Particularly noteworthy are cross-decorated examples from the rich Birka graves, which were buried along with Rhenish(?) glass imports<sup>44</sup>. It is plausible that Tating jugs reached the Frisian and Viking areas from the bishop's church in Cologne – possibly along with local relics and in the wake of the missionaries.

<sup>40</sup> Skre 2010, 139.

<sup>41</sup> Gieritz 2014, 221.

<sup>42</sup> Höltnen 2021, 182.

<sup>43</sup> O. Doppelfeld has already pointed out that these vessels may have reached the North in the course of the missionary efforts at the time of St Ansgar: Doppelfeld 1970, 33.

<sup>44</sup> Croix et al. 2020, 607; Arbman 1943, 195–196. 330.

The archaeozoological examination of animal bones is of particular value in determining the origin of organic trade goods. The medieval layers of the Heumarkt provided around 120,000 objects, including the remains of animals that originated from outside of the Rhineland and arrived in Cologne as part of the Rhine trade. These include the vertebral bones of codfish (Atlantic cod) from Carolingian contexts, which arrived as stockfish<sup>45</sup>. There are also bones from red foxes, also from Carolingian layers, which are almost exclusively foot bones. Apparently, pelts were traded here, with the furrier leaving the animal's paws on the fur<sup>46</sup>. It is likely that these were imported pelts, but the origin of the respective animals is unknown. The possible polar fox bones are remarkable<sup>47</sup>. The fur probably had a high value, similar to the aforementioned polar bear skin from St Andreas, for which a price of five *solidi* was paid.

Objects made of walrus tusk are only found in larger numbers in the collections of the Colognian museums in the form of carvings from the mid-11<sup>th</sup> century<sup>48</sup>. The processing of walrus tusks is documented from the 12<sup>th</sup> century, based on archaeological contexts. A number of workshop finds are available from the Heumarkt<sup>49</sup>.

Although the early medieval coinage of Cologne does not reach the output of the former Roman coin factory in terms of quantity, the few numismatic finds provide important information on trade and trade routes. The distribution of Colognian coins already indicates intensive contacts along the Lower Rhine to Frisia and England in the 6<sup>th</sup>/7<sup>th</sup> centuries; about half of the coins originating from Cologne have been found in the Netherlands<sup>50</sup>. Since the coinage in Cologne ceased from the end of the 7<sup>th</sup> century to the mid-8<sup>th</sup> century, further observation of coin flow along this route is not possible. However, the few Cologne coin finds from settlement contexts from this time suggest continuous trade relations via the Mo-



**Fig. 5** Coins: **1** Imitation of a Dorestad penny of Charlemagne, Albansviertel. – **2** Sceatta, Maastricht type, c. 720–755, Roncalliplatz. – (Photos T. Höltnen). – Scale 1:1.

selle route<sup>51</sup>. It is noteworthy that only one sceatta is known from Cologne (figs 2, a; 5, 2)<sup>52</sup>. Sceattas – Anglo-Saxon silver coins and Frisian imitations – are frequently found in Mainz and Xanten<sup>53</sup>. Along with an imitation of a penny of Charlemagne (768–814) from the Albansviertel (figs 2, d; 5, 1)<sup>54</sup>, these are so far the only numismatic indications of Frisian trade in the 8<sup>th</sup> and 9<sup>th</sup> centuries in Cologne. According to current research, it appears that Cologne coins found their way into the Anglo-Saxon and Frisian areas, but there was no significant backflow of coins from there. Instead, goods such as fabrics, furs, etc. were imported<sup>55</sup>.

In Roman times, a large number of Colognian glass products were already being produced for export. Corresponding finds are known from *Magna Germania* and the area north of the Rhine to Scandinavia<sup>56</sup>. The export of these luxury goods was continued through the known trade routes into the early Middle Ages<sup>57</sup>. The latest research on glass production in Cologne, which was carried out continuously in the Rhine settlement from the second half of the 5<sup>th</sup> century to the 10<sup>th</sup> century, proves to be an excellent source. Over 1,000 finds (glass fragments and crucibles) as well as furnace remains

<sup>45</sup> Berke 1997, 406; Schütte 2000, 186. – See also Schütte 1995, 167, 170.

<sup>46</sup> Berke 1997, 406. – Cf. a similar object among the Carolingian/Ottonian animal bones from the Alter Markt: H. Berke in: Carruba et al. 2021, 261 as well as among medieval finds from the Breslauer Platz: H. Berke in: Berthold et al. 2016, 300.

<sup>47</sup> Berke 1997, 406.

<sup>48</sup> Beer 2011, 71.

<sup>49</sup> Gechter/Schütte 1995, 134; Berke 1997, 406; Schütte 2000, 187. – The observation that in the course of the High Middle Ages a large group of animals joined the small native cattle breeds suggests that cattle from the Netherlands, Denmark or Burgundy came to Cologne. Further comparative studies are awaited here: Schütte 1995, 167; Berke 1997, 406.

<sup>50</sup> Fischer 2002, 294–295, 299–300.

<sup>51</sup> Fischer 2002, 297.

<sup>52</sup> Report 1969.002. The Maastricht-type coin was found 1969/1970 in the Roncalliplatz, directly south of the Cathedral – according to the find label – »in a medieval disturbance«. The piece came to light again in 2022 in the course of archival work and is therefore missing from Fischer's 2002

compilation. The production of the type is assumed to be in the upper Meuse region: Op den Velde/Metcalf 2014, 13–14.

<sup>53</sup> Fischer 2002, 295.

<sup>54</sup> Schütte et al. 1998, 53 (contribution by V. Zedelius).

<sup>55</sup> Fischer 2002, 298. – Regarding the quantities of coins from archaeological findspots, it should be noted that there is a considerable imbalance: Today, 84 Merovingian coin finds are known from the entire city of Cologne. In most cases, these are grave goods from the Frankish cemeteries *extra muros* (Fischer 2002, 281, 296). Five coins are from settlement layers in the city centre (Fischer 2002, no. 56, 69, 75 and 77 as well as the above-mentioned sceatta from the Roncalliplatz). The coins from the two rich tombs under the Cathedral (*intra muros*) are excluded here (Fischer 2002, 281, 296). These are contrasted by only four coins from the Carolingian period: These include one denarius each of Louis the Pious (814–840) and Louis IV (900–911) from the Cathedral excavation (Höltnen 2012b, 129) and a denarius of Charlemagne from around 768 or a little later from St Gereon (Geissen et al. 1987, 156 no. 35 b, a grave find, *extra muros*).

<sup>56</sup> Doppelfeld 1975, 53.

<sup>57</sup> Steuer 1987, 146–151.





Fig. 6 Trade routes of early medieval glass. – (After Dodt et al. 2021, fig. 9).

come from a strip of the Rhine settlement about 500 m long (fig. 2).

Chemical analysis of the objects from Cologne and of material from other central and northern European sites allows us to differentiate between the respective raw material groups used for the production of soda-lime glass. They offer a growing basis for the reconstruction of specific trade routes. While the previous analysis of beakers from Cognian grave finds has so far assumed that trade in the Merovingian period was mainly directed towards the South<sup>58</sup>, the latest chemical analyses show that old contacts with the North were also used. The typical chemical glass signature HIMT-2 for Cologne is found at numerous places in the Rhine, Main and Moselle areas; another important route ran to the North via Dorestad (fig. 6)<sup>59</sup>.

The presence of simple Carolingian tumblers and funnel cups from Cologne can be proven by chemical and typological analysis at several sites in the coastal region (Cuxhaven, Föhr, Sylt, Hollingstedt, Haithabu, Reric/Groß-Strömkendorf and Rostock-Dierkow)<sup>60</sup>. At this time, however, Cologne's dominance in the market had already declined, as other glass furnaces had appeared since the late 8<sup>th</sup> century, operating at monasteries and palaces (such as Fulda, Lorsch and Paderborn) and using new recipes (wood ash glass), carried in part by wandering craftsmen. The Cognian craftsmen, on the other hand, relied on the old but proven and high-quality soda-lime glass<sup>61</sup>. The extent to which other Cognian export goods joined the same routes as the glass has yet to be ascertained.

<sup>58</sup> Doppelfeld 1975, 78–79.

<sup>59</sup> Dodt/Kronz 2021, 193; Dodt et al. 2021, 187–188. The analyses of finds from the Anglo-Saxon area have not yet been completed.

<sup>60</sup> Friendly note by M. Dodt.

<sup>61</sup> Dodt/Kronz 2021, 196.



Archaeological finds in Cologne that indicate contacts with the British Isles are hard to come by<sup>62</sup>. A bronze comb found in 1982 during excavations at the Malzmühle, on the southern edge of the early medieval city is notable (figs 2, g; 7)<sup>63</sup>. Unlike the common bone combs, this find is unique due to its material and can be called an exotic. Its handle shows an openwork lattice pattern in the middle. The comb is decorated with several circular ornaments and originally had two inward-facing animal heads on the ends, derived from examples from the Roman imperial period<sup>64</sup>. The Colognian find is undoubtedly related to a group of openwork bronze combs from Whitby Abbey in Yorkshire (GB), from the Terpe Aalsum near Dokkum (NL), and from Puy-de-Dôme near Clermont-Ferrand (FR). These finds are dated to the 7<sup>th</sup>/8<sup>th</sup> centuries<sup>65</sup>. The combination of an openwork plate, circular decoration and animal heads is also encountered on a bone comb from Dun Cuier on the island of Barra (GB; Outer Hebrides)<sup>66</sup>. The respective find spots in the Anglo-Saxon, Frisian and Colognian areas suggest that combs of this type come from the luggage of the aforementioned



Fig. 7 Bronze comb, 7<sup>th</sup>/8<sup>th</sup> century, An der Malzmühle. – (Photo Kölnisches Stadtmuseum/Rheinisches Bildarchiv, W. Meier, rba\_doo5685).

Anglo-Saxon or »Scottish« monks who set out from Cologne on a mission trip to Frisia<sup>67</sup>. Perhaps the specimen also arrived in the city through regular trade or as personal belongings from the northern area. Ultimately, a production in Cologne itself cannot be excluded<sup>68</sup>.

## A Frisian Quarter in Cologne

The name of today's Friesenstraße in Cologne has already led early local researchers to suggest that Frisian merchants settled here in the Carolingian period (fig. 2)<sup>69</sup>. The street is located south of the church of St Gereon and appears for the first time in 1165 as *platea Frisorum*. It is undisputed that the street was inhabited by »Frisian« or generally people from the coastal region in the 12<sup>th</sup> century. However, it is hardly imaginable that this place served as a preferred settlement for Frisian merchants in the early Middle Ages<sup>70</sup>. Its location – 1 km from the Rhine

and outside the city wall – is too remote. The distribution of Carolingian ceramics in Cologne suggests that the area around Friesenstraße was uninhabited at this time<sup>71</sup>.

It is much more plausible that Frisian traders settled near the Rhine and the central market in the heart of the medieval city. Here – between the Heumarkt and the former Rhine harbour – was the Frisingazze, today's Tipsgasse, which was first mentioned in 1242 (fig. 2)<sup>72</sup>. The street measured around 60 m in the 16<sup>th</sup> century, but its extent in

62 Around ten strap ends and fittings are in the collection of the Roman-Germanic Museum, which are decorated in the »insular animal style of the continental character« (»Anglo-Carolingian animal style«). It is unclear whether they originate from archaeological layers in Cologne: Steuer 1982, 5 fig. 4. In addition, there are two finds from the Heumarkt excavation: Roth/Trier 2001, 779-782 fig. 16, 42-43. The growing number of similar finds from the Rhineland indicates that corresponding pieces may have been made and worn locally: Schmauder 2005, 297; Wamers 2013, 439-442.

63 Report 1982.15; Steuer 1982, 19; Höltken 2010. – The object, which was allegedly found on the site by a construction worker, was handed over to the Roman-Germanic Museum.

64 Concerning a bone comb case with animal protomes from the Roman fort of Divitia/Deutz (on the right bank of the Rhine) see Düwel/Tempel 1968, 356-357; Carroll-Spillecke 1993, 370 fig. 42, 15a-b. K. Düwel and W.-D. Tempel assume an origin from a Frisian workshop. Since the piece dates to the 5<sup>th</sup> century, it lies outside the chronological frame of reference defined here.

65 White 1988; Höltken 2010; Schulze-Dörrlamm 2022, 93-94. – There is possibly a distant relationship with a bronze comb from Birka, grave 1162,

whose handle is decorated in a similar way: Arbman 1943, vol. 1, 480; 1943, vol. 2, pl. 100, 2.

66 MacGregor 1985, fig. 49g.

67 Schulze-Dörrlamm 2022, 94.

68 Schulze-Dörrlamm 2022, 93.

69 Keussen 1910, vol. 1, p. \*7; \*31; \*46; Schumacher 1925, 164-165; Wamers 1994, 197.

70 H. Keussen assumed that the foreign Frisians were assigned the still-unsettled area in the suburban district south of St Gereon: Keussen 1910, vol. 1, p. \*46.

71 A small concentration of Carolingian sherds north of Friesenstraße – in the area of the Steinfelder Gasse – probably belongs to the immunity area of St Gereon.

72 There was also a *domus Frisonis* here in 1291: Keussen 1910, vol. 1, p. \*47 note 1; \*57; 24; 89. The Friesengasse was in the vicinity of other streets where foreign merchants such as the Welsh (*platea Gallicorum*), Brabant, Flemish, Saxon, Strasbourg and Swabian established themselves: Ennen 1975, 133.

the Carolingian period is unknown. In this environment south of St Martins-church and in front of the harbour, Frisian merchants may have settled in the 8<sup>th</sup>/9<sup>th</sup> centuries. This is also indicated by the estate transactions of the 12<sup>th</sup> to 15<sup>th</sup> centuries, recorded in the Colognian »Schreinsbücher« (medieval land registration), in which people with the names Friso/Frisonis or Norman were included (fig. 2). These names often appear in the zone near the Rhine; three persons alone with the surname Fris[s]onis (Hellewici, Sifridi and Herimanni) are known from the vicinity of Frisingazze in around 1200. It is conceivable that these are the descendants of Frisian merchants who acquired property in the Carolingian era<sup>73</sup>.

It is questionable whether the current inventory of archaeological finds supports a localization of a »Frisian quarter«: A concentration of potentially Nordic objects is not apparent in Cologne – neither near the Frisingazze nor elsewhere. The reasons for this are multifaceted: On the one side, it is often difficult to make the decisive step from »popular in the north« to »made in the north« when characterizing individual archaeological artefacts. A concentration of obvious foreign objects – that are unusually Frisian or Scandinavian cultural property – in a Frankish household cannot be observed. Such a distribution of finds was observed in Norwegian Kaupang; here, Frisian and Frankish – and possibly also Colognian – traders reached the Viking settlement and established trading stations. This is indicated by concentrations of Vorgebirge ceramics, Frankish clothing components, glass and weights<sup>74</sup>.

The sudden growth of early medieval settlement finds in the inner city of Cologne, which was considered empty before the 1990s, clearly shows how much archaeology depends on finder's luck. Is it possible that the lack of artefacts from the North is to be blamed on the current state of research? This is certainly possible, as there are significant imbalances in the Colognian material from the 8<sup>th</sup>/9<sup>th</sup> centuries: Compared to Mainz and Trier<sup>75</sup>, finds of metal, especially brooches and coins, are remarkably rare in Cologne. Among the archaeological finds from Mainz, Löhrrstraße, over 90 Carolingian-Ottonian

brooches, 20 sceattas and 38 Carolingian coins are recorded<sup>76</sup>. In Cologne, however, the yield is much lower: Only 20 brooches from the 8<sup>th</sup>–10<sup>th</sup> centuries and four Carolingian coins are so far known from the entire inner city<sup>77</sup>. This is by no means due to a lack of archaeological investigations: In recent years, the harbour settlement has been archaeologically examined at several points over an area of about 9,200 m<sup>2</sup> (Heumarkt, Kurt-Hackenberg-Platz, and Alter Markt; fig. 2, b. c. e). Finds such as animal bones and ceramics are ubiquitous and abundant, reflecting the idea of a densely populated city from which goods were widely exported<sup>78</sup>. A satisfactory explanation for the low occurrence of brooches and coins from Cologne is difficult to provide. While it is undisputed that metal objects underwent intensive recycling – which significantly reduces the archaeological material – this also happened in Trier and Mainz and there is no indication that the people of Cologne melted more material than the residents of other cities<sup>79</sup>.

Another explanation for the lack of coins and jewellery/clothing components is suggested by the topographical location of the known sites: The rich finds from the Carolingian-Ottonian period made at the Heumarkt and the Alter Markt come from settlements whose buildings were abandoned almost simultaneously in the middle of the 10<sup>th</sup> century when the settlement was replaced by a marketplace. This happened during the tenure of Archbishop Bruno I and probably at his command. However, the core of the settlement – east of the Heumarkt and closer to the Rhine – was left intact, maybe because resistance from the wealthy merchants under the protection of the king was expected here. The establishment of the open market area only affected the edge of the Rhine settlement, where craftsmen settled and primarily worked on behalf of the bishop or prosperous merchants.

It is therefore likely that the mercantile centre of the harbour settlement was closer to the Rhine bank – east of the Heumarkt, in the area of today's »Altstadt« or St Martin's district. Here, in the still medieval-looking maze of small streets between the Heumarkt and Frankenwerft – west of the historical

<sup>73</sup> Keussen 1910, vol. 1, 24, 117.

<sup>74</sup> Skre 2010, 139. – On the question of the extent to which the Frankish objects from Kaupang were used as trade goods or private furnishings by the merchants and their families, cf. Skre 2010, 139.

<sup>75</sup> Clemens 2001, 58–59; Petry 2004, 74–75.

<sup>76</sup> Wamers 1994, vol. 4, 149, 177–181.

<sup>77</sup> In addition to the above-mentioned fibula finds from the Heumarkt and the Alter Markt, the following specimens should also be mentioned: a cross brooch, Luxemburger Straße, 8<sup>th</sup> century: Riemer 2006, 277 fig. 4-a rectangular brooch with enamel, Heumarkt (report 1992.014), 9<sup>th</sup>/10<sup>th</sup> century – a disc brooch with pelta decoration, Heumarkt, (report 1992.014), 9<sup>th</sup>/10<sup>th</sup> century. – Among the finds from Colognian collections, whose ori-

gin in Cologne is, however, not certain, are: a coin brooch: Dinklage 1955, 44 fig. 4, 6; Frick 1993, 393 – two disk brooches (Heiligenfibeln), Mus. Schnütgen, inv.-no. 602a and inv.-no. 602b: Steuer 1982, fig. 5; Haseloff 1990, 142 figs 75, 77; Frick 1993, 288–289, 384 – a disk brooch, Roman-Germanic Museum Cologne, former collection Niessen: Wamers 1994, 215 – a disk brooch, private collection, allegedly from Cologne: Wamers 1994, 220.

<sup>78</sup> From the Heumarkt (main campaign 1996–1998) about 14,000 stratified sherds from layers of the 8<sup>th</sup> to 10<sup>th</sup> centuries were excavated. From Kurt-Hackenberg-Platz, a total of 200,000 finds (including animal bones) can be mentioned from the same period: Berthold et al. 2017, 390.

<sup>79</sup> Clemens 2001, 52; 2010, 25.

north-south axis Fischmarkt-Buttermarkt-Thurnmarkt – the centre of the early medieval merchant settlement and thus the potential site for the material that is still lacking in Cologne is to be sought. Unfortunately, the early medieval layers were largely cleared away in this area for the construction of postmedieval deep cellars. The few remaining finds were uncovered in the 1930s and 1940s, when the archaeologists at that time only rarely had the opportunity to carry out proper excavations and generally had little interest in medieval finds. In addition, numerous finds were destroyed in the bombing of World War II.

One of the few indications of early medieval development were found during excavations in »Auf dem Rothenberg« street, east of Eisenmarkt, where a dark gray, »greasy« layer of sediment with Carolingian and Ottonian ceramics was uncovered, in which the remains of a drywall were embedded (fig. 2, i)<sup>80</sup>. This discovery resembles Carolingian-Ottonian timber frame buildings on stone foundations/sockets, which were found in the Heumarkt. Further east, between the Buttermarkt and Frankenwerft, the same layer is encountered at a lower level. Here, a horizontal, clearly reinforced walking-horizon was found, which could be a remnant of the harbour's stacking area (fig. 2, h)<sup>81</sup>. The jetty was likely located a few

meters east, at the height of today's Am Leystapel. While the late antique harbour can be sought at the height of today's Buttermarkt<sup>82</sup>, jetties and stacking areas have been pushed further into the Rhine over time due to earth-deposits and a declining river level.

In summary, it remains to be noted that the evidence of a Frisingazze and the historical mentions of Frisian/Norman property owners in the high Middle Ages are still the best indications of the location of a Frisian settlement in Cologne, even though archaeological finds are missing<sup>83</sup>. The location in the midst of the Rhine settlement, near the former Rhine bridge, south of the Cathedral immunity and east of the royal residence, undoubtedly had a prominent character, very similar to that of the Frisian quarter in Mainz, which was described in 886 as the »best part of the city« (*optima pars*)<sup>84</sup>. The Mainz quarter was also located near the Rhine, near the bridge, and in the neighbourhood of the bishop and king's property<sup>85</sup>. In contrast to Mainz, however, merchants and craftsman from Cologne settled east of the ancient city wall.

The Rhine suburb, which covers about 19 ha, was fortified in late antiquity with two wing walls on the north and south sides, but the 800 m long riverbank was unprotected. This raises the question of the extent to which the merchant's and craftsmen's settlement was affected by Norman raids.

## Cologne and the Normans

The historical sources concisely record that a fire or a destruction event took place in the city in 810 (*combustio Coloniae*)<sup>86</sup> and 856 (*combustio Coloniae secunda vice*)<sup>87</sup>. Both events are occasionally linked to Viking raids, but the actual cause is not named in the sources<sup>88</sup>. The first contacts with the Viking North seem to have taken place on a diplomatic and missionary level. In 826, the freshly baptised throne claimant Harald Klak/Heriold, who had been driven out of Denmark, visited the city of Cologne with his delegation, accompanied by St Ansgar (801–865). The Archbishop of Cologne, Hadebald, gave the trav-

ellers a ship for their journey, which led via Dorestad to the Danish border<sup>89</sup>. About ten years later, in 836 or slightly earlier, members of a Danish delegation arrived in Cologne, but they died in a dispute<sup>90</sup>. Adam of Bremen reports in the 11<sup>th</sup> century on a first raid that took place around 839<sup>91</sup>. Another attack occurred in 863, and it is briefly stated that Danes sailed upstream to Cologne<sup>92</sup>. Soon after (864/870), Vikings devastated the city and its churches<sup>93</sup>.

However, the sources provide the most detailed and comprehensive accounts of the Viking raids of 881/882, during which Cologne's churches and

<sup>80</sup> Report 1937.009a/b.

<sup>81</sup> Report 1986.026; Dödt 2019, fig. 1.

<sup>82</sup> Trier 2012, 180.

<sup>83</sup> In 1938, excavations were carried out on the east side of Tipsgasse/ Frisingazze (Report 1938.046). However, only small remains of the early medieval »black layer« were found.

<sup>84</sup> Schulze-Dörrlamm 2021, 347. – On the King's/Bishop's palace in Cologne, see Hillen/Trier 2012.

<sup>85</sup> Schulze-Dörrlamm 2013; 2021.

<sup>86</sup> Annales Sancti Petri Coloniensis 1859, 730.

<sup>87</sup> Annales Colonienses brevissimi 1826, 97.

<sup>88</sup> Cf. Hegel 1877, 299.

<sup>89</sup> Vita Anskarii: Laurent/Wattenbach 1939, 21. – The path therefore followed the route of Colgnian and Frisian merchants: Kellenbenz 1967, 4.

<sup>90</sup> On the year 836: Annales Bertiniani 1883, 12.

<sup>91</sup> »Magistri Adami gesta Hammenburgensis ecclesiae pontificum: Eodemque tempore per Rhenum vecti Coloniā obsederunt«: Chronica et gesta aevi Salici 1848, 293–294.

<sup>92</sup> »Dani [...] per Rhenum versus Coloniā navigio ascenderunt«: Annales Bertiniani 1883, 61, on the year 863.

<sup>93</sup> »[...] vastata a Nortmannorum rabie urbe et aeclesiis sanctorum cede et incendio: Gesta episcoporum Tungrensium, Traiectensium et Leodiensium (auctore Anselmo)«: Chronica et gesta aevi Salici 1846, 200.



secular buildings were set on fire<sup>94</sup>. But by the year 883, the city had been rebuilt, except for the monasteries and churches, and the city wall had been restored<sup>95</sup>. In 891, Pope Stephanus V sent the Archbishop of Cologne, Hermann, relics of the Virgin Mary and other saints and referred to Hermann's complaints that the churches of Cologne and all the houses had been burned<sup>96</sup>. It seems that the city centre and its fortification survived the attacks, defended by the ancient town wall itself despite it being about eight centuries old, and the damage was repaired within one to two years<sup>97</sup>. The unprotected monasteries and institutions outside the city walls, which were targeted for their wealth, were probably the most severely affected. Only the Church of St Severin is said to have remained intact, according to the *Vita et Translatio Sancti Severini*, which was written around 900<sup>98</sup>. However, the author of the *Vita* complains that he only had access to oral traditions, as the institution was robbed of its written documents due to an incursion of »unbelievers«. It is therefore likely that the Severin monastery was robbed by Vikings but not destroyed<sup>99</sup>.

That documents from before the year 881 are rare in the Colognian archives is possibly due to the plundering of the monastic libraries *extra muros*<sup>100</sup>. The Cathedral library seems to have fared better: Of the 175 volumes listed in the catalogue of the year 833, 35 are still preserved today<sup>101</sup>. Perhaps the library was secured in time<sup>102</sup>, or the Normans never reached it because it was protected by the city wall, like the bishop's church. The latter is more likely, as a provincial synod was held in Cologne Cathedral just a few years later on April 1, 888<sup>103</sup>.

The constant Norman threat paralysed the clergy and hindered them from their duties and travels as the Rhine was being besieged<sup>104</sup>. The note that only St Severin remained undamaged suggests that the other churches of the time had been damaged or destroyed in some way<sup>105</sup>. Accordingly, numerous 9<sup>th</sup> century Colognian churches have been associated with Norman destruction events from the archaeological and historical or building-historical point of view. However, archeologically proven destruction and burn horizons from the 9<sup>th</sup> century have not been found<sup>106</sup>. In view of the many and intensive excavation campaigns in Colognian churches, this negative finding should certainly not be seen as a simple research gap.

Graves as another source for fallen Vikings in battle play no role in Cologne. The absence of corresponding Nordic burials<sup>107</sup> is not surprising due to their general rarity<sup>108</sup>. Graves of local victims are also not mentioned, but this may be due to the fact that post-Merovingian burials without grave goods received little archaeological attention in Cologne. The burials discovered in the Carolingian harbour district in recent years should be referred to as sporadic house and special burials in the settlement area<sup>109</sup>. Hastily buried victims of Viking raids, as found in Zutphen (NL), are unknown in Cologne<sup>110</sup>. Although the early modern Colognian historical sources mention the discovery of »mass graves« several times, their temporal classification is unknown<sup>111</sup>.

The evidence of Norman destruction horizons in the Colognian settlement-layers is also disputed<sup>112</sup>. Within the ancient walled area, Carolingian

<sup>94</sup> On the year 881: *Annales Fuldenses* 1891, 394: »Agrippinam Coloniā et Bunnā civitates cōm aecclēsiis et aedificiis incenderund«; *Annals of St Vaast* to 882: *Annales Vedastini* 1829, 199: »Dani [...] Coloniā Agrippinā [...] igne creamaverunt«; Liudprand of Cremona: *Liudprandi Opera* 1915, 10: »civitates Agrippinā, quae nunc Colonia vocatur [...] combusserunt«. – On the reading of the *Annals of St Vaast* and on the question of whether the Colognian royal palace or merely general, unspecified palaces were damaged: see Hillen/Trier 2012, 34.

<sup>95</sup> *Annales Fuldenses*: MGH SS rer. Germ. 1, 398: »Agripina Colonia absque aecclēsiis et monasteriis reaedificata, et muri eius portis et vectibus et seris instaurati«.

<sup>96</sup> Oediger 1978, 93–94 no. 282: »basilicae et omnes fabricae domorum Coloniensium civitatis«.

<sup>97</sup> Critical of the question of the extent to which the ancient city wall was still intact in the 9<sup>th</sup> century: Paffgen 2004, 88.

<sup>98</sup> Oediger 1978, 12 no. 7.

<sup>99</sup> Schmidt-Bleibtreu 1980, 47–48 fn. 9; Oediger 1978, 12 no. 7.

<sup>100</sup> Ewig 1960, 13–14; Ubl 2022, 107.

<sup>101</sup> Hegel 1950, 48; Ennen 1975, 90.

<sup>102</sup> Ewig 1960, 13.

<sup>103</sup> Oediger 1978, 80 no. 237; 90 no. 264.

<sup>104</sup> »Reni fluēta obsident«: Oediger 1978, 93 no. 281 (Letter of Pope Stephanus of 31.10.890 to Archbishop Hermann I of Cologne).

<sup>105</sup> St Gereon: Rahtgens 1911, 17. – On possible delays in the extension of the church of St Severin caused by the attacks of 881/882: Mühlberg

1965b, 48. – St Ursula: Doppelfeld 1951, 54; Nürnberger 2006, 643–644. 646. – St Pantaleon: Rahtgens 1929, 53. – St Andreas: Ewald/Rahtgens 1916, 28. – St Georg (Caesarius Oratory): Mühlberg 1965a, 56. – Groß St Martin: Hegel 1877, 299; Oppermann 1900 (to the forged chronicle of St Martin). – St Kolumba: Seiler 1977, 112. – St Maria im Kapitol: Rahtgens 1913, 38. – St Cäcilien: Ewald/Rahtgens 1916, 174; Hegel 1950, 49.

<sup>106</sup> On structural changes to the Pantaleon church that are at least conceivable within (and causally related to?) the period of the raids of the late 9<sup>th</sup> century: cf. Ristow 2009, 74. 80. 108. 120; 2016, 190.

<sup>107</sup> Capelle 2006, 10.

<sup>108</sup> It cannot be ruled out (though it is unlikely) that Norman cremations – disguised by the numerous Roman cremations *extra muros* – remained unrecognised.

<sup>109</sup> On dendrochronologically dated graves from the period after 890/895 in the Alter Markt: Carruba et al. 2021, 68. – On early medieval burials in the Heumarkt: Aten 2001a; Höltnen 2006, 478.

<sup>110</sup> Bartels 2003. – On the »obviously hastily buried« dead around the Alter Markt and Marienkirche in Duisburg: Krause 2005, 47.

<sup>111</sup> On the finds of mass graves uncovered in the 17<sup>th</sup> century see, for example: Klinkenberg 1892, 175; Höltnen/Karas 2020, 288–289. These graves were found on the »Ursulaacker« between St Ursula and St Johannes and Cordula and were associated with the graves of the »11,000 virgins«.

<sup>112</sup> The Roman-Germanic Museum has a number of Viking objects that are unlikely to have originated on Colognian soil: La Baume 1955; Wamers 1981. These objects remain excluded here.

settlement remains were revealed in the so-called Albansviertel (between Gülichplatz, Obenmarspforten, and Martinsstraße) in 1997 (fig. 2, d). In this context, a »large-scale layer of fire with charred beams and a wealth of shattered household goods and ceramics« from the time »around 880 to 900« is described, which is associated with the events of 881/882<sup>113</sup>. Unfortunately, the features and artefacts are not yet fully published, so an assessment and comparison with other Cologne settlement finds is not possible<sup>114</sup>. In any case, the latest excavations of early medieval settlement layers in Cologne show that broken and scattered pottery need not be a sign of destruction, but were part of the regular and carefree handling of waste in the city<sup>115</sup>. Large-scale fires as evidence of violent destruction are not proven by the excavations in the Heumarkt, the Alter Markt, and in Kurt-Hackenberg-Platz. Only possible indications of local heat exposure – in the form of burned clay soils and thin layers of ash – should be mentioned<sup>116</sup>. Whether these are the remains of buildings set on fire by the Normans or simple house fires, which were always likely to break out due to the timber and thatch building construction, cannot be decided. The unprotected Rhine bank was certainly easy prey in a Viking raid. Yet, if threatened with a hostile ship landing, the inhabitants of the Rhine bank had enough time to gather their most important belongings and take shelter behind the city walls, which were only a few meters away. At the least, after the first raids, a permanent watchman must have observed the Rhine and reported on approaching ships.

The early medieval settlement (*civitas*) in the former Roman fort of Deutz (*Divitia*) on the opposite bank of the Rhine and the ancient Rhine bridge – whose passage for ships could be closed between the pillars – must have played a strategic defensive role<sup>117</sup>. The moat surrounding the fort was probably filled in during the Carolingian period and replaced

by a second moat. Whether this restructuring was due to Viking invasions is not certain, as there are also no indications of destruction here<sup>118</sup>.

If we summarise the historical and archaeological sources, the Norman raids of the 9<sup>th</sup> century are likely to have primarily targeted the monasteries and convents located in front of the city wall. Movable goods such as liturgical utensils, book bindings and reliquaries – in short, objects made of precious metal – were in demand<sup>119</sup>. The clergy brought some of the treasures to safety in Mainz<sup>120</sup>. Those who could not escape faced death, enslavement or being taken as hostages. The holy places of many martyrs – the »thousands« of virgins of St Ursula and the Theban Legion of St Gereon – and their honoured remains made Cologne vulnerable, even though the city wall resisted direct attacks. For Cologne, which was permitted to carry the name »Holy« (*sancta Agrippinensis urbis*) along with Rome, Jerusalem and Trier, the theft, destruction and desecration of precious relics, and the violence against the clergy who were responsible for them, came close to a catastrophe, paralysing church life for years.

However, archaeological findings do not indicate a widespread fire in the city, including its churches<sup>121</sup>. There are also currently no other classic indicators, such as defence structures, treasure finds, mass graves or even remnants of a Norman camp. Since we have to rely exclusively on the reports of those who were the focus of the raids with regard to the written tradition, the material damage to buildings may have been exaggerated. Nevertheless, these were surprise raids and they probably targeted unprotected monasteries and settlements outside the city walls with extreme brutality. The Annals of St Vaast at Arras report on the state of a settlement after a Norman raid in 884: »There were bodies of clergy, nobles and others, of women, young people and infants everywhere. There was no street or place where there were not dead«<sup>122</sup>.

<sup>113</sup> Schütte et al. 1998, 44–45.

<sup>114</sup> The excavation documentation (Report 1990.01 and following investigation 1997) notes a »layer of earth heavily interspersed with charcoal and fire debris, which is to be regarded as a levelled fire layer« (feature no. 644). The associated field drawings indicate an extension of only 3.5 m × 1 m. The feature is cut off on all sides by recent features, so that its original extent is unknown.

<sup>115</sup> Höltnen 2006, 458–459.

<sup>116</sup> Kurt-Hackenberg-Platz: Berthold et al. 2017, 396; Heumarkt: Höltnen 2006, 473, 475; Lintgasse: Report 1937.040; Auf dem Rothenberg: Report 1937.009a.

<sup>117</sup> Paffgen 2004, 100; Capelle 2006, 44.

<sup>118</sup> On the bottom of the first ditch, pottery was found which dates to the 8<sup>th</sup> century (the finds are no longer present today). The younger ditch would

therefore have been created in Carolingian times (at the earliest), which is associated with the raids of 881/882: Carroll-Spillecke 1993, 341.

<sup>119</sup> Paffgen 2004, 105.

<sup>120</sup> On the year 881: Annales Fuldenses 1891, 97: »But whoever of the canons or sanctimonials could escape from there [Cologne/Bonn] fled to Mainz, taking the church treasures and the relics of the saints with them«.

<sup>121</sup> Hellenkemper 1973; Trier 2002, 307; Dietmar/Trier 2011, 224–226; Ubl 2022, 260–261. – It is possible that the fires were limited to the roof-construction and the wooden equipment of the churches and left no traces in the foundation area, i. e. in the archaeological field of vision: Ubl 2022, 261.

<sup>122</sup> Annales, chronica et historiae aevi Carolini 1829, 200; Capelle 2006, 7.

# Bibliography

## Sources

- Annales Bertiniani 1883:** Annales Bertiniani. MGH SS rer. Germ. 5, ed. G. Waitz (Hannoverae 1883).
- Annales, chronica et historiae aevi Carolini 1829:** Annales, chronica et historiae aevi Carolini. MGH SS 2, ed. G. H. Pertz (Hannoverae 1829).
- Annales Colonienses brevissimi 1826:** Annales Colonienses brevissimi a. 814–870. MGH SS 1, ed. G. H. Pertz (Hannoverae 1826) 97.
- Annales Fuldenses 1891:** Annales Fuldenses sive annales regni Francorum orientalis. MGH SS rer. Germ. 7, post ed. G. H. Pertzii, recogn. F. Kurze (Hannoverae 1891).
- Annales Sancti Petri Coloniensis 1859:** Annales Sancti Petri Coloniensis. MGH SS 16, ed. G. H. Pertz (Hannoverae 1859) 730.
- Annales Vedastini 1829:** Annales Vedastini. MGH SS 2, ed. G. H. Pertz (Hannoverae 1829) 199.
- Chronica et gesta aevi Salici 1846:** Chronica et gesta aevi Salici. MGH SS in folio 7, ed. G. H. Pertz et al. (Hannoverae 1846).
- 1848:** Chronica et gesta aevi Salici. MGH SS in folio 8, ed. G. H. Pertz (Hannoverae 1848).
- Haupt 1840:** M. Haupt (ed.), Der gute Gerhard. Eine Erzählung von Rudolf von Ems (Leipzig 1840).
- Hegel 1877:** K. Hegel, Verfassungsgeschichte von Cöln im Mittelalter. Chroniken der dt. Städte. 1: Cöln (Leipzig 1877).
- Hesse/Wattenbach 1892:** L. F. Hesse / W. Wattenbach, Die Jahrbücher des Lambert von Hersfeld. Die Geschichtsschreiber der dt. Vorzeit. 2, 43: 11. Jahrhundert. 5 (Leipzig 1892).
- Laurent/Wattenbach 1939:** J. C. M. Laurent / W. Wattenbach, Leben der Erzbischöfe Anskar und Rimbart. Die Geschichtsschreiber der dt. Vorzeit. 2, 22: 9. Jahrhundert. 7 (Leipzig 1939).
- Liudprandi Opera 1915:** Liudprandi Opera. Die Werke Liudprands von Cremona. MGH SS rer. Germ. 41, ed. J. Becker (Hannoverae, Lipsiae 1915) 10.
- Oediger 1978:** F. W. Oediger, Die Regesten der Erzbischöfe von Köln im Mittelalter. 1: 313–1099. Publ. Ges. Rhein. Geschkde. 21, 1 (Düsseldorf 1978).
- Strange 1851:** J. Strange (ed.), Caesarii Heisterbacensis Monachi dialogus miraculorum. 2 (Coloniae 1851).
- Vita et miracula s. Goaris 1887:** Vita et miracula s. Goaris auct. Wandalberto. MGH SS 15.1, ed. O. Holder-Egger (Hannoverae 1887) 362–373.

## References

- Arbman 1943:** H. Arbman, Birka. Untersuchungen und Studien. Die Gräber 1–2 (Stockholm 1943).
- Aten 2001a:** N. Aten, Die frühmittelalterlichen Bestattungen aus den Ausgrabungen auf dem Heumarkt in Köln. Kölner Jahrb. 34, 2001, 831–839.
- 2001b:** N. Aten, Römische bis neuzeitliche Befunde der Ausgrabung auf dem Heumarkt in Köln. Kölner Jahrb. 34, 2001, 623–700.
- Bartels 2003:** M. Bartels, Vikingaanval en Deventer Verdediging. Archeologisch Onderzoek aan de Smedenstraat 38–44 te Deventer. Arch. Deventer 5 (Deventer 2003).
- Beer 2011:** M. Beer, Kölner Elfenbeinarbeiten des Mittelalters: von den Anfängen bis zum Ausklang der Romanik. In: D. Täube / M. V. Fleck (eds), Glanz und Größe des Mittelalters. Kölner Meisterwerke aus den großen Sammlungen der Welt [exhibition cat. Köln] (München 2011) 62–81.
- Berke 1997:** H. Berke, Haustiere, Handwerker und Händler. Vorläufige archäozoologische Ergebnisse der Ausgrabungen am Heumarkt in Köln. Kölner Jahrb. 30, 1997, 405–413.
- Berthold et al. 2016:** J. Berthold / T. Lobüscher / I. Reuter, Ausgrabungen am Breslauer Platz in Köln. Archäologische Untersuchungen im Rahmen des Nord-Süd Stadtbahnbaus. Kölner Jahrb. 49, 2016, 163–307.
- 2017:** J. Berthold / D. Hupka / F. Kempken / R. Nehren, Ausgrabungen am Kurt-Hackenberg-Platz und Am Domhof in Köln. Kölner Jahrb. 50, 2017, 133–540.
- Bestemann 1990:** J. C. Bestemann, Uitgeest. In: W. A. M. Hessing (ed.), Archeologische Kroniek van Holland over 1989 (Amersfoort 1990) 324–329.
- Bos 2005–2006:** J. M. Bos, Medieval brooches from the Dutch province of Friesland (Frisia): a regional perspective on the Wijnaldum brooches. Part I: small equal-armed brooches. Palaeohistoria 47–48, 2005–2006, 455–477.
- 2007–2008:** J. M. Bos, Medieval brooches from the Dutch province of Friesland (Frisia): a regional perspective on the Wijnaldum brooches. Part II: Disk Brooches. Palaeohistoria 49–50, 2007–2008, 709–793.
- Bunte 2013:** T. Bunte, Fibeln und Keramik des 6. bis frühen 11. Jahrhunderts aus der Ortswüstung Balhorn bei Paderborn. Wiss. Schr. WWU Münster. R. 10, 13 (Münster 2013).
- Carruba et al. 2021:** B. Carruba / F. Daubner / M. Fiedler, Der Alter Markt in Köln – Ausgrabungen in den Jahren 2004 bis 2012. Kölner Jahrb. 54, 2021, 7–302.



- Capelle 1976:** T. Capelle, Die frühgeschichtlichen Metallfunde von Domburg auf Walcheren 1 und 2. Nederlandse Oudheden 5 (Amersfoort 1976).
- 2006:** T. Capelle, Die Wikinger auf dem westeuropäischen Kontinent: Normannische Aktionen und karolingische Reaktionen – eine historisch-archäologische Spurensuche entlang von Flüssen. Dt. Schifffahrtsarchiv 29, 2006, 7–58.
- Carroll-Spillecke 1993:** M. Carroll-Spillecke, Das römische Militärlager Divitia in Köln-Deutz. Kölner Jahrb. 26, 1993, 321–444.
- Clemens 2001:** L. Clemens, Archäologische Beobachtungen zu frühmittelalterlichen Siedlungsstrukturen in Trier. In: S. Felgenhauer-Schmiedt / A. Eibner / H. Knittler (eds), Zwischen »Römersiedlung« und mittelalterlicher Stadt. Archäologische Aspekte zur Kontinuitätsfrage. Beitr. Mittelalterarch. Österreich 17 (Wien 2001) 43–66.
- 2010:** L. Clemens, Wirtschaft an Rhein und Mosel in der Spätantike und im Frühmittelalter. In: F. J. Felten (ed.), Wirtschaft an Rhein und Mosel. Von den Römern bis ins 19. Jahrhundert (Stuttgart 2010) 13–32.
- Croix et al. 2020:** S. Croix / S. M. Sindbæk / M. Søvsø, An 8<sup>th</sup>-Century Mayen Ware Pitcher Found in Ribe (Syddanmark/DK). Arch. Korrb. 50(4), 2020, 601–612. DOI: 10.11588/ak.2020.4.82370.
- Daubner et al. 2005:** F. Daubner / D. Hupka / S. Pfahl / R. Wirtz, Ausgrabungen Nord-Süd-Stadtbahn Köln. Der Alter Markt in Köln. Erster Bericht zu den Untersuchungen im Zeitraum von Juni bis November 2004 sowie Januar bis Dezember 2005 [unpubl. manuscript in the archive of the Roman-Germanic Museum, Cologne].
- Dietmar/Rakoczy 2002:** C. Dietmar / C. P. Rakoczy, Köln, der Rhein und das Meer. 2000 Jahre Kölner Schifffahrts- und Hafengeschichte (Köln 2002).
- Dietmar/Trier 2011:** C. Dietmar / M. Trier, Colonia – Stadt der Franken. Köln vom 5. bis 10. Jahrhundert (Köln 2011).
- Dinklage 1955:** L. Dinklage, Karolingischer Schmuck aus dem Speyer- und Wormsgau. Pfälzer Heimat 6(1–2), 1955, 1–4. 41–45.
- Dodt 2019:** M. Dodt, Der Kölner Hafen im Frühen Mittelalter. In: J. Bemmman / R. Gerlach / M. Mirschenz (eds), Der Rhein als europäische Verkehrsachse 3. Bonner Beitr. Vor- u. Frühgesch. Arch. 22 (Bonn 2019) 177–193.
- Dodt/Kronz 2021:** M. Dodt / A. Kronz, Frühmittelalterliche Glaswerkstätten in Köln und ihr Export an den Mittel- und Oberrhein, den Main und die Mosel. In: Gierszewska-Noszczyńska/Grunwald 2021, 189–199. DOI: 10.11588/propylaeum.996.c13285.
- Dodt et al. 2021:** M. Dodt / A. Kronz / K. Simon, Production of early medieval Glass in Cologne and its export via Dorestad. In: A. Willemsen / H. Kik (eds), Dorestad and its Networks. Communities, Contact and Conflict in Early Medieval Europe. Proceedings of the Third »Dorestad Congress« held at the National Museum of Antiquities, Leiden, the Netherlands, 12–15 June, 2019. Papers Arch. Leiden Mus. Antiqu. – PALMA 25 (Leiden 2021) 179–192.
- Doppelfeld 1951:** O. Doppelfeld, Grabung in der Kirche St. Ursula zu Köln. In: W. Neuß (ed.), Rheinische Kirchen im Wiederaufbau (Mönchengladbach 1951) 65–69.
- 1970:** O. Doppelfeld, Frühmittelalterliche Funde. In: Rom am Dom. Ausgrabungen des Römisch-Germanischen Museums. Schriftenr. Arch. Ges. Köln 16 (Köln 1970) 32–33.
- 1975:** O. Doppelfeld, Kölner Wirtschaft von den Anfängen bis zur Karolingerzeit. In: Kellenbenz 1975, 13–88.
- Düwel/Tempel 1968:** K. Düwel / W.-D. Tempel, Knochenkämme mit Runeninschriften aus Friesland. Mit einer Zusammenstellung aller bekannten Runenkämme und einem Beitrag zu den friesischen Runeninschriften. Pa-laehistoria 14, 1968, 353–391.
- Ennen 1975:** E. Ennen, Kölner Wirtschaft im Früh- und Hochmittelalter. In: Kellenbenz 1975, 87–193.
- Ewald/Rahtgens 1916:** W. Ewald / H. Rahtgens, Die kirchlichen Denkmäler der Stadt Köln. St. Alban – St. Andreas – Antoniterkirche – St. Apostel – St. Cäcilia – St. Columba – St. Cunibert – Elendskirche – St. Georg. Kunstdenkmäler Rheinprovinz 6, 4 = Kunstdenkmäler Stadt Köln 1, 4 (Düsseldorf 1916, reprint 1980).
- Ewig 1960:** E. Ewig, Beobachtungen zur Frühgeschichte des Bistums Köln. In: R. Haaß / J. Hoster (eds), Zur Geschichte und Kunst im Erzbistum Köln. Festschr. Wilhelm Neuss. Stud. Kölner Kirchengesch. 5 (Düsseldorf 1960) 13–39.
- Fischer 2002:** J. Fischer, Geld und Geldwirtschaft in merowingischer Zeit in Köln. Kölner Jahrb. 35, 2002, 281–306.
- Frick 1992–1993:** H. J. Frick, Karolingisch-ottonische Scheibenfibeln des nördlichen Formenkreises. Offa 49–50, 1992–1993, 243–463.
- Gechter/Schütte 1995:** M. Gechter / S. Schütte, Der Heumarkt in Köln. Ergebnisse und Perspektiven einer archäologischen Untersuchung. Gesch. Köln 38, 1995, 129–139.
- Geissen et al. 1987:** A. Geissen / B. Paffgen / G. Quarg, Die Fundmünzen der Jahre 1973–1980 aus Köln und Nachträge älterer Funde. Kölner Jahrb. 20, 1987, 129–199.
- Gierszewska-Noszczyńska/Grunwald 2021:** M. Gierszewska-Noszczyńska / L. Grunwald (eds), Zwischen Machtzentren und Produktionsorten: Wirtschaftsaspekte von der römischen Epoche bis in das Hochmittelalter am Rhein und in seinen Nachbarregionen. RGZM –

Tagungen 45 (Mainz 2021) 189–199. DOI: 10.11588/propylaeum.996.

**Giertz 2014:** W. Giertz, Karolingerzeitliche Funde aus dem Frankenreich in Ham(ma)burg – Tatinger Kanne und Kreuzfibel. In: R.-M. Weiss / A. Klammt (eds), *Mythos Hammaburg. Archäologische Entdeckungen zu den Anfängen Hamburgs* (Hamburg 2014) 219–235.

**Grunwald 2011:** L. Grunwald, Bestattungsritus und Sachgut der Karolingerzeit im Moselmündungsgebiet. *Ber. Arch. Mittelrhein u. Mosel* 17, 2011, 381–392.

**Haseloff 1990:** G. Haseloff, Email im frühen Mittelalter: frühchristliche Kunst von der Spätantike bis zu den Karolingern (Marburg a. d. Lahn 1990).

**Hegel 1950:** E. Hegel, Die Kölner Kirchen und die Stadtzerstörungen der Jahre 355 und 881. In: W. Zimmermann (ed.), *Untersuchungen zur frühen Kölner Stadt-, Kunst- und Kirchengeschichte* (Ratingen 1950) 41–53.

**Hellenkemper 1973:** RGA<sup>2</sup> 17 (1973) 101 s. v. Köln (H. Hellenkemper).

**Hillen/Trier 2012:** C. Hillen / M. Trier, Zur Geschichte der Kölner Königspfalz. *Gesch. Köln* 59, 2012, 5–42. DOI: 10.7788/gik.2012.59.1.5.

**Höltken 2003:** T. Höltken, Keramikfunde des 8.–10. Jahrhunderts vom Heumarkt in Köln. *Heumarkt 4. Kölner Jahrb.* 36, 2003, 511–566.

**2006:** T. Höltken, Karolingisch-ottonische Hausbefunde vom Heumarkt in Köln. *Kölner Jahrb.* 39, 2006, 457–520.

**2010:** T. Höltken, Ein Kamm aus Bronze. In: W. Schäferke / M. Trier (eds), *Mittelalter in Köln. Eine Auswahl aus den Beständen des Kölnischen Stadtmuseums* (Köln 2010) 253.

**2012a:** T. Höltken, Köln und die Friesen. In: M. Trier / F. Naumann-Steckner (eds), *ZeitTunnel. 2000 Jahre Köln im Spiegel der U-Bahn-Archäologie. Kostbare Funde aus der Kölner Unterwelt* [exhibition cat.] (Köln 2012) 150–151.

**2012b:** T. Höltken, Die karolingischen und hochmittelalterlichen Funde der Domgrabung. In: U. Back / T. Höltken / D. Hochkirchen, *Der Alte Dom zu Köln. Befunde und Funde zur vorgotischen Kathedrale*. *Stud. Kölner Dom* 12 (Köln 2012) 93–132.

**2021:** T. Höltken, Keramikversorgung im frühmittelalterlichen Köln. Köln am Übergang von Antike zum Mittelalter. In: Gierszewska-Noszczyńska/Grunwald 2021, 173–187. DOI: 10.11588/propylaeum.996.c13284.

**Höltken/Karas 2020:** T. Höltken / U. Karas, Ausgrabungen im Kölner Machabäerkloster. *Kölner Jahrb.* 53, 2020, 273–349.

**Kellenbenz 1967:** H. Kellenbenz, Der Aufstieg Kölns zur mittelalterlichen Handelsmetropole. *Jahrb. Köln. Gesch.* 41, 1967, 1–30.

**1975:** H. Kellenbenz (ed.), *Zwei Jahrtausende Kölner Wirtschaft. 1: Von den Anfängen bis zum Ende des 17. Jahrhunderts* (Köln 1975).

**Kemme 2021:** A. W. A. Kemme, A different perspective on the Carolingian economy: Material culture and the role of rural communities in exchange systems of the eighth and ninth centuries [Doctoral thesis Univ. Leiden 2021].

**Keussen 1910:** H. Keussen, *Topographie der Stadt Köln im Mittelalter 1–2* (Bonn 1910).

**Klinkenberg 1892:** J. Klinkenberg, Studien zur Geschichte der Kölner Märterinnen. *Bonner Jahrb.* 93, 1892, 130–179. DOI: 10.11588/bjb.1892.0.44380.

**Krause 2005:** G. Krause, Historisches Ereignis und archäologischer Befund – Drei Fallbeispiele aus der Duisburger Stadtarchäologie. *Mitt. Dt. Ges. Arch.* 16 (Paderborn 2005) 39–48.

**La Baume 1955:** P. La Baume, Einige nordgermanische Schmuckstücke im Römisch-Germanischen Museum Köln. *Kölner Jahrb.* 1, 1955, 49–55.

**Lebecq 1999:** RGA<sup>2</sup> (1999) 69–80 s. v. Friesenhandel (S. Lebecq).

**MacGregor 1985:** A. MacGregor, Bone, Antler, Ivory & Horn. *The Technology of Skeletal Materials Since the Roman Period* (London 1985).

**Mühlberg 1965a:** F. Mühlberg, Das sogenannte Caesarius-Oratorium (St. Georg). In: *Frühchristliches Köln* [exhibition cat.]. *Schriftenr. Arch. Ges. Köln* 12 (Köln 1965) 55–57.

**1965b:** F. Mühlberg, St. Severin. In: *Frühchristliches Köln* [exhibition cat.]. *Schriftenr. Arch. Ges. Köln* 12 (Köln 1965) 38–49.

**Müller 1987:** H. Müller, Bischof Kunibert von Köln. Staatsmann im Übergang von der Merowinger- zur Karolingerzeit. *Zeitschr. Kirchengesch.* 98, 1987, 167–205.

**2017:** H. Müller, Köln und die Lande an Rhein und Maas zur Zeit Plektruds und Pippins des Mittleren: am Rande des Frankenreichs? *Francia* 44, 2017, 1–28. DOI: 10.11588/fr.2017.0.68994.

**Nürnberg 2006:** G. Nürnberger, Die Vorgängerbauten der Kirche St. Ursula in Köln. *Kölner Jahrb.* 39, 2006, 581–717.

**Op den Velde/Metcalf 2014:** W. Op den Velde / M. F. Metcalf, The circulation of sceattas in the Southern Low Countries. *Rev. Belge Num.* 160, 2014, 3–22.

**Oppermann 1900:** O. Oppermann, Kritische Studien zur älteren Kölner Geschichte. 1: Die Fälschungen des Oliver Legipont zur Überlieferung von St. Martin. *Westdt. Zeitschr. Gesch. u. Kunst* 20, 1900, 271–344.

- Päffgen 2004:** B. Päffgen, Urban Settlements and Sacral Topography in the Rhineland at the Time of the Viking raids. In: R. Simek / U. Engel (eds), Vikings on the Rhine: Recent Research on Early Medieval Relations between the Rhinelands and Scandinavia. Stud. Mediaevalia Septentrionalia 11 (Wien 2004) 83–109.
- Petry 2004:** K. Petry, Venedig in Trier – zum Fund zweier venezianischer Stadtprägungen aus dem beginnenden 9. Jahrhundert in der Moselmetropole. Funde u. Ausgr. Bezirk Trier 36, 2004, 71–79. DOI: 10.11588/fu-abt.2004.0.54661.
- Rademacher 1927:** F. Rademacher, Ein karolingischer Töpferofen bei Wildenrath, Kr. Heinsberg. Bonner Jahrb. 132, 1927, 207–210. DOI: 10.11588/bjb.1927.0.47655.
- Rahtgens 1911:** H. Rahtgens, Die Kunstdenkmäler der Rheinprovinz. 7, Abt. 1: Die kirchlichen Denkmäler der Stadt Köln. 2: St. Gereon – St. Johann Baptist – Die Marienkirchen – Groß St. Martin (Düsseldorf 1911).
- 1913:** H. Rahtgens, Die Kirche S. Maria im Kapitol zu Köln (Düsseldorf 1913).
- 1929:** H. Rahtgens, Die Kunstdenkmäler der Rheinprovinz. 7, Abt. 2: Die kirchlichen Denkmäler der Stadt Köln: Minoritenkirche, S. Pantaleon, S. Peter, S. Severin (Düsseldorf 1929).
- Riemer 2006:** E. Riemer, Merowingerzeitliche Funde im Stadtgebiet von Köln. Kölner Jahrb. 39, 2006, 253–455.
- Ristow 2009:** S. Ristow, Die Ausgrabungen von St. Pantaleon in Köln. Archäologie und Geschichte von römischer bis in karolingisch-ottonische Zeit. Zeitschr. Arch. Mittelalter Beih. 21 (Bonn 2009).
- 2016:** S. Ristow, Aachen and Cologne in Carolingian and Ottonian times and the Viking raids. In: L. Holmquist / S. Kalmring / C. Hedenstierna-Jonson (eds), New Aspects on Viking-age Urbanism, c. AD 750–1100. Proceedings of the International Symposium at the Swedish History Museum, April 17–20<sup>th</sup> 2013. Theses and Papers Arch. B 12 (Stockholm 2016) 183–193.
- Roth/Trier 2001:** H. Roth / M. Trier, Ausgewählte Funde des 4. bis 11. Jahrhunderts aus den Grabungen auf dem Heumarkt in Köln. Kölner Jahrb. 34, 2001, 759–793.
- Schmauder 2005:** M. Schmauder, Ein Schwertgurtbesatz aus Jüchen-Garzweiler – Werke des insularen Tierstils kontinentaler Prägung aus dem Rheinland. In: B. Päffgen / E. Pohl / M. Schmauder (eds), Cum grano salis: Beiträge zur europäischen Vor- und Frühgeschichte. Festschr. Volker Bierbrauer zum 65. Geburtstag (Friedberg 2005) 293–301.
- Schmidt-Bleibtreu 1980:** W. Schmidt-Bleibtreu, Das Stift St. Severin in Köln von den Anfängen der Kirche im 4. Jahrhundert bis zur Aufhebung im Jahre 1802 (Bonn 1980).
- Schütte 1995:** S. Schütte, Continuity problems and authority structures in Cologne. In: G. Ausenda (ed.), After Empire. Towards an Ethnology of Europe's Barbarians. Stud. Hist. Arch. 1 (Woodbridge 1995) 163–175.
- 2000:** S. Schütte, Köln als Handelsplatz des Früh- und Hochmittelalters. In: A. Wieczorek / H. Hinz (eds), Europas Mitte um 1000. 1 (Stuttgart 2000) 184–187.
- Schütte et al. 1998:** S. Schütte / M. Gechter / V. Zedelius / J. Giesler, Beiträge zur mittelalterlichen Baugeschichte des Kölner Albansviertels. In: G. U. Großmann (ed.), Zur Bauforschung im Rheinland. Ber. Haus- u. Bauforsch. 5 (Marburg 1998) 29–59.
- Schulze-Dörrlamm 1999:** M. Schulze-Dörrlamm, Münzfibeln der Karolingerzeit. Arch. Korrb. 29, 1999, 271–288.
- 2013:** M. Schulze-Dörrlamm, Mainz im 9. und frühen 10. Jahrhundert. In: W. Wilhelmy (ed.), Glanz der späten Karolinger. Hatto I. Erzbischof von Mainz (891–913). Von der Reichenau in den Mäuseturm [exhibition cat. Mainz] (Regensburg 2013) 88–107.
- 2021:** M. Schulze-Dörrlamm, Die Friesen und das Friesenviertel in Mainz aus etwas anderer Sicht. In: Gierszewska-Noszczyńska/Grunwald 2021, 347–358. DOI: 10.11588/propylaeum.996.c13295.
- 2022:** M. Schulze-Dörrlamm, Die Einwanderung von Angelsachsen ins Frankenreich aus archäologischer Sicht. Zu den Spuren der »angelsächsischen Mission« im ausgehenden 7. bis mittleren 9. Jahrhundert. Monogr. RGZM 158 (Mainz 2022). DOI: 10.11588/propylaeum.1025.
- Schumacher 1925:** K. Schumacher, Siedlungs- und Kulturgeschichte der Rheinlande von der Urzeit bis in das Mittelalter 3 (Mainz 1925).
- Seiler 1977:** S. Seiler, Ausgrabungen in der Kirche St. Kolumba in Köln. Zeitschr. Arch. Mittelalter 5, 1977, 97–119.
- Skre 2010:** D. Skre, From Dorestad to Kaupang. Frankish Traders and Settlers in a 9<sup>th</sup> century Scandinavian Town. In: A. Willemsen / H. Kik (eds), Dorestad in an International Framework. New Research on Centres of Trade and Coinage in Carolingian times. Proceedings of the first »Dorestad Congress« held at the National Museum of Antiquities, Leiden, the Netherlands, June 24–27, 2009 (Turnhout 2010) 137–141.
- Spiong 2000:** S. Spiong, Fibeln und Gewandnadeln des 8. bis 12. Jahrhunderts in Zentraleuropa. Eine archäologische Betrachtung ausgewählter Kleidungsbestandteile als Indikatoren menschlicher Identität. Zeitschr. Arch. Mittelalter Beih. 12 (Bonn 2000).
- Steuer 1982:** H. Steuer, Spiegel des täglichen Lebens. Archäologische Funde des Mittelalters aus Köln [exhibition cat.] (Köln 1982).
- 1987:** H. Steuer, Der Handel der Wikingerzeit zwischen Nord- und Westeuropa aufgrund archäologischer



Zeugnisse. In: K. Düwel / H. Jankuhn / H. Siems / D. Timpe (eds), Untersuchungen zu Handel und Verkehr der vor- und frühgeschichtlichen Zeit in Mittel- und Nordeuropa. 4: Der Handel der Karolinger- und Wikingerzeit. Bericht über die Kolloquien der Kommission für die Altertumskunde Mittel- und Nordeuropas in den Jahren 1980 bis 1983 (Göttingen 1987) 113–197.

**Trier 2002:** M. Trier, Köln im frühen Mittelalter: Zur Stadt des 5. bis 10. Jahrhunderts aufgrund archäologischer Quellen. In: J. Henning (ed.), Europa im 10. Jahrhundert. Archäologie einer Umbruchszeit (Mainz 2002) 301–310.

**2012:** M. Trier, Ausgrabungen im Rheinhafen des römischen Köln – zehn Jahre U-Bahn-Archäologie in Köln (2003–2012). In: C. Ohlig (ed.), DWHG – zehn Jahre waserhistorische Forschungen und Berichte 1 (Siegburg 2012) 179–191.

**Ubl 2022:** K. Ubl, Köln im Frühmittelalter (400–1100). Geschichte der Stadt Köln 2 (Köln 2022).

**Wamers 1981:** E. Wamers, Wikingerzeitliche Schmuckstücke aus Privatsammlungen im Römisch-Germanischen Museum, Köln. Arch. Korrbibl. 11, 1981, 341–354.

**1994:** E. Wamers, Die frühmittelalterlichen Lesefunde aus der Löhrstraße (Baustelle Hilton II) in Mainz. Mainzer Arch. Schr. 1 (Mainz 1994).

**2013:** E. Wamers, Tassilo III. von Baiern oder Karl der Große? – Zur Ikonographie und Programmatik des sogenannten Tassilokelch-Stils. In: K. Roth-Rubi / E. Kühne / H. R. Sennhauser (eds), Wandel und Konstanz zwischen Bodensee und Lombardei zur Zeit Karls des Großen (Zürich 2013) 427–450.

**White 1988:** A. J. White, Copper-alloy combs from Britain and Frisia. Medieval Arch. 32, 1988, 212–213. DOI: 10.5284/1071753.

**Zöller 1993:** S. Zöller, Kaiser, Kaufmann und die Macht des Geldes Gerhard Unmazed von Köln als Finanzier der Reichspolitik und der »Gute Gerhard« des Rudolf von Ems (München 1993).

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