

# Early Medieval Finds as Evidence of Individual Long-Distance Contacts, Acts of War and Economic Relations with the North

## The Middle Rhine and Lower Moselle Region

### ABSTRACT

This article sheds light on the relations between the landscapes of the Middle Rhine and the Lower Moselle and the North in the Early Middle Ages. While in the Merovingian period contacts beyond the mouths of the Rhine, Meuse and Scheldt existed only to a lesser extent, a massive and multi-layered increase took place in the Carolingian period under the coordination of Frisian traders. Mayen millstones made of basalt lava and wine were particularly sought after in Great Britain and Denmark. Occasionally, Norway, Sweden and the Baltic region were reached with these goods. The pottery produced in Mayen was of secondary importance in comparison and must be regarded as individual private property in rural areas outside of economic hubs such as Ribe or Haithabu. Remarkable is both the evidence of Frisian-Scandinavian brooches in burials on the Middle Rhine and Lower Moselle region and the occurrence of jewellery of Rhenish production in the North. The Norman threat from the North and the contacts of early Christianity towards the North are further aspects.

### KEYWORDS

Scandinavia / Middle Rhine and Lower Moselle region / Early Middle Ages / long-distance trade / millstone / basalt lava / pottery / Mayen / Christianity / Normans

### Historical Development

The regions of the Middle Rhine and the Lower Moselle have been well researched for the Early Middle Ages. In the field of cemetery archaeology, area surveys covering almost the entire partial landscape of this region are available<sup>1</sup>. In addition, there are analyses of individual rural burial sites<sup>2</sup> or larger settlements such as Andernach<sup>3</sup>. Only for the necropolises in the Neuwied-Gladbach area is there no corresponding object documentation. Therefore,

one has to make do with preliminary reports<sup>4</sup>. If one starts from these multi-layered finds and combines the material depicted there with the current dating approaches, one obtains a new picture, for example, for the period from 670/680 to 910/920<sup>5</sup>. In comparison, the aspect of settlement archaeology for the Early Middle Ages has only been appreciated to a limited extent in the Middle Rhine and the Lower Moselle<sup>6</sup>. Nevertheless, a representative new

<sup>1</sup> Neumayer 1993; 2023; Grunwald 1998; Grünewald 2001; Hanel 1994; Back 1989; Ament 1976.

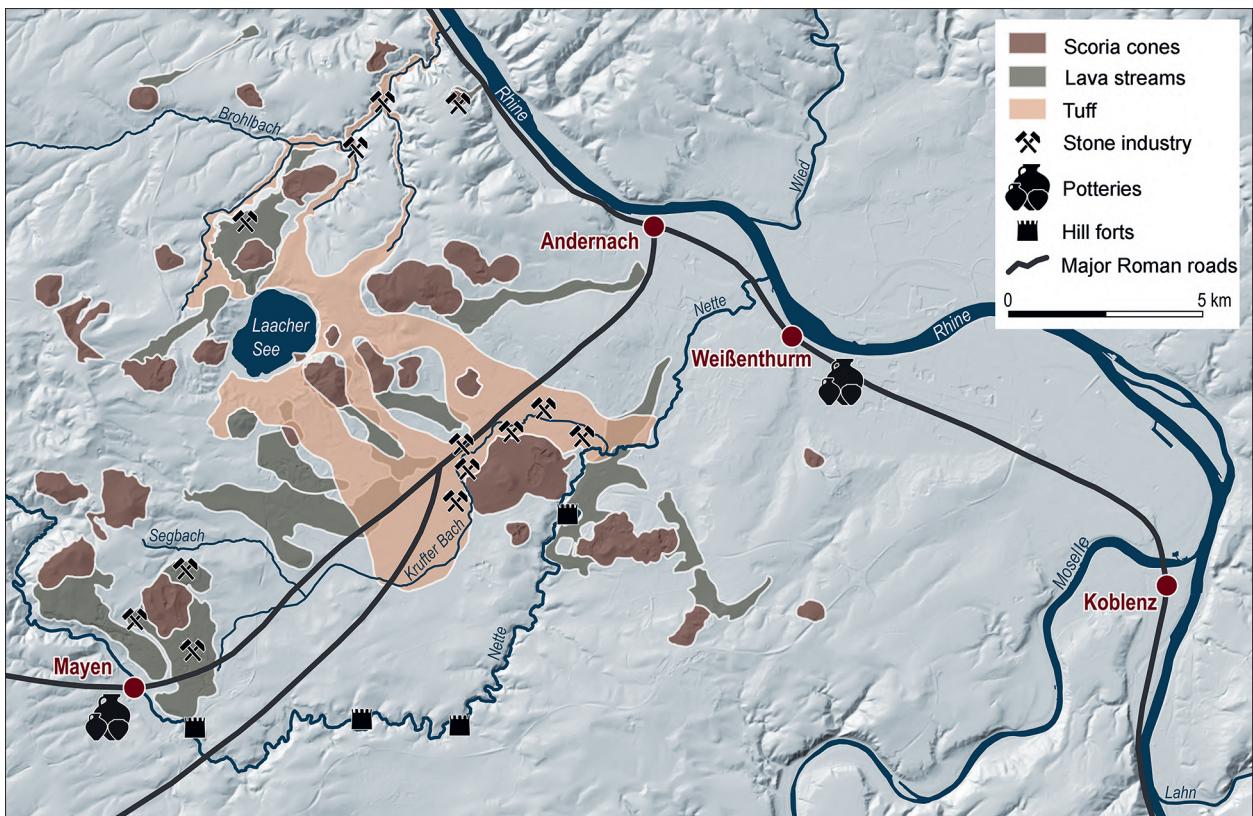
<sup>2</sup> Cf. Neuffer-Müller/Ament 1973; Machhaus 2003; Saal 2014; Schultze-Dörrlamm 1990.

<sup>3</sup> Vogel 2006.

<sup>4</sup> In summary, cf. Grunwald/Schreg 2013.

<sup>5</sup> Grunwald 2022a, 507–518.

<sup>6</sup> Grunwald 2013.



**Fig. 1** The ancient quarry and mining area between Mayen on the edge of the East Eifel and Andernach on the Rhine. – (Graphics B. Streubel, LEIZA; base map ©GeoBasis-DE/LVermGeoRP 2022, after Grunwald 2022a, 3 fig. 1).

overview was published on this topic in 2022<sup>7</sup>. In addition, several studies focused on the economic aspects and the export goods produced in the Roman period and in the Early Middle Ages, especially in the Moselle estuary<sup>8</sup>. The entire region between Mayen in the Eastern Eifel and Andernach on the Rhine is to be regarded as an ancient pre-modern industrial area (fig. 1)<sup>9</sup> of extreme importance for large parts of the Roman Empire and subsequently, to a likewise economically formative extent, for the early medieval rulers<sup>10</sup>. Here, in a densely populated area well served by roads, smaller bodies of water and the larger rivers Rhine, Moselle and Lahn, building stones made of tuff, millstones made of basalt lava, pottery made of clay and high-quality wine were produced<sup>11</sup>. An industrial area is understood to be a limited area in which goods were produced in large quantities over a long period of time in standardised manufacturing processes with a division of labour for the supra-regional export market<sup>12</sup>. In the working area, this applies especially to the landscape be-

tween Mayen and Andernach, which was also massively protected and monitored in late antiquity by hill fortifications.

Based on the good publication situation, the following can be stated for the Middle Rhine and the Lower Moselle region: Between the destruction by the Alamanni in 355 and the second half of the 9<sup>th</sup> century, with the increasing threat of the Normans from the north and the disputes between the Frankish sub-kingdoms, neither the archaeological evidence nor the written sources give any indication of significant warfare<sup>13</sup>. The greater area was rather characterised by peaceful, continuous and productive development. As late as 842, 859 and 860, the Andernach/Koblenz area was used for high-level negotiations between the Carolingian rulers<sup>14</sup>. However, the situation changed fundamentally despite the partition treaty concluded on 8 August 870 in Meerssen (near Maastricht/NL). Battles flared up between the East and West Frankish Empires. The issue was the rule over the entire territory of the king of the northern Middle

<sup>7</sup> In summary, see Grunwald 2022a, 65–100.

<sup>8</sup> Mangartz 2008; Schaaff 2015; Wenzel et al. 2021; Grunwald 2022a; 2022b; Grunwald/Wenzel 2023.

<sup>9</sup> Cf. Hunold 2011; 2016; Giljohann et al. 2017; Hunold/Schaaff 2019; 2020; Grunwald/Wenzel 2021; 2022; 2023.

<sup>10</sup> Cf. Grunwald 2018; 2022a; 2022b.

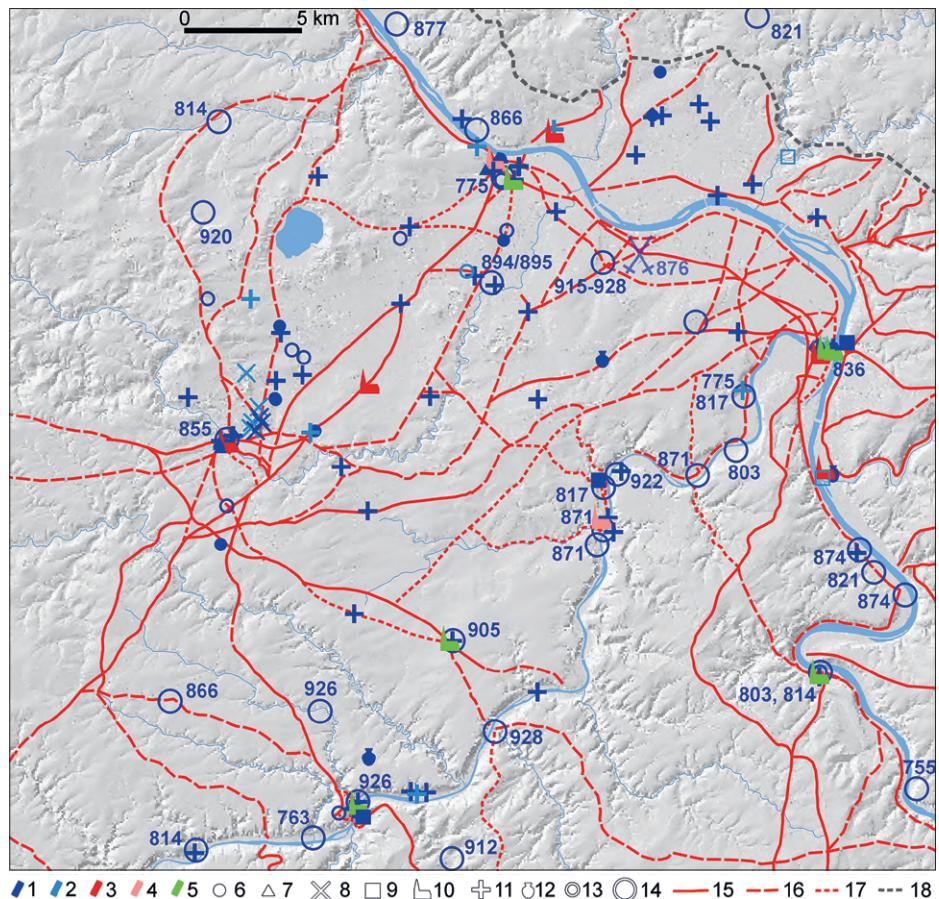
<sup>11</sup> Saal 2014, 394–399.

<sup>12</sup> Fundamental to the definition of the industrial district: Hunold/Schaaff 2021.

<sup>13</sup> Grunwald 2022a, 480–518; Grunwald/Wenzel 2023, 22–27.

<sup>14</sup> In summary, see Flach 1992, 102–110.

**Fig. 2** Roman roads and sites from the Carolingian period in the Moselle estuary area:  
**1** Carolingian period. – **2** Carolingian period, dating not precise. – **3** Church, archaeological finding. – **4** Probable church. – **5** Collegiate church. – **6** Settlement. – **7** Pottery kiln. – **8** Quarry. – **9** Fortification. – **10** Church. – **11** Cemetery. – **12** Coin treasure. – **13** Single finds. – **14** Settlements with historical mentions. – **15** Roman road. – **16** Probable Roman road. – **17** Roman road reconstructed. – **18** Course of the Limes in the middle imperial period. – (Graphics S. Wenzel, LEIZA; base map ©GeoBasis-DE/LVermGeoRP 2022, after Grunwald/Wenzel 2023, 25 fig. 14, processed).



Kingdom, Lothar II, who had died in 869 without a legitimate heir and which stretched from Burgundy and Switzerland in the south to the Frisian coast in the north<sup>15</sup>. This also directly affected the state affiliation of the economically important and prosperous former Lotharingian landscapes on the Middle Rhine and lower Moselle. Charles II the Bald wanted to incorporate them into his West Frankish Empire. However, in a battle fought on 8 October 876 southeast of Andernach between the West Frankish army and the force of the East Frankish Empire under Louis III the Younger (fig. 2), the East remained victorious<sup>16</sup>. Louis consolidated his newly acquired territorial claims in the Treaty of Ribemont (near Saint-Quentin/FR) concluded in February 880. The regions of the Middle Rhine and the lower Moselle thus remained East Frankish. After the death of Louis III the Younger on 20 January 882, however, destruction by the Normans began here during the regency of his brother and successor Charles III the Fat<sup>17</sup>. These lootings are certainly not only the result of political changes and

uncertainties, but also a consequence of the previous campaigns and the resulting weakening of the East Frankish Empire.

Between 355 and 876, however, there was a period of peace lasting longer than 500 years on the Middle Rhine and the lower Moselle, during which the local industries produced for export<sup>18</sup>. This took place on a large scale, with Mayen in particular, with its pottery and millstone production, being the most important economic location for the manufacture of goods in the Early Middle Ages. Also, in this phase, the working area must be addressed as rich, economically eminently important and desirable for every state budget due to the tax revenues to be gained here<sup>19</sup>. This development was not affected by the changes in the balance of power that occurred in the Rhineland during the second half of the 5<sup>th</sup> century and the first half of the 6<sup>th</sup> century, nor by the deterioration of the climate during the »Late Antique Little Ice Age«<sup>20</sup> of the later 6<sup>th</sup> and 7<sup>th</sup> centuries existentially affected<sup>21</sup>. The reason for this lay in the continuation of

**15** Summarising the historical development for the working area, cf. Grunwald 2018, 909–911; 2022a, 461–462.

**16** Cf. Flach 1992: 111-112.

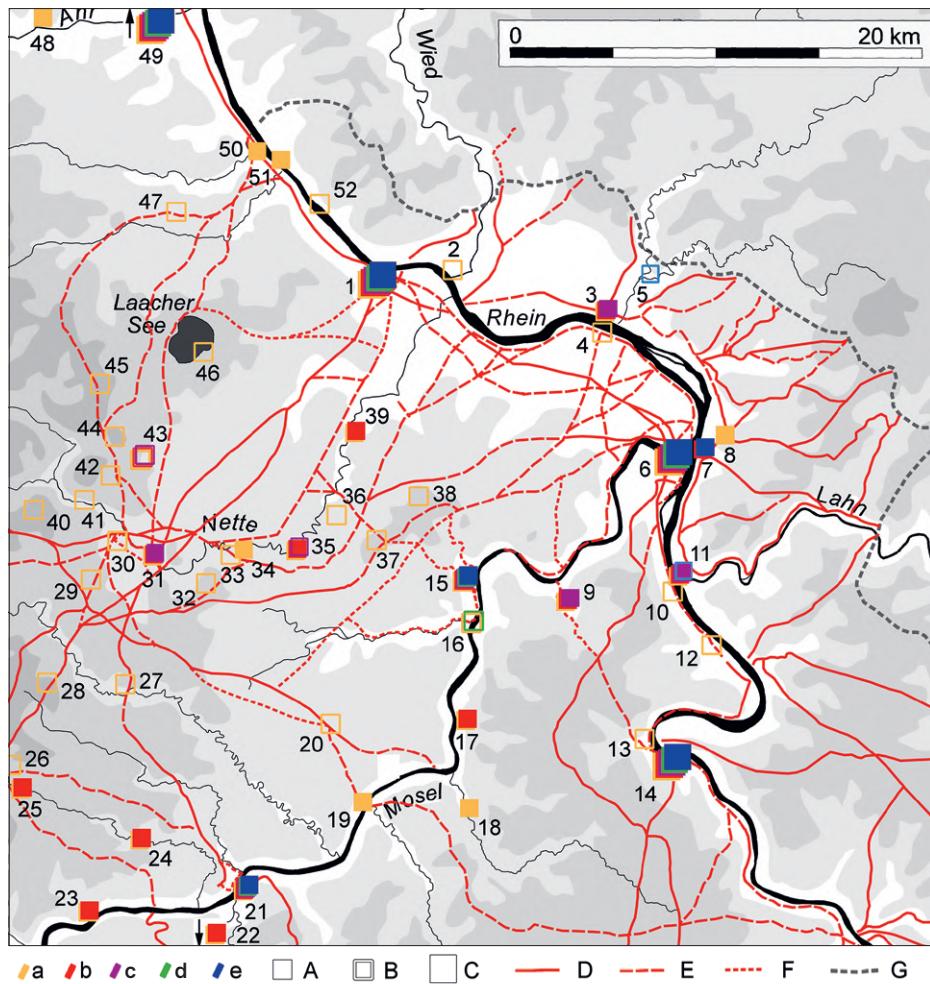
17 On the development, see Flach 1992: 112–114.

**18** In summary, cf. Grunwald/Wenzel 2023.

19 Cf. Grunwald 2022b.

20 Lastly Jöns 2022.

<sup>21</sup> In summary Grunwald 2022a, 491–511. – Cf. Grunwald/Wenzel 2023.



**Fig. 3** Fortifications from Late Antiquity to the Carolingian period in the Moselle estuary area: **a** 4<sup>th</sup> century/Late Antiquity. – **b** 5<sup>th</sup> century. – **c** Second half of the 5<sup>th</sup> century. – **d** Merovingian period. – **e** Carolingian period. – **A** Fortification. – **B** Fortification suspected/not proven with certainty. – **C** Fortified city. – **D** Roman road. – **E** Probable Roman road. – **F** Roman road reconstructed. – **G** Course of the Limes in the middle imperial period. – **1** Andernach/Antunnacum. – **2** Neuwied-Irlach. – **3** Neuwied-Engers. – **4** Kaltenengers. – **5** Castle Sayn. – **6** Koblenz/Confluentes. – **7** Koblenz-Ehrenbreitstein. – **8** Koblenz-Niederberg. – **9** Koblenz-Kartause. – **10** Koblenz-Stolzenfels. – **11** Lahnstein-Niederlahnstein. – **12** Rhens, St Dionysius. – **13** Boppard, Old Castle. – **14** Boppard/Bodobrica. – **15** Kobern, Niederburg. – **16** Gondorf, Niederburg. – **17** Alken, Burgberg (Castle Thurandt). – **18** Brodenbach, Ehrenburg. – **19** Münstermaifeld-Lasserg, Burgberg. – **20** Münstermaifeld, collegiate church. – **21** Treis, Zillesberg. – **22** Mittelstrimmig. – **23** Klotten, Castle Coraidelestein. – **24** Binningen, Kuhkeller. – **25** Hambach, Burgberg. – **26** Kaisersesch, Römereturm. – **27** Kehrig, Berfeldskopf. – **28** Düngenheim, Geisenberg/Beilstein. – **29** Mayen, Geishecker Hof. – **30** Mayen, Genovevaburg. – **31** Mayen, Katzenberg. – **32** Polch-Obergein. – **33** Polch, Galgen-/Rosenberg. – **34** Trimbs/Welling, Burgberg. – **35** Polch-Ruutsch, Burgberg. – **36** Ochtendung, Unterwald. – **37** Ochtendung, Oben am Münsterer Weg. – **38** Bassenheim, Karmelenberg. – **39** Ochtendung, Castle Wernerseck/Kelterhausberg. – **40** Kürrenberg, Scheidkopf. – **41** Mayen, Im Jagen 47. – **42** Ettringen, Sinsberg. – **43** Mendig, Im Winkel. – **44** Mendig, Hochstein. – **45** Rieden, Auf dem Sommerberg. – **46** Krift, Castle Laach. – **47** Lützingen, Herchenberg. – **48** Bad Neuenahr-Ahrweiler, Lohrsdorf, Landskrone. – **49** Remagen/Rigomagus. – **50** Rheineck, Reutersley. – **51** Rheinbrohl. – **52** Castle Hammerstein. – (Graphics S. Wenzel, LEIZA; base map O. Jöris, LEIZA, after Grunwald/Wenzel 2023, 12 fig. 1, processed).

economic structures, trade networks and tax systems beyond the epochal boundary<sup>22</sup>. The conditions of the population living along the Middle Rhine and the lower Moselle therefore hardly changed over the centuries. It is not surprising that this area was also productive and prosperous in the Carolingian period, which is of particular interest here due to the contacts with Scandinavia that can be traced.

The regions of the Middle Rhine and the Lower Moselle were also much more densely populated

than can be seen in the publications to date. The re-evaluation of the archaeological finds and written sources to be consulted has only just begun<sup>23</sup>. The current settlement pattern (fig. 2), which will certainly be supplemented in the future, shows that from the middle of the 8<sup>th</sup> century until the first half of the 10<sup>th</sup> century, large numbers of settlements continued to be oriented towards the Roman road network. The established road connections were thus used continuously and, along with the water-

<sup>22</sup> Cf. Grunwald/Wenzel 2023.

<sup>23</sup> Grunwald 2022a, 511 and supplement 4; Grunwald/Wenzel 2023.

ways, formed the basis for travel, exchange, transport, trade and long-distance export, as they had in the Roman era and in the Merovingian period. The latter now also reached Scandinavia. It is therefore in no way possible to speak of depopulated and settlement-poor landscapes in the Carolingian period in the Middle Rhine and the Lower Moselle. On the contrary, this epoch represents an economic boom phase and a rich, even flourishing landscape for the working area<sup>24</sup>.

In 2022, the author also went into detail about securing the economically so important working area in Late Antiquity<sup>25</sup>. It was possible to prove that the landscapes of the Middle Rhine and the Lower Moselle, which were criss-crossed by a dense network of main roads, were a very fortified area (fig. 3). There was a dense network of fortified towns, protected *vici*, forts, *burgi*/ship lands, hill fortifications as well as stations and watchtowers especially oriented towards the thoroughfares and waterways.

It is remarkable that in the Carolingian period, in addition to the strategically particularly important larger settlements – such as Remagen, Andernach, Koblenz or Boppard – neuralgic terrain formations were again used for surveillance and defence purposes with their late antique fortifications that were certainly still largely present in the stone substance. Even more surprising is the fact that two fortifications – the late antique hilltop fortifications on the Zillesberg near Treis-Karden (fig. 3, 21)<sup>26</sup> and of the Niederburg near Kobern, municipality of Kobern-Gondorf (fig. 3, 15)<sup>27</sup> – were used for surveillance purposes probably continuously from Late Antiquity to the Carolingian period and beyond. This is also an indication of the constancy and continuity in the working area from the Roman roots to the Carolingian period. However, even these defences could not prevent the crisis of the second half of the 9<sup>th</sup> century with the Norman invasions that are still to be addressed.

## Economic Relations

If one asks about the contacts from the landscapes on the Middle Rhine and the Lower Moselle with the north, one immediately thinks of the multi-layered exchange of goods and long-distance trade. Initially, this took place by water over the Rhine. Supra-regional trade with products from the basalt lava found near Mayen already began during the Urnfield culture in the time around 1000 BC and reached the Dutch coastal region in the north<sup>28</sup>. Long-distance trade, which since prehistoric times has made particular use of the great rivers for the exchange of goods between the Mediterranean and the North Sea coasts<sup>29</sup> thus, in the early Middle Ages, there was already a very long tradition in our region. S. Wenzel and the author dealt comprehensively with the complex of topics of production, trade and export of goods from the working area in the years 2021 to 2023 for the Roman period and the Early Middle Ages<sup>30</sup>. It turned out that also in the Early Middle Ages the goods of the industrial area between Mayen on the eastern edge of the Eifel and Andernach on the Rhine were traded to far parts of Europe. These were mainly the clay vessels pro-

duced in Mayen and the basalt lava millstones produced in and near Mayen. In addition, the export of these so-called »Mayen ware« has recently been examined<sup>31</sup>. Furthermore, wine cultivation must have been extensive and the pressed wines must also have been exported to the north on a large scale<sup>32</sup>. In any case, there are numerous archaeological and written references to wine-growing villages in the Middle Rhine and Lower Moselle regions, especially from the Carolingian period<sup>33</sup>. In contrast, the importance of lightweight tuff building blocks, which were still important in Late Antiquity, declined massively in the Merovingian period and even in the Carolingian period they are not products of export, which is why they are not discussed further here<sup>34</sup>.

In summary, although Mayen pottery reached the estuaries of the Rhine, Meuse and Scheldt in a northerly direction during the Merovingian period, there is no evidence of long-distance export to Great Britain and Scandinavia in the 6<sup>th</sup> and 7<sup>th</sup> centuries. The situation is different with the Mayen millstones made of basalt lava, which were found in the south

<sup>24</sup> Lastly Grunwald/Wenzel 2023.

<sup>25</sup> Grunwald 2022a, 485-491. – See also Grunwald/Wenzel 2023.

<sup>26</sup> Grunwald 2022a, 496.

<sup>27</sup> Grunwald/Wenzel 2023, 14.

<sup>28</sup> As early as the late Bronze Age, rubbing stones made of Mayen basalt lava were widely exported during the Urnfield Culture and reached the Dutch North Sea coastal region in a northerly direction, see Hoffmann/Wenzel 2018, 84 with distribution map fig. 2.

<sup>29</sup> Cf. Theuws et al. 2021, 450-452 with fig. 25, 17.

<sup>30</sup> Grunwald/Wenzel 2021; 2022; 2023.

<sup>31</sup> Grunwald 2022a, 441-460.

<sup>32</sup> Cf. Theuws et al. 2021, 455-457 with fig. 25, 19; Grunwald 2022a, 513-514.

<sup>33</sup> Saal 2014, 394-399.

<sup>34</sup> Lastly Grunwald/Wenzel 2023, 7-8.

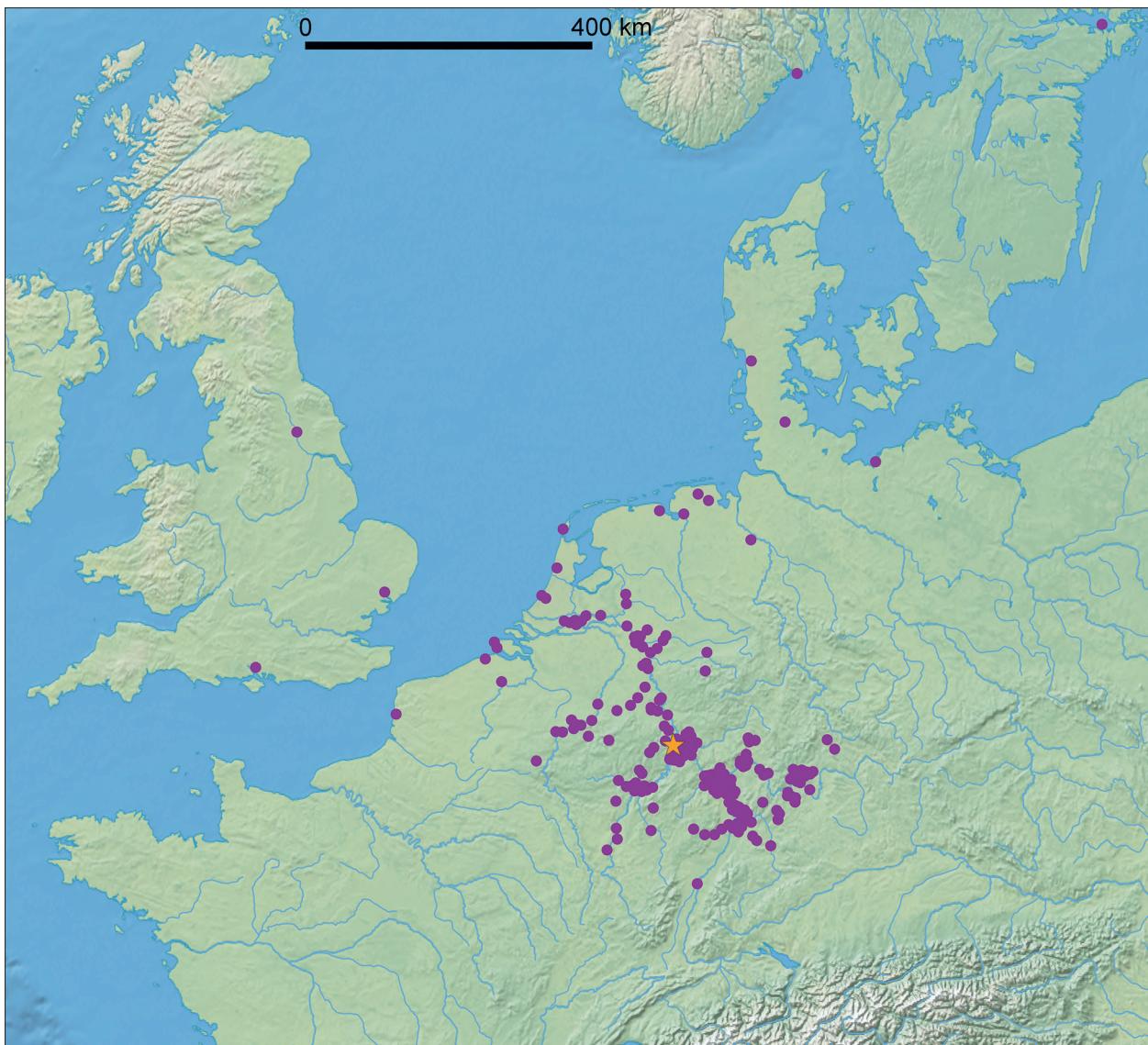


Fig. 4 Findspots (●) of Carolingian pottery from Mayen (\*). – (Graphics L. Grunwald; base map Natural Earth, after Grunwald 2022a, 457 fig. 239).

of England and in smaller numbers on the Kimrian peninsula and on the Baltic coast during this period. However, a large-scale export can only be assumed for England.

The distribution of Carolingian Mayen pottery (fig. 4) is more extensive than that of the Merovingian period. It can be traced in the north, with a few records in England, to the most distant sites in Scandinavia, Kaupang<sup>35</sup>/Skiringssal-kaupangen (a trading centre established under Danish influence around 800 in the southern part of today's Fylke Vestfold/Norway)<sup>36</sup> and the trading post of Birka, founded around 750, on the small island of Björkö in Sweden's Lake Mälaren<sup>37</sup>. In the Nether-

lands and in northern Germany, a connection of the distribution to the North Sea coast can be read. The transport routes could be via trading emporia such as the Frankish-Frisian Dorestad on the Krumme Rhine (near and in Wijk bij Duurstede/NL), Ribe in Denmark (foundation of the trading centre around 700) or settlements founded between 750 and 770 such as Haithabu near Schleswig<sup>38</sup> and Reric/Groß Strömkendorf, which is already on the Baltic Sea coast. However, it cannot be assumed – if at all – that Mayen pottery was exported in large quantities. The known numbers of finds – apart from Ribe and Haithabu – are so small in this region that the Mayen products are more likely to have been private pos-

<sup>35</sup> In summary Kilger 2008.

<sup>36</sup> Few fragments of Mayen pottery are known from Kaupang, cf. Pilø 2011, 281, 283, 291–292 fig. 10, 11.

<sup>37</sup> To sum up on Birka, see Herget 2008.

<sup>38</sup> To sum up to Haithabu, see Hilberg 2008; 2017; 2018.

sessions that travelled with their owners beyond the Rhine estuary region to the north. The interpretation of the Rhenish pottery discovered in North Frisia, on the adjacent Kimbrian peninsula and in further Scandinavia as imported goods is generally disputed (cf. Keller, this volume). It is often interpreted primarily as the personal equipment of valuable traders<sup>39</sup>. The products originating from Mayen must also be critically evaluated. If we look at the North Frisian Islands, for example, no »Mayen ware« has been found there. Even otherwise, the Rhenish ceramic products that appeared there around 700 and in the first half of the 8<sup>th</sup> century are only present in small numbers<sup>40</sup>. It can therefore not be assumed that the »Mayen ware« was regularly exported to the far north. The late Merovingian/Carolingian pottery from Mayen is likely to have been privately owned in rural Scandinavia outside trading centres such as Ribe or Haithabu. The same must be assumed for the few finds from Britain. How the Mayen pottery in the two economically important centres mentioned above is to be evaluated remains to be clarified in the future.

The distribution of the Carolingian northern export is completely different for the millstones from the basalt lava found near Mayen (fig. 5). The map shows a massive long-distance trade with such machines to the north<sup>41</sup>. In 2021 A. W. A. Kemme stated for the Netherlands that basalt lava millstones »were almost certainly present on every site in our research area throughout the eighth and ninth century«<sup>42</sup>. Such machines were thus commonly used there in the Carolingian settlements and were available over a wide area<sup>43</sup>. The export range of basalt lava millstones extended in the north from England via Denmark to the German Baltic coast, and selectively to Norway (Kaupang), Sweden (Birka) and Poland (Wolin). Millstone blanks were part of the car-

go of the 9<sup>th</sup> century Graveney boat on the coast of Kent<sup>44</sup>. Blanks, semi-finished products and finished mills were exported from Mayen. According to A. Dobat, the millstones made of Mayen basalt lava were transported by seagoing ships primarily as ballast material and thus as secondary trade goods to the more distant<sup>45</sup>. From here they were then – in the case of blanks or semi-finished products after finishing – passed on to the settlements in the hinterland of the trading centres. The basalt lava millstones were finally available throughout the North Frisian settlements as »household goods for daily use«<sup>46</sup>. There are similar indications for the entire Kimbrian peninsula with an expansion into Norway, Sweden and the Baltic Sea region<sup>47</sup>. One has the impression that in the period around 800/the 9<sup>th</sup> century, the Danish sphere of influence covering parts of southern Norway and southern Sweden as well as the German Baltic Sea coast was extensively supplied with this trade good. The basalt lava millstones produced in Mayen were therefore certainly an exported trade good north of the Rhine-Meuse Delta and in Great Britain from around 700 onwards. With the rise of Christianity in the Middle Rhine and lower Moselle (see below), the production of the widely exported basalt lava millstones, especially in the Carolingian period, may have been increasingly under ecclesiastical patronage<sup>48</sup>. This is supported by a written exchange of goods between the monasteries of St Maximin in Trier and the Prüm monastery in 855, in which the Mayen quarries are mentioned for the first time<sup>49</sup>. M. Pohl assumes that in the High and Late Middle Ages, too, ecclesiastical institutions were primarily the landowners of the quarry plots for basalt lava<sup>50</sup>. The church's involvement in the production and export of goods from the labour area is therefore particularly evident for the millstones.

## Evidences of Long-Distance Contacts: The Early Medieval Finds

There is a very extensive find material from the numerous burial grounds with grave goods in the Middle Rhine and the Lower Moselle. The objects are often of high quality. Based on this, one can assume that the population of these landscapes was at least

partially wealthy. Almost always, the finds fit into the spectrum of East Frankish forms of the Early Middle Ages known from the Rhine-Moselle region. But not in every case. In 2022, for example, the author pointed out on a few pages some unusual finds

<sup>39</sup> In summary, cf. Majchczack 2020, 269.

<sup>40</sup> Majchczack 2020, 230–231 with fig. 108.

<sup>41</sup> Cf. Pohl 2012, 127–143.

<sup>42</sup> Kemme 2021, 368.

<sup>43</sup> Kemme 2021, 256 fig. 6, 3.

<sup>44</sup> Grunwald/Wenzel 2022, 50.

<sup>45</sup> Dobat 2010, 421.

<sup>46</sup> Majchczack 2020, 269–270.

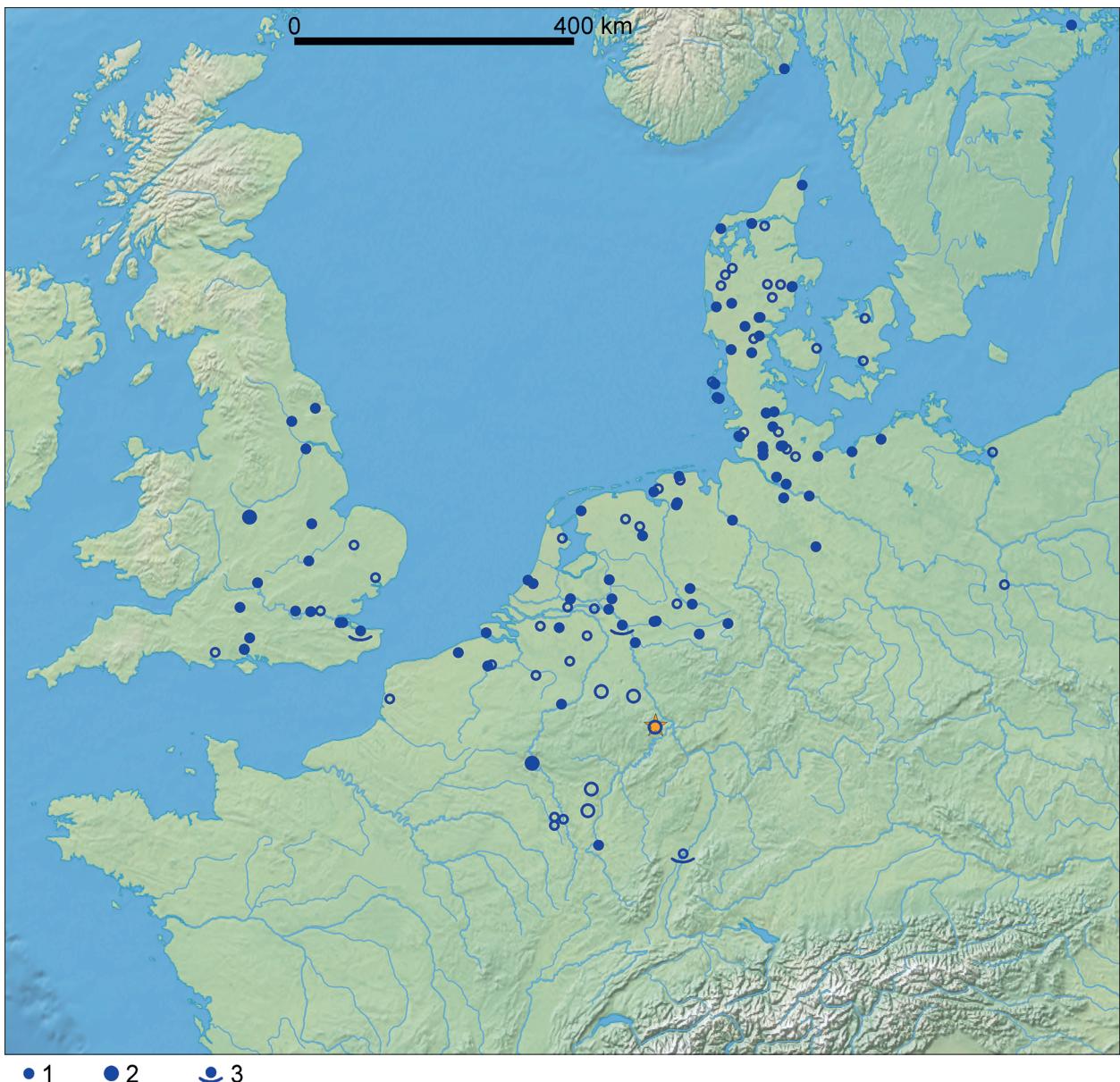
<sup>47</sup> Cf. Wenzel 2020.

<sup>48</sup> Dobat 2010, 418.

<sup>49</sup> Cf. Grunwald 2018, 909.

<sup>50</sup> Pohl 2012, 76.

<sup>51</sup> Grunwald 2022a, 515–517.



**Fig. 5** Findspots (●) of Carolingian basalt lava querns from Mayen (★). 1 Quern/fragment. – 2 Millstones. – 3 Querns from ship loads. – Open signature (○) dating not precise. – (Graphics S. Wenzel, LEIZA; base map Natural Earth, after Grunwald/Wenzel 2021, 55 fig. 15, processed).

and facts that can only be explained by long-distance contacts to the north and Scandinavia<sup>51</sup>.

Two pseudo-coin brooches (fig. 7) with a diameter of 3.0 cm, discovered in 1970 during excavation work in a body burial of the early medieval cemetery near the church of St Peter (fig. 6, 7), must be mentioned in this context<sup>52</sup>. They can be identified as late Carolingian ornamental forms cast from a highly tin-containing bronze, i. e. imitating silver, in imitation of the brooches with incorporated original

coins. The central decorative surfaces are adorned with mirror-inverted representations of the obverse and reverse of a trient by the mint master Madelinus, modelled on a widespread Dorestad coin type of the 7<sup>th</sup> century. Earlier pressed-plate disc brooches with coin designs – such as the group dating back to coinages of the monetar Landoaldus<sup>53</sup> that appeared in the working area from 670/680 onwards and continued to be worn during the advanced 8<sup>th</sup> century were already in use<sup>54</sup> adopted this principle. They showed

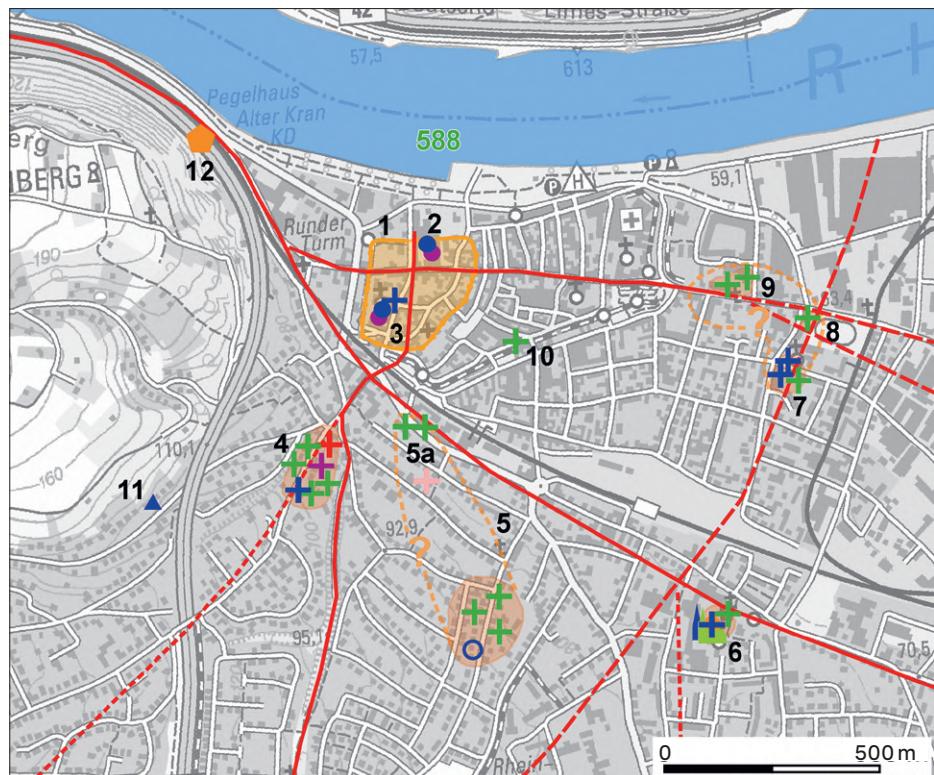
<sup>52</sup> Cf. Grunwald 2011, 381–383 with figs 1–2.

<sup>53</sup> Cf. Grunwald 2009.

<sup>54</sup> In the undisturbed burial 39 of the Neuwied-Gladbach I burial ground, a pressed sheet metal disc fibula from the Landoaldus group was found together with two large silver wire earrings with a polyhedron and indicated

wire wrapping. According to E. Saal, their diameter of 7.0 cm indicates that the pieces could have been made around 720/730 at the earliest. They were probably not buried until later in the late 8<sup>th</sup> century. Information on the burial according to documents from LEIZA. For dating cf. Saal 2014, 250 fig. 36.

**Fig. 6** Andernach, Late Antiquity and early medieval sites: 1 Fort wall. – 2 »Weissheimer terrain«. – 3 In front of the Marienkirche. – 4 Kirchberg. – 5a Breite Straße/ Martinsberg. – 5 Martinsberg. – 6 St Thomas. – 7 Landsegnung/ St Peter. – 8 Ziegefeld. – 9 »Vor dem Burgtor«. – 10 Corner Bahnhofstraße/Untere Wallstraße. – 11 Carolingian kiln »In der Antel«. – 12 Temple at the foot of the Krahnenberg. Figure legend cf. figs 2–3. – (Graphics S. Wenzel, LEIZA; base map ©GeoBasis-DE/LVermGeoRP 2022; after Grunwald/Wenzel 2023, 13 fig. 2, processed).



representations of rulers with insignia of power such as a forehead diadem as a symbol of divine will. Such an insignia of dignity can also be seen on one brooch from Andernach (fig. 7, left). The author pointed out in 2009 that in such profile heads one can probably often see Christ as the ruler of the world with the imperial insignia transferred to the kingdom of heaven, which were late Roman in origin<sup>55</sup>. This principle probably also applies to the Carolingian pseudo-coin brooches, which were probably cast from 810/820 onwards as a successor type. However, deceased rulers who were revered as saints, such as Louis I the Pious or Christian missionaries, were also subsequently depicted. The wide beaded rims of the Andernach pieces suggest that they were not made until the middle of the 9<sup>th</sup> century. Such brooches were widespread in Friesland. They were found in large numbers in Haithabu, for example, and also as semi-finished products<sup>56</sup>. Their manufacture in this trading centre is therefore very likely and proven for the 10<sup>th</sup> century in Friesland<sup>57</sup>. The two components of the women's costume from Andernach may therefore have arrived in the working area from the Frisian-Danish region during the Norman threat. Whether this indication of origin also applied to the wearer, who according to the given interpretation belonged to Christianity, can no longer be clarified.



**Fig. 7** Andernach, near the church of St Peter, from a woman's grave. Pair of pseudo coin fibulae. Diameter 3 cm. – (After Grunwald 2011, 381 fig. 1).

Researchers are well aware of two small disc brooches made of gilded bronze discovered on 4 August 1936 in the richly furnished and 2 m-deep female grave 8 of the Neuwied-Gladbach II burial ground (fig. 8, a-b)<sup>58</sup>. K. Sippel summarised such jewellery as brooches of the Gladbach-Birka type on the basis of the important parallels coming from the Swedish cemetery of Birka (see below)<sup>59</sup>. According to his interpretation, such pieces represent a further development of late Merovingian pressed sheet metal brooches with glass inlays. The author agrees with this. The central decorative surfaces, bordered by cloissoné-bands

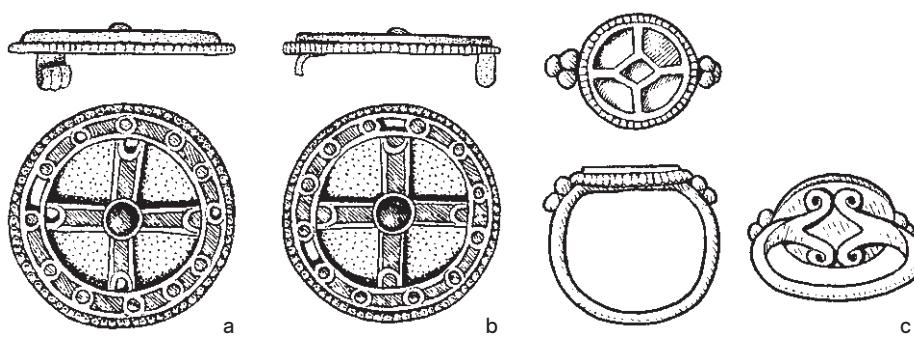
<sup>55</sup> Grunwald 2009, 94–97, there esp. 96.

<sup>56</sup> In summary Grunwald 2011, 383.

<sup>57</sup> Grunwald 2011, 382 with fig. 8.

<sup>58</sup> Cf. Grunwald/Schreg 2013, 574 with fig. 2.

<sup>59</sup> Sippel 1989, 163–167. – See also Saal 2014, 383.



**Fig. 8** Neuwied-Gladbach, cemetery II, grave 8: **a-b** Disk brooches of the Gladbach-Birka type, diameter 2.9 cm, bronze, gilded, blue central glass inlay and red enamel cell fillings. – **c** Three-knot finger ring, diameter 2.3 cm, silver with almandine inlays. – (Drawings archive LEIZA). – Scale 1:1.

with almandine, glass or enamel inlays, were designed very differently.

In the case of the precious objects with a diameter of 2.9 cm from Neuwied-Gladbach and the cast pieces from graves 3 in Windecken (part of the town of Nidderau in the Main-Kinzig district)<sup>60</sup> and the disturbed grave 9 of Froitzheim (part of the municipality of Vettweiß in the district of Düren)<sup>61</sup> there are probably cross ornaments that can be interpreted in a Christian way. This impression is reinforced for the inventory from Neuwied-Gladbach by the silver three-knot finger ring with almandine inlays, also incorporating the cross motif, which was found on the left hand of the deceased and has a diameter of 2.3 cm (fig. 8, c)<sup>62</sup>. Christian women were probably buried in these three places. In the case of the Gladbach-Birka type brooches, however, simple pressed sheet metal with rosette and boss decorations as well as red glass inlays in the shape of a cross as central decorative elements were also possible in the 8<sup>th</sup> century<sup>63</sup>. It was probably not until the 9<sup>th</sup> century that quadrupeds with paws and suggested wings (griffins or winged horses?) appeared, following the development from 816/819 (see below). As a new find from France, which is important from a chronological point of view, shows once again, representations of rulers were among the central decorations, as was the case with the pseudo coin brooches. The French example in question was discovered in Normandy in the Olivet/Motte castle of Grimbosq and dates to the first half of the 11<sup>th</sup> century<sup>64</sup>. Here, the edge of the cellwork encloses a decorative surface designed in the form of a coin brooch with a ruler's profile. It can be assumed that here, too, Christian ideas were the origin of this ornamentation.

The general uncertainty in the dating of brooches of the Gladbach-Birka type is clearly evident in the literature on the working area to date<sup>65</sup>. However, more recent research on Scandinavian literature offers some useful approaches and possibilities. For example, from the graves Bj 526<sup>66</sup> and Bj 649<sup>67</sup> since the comprehensive and exemplary presentation of the Birka cemetery by H. Arbman, two pieces of jewellery of this type are known. On the small island of Björkö in Sweden's Lake Mälaren, between the middle of the 8<sup>th</sup> and the end of the 10<sup>th</sup> century, there was the settlement of Birka, which was important for trade as a central location, with a large burial ground. Based on the finds from this cemetery and considering the continental comparative finds known at the time, I. Jansson dealt with the small round clasps in 1984 in his work »Birka 2.1. Systematic Analyses of the Grave Finds«, edited by G. Arwidsson<sup>68</sup>. The brooches of the Gladbach-Birka type were treated in detail here under his »Group VII. Polychrome clasps«<sup>69</sup>. In addition, the two graves from Birka can be more precisely dated via the bead periods of J. Callmer. According to this, burial Bj 526 was buried during his bead period III<sup>70</sup> and the tomb Bj 649 was created in his bead period VII<sup>71</sup>. If one considers the 2022 plan presented by S. Kalmring<sup>72</sup> chronological reinterpretation of the Callmer pearl periods<sup>73</sup>, thus, the burial Bj 526 can be dated to the period 845–875 and the grave 649 to between 905 and 935<sup>74</sup>. The Gladbach-Birka type of brooch, which was probably produced in the Rhineland, often with Christian meaning and exported to Scandinavia, appeared in the Carolingian period in the second half of the 8<sup>th</sup> century, was common in the 9<sup>th</sup> and 10<sup>th</sup> centuries and can be traced into the first

<sup>60</sup> Thiedmann 2008, 254 grave 3 pl. 63, D3.

<sup>61</sup> Plum 2003, 205 grave 9/1935 pl. 37, E3.

<sup>62</sup> Information according to LEIZA documents.

<sup>63</sup> Regarding the specimen from grave 16 of Niedenstein-Kirchberg in the Schwalm-Eder district, cf. Sippel 1989, 383–384 with fig. 128 pl. 24, grave 16, 6.

<sup>64</sup> Skiba et al. 2022b.

<sup>65</sup> Saal 2014, 383; Machhaus 2003, 48; Neumayer 1993, 41; see also Jansson 1984, 71–72; Thiedmann 2008, 63.

<sup>66</sup> Arbman 1940, pl. 100, 13; 1943, 161–162 with fig. 111.

<sup>67</sup> Arbman 1940, pl. 100, 12; 1943, 228–229 with fig. 186.

<sup>68</sup> Jansson 1984

<sup>69</sup> Jansson 1984, 69–73.

<sup>70</sup> Callmer 1977, 28 cat. no. 239.

<sup>71</sup> Callmer 1977, 29 cat. no. 254.

<sup>72</sup> The author is very grateful to S. Kalmring, Stockholm, for numerous tips.

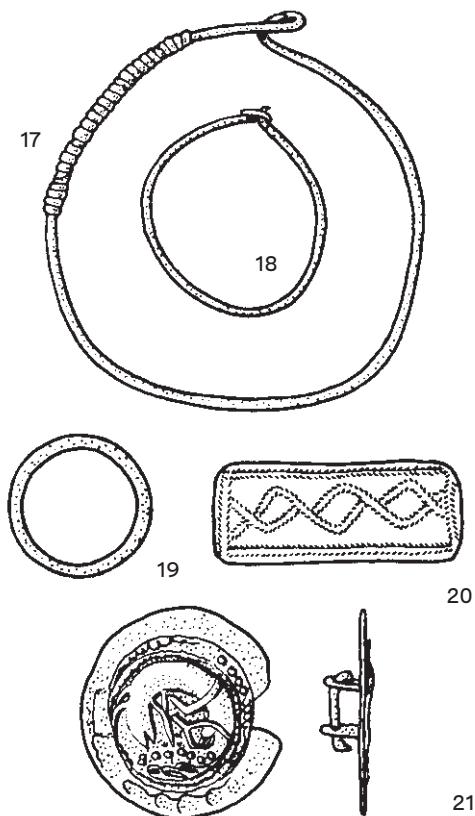
<sup>73</sup> Kalmring et al. 2022, 89–101.

<sup>74</sup> Kalmring et al. 2022, 94 tab. 3c; 99 tab. 5.

half of the 11<sup>th</sup> century. It thus appears as long as the cast pseudo coin brooches<sup>75</sup>.

If one considers the long life of the Gladbach-Birka type and especially the numismatically confirmed Scandinavian dating, the other three examples of this form of jewellery from the Middle Rhine and Lower Moselle region are chronologically new and significantly younger than previously published. They were found as a pair in grave g of the cemetery »Im Proffen« in Boppard<sup>76</sup>, as a single find in grave 134 of the Müden cemetery<sup>77</sup> and in the undisturbed burial 592 of Koblenz-Rübenach<sup>78</sup>. In the latter grave, in addition to a Gladbach-Birka type brooch (here with a lindworm-like quadruped in the central ornamental area<sup>79</sup>; **fig. 9, 21**) also a silver rectangular brooch with a punched braided band (**fig. 9, 20**), two earrings (**fig. 9, 17-18**) and a bronze finger ring (**fig. 9, 19**) were found *in situ*. It is quite possible that this inventory dates at least to the advanced 9<sup>th</sup> century. The same can be assumed for the pieces from Müden and Boppard. In any case, earlier published dating of such finds to the late Merovingian period should be disregarded in the future due to the new Scandinavian dating approaches.

A piece of jewellery that is also important for the interpretation of the contacts to the north and is unique on the Rhine and Moselle in its design and production technique comes from the disturbed grave 655 of the burial site Koblenz-Rübenach, which had been in continuous use since the middle of the 5<sup>th</sup> century (**fig. 10**)<sup>80</sup>. It is a flat gold disc brooch, only 2 cm in size, but with a central boss. Radiating from the boss are filigree decorations of bent and twisted gold wires. The piece corresponds to the Scandinavian sense of jewellery. It has a particularly good parallel with a specimen from Adelsö on Björkö, for example<sup>81</sup>. This small piece of jewellery also has a subdivided spiral pattern of curved rays around the central hump on the front. As the small figurine of a Valkyrie discovered in 2013 near Hårby (Assens Kommune/DK) on the island of Funen clearly shows, such pieces of jewellery are probably miniature versions of shields<sup>82</sup>. For this very detailed representation, made of silver, with gilding and niello inlays, holds a shield with a hump in front of the body with the left arm, appropriately decorated with a spiral pattern. Comparable small pendants in the form of shields from the Carolingian/Ottoman period, with a diameter of around 2 cm, are also known from the



**Fig. 9** Koblenz-Rübenach, independent city of Koblenz. From the undisturbed grave 592. Probable burial of a young girl: **17** Wire earring, diameter 5.5 cm, bronze. – **18** Wire earring, diameter 2.5 cm, bronze. – **19** Finger ring, diameter 1.5 cm, bronze. – **20** Rectangular fibula with punched braided band, size 3.3 cm × 1.4 cm, silver. – **21** Disc brooch of the Gladbach-Birka type with press plate, diameter 2.8 cm, base plate bronze, decorative press plate gold. – (After Neuffer-Müller/Ament 1973, pl. 37, 17-21). – Scale 1:1.

Scandinavian region and were worn as amulets<sup>83</sup>. Such disc brooches and pendants could perhaps be connected with the belief in supernatural powers at the time. G. Trotzig has associated this group of objects with Christianity<sup>84</sup>. His explanations are well-founded, as such pieces very often appear in the Birka cemetery in inventories with cross pendants, portable reliquaries, coins of Louis the Pious or other finds that can be interpreted in Christian terms<sup>85</sup>. Perhaps, therefore, such disc brooches and pendants really do possess a hitherto unappreciated symbolic content of Christianity.

How does the piece of jewellery from Koblenz-Rübenach, which arrived in the working area from Scandinavia, date? Since it is without exact comparisons on the Rhine and Moselle, the chronology of

<sup>75</sup> Grunwald 2011, 382.

<sup>76</sup> Neumayer 1993, 168 grave g pl. 7, 1-2.

<sup>77</sup> Machhaus 2003, 134 grave 134 pl. 107, F grave 134, 1.

<sup>78</sup> Neuffer-Müller/Ament 1973, 237 grave 592 pl. 37, 17-21.

<sup>79</sup> Neuffer-Müller/Ament 1973, 75.

<sup>80</sup> Neuffer-Müller/Ament 1973, 75 pl. 39, 23.

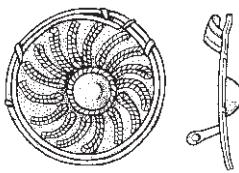
<sup>81</sup> Willemsen 2004, 47 with fig. top left.

<sup>82</sup> Price 2017b, 165 with fig. 3; Toplak 2018, 61 with fig.

<sup>83</sup> Price 2017b, 173 with fig. 12.

<sup>84</sup> Trotzig 2004.

<sup>85</sup> Trotzig 2004, 204 tab. 1.



**Fig. 10** Koblenz-Rübenach. From the disturbed grave 655. Disk fibula with filigree decoration from the filling. Diameter 2 cm. Gold. – (After Neuffer-Müller/Ament 1973, pl. 39, 21). – Scale 1:1.

the north must be used again here. Parallels come in larger numbers from the cemetery of Birka. Such brooches and pendants of the type »pendants with a central boss and whorl ornament«<sup>86</sup> of the object group »disc-shaped pendants« after W. Duczko were found in the local, well datable graves Bj 660<sup>87</sup> und Bj 825<sup>88</sup> of the Late Birka period. The jewel from the burial Bj 825 dates to the bead period VII according to J. Callmer due to the chain documented here<sup>89</sup>. This corresponds in absolute numbers to the period 905–935<sup>90</sup>. According to the chronology of J. Callmer, the grave Bj 660 was created in his bead period IX<sup>91</sup>. The burial was therefore excavated between 965–990<sup>92</sup>. The disc brooch from grave 655 at Koblenz-Rübenach was found together with beads from the 7<sup>th</sup> century. However, since the burial had been disturbed and the beads and jewellery came from the backfill, this circumstance is not decisive for the dating. It therefore remains to be stated that this disc brooch was most likely made in Scandinavia during the 10<sup>th</sup> century and reached the working area from there. Here the wearer, probably of Christian faith, was then buried in the cemetery of Koblenz-Rübenach.

According to H. Ament, this piece of jewellery, which is foreign to the early medieval canon of forms in the Rhineland, is to be joined by another filigree-decorated, golden, 2 cm small disc brooch from the Mertloch-Künzerhof cemetery<sup>93</sup>. It corresponds »exactly« in size, construction and decoration to the example from Koblenz-Rübenach. On the front, however, there is a rim fitting decorated with pearl bosses and on the inner surface there are fitting bands starting from a central boss and rolled up at the ends. The decoration is therefore different. But this depic-

tion is also reminiscent of a Scandinavian round shield from southern Norway of the 12<sup>th</sup> century that is still preserved today<sup>94</sup>. It is therefore conceivable that similarly shod older protective weapons served here as a model for the piece of jewellery from Mertloch-Künzerhof. As with the example from grave 655 in Koblenz-Rübenach, we can assume a date in the 10<sup>th</sup> century and an origin from Scandinavia.

Such pieces of jewellery are thus interpreted as miniature replicas of shields. The models are particularly striking in the depictions of women carrying weapons<sup>95</sup>. For example, the shield of such a female fighter on a pendant made of silver with niello inlays from Kalmergården, Lake Tissø, in Danish Northwest Zealand<sup>96</sup>, shows the character spiral ornamentation. Valkyries and shieldmaidens belong to the Norse world of imagination<sup>97</sup>, but grave finds and Byzantine written sources indicate that equipped women of the north also fought on the battlefields. Such depictions on jewellery, such as the Valkyrie brooches made in Haithabu in the second half of the 9<sup>th</sup> and the first half of the 10<sup>th</sup> century, could therefore certainly have references to this world<sup>98</sup>, but also have a reference to the afterlife with Christian content that has probably been subsequently over-influenced.

The late time approaches given here may at first seem surprising. However, they fit into the latest research on the field and complement the current studies on the Carolingian period<sup>99</sup>. Between October 2008 and April 2010, for example, excavations were carried out in the town centre of Münstermaifeld, more precisely in the area in front of the mighty former collegiate and present-day parish church of St Martin and St Severus. At that time, it was possible to examine a section of a large burial ground used from the second half of the 6<sup>th</sup> century until the 14<sup>th</sup> century. Around 530 burials were uncovered. In ten graves from the 9<sup>th</sup> to 11<sup>th</sup> centuries, cross enamel, animal and, in three cases, saint's disc brooches with pit enamel in costume were found. These excavation findings prove that in the Middle Rhine and the Lower Moselle region, the deceased were still given costume components in rare cases in the High Middle Ages. This information, published by C. A. Jost in 2017, points the way forward<sup>100</sup>. In the future, one must expect a sporadic use of early medieval cem-

<sup>86</sup> Duczko 1985, 48–51.

<sup>87</sup> Arbman 1940, pl. 97, 1; 1943, 231–233 with fig. 189; Duczko 1985, 48–50.

<sup>88</sup> Arbman 1940, pl. 97, 17; 1943, 298–300 with fig. 247–248; Duczko 1985, 50–51.

<sup>89</sup> Callmer 1977, 30 cat. no. 267

<sup>90</sup> About the dating via the pearl chronology, cf. Kalmring et al. 2022, 89–101.

<sup>91</sup> Callmer 1977, 29 cat. no. 257.

<sup>92</sup> Kalmring et al. 2022, 94 tab. 3c; 99 tab. 5.

<sup>93</sup> Ament 1993, 46–47 fig. 34, 2.

<sup>94</sup> Mertens/Zilmer 2022, 42 fig. A 1, 5.

<sup>95</sup> To discuss whether women also went into battle as armed men and were buried with their equipment, cf. Toplak 2018; Wise 2022.

<sup>96</sup> Price 2017a, 116 fig. 1.

<sup>97</sup> In summary Wamers 2017.

<sup>98</sup> Hilberg 2022.

<sup>99</sup> Cf. Grunwald 2022a, 353–380.

<sup>100</sup> Jost 2017, 271, 273 with fig. 2.

teries for burials with dress components or grave goods at least until the 11<sup>th</sup> to 13<sup>th</sup> centuries. Therefore, there is no reason to assume that the inlaid comb with long tines found in grave 27 of the cemetery »Auf der Eich« in Mayen<sup>101</sup> not to be dated to the High Middle Ages. Such combs, modern especially in the 12<sup>th</sup>/13<sup>th</sup> century and sawn from metapodials or metatarsi, are a classic design of the period<sup>102</sup>. An approach of such pieces in an early medieval context is, according to H. Ament, absurd<sup>103</sup>. The tomb from Mayen, in which a small bronze finger ring was still

found<sup>104</sup>, is thus most likely to date to the late High Middle Ages. In the future, we will have to expect further evidence of a find horizon of objects from the 9<sup>th</sup> to 13<sup>th</sup> centuries and beyond in the burial inventories of the Rhine-Moselle region. For the Carolingian/Ottoman phase, the picture that is currently emerging is that mainly brooches and pieces of jewellery with probably Christian meaning appear from the burials. What was the general situation in the Middle Rhine and Lower Moselle with regard to the spread of the Christian faith since Late Antiquity?

## The Role of Christianity

After a long period of pagan beliefs and only a few Christians in the economically more important settlements since Late Antiquity, there is increasing evidence of Christianity in the Middle Rhine and Lower Moselle region from the late 6<sup>th</sup>/7<sup>th</sup> century onwards<sup>105</sup>. From 580/590, the new faith seems to have penetrated the population outside the larger settlements. According to the numerous early medieval gravestones with Christian inscriptions that have survived in and around Andernach and their iconography, which was once again decorative in the Carolingian period and characterised by floral elements and figurative representations with saints or mythical creatures<sup>106</sup> this settlement was the spiritual centre of the working area<sup>107</sup>. In addition, six churches can be assumed in and outside the late antique fort of Antunnacum<sup>108</sup>, of which, however, only one could be archaeologically proven in the area of St Thomas (see below). However, pagan practices and a syncretic attitude of the population continued to exist in the working area, e. g. in burial customs or ritual acts at sanctuaries<sup>109</sup>. According to the sources that can be analysed, however, a widespread Christianisation of the population can be assumed from the time around 800 at the latest. Thus, stone church buildings in the Carolingian period are not only to be found in the larger settlements, but also in the more rural regions (fig. 2, red churches). In addition, there are also clerical institutions appearing over a wide area (fig. 2, green churches). Under Louis I the Pious, a

clear separation between monasticism and canonry, i. e. a uniform order valid throughout the empire, was achieved at the Aachen synods of the years 816 to 819<sup>110</sup>. Especially the Imperial Synod of Aachen in 816 officially made clerical communities possible as secular collegiate foundations. As regular ecclesiastical communities, they were now bindingly subject to the canonical rules and since then stood on an equal footing with monastic communities<sup>111</sup>. At that time, binding norms for the life of spiritual communities were established. Grave goods and the old burial customs were prohibited. Alternative practices, such as the *pars pro toto* addition of e. g. vessel shards in the graves or annual sacrificial acts to appease the souls of the dead<sup>112</sup>, were now becoming more and more common. However, the custom of giving objects to the deceased and burying the dead with traditional costume items were never completely displaced in the working area<sup>113</sup>. The collegiate monasteries, which were especially supported and richly endowed from 816 onwards, i. e. the centres of the pastoral development of the region, were located on the Middle Rhine and Lower Moselle region in five places<sup>114</sup>.

In Andernach, to the southeast of the Roman town fortifications, there was already a church in the Merovingian period in the area of the later monastery of St Thomas<sup>115</sup> (refounded on the old ruined site in 1129; fig. 6, 6) a Christian place of worship with a religious community existing<sup>116</sup>. According to the *Gesta Treverorum*, the Bishop of Trier

<sup>101</sup> Ament 1976, 216 grave 27 pl. 91, 6.

<sup>102</sup> Trier 2011.

<sup>103</sup> Ament 1976, 118 with annotation 250.

<sup>104</sup> Ament 1976, 216 grave 27 pl. 91, 5.

<sup>105</sup> Grunwald 2012; 2020.

<sup>106</sup> To the decorations of tombstones and chancel screens with mythical creatures and Mediterranean decorative elements that appeared from 810/820 in the Moselle estuary area, see Grunwald 2020, 72-76.

<sup>107</sup> To Andernach last summary, cf. Nikitsch 2019, 14-31.

<sup>108</sup> Huiskes 1980, 96.

<sup>109</sup> In summary, cf. Grunwald/Wenzel 2023, 23, 26.

<sup>110</sup> Engels 2006, 4.

<sup>111</sup> Flach 1992, 97.

<sup>112</sup> Cf. Grunwald 2004.

<sup>113</sup> In summary, see Grunwald/Wenzel 2023, 19.

<sup>114</sup> Cf. Escher-Aspner 2004, 50.

<sup>115</sup> Cf. Ristow 2007, 167.

<sup>116</sup> Engels 2006, 17.

Modoald (614/625–ca. 647/649) and the Frankish King Dagobert I (623–639) jointly founded a church with a convent of women in honour of St Stephen of Jerusalem<sup>117</sup>. The church was probably observed during excavations in 1952<sup>118</sup>. According to A. Vogel, a 10-metre-long stone church was erected here in a Roman bath building in the middle of the 7<sup>th</sup> century at the latest<sup>119</sup>. Burials were found in and outside this structure<sup>120</sup>. Finds from the 7<sup>th</sup> to 9<sup>th</sup> centuries have been assigned to the at least seven graves from inside the church<sup>121</sup>.

In Boppard, a clerical community probably arose *intra muros* of the late antique fort in Merovingian times in the vicinity of the church now dedicated to St Severus of Ravenna, from which a collegiate monastery developed in the Carolingian period<sup>122</sup>.

In the village of Karden, situated on the lower Moselle, there may also have been a parish church with a priests' college as early as the Merovingian period<sup>123</sup>. According to D. Flach, the permanent establishment of a large parish and a clerical community in Karden may have finally succeeded under the Trier bishop Wiomad (757–791)<sup>124</sup>. The clerical community was then transformed into a collegiate foundation, probably as a result of the decisions of Aachen. Under the Archbishop Ratbodo of Trier (883–915), the St Kastor monastery of Karden became the seat of an archidiaconate<sup>125</sup>.

According to a credible tradition, the Trier bishop Modoald is said to have founded a church dedicated to St Martin in Münstermaifeld in the first third of the 7<sup>th</sup> century and endowed it with family property<sup>126</sup>. From this arose a pastoral clergy<sup>127</sup>. »The first secure evidence, which, however, presupposes the existence of the monastery, dates from the time of the Archbishop of Trier, Hetti (814–847)«<sup>128</sup>. In the 9<sup>th</sup> century, the *fratres in loco s. Martini* can be traced. Their collegiate church is first mentioned in writing in 905. In 956, the relics of St Severus were transferred from Antrodoco to the monastery there. In 965, Münstermaifeld was granted market rights with tax exemptions, thus acquiring a central local function with economic significance and becoming a pilgrimage centre. Comparable developments can

also be assumed for the other monasteries in the working area in the 9<sup>th</sup> and 10<sup>th</sup> centuries.

Today's Koblenz church of St Florin is located within the Roman city walls on the Moselle front (fig. 11, 2). It was originally a church of the Virgin Mary<sup>129</sup>, from which a Marian monastery developed in the Early Middle Ages<sup>130</sup>. After the relocation of the relics of St Florin of Remüs (probably 938 to 948), the church was consecrated only to him. According to H. Bellinghausen, there is a relatively large church of the 9<sup>th</sup> century under the present building, in which the founding church of the Marian monastery, which originated from royal property, can be seen<sup>131</sup>.

Outside the Roman city walls of Koblenz, which were also used as a fortress in the Carolingian period, a new collegiate monastery was built directly at the confluence of the Moselle and Rhine rivers, which the Archbishop of Trier, Hetti, had been striving for since the second decade of the 9<sup>th</sup> century<sup>132</sup> and was under construction in the 820s. In 836, the monastery was completed and furnished with relics of St Kastor of Karden (fig. 11, 18). More precisely, these were buried under the high altar<sup>133</sup>. The large Carolingian Kastor Church, which dates back to a Merovingian predecessor<sup>134</sup>, was consecrated by Archbishop Hetti of Trier on 12 November 836. A week later, Emperor Louis I the Pious arrived with rich gifts. The monastery was so well endowed and splendidly furnished by him that he was later referred to as the founder<sup>135</sup>. Envoys of the three sons (Charles II the Bald, Lothar I and Louis II the German) of the emperor, who died in Ingelheim on 20 June 840, negotiated the Treaty of Verdun there from 19 to 24 October 842, which was concluded a year later<sup>136</sup>. This provided for the division of the Carolingian Empire into three parts and ultimately led to the present-day states of France and Germany. In Koblenz, the inner-dynastic struggles of the Carolingians, which lasted from 830 to 842, thus came to an end for the time being. With the exception of St Kastor near Koblenz, the monasteries mentioned »probably grew out of a gradually consolidating community of clergymen in a longer process, whose

<sup>117</sup> Simon 2019, 32.

<sup>118</sup> Vogel 2006, 16 fig. 4.

<sup>119</sup> Vogel 2001, 38–39 fig. 5, 1.

<sup>120</sup> Vogel 2006, 25 fig. 8

<sup>121</sup> Vogel 2006, 189–190 pls 67–68.

<sup>122</sup> Engels 2006, 20.

<sup>123</sup> Engels 2006, 35.

<sup>124</sup> Flach 1992, 94–95.

<sup>125</sup> Engels 2006, 35–36.

<sup>126</sup> Ament 2006, 155; Escher-Aspner 2004, 48; Vogel 2006, 138 with annotation 432.

<sup>127</sup> Escher-Aspner 2004, 43–49.

<sup>128</sup> Engels 2006, 65.

<sup>129</sup> Cf. Ament 1992, 75. 488 with annotation 12.

<sup>130</sup> Cf. Engels 2006, 39.

<sup>131</sup> Bellinghausen 1971, 76–77.

<sup>132</sup> Stanzl 1998, 196.

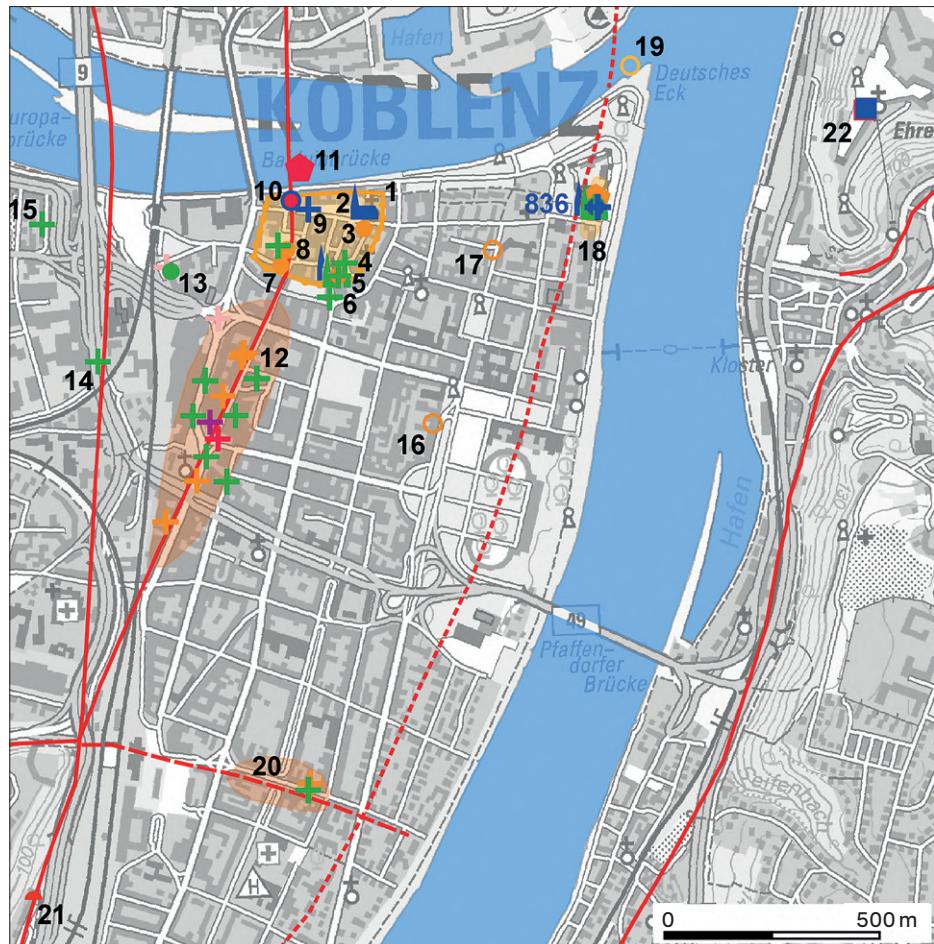
<sup>133</sup> Stanzl 1998, 180.

<sup>134</sup> Cf. Ament 1992, 78.

<sup>135</sup> Engels 2006, 38–39.

<sup>136</sup> Cf. Flach 1992, 99–102.

**Fig. 11** Koblenz. Late antique and early medieval sites:  
 1 Fort wall. – 2 Marienkirche/St Florin. – 3 Florinsmarkt/Florinspaffengasse. – 4 Mehlgasse. – 5 Liebfrauenkirche. – 6 Schulgässchen. – 7 Altenhof. – 8 Münzplatz. – 9 Florinsmarkt/Burgstraße. – 10 Burgstraße. – 11 Moselle Bridge (with a function as a sanctuary for sacrifices to the river god). – 12 Löhrstraße/Hohenfelder Straße. – 13 Weisser Gasse. – 14 Kaiserin-Augusta-Ring (Möselring). – 15 Falckensteinstraße (Baeckerstraße). – 16 Schlossplatz. – 17 Nagelsgasse. – 18 St Kastor (Roman sanctuary, early medieval burial ground and collegiate church from 836). – 19 Hundsschwanz (Ship find and coin offering at a Moselle ford). – 20 Markenbildchenweg. – 21 Römerstraße 48 and 50 (Road section with milestones). – 22 Fortress Ehrenbreitstein (Late antique and Carolingian fortifications). Figure legend cf. figs 2–3. – (Graphics S. Wenzel, LEIZA; base map ©GeoBasis-DE/LVermGeoRP 2022, after Grunwald/Wenzel 2023, 13 fig. 3, processed).



origins can be assumed to date back to Merovingian times<sup>137</sup>. The landscapes along the Middle Rhine and Moselle were therefore not only important from an economic point of view in the younger Merovingian and Carolingian periods and inhabited by a largely wealthy population. The ecclesiastical institutions and monasteries were probably also rich in noble furnishings and assets, especially in the Carolingian period. In addition to the donations, this was

also due to the great influence of the church on the manufacturing trades, the holding of markets and the export of goods such as the Mayen millstones made of basalt lava<sup>138</sup>. The ecclesiastical wealth of the Christianised region, which was therefore not affected by the Anglo-Saxon mission of the late 7<sup>th</sup> to the mid-9<sup>th</sup> century<sup>139</sup>, was certainly known to the invading Normans and a massive incentive to plunder.

## Traces of War

From the 840s onwards, the Norman invasions in the regions along the northern course of the Rhine became increasingly threatening. However, they did not initially reach the landscapes along the Middle Rhine and the Lower Moselle. The news of the serious threat situation was certainly brought to the working area through the contacts that existed at the same

time in the north. According to the grave goods, this knowledge is reflected in the costume from this time onwards. Here, for example, the saints' brooches are to be mentioned<sup>140</sup>. They are a form of jewellery worn for a short time between the middle of the 9<sup>th</sup> century and the beginning of the 10<sup>th</sup> century, and thus at the same time as the Norman threat<sup>141</sup>. Their produc-

<sup>137</sup> Escher-Aspner 2004, 44.

<sup>138</sup> Summary of this topic, cf. Dobat 2010, 405–407, 416–418.

<sup>139</sup> After the recent and extensive processing of this topic, no traces of Anglo-Saxons who immigrated for mission purposes can be found on the Middle Rhine and the Lower Moselle, cf. Schulze-Dörrlamm 2022.

<sup>140</sup> Regarding the saints' fibulae based on a piece from Andernach, see Grunewald/Vogel 2019, 110–122.

<sup>141</sup> Cf. Schulze-Dörrlamm 2022, 52.

tion probably took place in the Rhine-Moselle-Main region<sup>142</sup>. The finds from Münstermaifeld prove that such jewellery was brought into the burials with the costume. This evidence fits in well with the known picture of burials leading to Carolingian burials in the area under investigation<sup>143</sup> and are further evidence that the custom of giving gifts was not abandoned in the Moselle estuary during the 9<sup>th</sup> century<sup>144</sup>. In addition to the evidence from Münstermaifeld, such garment clasps are known from the Middle Rhine and Lower Moselle cemeteries of Kaltenengers<sup>145</sup>, Andernach<sup>146</sup> and Kruft<sup>147</sup>. In addition to these examples, there is a single find from the Martberg near Karden on the Moselle<sup>148</sup>. The wearing of such brooches indicated the Christian faith of the owner and was also supposed to place the wearer under the special protection of a saint<sup>149</sup>. The situation was certainly frightening for the local population from the attacks on Cologne in the 860s onwards (cf. T. Höltken, this volume). The events of the year 882 must have been serious. It is reported in the *Annales Fuldenses* that after the death of King Louis III the Younger on 20 January 882, the army sent against the Normans gave up on defeating the enemy and returned empty-handed. The Normans followed the departing army, plundered »and burned what they had left earlier as far as Koblenz Castle at the mouth of the Moselle into the Rhine«<sup>150</sup>. Since the »saints depicted on the aforementioned brooches are apparently those bishops and archbishops who were active as missionaries in Friesland and Saxony during the 8<sup>th</sup> to early 9<sup>th</sup> centuries and were later venerated there as saints«<sup>151</sup>, might have asked for protection from the pagan danger from the north by wearing such holy brooches.

Archaeological traces of the destruction by the Normans in 882 can be found at two locations on the Middle Rhine and the lower Moselle region. Outside the late antique wall ring of Koblenz, which is still used like a fortress, archaeological investigations of the collegiate church of St Kastor (fig. 11, 18) revealed destruction with traces of fire and subsequent building measures, »which have been interpreted with good reason as a reflex of the Norman destruc-

tion«<sup>152</sup>. According to this, a partial destruction of the Carolingian complex took place at that time, during which the eastern front of the church<sup>153</sup>, the rotunda and parts of the apse gallery collapsed<sup>154</sup>. This devastation and the massive looting of the rich monastery that certainly took place were followed by a reconstruction that probably began as early as the late 9<sup>th</sup> century<sup>155</sup>. However, Fort Koblenz withstood the attackers at that time or was deliberately bypassed by the Normans. In any case, there is no archaeological evidence of destruction within the fortifications from this period.

According to the author, the second site with Norman destruction in 882 is near Andernach. Within the aforementioned early medieval church of the collegiate monastery of St Stephen, which was found in the area of the later monastery of St Thomas, a solidified, soil-like destruction layer was found above the early medieval graves<sup>156</sup>. In their interpretation, two fragments of a relief band amphora of the smooth-walled Mayen Ware MC from grave 3, found in 1952 inside the church and disturbed by the overburden layer, are particularly important<sup>157</sup>. They show a multi-zonal pattern meshwork of applied mouldings richly decorated with double and triple scroll wheels. Such vessels were produced in Mayen between 870/880 and 910/920<sup>158</sup>. The vessel, modern in the late 9<sup>th</sup> century, could therefore very well have been destroyed during the presumed looting of the abbey<sup>159</sup>. The church findings in the right place, the vessel sherds and the oral tradition of the Middle Ages<sup>160</sup> speak for the existence at that time of the collegiate monastery located here. It can therefore be assumed that the collegiate monastery of St Stephen, which was located here, was plundered and destroyed in 882<sup>161</sup>. In 1127, the Augustinian convent of St Thomas was founded on the remaining Carolingian ruins. No evidence of destruction from the late 9<sup>th</sup> century is known from the Andernach fortifications of the time<sup>162</sup>. As in the case of the collegiate monastery of St Kastor near Koblenz, a collegiate monastery located in the forefront of a fortified settlement thus seems to have been burnt down. However, Andernach, which was still protect-

<sup>142</sup> Bartel/Ludowici 2009, 86-87.

<sup>143</sup> Grunwald 2011, 382 distribution map fig. 5.

<sup>144</sup> Cf. Grunwald 2022a, 353-380; Grunwald/Wenzel 2023, 17-22.

<sup>145</sup> This fibula is very often referred to in the literature under the wrong location Engers, cf. Grunwald 2002, 105-107 fig. 7, 1.

<sup>146</sup> Schäfer 1988, 145 pl. 2, 1. - The piece probably comes from the burial ground on Kirchberg. Kindly communicated by A. Vogel, Kriftel.

<sup>147</sup> Ament 1976, 66 pl. 25, 4.

<sup>148</sup> In summary, see Grunwald 2011, 384-385 with fig. 3.

<sup>149</sup> Cf. Bulla 2010.

<sup>150</sup> Rau 1960, 117.

<sup>151</sup> Schulze-Dörrlamm 2004, 324.

<sup>152</sup> Clemens 2017a, 291.

<sup>153</sup> Stanzli 1998, 198.

<sup>154</sup> Cf. Stanzli 1998, 180-181.

<sup>155</sup> Stanzli 1998, 180.

<sup>156</sup> Cf. Ristow 2007, 167.

<sup>157</sup> Vogel 2006, 190 grave 3 pl. 68, 2-3.

<sup>158</sup> Grunwald 2022a, 332 with fig. 154.

<sup>159</sup> According to D. Flach, the Normans attacked Andernach in 882/883, cf. Flach 1994, 41.

<sup>160</sup> Meyer 2019, 456.

<sup>161</sup> Cf. Huiskes 1980, 96; Meyer 2019, 456.

<sup>162</sup> Vogel 2006, 141.

ed by the Roman wall, was spared destruction, as was the fortification of Koblenz. From the point of view of the Normans, loot from unfortified ecclesiastical institutions that could be plundered almost without danger was certainly much more interesting than a fortress that could be conquered with massive use of weapons and at the risk of one's life, perhaps with less wealth.

Why were the Normans able to advance so successfully southwards along the Rhine? It was not until the 860s that the Frankish Empire began to erect what were at first isolated wood-and-earth fortifications to defend itself against the enemy because of the continuing threat in the Frisian area of influence. It took until the end of the 9<sup>th</sup> century for defensive fortifications to be built along the northern European canal coast from Flanders in Belgium to Texel in the Netherlands<sup>163</sup>. Perhaps the Frankish rulers were also unwilling to build such fortresses in this border region because of ongoing political tensions and conflicts of loyalty. As an example, consider the Danish Viking king Godefrid/Gottfrid, who was entrusted with the defence of the Frisian imperial coast and is the subject of both the *Annales Fuldenses* and the *Chronica of Regino of Prüm*.

Godefrid/Gottfrid was baptised in 882 and subsequently received the province of Friesland by royal grant<sup>164</sup>. In 883 he married Lothar II's daughter Gisela<sup>165</sup>. Godefrid/Gottfrid, however, wanted to increase his power further. Thus, in 884, despite the

treaties, with the consent of Godefrid/Gottfrid, the Normans drove<sup>166</sup> »up the Rhine and set fire to many newly restored towns, robbing them of no small booty«<sup>167</sup>. The situation thus continued to be uncertain on the Middle Rhine and Lower Moselle. The historian and abbot of the Eifel monastery of Prüm, Regino, noted in his chronicle for the year 885 that Godefrid/Gottfrid demanded the surrender of Sinzig, Andernach and Koblenz together with the hinterland from Louis' successor, the East Frankish King Charles III the Fat, for the defence of the Frisian imperial coast entrusted to him against attackers. According to Regino, the reason for this was the good wine that was grown in this region<sup>168</sup>. However, this demand was not granted. Godefrid/Gottfrid therefore broke his oath of allegiance to Charles III the Fat and the Christian people. He gathered a Norman lord and began to sail up the Rhine at the beginning of May 885 in order to subjugate the named places in the area of work to his rule. At the beginning of this venture, however, he and his retinue were killed during negotiations<sup>169</sup>. The landscapes on the Middle Rhine and Moselle escaped renewed plundering in 885, as the Normans now invaded Saxony. The report, compiled from two sources, shows the explosive nature of the situation. The Frankish administration certainly did not want to see any fortified complexes in the possession of Godefrid/Gottfrid. This is another reason for the weakness of the imperial defences in the second half of the 9<sup>th</sup> century.

## Conclusion

The regions of the Middle Rhine and the lower Moselle were very important for trade with the north throughout the early Middle Ages and beyond because of the basalt lava millstones, pottery and wine produced here. For this reason, close mutual contacts were maintained. The intensive exchange of goods, especially in the Carolingian period, was probably shaped by Frisian traders. If one compares the distribution patterns of Mayen pottery and basalt lava millstones of the 8<sup>th</sup>/9<sup>th</sup> century (figs 4-5) with evidence of Frisians – be it Frisian small coins (sceattas), trading places, graves or finds – it is clear that the exchange of goods was influenced by Frisian traders<sup>170</sup>. These places reflect well the area

reached with products from Mayen. It is therefore possible that exports from the Middle Rhine and Lower Moselle landscapes to the north were mainly carried out by Frisian traders from around 700 onwards<sup>171</sup>. In return, they probably also guaranteed the import of goods from the north – such as animal skins or fabrics. This is supported by the fact that the Frisian small coins, the sceattas, were found to have influenced trade in the Rhineland, especially in the 8<sup>th</sup> century. On the Middle Rhine and the Lower Moselle, such means of payment can be traced from 710/720 onwards according to the grave inventories<sup>172</sup>. Research assumes that up to 50 million specimens were made of the porcupine sub-type alone,

<sup>163</sup> Cf. Coupland 2014, 118 fig. 2

<sup>164</sup> Rau 1960, 265.

<sup>165</sup> Rau 1960, 121. 265.

<sup>166</sup> Rau 1960, 266-269.

<sup>167</sup> Rau 1960, 121.

<sup>168</sup> Rau 1960, 269.

<sup>169</sup> Rau 1960, 122-125. 270-271.

<sup>170</sup> Cf. Clemens 2010, 27-29; 2017a, 290-291; 2017b; Saal 2014, 286-291; Fischer zu Cramburg 2017.

<sup>171</sup> For the role of the Frisians cf. Runde 2000, 297-300; Schulze-Dörrlam 2021.

<sup>172</sup> Cf. Grunwald 2007.

which was struck in the economic hubs of Domburg and Dorestad in the Netherlands at the time and was particularly important for the purchase of goods in the export of goods<sup>173</sup>. The Frisians therefore seem to have shaped the import and export of goods between the working area and the north in the 8<sup>th</sup> and 9<sup>th</sup> centuries<sup>174</sup>. Whether they acted on behalf of the Carolingian authorities, thus acting as merchants on commission, and had to pay taxes into the state budget for this, but were otherwise exempt from taxes, remains to be clarified in the future.

Surprising is the fact that in the graves of the Carolingian/Ottoman period, costume components and types of jewellery can be found that either reached Scandinavia from the Rhineland or were brought from the Frisian/Scandinavian area to the landscapes of the Middle Rhine and Lower Moselle. For the dating of such objects, as shown, the chronology worked out in the north can provide valuable clues. This is because, in the case of objects from burials of the 9<sup>th</sup> to 11<sup>th</sup> centuries, we are outside the systems previously established for cemetery archaeology in the Rhineland. The author presented first steps in this direction in 2022<sup>175</sup>. The costume components to be named for this period seem very often to have possessed Christian meaning. It could therefore be theoretically possible that people and objects from the working area came from Scandinavia to the north not only because of trade and personal contacts, but also in connection with Christianisation. For the working area was massively influenced by Christianity in the 9<sup>th</sup> century.

As a result of the Aachen Decisions, a rethinking of the iconography of gravestones and choir screens probably began in the Middle Rhine and Lower Moselle from 816/819 onwards. Now, under Mediterranean influence, floral elements and representations of mythical creatures such as griffins can be found in the working area<sup>176</sup>. This speaks for a new way of presenting and communicating the statements of the Christian faith, which cannot be traced in this way in the Merovingian period on the Middle Rhine and Lower Moselle from the late 6<sup>th</sup> to the 8<sup>th</sup> century. The construction of the churches also changed, especially after the Aachen synods of 817 and 819.

During the 8<sup>th</sup> century, ambones and piscines were required as part of the Old Gaulish liturgy<sup>177</sup>. With the new canon rules adopted in Aachen, they were no longer necessary. The Carolingian new buildings in the working area were probably hall churches of the transept type with strongly stepped transepts<sup>178</sup> as well as higher middle and choir areas. The nave and transepts were presumably separated by triumphal arches or by barriers – decorated with richly ornamented panels – to demarcate the altar rooms. The existing churches of the 8<sup>th</sup> century will probably have been adapted to the new guidelines. Changes can also be seen in the area of tomb style in the 9<sup>th</sup> century. In contrast to the 8<sup>th</sup> century, extensive furnishings with grave goods are now even rarer. At the same time, the current impression is that the use of *pars pro toto* grave goods is increasing<sup>179</sup>.

Even in the advanced Carolingian period, the landscapes of the Middle Rhine and lower Moselle were rich and tempting for marauding Normans. Such destruction can be assumed in greater numbers in the working area for the period from 882 to 884. The warlike actions of the second half of the 9<sup>th</sup> century had a very negative effect on exports to the north. Scandinavian trading places such as Kaupang in Norway, Birka in Sweden<sup>180</sup> and Ribe on the west coast of Denmark<sup>181</sup> were no longer reached by Rhenish pottery after 860/880. For Birka, S. Kalmring formulated this development as follows: »In the older Birka stage (c. 750–860), contacts to Western Europe dominate long-distance trade, while in the younger Birka stage (860–975) they shift eastwards to Rus, Byzantium and the Arab world«<sup>182</sup>. Thus, a shift and restructuring of the import-export trade took place in Scandinavia, at least in part. This also affected the export of Rhenish pottery, for example. In the northern direction, the export of clay vessels from Mayen almost ended in the late 9<sup>th</sup> century as a result of the above-mentioned crises. However, due to the fibulae from burials in the area mentioned above and the continued export of Mayen basalt lava millstones and probably also wine to Scandinavia and Britain, it is certain that long-distance trade to the north still took place in the 10<sup>th</sup> and 11<sup>th</sup> centuries and individual contacts also continued.

<sup>173</sup> Summarising with older literature, cf. Pestell 2017, 209.

<sup>174</sup> Saal 2014, 394–399.

<sup>175</sup> Grunwald 2022a, 368–380; cf. Grunwald/Wenzel 2023.

<sup>176</sup> Grunwald 2020, 72–76.

<sup>177</sup> Cf. Ristow 2007, 231.

<sup>178</sup> Cf. Stanzl 1998, 128–130.

<sup>179</sup> Cf. Grunwald 2004.

<sup>180</sup> Pilø 2011, 283.

<sup>181</sup> Pilø 2011, 283.

<sup>182</sup> Kalmring 2019, 370.

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