

# Frankish Seats of Power and the North

## Introduction, Discussion and Synthesis

Up until now, the connections between the Frankish seats of power and the North have not been sufficiently researched. This cannot come as any surprise since it is only in the last decades that manorial seats with a representative wooden architecture have come to light in large-scale excavations in the Scandinavian countries. Now we know the northern counterparts of the Frankish seats of power, which are central for the considerations in the present book.

During the early Middle Ages, these relationships were very complex and included diplomacy and confrontation but also the transfer of knowledge and economy. On the one hand, there was diplomacy via envoys and gift exchange while, on the other hand, failed diplomacy may have resulted in confrontation. However, there was also a policy of pure aggression – raids – in the pursuit of booty, which affected areas near the North Sea shore around 800. This is very close to the plundering of the Lindisfarne monastery in the year 793, usually considered as the beginning of the Viking Age. In turn, a transfer of knowledge may be seen in an adaptation of courtly Frankish culture in the North, while the economy

and foremost the emporia, with their wide-ranging networks of exchange, were in royal hands.

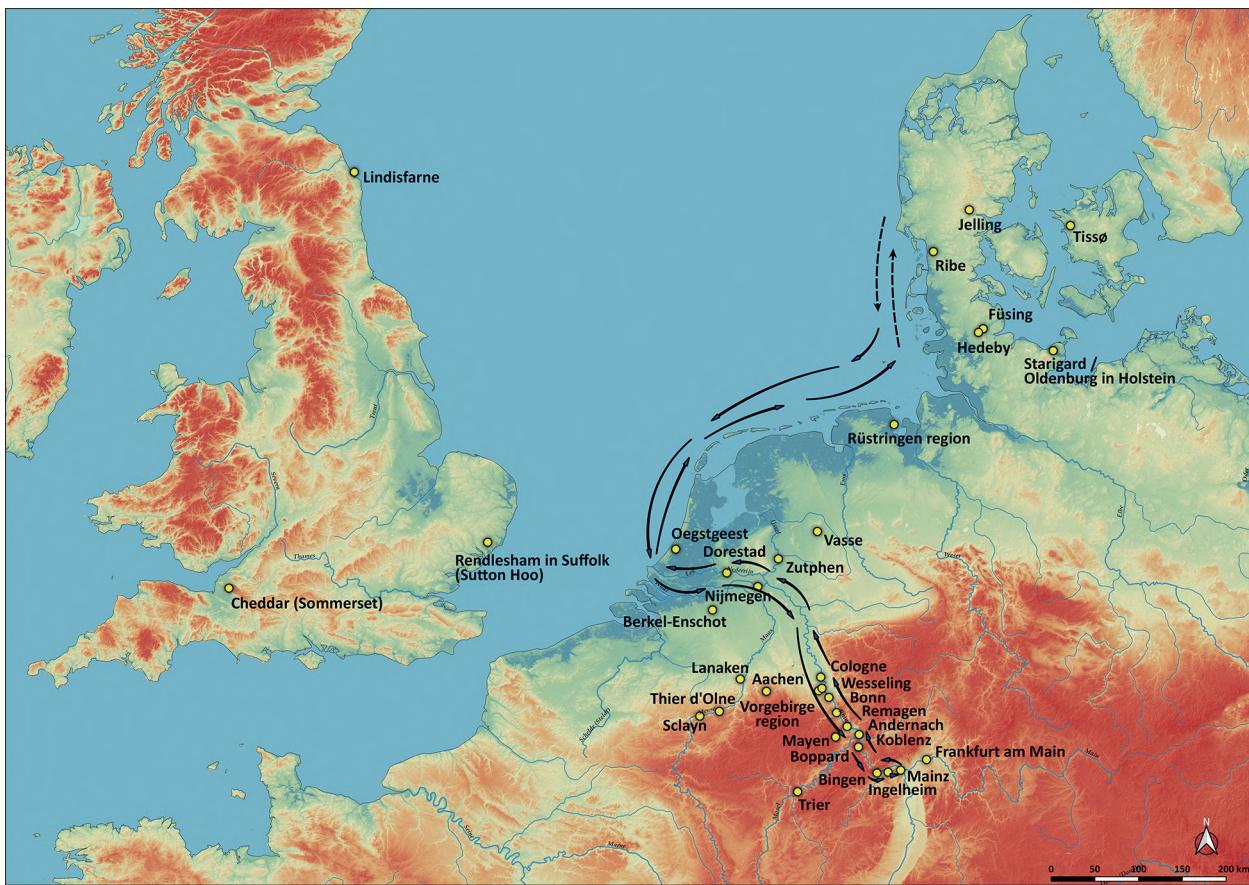
This conference volume presents a comprehensive and supra-regional thematisation of these research topics. In 826, the Danish king, Harald Klak (reigned 812–813 and 819–827 in parts of Denmark), paid a visit to Louis the Pious in his *palatium* at Ingelheim in order to find support in the power struggle for Denmark. Harald Klak's journey along the Rhine and the return to his home region bears eloquent witness to the complexity of the network of interests at that time. This endeavour forms the scenic framework for the following presentation (fig. 1). The journey to the continent is used for sketching the respective societies in the year 826, whereas the journey back home will allow glimpses of later events. Aachen, Frankfurt am Main and Trier are an exception; they were not visited by Harald Klak but, due to their importance for early medieval times, they are also considered in this text. Ultimately, Carolingian Aachen is used for a comparison with central functions at other seats of power: contemporary Tissø (Denmark) and younger Karakorum (Mongolia).

### Home Region of Harald Klak (Northern) and the Beginning of the Journey (Northwestern Europe)

The period around 800 saw cooperation as well as confrontation between Danes, Slavs, Saxons, and Franks in changing constellations, whereas 9<sup>th</sup> century Denmark was characterised by a struggle for the throne between different royal dynasties or even members of the same lineage (O. Grimm, T. Lemm and A. Pedersen, this volume). Often, several kings ruled, but it remains open whether this related to

Denmark on the whole or only to a part of it. Harald Klak (reigned 812–813, 819–827) obtained the support of the Frankish Emperor Louis the Pious from 814 onwards in his claim for power but, in the end, he could not hold the throne permanently (Helten 2011; Lund 2020).

It seems, however, that for most of the first half of the 9<sup>th</sup> century, only one royal lineage had



**Fig. 1** The reconstruction of Harald Klak's journey in 826. – (Digital execution P. Noszczyński, Forschungsstelle Kaiserpfalz, Stadt Ingelheim; content M. Gierszewska-Noszczyńska, Forschungsstelle Ingelheim, O. Grimm, LEIZA, Standort Schleswig, L. Grunwald, LEIZA; SRTM A. Jarvis, H. I. Reuter, A. Nelson, E. Guevara, 2008, Hole-filled seamless SRTM data V4, International Centre for Tropical Agriculture (CIAT), available from [srtm.cgiar.org](http://srtm.csi.cgiar.org). They are derived from the USGS/NASA SRTM data; Rivers, made with Natural Earth. Free vector and raster map data @ [natural-earth-data.com](http://natural-earth-data.com), Natural Earth: ne\_r0m\_rivers\_europe [Version 5.0] und ne\_r0m\_rivers\_lake\_centerlines [Version 5.0], Natural Earth > 1:10 m Physical Vectors – Free vector and raster map data at 1:10 m, 1:50 m, and 1:110 m scales [www.natural-earth-data.com/downloads/r0m-physical-vectors/](http://natural-earth-data.com/downloads/r0m-physical-vectors/)).

possession of the Danish throne, the »Godfred-dynasty« (Godfred, Horik I and Horik II). In contrast, it is unclear whether the kings Sigfred and Halfdan, mentioned in 873, also belonged to this lineage (T. Lemm, this volume). The same kind of uncertainties are given for Harald Klak, about whom little is known concerning his life from the late 820s onwards. There are further problems since, according to contemporary sources, there are different persons who go by the name of Harald, and it is impossible to identify the actual Harald Klak (Lund 2020, 68).

There is, however, no doubt that the »Godfred-dynasty« had possession of Hedeby (T. Lemm, this volume). In 808, Godfred undertook a campaign against the West Slav Obodriti, during which the trading place of Reric (Groß-Strömkendorf) was destroyed and its merchants transferred to Hedeby. In the first quarter of the 9<sup>th</sup> century, a parcelled merchant settlement was established at the site and, from 820/825, a royal mint was in operation. At that time, however, the most important trading site

of the North was Dorestad in Frisia, which flourished under Charlemagne (S. Coupland, this volume p. 205–216). Dorestad had a considerable trade surplus: vast numbers of coins were flowing into the emporium from all over the realm, but silver did not leave the port in equal measure. Goods that went out from Dorestad had been purchased with that silver. Most of the items likely originated from within the Carolingian realm, whereas other items were undoubtedly brought to Dorestad from the North.

Be it for Harald Klak or the »Godfred-dynasty«, an architecture of power has to be taken as given for an itinerant kingdom. Tissø on Zealand, one of the sites in question (besides Erritsø, Lejre and Jelling), is well known for its hall architecture with roots in the middle of the first millennium AD (O. Grimm and A. Pedersen, this volume). Tissø was in full swing from the second half of the 7<sup>th</sup> century onwards, with a main hall of 35 m × 10 m for gatherings and a lesser fenced-in hall for cult purposes. The site is also known for a heavy gold neck ring of almost 2 kg, the most precious single find from the

Viking Age overall. The place name itself – »lake of the martial god Tyr« – is in line with depositions, mostly weapons, in that lake. Apart from the manorial seat, the area also saw craftsmen at work and a market, both of which were seasonal.

Hedeby was still under construction in the early 9<sup>th</sup> century, but a manorial seat should be expected, with different possibilities at hand (T. Lemm, this volume). The first suggestion is the Füsing settlement on the other side of the Schlei, which dates from the second half of the 7<sup>th</sup> century to c. 1000. The presence of weapons points to a military sphere and dirhams, hack silver, and so on to an economic one, while sherds from 15 glass vessels show an upper class and perhaps a courtly culture. However, there was no representative architecture as in Tissø. Other suggestions place the location of the royal seat closer to Hedeby itself. The most prominent position for a nearby royal residence with a wide panoramic view would have been the elevation southwest of the town area, where two burial grounds have come to light, too.

It is also noteworthy that considerable construction work of a military character had already been carried out in the early 8<sup>th</sup> century: the Danevirke and the rampart on the Reesholm Peninsula (where Füsing was located), which continued into the Schlei as an offshore work in the form of a huge wooden wall (T. Lemm and A. Pedersen, this volume). The considerable logistics needed for this presuppose a central (royal) force in the background, roughly 100 years before Hedeby was founded. In the case of Füsing, a political force is now visible that could have stood behind this work and which sheds some light on the »dark 7<sup>th</sup> century«, which is characterised by a lack of finds in general and the absence of richly furnished burials in particular. However, there are older building phases of the Danevirke that go even further back in time.

A look at the northeast; an architecture of power can be seen in West-Slavic Starigard/Oldenburg, probably the seat of power of the Wagri, who belonged to the Obodriti tribe (O. Grimm, this volume). At this location, a prince or leading family built the fortification (first a circle, later expanded) in around AD 700 or slightly later. This work also demanded considerable logistics. A hall architecture can be seen from the late 8<sup>th</sup> century onwards; the earliest princely hall of 24 m × 7 m had a designated room for gatherings that was 9–11 m long. There was a smithy nearby in which gold, silver, tin and lead were processed, although it needs to be ascertained if it was already operating in the first period of the manorial seat (780–830).

A look at the northwest; Rendlesham in Suffolk, which is mentioned as a royal site by Beda Venerabilis, has long been known for the Sutton Hoo ship burial, undoubtedly a royal grave, c. AD 625 (J. Hines, this volume). It is only now that a great hall (23 m × 10 m) has been located, with a dating to the final quarter of the 6<sup>th</sup> century, as part of a larger site that was in use in the period from c. 570–720. Close to the hall, substantial evidence for advanced craftwork has been unearthed. Excavations are still ongoing.

What can be seen here is a »hall architecture« as a common denominator over vast areas, with variations in overall context. As has been suggested for Starigard/Oldenburg, its manorial seat reflects an *imitatio imperii* of Frankish architecture (Gabriel 1986; see O. Grimm, this volume). It is a fact that West-Slavic (and Danish) delegations had seen sites like Aachen and Ingelheim in all their splendour. However, a closer look shows that local hall architecture was already built before the contact with the Franks, and there is no sign of significant constructional changes in the manorial seats after that. Architecture aside, one could suggest instead a broader adaptation of a courtly lifestyle, which included courtly riding, courtly feasting with proper tableware and, quite possibly, courtly falconry. This kind of adaptation is best recognised in Starigard/Oldenburg.

When Harald Klak was on his journey through Frisia early in the 9<sup>th</sup> century, this area may have already seen Viking raids, since Charlemagne had ordered the construction of a fleet and the deployment of guards to defend the North Sea coast against an enemy identified as »Northmen« (S. Coupland, this volume p. 141–149). The given date would be close to that of the raid on Lindisfarne in 793, often seen as the beginning of the Viking Age. By then, however, high ranking persons (if not members of royal families) from Denmark had already been granted fiefs by Charlemagne in Frisia. The earliest known example to this effect was King Halfdan, who pledged allegiance to Charlemagne in 807 and was granted Walcheren as a benefice, which was later in the hands of his son Hemming. Frisia can be understood as neither Frankish nor Danish but as a frontier region between both kingdoms; confrontation and cohabitation went side by side.

There is a surprising lack of palaces/residences in towns and the countryside in the northern part of the Merovingian and early Carolingian kingdom (F. Theuws / A. den Braven, this volume). In excavations, the Oegstgeest riverine settlement shows well-connected rural dwellers involved in agriculture, fishing, cattle raising, craft activities, and

exchange whereas, in turn, there are possible cult places in Steenbrei, Thier d'Olne and Sclayn, the centre of a property complex in Berkel-Enschot and, furthermore, the collection and redistribution site (?) of Lanaken-Industrieweg. None of these represent a top level of society for which we must expect architecture beyond the ordinary, not least hall architecture (see above). We have to take as given that palaces and residences did exist, but so far they have evaded identification despite all the excavations in previous decades. So, only the future can tell. One excavation that is both promising and ongoing covers the Chèvremont fort in Belgium,

which is reconstructable as a royal seat since the late Merovingian period, on the basis of written records.

However, the pivotal role in the area in question was played by Charlemagne's palace in Nijmegen, built on the remains of a late Roman fortification (*castellum*). Nijmegen, Aachen, and Ingelheim were among the important royal palaces of the Carolingian realm; Charlemagne stayed in Nijmegen at least four times between 777 and 808. The palace was almost completely demolished in the late 1700s but, as can be reconstructed, the Carolingian hall was 19 m in width.

## Arrival at the Lower Rhine Region: Cologne, with a Look at Aachen

During the visit to the palace in Nijmegen by Harald Klak and his entourage in 826, the important residential city of Aachen, with all its multi-layered functions, was surely also discussed, and the guests would thus have learned about the magnificence of the Aachen palace complex (J. Ley / A. Schaub, this volume). This large place of 25 ha × 30 ha (Schaub 2021, 159) which, thanks to its hot springs, was already very popular in the Roman period, was established by the Carolingians as their main residence, especially for the winter periods. The very name *Aquisgrani* is a reminder of the Romans, who conquered this place and converted it into a *civitas*. It is possible that the name originates from the Carolingian period, which would be tangible evidence of a deliberate and conscious appropriation of ancient models in the late 8<sup>th</sup> and 9<sup>th</sup> centuries (P. Kremser, this volume): there is evidence of settlement continuity in Aachen from the Roman period to the Carolingian era.

The cityscape was also shaped by large Roman buildings in the early Middle Ages (Schaub 2021, 159–163, 171). To the Danish delegation, the *palatium* was presented as a large-scale complex consisting of secular and sacred buildings. An *aula regia*, the royal hall, the largest building in this complex with its high stair tower (Granusturm), was mainly intended for assemblies. It was here that the continuity of the settlement since Roman times was most clearly visible. The large hall had been built into a Roman *castellum* dating back to the late 3<sup>rd</sup> century with a massive defence wall. Its foundations were about 5.3 m thick! The *aula regia* and the Roman construction were not only a kind of refuge with an area of approximately 1 ha, but probably also demonstrated a *renovatio imperii*, with the power of Charlemagne

and his son as a continuation of the Western Roman Empire. The Chapel of St Mary (794–813), in the form of an octagon with many magnificent architectural elements such as columns and floors in opus sectile-technique, was presented to the envoys as a legacy of antiquity. These two most essential palace areas were connected by a 13 m long corridor, which was used as a comfortable communication wing, especially by the rulers and their guests (J. Ley / A. Schaub, this volume).

The importance and significance of this complex was repeatedly emphasised in the written sources. It was a very popular and frequently visited place, a *de facto* headquarter of the Carolingian rulers (H. Müller, this volume). Many written sources attest that Aachen was not a temporary transit point for Charlemagne but a permanent representative residence, which he mainly visited during winters. Louis the Pious adopted this practice and favoured Aachen, especially during his early reign between 814 and 817, when many documents were issued in Aachen that served as direct advertising for the city. Even if Harald Klak did not visit the *palatium* in Aachen in 826, he and his entourage certainly learned a lot about *Aquisgrani* and the unique palace buildings that characterised this place in the early Middle Ages. The year 822 marked a turning point in the Carolingian reign. The situation in the empire changed due to many internal conflicts, so Louis the Pious had to travel much more through his territories and make use of other residences and their facilities, e. g., the palace of Ingelheim (see below). Over the next few decades, Aachen lost its role as the main palace complex. However, was this place a *Roma secunda* in Carolingian times, or is this just an invention or vision of today's scholars? How have the

perceptions of the palace, its features, and its history changed over the centuries due to the subjectivity of researchers? To what extent did the interpretation and reconstruction depend on »facts« already surmised or invented (F. Pohle, this volume)?

Travelling up the Rhine, the delegation led by Harald Klak reached Cologne, which was called Colnaburch by the Frisians (T. Höltken, this volume). In 826, the original Roman fortress wall of this large city, which was 3,911 m long and over 8 m high, continued to be used as a bulwark. The walled settlement area amounted to 97 ha, still characterised by the imposing large Roman buildings. The eastern part of the inner area neighbouring the Rhine (53 ha), in particular, was densely populated in the Carolingian period. Based on this, Cologne was already twice as large as Hedeby, with an area of 24 ha (Höltken 2021, 174). The sight of the fortified city with its churches and monasteries inside and outside the defence wall, the original Roman Rhine bridge, and the Deutz castellum on the right bank of the Rhine must have made a great impression on Harald Klak and his entourage.

As before in Roman times, Cologne acted as a crucial transhipment point and coordination centre for long-distance trade, which was probably conducted by Frisian merchants in particular from the 8<sup>th</sup> to 10<sup>th</sup> centuries. For that reason, Cologne was extremely important for relations with the North and was known as a rich *colonia*. Ceramics such as the so-called Tatinger Ware, millstones, wood, wine, grain, glass, weapons, and building materials such as ancient Tuff stones and spolia were exported from there to the North. In return, cloth, wool, leather, amber, spices, Atlantic cod, and slaves reached the Frankish Empire via Cologne. Presumably, Harald Klak and his party witnessed the immense turnover of goods around them in the port of Cologne right at the beginning of their stay.

In Cologne, the economic power of the Frankish Empire could be seen. For example, ceramics from the pottery workshops of the Cologne-Bonn Vorgebirge region were loaded onto ships in the harbour to be transported to Britain and Scandinavia for sale. There is no doubt that the travellers were curious to find out where these clay vessels, known from their homeland, were made. In 826, ceramic production in the Eifel Vorgebirge already had a long tradition, perhaps even dating back to the Roman era (C. Keller, this volume). In the early Middle Ages, mass production in the area began in the 7<sup>th</sup> century, with exports extending as far north as the Netherlands. During the Carolingian period, pottery production was further increased in centres such as Bornheim-Walberberg,

Brühl-Badorf, and Brühl-Eckdorf. In the 9<sup>th</sup> century, the robust vessels from the countryside around the present-day cities of Bonn, Brühl and Wesseling went into trade, and they were transported to Britain and, via Denmark, to the coastal regions of the Baltic Sea and the more distant regions of Scandinavia, as is evidenced in particular by the distinctive, light-coloured so-called Badorf ware. This can be found in large numbers as a trade good in all the important coastal towns and trading centres of the North Sea and even the Baltic. It is quite possible that the travelling party visited workshops with their pottery kilns on a day trip from Bonn, for example.

The spread of Christianity to the north of Europe was another high-ranking aspect of the contacts. From the 7<sup>th</sup> century onwards, the bishops of Cologne were involved in the attempt to Christianise the Frisians and Saxons. This endeavour did not run smoothly. As early as 716, a Frisian army threatened the city and extorted a large ransom. By 785 at the latest, however, Friesia had been subjugated by the Frankish Empire and the Christianisation of Denmark could be attempted. The Frankish administration wanted to use Harald Klak and his entourage for this after their return to the North in 826. First, however, the pagan pretender to the throne had to be baptised himself, and his journey along the Rhine served this purpose. In return, Harald Klak hoped for military support from Louis the Pious.

The fleet with Harald Klak's delegation reached the Middle Rhine Valley from the area around Bonn, following the Rhine upstream. The next stop could have been the heavily fortified Carolingian fiscal estate of Remagen, which had been built within the Roman defence walls. They entered a region characterised by pre-modern industries and the Christian faith (L. Grunwald, this volume). Today, we are particularly well informed about the densely populated Moselle estuary area. This region was an ancient industrial area with a close-knit network of roads and waterways, and it was extremely important for the European market. The wine produced on a large scale in the Moselle and Rhine area and the basalt lava millstones produced in and around Mayen in the eastern Eifel were particularly popular exports on the European market. These products also reached the North, especially Denmark, on a large scale. The contacts between the two regions must have been complex. Costume components of burials from the 9<sup>th</sup> to 11<sup>th</sup> centuries certainly indicate a two-way exchange with Scandinavia. Therefore, the travelling party is unlikely to have come to this region unprepared. In the Carolingian period, the Middle

Rhine and Lower Moselle regions were characterised by royal fiscal estates and rich ecclesiastical institutions, such as collegiate monasteries. These locations were intensively involved in the production of goods and trade at the time. The centre of this area was formed by the *modicae civitates*, the fortified small towns of Andernach, Koblenz and Boppard. These royal possessions, within original Roman defence walls, provided security for inhabitants, merchants and diplomats. The existing residential buildings

were a worthy accommodation for the high nobility, and it can be assumed that Harald Klak and his entourage stayed here, perhaps for a longer period, with several visits to the countryside. Thus refreshed, the Rhine journey to the palace of Louis the Pious in Ingelheim could be continued without any problems. From St. Goar onwards, the treacherous rapids of the Rhine had to be overcome before reaching calmer waters again near the mouth of the River Nahe at the royal estate of Bingen.

## A Stay in the Rhine-Main Region (Ingelheim, Mainz) with a Look at Frankfurt/Main

At the gates of the Ingelheim *palatium*, the delegation saw a slightly different landscape: the expanse of the Rhine valley at this point was characterised in particular by the flat Rhine lowlands, which culminated in the towering Rhine-Hessian plateau. The residence of the Frankish kings, located on the middle terrace, was certainly recognisable from a distance (H. Grewe and M. Gierszewska-Noszczyńska / R. Kaiser, this volume). All the guests arriving at the harbour in Frei-Weinheim were impressed by its splendour and size. The Ingelheim area already played a central role in the region during the Merovingian period, especially in the late 7<sup>th</sup> century, as is indicated, for example, by the baptismal font in the St Remigius Church or the late 7<sup>th</sup> century fortified settlement beneath the younger Carolingian palace complex (Gierszewska-Noszczyńska 2021). This area had been in contact with other regions for centuries. Various types of ceramics had been imported since the Roman imperial period, including products from the pottery workshop centres in Mayen and Weißenthurm. Four small coins, so-called sceattas, from Ingelheim and its surroundings, testify to contact with the Frisians; these coins have otherwise only been found in Mainz (21) and Xanten (5). A cremation grave from the first half of the 9<sup>th</sup> century, which was discovered near the harbour in Frei-Weinheim, demonstrates the presence of Frisians at this location (M. Gierszewska-Noszczyńska / R. Kaiser, this volume). A continuity of infrastructure, which would be significant for communication and trade, is assumed for this area; the palace complex was most likely accessible via the roads built in antiquity, which may have been renewed and continued to be used in the Middle Ages (Haupt 1996, 21–22; 2021, 221). The region was also connected to the Rhine and Moselle communication network. After disembarking from the »hundreds of ships«, the guests travelled along the country road to one of the most remarkable pal-

ace complexes of the Carolingian Empire (H. Grewe, this volume).

The representative northern façade of the *palatium*, which was already clearly visible from the Rhine and the main road, certainly made a great impression on travellers. It was intended as an invitation and preview of the magnificent individual buildings as well as the entire complex, which followed ancient models. The second impressive façade was the semi-circular building in the east with a gate and two towers, the so-called Heidesheim Gate, at the apex of this construction. From that point onwards, anyone who passed through the gate had to walk, as is evidenced by the difference in height between various door thresholds. Once through the gate, one entered a hall divided by pillars, which was furnished with multi-coloured decorative floors made of marble and porphyry slabs (*opus sectile*), and then descended via a staircase into a portico with at least 36 columns, which was in front of the semi-circular exedra with a diameter of 90 m on the inside. The ancient influences can be especially recognised in this building (e. g., the Forum in Cologne; see T. Höltken, this volume, fig. 1). Guests could probably also linger in individual rooms of this construction, which could be entered directly from the portico. The exedra, like the other palace buildings, enclosed a spacious interior, which was divided by a small church into two courtyards of semi-circular and square shape (in 826; erection of a second church with three apses; Gierszewska-Noszczyńska/Peisker 2020, II2–II4).

The meetings took place in the largest room of the *palatium*, the king's hall, called the *regia domus* in Latin at that time. Harald Klak and his entourage came to the imperial assembly in the *palatium* of Ingelheim in June 826 in order to gain the support of Louis the Pious in the struggle for the Danish throne. In return, he was to be baptised and was to

support the Christianisation of the northern territories with the help and company of two missionaries. One of these was Ansgar, who later became Bishop of Hamburg and then Bremen (Geißler 2023, 75). The international society most likely gathered in this largest secular hall, which had an area of around 500 m<sup>2</sup>. The plastered walls, painted with geometric patterns, and the glazed windows probably made a lasting impression on the envoys from various regions of Europe. In addition to Harald Klak and his followers, the sons of the Danish King Godfred, Leo, the bishop of Civitavecchia, who spoke in favour of the Roman Church, and guests from Jerusalem, Pannonia and the Slavic territories were also present at the imperial assembly in Ingelheim (M. Gierszewska-Noszczyńska / R. Kaiser, this volume).

During the negotiations and talks in Ingelheim in 826, it became clear that Harald Klak could still be sure of the benevolence and continued support of Emperor Louis the Pious (H. Grewe and M. Gierszewska-Noszczyńska / R. Kaiser, this volume). However, he and his entourage still had to be baptised and converted to Christianity. This ceremony took place near Mainz. Like Cologne, Aachen and Trier, the former provincial capital of Mogontiacum had not yet lost its Roman splendour. Its development up to the year 826 also appears to have been similar to that of the other three centres of power.

In Late Antiquity, Mogontiacum was the administrative, cult and economic centre of the province of Germania Prima (Heising 2022a; 2022b). The city wall, which was still in use in the Carolingian period, was closed around the centre of the settlement along the Rhine between 369/370 (Heising 2008, 206 fig. 42c) and 375 (Burger-Völlmecke 2020, 245; Heising 2022b, 48 fig. 229). Mainz was also involved in the defence of the province. Ships of the Rhine fleet were moored here at least until the second quarter of the 5<sup>th</sup> century (Bockius 2006, 215; 2022, 31 tab. 1). According to the military manual, the *Notitia Dignitatum*, which was last revised in the third decade of the 5<sup>th</sup> century, Mogontiacum was also the seat of the *Dux Mogontiacensis*, the supreme commander of the western Roman frontier army in the province of Germania Prima (cf. Heising 2023). According to this source, the *milites armigeri* in Mainz were subordinate to him under the *praefectus militum armigerorum* (Scharf 2005, 257–258). Roman statehood probably existed in Mainz until at least the middle of the 5<sup>th</sup> century (Bockius 2006, 231; Heising 2020, 23; 2022a, 108), perhaps even, as in the Middle Rhine and Lower Moselle, until the 470s. It can be assumed that the city was peacefully integrated into the Frankish power structure in the first third of the 6<sup>th</sup> century after a brief, non-violent

Alamannic rule, such as that in Trier. As in Cologne and Trier, the populated district in Mainz was concentrated in the city area near the river behind the city walls, which was also the case in the Merovingian period. Only under the Carolingians were the previously deserted districts used again (Knöchlein/Rupprecht 2011; Knöchlein 2017; 2020; Heising 2022a, 48 with fig. 22).

Individual findings suggest an impressive continuity of the late antique buildings *intra muros*. For example, according to Guido Faccani, the excavations in St Johannis Church led to the discovery of a late antique, secular large-scale architecture that was still in use in the 5<sup>th</sup> century (Faccani 2020). In the later 6<sup>th</sup> century, a part of this building served as the foundation for the first early medieval church in Mainz. In addition, alongside a spiritual quarter around the bishop's seat and another quarter around the assumed royal court, a significant part of the settlement can be considered as a settlement of Frisian traders (Schulze-Dörrlamm 2014; 2021; Volquartz 2017).

The importance of Mainz as an early medieval royal and episcopal seat and as a trading hub in the early and high Middle Ages must have been great. With the construction of the new monastery church of St Alban and the foundation of the Benedictine monastery in 787–805, a new spiritual centre was created *extra muros* in the east of the Frankish Empire at the behest of Charlemagne (Schulze-Dörrlamm 2014, 75). Harald Klak was baptised here on 24<sup>th</sup> June 826 together with his wife, his son Godfred and his entourage. Ludwig became Harald's godfather and enfeoffed him with the Frisian county of Rüstringen. In return, Harald was given the task of defending the Frisian coast against future Viking raids and establishing Christianity and Frankish influence in Denmark.

Delegates from the new *palatium* in Frankfurt am Main were certainly also present at the symposium in 826. Charlemagne had already maintained diplomatic links with Denmark and constantly endeavoured to expand his territory in this direction. Between 814 and 828, his son Louis the Pious continued these efforts and supported his feudal lord Harald Klak in his efforts to attain the royal throne in Hedeby. Indirectly, this would have massively increased Frankish influence and the spread of Christianity to the North. Therefore, it should come as no surprise that traces of such connections can also be found in archaeology, for example in the area of the Carolingian palace in Frankfurt am Main (C. Ehlers, this volume). According to the previous point of view, there was a Roman settlement in and around today's St Bartholomew's Cathedral in Frankfurt. This area

continued to be used in the Merovingian period and was probably expanded in the 8<sup>th</sup> century as a centre of power for the territory of Mainz. Charlemagne stayed here at Easter in 794; therefore, residential buildings must have already existed at this time. Modelled on these, the later church and the *aula regia* of the palace had been extended at the instigation of Louis the Pious from around 822. The Carolingian fiscal district of Franchonfurt was first mentioned in writing shortly before this, in 817. From this time onwards, the royal estate of Frankfurt am Main was probably separated from the territory of Mainz. The palace must have been under construction at the time of Harald Klak's endeavour in 826. This could explain why this centre of power, which was situated close to Ingelheim, was not visited by Harald Klak's delegation, according to current knowledge.

The early medieval settlement in Frankfurt am Main also included a Merovingian-Carolingian burial ground located in and around the later Cathedral (C. Ehlers, this volume). A rectangular building, probably of late antique origin, was initially integrated into the Merovingian necropolis, perhaps as a cleric's house, which was still in use in the Carolingian period. In this house, a grave chamber was found, which contained the inhumation of a girl, richly decorated according to the Christian faith, and a pre-Christian cremation of another child. The furnishings of both graves are of particular importance for the reconstruction of contacts between Frankish and Scandinavian elites in the decades around 800. Later, from 822 onwards, the *palatium* basilica of St Salvator was erected above the house and consecrated in 855 but the burials were left intact.

## A Short Digression on Trier

As in Mainz, Aachen and Cologne, the development of Trier at the transition to the early Middle Ages is today understood as a relatively peaceful process. The 285 ha late antique imperial city of Trier was surrounded by a ring of walls that were 6,418 m long, far too large and built for prestige kind rather than defence. The imperial court was probably moved from Trier to Milan around 395 and then to Ravenna in 402 (F. Heimerl, this volume). In 407, at the latest, the praetorian prefecture for Gaul, Britain, and Hispania had been relocated from Trier to Arles. At that time, the *civitas* lost its political supremacy. However, as the military centre and administrative seat of the province of Belgica Prima and the northern Gallic diocese, all its structures and institutions remained untouched (cf. Heimerl 2021, 116). It also continued to function as an economic coordination and distribution centre. Both the artefacts and the findings suggest that Roman life continued undisturbed and peacefully during the 5<sup>th</sup> century. The non-violent integration of Trier into the Frankish power structure is likely to have taken place in the first third of the 6<sup>th</sup> century. It is therefore not surprising that this metropolis became a seat of power in the East Frankish Empire and, from the 6<sup>th</sup> century on, an increasingly important episcopal see, with a large number of churches and monasteries located *intra* and *extra muros*. The substantial Roman buildings remained in use in the early Middle Ages, although their functions underwent some changes. Even if

the former splendour of the imperial residence in Trier could not be retained in its entirety until the Carolingian period, the city remained a significant economic, administrative, religious, and production centre for very different types of manufactured goods. Therefore, it is not surprising that a mint operated here continuously from late antiquity onwards.

Carolingian Trier, with its large buildings derived from Roman structures, was also an important metropolis during the 8<sup>th</sup> to 10<sup>th</sup> centuries, involved in reciprocal trade and multi-layered exchange with the North (L. Clemens and F. Heimerl, this volume). The long-distance relationships and transport of goods were probably made possible on the Rhine and Moselle in particular by Frisian traders (T. Höltken, this volume), who settled in the urban area of Trier both near the centres of power of the time (royal palace and cathedral/southern church) and in decentralised locations (L. Clemens, this volume). The damage caused by the Norman invasion of 882 could be quickly repaired. Archaeological findings from the 7<sup>th</sup> to 10<sup>th</sup> centuries in the monastery of St Irminen, which was built in the area of the former Roman horreae of Trier, show how complex the supply of goods from the North was in the 10<sup>th</sup> century. The Anglo-Frisian sceattas and coin brooches are evidence of Frisian trade, and a comb and the bone of a flatfish clearly demonstrate the import of goods from the North and long-distance trade in 826.

## The Journey Back Begins: Passing Boppard, Koblenz and Andernach

On the way back north, Harald Klak's delegation, which included missionaries led by Ansgar, once again passed through the Middle Rhine Valley and reached the Moselle estuary (L. Grunwald, this volume). The Christian character of this rich region must have been impressive: six churches and a Christian convent existed in and around Andernach as early as the Merovingian period. In Boppard, a collegiate monastery was located within the fortress walls near the former church of St Severin. Such institutions also existed in the Moselle catchment area in Karden and Münstermaifeld. However, Harald Klak and his entourage were particularly impressed by Koblenz, where a Marian convent was located within the approximately 8 m high fortress walls next to the building that preceded today's Church of Our Lady. Outside the city walls, which were originally Roman, a collegiate monastery was built directly at the confluence of the Moselle and Rhine rivers. It had been planned by Archbishop Hetti of Trier, and the impressive construction work was probably shown to Harald Klak and his men. The monastery was then consecrated in 836. Due to the previous distribution of Gladbach-Birka-type fibulae in the Moselle estuary and Scandinavia, one may suggest that believers from this region, Christianised around 800 at the latest, joined the missionary project under the leader-

ship of Ansgar and with the support of Harald Klak. According to burial inventories of the 9<sup>th</sup> to 11<sup>th</sup> centuries, the Christian faith continued to have a massive influence after the year 826. From the 840s onwards, the Norman invasions became increasingly threatening in the regions along the northern course of the Rhine, but they did not initially reach the lands along the Middle Rhine and Lower Moselle. However, this serious threat was certainly known at the time, due to the contacts that existed with the North.

In the second half of the 9<sup>th</sup> century, the highly productive regions along the Middle Rhine and Lower Moselle also attracted the interest of the West Frankish Empire, and Charles II the Bald wanted to incorporate them into his empire. However, in a battle fought on 8<sup>th</sup> October 876 southeast of Andernach between the West Frankish army and the forces of the East Frankish Empire under Louis III the Younger, the East remained victorious. The wealth of the industrialised region and the produced goods led to subsequent plundering by the Normans. Despite the resulting destruction, the trade networks to the North remained intact. Even in the High Middle Ages, mutual contact with the North was complex and the exchange of goods is verifiable. In this respect, the situation in the 10<sup>th</sup> century was comparable to that in 826.

## Travel via Cologne

After leaving the Middle Rhine Valley, Harald Klak, his entourage and the missionaries returned to the area around Bonn, Brühl and Wesseling with their pottery sites (C. Keller, this volume). Until the Norman invasions of the 850s to 880s, the Carolingian export of vessels across the Rhine to the North remained stable and extensive. It utilised the long-established trade network via important hubs such as Dorestad in the Netherlands. The vessels thus not only reached many rural regions of the Netherlands, the north of Belgium and the German coastal areas, but trading centres in England and Scandinavia were also integrated into the supply network. In these distant regions of export, however, the number of records is significantly lower. Outside of the larger economic hubs, it can be assumed that the vessels were owned by the travelling merchants themselves rather than being deliberately brought there for export.

Cologne, the centre of power, which was characterised by business and Christianity, offered the

travellers a familiar picture at the end of the Rhine route that started in the Bonn area: stately buildings, a high city wall, and many churches and monasteries as well as a multitude of markets, traders and products from near and far (T. Höltken, this volume). The North was extensively integrated into the economic network at that time. Between today's Heumarkt and what was then the Rhine harbour, and thus in the centre of the bustling city, there was a district where Frisian traders lived and offered their goods. Harald Klak, who had only recently been baptised in St Alban's Monastery in Mainz, received massive support for his mission from the Archbishop of Cologne, Hadebald. He and his entourage were given another ship for their journey to the Danish border. The armed conflicts with the Danes that began in the 830s and 840s made trade with the North increasingly difficult and led to a steadily growing threat to Cologne. The situation became existentially threatening for the population in 856 at the latest,

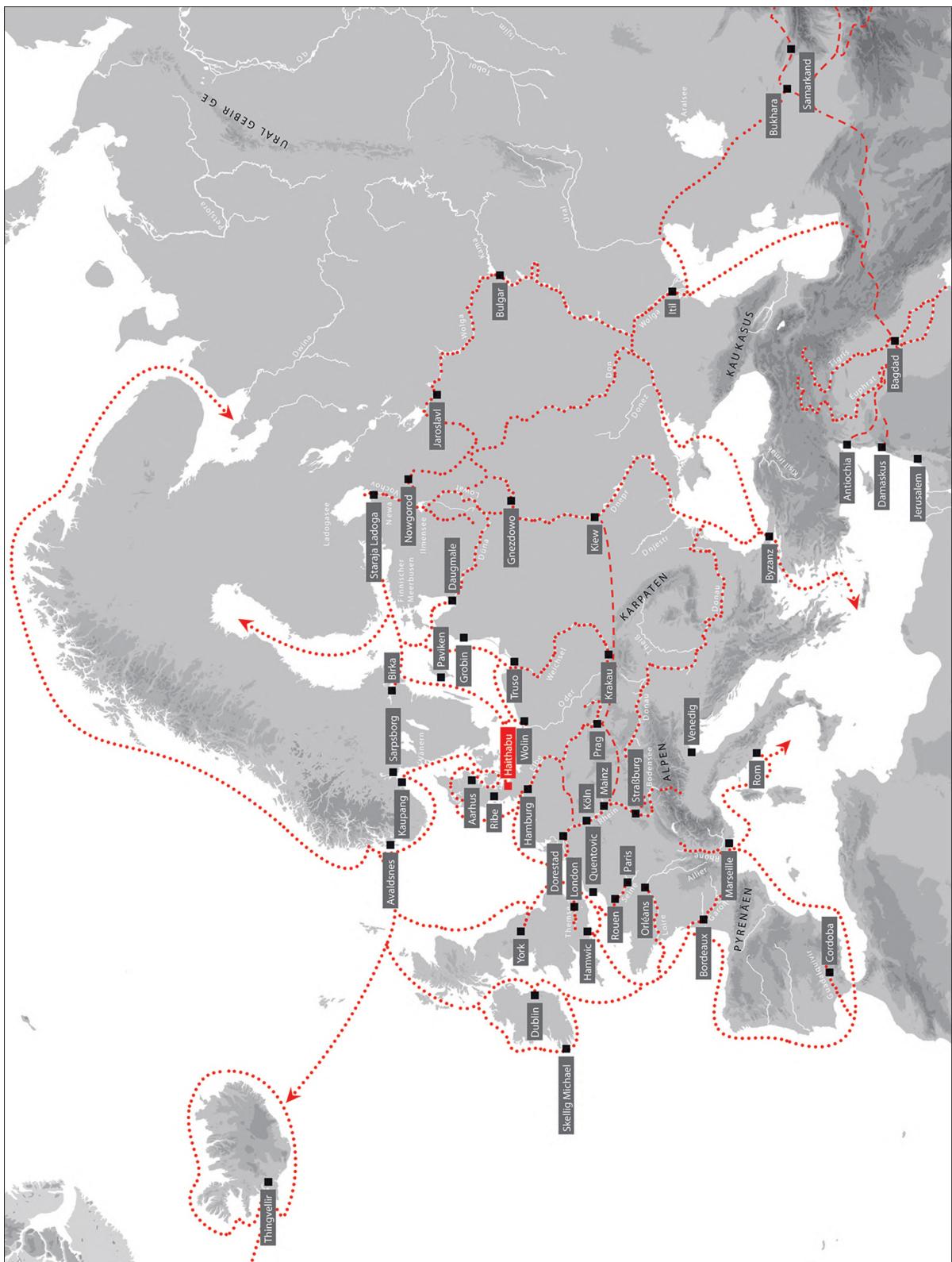


Fig. 2 Viking Age Hedeby and its trading network. – (After Maixner 2010, frontispiece).

with the destruction probably caused by the Normans. Until the 880s, there were repeated raids, but these probably only led to the pillaging of the monasteries and churches located outside the defended city walls. However, the effects of the plundering were overcome in the early 10<sup>th</sup> century. Cologne remained the administrative control centre for the

export of goods to the North. Over 600 wealthy merchants are recorded for this city in 1074. In 1165, a street to the south of St Gereon was referred to as »platea Frisorum« for the first time. Frisians or people from the coastal region were therefore still living there in the 12<sup>th</sup> century and the economic situation was probably similar to the conditions in 826.

## Getting Closer to Home: On the Way Back to Northwestern and Northern Europe

Viking attacks in the 9<sup>th</sup> century along the shores of the North Sea are well known from written sources, whereas archaeological evidence is scarce. In Carolingian times, Zutphen in the Netherlands became one of the most important strongholds of the counts of Hamaland (M. Groothedde, this volume). The year 882 saw raids and slaughter in Zutphen, recognisable as a destruction layer, which also included the burning of the local hall (see below). In response, a circular fortress was built around 890 by Everhard of Hamaland, along with forts along the North Sea shore and further inland, probably following a royal order. In Zutphen, the circular walled structure housed a central square for open-air jurisdiction and a market, on which stood a church and a large hall (the »palas« of the count).

Frisia, however, still experienced the aforementioned »confrontation and cohabitation« pattern (S. Coupland, this volume p. 141–149). Raiding peaked in the mid-9<sup>th</sup> century but continued into the 900s. But, as before, members of Danish royal families were granted benefices, up to Charles the Fat in 880s. This included Harald Klak, who was given Rüstringen (Frisia) as a fief by Ludwig the Pious in 826. This was intended to become his homeland in the case that his attempt to maintain the Danish throne against the Godfred-dynasty failed. An increasing number of finds with a Danish (Scandinavian) origin, which came to light by metal detecting, may demonstrate that Danes settled in Frisia.

On his way back to Denmark, Harald Klak could have noticed that Nijmegen was still flowering (F. Theuws / A. den Braven, this volume). Louis the Pious stayed at the site on nine occasions between 815 and 838, and several royal assemblies were held between 804 and 870. The division of the Frankish realm in 843, however, probably had as much a negative impact on Nijmegen as on Dorestad.

The trading site still flourished under Lois the Pious and then came the fall of Dorestad; first as a result of decreasing economic relations post-843 and then with the arrival of Arabic dirhams in Denmark,

which made traders turn to Hedeby, now a more lucrative source of silver in the North (S. Coupland, this volume p. 205–216). This place saw its heyday in the second half of the 9<sup>th</sup> century, when it had widespread economic connections with trading sites along the Baltic and North Sea shores (T. Lemm, this volume). This, however, extended much further, from Iceland to Cordoba (Spain), Bagdad (Iraq), and Samarkand (Uzbekistan) (fig. 2). The semicircular rampart of Hedeby, however, was apparently not established before the 10<sup>th</sup> century.

Hedeby was characterised by the production and trading of mass products, such as combs, soapstone vessels, beads and metal tools, but goldsmiths also worked in the area (Schietzel 2022). There was, however, yet another sphere: the exchange (gift-giving) of luxury products. In this respect, the splendid Frankish sword and the likewise luxurious belt mounts in the Hedeby ship burial may reflect the gift of a Frankish king (see below). In turn, in an account written down at the court of the Anglo-Saxon king Alfred in the late 9<sup>th</sup> century, the northern Norwegian petty king/trader Ohthere points to the active participation of the North in the exchange of luxury products. He travelled from the Far North to the trading places in Kaupang (eastern Norway) and Hedeby before reaching England, and in his ship he brought animal remains (walrus teeth, furs of different animals) from his homeland, which were very precious/exotic in areas further to the south (Bately/Englert 2007).

The aforementioned hall architecture of the North, which was typical for manorial/royal seats, was still extant. Now, as a newcomer, Zutphen, comes into play with its wooden hall of around 25 m × 8 m, which was erected in the middle of the 9<sup>th</sup> century and destroyed by the Vikings some decades later (then re-built) and, possibly, a stone-built church beneath the present-day St Walburgis' Church, which goes back to the 11<sup>th</sup> century (M. Groothedde, this volume). In a broader view, royal but modest architecture (a 24 m × 6 m hall) is found at the well-known site in

Cheddar (Somerset) in England from the late first millennium AD; Cheddar was one among 60 royal estates, recorded in written sources (J. Hines, this volume). In the 9<sup>th</sup> century, the manorial (royal) seat at Tissø was still in its traditional form before it saw a substantial reorganisation in its fourth and final phase in the 10<sup>th</sup> and early 11<sup>th</sup> centuries (O. Grimm and A. Pedersen, this volume). The hall was extended to 48 m × 12 m, and a small, square building (in the former fenced-in »cult area« with a small hall) may have served as a church. As for Hedeby, again, the royal seat was situated either in Füsing or closer to the trading site (T. Lemm, this volume). The seat of power in West-Slavic Starigard/Oldenburg saw changes in hall architecture but it remained in place until the middle of the 10<sup>th</sup> century before it saw shifts in ownership (Gabriel 1986; see O. Grimm, this volume). The next major development would be the stone buildings in the North, but this did not happen before the 11<sup>th</sup> century.

On Harald Klak's return, Denmark still saw rivalry between different royal lineages or even among these, including the »Olaf dynasty« (late 9<sup>th</sup>/early 10<sup>th</sup> century), before the appearance of the powerful Jelling kings and queens of the 10<sup>th</sup> century with their main seat in central Jutland (T. Lemm and A. Pedersen, this volume). Harald Klak co-reigned from 819 to 827, but in the end he could not maintain his position and had to go into exile. His final years and death are shrouded in mystery but he may have died in Rüstringen (see above).

One could argue that the early Christianisation of the North was part of the struggle for Denmark inasmuch as representatives of both (petty) kingdoms of the country (if it was only two), Horik I and Harald Klak, sought to consolidate their position by way of support from Louis the Pious. In that situation, Harald Klak took a step that brought him closer to Louis than his Danish opponent; he became a Christian. But, perhaps, this was not only because of the power struggle but also reflected matters of personal faith.

Harald Klak was the first baptised Dane ever to return to his homeland in 826. In his entourage, there were Ansgar and other men of Christian faith from the continent who were meant to support Harald spiritually and also spread the word of Christ. But how successful could missionary work have been in this short period, with Harald leaving Denmark in 827/828? The early Christianisation of northern Europe cannot be elaborated here any further (see briefly Lund 2020, 176–178), but suffice it to mention that Ansgar, Benedictine monk and archbishop of Hamburg and later Bremen, was the decisive person

in this process. The earliest churches of the North stood in the trading sites of Hedeby and Ribe (both Denmark) and Birka (Sweden), probably in around 830 at the earliest (Birka) and not later than around 850 (Hedeby and Ribe).

The final issue: who was actually buried in the famous Hedeby ship grave, dated 800–830/850? This grave is notable for both its construction and grave furnishings. The 4.5 m × 2.5 m chamber was divided into two parts of unequal size, and there was a pit for three horses. Above this, a ship of 20 m was placed and, on top of this, a mighty mound with a diameter of around 40 m. Chamber B, with the burial of a king, is notable for its extremely precious sword and similarly precious silver belt mounts, both of Frankish origin and the only find of its kind in the North with both sword and sword belt. In turn, chamber A has yielded the graves of two high-ranking warriors of the king's retinue, indicated by two swords, two shield bosses, a pair of stirrups and two horse harnesses.

Interestingly, two different interpretations have been suggested for the burial. Due to their quality, both sword and sword belt may be considered as a gift from a Frankish Emperor to a Danish king. If one follows this argument, then two powerful persons from Denmark are in fact mentioned as receivers of such gifts. Harald Klak did so on the occasion of his baptism in 826 in Mainz and Ingelheim (Wamers et al. 1994). However, we also know that Horik I had contact, via envoys, with Emperor Louis and later with his son, and such envoys were given gifts in the year 839 (T. Lemm, this volume). Horik I also allowed Ansgar to build a church in Hedeby (around 850; see above). In that context, he received items via the missionary, too.

Horik I fell in battle in 854 and so did all his relatives, except for a child who was to become king Horik II. In a situation like this, the ship burial, prepared by the court, was a strong statement on the legitimisation of rule in a crisis (T. Lemm, this volume). This line of argument would also be strengthened by the fact that Horik I belonged to a royal lineage with close ties to the trading place and a seat of power nearby. Against this scenario, it is less likely that the burial can be ascribed to Harald Klak, whose later years and place of death are unknown (see above).

It is also an interesting observation that the ship grave was situated outside Hedeby, so the mound would be the first thing seen by whoever came from the south. Surprisingly, the conveyed message was not primarily meant for Danes who travelled to Hedeby from the north.

## Final Consideration: Carolingian Aachen and Danish Tissø (Intra-Culturally) – Carolingian Aachen and Mongol Karakorum (Cross-Culturally) – a Comparison of Central Functions

In the present book, Aachen has received much attention, which cannot come as any surprise. It is well known for its extant Carolingian architecture, its excavations with high evidential value and its contemporary written records (see above). According to the latter, Aachen had a central position, almost capital-like, in the late Charlemagne and early Louis the Pious (806–822) periods, whereas a broader view would have to cover the period 770–840. The story is far from being told, which is evident from the results of recent archaeological investigations. As has become apparent only in the past decades, a late antique polygonal fortification (*castellum*) was part of the site, with the Carolingian hall placed at its southwestern limit. In addition, in late 2023/early 2024, the walls of another stone building from Carolingian times have come to light, about 20 m north of the so-called North Annex.

Carolingian Aachen has been used for a comparative functional/structural analysis with other central sites: contemporary Tissø in Denmark (Jørgensen 2002; 2005; see O. Grimm, this volume) and younger Mongol Karakorum (S. Reichert, this volume). Notably, in all three cases the sites in question were only one among several in an itinerant kingdom. In the case of Aachen, Ingelheim, also with elaborate architecture, holds a prominent position, too. In Denmark, Tissø stood side by side with Lejre, Erritsø and Jelling, although it is not quite clear whether the places belonged to one or several kingdoms. In turn, as regards Karakorum, the wider surroundings in the Orkhon valley yield further residential complexes, most prominently Doityn Balgas, a spring palace.

The comparison of Aachen and Tissø is intra-cultural inasmuch as it relates to German-speaking populations with a common heritage. However, for the 3<sup>rd</sup> century, we see the establishment of representative wooden halls in the north of Europe – larger ones for assemblies and smaller ones for cult –, notably in a period in which the Frankish tribe is mentioned for the first time (O. Grimm, this volume). In the middle of the first millennium AD, the Franks took over the remnants of the Roman Empire in Gallia while the Danes as well as the Swedes and Norwegians underwent a development of their own. Interestingly, we know for a fact that Danish delegations did actually see Aachen in the early 9<sup>th</sup> century (see above).

The case is different with Karakorum on the Mongolian Plateau, the first »capital« of the Mongol World Empire, which represented the largest contiguous land realm that ever existed and spanned the Eurasian continent from the Sea of Japan to eastern Europe. It originated in the Mongolian steppes and was founded by Chinggis Khan (r. 1206–1227), whose son and successor to the throne, Ögödei Khan (r. 1229–1241), instigated major construction work. Of main concern is the period 1220–1260, but only the years 1235–1260 saw a centralisation of functions in Karakorum. In the case of the actual seat of power, there is little archaeological knowledge inasmuch as the area in question is covered by a monastery that is still extant.

S. Reichert suggested comparing the capitals (in her case, Carolingian Aachen and Mongol Karakorum) by means of three overall functions: political, ideological and economic (with subdivisions). This suggestion was coined from a look at empire studies, a much-discussed recent field of research, whereas archaeology, perhaps surprisingly, has not seen that many cross-cultural studies. S. Reichert's scheme will be used for Tissø first before turning to Karakorum.

The comparison once made between Aachen on the one hand and Tissø (with a broad dating to the second half of the first millennium AD) on the other brings together sites in different measure. As mentioned already, we are well informed about the splendour of Aachen. In contrast, Tissø is a »mute« place that has not found any resonance in (later) written records. For Tissø, all we have are highly impressive large-scale settlement excavations that brought to light a manorial site with additional areas, alongside the place name that alludes to a pre-Christian cult (Tissø stands for »lake of the martial god Tyr«) and a heavy golden ring (O. Grimm and A. Pedersen, this volume).

Reichert's aforementioned list of overall capital functions is well suited to be applied to the (petty) king's seat in Tissø. The political sphere is reflected by the architecture of power, and we also have to take as given regular assemblies in the main hall. Ideology can be seen in the grandeur of the site, foremost the halls (a larger and a smaller one) with their mighty posts, which surpassed the ordinary buildings of the time, surely overwhelmed visitors and conveyed a message of strong rule. In northern Norwegian Borg, the reconstructed chieftain's house

including its central hall has a height of 8 m beneath the roof (!) (O. Grimm, this volume). The economy of Tissø is reflected by a workshop site and market that operated seasonally. A find of truly royal quality is the 2 kg gold ring, the richest single object of the Viking Age, found hidden (deposited) near the site (part of the royal riches?).

And now, turning to Aachen and Karakorum, the comparison brings together sites from different cultural backgrounds and used in different periods of time. Reichert's considerations focus on the role and function of the »capitals« Aachen and Karakorum by detaching from the usual dichotomies of sophisticated vs. barbaric and sedentary vs. nomadic. A Euro-centric view is omitted, too. When it comes to the political sphere, both Aachen and Karakorum are known for their splendid architecture and local administration, but assemblies took place regularly only at Aachen, whereas administration was to some extent mobile in both itinerant kingdoms. Ideology is reflected by architectural programs, which convey a message of legitimisation and strength of rule. For good reasons, Aachen was termed New Rome/Second Rome, with building materials brought from Italy to the site (J. Ley / A. Schaub, this volume). Economically, the empires' riches were kept in Karakorum and Aachen, but it is only in the former that actual minting was carried out, while Charlemagne at the least had the minting reformed in his realm.

S. Reichert has suggested that, as a first step, two dimensions (scales) of capital functions shall be ad-

dressed: the spatial distribution of the localities (the geographic criterion: from concentrated at one spot to dispersed) and permanence, which includes the time factor (temporal criterion, with mobility at the one end to stable at the other). As it turns out, a dispersed mobile system of capital functions can be established for both the Carolingians and the Mongols. However, in the later years of Charlemagne and the early years of Louis the Pious, Carolingian rule was surely less mobile and more focused (with a particular emphasis on Aachen), as was the case with the Mongolian Empire and Karakorum. In a second step, case studies from widely different settings could be added (see Tissø). In yet another step, analysis of change should be made with a diachronic approach, since Aachen and Karakorum in the present case provide only a rather static glimpse. Finally, more functions should be taken into account, such as judiciary, attached craft production systems and the military (see Tissø above on workshop areas and the market).

As we can see, Aachen has been and is still used for wide-ranging and thought-inspiring comparative structural analysis. S. Reichert has now presented an instructive, methodologically well-founded study that can be used for further analysis and can be elaborated. In the end, the question of capital functions is relevant even for rather recent and modern times. To give an example, France's central functions are concentrated in Paris, whereas in Germany they are divided among several cities.

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