

# The Rhine-Main Area as a Contact Zone with the North

## The Royal Palace of Ingelheim AD 826 as an Example

### ABSTRACT

The area on the Rhine between the Neckar and the Middle Rhine Valley evolved into a central location for church organisation and kingship around AD 780-850. Mainz and Worms were developed into episcopal cities; Ingelheim, Frankfurt and Trebur became royal seats of power. Due to trade relationships, this area was in cultural exchange with the North. From 822 onwards, Nordic legations travelled to the above-mentioned places, seeking political and military support in asserting their power interests. In return, the Frankish emperor expected success in Christianisation both by baptising the petitioners and by sending missionaries. Contemporary written sources reveal how the act of baptism was built up into representative festivities with a solemn liturgy and courtly ceremonies such as, for example, in Ingelheim in 826. The present contribution describes the setting of 826 from an archaeological perspective. The *palatium* of Ingelheim is exemplary for large buildings of the time around 800, in which manifold stylistic influences and the appropriation of ancient Roman building techniques can be seen.

### KEYWORDS

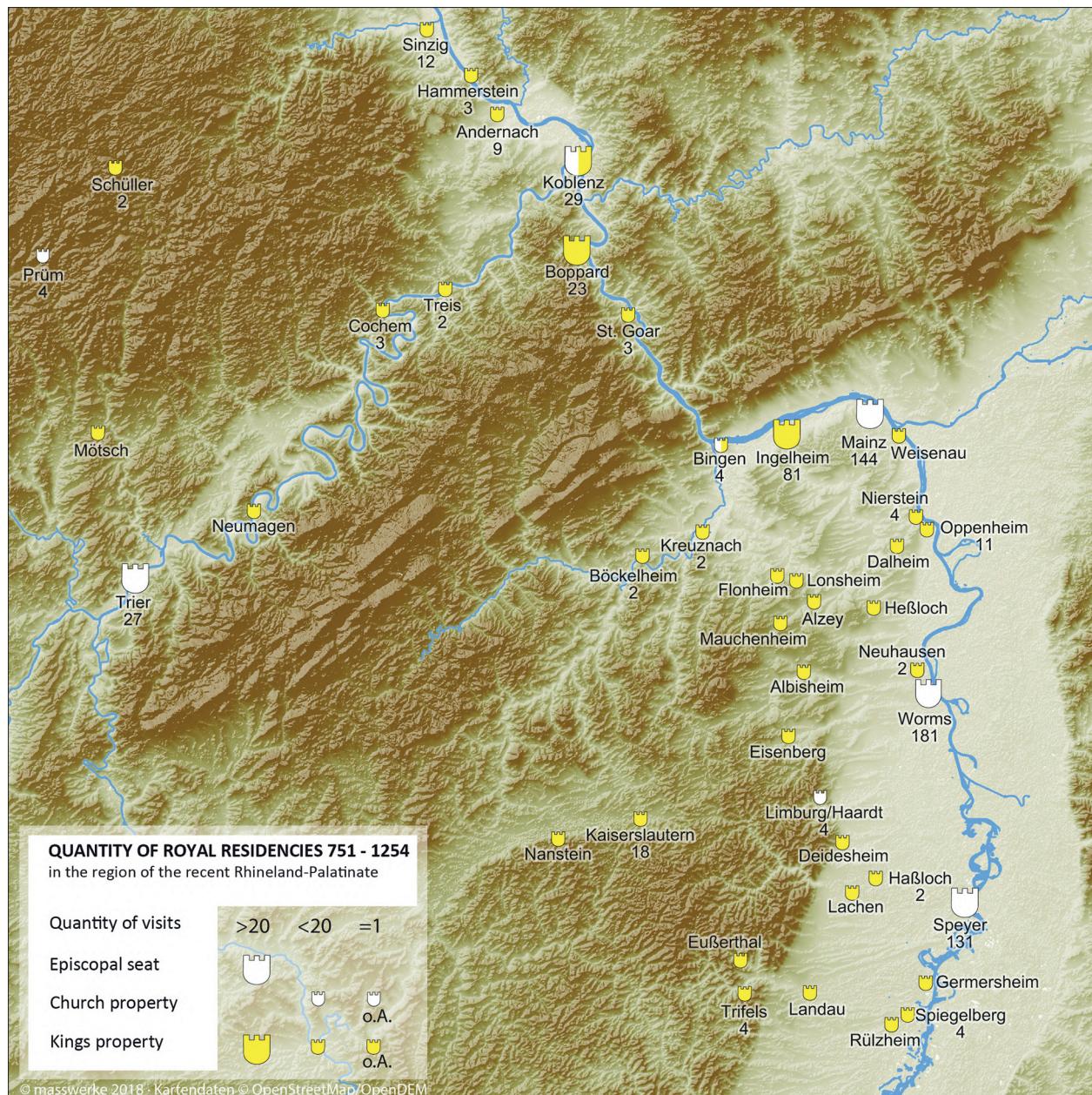
Ingelheim / *palatium* / Early Middle Ages / architecture

### The Rhine-Main Area

When the crown of the Frankish Empire passed to the Carolingians in the middle of the 8<sup>th</sup> century, the area along the Rhine was in the process of developing from a border to a central region. Four generations later, by far the highest number of rulers visiting and staying were recorded for Mainz and Worms. These places became centres of church organisation, first and foremost Mainz, which was called the metropolis of Germania after the Fulda Yearbooks from 852 (Brühl 1990, 89–132). Along with Ingelheim, Frankfurt and Trebur, royal dominions also emerged and provided space and resources for synods, imperial assemblies and court meetings for the next centuries.

It is striking that the impactful development of the church organisation occurred in temporal coin-

cidence with the formation of a new spatial focus on the Carolingian conception of rule (Patzold 2008, 179–184). Simultaneously to the foundation of the imperial monasteries and the initiation of the promotion of Mainz to an archbishopric, the royal sojourns, court meetings and synods increased in the Rhine-Main region. However, from that region it was not only possible to expand the church organisation in Franconia, Thuringia and the Wetterau but also, and especially, the area from Worms to Ingelheim offered an excellent strategic base for military operations against the Saxons and for their missionary work. The construction of a wooden bridge over the Rhine near Mainz, which is specifically highlighted in Einhard's *Vita Karoli Magni*, is a symbol of these actions (Einhard ed. 1911, ch. 17, 20).



**Fig. 1** The Lower Upper Rhine and Middle Rhine area with the royal residences of the Early and High Middle Ages according to C. Ehlers and H. Grewe, 2020. – (Content C. Ehlers / H. Grewe; digital execution Maßwerke-GbR / U. Haarlammert, 2020).

It is still difficult to grasp the extent of the exploration of the area along the Rhine by the rulers in the Merovingian and early Carolingian periods as there has been a noticeable, large loss of written records for that period. However, the number of sources indicating government business, assemblies and royal sojourns in the area under consideration in-

creases rapidly in the early years of Charlemagne's reign. After that time, Worms, Mainz and Ingelheim, and later also Frankfurt and Trebur, were places in the king's itinerary for which a disproportionately large number, and in some cases long-lasting, overwinter stays were recorded (Felten/Grewe 2012, 241–251) (fig. 1).

## Northmen on the Rhine

The year 822 marked the beginning of a series of court meetings and imperial assemblies in the above-mentioned places in which Nordic legations participated.

They appeared as petitioners at the court of Emperor Louis the Pious, asking for political and military help to stabilise their rule. In return, there were some at-

**Fig. 2** The former area of the palace complex of Ingelheim am Rhein (in the foreground) with the buildings from the late 14<sup>th</sup> century onwards. – (Photo A. Rath, 2012).

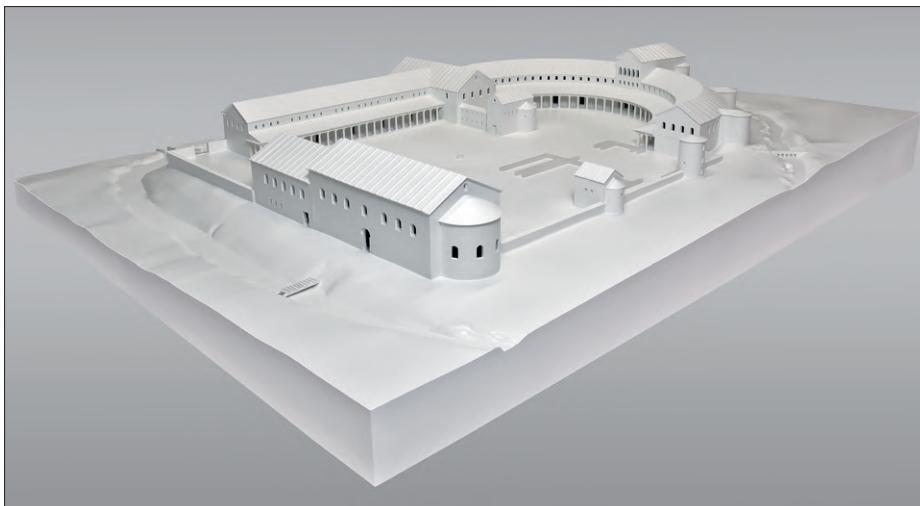


tempts made to bind them to the Frankish court and to Christianise them by baptism and sending missionaries to the North (Simek 2014, 58–60; Hardt 2017, 96–103). On these occasions, there were encounters and exchanges between cultures, which also materialised, for example, through the exchange of precious gifts. In addition, there were also trade relations, which might have been additionally promoted by diplomatic exchange. Archaeology can prove this exchange through the distribution of sceattas in the above-mentioned places on the Rhine (cf. Gierszewska-Noszczyńska/Kaiser, this volume) as well as of Frankish coins in the North. For Denmark and Sweden, it has been proven through material studies that Frankish cultural objects were held in high esteem and that they were reworked and frequently slightly changed, thus expressing an appropriation of the

Frankish culture, which was perceived as superior (Maixner 2014, 120–121).

Was the cultural landscape along the Rhine, with its bishop's seats and royal residences, perceived and highly esteemed, and were there any demonstrable reflections of this, for example in the architecture of the Nordic places of power? The contributions by Lemm and Grimm in this volume are dedicated to this question.

In the following, the focus is directed to the developed architectural environment on the Rhine, using the example of the *palatium* of Ingelheim as a single case study (fig. 2). This research was able to draw a comparatively concrete picture of the architecture and its use by the travelling court over the decades. In 826, Ingelheim was the stage for two imperial assemblies, the first of which was attended in



**Fig. 3** Reconstruction model of the palatinate in its condition around 800 based on the state of research in 2016. – (Content H. Grewe; model execution; Photo B. May, Forschungsstelle Kaiserpfalz, Stadt Ingelheim; model execution ConstruVISION [St. Wendel]).

the summer of that year by legations from the papal curia, the Holy Land, the Abodrites and Sorbs, and from Brittany and Pannonia as well as from Denmark. It was not only Harald Klak with his family and a large entourage who stayed at the court in Ingelheim but also the competing companions of Gud-

fred's sons. According to the testimonies of Astronomus and Thegan, the biographers of Louis the Pious, as well as other sources, King Harald was baptised, endowed with precious gifts and received a part of Frisia as a fief (cf. Ehlers and Gierszevska-Noszczyńska/Kaiser, this volume).

## Foundation of the Ingelheim Palatinate

Around 800, the establishment of a representative royal palace in the middle of the court complex of Ingelheim laid the foundation for a seat of government with an assembly function. The development of the landscape between the lower Upper Rhine and the Middle Rhine Valley created favourable conditions for this, as did the extensive fiscal system with royal courts and transport infrastructure. However, the palace building itself also reached a high point at the same time. The form and elements of the architecture came under the influence of the *Renovatio imperii*. Marble columns, ancient capitals, mosaic floors and other building materials were imported from, among other places, Italy. In Aachen, Ingelheim and probably Nijmegen, extraordinarily richly decorated palaces were built. They were inspired by ancient Roman, Lombard and Byzantine architectural motifs and featured sensational innovations, such as ring anchor systems for the dome of the church in Aachen (Marienkirche) and a 7 km long-distance water channel in Ingelheim. These constructions and buildings were mentioned in numerous letters, in yearbooks and in highly decorated poems of praise, which shows how deeply impressed contemporaries were and the identity-forming effect the architecture had on them.

Legations from Byzantium were received and many of the important church events of the year

were celebrated almost regularly in Aachen and Ingelheim. Finally, in 819, Louis the Pious moved an imperial assembly to Ingelheim and established its function as an assembly palace, which continued with interruptions until the time of Henry III attested court meetings: 12, synods: 6, feast days (Easter): 10 (Schmitz 1974, attachment).

The preconditions for this included, in addition to the infrastructure of the metropolitan area and both regional and local agricultural-economic prosperity, a developed architectural environment. This is described below from an architectural-historical and archaeological perspective.

## Semicircular Building

In the ground plan, the structural appearance of Ingelheim palace was symmetrical, and was thus composed of two simple geometric figures: a square and a semicircle. Closed peripheral buildings, which formed this complex, were established on this foundation grid. The east-facing façade was completely filled by a semicircular building with round towers to the front. With a diameter of 89 m, it was one of the largest secular buildings of the Carolingian period (fig. 3). Typologically close to the exedras of the Roman forum architecture, the semicircular build-

**Fig. 4** Aerial photography of the eastern part of the imperial palace and Archaeological Zone (Ingelheim) with the remains of the semicircular building that characterises the current town-scape. – (Photo A. Rath, 2012).



ing is an exception among the securely dated examples of the Early Middle Ages<sup>1</sup>. However, the comparability with the ancient exedras, which also occur in the architecture of the palace and villa on a smaller scale, is formally limited to the basic architectural scheme. This is because the building combines architectural elements of different functions. A gateway, representation rooms, six round towers and the portico of a peristyle courtyard are arranged in such a way that they are partly and spatially dependent on each other. At the apex of the arch, a porch protruded 4 m from the façade, its straight end flanked by two round towers. At this point, there was a gateway of 3.5 m width, which led through a pillared hall into the portico. The trapezoidal entrance hall was divided into three naves and two bays by pillars and pilasters. From that hall, the towers were accessible. Their flanking position was not for fortification; it gave the gate a stronger effect and visually emphasised the central axis of the palace complex (fig. 4).

The archaeological finds do not reflect the ornamental elements of the buildings completely. Therefore, a concrete idea of the appearance of the interiors cannot be created. However, wall and floor tiles provide the decisive clue about the character and representation of these spaces. Porfido verde antico and Porfido rosso, as well as ten types of colour-

ed marble, were used for wall incrustations or/and decorative flooring in the manner of ancient *opus sectile*. There is no doubt that the precious decorative elements, despite insufficient knowledge of their value, availability and procurement paths in the Early Middle Ages, can be stated for Ingelheim. These elements gave the rooms a decidedly representative character and, according to the excavation finds, the preciousness of the decorative elements was probably increased even further in the peristyle. In front of the concave façade on the courtyard side was a 4.8 m wide corridor, which served as the access to the interior rooms of the exedra on the ground floor. An archaeological excavation conducted in 1914 provided the decisive evidence for the reconstruction of a portico. At a distance of 2.5 m from a profiled corner pillar at the southern end of the corridor, a base of the marble column was found *in situ* on its foundation as the beginning of a row of columns. Column shafts and capitals were no longer found there; they were, however, discovered in other parts of the *palatium* area and can be plausibly related to the colonnade (fig. 5). The total inventory of the building sculpture includes column shafts made of granite and limestone and marble of different shapes and dimensions, as well as capitals of different materials and different styles: Corinthian, Corinthising, and composite (Schulze-Böhm 2021,

<sup>1</sup> In the Samoussy palace, a semicircular structure (closed building?) about 45 m in diameter was discovered in 1917 during hastily conducted excavations. The structure is undated. Cf. Weise 1923, 60–82.



**Fig. 5** Reconstruction view of the semicircular peristyle courtyard with a selection of building sculpture found *in situ* in the semicircular building or attributed to it. – (Content H. Grewe; digital execution Maßwerke-GbR / U. Haarlammert; photo D. Wolf, 1999–2011, after Grewe 2014).

156–159). The quantitative relationship between the pieces found and the original inventory is unknown. However, the significant variety of materials and ornaments does not indicate homogeneous ensembles of the pieces, but rather a visible wealth of variation. The provenance of these decorative elements can probably be made for individual capitals using stylistic analysis, but material-technical serial examinations only offer a very approximate result potential for the future. For high-quality pieces in a good state of preservation, such as composite and Corinthian capitals, a production in Italy, perhaps Rome or Ostia, in 1<sup>st</sup> to 3<sup>rd</sup> century workshops is probable (Brandenburg 2000, 47–60). Research questions on the transport routes of the spolia, the phenomenon of their mediation via late antique buildings and on the chronology of the events have been formulated for a long time. However, they can currently only be answered for individual cases and for the preservation state of above average finds (Binding 2007, 5–48; Esch 2005, 11–60; Jacobsen 1996, 155–177). What is decisive here is that the portico with its secondary used column bases, shafts and capitals gave the exedra an antique appearance on its inner side, which was open to the other palace buildings. Func-

tionally, the corridor connected the inner courtyard with the pillared hall and gate, and opened on to the rooms. The entrances themselves were archaeologically recorded in three find spots. For one threshold, an ashlar panel with an inscription has been walled up, which is turned upwards and thus visible. Radial walls separated the inner rooms, the width of which, measured on the courtyard side, varied between 3 and 10 m. It is not known whether the rooms, which were 11.5 m deep in the longitudinal direction, had an internal division. There are no indications of this, but the area of interest was not completely surveyed. At least five rooms had access to the conspicuous round towers, which protruded from the outer façade by means of connecting walls. Their purpose has not been clarified for the time being, but it is evident that they significantly influenced the overall appearance of the palace. Associations with cities and military camps, palaces and villas, even country estates come to mind. They all date back to antiquity or late antiquity and in many places demonstrably retained their appearance until the High Middle Ages, as has been shown for Trier, for example. Nothing comparable can be found in the Carolingian buildings.

The reception of antiquity is a dominant feature of the underlying construction plan for the semicircular building in the Ingelheim *palatium*. In its basic form, the building type reflected the appropriation of Roman exedra. At the same time, it adhered to their monumental dimensions, which are characteristic of at least the public buildings, such as those in the Forum Trajani<sup>2</sup>. Spolia, identifiable by inscriptions and ornaments, have a functional use, being built into its foundations and into a doorway. The ashlar spolia were reused because of their material suitability, and their availability was probably ensured by the presence of ruins at a short to medium distance away. A second category of spolia is inherent in the marble and porphyry plates of the *opus sectile* floors. It is possible that medieval artisans reworked the missing pieces of the floor. However, the idea and material were taken from original ancient buildings, as indicated by the use of the same variety of marble types. The material was visibly reused: the Roman luxury marble, already well documented for Cologne and Trier, was intentionally adopted there (Fontaine 2003, 130–161; Peuser 1997, 73–120). An increase in the expense and effect of the use of spolia can be found in the portico, whose semicircular form is in itself a document of elaborate representational architecture. The building incorporated Roman spolia of outstanding quality in an exposed position, which, both in terms of their number and their artificial form, dominated the appearance of the building.

## Long-Distance Water Pipeline

In the foundations of the semicircular building, where the round towers join its outer wall, there is a brick-lined channel, which is a relic of the sophisticated water supply system of the palace complex (fig. 6). Its water-bearing channel is 0.4 m wide and was lined in some sections with a special mortar containing small pieces of bricks, whose consistency and colour is comparable to ancient *opus signatum*. A hydraulic plaster mortar was preferred for water-bearing structures to protect the masonry. All construction features, including the vault with an apex height of 1.1 m above the bottom of the canal, resemble an aqueduct that runs east of Ingelheim on a contour line between approximately 176 and 137 m above sea level between the Orbel / Karlsquelle spring area and the *palatium*. The length of the

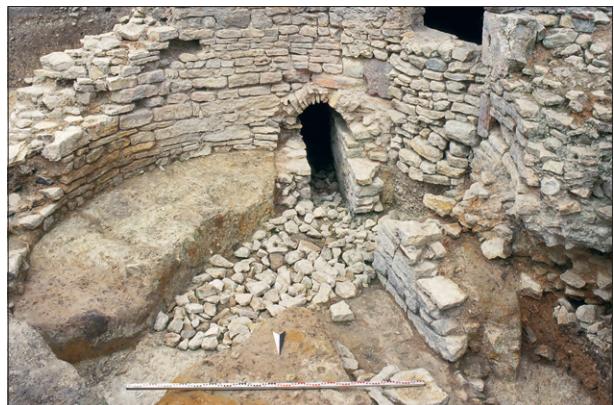


Fig. 6 Foundation zone of the 4<sup>th</sup> tower showing the vaulted channel of the long-distance water pipeline at the time of excavation in 2003. – (Photo H. Grewe, 2003).

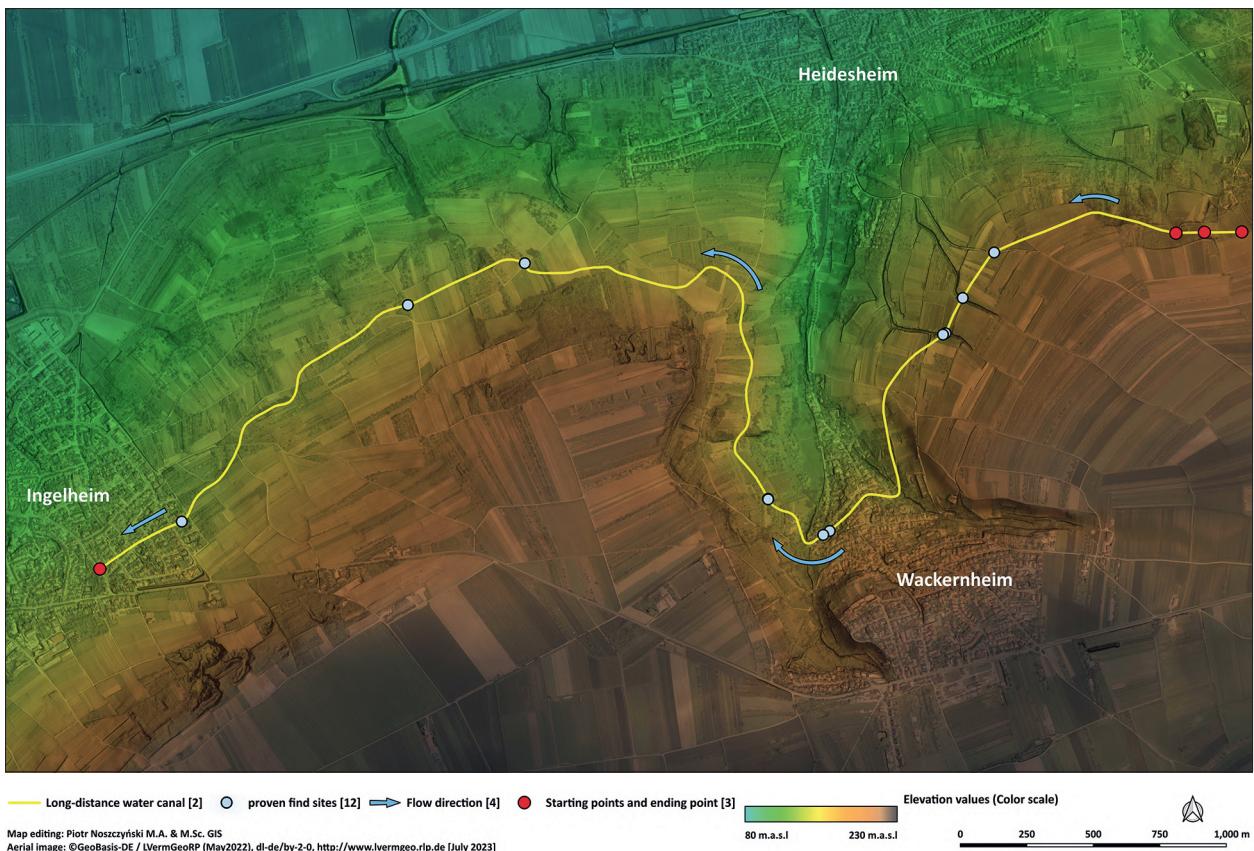
channel is approximately 6.8 km (fig. 7), the gradient of the canal sections varies moderately between 0.54 and 0.8 %, and the peak flow rate of the springs is over 25 l/s.

In the semicircular structure, the foundation and the canal were clearly built simultaneously in the first construction phase. From the 5.5 km conduit and the palace complex, radiocarbon dates were obtained from charcoal particles in the mortar, which range over the last quarter of the 8<sup>th</sup> century (Haupt 2007, 188–189; Gierszewska-Noszczyńska/Noszczyński 2019, 35; Gierszewska-Noszczyńska/Peisker 2020, III).

While the elaborate long-distance supply systems for fresh water, constructed by means of many kilometres of pipes, were an original element of ancient Roman urbanity, the construction of new pipes in the Early Middle Ages is limited to a few examples. With today's knowledge, the only corresponding architectural features, which are from the palaces of Aachen and Ingelheim, can be dated to the Carolingian period by means of stratigraphy or archaeometric data (Grewe 2007, 191–199; Haupt 2007, 183–189). Concerning the necessary knowledge for the building of the similar canals, it is revealing that both places had Roman hydro-engineering constructions in their surroundings. In Aachen, for example, there were the thermal baths of the early Roman imperial city of Aquis Granni that, according to the testimony of contemporary written sources, were put back into operation in Carolingian times<sup>3</sup>. There was also a preserved monumental aqueduct in the surroundings of Ingelheim. This was the water pipeline

<sup>2</sup> S. Schütte suggested the derivation from an exedra in the forum of Cologne, but the findings of the Heumarkt excavation are too incomplete for a secure building reconstruction. Cf. Schütte 2000, 203–212.

<sup>3</sup> On the evidence of the archaeological findings, cf. Pohle 2015, 398–417.



**Fig. 7** Hypothetical course reconstruction of the long-distance water channel. – (Content H. Grawe / P. Haupt / P. Noszczyński, 2023; digital execution P. Noszczyński; aerial photography © GeoBasis-DE / LvermGeoRP Mai 2022, dl-de/by-2.0, [www.lvermgeo.rlp.de](http://www.lvermgeo.rlp.de) [21.07.2025], Juli 2023).

built in stone in Vespasian times in place of an older wooden construction that supplied the legionary camp on the Kästrich: its source was located in the Königsborn in Mainz-Finthen. The approximately 7 km-long route was brought to the southwest corner of the camp over a longer section via aqueduct constructions, where for the time being the secured find spots have been lost. At the site of the Zahlbachtal-Querung, an impressive row of aqueduct pillars up to a height of 7 m have been preserved to this day (Pelgen 2004, 30–42). If one considers that the Königsborn spring area of the ancient conduit and the Carolingian water channel with the spring near Heidesheim were only about 2 km apart, it becomes clear that the ancient conduit was probably no longer functional, but was still visible, which could be explored metrologically and perhaps experimentally in addition to the documented study of Vitruvius' architectural theory (Vitruvius ed. 1991, 389–401; Binding 1996, 38). Therefore, that finding is of central importance for our knowledge of the appropriation of ancient building culture in the Carolingian period (Nussbaum 2008, 161–188).

Long-distance water pipelines carry spring water in significant quantities to its destination. They ensure the supply of large groups of people and enable the use of water for bathing facilities and representative aquatic architecture. Only in rare cases do the remains of the buildings provide the former appearance and character of these facilities. However, the illustration in the Utrecht Psalter gives us an idea of how it was imagined by a book illustrator in this individual case (fig. 8). The use of running water, which was associated with high expenditure, was suitable for designing the developed environment of a place in such a way that it presumably made a deep impression on the viewers and visitors as well as expressing the competence and ambition of its builder.

### *aula regia*

The royal hall (*aula regia*) was situated opposite the semicircular building, on the western edge of the large inner courtyard. Its slightly retracted semicir-



**Fig. 8** The miniature from the Utrecht Psalter, f14v (detail) depicts a water conduit with aqueduct bridge, gargoyle in the shape of a lion and collecting basin. About 820/830. – (Source Utrecht Psalter, psalter.library.uu.nl/page/36 [10.03.2024] p. 36).

cular apse had a raised floor level that could be accessed via a staircase with three steps, which were found and documented during archaeological excavations (fig. 9). The exceptionally well-preserved masonry here revealed four former large windows next to each other<sup>4</sup>. The apse was framed by corner ashlars of sandstone blocks (spolia) and finished on the eastern side with an impost, preserved *in situ*, which was the base of an apse arch of 4.65 m radius. All three features of the southern conch were the most architecturally accentuated part of the *aula regia*, and perhaps of the palace as a whole. The main entrance was opposite. Two doors provided the entrance to a narthex with a portal that was probably three-aisled. The constructions of both building elements were connected and their width and axial orientation correspond to each other. Two further entrances were placed in the long sides exactly in the central axis of the assembly hall. The building measured 16.5 m × 40.5 m, and the reconstructed eaves height was about 13.5 m. The construction thus enclosed the largest interior volume of all the palace complex, which was divided neither vertically by storey levels nor horizontally by internal divisions.

More than 3,000 fragments of wall plaster, some of them polychrome, do not prove the elaborately composed figurative pictorial programme that was described by Ermoldus Nigellus in a Panegyricus written soon after 826. Moreover, the geometric coloured areas can be reconstructed from these fragments and interpreted as an illusionistic imitation of wall incrustations with coloured marble (Ermoldus Nigellus ed. 1884, 4–79).

Among the palace halls of the Carolingian period, the Ingelheim building has no direct comparable example, but shows a distant relation to the *aula regia* of Aachen<sup>5</sup>; the (main) apse arranged on the narrow side and the rectangular hall show similarities. Whether there is longitudinal or transverse access remains open for Aachen, as does the question of single or multiple storeys<sup>6</sup>. In any case, the *aula regia* in Ingelheim was much more influenced by the (late) antique apsidal halls than the other early medieval buildings, insofar as these can be discerned in the architectural-historical findings in the current state of research (Grewe 2021, 101–104). It corresponded especially with the Aula of the Constantinian palace in Trier (early 4<sup>th</sup> cen-

<sup>4</sup> Remains of the reveals of the two eastern windows have been preserved. The clear width of the openings was 1.3 m on the inside. Whether the openings tapered outwards or ran through the masonry at the same width cannot be determined from the building findings without invasive examination. The window arrangement of the eastern half was reconstructed mirror-symmetrically and projected onto the western half.

<sup>5</sup> An overview can be found in Lobbedey 2003, 129–154. Since then, the excavations in the palaces of Paderborn and Frankfurt am Main have been published monographically: Gai/Mecke 2004; Wintergerst 2007.

<sup>6</sup> For older research literature, see Falkenstein 1970. For findings and interpretation of the lateral apses, see Pohle 2015, 297–303.



**Fig. 9** South conch of the royal hall of Ingelheim as it exists today and hypothetical reconstruction. – (Photo K. Benz, 2001; reconstruction H. Grawe und Archimedix-GbR 2002, after Grawe 2014).

tury), especially in the building form and longitudinal development, in which the apse and entrances were opposite to each other on the gable sides, and also with the narthex in front of the main entrance, for which different arrangements and types of constructions were chosen. Even the *praefurnia* of the hypocaust heating in Trier were apparently planned in Ingelheim, implemented in a rudimentary way,

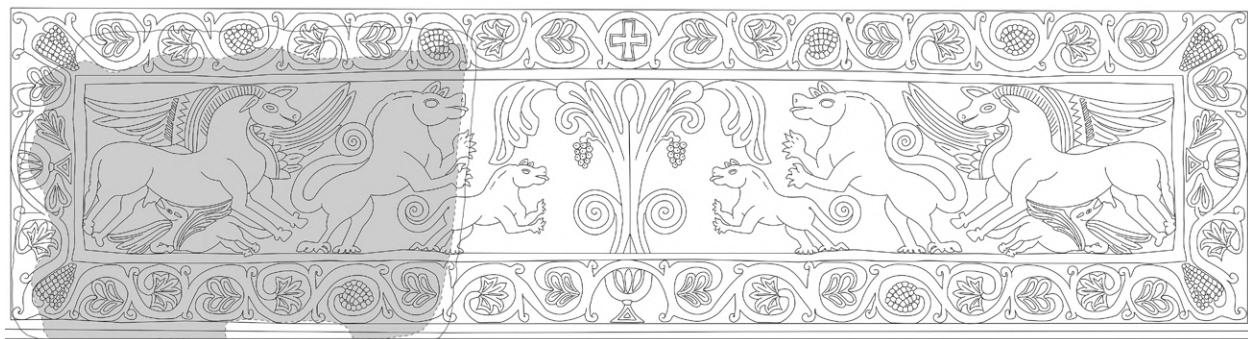
but never developed into functional floor and wall heating systems. This was by no means an imitation of an architectural model, but a selective adoption of characteristic features, which was developed with new elements, such as the symmetrically arranged side portals, into an independent building programme in which tradition and innovation were combined.

## Motifs, Forms, Spolia

The general description of the Ingelheim *palatium* using the example of the semicircular building and the *aula regia* has already made it clear that the building forms are in the tradition of ancient and late antique architecture. They were adopted as motifs, but varied in terms of design and function and were finally adjusted to the symmetrical basic grid of the entire complex. In this respect, the process can be clearly distinguished from architectural copying. Secondly, in addition to the adaptation of the building forms, the example of the long-distance water channel shows that the reception is also documented

in the appropriation of Roman building techniques. The planning of the channel was technically highly demanding, and its construction was particularly complex, even unique. Thirdly, the influences of Roman (building) art can be read in the extensive spolia used as architectural elements. The pieces found at the site that can be reliably attributed to it reveal an appreciation of precious materials, intricate forms and artistic quality. It is quite likely that some capitals were already widely traded in antiquity, perhaps conveyed from central Italy to Trier and other cities with large public buildings.

**Fig. 10** Fragment of a relief plate with mythical creatures and floral decoration (so-called »winged horse relief«), found at Ingelheim 1876. – (Photo D. Wolf, 2009, with the kind permission of GDKE RLP – Generaldirektion Kulturelles Erbe Rheinland-Pfalz, Landesmuseum Mainz).



**Fig. 11** Graphic reconstruction of the relief plate based on comparative finds from Pavia and Oviedo according to Schulze-Böhm 2021, fig. 82. – (Content B. Schulze-Böhm; graphical execution Archäologisches Zeichenbüro Flonheim / P. Rispa, 2014).

Finally, the fragment of limestone slab with a figural and floral relief testifies to the range of stylistic influences and familiarity with Longobard architectural elements/objects (fig. 10). The depiction of winged horses in a picture field framed by wavy tendrils (*locus amoenus*) is close to Longobard sculpture, such as the relief slabs from S. Salvatore (Bau I) in Brescia and S. Maria Teodote in Pavia from the first half or middle of the 8<sup>th</sup> century (Menis 1990, 300–324). It is presumably a work based on motifs that expressed the reception of high quality Lombard art after 774 (fig. 11), and it exemplifies that the reception of antiquities was an element of a complex and comprehensive process of appropriation that also included the architecture and art of the 6<sup>th</sup>–8<sup>th</sup> centuries, in which it was transmitted, modified and further developed. At their new destination of Ingel-

heim, these spolia were finally placed in the vicinity of original Carolingian pieces. This includes, for example, imposts with fan-shaped fluting and profiled impost panels. It is no longer possible to assign the elements to the individual buildings of the palace, because they were found almost without exception in the secondary context. Therefore, the building component-related juxtaposition of the spolia and the Carolingian sculpture regrettably eludes a concrete conception.

Both buildings selected for this presentation, the monumental semicircular building and the residential assembly hall, unanimously reveal the fusion of ancient with contemporary building ideas as a dominant principle in Carolingian architectural design/architecture.

The question of the intention and the intended effect arises, and it cannot be answered based on the architectural findings. However, the overall findings on cultural, political and religious currents at the end of the 8<sup>th</sup> century make it clear that the study of the reception of antiquities, as well as intercultural appropriation processes, to a certain extent reflect a basic attitude of the educated elite at the court and of Charlemagne himself. It seems reasonable to assume that it was the characteristics of the novel building programme and the elaborate realisation of it that aroused Einhard's interest in the Ingelheim *palatium*, whose construction he mentions in

his biography of Charlemagne. It is also conceivable that Einhard was involved in the planning, either because of his artistic competence or more generally because of his leading position at the court (Binding 1996, 40–42). In his enumeration of buildings that Charlemagne erected, Ingelheim is mentioned in chapter 17 of the *Vita Karoli Magni* with the following words: »*Inchoavit et palatia operis egregii, unum haud longe a Mogontiaco civitate, iuxta villam cui vocabulum est Ingilenheim [...]*« / »He also built magnificent palaces, one not far from the city of Mainz at the estate of Ingelheim (Ingilenheim)[...]\« (Einhard ed. 1911, 20).

## Representation and Reception?

In this respect, it can be also attested that the gathering of 826 took place in a region and at a place that could and should impress those present and which was perceived as exceptional by contemporaries. In addition, there was the staging of the events themselves, which was symbolically exaggerated by Harald's baptism in front of the adversaries of the Gudfred family who were also present, along with the godparents from the imperial family, and with the enfeoffment with a Frankish territory. Poems of praise, such as the Paderborn epic from the year 799, which exaggerated significant diplomatic meetings by literary means, occasionally provided insight into the events themselves (Wemhoff 2013, 156–157). This is also the case for the year 826 in Ingelheim, in which the Aquitanian poet Ermoldus Nigellus describes in a fictitious eyewitness account the palace with its

100 columns and 1000 doors and rooms, as well as a sword belt, a crown and a gold-trimmed Frankish costume, which were presented to Harald as precious gifts (source edition in Geißler 2023, 64–69). Reports such as these convey, with all the distance required from a source-critical point of view, how especially the ritualised procedures and the courtly ceremonials up to the solemn ecclesiastical liturgy were built up into splendid celebrations for which the architecture formed the stage (Angenendt 1984, 215–223). Gifts, architecture, and ceremonials – it is not possible to fathom in detail what was perceived and possibly received (Wamers 2005). For cultural exchange, the receptions of northern legations at the Frankish court were a special experience which, in contrast to trade and the exchange of goods, can be assumed to have had a specific purpose.

## Bibliography

### Sources

**Einhard ed. 1911:** Einhardi *Vita Karoli Magni*, ed. G. Waitz / O. Holder-Egger. MGH SS rer. Germ. 25 (Hannoverae, Lipsiae 1911).

**Ermoldus Nigellus ed. 1884:** Ermoldus Nigellus, *Carmen elegiacum in honorem Hludovici christianissimi Caesaris Augusti*, ed. E. Dümmeler. MGH Poetae 2 (Berolini 1884).

**Utrecht Psalter:** psalter.library.uu.nl.

**Vitruvius ed. 1991:** Vitruvii *De architectura libri decem*. Zehn Bücher über Architektur, übers. und mit Anm. vers. von Curt Fensterbusch (Darmstadt 1991).

### References

**Angenendt 1984:** A. Angenendt, Theologie und Liturgie der mittelalterlichen Toten-Memoria. In: K. Schmid (ed.), *Memoria. Der geschichtliche Zeugniswert des liturgischen Gedenkens im Mittelalter. Societas et fraternitas 15* = Münster. Mittelalter-Schr. 48 (München 1984) 79–199.

**Binding 1996:** G. Binding, Der früh- und hochmittelalterliche Bauherr als *sapiens architectus*. Veröff. Abt. Architekturgesch. Kunsthist. Inst. Univ. Köln 61 (Köln 1996).

**2007:** G. Binding, Antike Säulen als Spolien in früh- und hochmittelalterlichen Kirchen und Pfalzen: Materialspolie oder Bedeutungsträger? Sitzungsber. Wiss. Ges. Univ. Frankfurt am Main 45, 1 (Stuttgart 2007).

- Brandenburg 2000:** H. Brandenburg, Zwei Marmor-Kapitelle aus der karolingischen Pfalz Ingelheim im Landesmuseum zu Mainz. Zur Frage der Spolienvwendung im frühen Mittelalter. In: T. Mattern (ed.), *Munus. Festschr. Hans Wiegartz* (Münster 2000) 47–60.
- Brühl 1990:** C. Brühl, Palatium und Civitas. Studien zur Profantopographie spätantiker Civitates vom 3. bis zum 13. Jahrhundert (Köln, Wien 1990).
- Ehlers/Greve 2020:** C. Ehlers / H. Grewe (eds), Mittelalterliche Paläste und die Reisewege der Kaiser. Neue Entdeckungen in den Orten der Macht an Rhein und Main (Oppenheim am Rhein 2020).
- Esch 2005:** A. Esch, Wiederverwendung von Antike im Mittelalter. Die Sicht des Archäologen und die Sicht des Historikers. *Hans-Lietzmann-Vorlesungen* 7 (Berlin, New York 2005).
- Falkenstein 1970:** L. Falkenstein, Zwischenbilanz zur Aachener Pfalzenforschung. Kritische Bemerkungen zu Forschungsberichten über die Aachener Pfalz im Sammelwerk »Karl der Große – Lebenswerk und Nachleben«. *Zeitschr. Aachener Geschver.* 80, 1970, 7–71.
- Felten/Greve 2012:** F. J. Felten mit Beiträgen von H. Grewe, Grundlegung im frühen Mittelalter. Vom 5. bis zum Ende des 9. Jahrhunderts. In: L. Clemens / F. J. Felten / M. Schnettger (eds), Kreuz, Rad, Löwe. Rheinland-Pfalz. Ein Land und seine Geschichte. 1: Von den Anfängen der Erdgeschichte bis zum Ende des Alten Reiches (Darmstadt, Mainz 2012) 235–272.
- Peuser 1997:** J. Peuser, Marmorluxus bei öffentlichen Bauten im römischen Köln: Marmorimport und einheimische Werkstätten. In: *Antiker Marmorluxus von Rom bis zum Rhein. Funde, Fotos, Modelle [exhibition cat. Xanten]*. Führer u. Schr. Regionalmus. Xanten 44 (Köln 1997) 73–120.
- Fontaine 2003:** T. H. M. Fontaine, Ein letzter Abglanz vergangener kaiserlicher Pracht. Zu ausgewählten archäologischen Befunden aus dem Areal der römischen Kaiserresidenz in Trier. In: M. König / E. Bolognesi Recchi-Francescini / E. Riemer (eds), *Palatia. Kaiserpaläste in Konstantinopel, Ravenna und Trier*. Schriftenr. Rhein. Landesmus. Trier 27 [exhibition cat.] (Trier 2003) 130–161.
- Frontinus-Gesellschaft 2007:** Frontinus-Gesellschaft e. V. (ed.), Wasser auf Burgen im Mittelalter. *Gesch. Wasserversorgung* 7 (Mainz 2007).
- Gierszewska-Noszczyńska/Noszczyński 2019:** M. Gierszewska-Noszczyńska / P. Noszczyński, Ingelheim im Früh- und Hochmittelalter: Die Entwicklung der Pfalz Karls des Großen bis in die Stauferzeit. In: H. Berkesel / J. Gerhard / N. Gerhard / M. Gierszewska-Noszczyńska / W. Marzi / G. Mendelssohn (eds), Ingelheim am Rhein. Geschichte der Stadt von den Anfängen bis in die Gegenwart (Oppenheim am Rhein 2019) 56–79.
- Gierszewska-Noszczyńska/Peisker 2020:** M. Gierszewska-Noszczyńska / K. Peisker, Das Palatium in Ingelheim. Aktuelle Ergebnisse zur Vorbereitung und architektonischen Entwicklung der Pfalzanlage. In: Ehlers/Greve 2020, 99–121.
- Gai/Mecke 2004:** S. Gai / B. Mecke, *Est locus insignis ... Die Pfalz Karls des Großen in Paderborn und ihre bauliche Entwicklung bis zum Jahr 1002*. Die Neuauswertung der Ausgrabungen Wilhelm Winkelmanns in den Jahren 1964–1978. *Denkmalpf. u. Forsch. Westfalen* 40, 2 (Mainz 2004).
- Geißler 2023:** H. Geißler, Ludwig der Fromme in Ingelheim. In: C. Ehlers / H. Grewe / K. Ibragimow-Schönfelder (eds), *Schriftquellen zur Pfalz Ingelheim. Lateinische Texte der karolingischen Epoche*. Gesammelt, übersetzt und kommentiert von Hartmut Geißler. Arch. u. Bauforsch. Pfalz Ingelheim am Rhein 3, 1 (Petersberg 2023) 55–94.
- Grewe 2007:** H. Grewe, Die Wasserversorgung der Kaiserpfalz Ingelheim am Rhein im 8./9. Jahrhundert. In: *Frontinus-Gesellschaft* 2007, 191–199.
- 2014:** H. Grewe, Auf den Spuren Karls des Großen in Ingelheim. Entdeckungen – Deutungen – Wandlungen (Petersberg 2014).
- 2021:** H. Grewe, Pfalzen Karls des Großen. In: M. Gierszewska-Noszczyńska / H. Grewe (eds), *Beiträge zur Ingelheimer Pfalz und ihrer Peripherie*. Arch. u. Bauforsch. Pfalz Ingelheim am Rhein 1 (Petersberg 2021) 93–105.
- Hardt 2017:** M. Hardt, Von Corvey nach Birka. Ansgars Mission im europäischen Norden. In: C. Stiegemann / C. Ruhmann (eds), *Credo. Christianisierung Europas im Mittelalter* 3 (Petersberg 2017) 96–108.
- Haupt 2007:** P. Haupt, Die karolingische Wasserleitung bei Ingelheim, Kr. Mainz-Bingen. In: *Frontinus-Gesellschaft* 2007, 183–189.
- Hofmann et al. 2014:** K. P. Hofmann / H. Kamp / M. Wemhoff (eds), *Die Wikinger und das Fränkische Reich. Identitäten zwischen Konfrontation und Annäherung*. Mittelalterstudien des Instituts zur Interdisziplinären Erforschung des Mittelalters und seines Nachwirkens 29 (Paderborn 2014).
- Jacobsen 1996:** W. Jacobsen, Spolien in der karolingischen Architektur. In: J. Poeschke / H. Brandenburg (eds), *Antike Spolien in der Architektur des Mittelalters und der Renaissance* (München 1996) 155–177.
- Lobbedey 2003:** U. Lobbedey, *Carolingian Royal Palaces. The State of Research from an Architectural Historian's Viewpoint*. In: C. Cubitt (ed.), *Court Culture in the Early Middle Ages. The proceedings of the First Alcuin Con-*

- ference. Stud. Early Middle Ages 3 (Thurnhout 2003) 129–154.
- Maixner 2014:** B. Maixner, Die Begegnung mit dem Süden: Fränkische Rangzeichen und ihre Rezeption im wikingerzeitlichen Skandinavien. In: Hofmann et al. 2014, 85–132.
- Menis 1990:** G. C. Menis (ed.), I Longobardi. Catalogo della Mostra tenuta a Passariano e Cividale del Friuli nel 1990 [Exposition cat. Passariano, Cividale del Friuli] (Milano 1990).
- Nussbaum 2008:** N. Nussbaum, Antike Bautechnik im Mittelalter. Wissenstransfer oder Lernen durch Nachahmen? In: D. Boschung / S. Wittekind (eds), Persistenz und Rezeption. Weiterverwendung, Wiederverwendung und Neuinterpretation antiker Werke im Mittelalter. ZAKMIRA 6 (Wiesbaden 2008) 161–188.
- Patzold 2008:** S. Patzold, Episcopus. Wissen über Bischöfe im Frankenreich des späten 8. bis frühen 10. Jahrhunderts. Mittelalter-Forsch. 25 (Ostfildern 2008). DOI: 10.11588/diglit.34736.
- Pelgen 2004:** F. S. Pelgen, Aquädukt-Ansichten. Aus der Denkmalgeschichte der Wasserversorgung für das römische Mainz. Arch. Ortsbetrachtungen 5 (Mainz 2004).
- Pohle 2015:** F. Pohle, Die Erforschung der karolingischen Pfalz Aachen. Zweihundert Jahre archäologische und bauhistorische Untersuchungen. Rhein. Ausgr. 70 (Darmstadt 2015).
- Schmitz 1974:** H. Schmitz, Pfalz und Fiskus Ingelheim (Marburg 1974).
- Schulze-Böhm 2021:** B. Schulze-Böhm, Die Bauskulptur der karolingischen Pfalz Ingelheim. Zur Ausstattung frühmittelalterlicher Herrschaftsarchitektur. In: H. Grewe / K. Peisker (eds), Bauskulptur und Steinbearbeitung im Frühmittelalter. Arch. u. Bauforsch. Pfalz Ingelheim am Rhein 2 (Petersberg 2021) 65–180.
- Schütte 2000:** S. Schütte, Überlegungen zu den architektonischen Vorbildern der Pfalzen Ingelheim und Aachen. In: M. Kramp (ed.), Krönungen – Könige in Aachen – Geschichte und Mythos 1 [exhibition cat.] (Aachen 2000) 203–211.
- Simek 2014:** R. Simek, Die Gründe für den Ausbruch der Wikingerzüge und das fränkische Reich. In: Hofmann et al. 2014, 51–60.
- Wamers 2005:** E. Wamers, Stupor Danorum. In: E. Wamers / M. Brandt (eds), Die Macht des Silbers. Karolingische Schätze im Norden [exhibition cat. Frankfurt a. M., Hildesheim] (Regensburg 2005) 159–161.
- Weise 1923:** G. Weise, Zwei fränkische Königspfalzen, Bericht über die an den Pfalzen zu Quierzy und Samoussy vorgenommenen Grabungen (Tübingen 1923).
- Wemhoff 2013:** M. Wemhoff, Great halls and palaces. In: G. Williams / P. Pentz / M. Wemhoff (eds), Viking (Copenhagen 2013) 156–157.
- Wintergerst 2007:** M. Wintergerst, Die Befunde der karolingisch-ottonischen Pfalz aus den Frankfurter Altstadtgrabungen 1953–1993. Franconofurd 1 = Schr. Arch. Mus. Frankfurt 22, 1 (Frankfurt am Main 2007).

#### Holger Grewe

Forschungsstelle Kaiserpfalz Ingelheim  
Stadtverwaltung Ingelheim am Rhein  
Mainzer Straße 68  
DE - 55218 Ingelheim am Rhein  
holger.grewe@ingelheim.de  
ORCID: 0009-0003-6501-3478