

**‘*Quod grata lavacra nitescunt*’: Roman Villa Baths as Markers of Elite Competition in Continental North-Western Europe**

**SADI MARÉCHAL**

*Department of Archaeology, Ghent University, Belgium*

*This article examines how villa baths in the north-western Roman empire can help us understand how rural regions were incorporated in the Roman cultural sphere despite the absence of cities and secondary agglomerations. Whereas in the first phase of Roman rule the addition of private baths to a villa could be interpreted as a marker of a Roman way of life, the ever larger and more luxurious bathhouses of the second and third centuries AD can only be understood in the context of intra-elite competition, revealing a real concern for displaying wealth and underlining social status, but also for leaving a family legacy. Here, a case-study in the rural north-west examines the role of baths in the self-representation of elites, the consolidation of elite peer interaction networks, the creation of social exclusion, and the inclusion of new ideas into local cultures.*

**Keywords:** Roman private baths, Roman *villae*, elite competition, Gaul, Germania Inferior

**INTRODUCTION**

For the sixth-century AD poet Venantius Fortunatus, ‘*Quod grata lavacra nitescunt*’ (‘because the gracious baths shine’), is the main reason why a certain Leontius was praised as a master builder of *villae*. The passage about a private villa near Bordeaux (*Burdigala*) underlines the continued importance of bathhouses in elite circles, even long after the Roman empire’s heyday. Until recently, private baths were relatively under-researched because the academic focus was on public baths, preferably large and lavishly embellished *thermae* in important cities (de Haan, 2010: 6–8). Private baths, especially the baths in rural *villae*, were considered to be derivatives of the public baths, the extravagant whim of an urban elite that wished to enjoy city comforts and impress friends and guests (Nielsen, 1993: 60). Renewed interest in these private facilities has pointed to the pioneering role in the development of the Roman bathhouse and bathing culture, paving the way for new architectural, technological, and

decorative developments (de Haan, 2010: 37–38). With ever larger and more luxurious public baths in the cities, it was mainly in their country estates that the elite tried to outclass their peers with sophisticated baths. In the provinces, the luxury of private Roman-style baths was not only a sign of wealth but also implied participation in a Roman way of life (DeLaine, 1999: 12–13).

Intra-elite competition as a driving force in the construction of private baths has only been examined in secure urban contexts such as Pompeii (de Haan, 1997, 2010), but far less so for *villae* in rural settings. Finding a region with a representative sample of excavated villa baths that were in use at the same time has been a challenge, but a sizeable archaeological dataset from recent rescue excavations as well as antiquarian investigations exists in the north-western part of the Roman empire, in Gallia Belgica and Germania Inferior. Here, I shall examine how bathhouses were introduced in this region and rapidly became popular markers of wealth and a Roman way of life. I shall focus on how the size and embellishment of baths offered the elite the opportunity to compete with their peers in a region where several contemporaneous villa baths reveal similarities in plan that suggest that their owners were trying to measure up to their close neighbours. The study of such elite peer interaction networks and the way local communities engaged with something as Roman as bathing has important implications for our understanding of the Roman north-west, as it can show how complex societies with few urban centres were drawn into the Roman cultural sphere.

### **GEOGRAPHICAL AND CHRONOLOGICAL FRAMEWORK**

The continental north-western part of the Roman empire has been somewhat overlooked in the seminal works on Roman baths. Only some of the larger public baths in Germania Inferior, such as those at Heerlen, Xanten, or Trier, were included in studies on the (mainly architectural) evolution of Roman baths in the provinces (Brödner, 1983; Heinz, 1983; Yegül, 1992; Nielsen, 1993). The less urbanized region between the river Mosel, the North Sea, and the Seine basin yielded very few (monumental) public baths and has therefore largely remained blank. Only some of the larger *villae* and public baths have been summarily discussed (Grenier, 1960; Ternes, 1992; Coquelet, 2000; Gros, 2001). However, the region, which was administratively divided into three *civitates*, contains numerous *villae* that have been identified and excavated over the last two centuries, with important new discoveries made since the start of rescue archaeology in the 1990s. Unfortunately, the publication of the early excavations was often confined to the bulletins of local history clubs or never published.

Only the villa baths in Germania Inferior have been the subject of more focused studies (Koethe, 1940; Deru, 1994; Dodt, 2005, 2006, 2007).

In Roman times, our research area comprised part of the Roman provinces of Gallia Belgica (created in the last quarter of the first century BC) and Germania Inferior (detached from Belgica in the first century AD), more specifically the *civitates* of the Menapii, the Nervii, and the Tungri (Figure 1). In modern terms, this roughly translates as the territories of Belgium, the Département du Nord and the northern part of the Département des Ardennes in France, the cantons of Clervaux, Wiltz, Diekirch, and Vianden in the Grand Duchy of Luxembourg, the Eifelkreis Bitburg-Prüm district in Germany's Rhineland-Palatinate and the County of Zeeland and the Province of Limburg in the Netherlands. Two important historical events delimit the Roman period for this area. It starts not so much with Julius Caesar's conquest of Gaul (beginning in 57 BC) but with the administrative reforms of northern Gaul by Augustus in the last decades of the first century BC (Brulet, 2008: 37). The end is traditionally dated to the withdrawal of the troops along the Rhine and along the Bavay-Cologne road in the early fifth century (Brulet, 2008: 262). Yet, these events are more a modern scholarly convention than strict cultural breaks. The archaeological data for villa construction only start to appear after the middle of the first century AD, after a road network had been established in the period between the Claudian and Flavian rule. The end of the Roman period is even less clear-cut, as early fifth-century events were the result of processes that were already in train during the later third and fourth century. In the second half of the third century, several Germanic raids into north-western Gaul seem to have had a severe impact on rural estates and small agglomerations (Brulet, 2008: 231). Hence the timespan of Roman *villae* considered here mainly runs from the middle of the first century AD to the end of the third or early fourth century AD.

#### **THE INTRODUCTION OF ROMAN BATHS IN NORTH-WESTERN CONTINENTAL EUROPE**

In the northern provinces, bathhouses were first introduced after the Roman conquest, whereas in the Mediterranean sphere public and private baths first emerged during the period of Greek expansion and then spread in the Hellenistic era (DeLaine, 1989; Fagan, 2001; Yegül, 2013). The role of the army is unknown, as the contemporary sources such as Caesar's *De Bello Gallico* are silent on this matter and the earliest archaeological evidence of military baths in the northern provinces dates from the Flavian period (Nielsen, 1993: 76). Temporary camps such as those mentioned by Caesar (*De Bello Gallico* 2, 18) would not have had bathhouses (Hanel, 2000: 23) but they may have been present in more permanent strongholds

(Caesar, *De Bello Gallico* 4.38). Unfortunately, no such camps of the initial Roman conquest have been excavated in our study region (Brulet, 2008: 41–42). However, the occasional involvement of the army in the construction of civic bathhouses has been established in other parts of the Roman empire, such as in North Africa (Thébert, 2003: 294). As the earliest agglomerations and towns were often linked to a military presence (Brulet, 2008: 36, fig. 39), it is quite likely that some of the first (public) bathhouses were inspired by military baths (Nielsen, 1993: 74). The first phase of the baths in the villa of Champion-Emptinne, was constructed in the middle of the first century AD (Van Ossel & De Poorter, 1992: 201). Its plan features a remarkable circular *caldarium*. The shape is reminiscent of the round sweat rooms (*laconica*) often present in the early Roman baths in Italy (Nielsen, 1993: 158). The shape persisted in the plan of military baths. Several examples have been found in Britannia and Germania Inferior, where they are dated to between the mid-first and early second century AD (Fair, 1927: 220).

No such early military baths have been found in the three *civitates* in our study area, although the undated baths outside the military camp of Oudenburg did have such a circular room (Creus, 1975: 8-9). Just outside the research area, a round *laconicum* was present in the first phase (Neronian or Flavian) of the baths at Heerlen (*Coriovallum*), which probably had a military character (Jeneson et al., 2020: 172–173). Perhaps the plan of the early baths at Champion was inspired by these early military baths. The small baths in the *vicus* of Tienen, dated to the second half of the first century AD (Vanderhoeven et al., 1998), as well as the first bathhouse of the initial villa at Haccourt, dated to the same period (De Boe, 1974), have a simple linear plan consisting of the three basic rooms, the *frigidarium*, the *tepidarium*, and the *caldarium*, a layout also frequently encountered in fortresses (Nielsen, 1993: 76). In the research area, the only military baths date to the fourth century AD, namely the *castellum* baths of Furfooz (Brulet, 1978), Liberchies (Mertens & Brulet, 1974) and Oudenburg (Vanhoutte, 2018), featuring a basic linear succession of the main rooms (Figure 2). The Flavian or Neronian baths in Heerlen mentioned above also had an axial linear plan (Jeneson et al., 2020: 172). Native auxiliaries who returned to their homelands after service and veteran colonists who were awarded lands in the conquered territories might also have been inspired by fortress baths when they built their own private baths (Nielsen, 1993: 74; Black, 1994).

The army may have played a role in the introduction of bathhouses, but the spread throughout the north-western provinces was driven by the local elite, who invested heavily in public baths while acting as members of local councils, as well as in private baths on their country estates (de Haan, 2010: 51–54). The first modest bathhouses, both public and private,

appear in our research area from the mid-first century AD onwards, e.g. at Champion phase 1 (Van Ossel & De Poorter, 1992), Évelette ‘Clavia’ (Lefert, 2014), Haccourt Baths 1 (De Boe, 1974), Heestert (Janssens, 1984) or Tienen (Vanderhoeven et al., 1998). Besides native army veterans and colonists, the native elites also enjoyed baths infrastructure. The latter were key mediators between the Roman administration and the local population, ensuring that the riches of the provinces reached the Roman treasury (Woolf, 1998: 33). Tacitus gives us an insight into this process in Britain: the sons of chieftains were offered a Roman education ‘and little by little the Britons went astray into alluring vices: to the promenade, the bath, the well-appointed dinner table. The simple natives gave the name of “culture” to this factor of their slavery’ (Tacitus, *Agricola* 21, translated by Hutton & Peterson, 1914: 67). In order to climb the social ladder, local people had to adopt this concept of *humanitas* (translated in the quotation above as culture), that is, a civilized, Roman way of life (Woolf, 1998: 54–55).

Bathing played an important part in this lifestyle. From the 143 excavated bathhouses in our research area, 116 can be identified as private baths belonging to a villa (c. eighty-one per cent; Maréchal, 2020). The popularity of private baths is illustrated by the number of excavated baths against the total number of excavated villa sites, taken from the archaeological inventories of the heritage agencies of Flanders and the Netherlands, and the data assembled by the ‘Mapping the *civitas Tungrorum*’ project of the Gallo-Roman Museum of Tongeren. Out of twenty-one villa sites in the *civitas Menapiorum*, five had a bathhouse (twenty-four per cent); in the *civitas Nerviorum*, forty-five villa sites yielded eighteen bathhouses (forty per cent); for the *civitas Tungrorum*, the 260 villa sites on its fertile loam soils gave an equally high number of ninety-three baths (thirty-six per cent). These percentages are of the same order (thirty-three per cent) as the *villae* with private baths calculated by Dodt (2006: 29) for the province of Germania Inferior in the same period (first to late third century AD) (excluding the *civitas Tungrorum* and *villae* known only through aerial photography or surface survey). Considering that several *villae* were only partly excavated, the actual percentage of such sites equipped with baths may be even higher. Furthermore, several bathhouses were also entirely freestanding (Maréchal, 2020: 160-67), indicating that the absence of baths in the main villa does not automatically imply their absence on the villa estate.

### THE LUXURY OF A BATH

Just like the urban *domus*, the countryside villa was not an exclusively private residence in which only the *paterfamilias* and his extended family retreated. The master of the house

received family, friends, guests, and clients. Unsurprisingly, the house itself had to reflect the wealth and status of its owner and was designed as a statement of power. *Luxuria* was not a mere extravagance, it was a ‘social necessity in a highly competitive society’ (Wallace-Hadrill, 1988: 45). A large and lavishly decorated private baths complex was luxury *par excellence*. Several ancient authors make clear that the private baths of Roman *villae* were not exactly private, at least not in the modern sense of the word. ‘I will give the order to heat the baths’ wrote Cicero to his friend Atticus when hearing of his visit (Cicero, *Letters to Atticus* 2.3). Like public baths, private baths were to be used in company, such as family, friends, or colleagues. Preparing the baths when receiving visitors was a sign of hospitality. Pliny the Younger even rejoices in the fact that his villa lay close to a small village with three public baths to which he could take his guests when his private baths could not be heated in time (Pliny, *Epistulae* 2.17.26). It was expected of a good host to have the baths ready and private baths became real showpieces, showcasing the wealth of their owner. In his letters, Seneca deplores the abundant luxury of baths compared to the basic bath used only for washing by Scipio Africanus (Seneca, *Epistulae* 86.6): ‘But who in these days could bear to bathe in such a fashion? We think ourselves poor and mean if our walls are not resplendent with large and costly mirrors; if our marbles from Alexandria are not set off by mosaics of Numidian stone, if their borders are not faced over on all sides with difficult patterns, arranged in many colours like paintings; if our vaulted ceilings are not buried in glass; if our swimming-pools are not lined with Thasian marble’ (translation by Gummere, 1920: 313). Similar references to the elite investing a fortune in the embellishment of private baths are found in Martial’s *Epigrams* (9.75; 10.79). Still in the fourth century, Ausonius (*Mosella*, 335–348) dedicates an entire poem to the luxurious baths of a villa along the river Mosel.

The passage by Ausonius reminds us that most authors wrote about the Italian heartland, and that we are far less well informed about the north-western provinces. Fortunately, archaeological remains of villa baths are omnipresent in this part of the empire, even more so than public baths (Maréchal, 2020). Several of these villa baths clearly surpassed their basic hygienic function and seem to have been constructed to impress. Unlike the modest baths of the first half of the first century AD, some villa baths of the second and third century were large facilities with several heated rooms. The luxurious baths of the *villae* at Basse-Wavre (Dens & Poils, 1905), Champion (phase 3; Van Ossel & De Poorter, 1992), Gesves (phase 2; Lefert, 2008), and Haccourt Baths 3 (De Boe, 1976) are larger than some of the (early) public baths in small centres such as Grobbendonk (De Boe, 1977), Macquenoise (Brulet, 1985), or Tienen (Vanderhoeven et al., 1998) (Table 1).

Unsurprisingly, a look at the *villae* to which the baths belong, reveals that these were the larger and more luxurious residences: for example Haccourt comprises some 4900 m<sup>2</sup>, Basse-Wavre c. 1400 m<sup>2</sup>, and Champion and Gesves each cover a minimum of 800 m<sup>2</sup> (Figure 3). Conversely, the small and very simple baths at Évelette ‘Clavia’ seem to have belonged to an estate where the main building was built in perishable materials, following vernacular traditions (Lefert, 2014: 238–40). Together with the cellar, it was the only element on the estate to have been constructed in stone. But even the owner of this very modest and still very non-Roman farm invested in this Roman luxury, possibly at an early stage (perhaps in the late first century AD). Similarly, the rather modest villa of Bierbeek, covering an area of some 530 m<sup>2</sup>, had very basic baths (c. 36 m<sup>2</sup>) consisting of a single heated room (De Clerck, 1987). Similar examples of simple baths in the north-western frontier region can also be linked to *villae* rooted in a vernacular building tradition and with a local material culture, possibly indicating that the local elite invested in this Roman luxury but without building all the traditional rooms (cold, tepid, and warm rooms) and hence not fully adopting the underlying bathing culture (Maréchal, 2020). The preference for a hot bath in the cold North should not come as a surprise, as Tacitus already noted in *Germania* (22.1): ‘*lavantur, saepius calida, ut apud quos plurimum hiems occupat*’ (‘they wash, usually in warm water, since winter bulks so large in their lives’; translated by Hutton & Peterson, 1914: 165). This, however, does not mean that smaller baths automatically belonged to an elite with a native background and the larger baths to Roman colonists. Seneca (*Epistulae* 86.7), even reminds us that it was especially freedmen who invested heavily in their baths ‘merely in order to spend money’ and presumably to present themselves as sophisticated and Roman.

The increasing importance of private baths can be deduced from the fact that several villa baths survived for several generations and were (significantly) enlarged over time, as at Champion, Gesves, Kuntich (Cramers, 1984), Meslin- l’Évêque (Deramaix & Sartieaux, 1994) or Haccourt Baths 3 (Figure 4). Apparently, the original bathhouse was deemed too small, too old-fashioned, or too modest and the master of the house was prepared to invest considerable funds in larger, more luxurious, and better equipped baths. In the case of Champion (phase 3) and Haccourt Baths 3 (phase 2), a heated swimming pool (*piscina calida*) was even added. Such an infrastructure was rare, even in public baths (Manderscheid, 1996: 110). In other *villae*, the original bathhouse was complemented by new, often freestanding, larger baths complexes, e.g. in Aiseau (Kaisin, 1878), Miécrot (Materne, 1969), and possibly Mont-lez-Houffalize ‘Fin de Ville’ (Meunier, 1964) (Figure 5). It seems that in all these cases, the baths were being used at the same time, possibly suggesting a differential use, with the

integrated baths reserved for the inhabitants and perhaps larger *familia*, and the freestanding baths used when receiving guests (de Haan, 2010: 129–30). In Merbes-le-Château, the first small baths, integrated in the villa, fell out of use when larger freestanding baths, later connected to the villa by a corridor, were constructed (Authom & Paridaens, 2011). Similarly, the first baths in Kuntich were replaced by larger and more luxurious baths. Equipping the villa with larger baths may have signalled increased wealth and power, but may also have been a way of leaving a mark on the villa for posterity, as ‘potent symbols of family continuity’ (Bodel, 1997: 11).

The taste for a splendid interior described by many ancient authors is confirmed by the archaeological remains, even if the buildings’ poor state of preservation and a high degree of spoliation impede a thorough comparative study. As baths were one of the social hubs within *villae* (Ellis, 2000: 160–63), it is no coincidence that decoration such as wall paintings, mosaic, or *opus sectile* floors, all relatively rare in our research area (Brulet, 2008: 150–52), are mainly found here. Wall paintings in *villae* seem to have been reserved for large reception rooms, dining halls, and the baths. Examples were found in several such baths, even if few patterns could be reconstructed. Floral patterns were found in Belgium in the baths at Boirs (Peuskens & Tromme, 1979), Hamois (Van Ossel, 1981), Montignies-St-Christophe (Van Bastelaer, 1891a), Neerharen-Rekem (De Boe, 1982), and Thirimont (Van Bastelaer, 1891b), and in Germany at Oberüttfeld (Rhineland-Palatinate; Faust, 1999), while figurative depictions are known from the baths of Melsbroek (Galesloot, 1859) and probably Hoogeloon (Hiddink, 2014). In Grumelange, paintings imitating marble were found in the *frigidarium* (Malget & Malget, 1912).

Mosaics appear even more exceptionally in our research area. They were present in large *villae* (over 500 m<sup>2</sup>) with large baths, at Anthée (Del Marmol, 1877), Basse-Wavre, Gerpinnes (De Glymes et al., 1875), Haccourt, Liège (Otte, 1990), Limerlé (De Maeyer, 1940: 202–03), Modave (Anonymous, 1896), and Nouvelles (Leblois & Leblois, 1968). In the *villae* of Ways and Angre, mosaics were found but no bathhouse has yet been identified (Brulet, 2008: 152). Mosaics with geometric patterns were found in Baths 1 and 3 at Haccourt, Saint-Jean-Geest (Remy, 1977), and Baths 2 at Kuntich. *Opus sectile* floors, often a pattern of black and white lozenges, were found in the baths of Anthée, Boirs, and Boussu-lez-Walcourt (Bayet, 1891). Even in this northern part of the Roman empire, some baths were embellished with imported marbles, such as the Numidian *giallo antico* (yellow spotted or veined marble) in Nouvelles. As for the large baths of Bruyelle, several fragments of imported stone were found, including Numidian *giallo antico*, Greek red and green marbles (*porfido*



*rosso* and *porfido verde di Grecia*), and unspecified white marbles from the Mediterranean (Ansieau & Bausier, 2018: 260). Nevertheless, most decorative stones seem to have been quarried locally, labelled ‘Belgian marble’ in antiquarian excavation reports. As for flagstones and plinths, they are present in numerous villa baths, and not only in the more luxurious examples (e.g. at Aiseau, Anthée Baths 1, Basse-Wavre, Bois-et-Borsu (De Maeyer, 1940: 133), Champion, Gerpinnes, Meerssen (Habets, 1871), Melsbroek, Neerharen-Rekem, Nouvelles, or Villers-le-Bouillet (Geubel, 1938)). Unfortunately, few provenance studies have been carried out to establish the location of the quarries. At least for some *villae* in this part of Gaul, Seneca’s comment about the luxury of private baths seems accurate.

### COMPETITION AT WORK

The literary evidence and the archaeological remains show that the elites tried hard to impress their peers with large, well-equipped, and lavishly decorated baths on their villa estates. To see this ‘competition’ at work, a microregion with a number of contemporaneous Roman *villae* equipped with baths within a close range of each other was chosen. Establishing their date of construction, rebuilding, and abandonment proved to be a challenge, and the reliability of the early excavation data was sometimes questionable, with unclear plans and little attention paid to different phases within a building. Nonetheless, our sample area includes ten villa sites with baths within a radius of ten kilometres west of the *vicus* at Clavier-Vervoz in the Roman *civitas Tungrorum* in the present-day Belgian province of Namur (Figure 6). The *villae* are located on stony loam soils with favourable natural drainage, often on gentle south-facing slopes dominating a stream. All sites were apparently occupied during the second century AD ().

If we include villa sites in this region without any remains of a bathhouse, only one site can be added, at Haltinne. Since it has not been fully excavated (Brulet, 2008: 535), it is possible that (freestanding?) baths have simply not been found. The fact that almost all *villae* had baths clearly indicates their importance for their owners, as part of the standard (and expected) facilities. A comparison, when possible, of the size of the baths and that of the villa (ground floor in its final phase) shows that the baths could make up between five and fifteen per cent of the surface (). Except for the baths at Bois-et-Borsu, of which only one pool and one heated room were excavated (De Maeyer, 1940: 133), most sites have at least a basic plan usable for comparison. The plans of the baths of Évelette ‘Résimont’ (Willems, 1966) and Miécrot Baths 1 (Materne, 1969) are very similar, consisting of a *frigidarium* with *piscina* and an adjacent *caldarium* with two *alvei* (hot pools) at right angles to each other (Figure 7).

Furthermore, both baths are integrated within the villa and are roughly the same size. The plans of the baths of Flostoy (Lefert, 2015), Hamois (Van Ossel, 1981), Haillot (Lefert, 2002), and Modave are also similar (Figure 8), consisting of a simple linear succession of *frigidarium*, *tepidarium*, and *caldarium*. At Modave and Flostoy, the *caldarium* and *tepidarium* were only separated by a thin wall at ground level, the hypocaust being one continuous space. In all baths, the *caldarium* has one *alveus* on the axis of the building and one perpendicular to it. The *piscina* is also perpendicular to this axis and parallel to the perpendicular *alveus*. Only at Modave does the *piscina* lie on the main axis. All four baths are roughly of the same size and were later additions to the villa. The baths of Gesves (Lefert, 2008), originally freestanding, are comparable in extent and plan to those of Flostoy, Haillot, Hamois, and Modave, the difference being that its *caldarium* only had one *alveus* on the axis of the building. The first phase of the baths in Champion, possibly also freestanding, occupies a similar surface area but has a different plan (Van Ossel & De Poorter, 1992). When the baths at Gesves and Champion were enlarged, and attached to the villa, their extents increased to about 250 m<sup>2</sup>.

Not only do baths with similar plans occupy comparable surface areas, but the size and shape of their pools are also similar (). Assuming that each bather would require around 1 m<sup>2</sup> in a pool, the *piscinae* of Miécret Baths 1 and Évelette ‘Résimont’ could accommodate two bathers simultaneously, while those of Flostoy, Haillot, Hamois, and Modave could have held between three and six. As for the *piscinae* of Champion and Gesves, five people could have used them at the same time. The *alvei*, which are often poorly preserved due to the collapse of the hypocaust, could each accommodate one or two persons, indicating that in most *caldaria* three or four people could bathe at the same time. Because the water of the *alvei* had to be heated in boilers first, unlike the *piscinae* which could be fed directly by an aqueduct, the size of the *alvei* was rather modest, even in larger baths with large *piscinae* (Manderscheid, 2000: 494).

We must nevertheless be careful when interpreting similar plans as evidence of one building influencing another, or the construction of several buildings being owed to the same architect or contractor. The simple linear plan is the easiest way of connecting the basic rooms of a Roman bathhouse and allows for a single furnace to heat both the *caldarium* and the *tepidarium*. The location of an *alveus* above the furnace also ensures the maximal use of direct heat. The similarity in plans may well be the logical result of adding a basic bathhouse to one side of an existing villa. It is, however, not inconceivable that villa owners in the same region used the same professional ‘baths builders’, especially in a region with few central

places. Literary sources pertaining to Italy indicate that rich proprietors contacted *fabri aedium* ('builders'), who showed them different plans on parchment to choose from (Aulus Gellius, *Noctes Atticae* 19.10.1–3). The passage by Venantius Fortunatus quoted at the start of this article also underlines the role of the architect in the construction of baths.

Further similarities in building techniques may point to the same builders but can hardly be considered hard evidence. In the similar baths of Modave and Flostoy, the only hypocaust of the baths was probably separated at room-level into two rooms (*caldarium* and *tepidarium*) by a thin wall, as suggested at Flostoy by a line of pillars constructed of stone instead of tiles (Lefert, 2015: 271). The *piscinae* of both bathhouses were also clad with similar tiles. In Miécrot Baths 1 and Évelette 'Résimont', some hypocaust pillars were made of limestone monoliths (Willems, 1966: 16; Materne, 1969: 81). Even if the use of such monoliths as hypocaust pillars is not extraordinary in itself (Adam, 1984: 290; Schiebold, 2010: 14–16), these are the only two known examples in our research area. In the *villae* of Leignon (Hauzeur, 1851) and Maillen 'Sauvenière' (Mahieu, 1892), located some fifteen kilometres apart and with baths of similar plan, tiles with the same manufacturer's stamp (HAMSIT) indicate that the builders of these two baths were supplied by the same manufacturer. The occurrence of the same stamp on different villa sites is not uncommon in our research area. Several tile production centres, all with their own stamp, seem to have supplied the *villae* and local centres with ceramic building materials (Brulet, 2008: 208). The decoration of the baths was unfortunately too damaged to make any links between sites.

## CONCLUSIONS

Contrary to the picture emerging from most general studies on Roman baths, the north-western continental part of the empire was not a region in which Roman baths and bathing habits were rarely practiced. With so few cities and secondary centres present, it was mainly the rural elite that invested in bathhouses. These were certainly not restricted to the largest and most luxurious *villae*: from modest buildings to the grand estates that could rival with those in Italy, *villae* were equipped with this typically Roman luxury. For early villa sites with a local material culture and with strong roots in vernacular architecture, constructing Roman baths could even be a cultural statement, demonstrating the adoption of, or at least familiarity with, a Roman way of life.

By the second century AD, when Roman rule was well established and Roman culture had spread widely, some villa owners were prepared to invest important sums to expand, embellish, or rebuild their private baths. Such conspicuous spending can be understood within

the framework of intra-elite competition, revealing a real concern for displaying wealth and emphasizing social status, but also leaving a mark on the family legacy. It is not easy to identify such competition among local elite networks in the archaeological record but the sizeable dataset of excavated *villae* in our research area has made it possible to define a small sample area with relatively numerous villa sites, almost all equipped with baths. As all sites were occupied roughly at the same time, overlapping in the second century, a comparative analysis shows that baths of equally large *villae* were not only similar in size, but also in plan.

Competition should perhaps not necessarily be understood in the sense of one villa owner trying to outshine his neighbour with larger and better baths, but more in the sense of ‘keeping up with the Joneses’. The fact that ten out of eleven *villae* within a ten-kilometre radius west of Clavier had a baths complex, compared to the twenty-four to forty percent baths-villa ratio in our research area, could indicate that the villa owners in the region all tried to match a certain level of wealth. In this rural area devoid of cities or other central places, it is not unthinkable that they may even have used the same builders, resulting in similar plans and building techniques. Even in this poorly urbanized part of the empire, bathhouses seem to have accompanied a Roman way of life, reminding us that bathing was not the exclusively urban phenomenon modern scholars sometimes present it to be. Baths played an important role as social hubs in a region with few large settlements, cementing local peer interaction networks and contributing to the adoption of new social practices and ideas into local cultures, but possibly also creating social exclusion among the less wealthy. Furthermore, the many *villae* equipped with such a typical Roman luxury could imply that the north-western part of Gallia Belgica and Germania Inferior was not primarily drawn into the Roman cultural sphere through cities, but through a network of villa-based elites who governed these rural regions.

#### ACKNOWLEDGEMENTS

This work was supported by the Research Foundation Flanders (FWO) under Grant 12I9619N. The author would like to thank Wim De Clercq (Ghent University) for commenting on earlier drafts of this article.

#### REFERENCES

- Adam, J.-P. 1984. *La construction romaine: matériaux et techniques*. Paris: Picard.
- Anonymous 1896. Villa belgo-romaine de Survillers. *Bulletin de l'Institut archéologique liégeois*, 25: 179–89.

- Ansieau, C. & Bausier, K. 2018. Les bâtiments de la villa. In: K. Bausier, N. Bloch & F. Pigière, eds. *Antoing, Bruyelle. Villa romaine et occupations antérieures* (Études et Documents Archéologie 23). Namur: Agence wallonne du Patrimoine, pp. 91–129.
- Authom, N. & Paridaens, N. 2011. Merbes-le-Chateau/Labuissière: la villa gallo-romaine du «Champ de Saint-Eloi». Troisième campagne de fouilles (2009). *Chronique de l'Archéologie wallonne*, 18: 57–61.
- Bayet, L. 1891. Villa belgo-romaine de Boussu-lez-Walcourt. *Documents et Rapports de la Société Paléontologique et Archéologique de Charleroi*, 18: 53–69.
- Black, E.W. 1994. Villa-Owners: Romano-British Gentlemen and Officers. *Britannia*, 25: 99–110. <https://doi.org/10.2307/526990>
- Bodel, J. 1997. Monumental Villas and Villa Monuments. *Journal of Roman Archaeology*, 10: 5–35. <https://doi.org/10.1017/S1047759400014719>
- Brödner, E. 1983. *Die römischen Thermen und das antike Badewesen : eine kulturhistorische Betrachtung*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Brulet, R. 1978. *La fortification de Hauterence à Furfooz* (Publications d'Histoire de l'Art et d'Archeologie de l'Université Catholique de Louvain 13). Louvain-la-Neuve: Institut Supérieur d'Archéologie et d'Histoire de l'Art.
- Brulet, R. 1985. Établissement gallo-romain à Macquenoise: thermes et centre sidérurgique. *Documents et Rapports de la Société Paléontologique et Archéologique de Charleroi*, 49: 27–55.
- Brulet, R. 2008. *Les Romains en Wallonie*. Bruxelles: Éditions Racine.
- Coquelet, C. 2000. Les thermes publics urbains des villes de Gaule Belgique. In: C. Fernández Ochoa & V. García-Entero, eds. *Termas romanas en el occidente del Imperio. II Colloquio Internacional de Arqueología, Gijón 1999* (Serie Patrimonio 5). Gijón: VTP, pp. 263–70.
- Cramers, D. 1984. Het badgebouw van de villa te Kumtich (Tienen). In: S. Thomas, ed. *Liber Amicorum Paul Dewalhens. Bijdragen tot de geschiedenis van Tienen*. Tienen: Stedelijk Museum 'Het Toreke', pp. 111–38.
- Creus, I. 1975. *De Gallo-Romeinse nederzetting onder het Laat-Romeins grafveld van Oudenburg* (Archaeologia Belgica 179). Brussels: Nationale Dienst voor Opgravingen.
- De Boe, G. 1974. *Haccourt I. Vestiges d'habitat et premières périodes de la villa romaine* (Archaeologia Belgica 168). Bruxelles: Service national des fouilles.
- De Boe, G. 1976. *Haccourt III. Les bains de la grande villa* (Archaeologia Belgica 182). Bruxelles Service national des fouilles.

- De Boe, G. 1977. *De Romeinse vicus op de Steenberg te Grobbendonk* (Archaeologia Belgica 197). Bruxelles: Service national des fouilles.
- De Boe, G. 1982. Meer dan 1.500 jaar bewoning rond de Romeinse villa te Neerharen-Rekem. *Archaeologia Belgica*, 247: 71–74.
- De Clerck, M. 1987. *Bierbeek 30 cm. dieper. Archeologische inventaris van 15 jaar prospectie en opgravingen*. Bierbeek: Gemeentebestuur Bierbeek.
- De Glymes, L., L. Henseval, L. & Kaisin, J. 1875. Rapport sur la fouille de la villa belgo-romaine de Gerpinnes. *Documents et Rapports de la Société Paléontologique et Archéologique de Charleroi*, 7: 93–140.
- de Haan, N. 1997. Nam nihil melius esse quam sine turba lavari. Privatbäder in den Vesuvstädten. *Mededelingen van het Nederlands Instituut te Rome. Antiquity*, 56: 205–26.
- de Haan, N. 2010. *Römische Privatbäder: Entwicklung, Verbreitung, Struktur und sozialer Status*. Frankfurt & Berlin: Lang.
- De Maeyer, R. 1940. *De overblijfselen der Romeinsche villa's in België*. Antwerp: De Sikkel.
- Del Marmol, E. 1877. Villa d'Anthée. *Annales de la Société Archéologique de Namur*, 14: 165–94.
- DeLaine, J. 1989. Some Observations on the Transition from Greek to Roman Baths in Hellenistic Italy. *Mediterranean Archaeology*, 2: 111–25.
- DeLaine, J. 1999. Bathing and Society. In: J. DeLaine & D.E. Johnston, eds. *Roman Baths and Bathing: Proceedings of the First International Conference on Roman Baths Held at Bath, England, 30 March–4 April 1992* (Journal of Roman Archaeology Supplement Series, 37). Portsmouth: Journal of Roman Archaeology, pp. 7–16.
- Dens, C. & Poils, J. 1905. L'Hosté. Villa belgo-romaine, à Basse-Wavre. *Annales de la Société d'Archéologie de Bruxelles*, 19: 303–43.
- Deramaix, I. & Sartieaux, P.-P. 1994. Ath/Meslin-l'Evêque: sauvetage d'une villa romaine inédite dans un zoning industriel. *Chronique de l'Archéologie wallonne*, 2: 43–44.
- Deru, X. 1994. Les bains publics et domestiques dans la cité des Tongres. *Documents d'Archéologie Régionale*, 4: 5–63.
- Dodt, M. 2005. Römische Badeanlagen in der Provinz Germania inferior: Ein Beitrag zum Leben in einer römischen Grenzprovinz. In: V. Zsolt, ed. *Limes XIX: Proceedings of the XIXth International Congress of Roman Frontier Studies Held in Pécs, Hungary*. Pécs: University of Pécs, pp. 857–70.

- Dodt, M. 2006. Bäder römischer Villen in Niedergermanien im Lichte neuer Ausgrabungen im rheinische Braunkohlerevier. *Bonner Jahrbücher*, 206: 63–85.  
<https://doi.org/10.11588/bjb.2006.0.51808>
- Dodt, M. 2007. Römische Badeanlagen in Niedergermanien. Eine Verbreitungskarte zum aktuellen Forschungsstand. *Archäologie im Rheinland*, 2006: 96–99.
- Ellis, S.P. 2000. *Roman Housing*. London: Duckworth.
- Fagan, G.G. 2001. The Genesis of the Roman Public Bath. Recent Approaches and Future Directions. *American Journal of Archaeology*, 105: 403–26.  
<https://doi.org/10.2307/507363>
- Fair, M.C. 1927. Circular Bath-Buildings in Connexion with Cohort Forts. *Journal of Roman Studies*, 17: 220–24. <https://doi.org/10.2307/296134>
- Faust, S. 1999. Ein römisches Gebäude bei Oberüttfeld (Kreis Bitburg-Prüm). *Trierer Zeitschrift*, 62: 155–67. <https://doi.org/10.11588/1999..55332>
- Galesloot, L. 1859. La province de Brabant sous l'Empire romain. *Revue d'Histoire et d'Archéologie*, 1: 252–84.
- Geubel, A. 1938: Notes sur la fouille d'une villa romaine à Villers-le-Bouillet. In: J. Balon, ed. *Fédération archéologique et historique de Belgique, XXXI<sup>me</sup> session. Congrès de Namur 1938*. Namur: Godenne, pp. 226–35.
- Grenier, A. 1960. *Manuel d'archéologie gallo-romaine. Quatrième partie: les monuments des eaux, aqueducts, thermes* Paris: Picard.
- Gros, P. 2001. *L'architecture romaine 2. Maisons, palais, villas et tombeaux*. Paris: Picard.
- Gummere, R.M. 1920. *Seneca. Epistles, Volume II: Epistles 66–92* (Loeb Classical Library 76). Cambridge (MA): Harvard University Press.
- Habets, J. 1871. Exploration d'une villa belgo-romaine au Herkenbergh à Meerssen. *Publications de la société historique et archéologique dans le duché du Limbourg*, 8: 379–428.
- Hanel, N. 2000. Militärische Thermen in Niedergermanien – eine Bestandsaufnahme. In: C. Fernández Ochoa & V. García-Entero, eds. *Termas romanas en el occidente del imperio* (Serie Patrimonio 5). Gijón: VTP Editorial, pp. 23–33.
- Hauzeur, N. 1851. Établissement romain de Barcenne. *Annales de la Société Archéologique de Namur*, 2: 375–82.
- Heinz, W. 1983. *Römische Thermen : Badewesen und Badeluxus im Römischen Reich*. Munich: Hirner.

- Hiddink, H. 2014. *De Romeinse villa-nederzetting op de Kerkakkers bij Hoogeloon (Noord-Brabant)* (Zuidnederlandse archeologische rapporten 53). Amsterdam: VUhs.
- Hutton, M. & Peterson, M. 1914. *Tacitus. Agricola. Germania. Dialogue on Oratory* (Loeb Classical Library 35). Cambridge (MA): Harvard University Press.
- Janssens, D. 1984. *Een Romeinse villa te Heestert* (Archeologische en Historische Monografieën van Zuid-West-Vlaanderen 8). Kortrijk: Archeologische Stichting voor Zuid-West-Vlaanderen.
- Jeneson, K., Vos, W.K. & White, G. 2020. Reconstructing the History of the Public Baths of Coriovallum. In: K. Jeneson & W.K. Vos, eds. *Roman Bathing in Coriovallum. The Thermae of Heerlen Revisited* (Nederlandse Archeologische Rapporten 65). Amersfoort: Cultural Heritage Agency of the Netherlands, pp.161–87.
- Kaisin, J. 1878. Villa belgo-romaine d'Aiseau. Rapport de la fouille. *Documents et Rapports de la Société Paléontologique et Archéologique de Charleroi*, 9: 145–243.
- Koethe, H. 1940. Die Bäder römischer Villen im Trierer Bezirk. *Deutsches archäologisches Institut, Berichte der Römisch-Germanischen Kommission*, 30: 43–131.  
<https://doi.org/10.11588/berrgk.1941.0.43588>
- Leblois, C. & Leblois, Y. 1968. Fouilles à la villa gallo-romaine de Nouvelles. *Études régionales*, 6: 57–80.
- Lefert, S. 2002. Ohey/Haillot: le corps de logis et les bains de la villa de Matagne. *Chronique de l'Archéologie wallonne*, 10: 243–45.
- Lefert, S. 2008. Gesves/Gesves: la villa gallo-romaine du Corria. *Chronique de l'Archéologie wallonne*, 15: 206–09.
- Lefert, S. 2014. La villa gallo-romaine du Clavia (Ohey/Évelette). *Chronique de l'Archéologie wallonne*, 22: 238–40.
- Lefert, S. 2015. Havelange/Flostoy: la villa gallo-romaine de “Lizée”. *Chronique de l'Archéologie wallonne*, 23: 271–73.
- Mahieu, A. 1892. Villas belgo-romaines de Maillen. *Annales de la Société Archéologique de Namur*, 19: 345–91.
- Malget, E. & Malget, R. 1912. Villa de “Lavend”. *Annales de l'Institut Archéologique du Luxembourg*, 47: 416–18.
- Manderscheid, H. 1996. Standard und Luxus in römischen Bädern. Überlegungen aus der Sicht der Hydrotechnik. In: N. de Haan & G.C.M. Jansen, eds. *Cura Aquarum in Campania. Proceedings of the Ninth International Congress on the History of Water*



- Management and Hydraulic Engineering in the Mediterranean Region* (Babesch Supplement 4). Leiden: Brill, pp. 109–15.
- Manderscheid, H. 2000. The Water Management of Greek and Roman Baths. In: Ö. Wikander, ed. *Handbook of Ancient Water Technology*. Leiden: Brill, pp. 467–538.
- Maréchal, S. 2020. Not your Classic Bath: Adopting and Adapting Roman Bathing Habits in NW Gaul. *Journal of Roman Archaeology*, 33 : 147–68.  
<https://doi.org/10.1017/S1047759420000963>
- Materne, D. 1969. Notes au sujet de la villa belgo-romaine de Miécret (Province de Namur). *Bulletin du Cercle Archéologique Hesbaye-Condroz*, 9: 79–82.
- Mertens, J. & Brulet, R. 1974. Le castellum du Bas-Empire romain de Brunehaut-Liberchies. *Archaeologia Belgica*, 163: 1–70.
- Meunier, M. 1964. La villa belgo-romaine de “Fin-de-Ville” (commune de Mont-lez-Houffalize). *Archaeologia Belgica*, 78: 154–72.
- Nielsen, I. 1993. *Thermae et Balnea. The Architecture and Cultural History of Roman Public Baths. I. Text* (2nd edition). Aarhus: Aarhus University.
- Otte, M., ed. 1990. *Les fouilles de la place Saint-Lambert à Liège 3. La villa gallo-romaine* (ERAUL 44). Liège: Université de Liège, Service de préhistoire.
- Peuskens, N. & Tromme, F. 1979. Deux balnea belgo-romains: Boirs "village" et Heure-le-Romain "Sur les moulins". *Bulletin de la société royale belge d'études géologiques et archéologiques*, 24: 381-414.
- Remy, H. 1977. Les villas romaines de Jodoigne et Saint-Jean-Geest. *Archaeologia Belgica*, 195: 5–19.
- Schiebold, H. 2010. *Heizung und Wassererwärmung in römischen Thermen : Historische Entwicklung, Nachfolgesysteme, Neuzeitliche Betrachtungen und Untersuchungen* (Schriften der Deutschen Wasserhistorischen Gesellschaft Sonderbd 3). Siegburg: Deutsche Wasserhistorische Gesellschaft.
- Ternes, C. 1992. Typologie des installations thermales en Gaule belgique et en Germanie. In: R. Chevalier, ed. *Les eaux thermales et les cultes des eaux en Gaule et dans les provinces voisines: actes du Colloque, 28–30 septembre 1990, Aix-les-Bains* (Caesarodunum 26). Tours: Centre de Recherches A. Piganiol, pp. 101–10.
- Thébert, Y. 2003. *Thermes romains d'Afrique du Nord et leur contexte méditerranéen: études d'histoire et d'archéologie* (Bibliothèque des écoles françaises d'Athènes et de Rome 315). Rome: École française de Rome. <https://doi.org/10.4000/books.efr.2147>

- Van Bastelaer, D.-A. 1891a. La villa belgo-romaine de Montignies-Saint-Christophe (Champ du Roi ou Terre d'au village). *Documents et Rapports de la Société Paléontologique et Archéologique de Charleroi*, 17: 396–406.
- Van Bastelaer, D.-A. 1891b. La villa belgo-romaine de Saint-Rémy. *Documents et Rapports de la Société Paléontologique et Archéologique de Charleroi*, 17: 372–95.
- Van Ossel, P. 1981. La villa romaine “sur le Hody” à Hamois. *Activités du SOS Fouilles*, 2: 117–35.
- Van Ossel, P. & De Poorter, A. 1992. Un ensemble balnéaire de l'époque romaine à Champion-Emptinne (Hamois). *Annales de la Société Archéologique de Namur*, 67: 195–242.
- Vanderhoeven, A., Vynckier, G. & Wouters, W. 1998. Het Oudheidkundig bodemonderzoek aan de Zijdelingsestraat te Tienen (prov. Vlaams-Brabant). Interim-verslag 1995–1996. *Archeologie in Vlaanderen*, 6: 133–60.
- Vanhoutte, S. 2018. The Roman Fort at Oudenburg (Belgium): A 4th-Century Bathhouse *intra muros*. In: H. Pöschke, A. Binsfeld & S. Hoss, eds. *Thermae in Context: The Roman Bath in Town and in Life. Actes du Colloque de Dalheim, Luxembourg, du 21 au 24 février 2013* (Archaeologia Mosellana 10). Luxembourg: Centre National de Recherche Archéologique, pp. 159–74.
- Wallace-Hadrill, A. 1988. The Social Structure of the Roman House. *Papers of the British School at Rome*, 56: 43–97.
- Willems, J. 1966. Notes au sujet de la villa belgo-romaine d'Évelette. *Bulletin du Cercle Archéologique Hesbaye-Condroz*, 6: 15–28.
- Woolf, G. 1998. *Becoming Roman. The Origins of Provincial Civilization in Gaul*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511518614>
- Yegül, F. 1992. *Baths and bathing in classical antiquity*. New York/Cambridge (MA): Architectural History Foundation /MIT Press.
- Yegül, F. 2013. Thermal Matters: Intersected Legacies of Greek and Roman Baths and Bathing Culture. In: S.K. Lucore & M. Trümper, eds. *Greek Baths and Bathing Culture. New Discoveries and Approaches* (Babesch Supplement 23). Leuven: Peeters, pp. 73–88.

#### BIOGRAPHICAL NOTE

Sadi Maréchal is a postdoctoral researcher in Roman archaeology at the Research Foundation Flanders (FWO) at Ghent University. His main interests include Roman architecture, urban topography, and public space, with a particular focus on Roman baths and bathing habits.

Address: Department of Archaeology, Faculty of Arts and Philosophy, Ghent University,  
Sint-Pietersnieuwstraat 35, 9000 Ghent, Belgium. [email: [sadi.marechal@ugent.be](mailto:sadi.marechal@ugent.be)]. ORCID:  
<https://orcid.org/0000-0002-0211-4795>

### **« *Quod grata lavacra nitescunt* » : les thermes des villas romaines comme indicateurs d'émulation en Europe du nord-ouest**

*Cet article traite de l'apport des thermes des villas romaines d'Europe du nord-ouest à notre conception des zones rurales de l'empire romain et à leur incorporation dans son monde culturel, malgré une absence de villes ou d'agglomérations secondaires. Tandis que pendant la première phase de la domination romaine la construction de thermes privés pourrait signifier l'adhésion à un mode de vie romain, les thermes de plus en plus grands et plus luxueux du Haut Empire appartiennent à un contexte dans lequel les élites rivalisaient entre elles, dans le but non seulement d'afficher leur richesse et de faire valoir leur statut social mais aussi de créer un héritage de famille. Un cas d'étude dans le nord-ouest du continent européen illustre le rôle que les thermes ont joué dans l'image que les élites cherchaient à projeter, dans la consolidation de leurs réseaux d'interaction, dans la formation de l'exclusion sociale mais aussi dans l'inclusion de nouvelles notions dans la culture indigène. Translation by Madeleine Hummler*

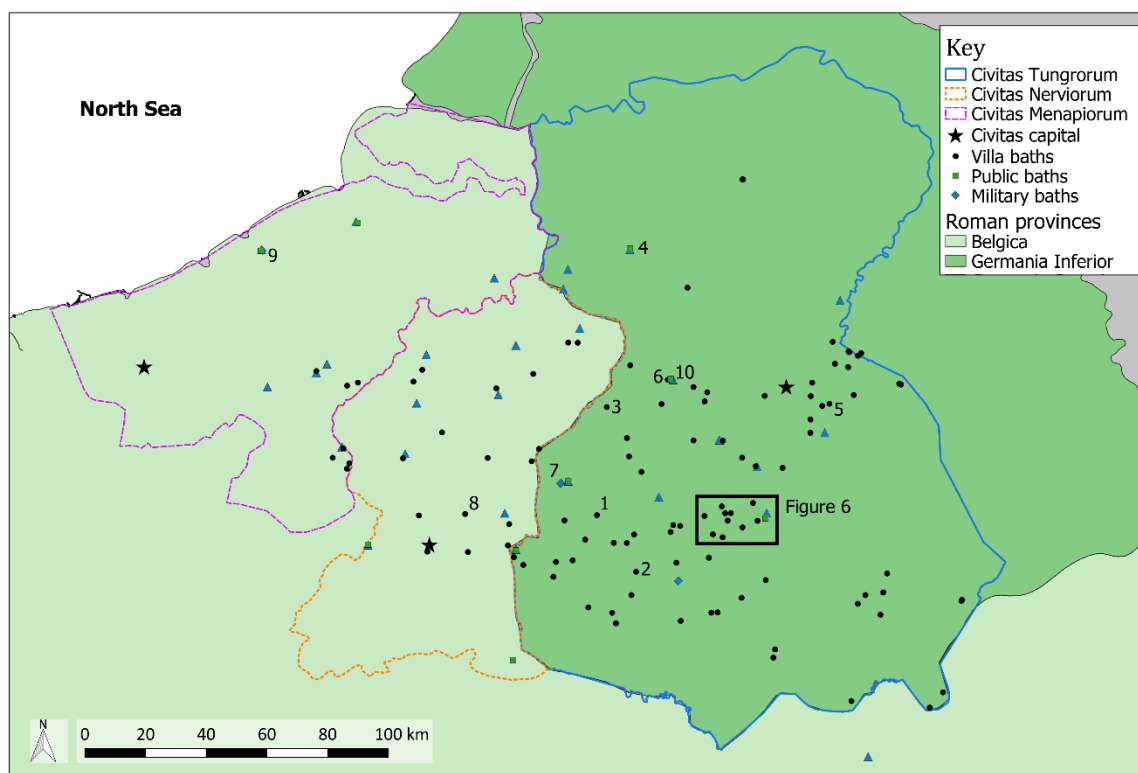
*Mots-clés* : thermes privés romains, villas romaines, émulation entre élites, Gaule, Germanie inférieure

### **„*Quod grata lavacra nitescunt*“: Bäder in den römischen Villen des nordwestlichen europäischen Festlands als Zeichen einer Konkurrenz zwischen Eliten**

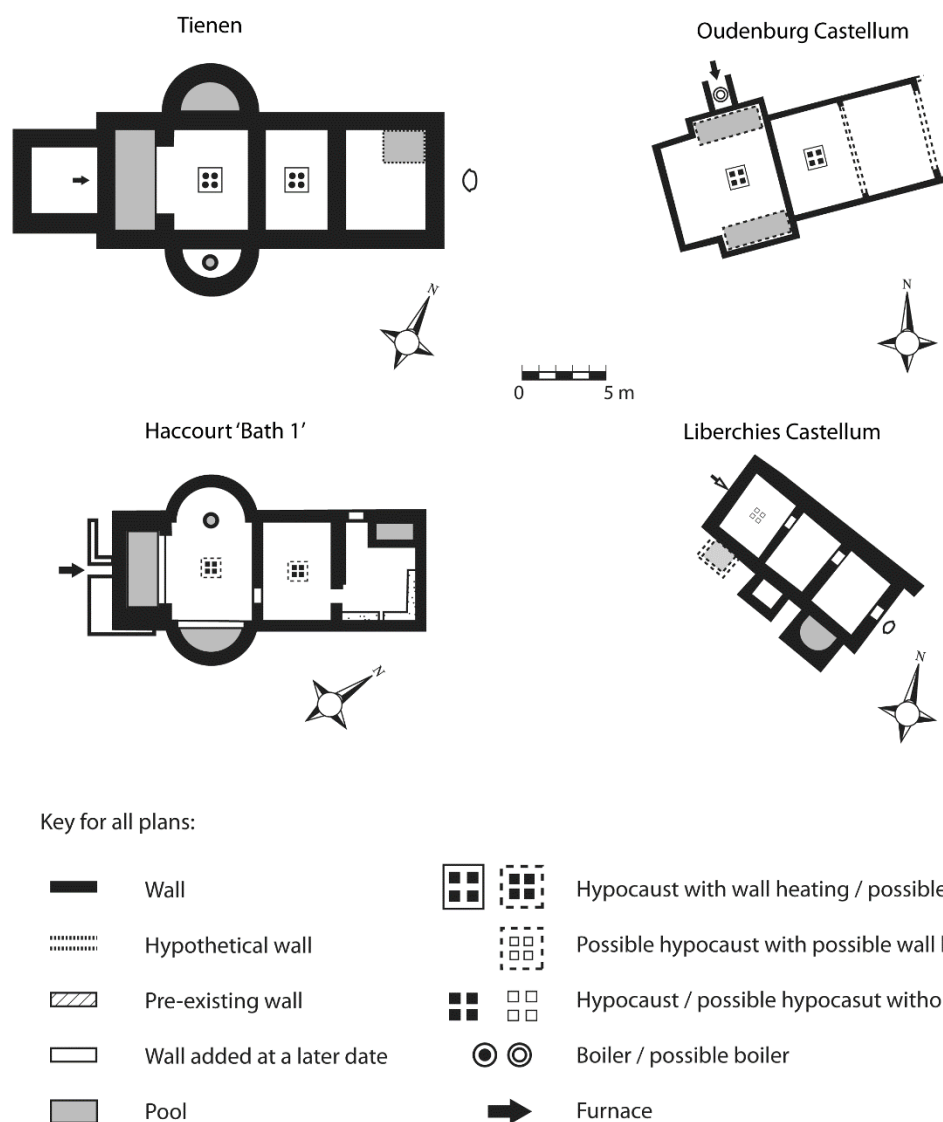
*In diesem Artikel untersucht der Autor, was die Bäder in den römischen Villen in Nordwesteuropa zur Kenntnis der ländlichen Gebiete des Römischen Reiches beitragen können und wie sie, trotz der Abwesenheit von Städten und weiteren städtischen Siedlungen, in den römischen Kulturkreis integriert wurden. Während in der ersten Phase der römischen Herrschaft der Anbau von Privatbädern in den Villen auf die Annahme von römischen Lebensweisen deuten kann, können die immer größeren und luxuriöseren Bäder der früheren Kaiserzeit nur im Kontext einer Konkurrenz zwischen einheimischen Eliten verstanden werden. Sie demonstrieren ein echtes Anliegen, den Reichtum und die soziale Stellung dieser Eliten zu betonen, aber auch einen Wunsch, ein Familienerbe zu erschaffen. Hier, am Beispiel einer*

*ländlichen Gegend im nordwestlichen Teil des Römischen Reiches, wird die Rolle der Villenbäder im Repräsentationsbedürfnis der Eliten und in der Verstärkung ihrer Netzwerke untersucht und das Einsetzen von gesellschaftlichen Ausgrenzungen und die Aufnahme von neuen Ideen in die einheimische Kultur betrachtet.* Translation by Madeleine Hummler  
*Stichworte:* römische Privatbäder, römische Vilen, Konkurrenz zwischen Eliten, Gallien, Germania Inferior

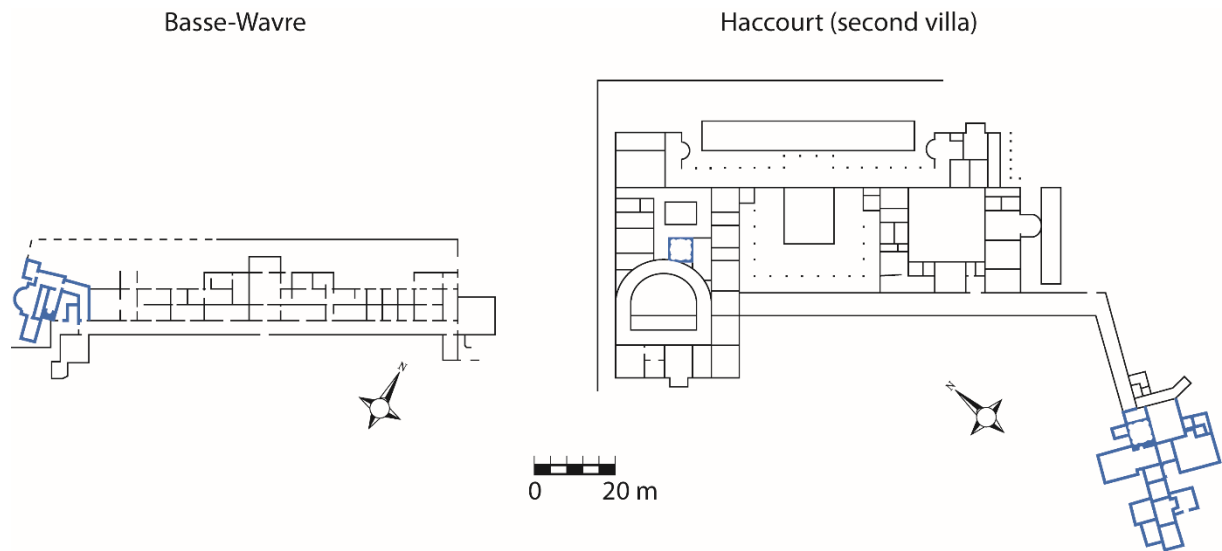
## Figures



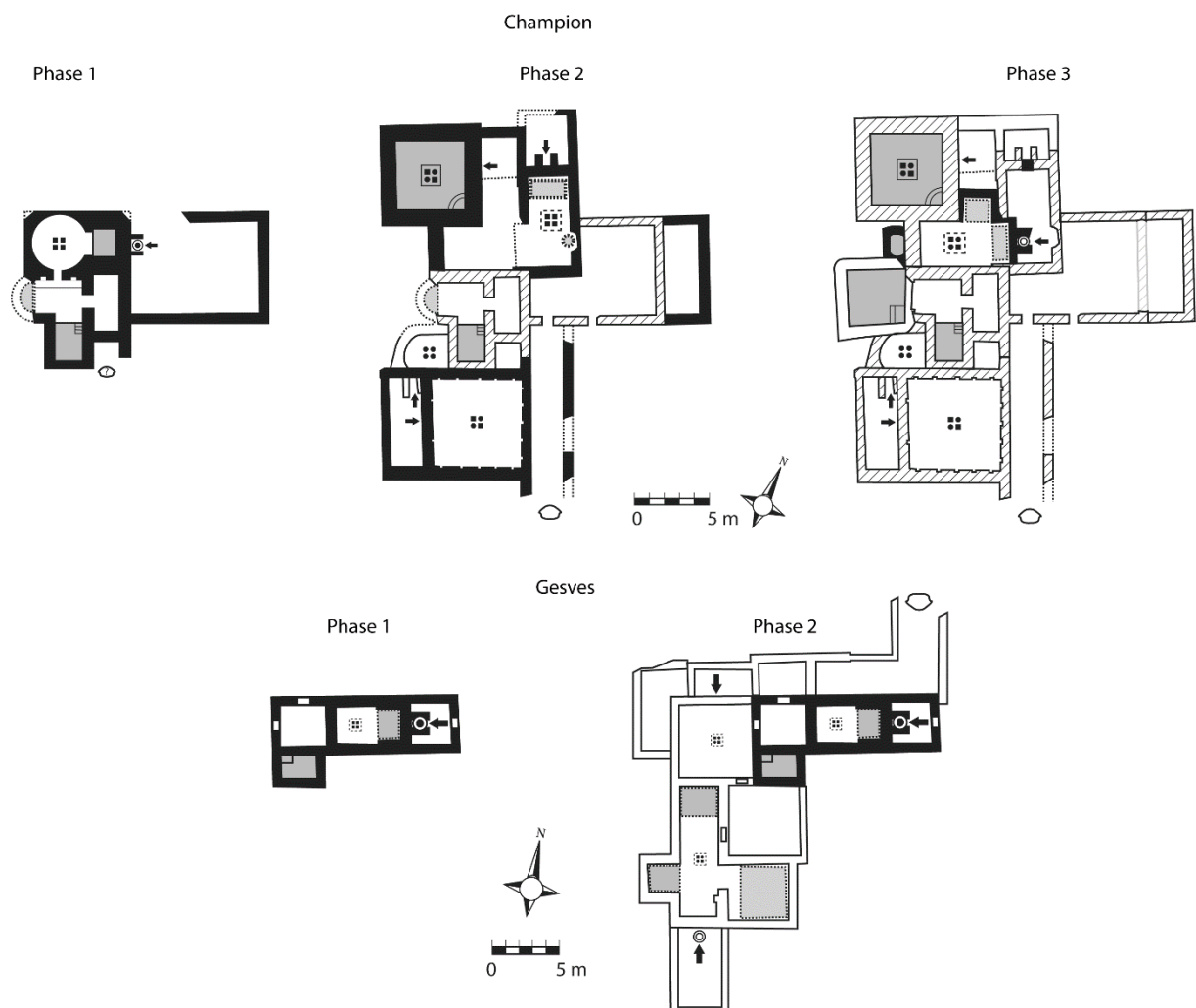
**Figure 1.** Map of the study area with indication of the Roman provinces (AD 117), the three civitates, and the different types of baths. The location of the main sites mentioned in the text are labelled, while the location of those in the microregion west of Clavier are given in Figure 6. 1: Aiseau; 2: Anthée; 3: Basse-Wavre; 4: Grobbendonk; 5: Haccourt; 6: Kuntich; 7: Liberchies; 8: Nouvelles; 9: Oudenburg; 10: Tienen. A detailed map with the location of all sites can be accessed at the project website: <https://bathsinbelgium.ugent.be/>.



**Figure 2.** Plans of the vicus baths of Tienen, the first villa baths of Haccourt, and the military baths of Oudenburg and Liberchies, with key to all subsequent plans (redrawn after Vanderhoeven et al., 1998: 143, fig. 16; De Boe, 1974: 18, fig. 2; Vanhoutte, 2018: 165, fig. 5; Mertens & Brulet, 1974: pl. V).

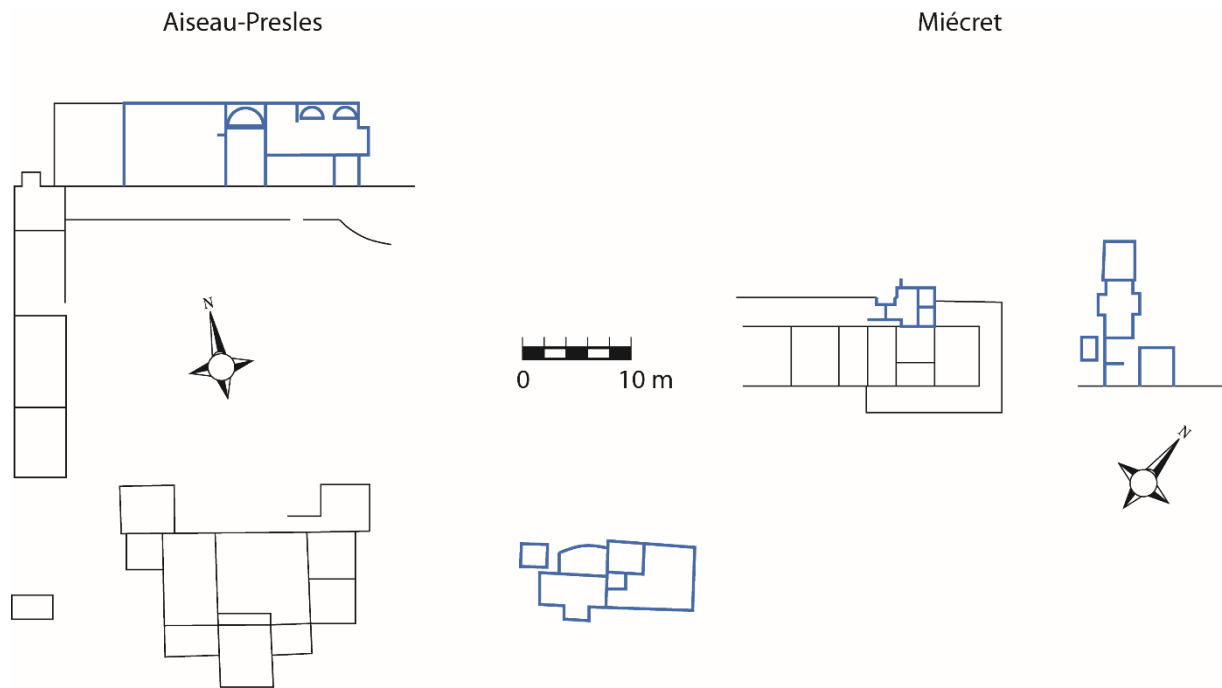


**Figure 3.** Plans of the villae of Basse-Wavre and Haccourt (second villa) with indication of the baths (redrawn after Dens & Poils, 1905: pl. XIII; De Boe, 1974: 28, fig. 10).

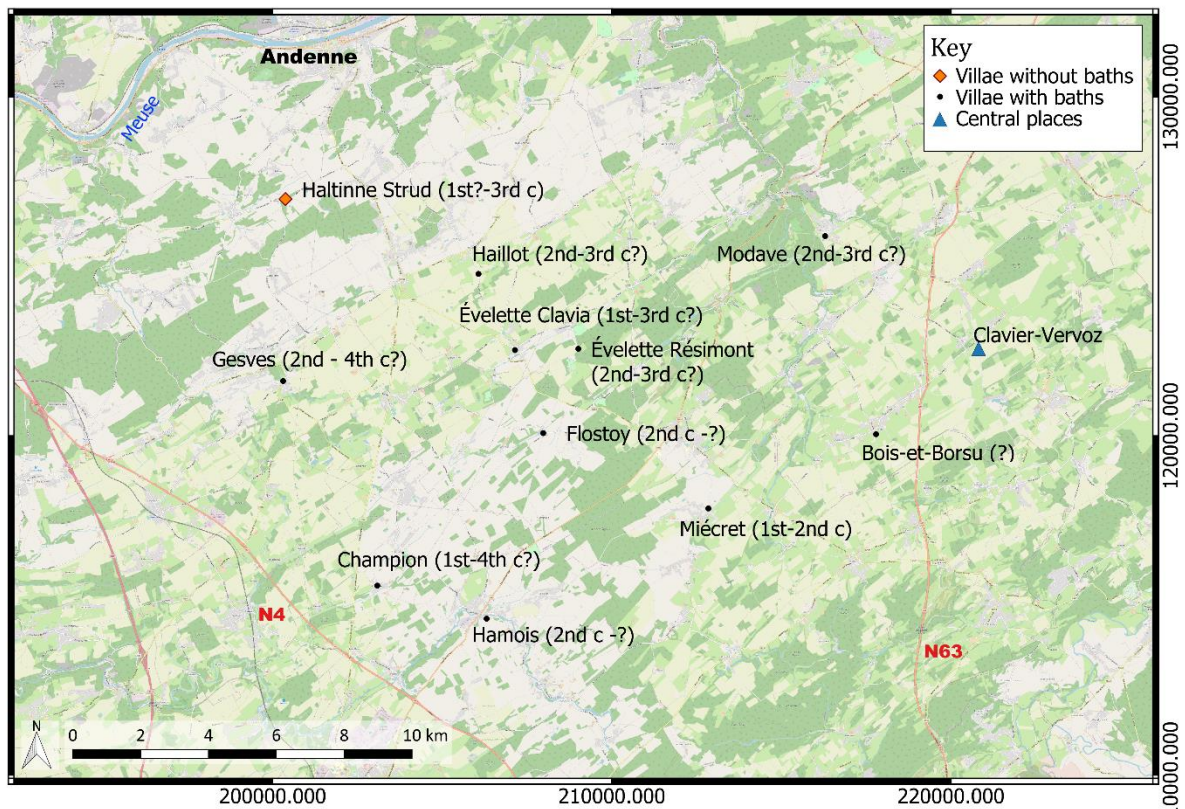


**Figure 4.** Plans of the baths of the villae of Champion and Gesves showing the gradual increase in size (redrawn after Van Ossel & De Poorter, 1992: 202, 208, 213, fig. 4, 9, 14; Lefert, 2008: 201).

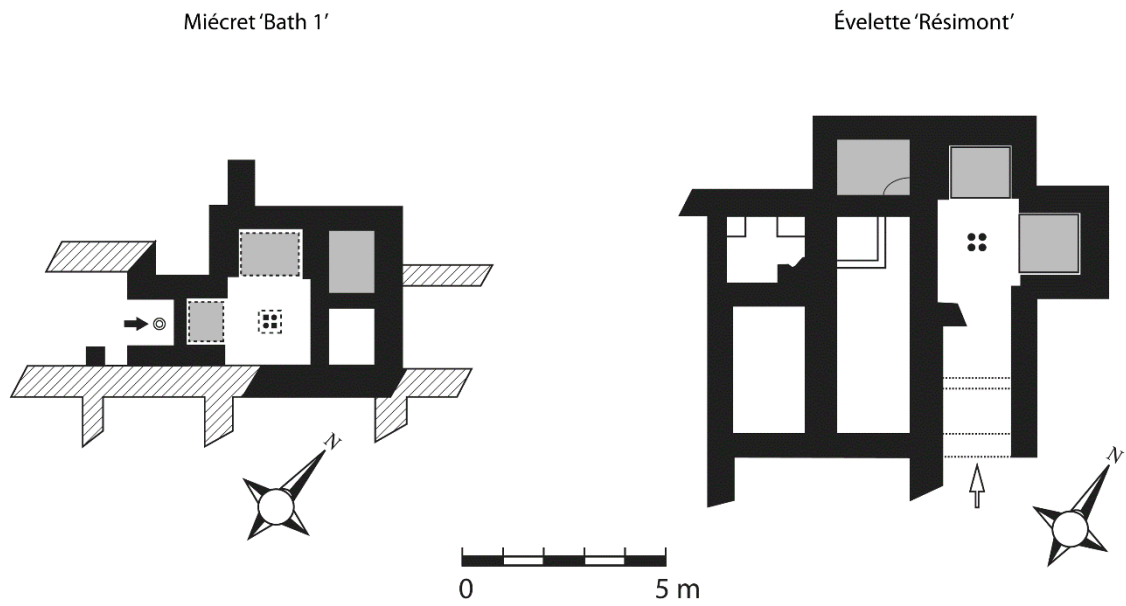




**Figure 5.** Plans of the villae of Aiseau and Miécrot with indication of the baths (redrawn after Kaisin, 1878: pl. II; Materne, 1969: 80).

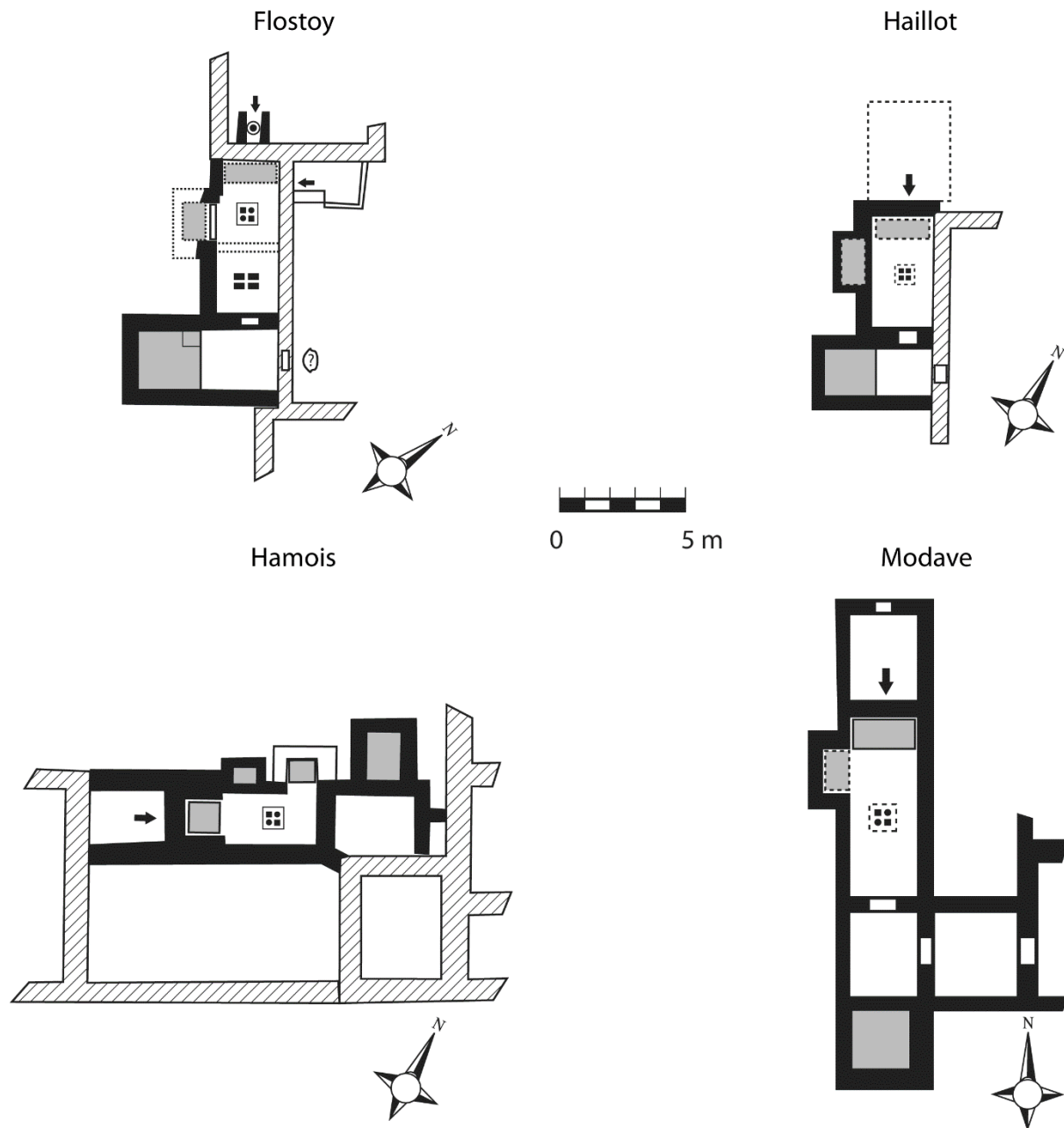


**Figure 6.** Map of the microregion west of Clavier with location of the villa sites (life span in brackets) (background OpenStreetMap; EPSG:31370 – Belgian Lambert 72).



**Figure 7.** Plans of the villa baths of Miécret (Baths 1) and Évelette 'Résimont' (redrawn after Kaisin, 1878: pl. II; Willems, 1966, general plan).





**Figure 8.** Plans of the villa baths of Flostoy, Haillot, Hamois, and Modave (redrawn after Lefert, 2015: 271; Lefert, 2002: 244; Van Ossel, 1981: 134, fig. 96; Anonymous, 1896: 181, fig. 1).

**Table 1.** *Comparison of the sizes of villa baths and public baths in the research area.*

<b>Villa baths</b>	<b>Size in m<sup>2</sup></b>
Basse-Wavre (second century AD)	300
Champion (phase 3, third century AD)	340
Gesves (phase 2, late second or third century AD)	250
Haccourt Baths 3 (phase 3, late second or early third century AD)	880
<b>Public baths</b>	<b>Size in m<sup>2</sup></b>
Grobbendonk (second century AD)	250
Macquenoise (late second or early third century AD)	200
Tienen (late first century AD)	200

**Table 2.** Date, baths size, pool sizes with maximum numbers of bathers and location of the baths in the microregion west of Clavier compared to the size of the main villa building. F: freestanding, I: internal, A: attached.

Site	Timespan	Baths size	<i>Piscina</i> size (no. of bathers)	<i>Alveus</i> size (no. of bathers)	Loc. of baths	Villa size	Baths surface in %
Bois-et-Borsu	Unknown	Unknown	1.2 m <sup>2</sup> (1)	Unknown	Unknown	Unknown	Unknown
Champion (phases 1–3)	First–fourth century AD?	60–70–230 m <sup>2</sup>	5 m <sup>2</sup> and 1.6 m <sup>2</sup> (5 and 2)	2,6 m <sup>2</sup> (2)	F?–A	800+ m <sup>2</sup>	Unknown
Évelette ‘Clavia’	First–third century AD?	58 m <sup>2</sup>	Unknown	Unknown	F	Unknown	Unknown
Évelette ‘Résimont’	Second–third century AD?	22 m <sup>2</sup>	2.2 m <sup>2</sup> (2)	2,3 m <sup>2</sup> and 2,3 m <sup>2</sup> (2 and 2)	I	460 m <sup>2</sup>	5%
Flostoy	Second century AD –?	55 m <sup>2</sup>	6 m <sup>2</sup> (6)	2 m <sup>2</sup> and 1,5 m <sup>2</sup> (2 and 1)	I	960 m <sup>2</sup>	6%
Gesves (phases 1–2)	Second–fourth century AD?	70 – 250 m <sup>2</sup>	4.8 m <sup>2</sup> (5)	4,2 m <sup>2</sup> (4)	F–A	800+ m <sup>2</sup>	Unknown
Haillot	Second–third century AD?	60 m <sup>2</sup>	4 m <sup>2</sup> (4)	1,8 m <sup>2</sup> and 2 m <sup>2</sup> (2 and 2)	I	390 m <sup>2</sup>	15%
Hamois	Second century AD –?	77 m <sup>2</sup>	2.8 m <sup>2</sup> (3)	2,3 m <sup>2</sup> and 0,8 m <sup>2</sup> (2 and 1)	I	840 m <sup>2</sup>	9%
Miécret ‘Baths 1’	First–second century AD	25 m <sup>2</sup>	1.8 m <sup>2</sup> (2)	1,8 m <sup>2</sup> and 1,1 m <sup>2</sup> (2 and 1)	I	Unknown	Unknown
Modave	Second–third century AD?	60 m <sup>2</sup>	4 m <sup>2</sup> (4)	3,6 m <sup>2</sup> and 2,4 m <sup>2</sup> (3 and 2)	A	Unknown	Unknown