Between mountains and frontiers: the Roman settlement system in the provinces of Germania Superior, Raetia and Noricum

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Between Mountains and Frontiers

The Roman settlement system in the provinces of Germania Superior, Raetia and Noricum

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The poetry of history lies in the quasi-miraculous fact that once, on this earth, on this familiar spot of ground, walked men and women, as actual as we are today, thinking their own thoughts, swayed by their own passions, but now all gone, one generation vanishing after another, gone as utterly as we ourselves shall shortly be gone like ghosts at cock-row.

G.M. Trevelyan

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General introduction

The aims of this book

'We urgently need a complete list of cities in various provinces, arranged according to the chronological order of their existence as cities'.[1] This statement written by M. Rostovtzeff dates back almost a century and can be considered as an early call closely related to the aspirations striven for in this monograph. The aim of this work is to present an overview of the Roman towns in several Roman provinces, more specifically in Germania Superior, Raetia and Noricum. Since these provinces' southern and internal land consisted of the Alps and the Alpine Forelands, the entire region will generally be referred to as the 'the northern Alpine region'.

Instead of providing a single definition of 'town' and applying this to the region-specific settlement systems of the three provinces under investigation, my inquiries into the 'urban' systems of these regions is informed by multiple approaches to 'urbanness', such as definitions based on juridical status, on monumentality and public infrastructure or on central-place functions performed by various types of settlement. As a consequence, this research involves more than only the official Roman towns and also comprises a broad spectrum of other centres with 'town-like' characteristics (Fig. A). To put it differently, the main focus of this book is the pursuit of a functional understanding of various segments of the Roman settlement systems of Germania Superior, Raetia and Noricum rather than an attempt to establish which components of this system were 'urban' rather than 'rural'.[2]

While the inquiries which will be undertaken in this book are bounded geographically, the scope of my investigations is also determined by the quality of the available research and by my personal interests and aspirations. Chronologically, this monograph picks up the development of centres in the region just before the time of the Roman conquest and tries to follow the evolution of its settlement systems through the three subsequent centuries. The middle of the 3rd century is taken as the closing date for this research. This was a period of increased instability which led to a drastic reconfiguration of the so-called limes and to major administrative changes, such as new administrative divisions introduced by Diocletian. The time frame of this thesis is thus set between the Late Iron Age and AD 260.

The first part of my investigations will focus on the transformation of regional settlement systems in the wake of the Roman conquest. What did the Late Iron Age settlement system look like? What impact did the Roman conquest have on the continuity of centres? What political and administrative decisions were made by the Roman rulers to control the conquered territories?

As a next step we will take a closer look at the process of 'municipalisation' in the three provinces. Communities were granted different levels of autonomy, expressed by a municipal status, such as *colonia, municipium* or *civitas*. Each of these statuses gave these communities a degree of self-government. My principal aim will be to trace the development and role of these self-governing towns in the northern Alpine region and that within the lines of the Roman administration. This involves questions such as 'What did it mean to be a self-governing community?', or 'Which places in the northern Alpine region gained a municipal status and why?'.

Following this discussion of self-governing cities and communities, an attempt will be made to gain a better understanding of the settlement systems of the three provinces by examining a variety of Roman centres which were administratively subordinated to self-governing cities or located in the

[1] Rostovtzeff 1957, 83.

[2] The research presented was conducted as a PhD project which ran from 2013 until 2018 and was hosted by the University of Leiden (the Netherlands). For more information see: Website: Empire of 2000 Cities.

territories of these cities. Unlike my investigation of the self-governing communities of the northern Alpine region, my investigation of secondary 'town-like' places will rely almost exclusively on archaeological evidence.

A separate chapter will be devoted to public buildings and infrastructure typical of Roman urban contexts. In what types of settlements do we find prestigious edifices, such as spectacle buildings, *fora*, aqueducts or bath complexes? Is there a relation to be found between the various juridical statuses Roman settlements might have and the array of public buildings that we find in these places? And what does the presence of such buildings tell us about the wider settlement system?

I will conclude my investigations into various aspects of the 'urban' systems of the northern Alpine region by providing a broader analysis of these systems. Where were places with 'urban' or 'central - place' functions located and how did these centres relate to the landscape, to each other and to their hinterlands? What can be said about the role of urban centres for the rural habitations surrounding them? Finally, what can be said about the settlement system of the Roman period in the northern Alpine region in general?

The theme of the final chapter concerns the remnants of the towns and town-like settlements of the Roman period and the ways they are managed today as heritage. Since the investigation of archaeological remains as well their preservation and meaning are heavily dependent on the societal experience of heritage, this chapter aims to investigate how these remains are taken care of and by whom? This involves further questions such as 'How are these elements of the past presented to the wider society and used by it?' and 'To what extent does the story about Roman cities as it is communicated to the general public correspond to what is debated within the academic world?'.

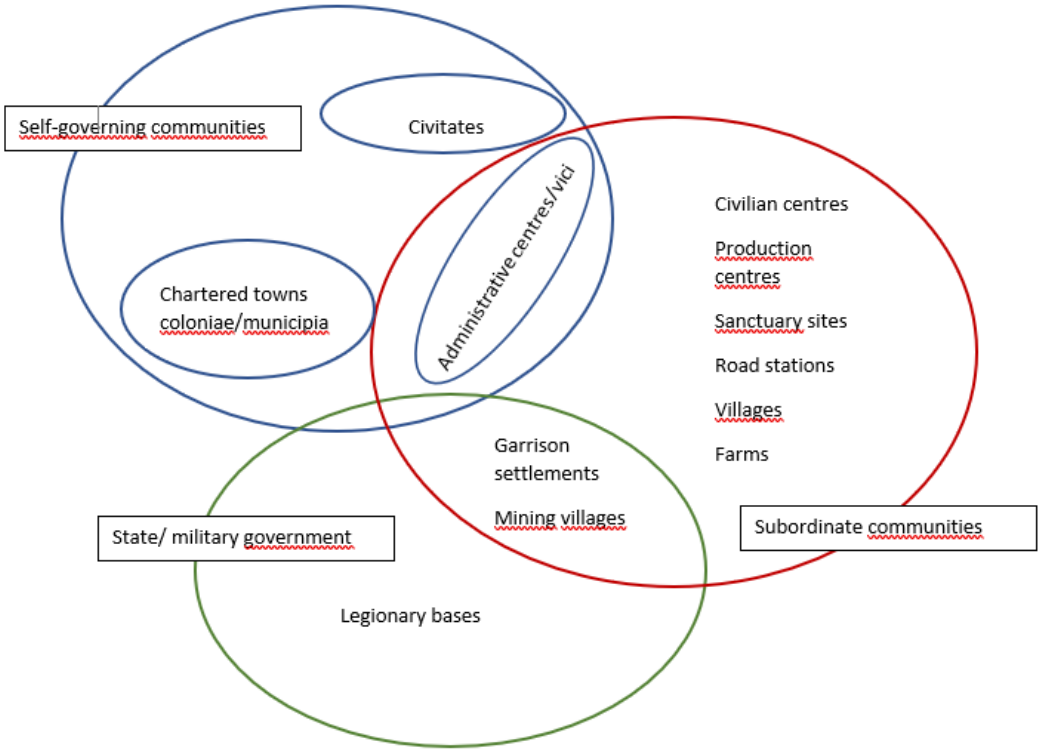

Fig. A: Diagram of different type of Roman settlements

Sources and methodological problems

Despite the fact that research on the Roman period in the northern Alpine region has been characterised by a strong military viewpoint, the theme of urbanism is not new to the regional scholarship. The continuing fieldwork has resulted in many publications which are directly or indirectly related to the central topic of this book. Nevertheless, no monograph has so far been published that considers the three provinces of Germania Superior, Raetia and Noricum as one study area. All too often, the region has been (partly) integrated in studies concerning Roman Gaul or the Balkan region. The provinces have also been studied separately, as is illustrated by the following publications: M. Klee (2013) Germania Superior*: Eine römische Provinz in Frankreich, Deutschland und der Schweiz*; G. Alföldy (1974) *Noricum*, T. Fischer (2002) *Orbis Provinciarum Noricum*, or M. Šašel Kos and P. Scherrer (2002), *The Autonomous Towns in Noricum and Pannonia*. The study of the Roman period is furthermore embedded in a very regionally orientated tradition, often focused on developments of specific (modern) regions or countries. The serials of *Die Römer in* […] are a perfect illustration of this.[3] Many new discoveries have been published in regional journals, such as the *Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz*; *Jahrbuch des Oberösterreichischen Musealvereines* or the *Bonner Jahrbuch*, to name but a few. The proceedings of workshops and conferences often contain important contributions to various questions concerning specific aspects of the Roman period and its settlement pattern, such as the papers in the volume *Ländliche Besiedlung und Landwirtschaft in den Rhein-Donau-Provinzen der römischen Reiches*, edited by Schwarz and Weithmann, those in *Neue Forschungen zu zivilen Kleinsiedlungen (vici) in den römischen Nordwest-Provinzen*, edited by Heising, and those in *Römische Landnutzung in der Eifel. Neue Ausgrabungen und Forschungen*, edited by Grünewald and Wenzel. In brief, there is more than enough information available to improve our insights into the problems and questions that will concern us in this monograph.

This is not to say that the archaeological remains relating to the Roman towns and town-like places of the northern Alpine regions is always easily accessible or that the interpretation of these remains is unproblematic. A relatively high number of Roman towns have been overbuilt by later structures from the Medieval up to modern times, making it difficult to locate key buildings and to reconstruct town plans. The problems surrounding the location of the *forum* of the Roman town of *Iuvavum*, currently buried somewhere underneath the centre of modern Salzburg (Austria), are a typical illustration. Many 'gaps' in the reconstruction of the Roman town have been proposed as possible location but despite many attempts no consensus has been reached.[4] Sometimes our knowledge is unexpectedly extended by new discoveries, as happened when rescue excavations carried out at the Roman garrison settlement of Künzing in 2003 revealed the imprint of a wooden amphitheatre.[5] The application of more modern research methods, such as geophysical survey, has also contributed to new discoveries and to new insights into the nature and complexity of various settlement types. While many 19th and early 20th century excavations in the frontier region focused mainly on the forts themselves, new survey methods have brought to light the many (civilian) structures that surrounded these military installations.[6] The geophysical surveys carried out at the site of the garrison settlement of *Iciniacum* in Theilenhofen, for example, have revealed traces of a possible *forum* and even those

[3] Filtzinger, Plack and Cremer 1976; Baatz and Herrmann 1982; Drack and Fellmann 1988; Cüppers 1990; Czysz 1995; Fischer 1999; Flutsch, Niffeler and Rossi 2002.
[4] Thüry 2014b, 307-318.
[5] Schmotz 2006
[6] Sulk 2011, 35-36.

of a theatre.[7] Unfortunately, geophysical surveys often do not reveal wooden constructions. Since perishable materials were often used to erect public buildings during the first decades following the Roman conquest, and also because not all areas in the northern Alpine region had easy access to good building stone, this most probably means that a considerable number of buildings remain undetected. The study of the Roman settlement system presented in this book is thus dependent on the current state of research.

Geographical introduction to the northern Alpine region: the provinces

The Roman provinces of Germania Superior, Raetia and Noricum overlap with parts of modern-day Austria, France, Germany, Liechtenstein, Slovenia and Switzerland (Fig. B). With their sizes of respectively 93,500 km^2, 80,000 km^2 and 62,000 km^2, they formed some of the Empire's smallest provinces.[8]

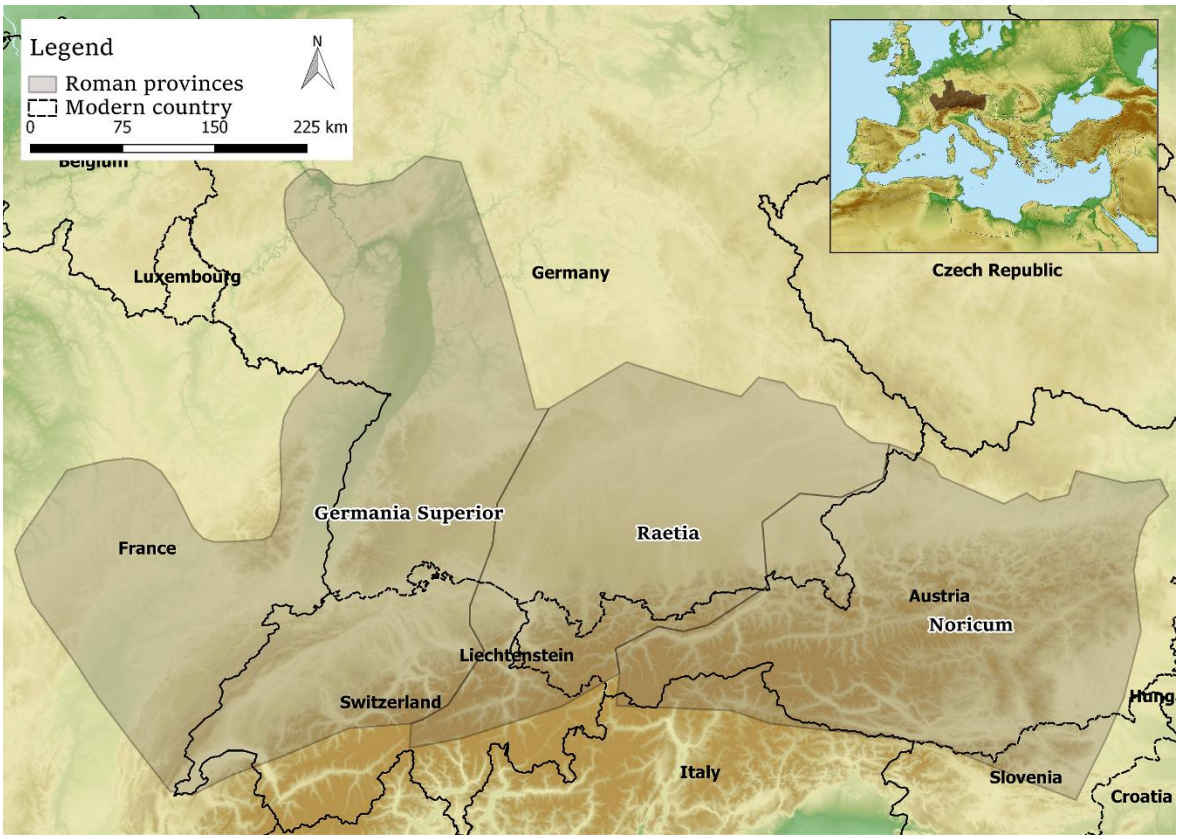

Fig. B: The modern countries within the study area of the northern Alpine region

The province of Germania Superior (Upper Germany) gained its final dimensions under the reign of Domitian in the late 1st century AD and was the biggest of the three Roman provinces that are of interest here. This Roman province stretched out over several modern countries and subregions (Fig. C). In the south-west, Germania Superior covered parts of what is now modern north-east France, including the Alsace region, Franche-Comté and a small part of Bourgogne. The south-east of the province also included north and central Switzerland, stretching from Geneva in the west to Url and Sankt-Gallen in the east. The northern half of Germania Superior was located in modern Germany, streching out over parts of the states (*Bundesländer*) of Baden-Württemberg, Bayern, Hessen and Rheinland-Pfalz. The province had a rather diverse landscape and relief (Fig. D). The southern most border of the province of Germania Superior was formed by one of the biggest lakes in the entire

[7] Mischka, Obmann and Henrich 2010
[8] Fischer 2002, 18.

northern Alpine region, today known as the Lake of Geneva, but in Roman times as *Lacus Lemannus*. More lakes characterised this southern part of the province, such as the lake by Neuchâtel located between the Alps and the Jura mountains. To the west of the Jura mountains, the Plateau of Langres marked the western border of the province. Since several significant rivers, such as the Aube, the Marne and the Saône rise here, this was a vital area for the region's connection with important contact networks involving the north-south route along the rivers Rhône and Saône. The western border of the province followed the Vosges, excluding the Plateau of Lorraine.

The central part of Germania Superior was dominated by the river Rhine flowing through the Upper Rhine Plain. The northern half of the province was characterised by even more river networks, including the Main, the Neckar or the confluents of the Moselle and the (Lower) Rhine at present-day Coblenz. The latter also determined the border with the province of *Germania Inferior*. Overtime these rivers played an important role in the alignment of the border between the Roman Empire and so-called *Barbaricum*. The frontier in Upper Germany reached its final extent around the mid 2nd century AD and was characterised by many forts and watch towers built at intervals along either man-made or natural defence works and included some of the streams mentioned earlier. From the border with *Germania Inferior* to the fort of Grosskrozenberg on the banks of the river Main, the border was formed by a land frontier consisting of a ditch and/or palissade. The Main river itself marked the border as far as Miltenberg where it again transferred into a land frontier till the fort of Lorch on the border with the province of Raetia (Fig. D).[9]

The province of Raetia shared its border with the province of Germania Superior in the west and the province of Noricum in the east. The southern part of the province stretched out into today's Swiss and Austrian Alps, including the Austrian region of Voralberg. Parts of the present-day German regions of Baden-Württemberg and Bayern belonged to the northern half of the Raetian province (Fig. E). The landscape in Raetia was characterised in the south by the high peaks of the Alps, reaching up to 2,000-3,000 metres and higher (Fig. F.). Lake Constance *(Bodensee)* formed the most important feature on the border with *Germania Superior* in the west.[10] Furthermore two major streams crossed the territory of Raetia: the river Lech ran from south to north joining the Danube just north of modern Augsburg, and the second river, the Danube, ran from west to east through the entire province. In the north-east, the territory of Raetia extended beyond this river. In that area north of the Danube, the landscape was characterised by the hills of the Swabian Jura (*Schwabische Alb),* with elevations up to 1,000 metres. The border in this particular part was also a land frontier. From the fort of Schirenhof, east of the border with *Germania Superior,* to just west of the military base of Regensburg, the frontier was demarcated by a palissade and ditch which were upgraded during the 2nd century with a stone wall.[11] To the east of Regensburg, the Danube marked the border of both the province of Raetia and of the Roman Empire.

The territory of the province of Noricum corresponds roughly with most regions of present-day Austria west of Vienna, including Ober- and Niederösterreich, Osttirol, Kärnten and Steiermark. A small area in the north-western part of the Roman province is today located in the German region of Bayern. In the Roman period, the area around the modern town of Celje in the northern region of Styria in Slovenia also belonged to the province of Noricum (Fig. E). Of the three provinces, the landscape in Noricum was probably most heavily dominated by the Alps (Fig. F). The mountain ranges came as far north as modern Salzburg and the Chiemsee. Most likely the river Inn demarcated the border between Raetia in the west and Noricum in the east; today it still functions as the boundary between Germany and Austria. The river Danube marked the northern edge of the

[9] Website: Deutsche Limeskommission and Limes Congress.
[10] Konrad 2012, 22-23.
[11] Website: Deutsche Limeskommission and Limes Congress.

province and at the same time it again formed the Empire's frontier with military installations on its southern bank.[12]

[12] Konrad 2012, 23.

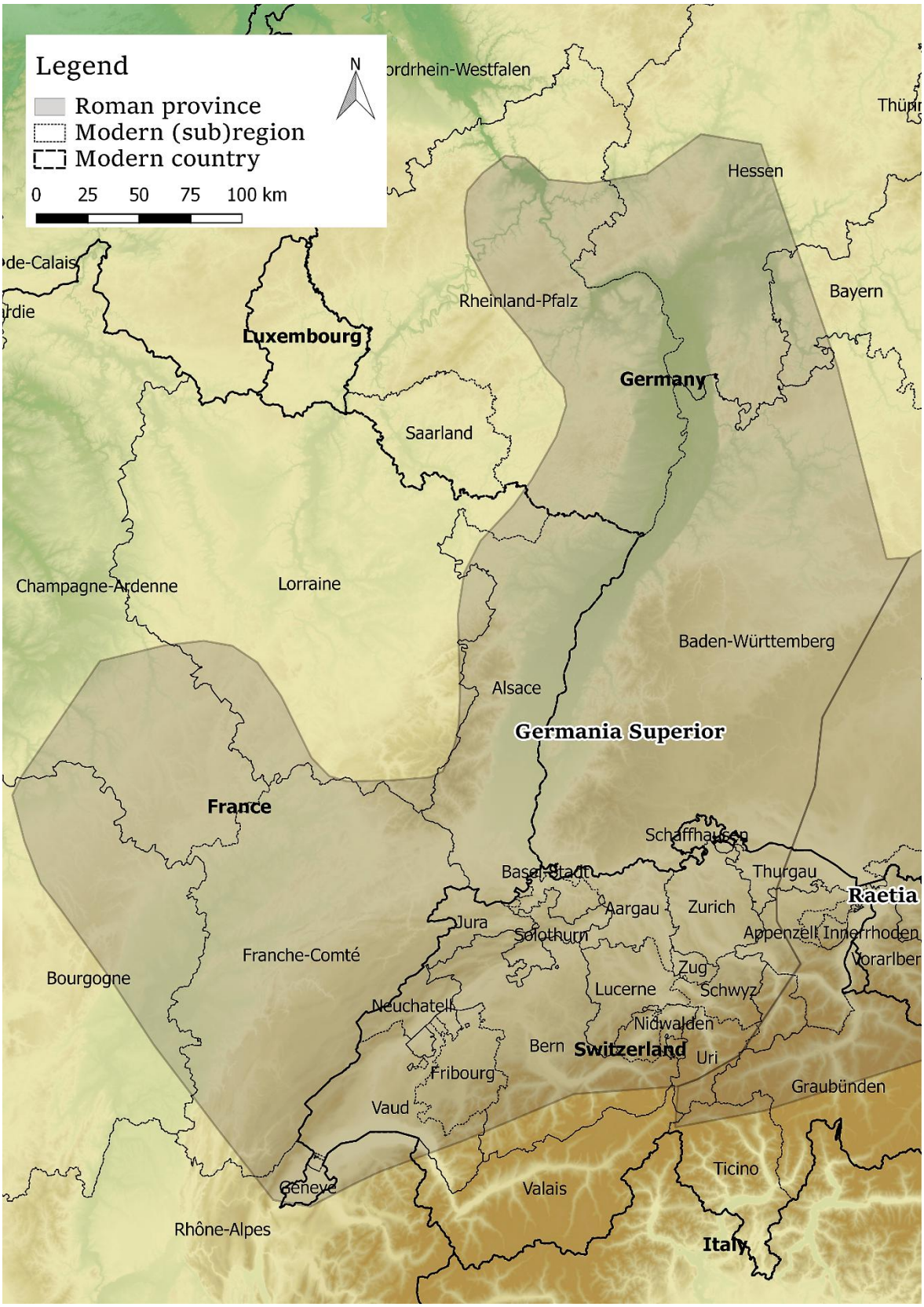

Fig. C: The modern countries and regions within the borders of Germania Superior

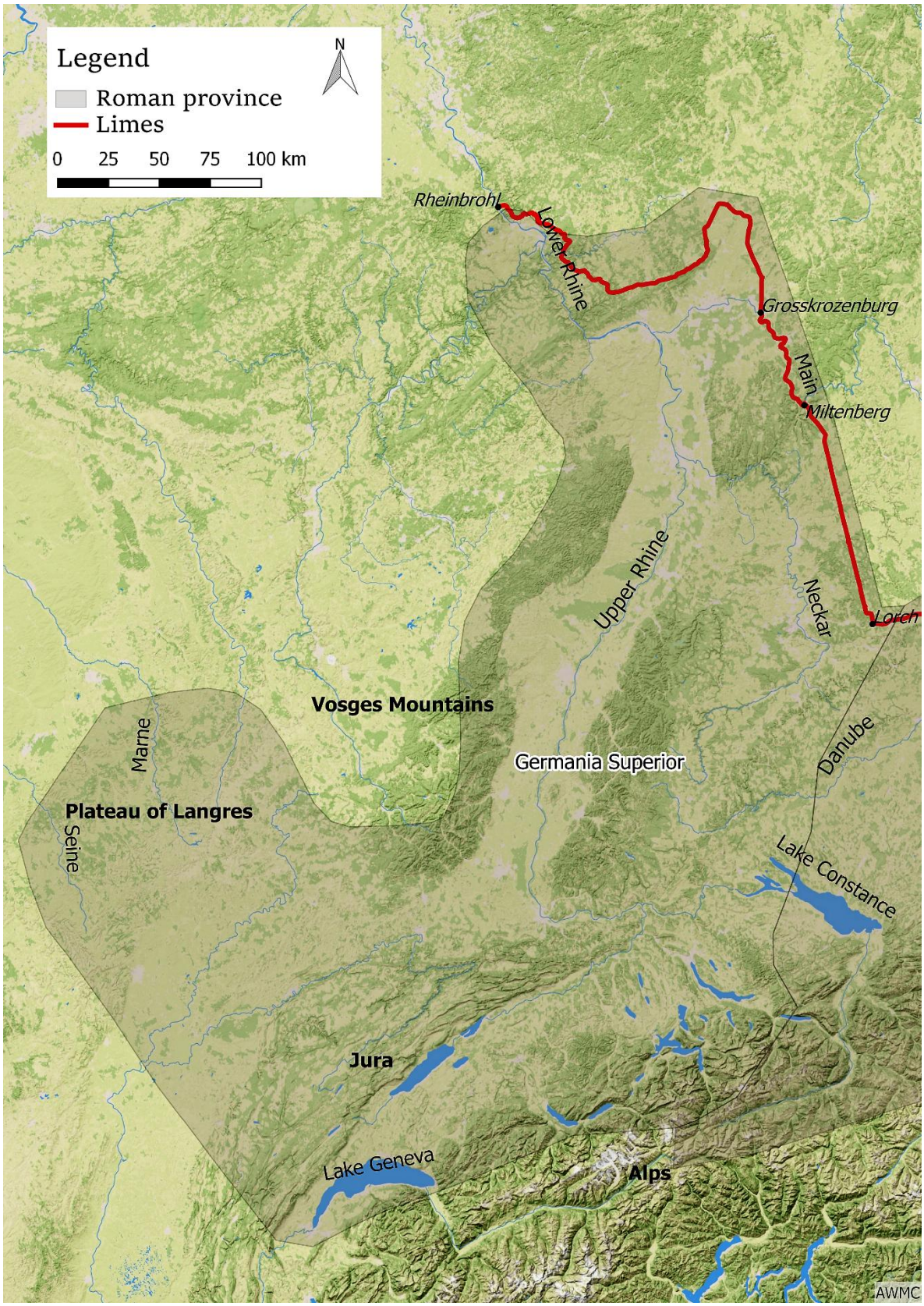

Fig. D: Landscape and relief features in Germania Superior

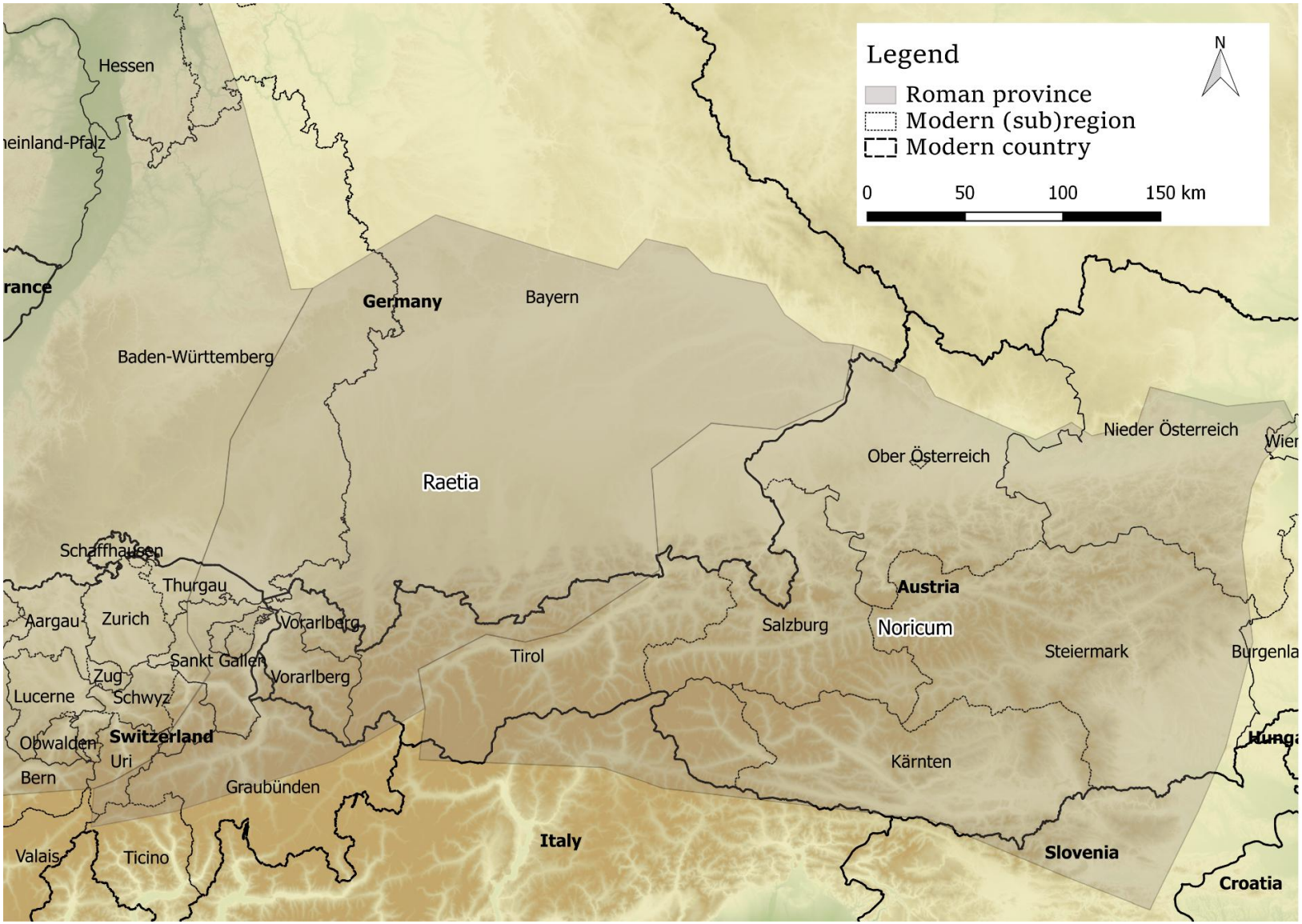

Fig. E: The modern countries and regions within the borders of Raetia and Noricum

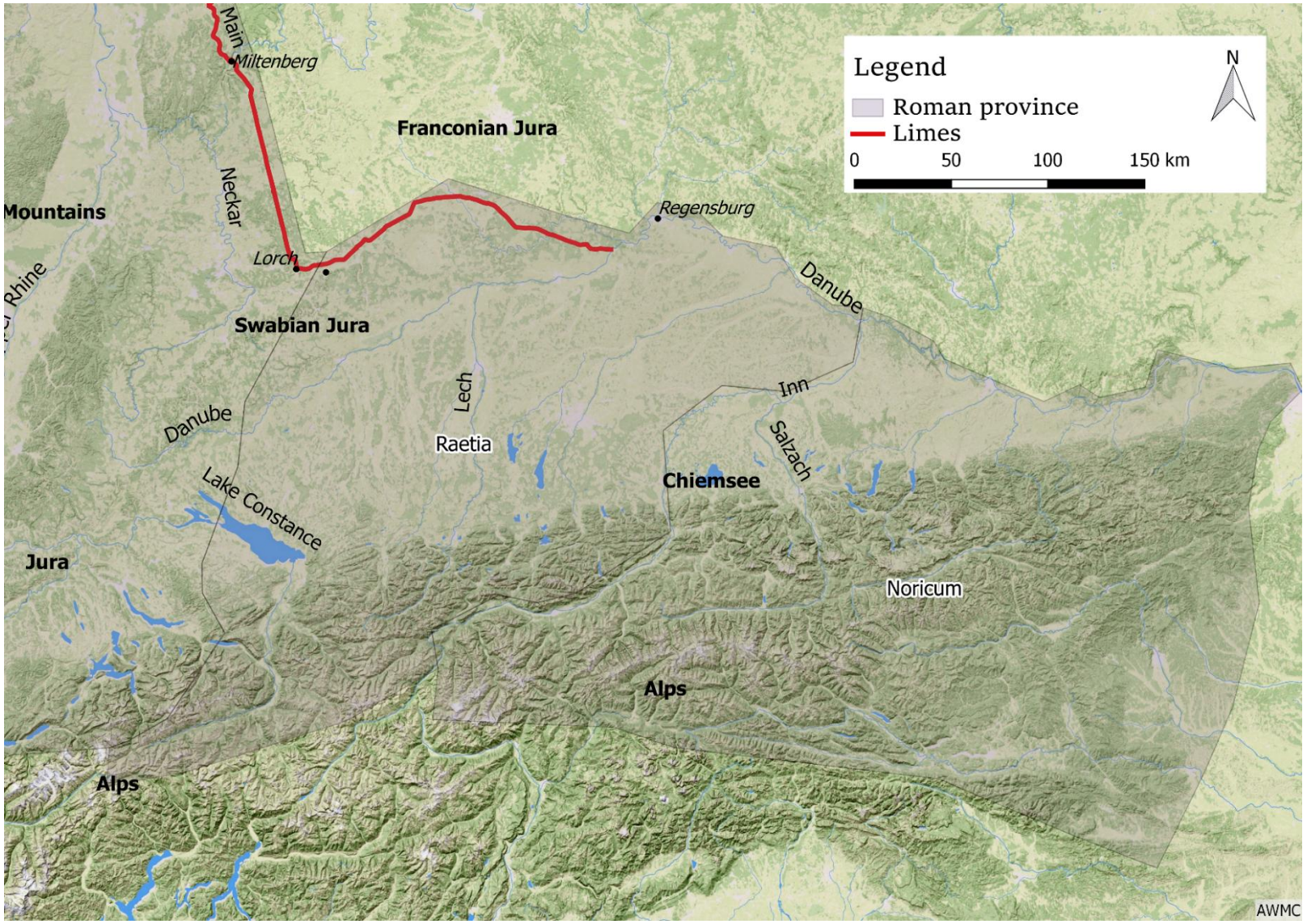

Fig. F: Landscape and relief features in Raetia and Noricum

Access and climate

We know from various ancient sources, such Polybius' *Histories* and Strabo's *Geography*, that the Alpine region was mainly perceived as a very inaccessible stretch of land. It was hard to force a way through the massive rocks and over the steep cliffs and in some places the roads were so narrow that they brought dizziness to travelers, human or animal.[13] Generally, there were only four ways to cross the Alps (Fig. G). One route crossed the territory of the *Ligures* in north-western Italy, and was located close to the Tyrrhenian Sea. It is also known as the Turbia Pass and might have been part of the *Via Julia* or *Via Aurelia*. A second one ran almost parallel with the first, but lay more to the north, close to or even similar to the St. Bernhard pass. The third pass was used by Hannibal and traversed the land of the *Taurini* who lived north of the river Po. The last route to cross the Alps was more centrally located and cut through the territory of the *Rhaeti*; today it is better known as the Brenner Pass. Both Polybius and Strabo considered the Alps more or less uninhabitable, with most of the area being depressing and barren, due to permanent frost and rugged soils. They conculed that it drove the inhabitants to invade other people's land, including Italy.[14] However, according to G. Patzelt, such descriptions are too coloured and subjective since the Romans had only the Mediterranean environment with which to compare it.[15]

The Alps are a relatively young mountain range and form a transition from the Mediterranean to temperate Europe. They provide the space for a diverse landscape both in a geological and a climatological sense. The western part of the Alps, for example, is geologically more pronounced, with higher mountain peaks. The northern area is influenced by the colder European mainland climate, while the southern region benefits from the warmer Mediterranean air. However, humans first inhabited the region as early as 6,500-5,500 BC. While a hunter-gatherer and later transhumance lifestyle dominated, it is assumed that in the more fertile southern areas of the Alps a sedimentary agricultural lifestyle developed. During the Roman period, there was an intensification of agricultural production. Because of improved farming techniques, more valleys and slopes were used for growing crops.[16]

The climate in the entire northern Alpine region during the Roman Imperial period is assumed to hove been comparable with that of today. It is worth noting that there was is a small increase in temperature (a maximum of one degree Celsius) during the first decades that followed the Roman conquest. Forestry, output and livestock are presumed to have continued between the pre-Roman and Roman period. The minor increase in temperature may have contributed though to the successful introduction of certain southern cultivations, such as herbs, grapes and other kind of fruit, into the area.[17] Nevertheless, this minor climate change cannot be seen as a driving force behind the rise and fall of the Roman rule in the region and its impact on urban development will have been negligible.

[13] Strabo, Geography 4.6.
[14] Strabo, Geography 4.9-12.; Polybius The Histories 2.15 and 18; Livy, History of Rome 21, 32.
[15] Patzelt 1994, 7-9.
[16] Bätzing 2015, 48-57.
[17] Patzelt 1994, 7-9; Küster 1994, 31-33; Bätzing 2015, 48-57.

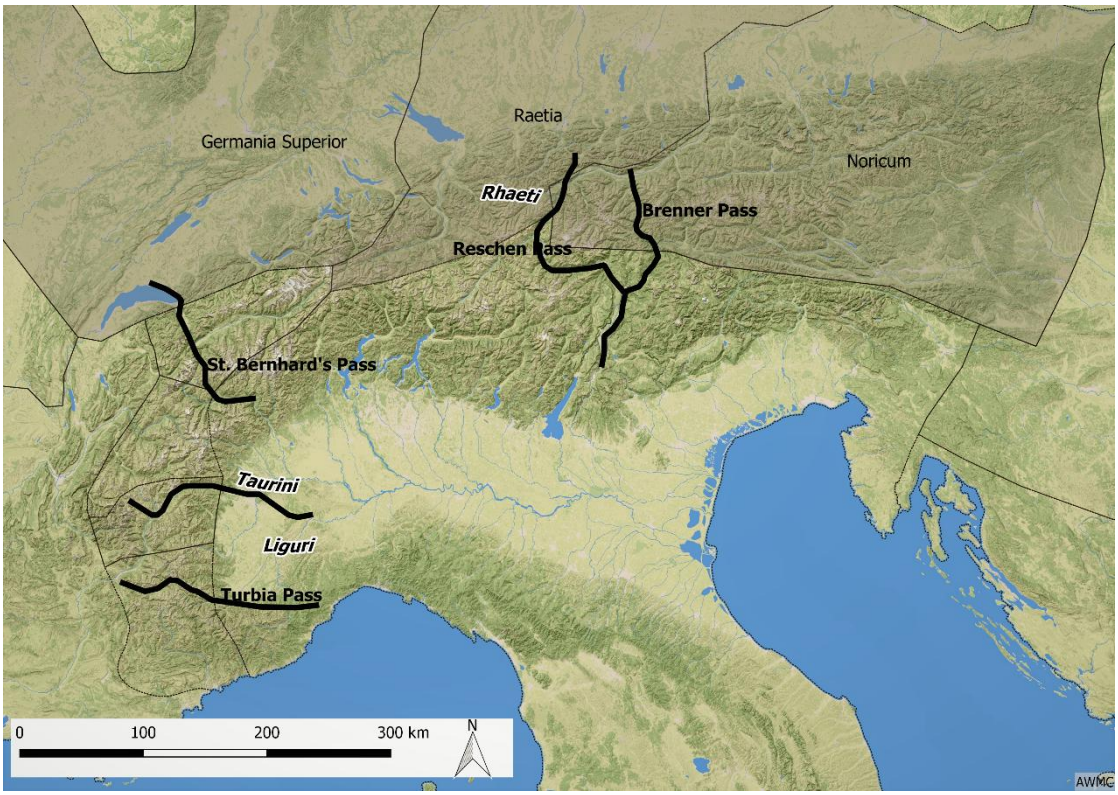

Fig. G: Rough situation of Alpine passes and Alpine tribes mentioned in the text

1. The northern Alpine Region on the eve of the Roman conquest

The focus in this chapter lies on the nature of urbanism and the character of centres during the decades prior to and immediately after the Roman conquest. The chapter is built around two themes. A first one concerns the changing ideas about the complexity and diversity of the settlement dynamics during the Late Iron Age, drawing on new archaeological evidence. A brief overview of urbanism in the pre-Roman period should provide a reference framework for discussing the impact of Roman rule on urban development in this part of the Empire. The description of the different conquests in the second section of this chapter forms just a transition to the other focus in the chapter, namely the first signs of Roman influence on the contemporary settlement system and of Roman administrative policy. The settlement system in these early years might have been much more complex than was previously thought. The question of wheter the Romans arrived in an abandoned land becomes more and more debatable.

1.1 The Pre-Roman urban settlement pattern

1.1.1 The Late Iron Age: La Tène Period

The last period preceding the incorporation of the northern Alpine region into the Roman Empire is named after the archaeological Late Iron Age site of La Tène, located on the edge of Lake Neufchâtel in Switzerland. Based on the specific nature of the material culture, which stood out from the then prevailing Hallstatt culture in northwest Europe, the last five centuries BC could be recognised as a separate period. The creation of the La Tène period was thus based on typological qualities of brooches, weapons, and oriental motifs influencing the decoration of objects and art.[18] For a long time the last phase of this La Tène period, roughly ranging from 150 BC to 50-30 BC, has been considered as the crucial moment for the first signs of *urbanization* in NW Europe, characterised by large defended sites, better known as *oppida*, along with indications for social differentiation, an increased level of production and market exchange.[19] But this vision is changing as will be explained below.

1.1.2 New perspectives on Late Iron Age settlement dynamics

Oppida: a problematic term and an outdated approach

The Latin word *oppidum* is best known from Caesar's *De Bello Gallico* in which he applied it to multiple Late Iron Age centres in Gaul. These centres were often located on spots of natural defence within the landscape and frequently showed evidence for strong defensive structures. These could include ramparts and gates as well as ditch and wall systems or earthworks of the so-called *murus gallicus* type described by Caesar. Moreover, the enclosed area was generally very large, ranging from 15 ha up to several hundreds of hectares. The majority of these sites have been dated to the middle of the 2nd century BC or to the beginning of the Late La Tène period. Based on these common features, the term *oppidum* came within the archaeological literature to stand for a large defended hilltop site. The appearance of these *oppida* has often been explained as a new phenomenon being partly a result of socio-economic changes and shifts in trade contacts. Acquaintance with the Mediterranean lifestyle has been seen as an important stimulus for the creation of these large

[18] Collis 1984, 43-44.

[19] Following Collis (1975, 5.), the La Tène period is generally divided into four sub-periods: Earliest La Tène A or Ia (475 – 400 BC), Early La Tène B1 and B2 or Ib and Ic (400 -325 BC), Middle La Tène C1 and C2 or IIa and IIb (300-100 BC) and finally Late La Tène D1, D2 and D3 or III (100-60 BC; 60-30BC and 30-10 BC). However in his book of 1984 (p39), a slightly different chronological division of the Late Iron Age is given. The Late La Tène period is generally also referred to as the Gallo-Roman period. Most finds discussed in the following sections will date from around La Tène C2/D1 and D2. For a short description of all the sub periods within the La Tène period and their characteristics see: ibid., 43-49.

defended centres. And so these sites have become the stereotype of Late Iron Age centres, serving as refuge, storage centre, focal point for trade and symbol of prestige and power.[20]

However, *oppidum* has proven to be a rather problematic term for which there is no consistent definition. First of all, it appears that already in antiquity the term *oppidum* did not refer to one specific type of centre. Caesar himself applied the term not only to Gallic centres but also used it to describe the living places of others, such as the Germanic tribes of the *Suevi*. Nevertheless, archaeologically no similar sites, such as those known from Gaul, have been identified in the Suevian territory north of the Rhine.[21] An analysis of Caesar's use of the word *oppidum* according to D. Lukas quickly shows a multitude of nuances, among which *emporium*, city and *metropolis* in addition to fortified place.[22]

Secondly, G. Woolf in 1993 was one of the first to recognise the problem that also from the archaeology it was unclear what the term *oppidum* stood for and that therefore the term has wrongly been used as an analytical tool.[23] The character of many Middle and Late La Tène period settlements appears to deviate from the main features of an *oppidum*: a large fortified hilltop settlement. This implies that sites of all different character have been categorised by scholars as *oppida* based on undefined and changeable criteria. The differences in the size of the enclosed area and in the level of fortification are two good examples to show the variety within the group of sites which have been labelled as *oppida*.[24] For instance, researchers have been using various thresholds for the minimum size of sites they categorised as *oppida*, ranging from 50 ha to 25 ha, to only 15 ha.[25]

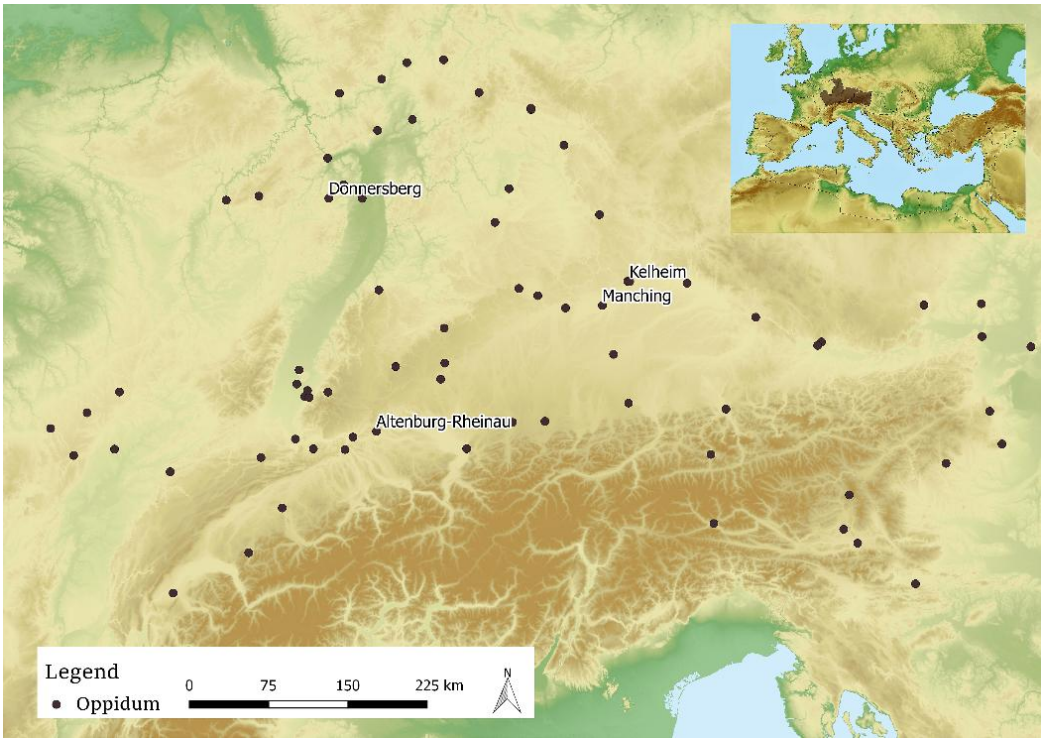

Fig.1.1: Overview of sites in the northern Alpine region referred to as *oppida* (n=57)

[20] Bintliff 1984, 196-198; Kuckenburg 2000, 144-147; Dürrwächter 2009, 43; Danielisová 2011, 144-145.
[21] Salač 2014, 70. De Bello Gallico, Book IV, 5.
[22] Lukas 2014, 84.
[23] Woolf 1993, 223.
[24] Ibid., 225.
[25] Ibid., 225; Kaenel 2006, 4-5; Dürrwächter 2009, 43.

Although the phenomenon is known from all over northwest Europe – stretching from Spain and Britain to the Balkans - I will illustrate the diversity of sites in the literature now referred to as *oppida* with examples mainly taken from the northern Alpine region. The following analysis is derived from 57 sites which are displayed on the map in figure 1.1. The website of the Culture 2000 funded project *Oppida: first towns north of the Alps*[26] has been an important reference source, in addition to the works of synthesis written by K. Bittel *et al.*[27], W. Dehn[28], R. Haeussler[29], U. Schaaf and A. Taylor[30] amongst many others.

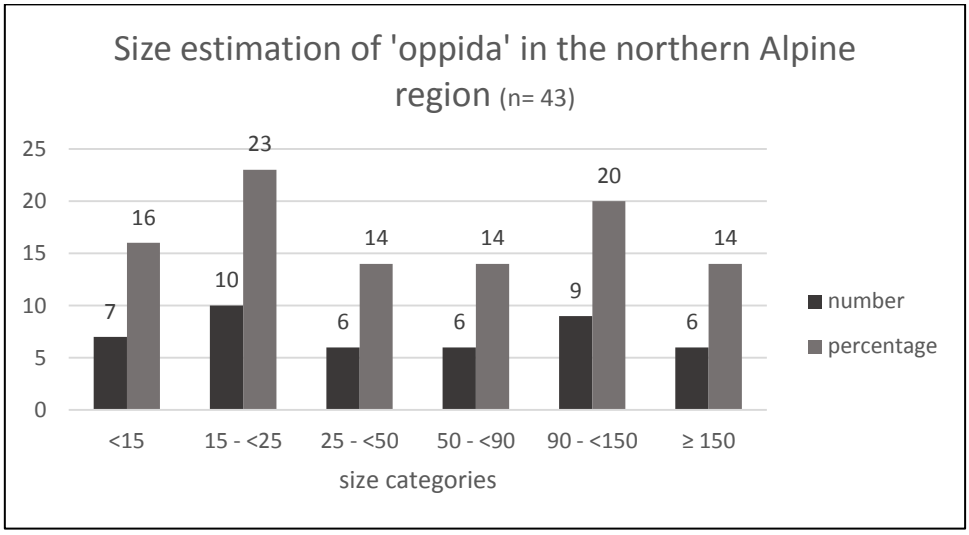

Fig. 1.2: Chart showing the division of size of *oppida* in the northern Alpine region

The size and fortification of oppida in perspective

For 43 Late Iron Age sites in the northern Alpine region, it was possible to make an estimation of the size of the enclosed area within the outermost defence structures of the sites. The chart (Fig. 1.2) displays a range of size categories from 2 ha to 650 ha. The size distribution of these Late Iron Age sites is surprisingly even. Traditionally *oppida* were considered to be large defended sites, but the chart shows that the majority remained smaller than 50 ha (61%). 39 percent did not grow above 25 ha. Nevertheless, it has to be said that a substantial number of sites (34%) were rather large with a defended area of 90 ha and more. Some sites, such as the sites of Kelheim (650 ha) and Manching (380 ha), or the *Doppelanlagen* of Altenburg-Rheinau (316 ha) and Donnersberg (240 ha) even reached an exceptional size of several hundred hectares.[31]

In addition to these differences in scale, it is also important to stress some qualitative divergences related to the size of these defended areas. The latter often did not correspond with the actual inhabited or built-up area and might therefore not be representative for the size of these centres. In the case of Kelheim, the biggest site of this kind in the entire region, it has been proposed that apart from the core area (however big that might be), most of the land was used for mining.[32] Altenburg-

[26] Website: Oppida. First towns North of the Alps.
[27] Bittel, Kimmig and Schiek 1981.
[28] Dehn 1963.
[29] Haeussler 1994.
[30] Schaaf and Taylor 1975.
[31] Kelheim: Collis 1975, 117-118. Website: Oppida. First towns North of the Alps. Manching: Kuckenburg 2000-151. Altenburg-Rheinau: Dehn 1963, 345-353. Website: Oppida. First towns North of the Alps. Donnersberg: ibid.-333; Collis 1975, 159.
[32] 1975, 117-118.

Niedenstein has a walled space of 70 ha, but the estimation for the occupied zone ranges between 5 and 10 ha.[33] Of the 380 ha site of Manching, probably only a maximum of 80 ha was inhabited.[34] The 170 ha defended site of Schwanberg was not intensively occupied and at Bern it has been suggested that a large part of the 140 ha site should be considered as agricultural land.[35] Only at some of the small defended sites, might the walled area have been completely occupied. The defended area at the Frauenberg, for example, included only 2 ha which was densely inhabited.[36] Nevertheless, some fallow land should still be taken into account also at smaller defended sites. Of the 15 ha at the Freinberg site, only 4 ha are considered to have been utilised for living.[37]

In addition to size, the presence of a defensive structure seems also less important as a determining factor. H. Gerdsen points out that multiple centres of the Middle and Late La Tène period which were not located on a hilltop or were not fortified have been categorised as *oppida*, amongst which the sites of Basel-Gasfabrik, Breisach or Manching (Bavaria, Germany).[38] The latter has often been identified as the *oppidum* of the *Vindelici*. This categorization is based chiefly on the 7 km long wall enclosing the settlement, because the site was not located on a natural elevation in the landscape. La Tène Manching was situated in the low land on a very accessible place between the rivers Paar and Danube. A better study of the site's chronology has, however, shown that the wall was a later addition. This implies that the so-called *oppidum* of Manching was in origin an open lowland settlement rather than a defended hilltop site.[39]

This short overview illustrates that the sites referred to as *oppida* do not represent a group of sites of a specific and well-defined type.

A more complex settlement system in the La Tène period

The theme of (Late) Iron Age urban dynamics has been part of the research agenda ever since the last decades of the 20th century.[40] The understanding of the wider settlement system of this era has nevertheless taken a different turn during recent years. Because of a strong research interest focused on the so-called *oppida* sites and their defended character, many other types of Late Iron Age settlements were paid little attention in previous research. The underlying assumption was that non-defended sites were inferior and subordinate to the *oppida*. This *a priori* deprived low-land and non-defended sites from performing central socio-economic or political functions.[41] The previously mentioned site of Manching, however, disproves this. Nevertheless, open settlements are archaeologically less visible and thus harder to find and investigate. Recent projects, among which the *Durotriges* Project (University of Bournemouth, England), have therefore been created and have a specific interest in Late Iron Age open and rural sites, aiming for a better understanding of this society.[42]

The papers brought together in the *Paths to Complexity. Centralisation and Urbanisation in Iron Age Europe* publication show that the debate surrounding Iron Age urbanism and the role of *oppida* is still evolving.[43] In general, all the contributions advocate a re-evaluation of the Iron Age urban landscape. The concept of urbanism has widened from the simple idea of emerging towns to the outcome of

[33] Ibid., 127-133.
[34] Lorenz and Gerdsen 2004, 128.
[35] Bern: Collis 1975-153. Website: Oppida. First towns North of the Alps. Schwanberg: ibid., 102.
[36] Tiefengraber and Grill 2007, 156.
[37] Collis 1975, 78-79.
[38] Lorenz and Gerdsen 2004, 164.
[39] Kuckenburg 2000, 149-169; Lorenz and Gerdsen 2004, 127; Wendling 2013, 460-461; 463; 466-467; Salač 2014, 65.
[40] Bintliff 1984, 157-174.
[41] Woolf 1993, 223-225; Moore *et al.* 2013, 491; Poux 2014, 157.
[42] Rusell and Cheetham 2016, 14. Website: Durotriges-project.
[43] Fernandez-Götz, Wendling and Winger 2014b.

complex combinations of interactive social processes and changes.[44] In this sense, the appearance of these late La Tène defended centres is no longer considered as an isolated phenomenon typical of the mid-2nd century BC. The presence of urban centres in central Europe is now dated back long before the Late Iron Age or the sites described by Caesar. These were part of processes that had started much earlier and that consisted of settlement dynamics in which both hilltop sites and low land centres alternately performed a central role.[45]

A first phase can be seen in the early Iron Age (800-450 BC) with a phenomenon better known as princely seats or *Fürstensitzen*, such as at the Hohenasperg or Mont Lassois. M. Fernandez-Götz and others have suggested that the 7th century BC site of the Heuneburg is an excellent example of proto-urban and urban developments long before the start of the La Tène period. From 600 BC the site grew to about 100 ha, including a citadel, a lower town and an exterior settlement. Over time a monumental wall and gate were added. The site was densely occupied with houses and workshops whilst the exterior settlement consisted of closely spaced enclosed farmsteads.[46] Estimates for the population reach up to 5,000 inhabitants. However, the site was destroyed by fire and although it was not abandoned immediately afterwards, it is uncertain if the site was still occupied during the La Tène period.[47] Nevertheless, more and more evidence has been discovered to prove a certain degree of continuity between the early Iron Age and the later La Tène period, such as reuse of defensive structures at the site of Dünsberg and Otzenhausen for example. The rapid disappearance of these urban centres, both in the early and Late Iron Age, was probably not due to external factors but was rather inherent to the internal process, experiencing successes and failures.[48] Other sites were not abandoned. The site at the Frauenberg (Murthal, Steiermark Austria) was occupied since the Copper Age, but was continiously inhabited from the Hallstatt period to Late Antiquity. During the La Tène period, the place gained regional importance, as this is indicated by the remains of metal production and minting, in addition to the presence of several sanctuaries. Until the Flavian period, the place maintained its function as significant cult centre.[49]

These earlier signs of centralisation and urbanisation have led to a revision of the traditional model. The idea of a more civilised Mediterranean region, where towns and cities had a much longer tradition, and that of a barbaric and non-urbanised temperate Europe until the Roman period is no longer accepted. J. Collis, therefore, argues now that the urban developments of both regions should be regarded as parallel but separate processes.[50]

New technologies, such as GIS applications, have also encouraged the adoption of more regional and integrated approaches, in which centres did not stand alone, but participated in a local environment formed by its landscape and several different kinds of settlements. This has added a so-called supra-local notion to urbanism in which the dynamics of all sites within a certain area are analysed.[51] It has also changed the ideas of the relationship between the urban space and the enclosed areas.

The case study of Bibracte (Bourgogne, France) and its hinterland as put forward by T. Moore and C. Pomroy illustrates clearly the possible dynamics between several neighbouring towns.[52] For a long time Bibracte, identified as the central place of the *Aedui,* used to be the model *oppidum* for Gaul. More recent research in the vicinity of Bibracte has revealed a high occupation level in Sources de

[44] Salač 2014, 70.
[45] Moore *et al.* 2013, 492-493.
[46] Fernandez-Götz and Krausse 2012, 30-31.
[47] Ibid., 29-31; Smith 2014, v-vi.
[48] Danielisová 2011, 147; Fernandez-Götz, Wendling and Winger 2014a, 12.
[49] Groh and Sedlmayer 2007, 166-188.
[50] Collis 2014, 15; Fernandez-Götz, Wendling and Winger 2014a, 9; Poux 2014, 156-157.
[51] Fernandez-Götz, Wendling and Winger 2014a,6- 8; Filet 2014, 26.
[52] Moore and Ponroy 2014, 146-148.

l'Yonne, 3 km northwest of the *oppidum*. Archaeological investigations showed many structures including houses, roads, terraces and draining systems, not only very similar but also contemporaneous to the occupation in Bibracte. With its 120 ha, it is hard to consider Source de l`Yonne as a suburb of Bibracte. In contrast to previous assumptions, it is now suggested that Source de l`Yonne was not one of the subordinate artisanal outskirts of the *oppidum*, but that it possibly belonged to the same community. In this case one can speak of urbanism outside the defended area, as M. Poux named it.[53]

Because of these new insights, large hilltop sites or large defended settlements are no longer considered as primary Iron Age towns, but rather as an exception within a more complex and wider settlement system. More recently lowland and open sites have gained much more attention and are now considered equal players within the societal developments of the 2nd and 1st centuries BC.[54] The Late Iron Age site of Roseldorf (Nierderösterreich), for example, despite its wooden palisade, is considered as an open settlement. In contrast to many *oppida* with large defensive earthworks but not much interior infrastructure, the site at Roseldorf was densely occupied over its entire 38 ha. Positioned near the Danube, one of the region's most important transport arteries and on the north-south amber trade route, the centre benefited from a strategic location. Big storage rooms on the site indicate that the community living at Roseldorf was supplied with goods from elsewhere. No room for or traces of agricultural activities have so far been found on the site itself. That the centre's economy relied on trade contacts can be seen from the many coins from the *Vindelici* in Bavaria, the *Sequani* in Gaul and the *Norici* and *Taurisci* in southern Austria. The site even revealed some Late Republican coins. The combination of the seven sanctuaries and the many import goods only underline the central position this low-land site performed in the settlement network at the time.[55]

A simple division between town/*oppidum* and village/farm has been proven to be no longer of relevance to the archaeological reality. Recent studies aim for more suitable definitions and categories for Iron Age sites, not using morphological features but functional aspects.[56] This kind of approach is quite recent and it is therefore not surprising that different studies generate different categories.[57] Blöck *et al.* report on a recent study on the Upper Rhine region, conducted by a tri-national research group, aiming to define the different categories of settlement that existed in this particular area.[58] Based on a combination of approximately 10 criteria (Table 1.1), this project distinguished three different types of sites: the **central place**, the **medium settlement** and the **farmstead**.

I will now continue with an attempt to shed light upon the varied nature of the Late Iron Age urban system in the northern Alpine region using this three-part division as a possible and more neutral approach. Since a detailed analysis of all Late Iron Age sites in the entire region and their dynamics would go beyond the scope of this study, only some exemplary sites will be highlighted (Fig. 1.3).

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[53] Moore *et al.* 2013, 495-510; Moore and Ponroy 2014, 146-148; Poux 2014, 157-159.
[54] Moore and Ponroy 2014, 152; Poux 2014, 157.
[55] Holzer 2014, 124-127.
[56] Woolf 1993, 226; Filet 2014, 21-25.
[57] For the same region of the Upper Rhine, H. Wendling identified three different categories, namely large open settlements, enclosed farmsteads and defended hilltop settlements (Wendling 2006, 623-624.) Some attempts are so elaborate that the settlement typology may be more confusing than enlightening. C. Filet's classification of the Late Iron Age sites resulted in abstract types 1 to 6 (Filet 2014, 22-23.).
[58] For a description of the workgroup and the aims of the project, see: Blöck *et al.* 2012, 381-418; Blöck *et al.* 2014, 179-180. The project aims for a better understanding of the settlement dynamics in the Upper Rhine region. The area is a closed environmental chamber, surrounded by the Vosges, the Jura Mountains and the Black Forest. Since the region is today divided over the three modern countries of France, Germany and Switzerland, a need for cooperation and sharing information in order to gain a better understand of the diachronical and historical developments in this area has emerged. Earlier individual attempts were already made, for example by Wendling 2006, 622-624.

Table 1.1: Criteria on which the categories of Central Place, Medium settlement and Farmstead are based as explained by (Blöck, Bräuning, Deschler-Erb *et al.* 2014, 179-182.) XXX = very characteristic for this kind of site, XX = less frequently appearing, X = can be found at this particular type of site.			
	Central place	**Medium settlement**	**Farmstead**
Topographic location			Low land
Fortification	x	x	
Unenclosed	x	x	
Enclosing ditches	x	x	xxx
Storage room	xxx		
Iron production	xxx	xx	x
Non-iron containing metal production	xxx		
Glass production	x		
Coin production	xxx		
Luxury goods	xxx	xx	x
Mediterranean imports	xxx	xx	x

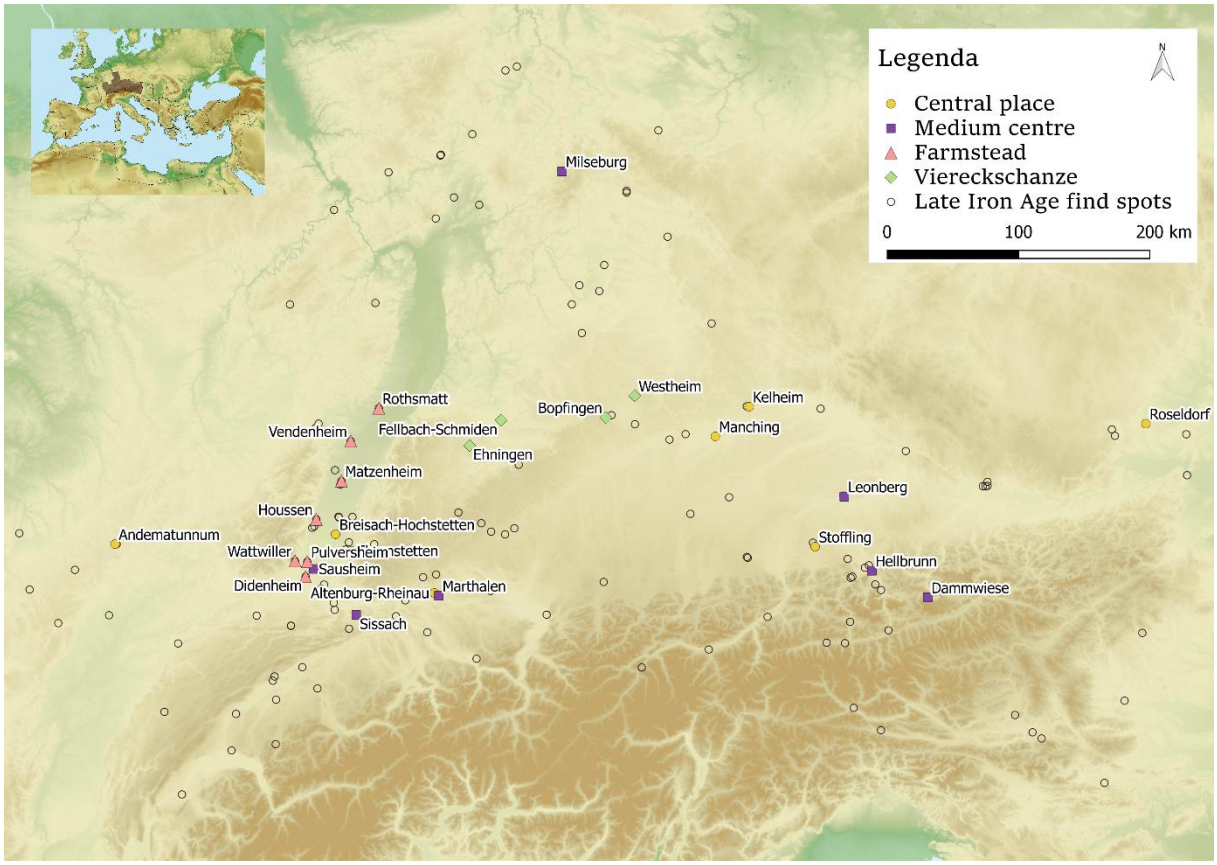


Fig. 1.3: Late Iron Age sites mentioned in the text, surrounded by a selection of many more contemporaneous sites, including the previously mentioned *oppida*

Central places

The sites that are identified by Blöck as central places were rather large and can be found both on hilltops and in valleys.[59] The two hilltop centres of Altenburg-Rheinau with their sizes of 233 ha and 85 ha respectively, the low-land settlements of Manching with 380 ha and Roseldorf with 38 ha, give a good impression of this diversity.[60] The presence of defensive structures is of less decisive importance. The majority of these central places demonstrate evidence of a wide range of different kinds of production. It is remarkable is that the processing of non-iron metal seems unique for this type of centre. At Kelheim, for example, the main occupation on site seems to have included both the mining and processing of metal and iron. Many little quarries have been found within the wall systems.[61] The finds at Manching indicate a mixed economy. Evidence for wood, leather and textile processing have been found, as well as glass production. The thousands of fragments of pottery kilns and of iron slag in the south-western area of the site seem to suggest, however, that iron processing and ceramic production constituted the centre's main business. Calculations estimate an annual production intensity of 3,500 ceramic receptacles, produced in three different workshops employing about 30 people. The centre also included agricultural land. Between the houses, open spaces were created and provided with storage rooms.[62] Granaries for winter and summer crops were found at the site of Roseldorf, too.[63] Furthermore, these so-called central places are characterised by large quantities of luxury and import goods.[64]

The production of coins is exclusively related to these central places. Several sites in the northern Alpine region provide different kinds of evidence for minting. It is assumed that the Lingones, living in *Andemantunnum*/Langres, minted their own potin coins, of which some three hundred have been found.[65] The same is true for the *Helvetii* in Althernburg-Rheinau, where the production of both bronze and potin coins has been attested. It is assumed that the 41 known silver coins were also produced at the centre.[66] Production of local coins is also attested at Breisach-Hochstetten. The imprint of the letters TOC on the coins here might, in fact, refer to the name of a local leader.[67] A casting funnel for the production of coins was found at Ehrenstetten and in Manching more than 140 ceramic melt moulds have been collected.[68] Similar activities are assumed at Roseldorf. At the poorly preserved site of Stöffling, most traces of the settlement are eroded, but in addition to some post-holes, evidence for metal production and hundreds of coins have been found as well as a stamp associated with minting. The evidence at the site in Zurich, where a large block of melted potin coins was excavated, is less clear. This site has also been interpreted as a possible tax station which evidently would explain the presence of the coins.[69] In this regard, Late Iron Age central places could be found within all kinds of environments and were locations where a whole range of activities took place and did not solely serve a refuge function. These central places distinguished themsleves from other centres mainly because of the coinage found there and the high number of import goods.

[59] Blöck *et al.* 2014, 181.
[60] Altenbrug-Rheinau and Manching: Website: Oppida. First towns North of the Alps. Roseldorf: Holzer 2014, 124-127.
[61] Collis 1975, 117-118.
[62] Kuckenburg 2000, 156; 162-165.
[63] Holzer 2014, 125-126.
[64] See section 1.1.3. Contacts between north and nouth
[65] Website: Oppida. First towns North of the Alps.
[66] Fischer 2004, 127-128.
[67] Blöck *et al.* 2014, 181-190.
[68] Ehrenstetten: ibid., 181-190. Manching: Kuckenburg 2000, 162-165.
[69] Fischer 2004, 129.

Medium settlements

The medium centres described by Blöck are much more difficult to distinguish, because of the lack of clear unique aspects. These places tended to be unfortified, although at Leonberg a rampart defined the site's northern edge.[70] Furthermore, these settlements show a wide variation of crafts, amongst which ceramic production seems most common. Sausheim and Sissach are two such open settlements that fit this profile. At the latter, a minimum of twelve kilns indicate a reasonable level of production of fine wares.[71] At Dammwiese, in addition to ceramic production, evidence has also been found for iron processing and salt mining.[72] Evidence of iron production was also attested spread between the 30 round huts of the Milseburg site.[73] Coins and amphorae have proven to be rather exceptional finds at these medium settlements.[74] Marthalen is an example of a site where fragments of amphorae have been found.[75]

Farmsteads or rural foci

Blöck's third kind of settlement is defined by its small size and is often framed by ditches. They appeared exclusively in the valleys and are generally interpreted as farmsteads.[76] The sites of Vendenheim, Houssen and Wattwiller are only a few examples. The ditches of the farmstead at Pulversheim enclosed an area of 3,600 m^2, the one at Didenheim an area of 1,235 m^2. The buildings inside the ditches are usually storage rooms and residential houses. At Diddenheim, for example, in the western and southern area of the enclosure, both underground silos and above ground storage rooms were found. The buildings, including the living houses, are generally relatively large, indicating the level of agricultural activity and the wealth of the inhabitants (Fig. 1.4). At the site of Pulversheim, a sherd of a Dressel 1 amphora was even found, a rather rare find at this kind of site. In general, not many traces of craft production can be attested at these farmsteads, with the exception of some iron production. At Matzenheim, for example, remains of a kiln for iron processing were found.[77]

The description of these farmsteads corresponds closely with the characteristics of archaeological structures better known as *Viereckschanzen*: relatively small areas enclosed by ditches. From the late 19th and early 20th century onwards two interpretations for this kind of site – mainly occurring in southern Germany – arose. P. Reinecke's suggestion that they were estates or farmsteads was superseded by F. Drexel's interpretation of cult places and sanctuaries.[78] Despite the fact that more than 300 of these features are known, little attention was paid to these rural sites until the end of the last century. The first large-scale excavations of such *Viereckschanzen* took place in the 1980s. The results contradicted Drexel's theory that these places served primarily religious functions. Excavations of the 100 m x 90 m large enclosure of Westheim revealed postholes of several large buildings. The site of Bopfingen-Flochberg became the exemplary *Viereckschanze*. Its complex occupation history entailed an early La Tène enclosure that preceded the 50 m x 50 m large Late Iron Age enclosure. Remains of several buildings of various sizes could be related to living, work and storage activities within the enclosed zone.[79] At least seven, but probably more, floor plans of buildings varying in size from 8 m x 5 m to 2.6 m x 2.9 m came out the excavation of the 81 m x 82 m

[70] Website: Oppida. First towns North of the Alps.
[71] Blöck *et al.* 2014, 181-190. For Sissach see also: Collis 1975, 156.
[72] 1975, 79-80.
[73] Ibid., 134.
[74] Blöck *et al.* 2014, 181.
[75] Fischer 2004, 128.
[76] Blöck *et al.* 2014, 181.
[77] Wendling 2006, 623-624; Blöck *et al.* 2012, 386.
[78] The phenomenon of V*iereckschanzen* occurs generally in the area between the river Rhine in the west and the river Inn, and between the river Main in the north and the Alps in the south (Wieland 1999b, 12.).
[79] Krause 1999, 81; 84; 84-87; Wieland 1999b, 11-12.

large *Viereckschanze* of Ehningen.[80] Evidence for cult practices does exist at these sites, such as the cult statue that was found in Fellbach-Schmiden. Today, these *Viereckschanzen* are considered to be the *aedificia privata* or the *loci tutissimi* known from texts by Caesar and Velleius Paterculus, and interpreted as farms or sheltered places.[81] Provided with cult places, wells, storage rooms, houses and even some possible workshops for crafts, it is assumed that some of these places might have served as central focal points for a wider rural area. What is certain is that these sites formed an important element within the wider Late Iron Age settlement system, but more archaeological investigation is needed in order to gain a better understanding of their nature and functioning.[82]

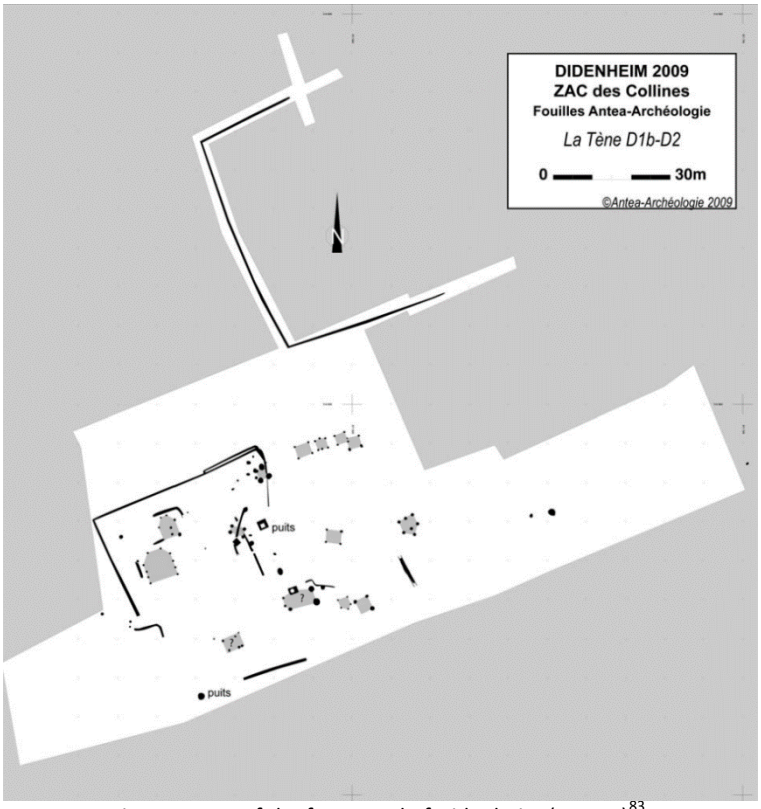


Fig. 1.4: Map of the farmstead of Didenheim (France)[83]

To sum up, this categorisation of central places, medium settlements and farmsteads or rural *foci* also has its imperfections. In order to analyse the settlement pattern in this way, much more highly specific and detailed data are required which are not always accessible for every site. In addition, not every site is easily assigned to a certain category. However, even with all its blanks, the overview above demonstrates that the settlement system and dynamics in the Late Iron Age were much more complex than previously thought under the *oppida* model. The character of the Late Iron Age sites was clearly much more diverse, both in terms of their appearance and the different roles they performed.

1.1.3 Contacts across the Alps

As has already been mentioned, many Late Iron age sites show remains of long-distance contacts with the Mediterranean region, often including amphorae. The foundation of the Roman town of *Aquileia* in northern Italy in 181 BC is considered as an important event for the contacts between Rome, the Italian Peninsula and especially the eastern Alpine region. The expectation is that the

[80] 1999a, 163-175.
[81] Caesar, The Gallic Ware 1.5.2
[82] Wieland 1999b, 15; 1999a, 271-273; 1999c, 79-80.
[83] Blöck *et al.* 2012, 387.

contacts with the Norican tribes in particular will have increased from that point onwards.[84] The Noricans were a group of Celtic tribes living in the region of modern Carinthia (Kärnten, Austria), such as the *Alauni, Ambisontes, Ambidravi* and the *Norici*, to name but a few (Fig. 1.6). It is even suggested that they organised themselves into a kingdom, better known as the *Regnum Noricum* with *Noreia* as its capital. The town is not located, but it is described by Strabo as being two 2,200 *stadia* away from *Aquileia.*[85] Names of certain kings have survived on coins, but exactly how these tribes were governed is not well understood.

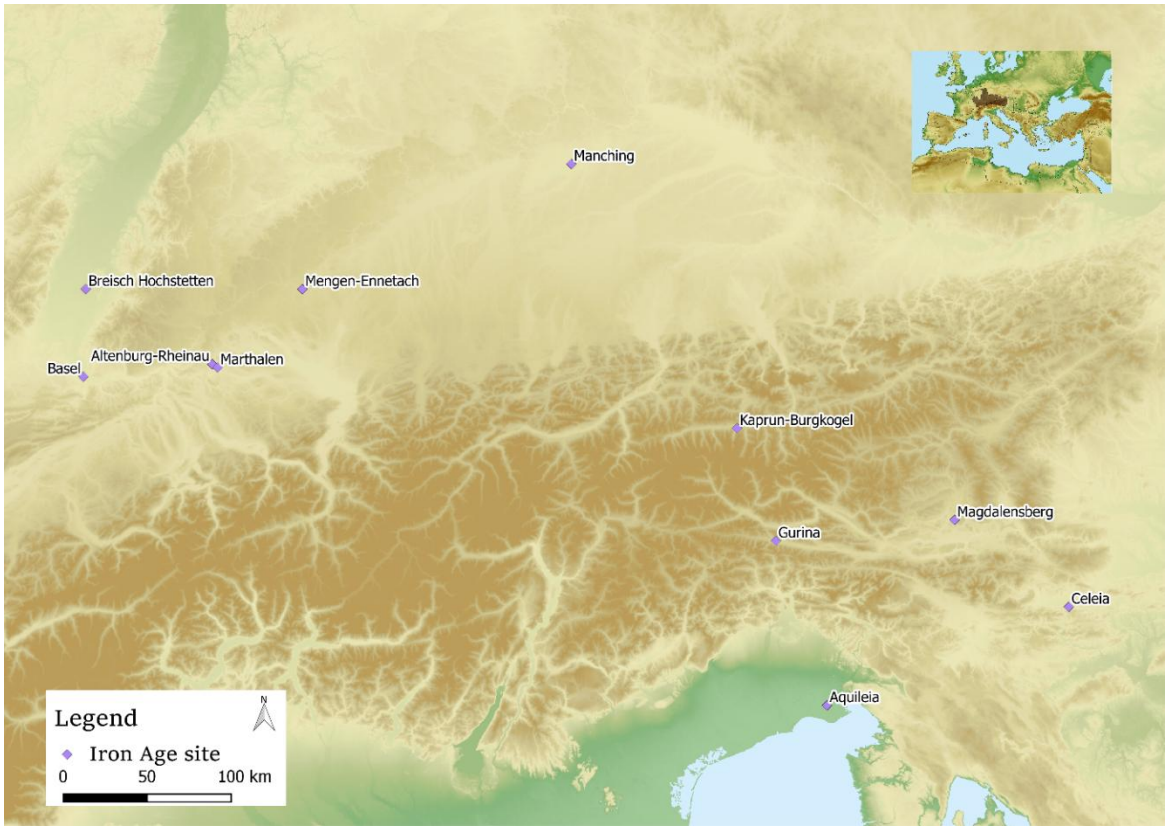


Fig. 1.5: Late Iron Age sites with evidence of trade contacts with the Italian Peninsula

From 170 BC a relationship of *hospitium publicum* is assumed to have been established between Rome and the Norican king Cincibilus, involving a political and economic treaty between both parties.[86] Such a relationship of *hospitium* provided a mechanism by which outsiders might have found protection, support, lodging, guidance and friendship in a foreign community.[87] This *hospitium* allowed the Romans to control the region through good relationships and trade contacts. A large part

[84] Konrad 2012, 27.

[85] Strabo, Geography 5.1.8. Sašel Kos 2010, 87-88; 1997, 39. It is assumed that multiple places within the Norican kingdom might have been named *Noreia*. It is unclear which of these is thought to have been the kingdom's capital. The Iron Age name for the large site on the Magdalensberg was *Virunum*, the same name as the later Roman town. The Magdalensberg is therefore not considered to be a possible location for *Noreia*, although it remains controversial (Konrad 2012, 25-26.). Some scholars suggest that the town *Noreia* most likely was situated in the territory of the Taurisci (Gleirscher 2007, 106.). More precisely the site of Gracarca has been suggested as a possible capital centre (Gleirscher 2005, 108.). The territory of the kingdom presumably reached as far north as the Danube and Inn rivers. The modern region of Steiermark (region of modern Graz in Austria) is considered part of the kingdom which must have been bordered by the high mountain tops of the Dolomites and the Karawanks in the south (Kneißl 1979, 262.).

[86] 1979, 262; Sašel Kos 1997, 21-24; Scherrer 2002b, 12-13; Šašel Kos 2010, 209-210; Konrad 2012, 27.

[87] Nicols 2011, 430 and 436. Unfortunately, I have not been able to gain access to G. Dobesch's publication on the *hospitium publicum* between Rome and Noricum (Dobesch 1976.).

of the Amber route crossed the Norican Kingdom. In addition, with the inhabitants of this part of the Alpine region as their friends the Romans had secured their northern border.[88] In return, when the Noricans were attacked by the *Cimbri* and other neighbouring tribes, they received help from the Roman side.[89]

One of the clearest illustrations of Roman influence and trade contacts is the Norican site located on the Magdalensberg in modern day Carinthia (Kärnten, Austria). The site is located in a region rich in all kinds of natural resources. We know from Ovidius and Pliny that the Romans had a keen interest in the so-called *ferrum Noricum*, Norican iron. Skillfully crafted Norican products were traded throughout the whole of Italy. It must be significant that a Roman centre emerged precisely in the political centre of the Noricans, in the vicinity of important iron mines. It is still an matter of debate whether a late La Tène centre existed at the Magdalensberg. A 17 ha large enclosed area with several occupation zones has been discovered and the presence of a Late Iron Age cult place has been suggested. However, more investigation is needed to provide a better understanding of Magdalensberg's earliest occupation.[90] From the mid-Augustan period onwards (35BC), if not earlier, the summit of the hill became dominated by a Roman podium temple. Gradually, a real emporium and trade centre developed on the southern slope of the hill. At the same time as the temple complex, a forum-like square was created in this zone of 110 m x 42 m in dimension. A *basilica* of 30 m x 17 m was established on the east side of the square. This *forum* was later rebuilt several times. Based on archaeological finds, wall paintings in the houses and the high number of Italian import goods, it is suggested that this place was mainly inhabited by traders, most likely from the region of Aquileia.[91]

Other evidence suggests that Magdalensberg was not the only Roman emporium in the region. *Gurina*, in south-west Austria, for example, had been occupied during the Hallstatt period and is interpreted as the centre of the *Ambilini*. Similar to the centre on the Magdalensberg, *Gurina* was situated in an iron ore-rich environment. It was probably the mining and the production of iron that made this centre important. Contacts with northern Italy are demonstrated by small finds, items such as fibulae but also inscriptions with Etruscan writing. Despite these early signs of trading connections between the region of Carinthia and northern Italy, the heyday of the sites of Magdalensberg and *Gurina* started only after the Roman conquest – in around 16-15 BC.[92]

Late Iron Age trade contacts with the Italian peninsula were not restricted to the Norican territory. Elsewhere in the northern Alpine region the rivers such as the Rhône and the Rhine provided good transport routes and products were traded over long distances via smaller streams or land roads. The Late Iron Age site of Basel-Gasfabrik was located in a fluvial area of the Rhine, an excellent position for a small harbour or quay that allowed trade.[93] A similar topographical choice can be seen at the site of Breisach-Hochstetten.[94]

Most attestations of Mediterranean import goods have been found at Late Iron Age sites described as central places in the previous section. These are most frequently amphorae sherds, or North Italian ceramics, such as Campana wares. The site of Manching, for example was strategically situated on the river Paar, which gave access to the Danube. These rivers were vital arteries that allowed the sites to flourish. In addition to the import of Italian wine and fine ware, also indications for trade with more northern regions, such as Bohemia, are found in Manching in the form of slate

[88] Sašel Kos 1997, 28-31.
[89] Winkler 1986, 7-10.
[90] Dolenz *et al.* 2009, 235-237.
[91] Ibid., 238-249.
[92] Gamper 2009, 1-8; 2015, 270 - 274.
[93] Blöck *et al.* 2014, 181-190.
[94] Wendling 2006, 626.

stone and coal.[95] Similar Italian imports have been found at the big centre of Altenburg-Rheinau, as well as a *denarius* from 106 BC. It is even assumed that Italian traders were stationed here, based on lamps fueled by olive oil, a practice that was unknown in this area before the Roman period.[96] It is assumed that trading goods via these central places also reached smaller sites in the hinterland. The amphorae found in Marthalen were presumably distributed from the large centre of Altenburg-Rheinau.[97] Amphorae were also found at the Late Iron Age site of Mengen-Ennetach. It is assumed that either the community itself was directly involved in this trade or that a currently still unknown nearby central place should have existed.[98]

A last example should emphasise that these trade contacts worked in both directions. The many Italian import goods found at the sites in the northern Alpine region give us a clear indication of what was brought from south to north, amongst which Italian wine and fine wares. What was traded southwards, in what shape and quantities is within most archaeological assemblages less clear. The site at Kaprun-Burgkogel is therefore very informative and stresses again the importance of iron mining and production carried out during the Late La Tène period in the northern Alpine region. Here, iron bars weighing 6.54 kg, equal to exactly 20 Roman pounds, were found. This was undoubtedly a specialised production intended for the Roman market.[99]

The presence of so many raw materials, such as metals or salt, will have made the region attractive to the Romans, but cannot be considered as the only reason for its incorporation. That had other underlying causes.

1.2 The Roman conquest

The Roman conquest undoubtedly had an impact on the settlement system of the Late Iron Age. The conquest of the Alpine mountains and the Danubian region are described in various ancient historiographical sources. The *Commentarii de Bello Gallico* by Caesar are very informative concerning the conquest of Gaul and the southern part of the later province of Germania Superior. In his *Annales*, Tacitus too wrote a whole chapter on the Germanic War fought during the reign of Augustus, just as Florus did. Strabo and Cassius Dio are also enlightening in view of the conquest of the Alpine region. Although history has not rendered us a complete overview of the conquest of the northern Alpine region[100], many modern scholars have tried to summarise and reconstruct the Roman campaigns in which the lands of the Rhine and Danube were ceded to the Roman Empire. Most of the introductory books on particular regions indeed include an overview of the most important military actions related to conquest.[101]

In what will follow a short description will be given of the main events that brought to an end to the autonomous rule of the existing Late Iron Age society described in the previous sections. Discussing the events in chronological order, we will first focus on the Gallic War, then the incorporation of the Alpine region, and finally the later developments which took place along the Rhine.

[95] Sievers 2004, 67-72; Kuckenburg 2000, 166.
[96] Fischer 2004, 128-131.
[97] Ibid., 128.
[98] Wieland 2004, 118-119.
[99] Höglinger 2004, 193.
[100] Mommsen 1968, 155-156; Winkler 1986, 198. Winkler emphasises that the sources dealing with the conquest of *Noricum* are very scarce and often from a later date.
[101] Some examples: Drack 1958; Filtzinger, Plack and Cremer 1976; Baatz and Herrmann 1982; Cüppers 1990; Czysz 1995; Flutsch, Niffeler and Rossi 2002.

1.2.1 Caesar and the Gallic War

In March 58 BC, tension between the Gallic tribes resulted in an planned invasion into Gaul, led by the *Helveti*. This gave Caesar – at that time consul of *Gallia Narbonensis* – a fundamental reason to intervene. Caesar operated from the military base in *Geneva*/Genève, which around 121 BC had been conquered in a battle against the Allobroges in one of the first expansions westwards. The Gallic War lasted till 51-50 BC. By the end of the war, the historical narrative tells us that Gaul was an exhausted country, where the previously flourishing centres were left in ruins while its rebellious inhabitants were killed or captured and consigned to slavery. Whether or not this is true, these eight years also resulted in an expansion of Rome's territory, which now strechted from the river Rhine to the North Sea, involving the land between the Alps and the Pyrenees. After his victory, Caesar created the province of *Gallia*, which was later divided into three smaller administrative units: *Gallia Aquitania*, *Gallia Belgica*, *Gallia Lugdunensis*. The new constellation, however, caused new frictions among certain Alpine tribes, such as the *Rhaeti* and *Rauraci* who started to cause unrest. The veteran colonies *Iulia Equestris*/Nyon and *Augusta Raurica*/Augst, constituted under Ceasar and Augustus, have been considered as an attempt to demonstrate some Roman power in the region and to create a buffer between the Lake of Genève and the Jura Alps in order to protect the new province.

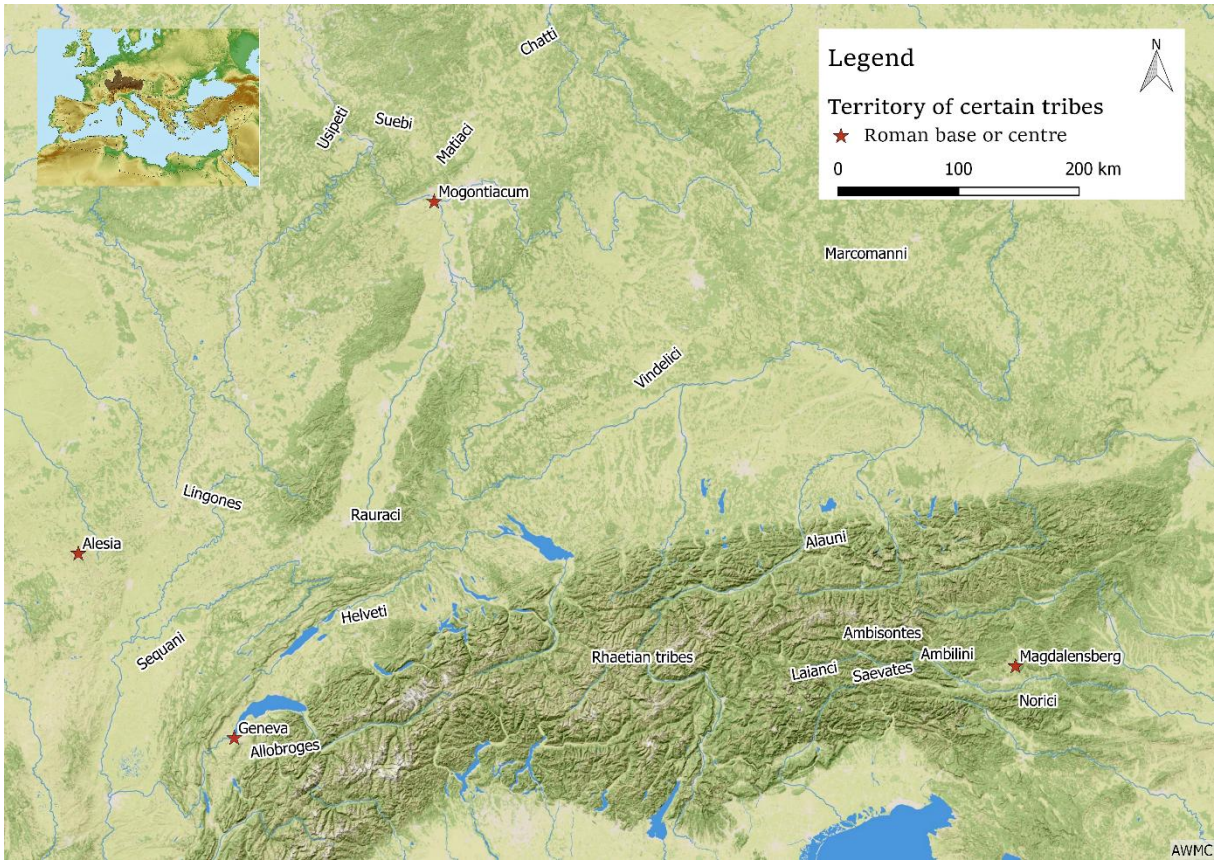


Fig. 1.6: Some important Roman (military) bases during the years of the conquest highlighted between the territory of some Iron Age tribes mentioned in the text

1.2.2 The incorporation of the northern Alpine land during the late 1st century BC

The western Alps were conquered under Augustus between 27 BC and 22 BC. It is an area that, after the Gallic and Civil Wars, had been transformed from a peripheral area into an important passage to the western territories. The Little and Great St Bernhard Passes, for example, would be the incentives for the later expansion of the road network. Under the reign of Augustus these western and southern Alps had fallen under Roman rule, but the Po valley was still not immune to possible attacks. Therefore, the whole Alpine region, stretching as far as the Danube, would need to be incorporated.

A few decades later, the Pannonian and Norican tribes, living north-east of the Alps, challenged the Romans by invading Istria.[102] They failed and were defeated by Roman troops under the leadership of Drusus and Tiberius. The exact date of the incorporation of the Norican territory into the Roman Empire is disputed. Suggestions vary between 16 BC to AD 6, but 15 BC is most generally accepted.[103] Overall, few literary records concerning the defeat of the Norici have been preserved. This silence of the sources has led to the assumption that the conquest proceeded peacefully and literally, as Strabo wrote, in a campaign lasting just one summer.[104] Confirmation has been found in Festus' thoughtful play on words that the Norican provinces joined the Empire.[105] The absence of most of the Norican tribes on Augustus' *Tropaeum Alpium* might indeed imply that their defeat was not of such a heroic nature.[106]

The narratives about the conquest of the Norican tribes contrast with the impression Cassius Dio gives us about the conquest of the *Rhaeti* and *Vindelici* who inhabited the central Alpine region. On the orders of Augustus, Drusus was sent to the Italian border and Tiberius to Gaul in order to stop the Raetian tribes from invading Roman territory. When the main troubles were solved, both leaders invaded Raetia. Whether they attacked the Raetian land on two different sides is disputed. Contrasting with C. S. Sommer's theory about a desolated country, Cassius Dio refers to a large population of men in open revolt.[107] Again, there is uncertainty about the finalisation of the *Raeticum Vindelicumque Bellum* in 14 BC, but it seems likely that the defeat of the *Norici* was quickly followed by the incorporation of the central Alps.[108] However, the rapidity with which Drusus and Tiberius conquered the rest of the Alps has raised the idea that the annexation of the Alps was the result of reactions to political developments rather than a grand strategy. The Raetian Alps were the only missing link to connect Gaul and the Rhine region with the more eastern Danubian provinces, promising an improvement of both communication as well as accessibility.[109]

1.2.3 Expansions along the Rhine from the time of Augustus to Domitian

Directly following upon the Alpine conquest, Drusus undertook campaigns from the military base at *Mogontiacum*/Mainz (Fig. 1.6) to expand the Roman territory up to the Elbe river. In contrast to earlier attempts, some of his actions were successful. He located military units along the Meuse, Elbe and Weser. According to Florus 500 forts were distributed along the Rhine, but this might be an exaggeration.[110] When Drusus died in 8 BC, a reasonably calm period followed lasting for almost a decade, but because of hostile tribes living in the area between the Rhine and the Elbe and the growing power of the Marcomanni in the region of Bohemia, Rome prepared for new battles. Under the lead of Tiberius, several revolts were suppressed.[111] Varus' catastrophic defeat of AD 9 in the

[102] Cassius Dio, Roman History 54.20.
[103] Alföldy 1974, 52-57; Fischer 2002, 15-17.
[104] Strabo, Geography 5.6.207.
[105] Festus, 7. Alföldy 1974, 56. A similar but slightly different interpretation can be found in Banchich and Meka's translation: *when all the Alpini had been conquered, the provinces of the Norici were added*.
[106] Winkler 1986, 189; Konrad 2012, 30.
However, Florus' short description of the Norican War contrasts with the interpretation of that of a quiet conquest (see footnote 105 and 106): "*How savage these Alpine people were is proved by action of their women, who, when missiles failed, dashed out the brains of their children against the ground and hurled them in the faces of the Roman soldiers*.", (Florus, The Norican War, Epitome of Roman History, 2.22).
[107] Sommer 2008b, 209-210. Cassius Dio, Roman History 54, 22.
[108] Heuberger 1932, 58. Alföldy 1974, 56; 299 (footnotes 11 and 19).
[109] Cüppers 1990, 53; Dietz and Czysz 2001, 46-47; Sommer 2008b, 220. The opposite has been suggested in the past. According to Kneißl, for example, the Alpine campaigns were the preparation for a wider expansion policy, namely to establish the Danube and the Elbe river as the borders (Kneißl 1979, 261-262.).
[110] Florus, The German War, Epitome of Roman History, 30.26.
[111] Baatz and Herrmann 1982, 44-50.

Teutoburger wood made Augustus fear for the safety of Gaul and Rome, but again Tiberius successfully reinstalled peace.[112] Under the reign of the latter, Germanicus had to deal with internal revolts caused by dissatisfied soldiers.[113] Because of the lack of major military successes, Tiberius put an end to the Elbe dream and reinforced the left bank of the Rhine river with auxiliary forts.

For almost thirty years little changed; it was only under the Flavian dynasty that the final battles concerning Germania were fought. The anarchy of the year of the four emperors had left many forts on the Rhine unmanned, a situation that Germanic tribes on the Lower Rhine took advantage of. One of the biggest revolts was led by the *Batavi*, and supported by other Germanic tribes, such as the *Chatti*, *Usipetes* and *Mattiaci* (Fig. 1.6). Once the temple of Jupiter in Rome burned down as a consequence of the mutinies of the civil war, inhabitants of Gaul believed that Roman rule had come to an end and they joined the *Batavi*. It was only under the reign of Vespasian that a degree of order was brought back to the region, many forts were restored and plenty of new ones were built. He also put an end to the practice of recruiting local and indigenous people in the auxiliaries, as they had proved to be unreliable. From then on soldiers from Hispania and the Danubian region were stationed along the Rhine. Nevertheless, in AD 89 Saturninus – governor of Germania Superior – did manage a revolt accompanied by Germanic allies. Domitian defeated them at Andernach and at Remagen. To avoid similar uprisings, a legion was stationed at Mainz and at Strasbourg. Domitian's recognition of the *Chatti* as *foederati* is considered to have been the final act of the expansion at the Rhine. It looks rather a poor victory weighted against the army of 30,000 to 36,000 soldiers he had assembled for the Chattian War.[114]

1.3 A gap of 50 years? New indications for continuity with the Roman period

For a long time it was believed that between the second half of the 1st century BC and the beginning of the 1st century when the first Roman centres were constructed, large parts of the northern Alpine region were abandoned. This timespan corresponds roughly with the period of the Roman conquest. Indications of a collapsing settlement pattern seemed to point in the direction of a settlement vacuum. Archaeological research has revealed discontinuity and dislocation between Late Iron Age sites and early Roman settlements in the region. The sites of Altenburg-Niedenstein, Heidetränk and Gründberg, for example, all seemed to have been spontaneously abandoned around the middle of the 1st century BC.[115] Archaeobotanical analyses also indicated a hiatus in the use of the land. Literary sources were read in favour of the idea of a deserted land, such as Cassius Dio's words on the conquest of *Raetia*: *the land had a large population of males and seemed likely to revolt, they deported most of the strongest men of military age, leaving only enough to give the country a population, but too few to begin a revolution.*[116] The desertion of the Late Iron Age site of Dünsberg in around 30 BC, for example, has been associated with the campaigns of Drusus.[117] The material culture found in the archaeological layers corresponding with the early Roman period seemed to indicate a non-local population originating from areas such as Gaul, Pannonia and Italy, in itself a finding that again endorsed the idea of a desolated land.[118]

[112] Cassius Dio Geography, 56.18-21; Florus, The German War, Epitome of Roman History, 30. 29-39.
[113] Tacitus, The Annals 1. 17, 33 and 51.
[114] Mommsen 1968, 156-159; Baatz and Herrmann 1982, 66-83; Cüppers 1990, 64-73; Schönberger 1969, 155-159; Klee 2013, 35-44. Tacitus also describes how Domitian had bought slaves and dressed them up as captives in order to disguise his poor victory (Tacitus, *Agricola* 39).
[115] Altenburg-niederstein: Collis 1975, 127-133. Heidetränk: Ausbüttel 2011, 397. Gründberg: Kastler 2004, 211.
[116] Cassius Dio, Roman History 54. 22.
[117] Ausbüttel 2011, 397. Website: Oppida. First towns North of the Alps.
[118] Sommer 1990; Wolff 1996 , 540; Sommer 2008b, 212-214; 215; 221.

Not everyone, however, continues to support the idea of a 50-year occupation gap. Despite the absence of archaeological evidence for Iron Age predecessors, the place names of many early Roman centres carry references to Celtic roots. *Brigantium*/Bregenz seems to refer to the tribe of the *Brigantii* and similar suggestions have been made for *Cambodunum*/Kempten, *Abodiacum*/Epfach and *Bratannium*/Gauting.[119] In addition, the realisation has grown that the remains of this - in archaeological terms - short period of time might not have been recognised due to the use of more perishable construction materials or might be difficult to distinguish from that of earlier and following decades, leading to the false image of a hiatus in occupation.[120] The "*Transalpine Mobility and Cultural Transfer"* project hosted by the Ludwig-Maximilians-University of Munich encompasses promising interdisciplinary research concerning the origins specifically of the population of *Raetia*. Preliminary results indicate a heterogonous population.[121] Although the large Late Iron Age centres do seem to have been abandoned, more recent research has brought to light evidence of continuity in the rural population, particularly through the investigation of more rural contexts and cemeteries.[122]

1.3.1 The site of Manching and villae as evidence for continuity

The Late Iron Age site of Manching has already been mentioned several times and can again be considered a textbook example in the light of the abandonment of flourishing sites in the northern Alpine region just before the Roman conquest. For a long time the consensus was that the site was destroyed violently, resulting in the end of the centre around the middle of the 1st century BC.[123] However, S. Sievers has said that, based on other examples from Bohemia, the remains of fire – mainly at Manching's main tower - do not necessarily indicate the abandonment of the site. She has therefore suggested a much more gradual decline of the settlement, influenced by the silting of the tributary river of the Paar. The decreasing flow of the stream will eventually have led to a loss in accessibility to the site, in trade contacts, and thus in the overall attractiveness of the place in general and as a central place.[124] The presence of an early Roman villa within the area of the Late Iron Age site of Manching is today regarded as an indication of a continuous occupation, also after its decline as a major centre, but more evidence is needed to prove this.[125]

There are more such villae in the vicinity of Manching whose dates of occupation argue against a long hiatus. These are the villa-sites of Eching, Manching-Seehofer, Pichl and Rockingen (Fig. 1.7).[126] At the 6 ha La Tène settlement in Eching, no traces of a sudden or violent end to the inhabitation have been found, but interestingly, in the southern area of the settlement, remains of another early Roman villa have been discovered.[127] Similar observations have been made in the region of modern Salzburg, more precisely at the sites of Hellbrunn and Loig. At Hellbrunn, a Roman villa was constructed on top of the previous Late Iron Age settlement, which was probably largely abandoned in favour of the Roman town in the valley. North-east of the *pars urbana* of the Roman villa of Loig, a

[119] This question of continuity was one of the issues discussed at the *Transformation from military base to civilian settlement in the archaeological record* symposium held from the 23rd to the 25th of October 2014 in Innsbruck. Many early Roman places in the region often started as military base. Based on their place names, it is assumed that these bases were erected in the vicinity of Late Iron Age centres which up to present day have not yet been identified. The Iron Age centre of *Brigantium*, for example, has not yet been found and the Roman site has not revealed many Iron Age artefacts to assume place continuity. It is, of course, not inconceivable that the former Celtic remains were not recognized during older excavations.
[120] Zanier 2004, 239-241.
[121] Grupe *et al.* 2015, 39-43.
[122] Konrad 2012, 24.
[123] Collis 1975, 104-117; Kuckenburg 2000, 1419-169.
[124] Sievers 2004, 67 ev.
[125] Hüssen 2004, 77; Wendling and Winger 2014, 132-138.
[126] Hüssen 2004, 77-79.
[127] Ibid., 81.

layer with a mixture of late La Tène material culture was found.[128] South of the Alps in Retznei (Steiermark, Austria) two spacious pre-Roman buildings were found beneath the structures of the large Roman villa site. The later villa even seems to have followed the same orientation as its predecessors.[129]

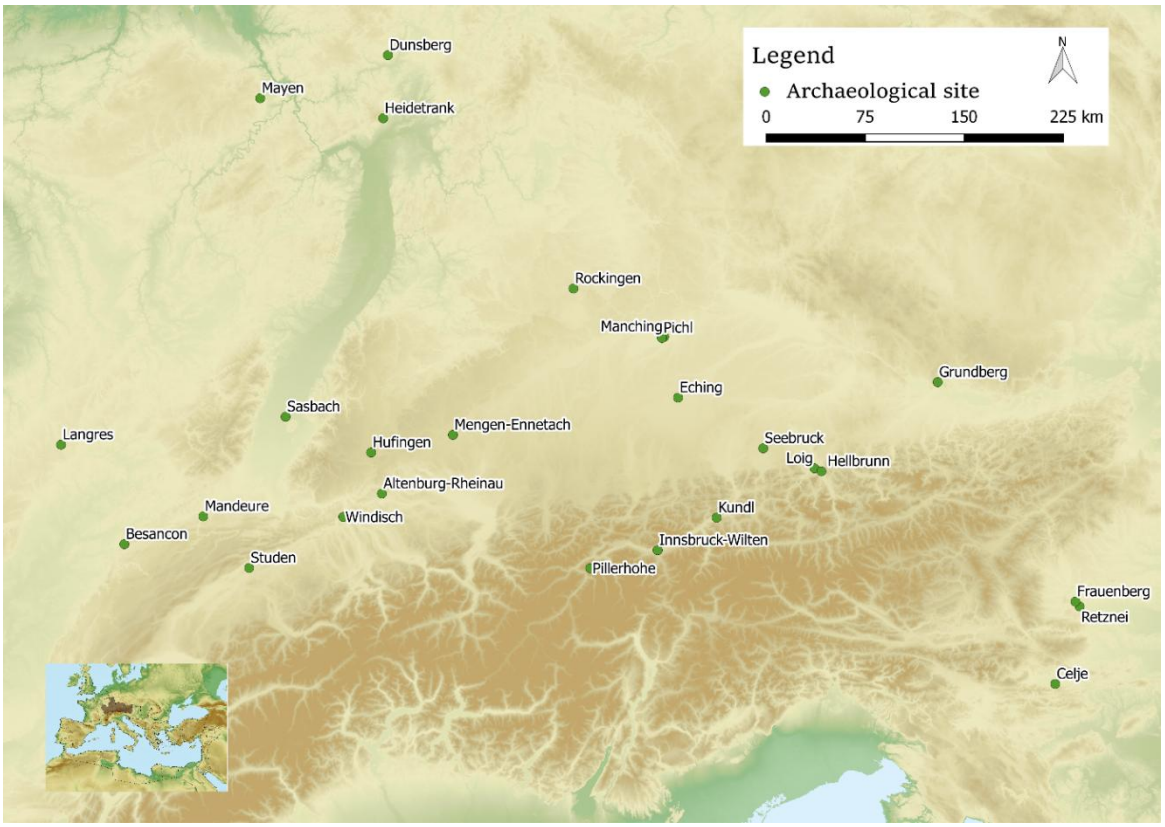


Fig. 1.7: Sites with indications for continuity between the Late Iron Age and the early Roman Period

1.3.2 Necropoleis and early Roman forts as evidence of continuity

Because of a research agenda with an increased focus on the rural character of the society during the Late La Tène period, more and more remains of Late Iron age habitation have been found, often proving continuity. Sometimes, the evidence is more indirect. Certain necropoleis in the Alpine region, for example, exhibit burial traditions that continue from the Late Iron Age into the early Roman period, such as the cemeteries of Kundl, Innsbruck-Wilten and Pillerhöhe. Here, local burial traditions were maintained, but grave finds were a mixture of indigenous and Roman style ceramic receptacles and *fibulae*. The existence of pre-Roman settlements can be presumed in the vicinity of these necropoleis.[130] Investigation of the finds belonging to the La Tène cemetery excavated near to the modern district court of Mayen provided proof of an uninterrupted burial practice from around 100 BC until the imperial period with only a small decrease in intensity at the beginning of the 1st century AD.[131]

Moreover, a stronger correlation than previously accepted seems to exist between early Roman forts and Late Iron Age sites. The site of Hüfingen, for example, was mainly known because of its Claudian fort. Based on pre-Roman finds, the presence of a Late Iron Age settlement was accepted but was thought to have ended in around 50 BC. Nevertheless, more recently a *fibula* was found which might

[128] Loig: Moosleitner 2004b, 179. Hellbrunn: ibid., 177.
[129] Konrad 2012, 39.
[130] Lang 2004, 199-204.
[131] Oesterwind 2012, 52; 72.

indicate the coexistence of the Late Iron Age site with the first Roman occupation.[132] Also, at Mengen-Ennetach both a Claudian fort and a contemporary Late Iron Age enclosure are attested.[133] The early Augustan fort in Sasbach was constructed behind the Late Iron Age ramparts, giving the impression that old access roads were maintained and still in use.[134] At Windisch, occupation structures marked by a strong Roman military character were erected within the earthen and timber ramparts of the Late La Tène settlement in around 15 BC. These strucutres are probably the remains of an early military base that was constructed here at the time of the Alpine conquests.[135] The possible relationship between the large Late Iron Age site of Altenburg-Rheinau and the Augustan fort of Dangstetten is somewhat more subtle. Based on coins, the end of the Altenburg-Rheinau site is dated between 50 and 15 BC. Similarities within the ceramic finds and other handicraft products suggest that craftsmen who were active at Altenburg-Rheinau moved to the fort at Dangstetten, which was erected somewhere in the last decades BC and served as headquarters for the campaigns against the *Rhaetii*.[136]

1.3.3 The uninterrupted use of Late Iron Age sanctuaries

A third case for continued occupation relates to Late Iron Age sanctuaries and religious places which remained in use during the Roman period, such as the sites of *Bedaium* in Seebruck and *Petinesca* in Studen.[137] This phenomenon is also clearly attested at several Roman centres with an Iron Age precedessor. In contrast to the Danube and Rhine region, the continuity question is of less relevance concerning Roman Gaul since many Iron Age sites here remained inhabited and underwent modifications of a Roman character during the decades immediately following the conquest. This means, however, that the remains of this very early Roman period are often deeply buried beneath many layers of later occupation phases, up to 4 m or 5 m in some cases. Those sites where it is possible to observe the changes that took place during and just after the conquest are rare. At the Late Iron Age centres of Besançon, Langres and Mandeure, for example, it has been possible to observe gradual changes in the lay-out of these sites, which dated to the first decades after the conquest or the reign of Augustus. Streets were constructed or realigned and monumental buildings in stone, such as gates, were erected. Overall, it appears that the urban spaces were given a new Roman strucutre, with the exception of the religious areas and sanctuaries. These locations were left in place, were respected and remained untouched at all three sites.[138]

The continuity of sanctuaries is also known from sites elsewhere in the northern Alpine region. The 2 ha densely occupied settlement at Frauenberg (Leibnitz, Austria) owed its existence mainly to its sanctuary and shows many similarities with contemporary temples in northern France. This sacred place was erected somewhere between 180-120 BC and remained in use until the mid-Augustan period.[139] The excavators noted that the occupation underwent a minor downturn during the Augustan-Tiberian period, but nevertheless the sanctuary continued to flourish and, judging from the archaeological assemblages, Roman objects and costumes gradually became more common. It was only from the Flavian period onwards that the site received a Roman make-over and the indigenous temple was replaced by a typical Roman podium temple.[140] The Iron Age temple on the periphery of

[132] Wieland 2004, 113.
[133] Ibid., 118-119.
[134] Website: Oppida. First towns North of the Alps.
[135] Carroll 2013, 7000-7001.
[136] Fischer 2004, 127-131; Roth-Rubi 2004, 133; Bräuning 2012, 479; 486.
[137] A more elaborate discussion of these site will follow in chapter 3.
[138] Besançon: Vaxelaire and Barral 2007, 31; Barral, Gaston and Vaxelaire 2011, 91-103. ; Langres: Barral *et al.* 2014, 367-369.; Mandeure: Thivet, Nouvel and Barral 2011, 153.
[139] Schrettle 2015, 295-296.
[140] Tiefengraber and Grill 2007, 156.

the Roman town in Celje (Styria, Slovenia) was kept in use till 50 AD, but was demolished when the entire town quarter was rebuilt because of the expanding centre.[141]

Sanctuaries, together with necropoleis, rural sites and forts have delivered an increased amount of evidence of habitation in the northern Alpine region before, during and just after the Roman conquest. However, as C. S. Sommer argued, the archaeological evidence does not exclude the possible transfer of different population groups into the region. According to C. S. Sommer, the archaeology does not allow precise dating of the use of the necropoleis and of the attributions of the material culture to specific peoples.[142] Additionally, the habitation at many places took a different form, such as the *villa* site at the previous centre of Manching. It has to be acknowledged that the urban landscape was in transition. Finally, while the Late Iron Age settlement structures were changing, the Romans filled the landscape with the establishment of military camps and administrative centres, whereby existing structures were sometimes further developed and elsewhere ignored.

1.4 The first Roman centres

In addition to the appearance of Roman practices and culture at already existing centres, larger Roman centres were built under Roman supervision. These seem to have played a role in the early military and administrative organisation of the area. It is remarkable that most of them were abandoned not long after their creation or replaced by another centre. I will distinguish between veteran colonies, possible administrative centres and legionary and military bases.

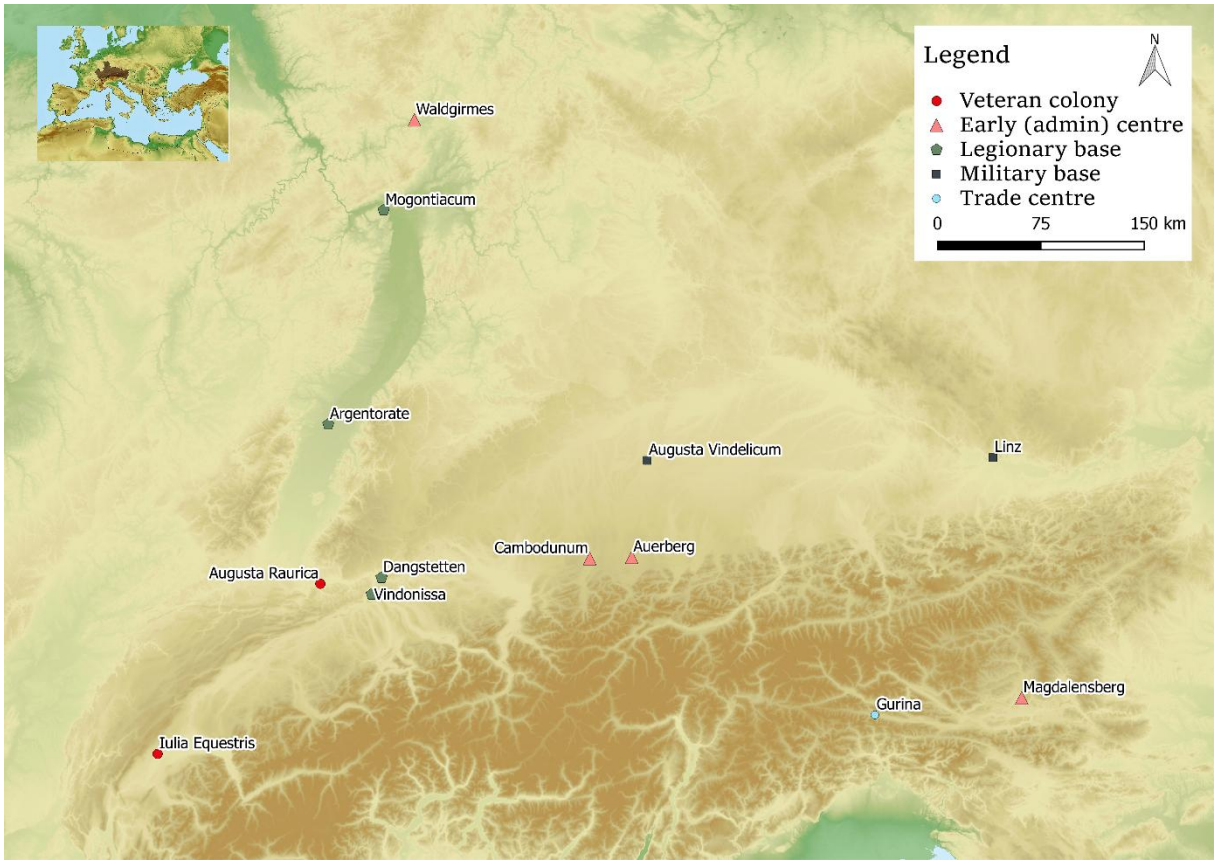


Fig. 1.8: Different kind of early Roman centres in the northern Alpine region

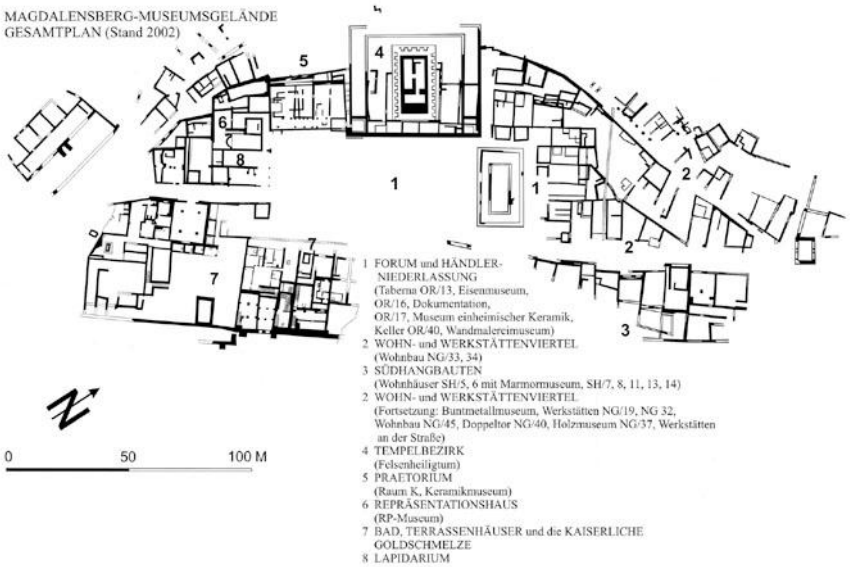
[141] Schrettle 2015, 301.
[142] Sommer 2008b, 211-217.

1.4.1 Veteran colonies

In the entire northern Alpine region there were only two veteran colonies, Roman centres created *ex novo* and inhabited mainly by Roman citizens and veterans, namely the *coloniae Iulia Equestris*/Nyon and *Augusta Raurica*/Augst (Fig. 1.8). Both were located at the foot of the Jura mountains, north of the Alps. For a long time the foundation of these two centres was interpreted as an attempt by the Romans to demonstrate their power and to maintain a state of peace in the newly conquered region of eastern Gaul. This vision has become outdated.[143] The presence of Roman veterans here is no longer regarded as having a military purpose, since the location of both centres was not very strategic with regard to the unrest in more northern areas of Gaul. Consequently, M. Poux has suggested a more administrative function.[144]

1.4.2 The first administrative centres?

Apart from the two veteran *colonies,* certain other sites have revealed structures which probably belonged to some aspect of Roman infrastructure supporting the administrative organisation of the new territory north of the Alps. The trade centres of Gurina and Magdalensberg, which were mentioned earlier, both flourished for a few decades after the Roman conquest. A 40m x 25m large trade complex, consisting of 22 rooms situated around an *atrium* is the best illustration of the business that took place in Gurina. House 4 has been identified as an officer's house. Together with the many military objects that have been found on site, Gurina is considered a key point in the control over the Plöcken Pass.[145] At Magdalensberg a large complex 80m in length was built at the south-west side of the *forum*. After the fire of AD 14, the *forum* area rose again from the ashes with reconstruction works and the creation of a new temple domain with a Gallo-Roman temple and a temple for the imperial cult as well as a new production quarter for metal and bronze (Fig. 1.9). Graffiti show trade contact with Africa and Asia Minor. It is assumed that within the infrastructure of the Magdalensberg *emporium* governmental and administrative tasks were also fulfilled. Based on coins, both trade centres were probably abandoned by the mid-1st century AD. This might have been related to an administrative reorganisation that was taking place around that time and the recognition of five chartered towns in the area.[146]



[143] Poux 2005, 12-14; Brunetti and Henny 2012, 79-80.
[144] Poux 2005, 14.
[145] Gamper 2009, 5-8; 2015, 274.
[146] Piccottini 1977, 276-289; Dolenz *et al.* 2009, 241-284; 260; Gamper 2015, 270-272.

Fig. 1.9: Ground plan of the emporium at Magdalensberg[147]

Unexpectedly, some ceramic sherds were found in Waldgirmes along the river Lahn in the late 1980's, which were later confirmed to be of Roman manufacture. It was the start of a new research project that had different outcomes than expected. The site in Waldgirmes was located farther north than any other Roman station in the vicinity, east of the Rhine in the territory the Romans tried to conquer several times in their effort to expand the Empire to the Elbe. Since the first geophysical surveys showed the outlines of a 7.7 ha enclosed area, it was assumed that an early Roman fort was constructed here to support the conquest's progress northwards. The excavations, however, revealed something else. The remains inside the timber-earth ramparts and enclosure defended with v-shaped ditches were more likely of a civil nature than military structures (Fig. 1.10). The place seems to have been dominated by a big *forum* complex, surrounded with large buildings, amongst which a meeting hall with two abscises. The streets were provided with water canals, and were built up by storage halls, *tabernae* and luxurious houses, even of the *atrium* type. Parts of at least five statues have been identified. A bronze head of a horse and the foot of a male which probably belonged to a *Reiterstandbild*. Since the emergence of the centre is dated around the middle of the last decade BC, it is assumed that one of the other statues represented Augustus. Some military barracks were found in the western outskirts of the place. The presence of the army was probably required during the confrontations with the Chatti around AD 15-16. Not long after, it is assumed that the place was abandoned.[148] This site is nevertheless considered nowadays as one of the first towns the Romans were constructing in so called *Germania Magna*.

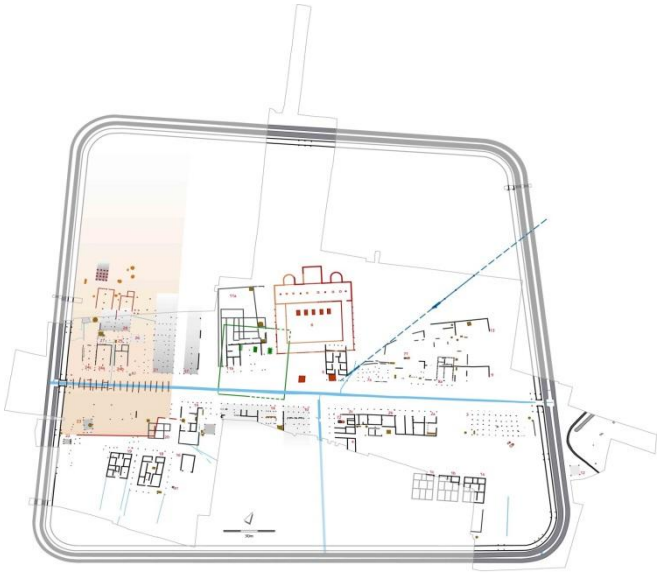


Fig. 1.10: Ground plan of the Roman site at Waldgirmes[149]

Also in Bavaria, at Auerberg in the area of the *Rhaeti*, a site with a similarly short occupation was found, which has been identified as the ancient site of *Damasia,* mentioned by Strabo.[150] Despite the many Roman *militaria*, no Roman fort has been discovered. However, the defence works, the canals and walls, do presume the presence of Roman soldiers. Centrally a space has been interpreted as a possible *forum*-like building. Although the houses are simple strip houses, there were latrines.

[147] Website: Transformation.
[148] Bekker 2008, 86; Zick 2006, 46-47. Website: Waldgirmes.
[149] Website: Waldgirmes.
[150] Strabo, Geography 4. 6. 8.

Remains of kilns suggest metal and glass production as well as ceramic production. Remarkably, the site was only in use from A D13/14 to AD 40.[151]

Why the site at the Auerberg was abandoned is not precisely known, but this could be related to the earliest occupation in *Cambodunum*/Kempten. The first Roman presence here is attested around AD 20. Although no Roman military fort has yet been discovered, it is likely that the site of Kempten was used for military purposes with its excellent location overlooking the Iller valley and its vicinity to the Reschen Pass. Furthermore, it is assumed that *Cambodunum* belonged to the territory of the allied tribe of the *Estiones*. In this way, *Cambodunum* had some advantages, both in the sense of security and location, compared to the site at Auerberg. Although Roman Augsburg soon became the governmental focal point of the later Rhaetian province, it is believed that during the early days the centre in Kempten fullfilled that role.[152]

Over the course of the following centuries the administrative organisation of the region was consolidated with the creation of administrative provinces and self-governing communities which took over the role of these early imposed centres.

1.4.3 Legionary and other military posts

In the period of the conquest and soon thereafter, the army was of crucial importance for control and order in the region. Military posts were created everywhere. It is remarkable though that no legion was stationed in the region of the *Rhaeti* and *Vindelici* or in the territory of the Noricans until the late 2nd century AD, when the auxiliary forts of *Castra Regina*/Regensburg and *Lauriacum*/Enns were reorganised into legionary bases.[153]

Foundations of a fort dated to the middle imperial period have recently been excavated in Linz (Oberösterreich). Based on finds of military objects, the earliest occupation of the fort dates a few decades earlier, which provides the basis for the generally accepted assumption that the Romans conquered the Norican territory as far as the Danube all in one go. A strong relationship between early Roman military camps and Late Iron Age settlements was mentioned earlier. Also in Linz the location of the earliest Roman military presence on the Schlossberg could be identified as a Late Iron Age settlement.[154]

Another military post can be found in the territory of the *Vindelici*. Roman military presence at Augsburg is assumed from the time of Augustus onwards, although the earliest known timber built fort dates to the reign of Tiberius. Shortly afterwards a civilian centre of about 8 ha also appeared around the fort. The fort had a very strong strategic, central location. It was one of the only military bases in this northern area and was positioned close to the frontier at that time, just south of the Danube, at the rivers Lech and Wertach. In AD 70 a major fire destroyed the fort, which was never taken back into use. The frontier had moved northwards and the military presence had become less relevant. However, the settlement continued to develop; simple strip houses were replaced by more luxurious examples, and the centre gradually took on the appearance of a typical Roman town. Soon after it would house the seat of the provincial governor and gain municipal status. The presence of the early fort left only some traces in the overall grid of the later town.[155]

In contrast, several legionary units were stationed under Augustus at different forts along the Rhine. In the Upper Rhine region the military base of Dangstetten is assumed to have hosted some legionary troops. The base was most likely created in around 20 BC and served as an important location for the

[151] Czysz 1995, 417; Ulbert 2006, 32-37; Sommer 2008b, 216.
[152] Czysz 1995, 200-206; Fischer 1999, 79; Weber 2000, 53.
[153] Regensburg: Bischop 2012. Enns: ibid., 55-66; Ployer 2013, 28-33.
[154] Kandler and Vetters 1986, 86; Ployer 2016, 1-2.
[155] Czysz 1995, 419; Bakker 2000, 88-94; Tremmel and Pöllath 2012, 13.

conquest of Raetia and more northern regions.[156] The oldest remains of the double legionary fort in *Mogontiacum*/Mainz date from around the same time but continued in use until the late 3rd century AD. The camps here were of high importance, specifically during Drusus' attempts to conquer *Germania Magna.* Just as in Augsburg, a civilian settlement was located in the vicinity. The Roman site of Mainz is another example of a military base that later developed into an administrative centre of provincial importance.[157] Under the reign of Tiberius, two more legions were stationed in the Upper Rhine region. One at *Argentorate/*Strasbourg which had already been a military place since the campaigns of Drusus. Although the centre flourished as a local administrative centre, the fort fell into disuse somewhere between AD 70 and AD 90.[158] The legionary fort of *Vindonissa*/Windisch was constructed in around AD 16 and probably replaced the fort in Dangstetten. It became the main military base for the entire region during the early imperial period, including the Raetian and Norican land where, until the reign of Claudius, very few forts were erected due to a low level of threat.[159] The fort in Windisch hosted a legion until AD 101, after which it continued to be a flourishing civil settlement. When the unrest increased again in the fourth century, the presence of a military unit can again be perceived, but much smaller than before.[160]

Either stationed in military bases or in centres more civilian in appearance, the presence of the army was without doubt important for the organisation of the new conquered land during these first decades. The role of the army in urban developments will be discussed in more detail in the following chapters.

1.5 The creation of the Roman provinces of Noricum, Raetia and Germania Superior

The interest of Rome in these newly conquered territories seems initially to have been moderate. In Noricum and Raetia and possibly also in Germania Superior political or administrative adjustments immediately after the annexation remained absent or not institutionalised to any great degree. Generally, only a few key centres were appointed. These new territories were thus not immediately transformed into administrative provinces, but for some time remained occupied land.[161] The archaeological and epigraphic evidence for large structural changes mainly date to the reign of Claudius, almost fifty years after the initial conquest.[162] The oldest milestone, for example, dates back to this period.[163]

The study of the creation of the three Roman provinces of the northern Alpine region is complicated. The relevant ancient sources are rather fragmented and besides, do not clearly distinguish between the different connotations of the term province. One cannot always identify whether the author used *provinicia* in the sense of occupied territory or of an administrative unit.[164]

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[156] Zanier 2004, 245-246; Roth-Rubi 2004, 133; 140.
[157] Baatz and Herrmann 1982, 425.
[158] Bedon 2001, 300; Schönberger 1969. ; Bischop 2012, 102.
[159] Hüssen 2004, 73-75.
[160] Deschler-Erb and Akeret 2011, 10; Flutsch, Niffeler and Rossi 2002, 401.
[161] Winkler 1985, 10-12; Winkler 1986, 200.
[162] Wolff 1996 , 539-400.
[163] Winkler 1985, 11-12. The oldest milestone is dated to the reign of Claudius and belonged to Virunum, CIL 3, 5709.
[164] Bermúdez 2014; Schaub 2001, 392; Šašel Kos 2010, 211; Frei-Stolba 1976b, 316; Wesch-Klein 2008, 6-7. R. Frei-Stolba pointed out that the meaning of the term *provincia* at the end of the Late Republic was still changing. G. Wesch-Klein gives an overview of seven different nuances that are known for this specific word, which I will summarise here: 1) command area of a mandatary, 2) area of juridical responsibilities, 3) an organised geographical administrative region, led by a civilian government, 4) independent provinces governed by a *praefect*, 5) annex provinces, 6) territories defeated by war and governed by Rome, 7) newly conquered

1.5.1 Raetia

The region of Raetia was conquered during the Alpine campaign of Tiberius and Drusus. Until the '70s of last century, it was believed that the creation of the province was a Claudian act. A decade later and definitely from the 1990s on, the foundation date has been hypothesized to be earlier, to a moment somewhere during the reigns of Caligula and Tiberius.[165] The evidence for such an early date nevertheless remains speculative and matter of debate.

Tacitus mentions that Germanicus sent veterans who had been serving in the Rhine district to the Raetian-Vindelician land.[166] This is interpreted by some scholars as evidence that Raetia was an imperial province by AD 14.[167] Also, Velleius Paterculus writes that "*He (Tiberus) also added to our Empire as new provinces Raetia, Vindelicia, Noricum, Pannonia, and the Scordisci".*[168] According to A. Schaub it is clear that *provincia* is used here in the administrative sense and one can assume a Tiberian date for the creation of the province.[169] That just around this time also the civil centres and development in the region increased has been used as an argument for this earlier creation date. After all, Strabo names three *poleis* in the region; *Brigantium*/Bregenz, *Cambodunum*/Kempten and *Damasia*/Auerberg.[170] Nevertheless, some scholars, such as D. Faoro, do not accept this as sufficient evidence for a Tiberian foundation. He argues for a later date during the reign of Claudius.[171] J.M. Bermúdez too, after analysing the textual evidence and investigating the appointment of a provincial *procurator*, concludes that preparations fot the establishment of the province might have been undertaken by Tiberius while the real institutionalisation only occured under the reign of Claudius.[172]

What also seems to plead in favour of a Claudian establishment of the administration in this province, is the revival date of the first provincial capital. Despite the fact that the initial occupation in *Cambodunum*/Kempten dates to AD 14, the place only got the appearance of a provincial Roman governing town under Claudius. Many stone buildings, for example, date to the reign of Claudius. The city had a typical Mediterranean layout: a rectangular street plan and a forum with a palatial building which can be considered as the seat of the provincial governor. Moreover, a large terrain for the imperial cult characterised the town. Although until the Flavian period this place stayed mainly a military base, it was the only town with this appearance in the whole region till the provincial administration was transferred to Augsburg/*Augusta Vindelicum*.[173]

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territory which is still considered as hostile and where a Roman official is in charge of coping with the military and often also civilian violence.

[165] Schaub 2001, 391.

[166] Tacitus, Annals 1.44.

[167] Sommer 2008b, 217.

[168] Velleius Paterculus, The Roman History, 2.39.3. Original: *At Ti. Caesar quam certam Hispanis parendi confessionem extorserat parens, Illyriis Delmatisque extorsit. Raetiam autem et Vindelicos ac Noricos Pannoniamque et Scordiscos novas imperio nostro subiunxit provincias*.

[169] Schaub 2001, 395-397. A. Schaub compared texts written by Tacitus and Velleius Paterculus and concluded that a distinction can be seen between the different meanings of the term *provincia*. He conluded that before AD 14 no evidence exists in favor of *provincia* used to indicate an administrative district. Therefore, Raetia can only exist as a province as early as Tiberius' reign. Schaub does also accept that at the moment Vellieus finished his work in AD 30, the province of Raetia was in existence.

[170] Strabo, Geography, 4.6.8. ; ibid., 396-397; Faoro 2008, 5-7; Sommer 2008b, 217-218.

[171] Faoro 2008.

[172] Bermúdez 2014.

[173] Czysz 1995, 200-206; Fischer 1999, 79-80; Weber 2000, 53; Sommer 2008b, 217-218; Tremmel and Pöllath 2012. Recent research has demonstrated that the architecture in Roman Augsburg during these early decades was of a higher monumental level than previously thought. The position of *Cambodunum* as the only monumentalized centre in the region might have to be revised soon. For more on the architecture of Roman Augsburg: Lipps 2016, 82-83.

In summary, whether it was AD 14 or AD 45, the creation of the province of Raetia did not take place until a long time after the conquest.

1.5.2 Noricum

The ancient sources are also not explicit in their reports about the creation of the province of Noricum and the way the newly annexed land was managed consequently remains a subject of debate.[174] Velleius Patercullus' words (cf. above), hint at an initiation of the Roman province of Noricum under Tiberius, similar to the case of Raetia as discussed above. However, P. Kneissl amongst others, has suggested that in the case of '*Noricos'* Velleius does not refer to the creation of a province, but to the defeat of some Norican tribes.[175] The same source is thus interpreted differently for each province.

Until the reign of Claudius, the sources suggest a transition period during which the local organisation of the land was adapted to the needs of the time. Proof is found, for example, in the absence of Roman coins and the common use of Norican *oboloi* till the reign of Claudius. A similarity with the minting in towns of the eastern Empire, producing money for daily life, can be suggested. Although regarding the disputed *Regnum Noricum* as a client kingdom may be one step too far.[176]

Furthermore, the Norican territory had only a small Roman military presence during these early years.[177] This has been a reason for some scholars to suggest an early foundation date for the province of Noricum. G. Alföldy, for example, has stated that we should not exclude the possibility of a procuratociral province[178] in the Norican territory as early as the reign of Tiberius or Caligula. This is because of the need for civil administrative bodies to support the strong economic relationship between the region and Rome and the high concentration of Roman citizens.[179] J. Wilkes however pleaded for a more locally empowered organisation of the territory and suggested that administrative tasks could have been delegated to local chiefs until a more stable situation was reached under the reign of Tiberius. [180] More evidence exists for the assumption that local tribes were organised in administrative units. In the so-called meeting hall of the possible governor's residence at the site of Magdalensberg thirteen shrines were found which were dedicated to the three women of the Augustan family (Livia, Julia and Julia). Because of the thirteen shrines, some have suggested the existence of four more unknown tribes, but this is no longer widely believed. Nevertheless, the discovery of this meeting hall, has led to the suggestion that the Norican region was organised by a federation of Norican tribes, organised in *civitates peregrinae* and supervised by a military *praefectus civitatium.*[181] In any event, these possible *civitates* must have disappeared again after the reforms led by Claudius.[182]

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[174] Winkler 1986, 203; Fischer 2002, 18.

[175] Alföldy 1974, 62-63; Kneißl 1979, 267. P. Kneißl suggest that Raetia and Pannonia are mentioned as two province names, whilst the others, amongst which the *Norici,* should be interpreted as tribe names. In this particular case, Kneißl thinks that Velleius refers to the conquest of some Norican tribes who lived somewhere between the Norican kingdom and Raetia.

[176] 1979, 269; Dembski 2005, 1003-1004. In contrast, the production of the Norican *tetradrachmen* stopped quickly after the conquest and under the Roman influence.

[177] Kneißl 1979, 267; Winkler 1986, 2010.

[178] Wesch-Klein 2008, 10-13. A *procuratorial province* was a province from which the governor was appointed by the emperor rather than by the senate which was the case of the senatorial or proconsular provinces (lead by a *praefect* or proconsul instead of a *quaestor* or *procurator*).

[179] Alföldy 1974, 62-63.

[180] Ibid., 65; Kneißl 1979, 267; Winkler 1986, 200; Wilkes 1996, 580-581; Šašel Kos 2010, 211-214.

[181] Kneißl 1979, 271. This assumption is based on a similar organisation of the fourteen tribes of the Alpes Cottiae who were under the authority of a *praefectus civitatium,* known from an inscription (CIL 5, 7231).

[182] Wilkes 1996, 572-573; Sašel Kos 1997, 40-41; Fischer 2002, 19; Šašel Kos 2010, 211-215.

Under Claudius, major administrative reorganisation took place in the Norican region which has left more clear archaeological and epigraphical traces.[183] The earliest epigraphical attestation of a *procurator Augusti Norici*, for example, dates from this time and proves that Noricum was by then a proconsular province.[184] Furthermore, we will learn in the next chapter that five centres in the Norican territory were granted municipal status by Claudius. It has been suggested that the possible *civitates peregrinae* known from the shrines at Magdalensberg were assigned to the territories of these five new Claudian towns. Table. 1.2 shows M. Sašel Kos's attempt to identify which tribes could have been subjected to which Claudian *municipium*. Evidently, this suggestion remains open for discussion since not all tribes could be precisely located.[185] Also, one can observe a rather intentional reorganisation of the urban centres. Pre-Roman settlements were abandoned in favour of these five towns, such as in the area of Roman Salzburg (Fig. 1.11).[186] It is furthermore assumed that around this period the governor's seat was moved from the site at the Magdalensberg to the Roman town of *Virunum*.[187] Finally also the iron mines in the region became imperial properties, as did other Alpine resources such as salt mines, woods and quarries.[188]

In general, one can say that most epigraphical and archaeological evidence regarding the time of foundation of the province of Noricum suggests a Claudian date. This includes the recognition of new municipal centres, the reorganisation of the local inhabitants, and the possible first confirmed presence of a Roman provincial governor.[189]

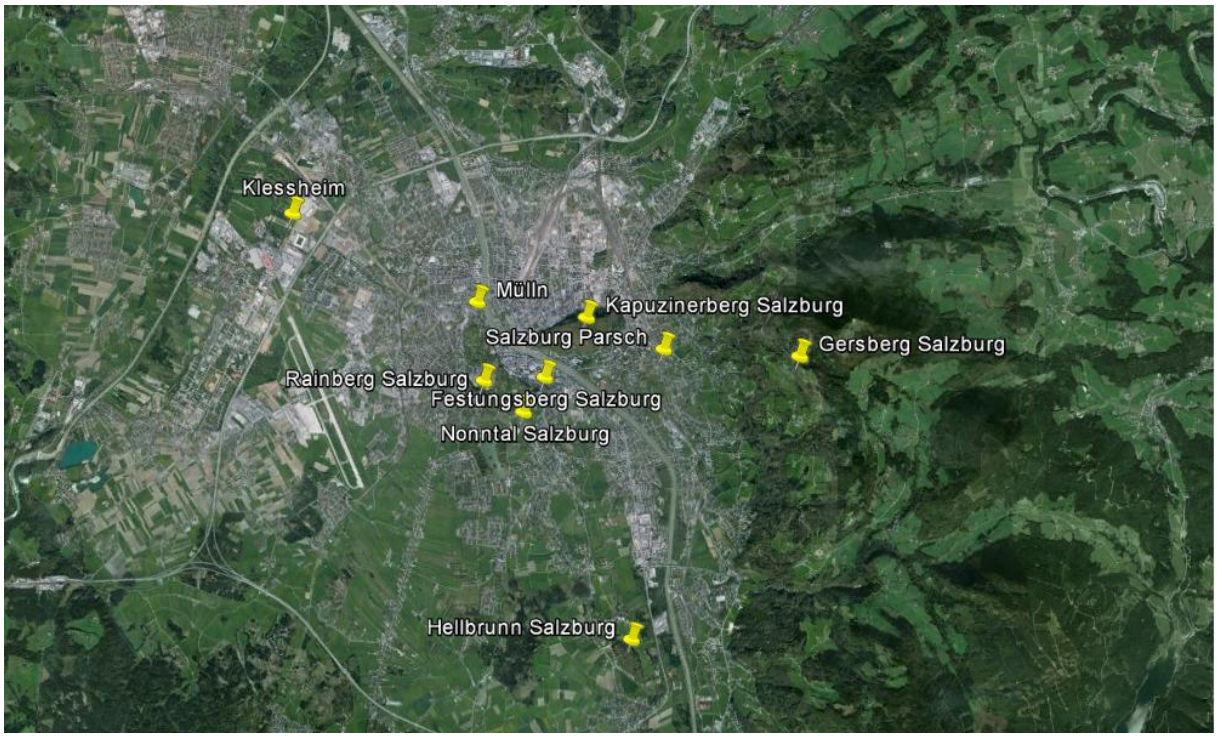

Fig. 1.11: Some find spots of Pre-Roman settlements in the vicinity of Salzburg. Most of these places were no longer intensively inhabited after the foundation of the *municipium Claudium Iuvavum*, after Dopsch 2010.

[183] Fischer 2002, 18; Kneißl 1979, 265.
[184] Website: Transformation. (Städtische Siedlungen in Noricum - City Settlements in Noricum).
[185] Wilkes 1996, 580-581; Fischer 2002, 19; Scherrer 2002b, 32-33; Šašel Kos 2010, 214-215.
[186] Straube 1996, 186; Dopsch 2010, 10-13.
[187] Straube 1996, 187; Piccottini 2002, 104.
[188] Winkler 1986, 215; Konrad 2012, 31. While there were first imperial slaves deployed, this responsibility was later handed over to tenants (*conductores ferrariarum noricarum*), mainly originating from Aquileia. Based on coins from Hadrian, called *MET(alla) Nor(ica)*, is is clear that the exploitation of the mountain resources had gone back to state officials.
[189] Wilkes 1996, 576; Sašel Kos 1997, 40; Šašel Kos 2010, 211-214.

Table.1.2: Sašel Kos' interpretation of the Norican tribes supervised by the Roman towns from the time of Claudius.	
Claudian *municipia*	**Subjected Norican tribes**
Virunum	Norici, Ambilini
Teurnia	Ambidravi, Elveti
Aguntum	Laianci, Saevates
Celeia	Uperaci, Ambisavi
Juvavum	Ambisontes, Alauni

1.5.3 Germania Superior

Setting aside the disputed existence of a *provincia Germania*, the creation of the two provinces of Germania Superior and Germania Inferior is traditionally dated around the end of the 1st century. Generally, a date between AD 82 and 92, during the reign of Domitian, is assumed.[190] H. Schonberger situated the most likely moment somewhere soon after the war against the *Chatti* in AD 85 and at the latest after the revolt of Saturninus in AD 89.[191] The words *Germania Capta* on Domitian's coins are one type of evidence, the clear distinction made between the two provinces in inscriptions and in diploma's from around AD 90-98 is another.[192] Recently, however, F. Ausbüttel has suggested a controversialy early date: between AD 10 and AD 14. He suggested that, since there is no indication for a common commander for the troops stationed in the two military districts of the Low and the High Rhine, one should assume that both areas were headed by an imperial legate.[193]

In any event, the first clear structural changes in the organisation of the territory occurring in the archaeological records date mainly to the reign of Domitian. It is from that moment onwards, until the late 2nd century, that peace in the area could be maintained and the contours of the northern border of the Empire, along the Higher Rhine, became stable.[194] The appearance of institutional bodies related to civil life becoming visible in the epigraphical records of the late 1st century, such as *civitates*. Inhabitants of the *territoria* of legionary and auxiliary forts started their own local governance.[195] Some imperial estates are known from the area between the Rhine and the Danube, enclosed by the modern Neckar region, the Schwabian Alb and the Black Forest. Tacitus referred to this district as the *Agri Decumates*.[196] He is the only author using this term and left us in uncertainty about the meaning of it. Some translated it as 'ten lands', but others are not afraid to call it rather 'waste'-land or the Helvetian dessert. This in origin Helvetian territory was conquered and made a buffer zone between the 'Roman' and the 'barbarian' world. Although some scholars have interpreted it as the land of the ten cantons, others imagine it as imperial domains where tenants could cultivate for a tenth of the yield. We know for sure known that such an imperial estate existed around *Summelocenna*/Rottenburg.[197]

1.6 Conclusion

[190] Mommsen 1968, 156-159; Jones 1973, 87; Baatz and Herrmann 1982, 71-83; Cüppers 1990, 70-73; Klee 2013, 58.
[191] Schönberger 1969, 159.
[192] Ausbüttel 2011, 395-400.
[193] Ibid., 395-400.
[194] Klee 2013, 58.
[195] Pelham 1911, 193-197.
[196] Tacitus, Germania, 29.
[197] CIL 13, 6365. Pelham 1911, 189; Mommsen 1968, 159-161; Schönberger 1969,161; Hind 1984.

The northern Alpine region provided a varied landscape, marked by mountainous or hilly regions, fertile valleys and many rivers, in which different settlement patterns could develop over time, reflecting social processes of power and of centralisation.

Influenced by sites such as the Heuneberg, the first (proto-)urban settlements in temperate Europe are dated to the Early Iron Age. More recent archaeological research has shown that from this period onwards developments towards a more complex societal organisation started to take place.

Previously the large defended hilltop sites of the mid-2nd century BC, better known as *oppida*, were considered the first towns north of the Alps, but these sites are now seen as just one externalization of much broader processes of urban development. Archaeological research conducted over the last few decades has revealed a rather complex and dynamic urban network for this period, consisting of both open and defended sites, and centres located on hill tops as well as in low-land areas. There is a growing realisation that the importance of the so-called *oppida* sites was overestimated and that the overall society was mainly rural. Despite the large amount of knowledge gained from researching the big Late Iron Age centres, many mysteries about this period might still be buried in rural centres, villages and farmsteads.

There is no doubt that major changes occured during the last half of the 1st century BC. Many central places seem to have lost their attractiveness and big parts of the northern Alpine region became incorporated into the Roman Empire. The population density in the region probably decreased during this period. Although heavily disputed by some, recent studies have tried to demonstrate continuity in the occupation between the Late Iron Age and the early Roman period. Early Roman *villae* have been found at several late La Tène settlements. Also cemeteries indicate a continuous use, strongly indicating that also the communities remained. In addition, a relation between early Roman forts and Late Iron Age sites seems to exist. A change in the settlement pattern of the late 1st century BC is nevertheless undeniable.

The impact of the Roman conquest during the following decades seems generally rather moderate. Some centres were established for military and administrative purposes. Very fascinating are the civil centres which were created, such as the site of Waldgirmes in *Germania Magna*, the sites of the Auerberg and Kempten in the *Raetian* territory and the governmental complex at the trade centre on the Magdalensberg in the heart of the earlier *Regnum Noricum*. None of these centres remained when Roman rule finally gained a more concrete shape and the administrative provinces were initiated.

It is not clear from the literary sources which emperor was responsible for the appointment of the provinces of Raetia and Noricum. For both provinces it is most likely that initial plans were made under the reign of Tiberius and that by the time of Claudius these administrative units were already functioning. Recently, AD 14 has been suggested as the foundation year for the province of Germania Superior, which differs from the more traditional assumption that it was realized by Domitian. Increasing municipal and administrative developments can be observed in all three provinces soon after their creation. These developments relate to the construction of stone built infrastructures in Raetian centres, the granting of municipal rights to communities in Noricum and the establishment of imperial domains. Similar tendencies could be observed on sites in Germania Superior.
Whether or not the creation of administrative municipal units under the Roman Empire encouraged an increased level of urbanism will be considered in the following chapters.

2. Self-governing centres and legionary forts: the top layer of the settlement system

We have seen that soon after the conquest the Romans created a few administrative posts, but real measures relating to the organisation of the region were only taken during the first half of the first century, with the creation of the provinces and the first self-governing towns.

This chapter compiles a list of the known self-governing towns in the northern Alpine region with the aim of gaining a better understanding of the regional differences in municipalisation. There are different kinds of evidence that can inform us about the municipal rights of communities during the Roman period. In the first section, the focus lies on the municipal status or titles included in the name of a place. Such elements can reveal directly, or indirectly, some of the inner organisation of the town. Epigraphic and literary sources will be used to give a chronological overview of the processes of municipalisation in this specific area. A second section focuses on the presence of certain types of civic magistracies, which also reveal information about a settlement's level of autonomy. The epigraphic evidence for these magistracies will be discussed to complete the overview of self-governing towns in the northern Alpine region. The nature of these self-governing centres, including their origin and appearance, forms the theme of a third and final section. Alongside the self-governing civic centres, attention will also be paid to the legionary bases and the civic centres developing in their immediate vicinity. Table 2.2 and Table 2.3, included at the end of the chapter, contain an overview of the epigraphic evidence used in this chapter.

Sources

In general, the ancient texts concerning Roman towns in the north-western Alpine region are limited. Regarding the northern Alpine region, ancient authors only sporadically mention town names and rarely leave us information about juridical status or municipal institutions. No equivalent for the lists of Roman towns in Spain and northern Africa provided by Pliny exists. Pliny does, however, mention five *oppida* in Noricum,[198] and *Brigantium* and *Cambodunum* in Raetia are named as *poleis* by Strabo.[199] The epigraphic data is thus crucial in revealing to us which communities were considered as self-governing by the Roman administration and what status or kind of citizen rights they were given. Unfortunately, there are fewer epigraphic remains in the northern Alpine region compared to other parts of the Empire, such as North Africa and Spain. This is due in part to a rather modest epigraphic tradition, and the presence of soft stone subject to a high degree of weathering.[200]

Much academic effort has already been put into the work of identifying Roman self-governing towns. With the exception of J. W. Hanson's account, which attempts coverage of the entire Roman Empire, most of the information about the status of towns is only available in narrower regional studies.[201] There are nevertheless important publications with a regional focus on the northern Alpine region concerning the Roman municipal network. M. Klee in her book on Germania Superior gives an overview of the autonomous Roman towns, although a detailed discussion of the source material is lacking.[202] The same is true for the recent publication by T. Schmidts, who discusses the towns in both the Germanic provinces.[203] The study by G. Rupprecht, and the more recent publication by M.-T.

[198] Pliny, Natural History 3.27.
[199] Strabo, Geography 4. 206.
[200] Haeussler 1994, 46.
[201] Hanson 2016, 3 ff. As will appear from this and the following chapters, the places I consider as towns or urban-like centres differ from J. W. Hanson' list. This difference is caused by different approaches and by critical reflection of the primary sources and secondary literature.
[202] Klee 2013, 87.
[203] Schmidts 2014, 43-48.

Raepsaet-Charlier in particular are by contrast two very valuable corpora concerning the epigraphic evidence for every possible Roman town in Germania Superior.[204] With regard to the autonomous towns of Noricum, the book by M. Šašel Kos and P. Scherrer is of high interest, but again the literary and epigraphic evidence that proves the status of these centres is not explicitly mentioned.[205] The book by R. Wedenig is a very useful source, in which most of the known inscriptions related to the internal organisation of the Roman cities in Noricum are listed and discussed separately for each place.[206] Regional studies concerning Raetia generally deal with the wider settlement system, since there was – as far as has been proven - only one self-governing town in the entire province.[207] Tables 2.2 and 2.3 therefore list as much of the primary source material as possible regarding the municipal status of centres in the northern Alpine region.

2.1 Local municipal developments: evidence from status and titles

The imperial administration relied on a system of local self-government.[208] A self-governing community of which membership depended on descent, and which controlled a certain territory, can be called a town.[209] These towns and their local civic elite were focal points in many vital aspects ranging from tax collection, to the organisation of jurisdiction or the imperial cult.[210]

In addition to economic and tertiary aspects, a Roman town was from an administrative point of view a place that was granted a juridical status.[211] Such a municipal status bestowed municipal rights and rights for citizens. It embodied information about the community's relation with Rome and above all implied a certain degree of politico-administrative independence. A self-governing community occupied a defined area of land and could extract resources from that territory for all kinds of purposes including state or cult taxes.[212] During the Republican period, Roman towns were founded as *coloniae* from Rome itself or incorporated as *municipia*, but under the rule of the Roman emperors existing centres could be granted various privileged municipal statuses. Such a promotion was often a reward for loyalty, but over time numerous other reasons were used.[213]

2.1.1 Municipal status and citizens' rights

Generally, within the modern literature, four kinds of statuses are distinguished within the hierarchy of Roman towns, involving from top to bottom the veteran *colonia,* the honorary *colonia*, the *municipium* and the *civitas*.

During the Imperial period, veteran c*oloniae* were the most prestigious Roman towns in the provinces. Their independence in local government was subjected to clear regulation, but these communities enjoyed many benefits concerning civic privileges, as well as obligations, such as

[204] Rupprecht 1975, 209; Raepsaet-Charlier 1999, 371.ff.
[205] Šašel Kos and Scherrer 2002.
[206] Wedenig 1997.
[207] Raetia's only autonomous town was *Augusta Vindelicum*: Rupprecht 1975, 234. A discussion of the wider settlement system in Raetia can be found in Czysz 2013, 342 ff.
[208] Braund 1988, 1; Garsney and Saller 1987, 20 ff.
[209] Jones 1974, 4.
[210] Edmondson 2006, 254-255.
[211] Pounds 1973, 116-140; Jones 1974, 4; Millar 1977, 395; Pferdehirt 2014, 29.
[212] Corbier 1991, 219-220.
[213] Sherwin-White 1973, 244. Reynolds 1988, 19; Kolb 1993, 334-339. In the case of Orchistos (Phrygia, Asia Minor) a Constantinian inscription (MAMA VII 1956, 69 ff., text with translation: Kolb 1993, 326-330.) gives multiple reasons why the community deserved municipal independence. In her interpretation J. Reynolds stays close to the elements listed in the actual inscription. She believes that the local community considered itself a town, which came along with a large population, public infrastructure and a previous municipal status, and wanted it to be officially confirmed in order to enjoy the benefits. F. Kolb has suggested a more religious background for the municipal promotion.

taxation. Originally it was Roman citizens themselves who inhabited these often *ex novo* founded *coloniae* that were established in newly conquered territories. Both the original settlers and their descendants were considered as Roman citizens. They enjoyed Roman rights and were therefore on the same footing with the citizens of Rome. Later on, the title of *colonia* could be granted to an already existing town. When over time *colonia* became an honorary title, it was no longer equated with Roman citizenship. The inhabitants of an honorary colony generally gained Latin rights and could only become Roman citizens by personal achievements. The custom of granting the honorary title of *colonia* came into use during the 1st century AD, but can be considered as normal practice from the reigns of Trajan and Hadrian.[214]

A *municipium* was in the Roman West equally a fully recognised Roman town, although certain privileges towards taxes for example were probably less beneficial than in *coloniae.*[215] It is generally accepted that during the imperial period the inhabitants of a *municipium* were more likely to have gained *ius Latii* rather than Roman citizenship.[216] The creation of new *municipia civium Romanorum* is disputed from the time of Augustus onwards.[217] Nevertheless, it was also possible for the inhabitants of a *municipium Latinum* to become Roman citizens through personal achievement. After fulfilling a one-year magistracy in a town, a magistrate became a Roman citizen. With the introduction of the *Latium maius*, whereby not only the magistrates but also the members of the town council (*ordo decurionum)*, as well as their families, were granted Roman citizen rights, more and more people could join this more prestigious type of citizenship.[218] It should, however, be borne in mind that, in order to be introduced as a magistrate, one had to have sufficient funds to be able to pay for the duties related to the particular function, about which more later on. The size of these councils was strictly controlled.

On the lowest stage of the municipal ladder one can distinguish the *civitas*, a self-governing unit but with fewer privileges. The inhabitants of the majority of *civitates* never gained citizenship before AD 212, and remained peregrine. These *civitates peregrinae* were allowed their own legal system, in contrast to the promoted towns that were subjected to the Roman jurisdiction.[219] However, some communities received a special agreement, such as *foederati* or did gain Latin rights. Unlike a *colonia* or a *municipium* a *civitas* was generally not allowed the appointment of certain magistracies, as will be discussed later. Furthermore whilst a promoted town was designated to control a territory and the agglomerations within that defined area, a *civitas* often involved a community that lived in a certain area but was dispersed in different centres or agglomerations. The borders of the *civitates* in the northwestern Alpine region are very poorly known. Data from Medieval times which can be used to deduce such territories are rarer than in the case of Gaul. It is assumed that every *civitas* had at least one main centre where the community's administration and jurisdiction were carried out and where markets were held.[220] In what follows the *civitas* will sometimes be equated to that centre, which in the academic literature is regularly referred to as 'civitas capital'. However, this term is a modern invention dating back to the 1960s and does not rely on any Latin equivalent.[221] I prefer to

[214] Langhammer 1973, 12-14; 16-17; Pounds 1973, 116-140; Sherwin-White 1973, 263; Miglbauer 2006, 2-3; Thiel 2008, 59; Pferdehirt 2014, 29-31.
[215] Garsney and Saller 1987, 27.
[216] Langhammer 1973, 7-12; 15-16; Pferdehirt 2014, 32.
[217] Galsterer 1972, 37-40; 43.
[218] Sherwin-White 1973, 255. The *Latium maius* was probably introduced under the reign of Hadrian. In Latin communities one sees in the epigraphic evidence that people only engaged themselves in a single annual magistracy, after which they became a Roman citizen. In contrast, the full range of municipal offices, is rarely attested. By fulfilling short-term magistracies, more people could apply and eventually become a Roman citizen. See: Pferdehirt 2014, 33-34.
[219] Jacques 1990, 19-22.
[220] Pounds 1973, 116-140.
[221] Rogers 2011, 3; Rivet 1966, 104; Rogers 2014, 52-53.

call these places *civitas* centres. Often the identification of a site as the centre of a *civitas* relies on the appearance of its name as *caput viae* on milestones, since towns were responsible for the maintenance of the roads. Also a relatively well-developed urbanised lay-out compared to surrounding places has led to the identification of *civitas* centres. It is, however, not possible to identify the centres of all *civitates* with certainty.

Some scholars recognise one further layer within the Roman town hierarchy, namely the *vici*. Nevertheless, the urban entity of *vici*, which is most accurately translated as villages, is almost a *contradictio in terminis*.[222] Some of the *civitas* centres are identified as *vici*. Although the term might imply a certain level of local organisation, the offices of a *vicus* did not correspond with those of promoted towns. Since the meaning of the term *vicus* is unclear, this status will play a limited role in this manuscript. The v*ici* in the northern Alpine region will be discussed more elaborately in chapter three, which deals with subordinate places and their role within the wider settlement system. In order to understand of what importance these subordinate centres were for the overall urban network, it will be useful to first look at the chronological development of the municipal organisation in the entire region and to look at the pattern of self-governing centres (i.e. c*oloniae, municipia* and *civitates*).

2.1.2 Historical overview of municipalisation

The Late Republic up to the reign of Tiberius

The evidence for the earliest Roman self-governing towns takes us back to the time of Caesar and Augustus and to the southern area of what later became the province of Germania Superior, when it still belonged to the territory of Gaul.

The *coloniae* of *Augusta Raurica*/Augst and *Julia Equestris*/Nyon were already mentioned in the previous chapter as some of the first centres created by the Romans in the northern Alpine region, most likely for administrative and logistical reasons. The high number of finds related to the Roman army and their additional names, such as *Equestris,* suggest that both towns may have been veteran *coloniae*. The foundation of these two *coloniae* and the *colonia Lugdunum*/Lyon in *Gallia Lugdunensis* has traditionally been seen as part of one strategic move, planned by Caesar and completed by Augustus. Based on their location between the rivers Rhine and Rhône it was thought that with the presence of veterans in this particularly turbulent region Rome was endeavouring to increase its power. A re-evaluation of the written and archaeological remains shows, however, that there is only little evidence in the sources to support a Caesarian *ex-novo* foundation in the case of both *Julia Equestris* and *Augusta Raurica.*[223]

Let us examine the evidence in a little more detail. The Roman site in Nyon has been identified since the 18th century as the location of the *Colonia Julia Equestris.*[224] T. Mommsen suggested *Noviodunum* as an alternative name for *Julia Equestris*. He indicated that the *colonia* was a new centre that replaced an existing pre-Roman settlement. The site of Geneva has been suggested as a candidate for this settlement, but all this remains speculative without further epigraphic or archaeological proof.[225] No consensus on the precise creation date of the town has been reached. The only clues are hidden in its names*. Julia* refers to the Julian dynasty. Traditionally and based on the political and geographical context Caesar, has been designated as founder.[226] In contrast B. Galsterer-Kröll, amongst others, holds Octavian responsible for the foundation of the *colonia,* because of the name

[222] Broise 1972, 602.
[223] Poux 2005, 11-12.
[224] Brunetti 2005, 57.CIL 13, 5013, 5534, 2607, 2606, 2614, 9058; CIL 3 11895 and Pliny, Naturak History 4.106.
[225] Frei-Stolba 1999, 36-37; Brunetti 2005, 57.
[226] Drack and Fellmann 1988; Frei-Stolba 1999, 30-32; Flutsch, Niffeler and Rossi 2002, 389.

Equestris which appears to be rather typical for his reign before he became Augustus.[227] Although occupation of the site from the time of Caesar has been attested by sherds of some Campanian ware, Dressel 1 amphorae and other small finds, the first urban infrastructures can only be attributed to the reign of Augustus.[228] The creation date for the *colonia Julia Equestris* is thus generally situated somewhere between 50/49 BC and 27 BC at the latest.

The *colonia Augusta Raurica,* nowadays located underneath modern Augst, was founded around the same time. An inscription on the mausoleum of L. Munatius Plancus, who was appointed governor of Gaul after Caesar's death, states that he founded the *coloniae Lugdunum* and *Raurica*.[229] Although this inscription has often been used in favour of a foundation date for Roman Augst under Caesar, the *Colonia Munatia Felix Raurica* could equally have been created during the other 30 years of Plancus' career.[230] A bronze inscription belonging to the base of a statue that may have stood on the *forum* of the *colonia* commemorates the inauguration ceremony of the town. The name of the *colonia* includes titles, such as Apollinaris, which refers to Augustus' ideology and so suggests a foundation date during his reign.[231] There is also some speculation about the location where Plancus founded the c*olonia.* Some scholars have suggested that the *colonia* might have been constructed on the Late Iron Age site of Basel-Münsterhügel, but no clear Roman structures have been found there.[232] If Plancus did found the *colonia* in Augst, one might wonder why the oldest Roman remains do not confirm that possibility. Approximately 70 percent of the Roman town in Augst has been excavated and the oldest structures can be dated no earlier than 15 to 20 BC.[233] It is of course plausible that there was a time difference between the foundation of the town *de iure* and the start of the first actual physical building phases.[234] One can conclude that the evidence suggests a foundation date for the *colonia Augusta Raurica* somewhere soon after Caesar's death, during the reign of Augustus.[235]

Augustus is generally well known for his administrative reorganisations in newly conquered territories. For example, he created new administrative units, *civitates* in Spain and in the region which was then still known as Gallia. There is evidence for three such early *civitates w*ithin the northern Alpine region. A first instance is mentioned by Pliny, who reports in his *Historia Naturalis* that the tribe of the Lingones enjoyed the status of *foederati*.[236] They most likely gained this position from Caesar for their support during the *Bellum Gallicum*. It is assumed that *Andemantunnum*/Langres functioned as the main centre of the *civitas Lingonum*. Recent excavations of the site have revealed clear investments and changes in the lay-out of the centre which could be dated to the reign of Augustus and can therefore indeed be related to the installation of a new administrative organisation.[237] Another example is the *civitas Helvetiorum*, created after Augustus conquered the *Helveti* in around 12 BC. Due to their rebellious behavior, they did not become

[227] Galsterer-Kröll 1972, 55; 94.
[228] Brunetti 2005, 59.
[229] Schwarz 1988, 4; Martin-Kilcher 2005, 51; Poux 2005, 9.
[230] 2005-17.
[231] EDCS: 09401124. Martin-Kilcher 2005, 51; Poux 2005, 16.
[232] Frei-Stolba 1999, 54-61; Deschler-Erb 2001, 204-206; Martin-Kilcher 2005, 53-54; Poux 2005, 17.
[233] 2005, 15.
[234] Ibid., 16; Martin-Kilcher 2005, 54.
[235] 2005, 51.
[236] Pliny Natural History 4, 17: a Scaldi incolunt [texero] Texuandri pluribus nominibus, dein Menapi, Morini ora Marsacis iuncti pago qui Gesoriacus vocatur, Britanni, Ambiani, Bellovaci, Bassi. introrsus Catoslugi, Atrebates, Nervi liberi, Veromandui, Suaeuconi, Suessiones liberi, Ulmanectes liberi, Tungri, Sunuci, Frisiavones, Baetaci, Leuci liberi, Treveri liberi antea et Lingones foederati, Remi foederati, Mediomatrici, Sequani, Raurici, Helveti, coloniae Equestris et Raurica. Rhenum autem accolentes Germaniae gentium in eadem provincia Nemetes, Triboci, Vangiones, in Ubis colonia Agrippinensis, Guberni, Batavi et quos in insulis diximus Rheni: (Joly 2003, 232.).
[237] Barral *et al.* 2014, 365.

foederati but *stipendiarii* and had to pay taxes. It is believed that after the reign of Tiberius *Aventicum*/Avenches was appointed as the centre of the *civitas Helvetiorum.* Similar to in Langres, the archaeological remains in *Aventicum* reveal urban development soon after the establishment of the *civitas*.[238] Despite the lack of any evidence, the *civitas Vangionum,* located around modern Worms, is considered to be a third example of such an early administrative centre. Under Augustus this part of the Rhine had become militarily organised. It is likely that the Vangiones had already been pacified by Caesar and that they were forced to surrender control over their territory. There is no further certainty as to whether or not the place gained any (municipal) privileges. M.-T. Raesaet-Charlier suggested that the inhabitants were subject to the *ius Latii*, while others have assumed a *civitas peregrine,* in which case the Vangiones were considered foreigners without access to Roman citizenship.[239] Taking into account their contribution to Celtic revolts, such as that one in AD 69, the latter seems more likely.[240]

So far it seems that the first major administrative developments and the earliest self-governing centres created during the Julian dynasty were situated in the south-western part of the northern Alpine region (Fig. 2.1). This is of course related to its relatively early conquest during the Gallic war. Nevertheless, as discussed previously, Roman centres and emporia were established during this period, such as *Damasia*/Auerberg and C*ambodunum*/Kempten in Raetia or the site on the Magdalensberg in Noricum. Despite past claims to this effect, no source has proven that *Cambodunum* was a self-governing Roman town.[241]

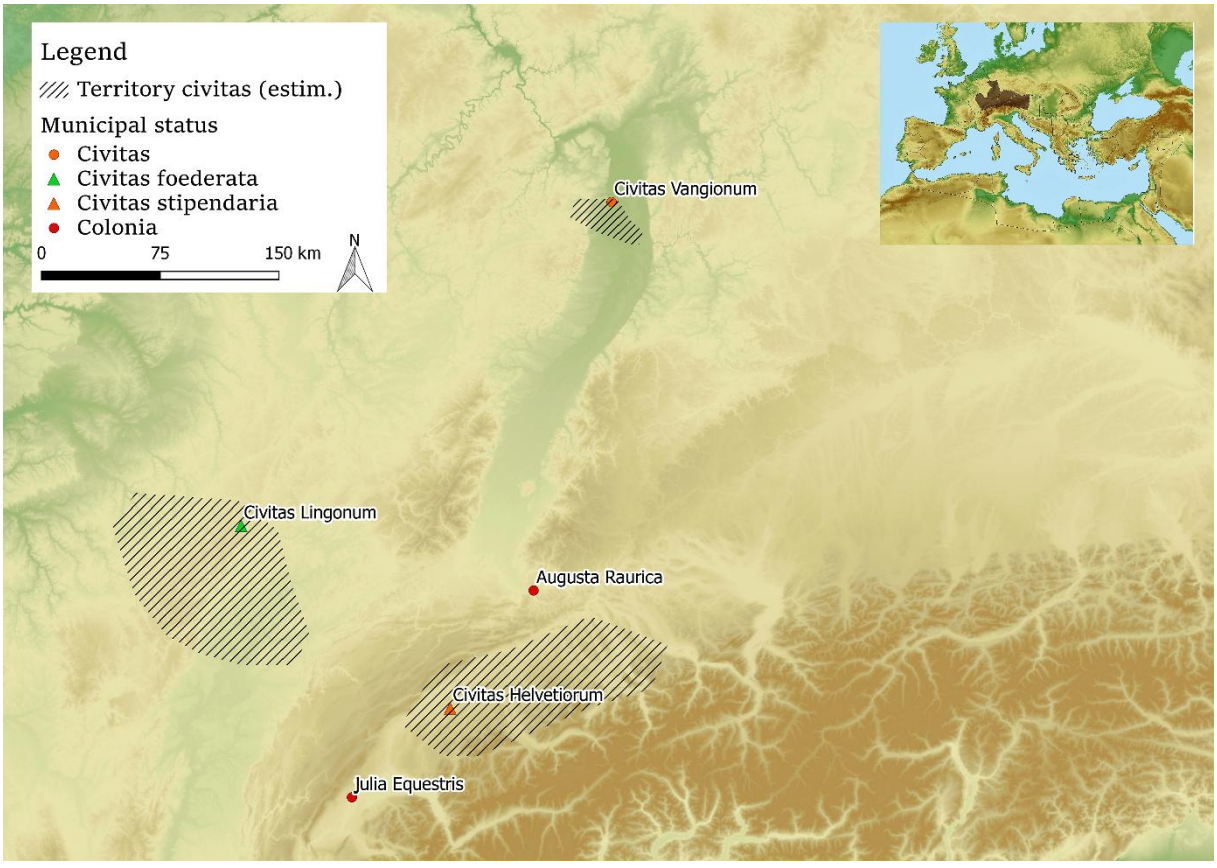

Fig. 2.1: Map of the municipal developments during the reigns of Caesar, Augustus and Tiberius

[238] Reynolds 1964, 338; Frei-Stolba 1976a, 384-389.
[239] Haeussler 1994, 44; Raepsaet-Charlier 1999, 292-293.
[240] Haeussler 1994, 44-45.
[241] Heuberger 1932, 100-118; Weber 2000; Weber 2001, 191-200.

The reign of Claudius

It was under the reign of Claudius that a first real wave of municipalisation can be observed. A combination of a passage in Pliny's *Historia Naturalis* and epigraphic evidence allows us to identify five *municipia* in the territory of the former Norican kingdom which were most likely founded under Claudius.

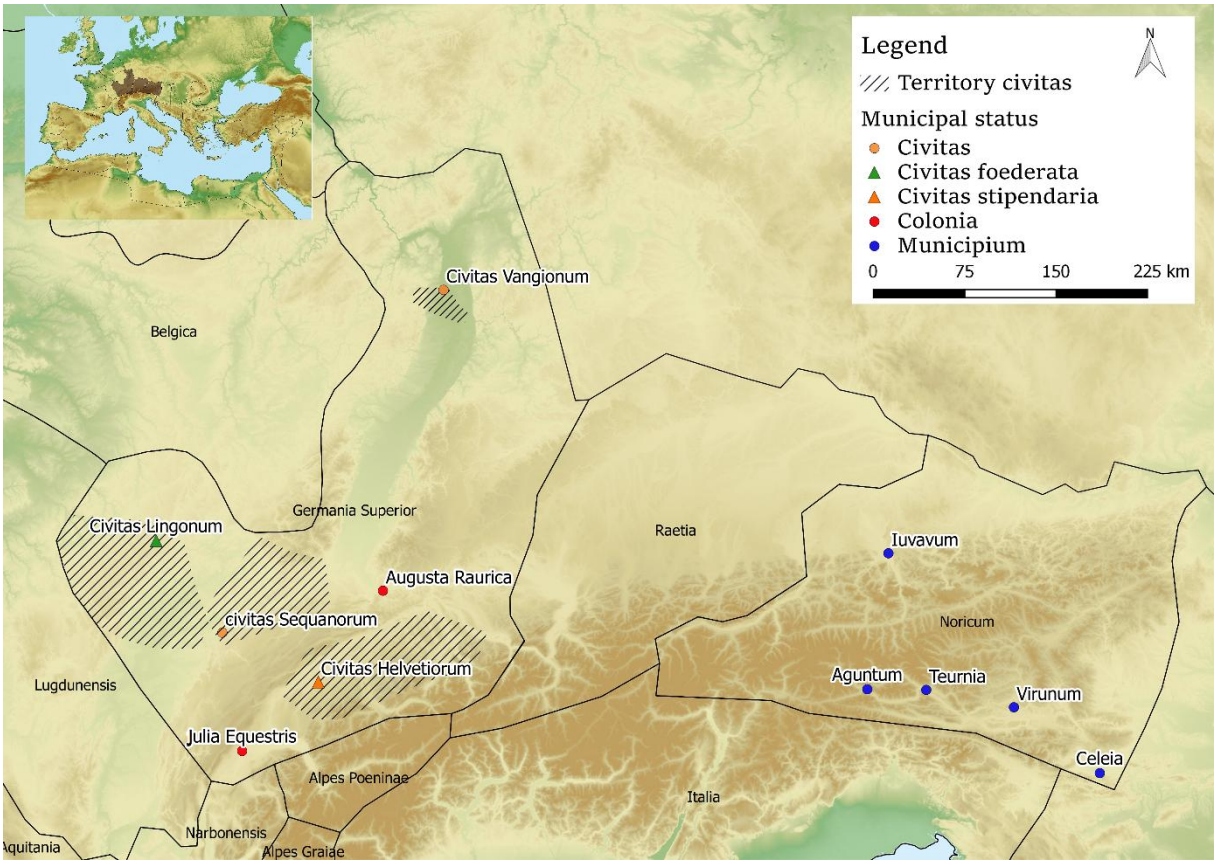

Fig 2.2: Map of the municipal developments during the reign of Claudius

Pliny lists five *oppida*: *Aguntum*/near Lienz, *Celeia*/Celje, *Teurnia*/St Peter in Holz, *Virunum*/Zollfeld and *Iuvavum*/Salzburg. The first four were all located south of the Alps while *Iuvavum* was the only one mentioned which was situated north of the mountain range (Fig. 2.2).[242] Pliny used the generic term *oppida* to refer to these urban centres and so the text does not allow us to find out anything about their status or the rights affirded to their inhabitants. For all five places epigraphic evidence proves nevertheless that they were *municipia.*[243] Since the gentilicum *Claudia* appears in their names, one can assume that certain civic privileges were granted to these communities by Claudius, probably their municipal status.[244] Notwithstanding this evidence, G. Thüry has suggested a different

[242] Pliny: Natural History 3, 24: *A tergo Carnorum et Iapudum, qua se fert magnus Hister, Raetis iunguntur Norici. oppida eorum Virunum, Celeia, Teurnia, Aguntum, Iuvaum, omnia Claudia, Flavium Solvense. Noricis iunguntur lacus Pelso, deserta Boiorum; iam tamen colonia Divi Claudi Savaria et oppido Scarabantia Iulia habitantur*.

[243] Aguntum: CIL 3, 11485 Celeia: CIL 3, 5227 Iuvavum: CIL 3, 5591 Teurnia: CIL 3, 5462 Virunum: EDCS 14400206, HD 11277.

[244] Claudium Aguntum: CIL 5, 708 Claudia Celeia: CIL 3, 15205 Claudium Iuvavum: CIL 3, 5591 Claudia Teurnia: CIL 3, 5462 Claudium Virunum: CIL 3, 4484, 11555 and Galsterer-Kröll 1972, 97 (nr. 2).

foundation date for the *municipium Iuvavum,* somewhere during the reign of Nero.[245] The inhabitants of these five *municipia* probably enjoyed Latin rights, since that was most common from the time of Claudius onwards. E. Weber goes much further than this. He suggested that Claudius might have granted the whole Norican province *ius Latii.* His argument therefore is two-sided. On the one hand he mentiones the long and good relationship between Rome and the Norican kingdom. On the other hand, he thinks that there was a strong need for citizens who could take up offices in these new towns.[246] Nevertheless, the fact that Vespasian gave to the people of the Iberian Peninsula this favor is an insufficient ground for posing similar acts by other emperors without hard evidence.

It is further assumed that tribes in Gaul also obtained Latin rights from Claudius, amongst which the *Sequani*. There is no solid proof in the literary sources for this assumption about the municipal titles, but the public infrastructure in the centre of the *civitas Sequanorum*, *Vesontio*/Besonçon, became monumentalised and more elite houses were built after the reign of Tiberius.[247] This urban development has been used as indication for municipal upgrading within the Roman administrative system.

The Year of the four emperors and the Flavian period

Several usurpers tried to claim power during the civil war that followed Nero's death. The attempts of Otho, Galba and Vetillius failed and it was Vespasian who realised the establishment of a new era of relative peace under the Flavian Dynasty. This political unrest had repercussions for the municipal organisation of the region (Fig. 2.3). The following passages from Tacitus' *Historiae* give a good impression of the developments which took place in AD 68.

"By similar bounty Otho sought to win the affections of the cities and provinces. He bestowed on the colonies of Hispalis and Emerita some additional families, on the entire people of the Lingones the privileges of Roman citizenship; to the province of Bætica he joined the states of Mauritania, and granted to Cappadocia and Africa new rights, more for display than for permanent utility."[248]

" Gaul, besides remembering Vindex (and his revolt against Nero), was bound to Galba by the recently conceded privileges of (Roman) citizenship, and by the diminution of its future tribute."[249]

The texts narrate that the inhabitants of the *civitas Lingonum* were granted Roman citizenship by Otho, but that Galba made all people in Gaul Roman citizens. It is strongly questioned though whether Vespasian even recognized the generosity of these *princeps* and whether he did not repeal them.[250] Vespasian is nevertheless known to have re-evaluated certain city rights after this year of upheaval and civil war.[251] For both the centre of the *civitas* of the Lingones and the Sequani inscriptions have been found which mention respectively the *colonia Lingonum* and *colonia Sequanorum*. It seems more likely though that these communities did not keep their Roman citizenship, but that Vespasian only granted them Latin rights. As explained earlier, the boundaries of these *civitates* are not well known, but judging from the epigraphic evidence, it seems that the towns of Alesia, Dijon and Vertault belonged to the *civitas Lingonum* and that the centres of E*pamanduodurum/* Mandeure and Villards d'Heria belonged to the territory of the *civitas Sequanorum* with *Vesontio*/Besonçon as the administrative centre.

[245] Thüry 2014a, 55-58.
[246] Weber 1999, 12-13.
[247] Caesar De Bello Gallico: I, 38-39. Dondin-Payre and Raepsaet-Charlier 1999, 289-291; Barçon 2006, 71-73.
[248] Tacitus, Natural History 1 . 78. 1.
[249] Tacitus, Natural History 1, 8.
[250] Raepsaet-Charlier 1999, 287-289.
[251] Suetonius, Life of Vespasian 8.4.

Based on the element *Flavia* in their names, it is probable that four more towns in the northern Alpine region were Flavian foundations. The centre of the *civitas Helvetiorum*, for example, most likely became a *colonia* during the reign of Vespasian. Reasons for this honour can be found in the emperor's affinity with the region as well as the loyalty shown by the *Helvetii* during AD 68-69. It is generally assumed that the citizens enjoyed Latin rights. [252] The *colonia's* full name *Aventicum Pia Flavia Constans Emerita Helvetiorum Foederata* contains titles which according to some scholars can be associated with veterans.[253] The element *Emerita*, for example, appears in the full name of several Roman towns, such as *Ammaedara* (Tunisia)*, Deultum* (Bulgaria) and Madauros (Algeria). Since archaeological research proved the presence of veterans in these places, *Emerita* became an indication for the presence of veterans among the population. Whether or not *Pia* and *Constans* also refer to army units or to the character of the community is debatable. Of particular interest is the addition of *foederata.* This clearly stresses the change between the *civitas Helvetiorum* as a community of *stipendiarii* since the reign of Augustus and its new Flavian municipal status.[254]

There were probably two *municipia* founded under the Flavian dynasty. It is assumed that Vespasian also founded the *municipium Flavia Solva*/Wagna in Noricum, expanding Claudius's organisation of the province. Pliny names this place together with the five Claudian *municipia* and therefore a similar municipal status is hypothesised for *Solva*.[255] Excavations have proven that the place was already occupied from the Augustan period onwards, but the name strongly indicates a Flavian date for the granting of municipal status.[256] The other Flavian *municipium* is *Arae Flaviae*/Rottweil in Germania Superior. An inscription proves that the *Municipium Arae Flaviae* existed in AD 186.[257] Nevertheless, scholars have generally dated its foundation around the Flavian period. The title Flavia does not allow a precise date but historical and archaeological facts indicate a foundation probably under Domitian. It was under this emperor that the new provinces of Germania Inferior and Superior were established, and that the military occupation made space for civic development. The archaeology shows clear urban reorganisation and rebuilding activities during this period in Roman Rottweil.[258] C.S. Sommer suggested that for Domitian the creation of a Roman town was the final manifestation of his *Germania Capta*.[259] It was the first, and possibly remained the only, self-governing Roman town in the northern areas of the province of Germania Superior. Why the foundation of this town remained such an isolated case cannot be answered or clarified by inscriptions or by the archaeological data. The presence of a Flavian altar in *Arae Flaviae* is suggested in the name and therefore generally accepted, but is archaeologically not attested.[260]

A last municipal concern that can be ascribed to the Flavians was the creation of the *civitas Nemetum* with *Flavia Noviomagus*/Speyer as its administrative centre. A precise date or allocation to a specific emperor is not possible, since the only hint comes from the element *Flavia* in a third-century inscription.[261] There are two inscriptions which mention *colonia* in association with this place, but this status was probably gained under the Gallic Empire and never recognised by the Roman emperor.[262] M.-T. Raepsaet-Charlier therefore assumes Latin rights for this community.[263]

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[252] Reynolds 1964, 388.
[253] CIL 13, 05089 and 05093: [colonia Pia Flavi]a Constans Emerita / [Helvetiorum] foederati.
[254] Frei 1969, 391-396. Galsterer-Kröll 1972, 75; Frei-Stolba 1999, 73-81.
[255] Pliny: Natural History 3, 24 (146).
[256] Groh 1999; Fischer 2002, 84 ff; Hodeczek 2002, 203.
[257] EDCS 13302673.
[258] Fischer 1999, 78-79; Sommer 1999b; Meyr 2014, 233-236.
[259] Sommer gives an overview of all the different interpretations for the foundation date of the *municipium*. The date of Domitian goes back to D. Planck (Sommer 1992b, 287-288.).
[260] Ibid., 289; Meyr 2014, 236.
[261] CIL 13, 6659.
[262] Raepsaet-Charlier 1999, 334 (4. Némètes).
[263] Colonia: CIL 17, 605 and 615. (ibid., 295.).

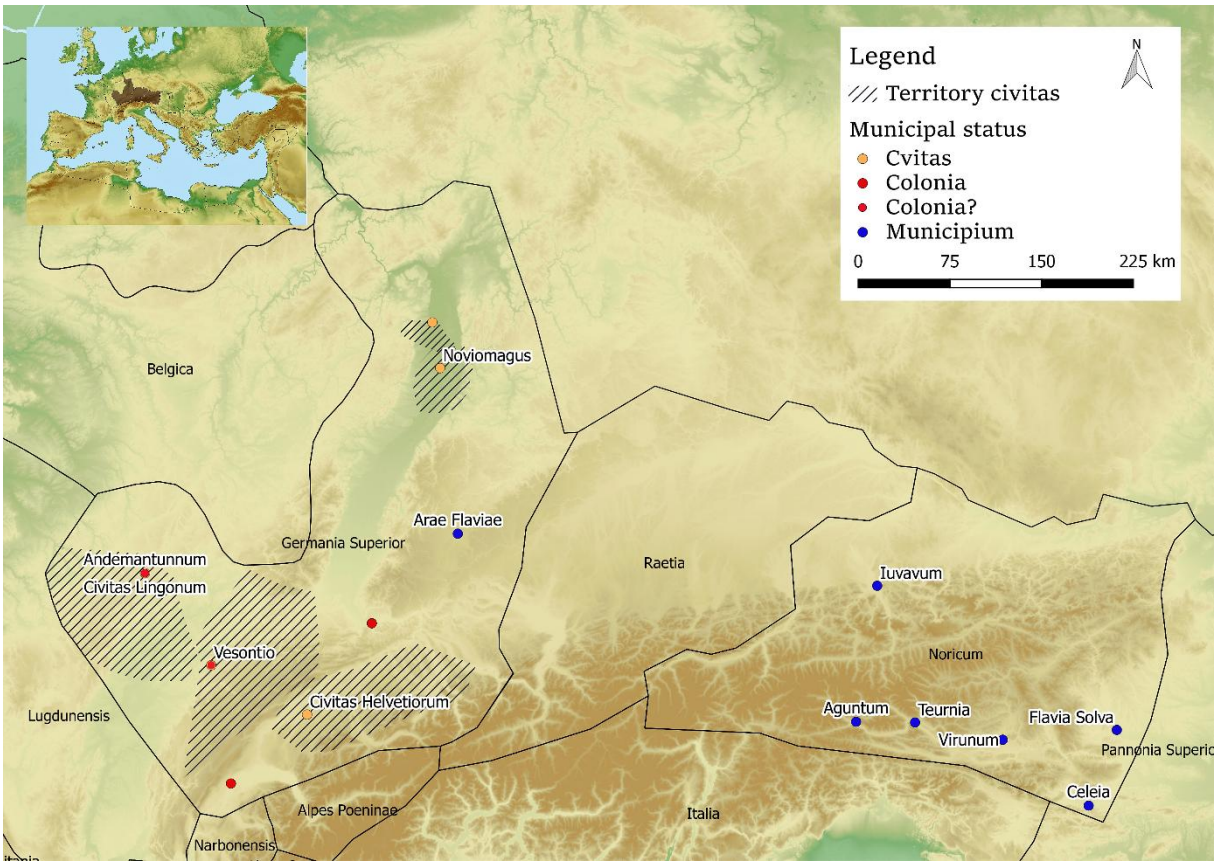


Fig. 2.3: Map of the municipal developments during the Flavian period

The adoptive emperors and the Antonine period

Trajan

Based on the element *Ulpia* in their names and the date of the demilitarisation of the occupation alongside clear urban developments, three more *civitates* can be ascribed to the reign of Trajan. These were the *civitates Ulpia Sueborum Nicrensium*, *Ulpia Taunensis* and *Ulpia Mattiacorum*(Fig. 2.4). There is no definitive evidence suggesting that the inhabitants of one of these communities gained civic privileges, and all three are therefore considered peregrine. Respectively *Lopodunum*/Langres, *Nida*/Frankfurt-Heddernheim and *Aqua Mattiacorum*/Wiesbaden are identified as the centres of these *civitates*. All three centres developed from a military base camp that was most likely abandoned around the time of the installation of these *civitates* and are attested as *vici* in the epigraphic record (Table 2.1).[264] The *civitas Mattiacorum* is a good example of the complex relationship between civil territory and military domain. The independence of the *civitas* and of its centre *Aquae Mattiacorum* from the legionary town of *Mogontiacum*/Mainz appears so strong that both should be considered as separate entities.[265] The *civitas* as a whole was never granted citizen rights, despite the many veterans of the legionary camp of Mainz who came to live there.[266]

Hadrian

A different wind began to blow under the reign of Hadrian. The emperor is generally well known for the granting of municipal rights to many places all over the Empire.[267] A total of three *municipia* in

[264] On the civitas Ulpia Sueborum Nicresium: Galsterer-Kröll 1972, 116; Raepsaet-Charlier 1999, 303; Thiel 2008, 55.; on the civitas Uplia Taunensis: Raepsaet-Charlier 1999, 300-301; 338-339; Kortüm 2005, 156-159.; on the civitas Ulpia Mattiacorum: Baatz and Herrmann 1982, 458-491.
[265] Indications for a separate administration: CIL 13, 6740a, 7301, 7302, 11804.
[266] Peregrine community: Galsterer-Kröll 1972, 116; Raepsaet-Charlier 1999, 297-300.
[267] For an overview of Hadrian's new town foundations see: Boatwright 2000, 39-40.

Raetia and Noricum can be allocated to him based on the element *Aelia* in their names (Fig.2.4). A first is *Aelia Augusta,* the *municipium* underneath modern Augsburg also known as *Augusta Vindelicum*.[268] The place had been a fort from the time of Tiberius onwards and had remained a garrison settlement until 90 AD. It eventually grew into a Roman town. It must have been granted municipal rights, judging by its title *Aelia*, under the reign of Hadrian.[269] *Aelia Augusta* must have hosted the governor's seat and remains up until today the only attested self-governing Roman town in *Raetia*.[270] The foundations of the *Municipia Ovilavis*/Wels and *Cetium*/St Pölten in northern Noricum are presumably related to Hadrian's travels to the Danubian region in the year AD 122.[271]

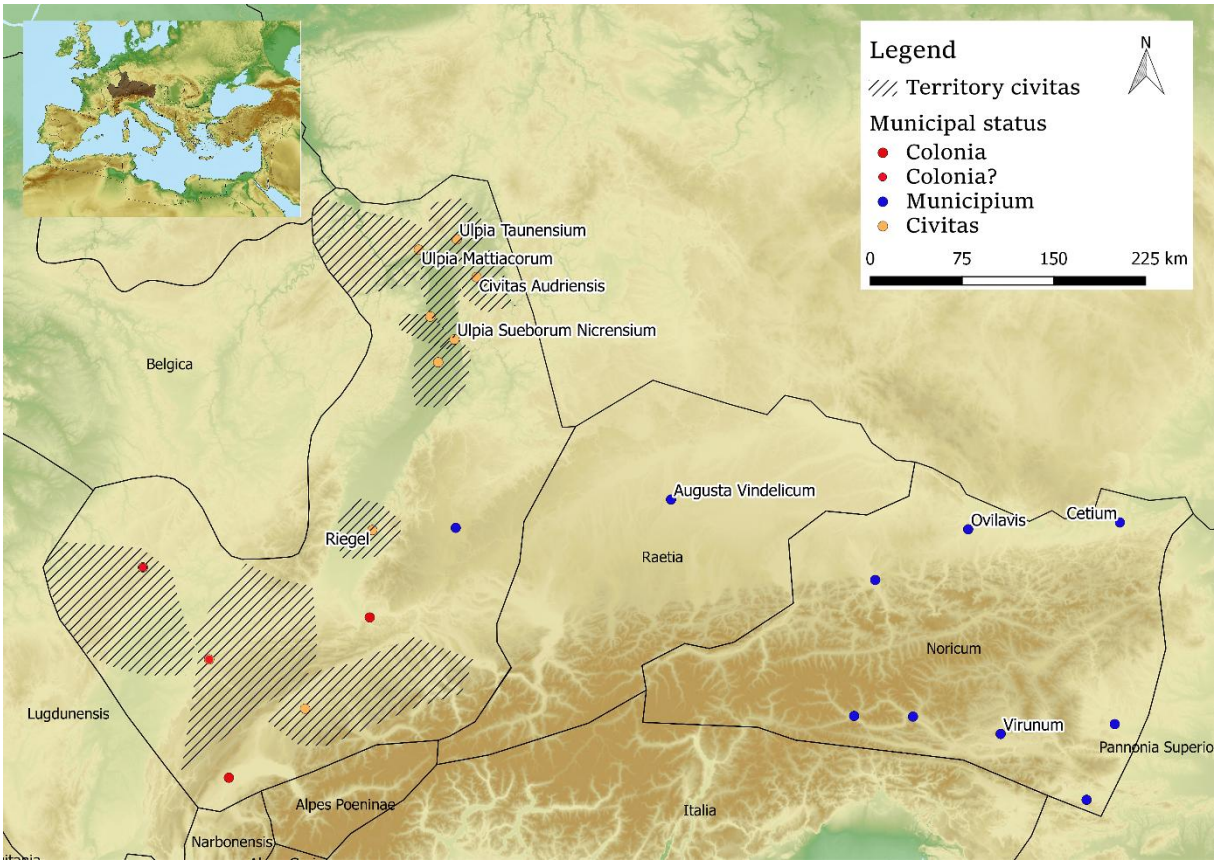


Fig.2.4: Map of the municipal developments during the adoptive emperors

There are a few more municipal changes which are difficult to assign to a specific emperor, but for which the promotion is generally attributed to one of the adoptive emperors (Fig. 2.4). The *civitas Audriensis,* for example, was probably part of Trajan's reorganisation. The *civitas* belonged to the same region as the *civitates Ulpia Sueborum Nicrensium*, *Ulpia Taunensis* and *Ulpia Mattiacorum*. The place *Med(…)*, mentioned as *caput viae*, has been identified with modern Dieburg and appointed as its administrative centre.[272] Another *civitas,* around the centre of Riegel, is assumed, although neither the ancient name of Riegel (*Rigola?)*, nor the name of the *civitas* is preserved. Nevertheless, just as in the case of *Nida*/Heddernheim and *Lopodunum*/Ladenburg, the departure of the army around the end of the 1st century is used here as an indication for its (Trajanic) foundation date.[273] Finally, the centre of Eisenberg is often considered to be a second centre within the *civitas*

[268] CIL 3, 5800, HD008661, 047105.
[269] Czysz 1995, 419; Bakker 2000, 88-94; Weber 2000, 52; Fischer 2002, 79.
[270] Czysz 1995, 419; Roeck 2005, 15-18; Gairhos 2016, 113.
[271] Halfmann 1986, 190. Wedenig 1997, 47; 53-54. According to Wedenig *Ovilava* is a name used by modern scholars, based on the ancient name Ovilavis, which is an abbreviation of its full name Aelium Ovilavis.
[272] Raepsaet-Charlier 1999, 302-303.
[273] Website: Transformation.

Vangionum based on its public infrastructure[274], but two inscriptions found at the site mention a *civitas St(...*), which cannot be identified with any of the neighbouring towns and is further not identified or located.[275] It seems likely from the epigraphic record that Roman Eisenberg may have been the centre of a further unknown community.

Antonine period

In accordance with the organisational work done by his predecessor, Marcus Aurelius presumably continued with the expansion of the municipal network in northern Germania Superior since possibly five or six more *civitates* have been dated to his reign (Fig. 2.5).[276]
Based on the name *Aurelia,* the *civitas Aurelia G*. of which neither the full name of the *civitas*, nor a centre can be derived from any (mile-stone) inscription, is one of them. Previously, both Bad Cannstatt and Öhringen have been proposed as the administrative centre, but more recent investigation makes Neuenstadt am Kocher a possibility.[277] Also ancient Pforzheim is considered as a possible administrative centre of an unknown *civitas*. This assumption relies on a milestone which mentions the name Port(us) (Antiensis?), and taking the other administrative changes in the region into account a creation under Marcus Aurelius is proposed.[278]
More details have survived of the three other Antonine *civitates*. *Sumelocenna*/Rottenburg is mentioned as as *caput viae* and is therefore identified as the centre of the *civitas Sumelocennensis.* The difficulty here is that a *saltus* is mentioned, and that the relation between this imperial domain and the *civitas* is not completely clear.[279]

Also a *civitas 'Alisinensium'* around the centre of Bad Wimpfen was found somewhere after the departure of the military units in the mid- 2nd century. A foundation date under Marcus Aurelius' reign is therefore likely.[280] Based on epigraphic evidence is it assumed that the *civitas Aurelia Aquensis* was founded at some time between AD 100 and AD 197.[281] The element *Aurelia* might be an indication of the emperor who founded the community, but it can equally be a later addition to distinguish the place from *Aquae Mattiacorum/Wiesbaden* and *Aquae Helveticae/Baden*.[282] The indication of Aquae/Baden-Baden as its main centre is generally accepted and is again based on the evidence of milestones. Although there is no clear indication of when the *civitas Tribocorum-Argentoratensium* was created, its vicinity to other Antonine municipal creations makes it very likely that the *civitas* was founded around this time. Presumably, first *Brumath*/Brucomagus functioned as its main centre and later *Argentorate/Strassbourg*.[283]

[274] Bernhard *et al.* 2007, 54-55.
[275] CIL 13, 11696, 11698: c(ivitatis)St().
[276] M. Klee has also mentioned *Iuliomagus*/Schlietheim as a centre of an unknown *civitas*, but this suggestion is not widely supported and is therefore not included in this overview (Klee 2013, 87.).
[277] Raepsaet-Charlier 1999, 305-306. K. Kortüm uses the level of urban development, the presence of stone buildings and a central cult complex to argue in favour of Neuenstadt am Kocher as the *civitas* centre (Kortüm 2014, 258-260.).
[278] Raepsaet-Charlier 1999, 315-316.
[279] Ibid., 308-309.
[280] Ibid., 304-305.
[281] For more explicit information on the date see: ibid., 306-307.
[282] Filtzinger, Plack and Cremer 1976, 215-223; Baatz 2000, 67; Rabold 2005, 98.
[283] Bedon 2001, 127; Kortüm 2005, 155. Elsewhere, one finds foundation datesfor the *civitas Tribocurum* is early as the Augustan period and the 1st century, see: Website: Transformation.

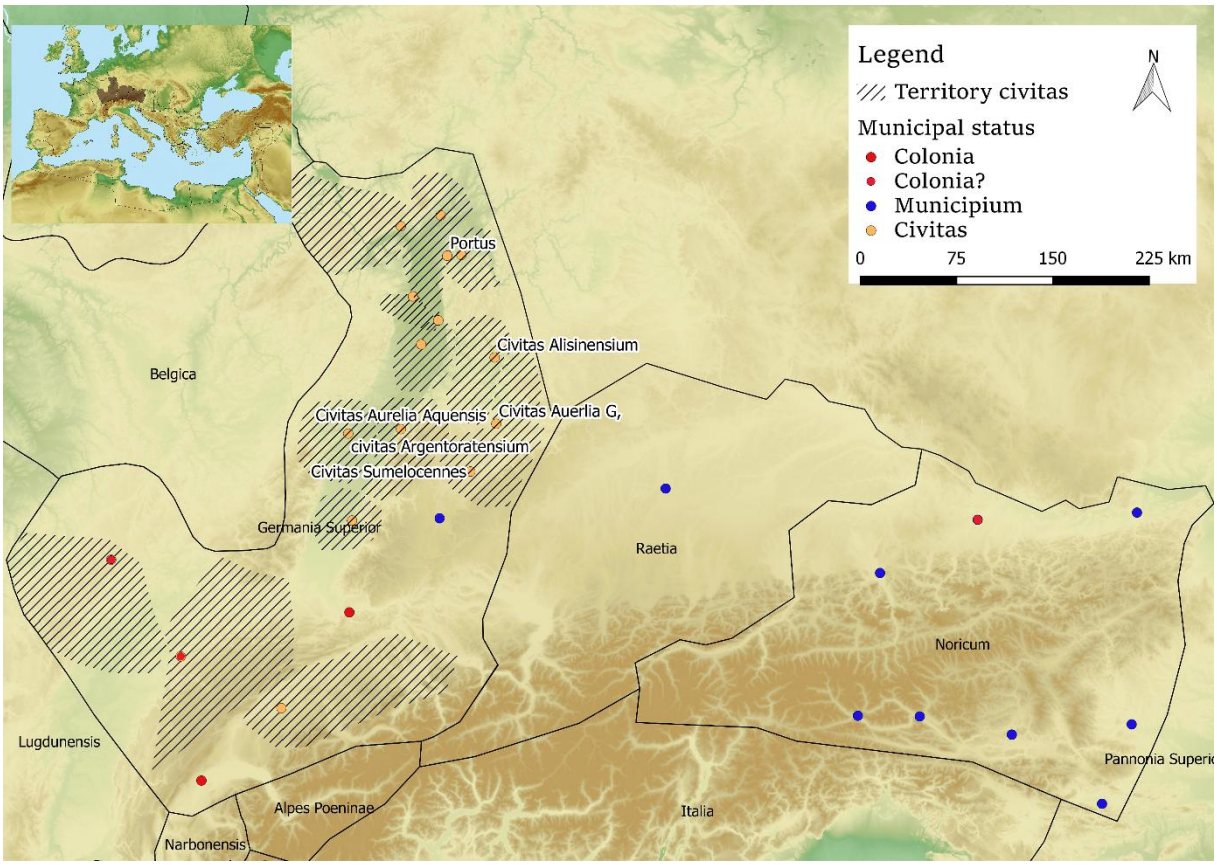


Fig.2.5: Map of the municipal developments during the Antonine and Severan period

The Severan period

The Antonine period can be considered as the time of the last considerable changes within the municipal system of the northern Alpine region. Only a few alterations can be dated to the Severan period. When Caracalla issued the *Constitutio Antoninia* in AD 212 offering Roman citizenship to all free inhabitants within the Empire, it did not eliminate the importance, or the ambition, of communities to receive municipal rights.[284] It still made a difference for a community to gain a municipal status and organise itself as a town.

One of the few changes within the municipal organisation of these provinces during the third century, was the promotion of the *municipium* of *Ovilavis*/Wels into the (honorary) *colonia Aurelia Antoniniana Ovilavensium*.[285] It is not clear whether Marcus Aurelius or Caracalla was the founder, but the promotion is generally dated to the Severan dynasty.[286] Several explanations have been suggested for the change in municipal rights. The two most likely motives are on the one hand the presence of many veterans from the surrounding forts and on the other hand *Ovilavis'* central role in the provincial administration.[287] The presence of the governor's chair in *Ovilavis,* as suggested by G. Winkler and E. Weber, is not fully accepted and can not be supported archaeologically. It has been suggested that the neighbouring *municipium, Aelium Cetium*/St. Pölten, may also have had *colonia* status around the same time, but no inscription or other literary source has so far proven that.[288] The

[284] Sherwin-White 1973, 381-387; Garsney 2004, 140-147.
[285] CIL 3, 5630 and Supl. 5603.
[286] Weber 1999, 13; Fischer 2002; Miglbauer 2002; Miglbauer 2006, 14-15.
[287] 2006, 15.
[288] The inscription CIL 3, 5652 mentions the *colonia Ovilavis* together with *Cetium*. Nonetheless, the inscription does not confirm colonial status for Cetium. Both centres are clearly mentioned separately from one another. Wedenig 1997, 52-53. *Cetium* considered as *colonia* see Weber 1972, 182-183; 1999, 13.

discussion about the reasons behind the promotion of *Ovilavis*/Wels and *Cetium*/St. Pölten has also been fed by the controversy around the city rights of the garrison town of *Lauriacum*/Enns. If indeed *Lauriacum* was founded as a new town, both *municipia* might have lost territory and then been compensated with greater civic privileges and citizen's rights. We will cover the widely discussed city rights of *Lauriacum* again later.

2.2 Self-government and magistracies

The grant of municipal status meant that a community was recognised as a town that was organised following the example of Rome. This implied the institution of certain offices and magistracies. The presence of these magistracies can be taken as evidence of a town's official status in cases where we are otherwise ignorant of its municipal organisation.[289] G. Rupprecht's description of a Roman town serves as a good example:

> *… ist der Terminus 'Stadt' im folgenden so zu verstehen:*
> *Ein lokal konzentriertes Gemeinwesen, das als Glied des römischen Reiches im Rahmen eines 'ordo decurionum'mit leitenden 'IIvir' oder 'IIIIvir' an der Spitze zwar selbst bestimmen und verwalten konnte, aber trotzdem der Herrschaft des Staates unterlag. Es besass die innere Autonomie, aber nicht die äussere, die zugunsten staatlicher Gesamtherrschaft aufgegeben werden musste oder gar nicht erst verliehen wurde.*[290] (underlinings by author)

A Roman town was thus administered by an *ordo decurionum*, comparable with the senate in Rome or a modern town council, which was chaired by *duoviri* or *quattuorviri* who held the highest magistracies within the municipal organisation.[291] When the presence of such a local board is attested, full municipal status for that community can be accepted.

2.2.1 The inner-organisation of a Roman town

The preservation of bronze tablets on which the municipal charter of specific self-governing towns was written has allowed us a better understanding of the inner-organisation of Roman towns and the function of the related municipal offices. Parts of several of such *leges municipales* have been found in southern Spain, more specifically in Malaga and the region of Seville.[292] Some bronze fragments found in *Lauriacum*/Enns in Noricum have also been identified as parts of a municipal charter, although it is disputed to which town it belonged.[293] More recently bronze tablets of the Roman towns of *Troesmis* in *Moesia inferior* and *Ratiariae* in *Dacia* have been identified as parts of their municipal legislation.[294] The finding of these municipal charters remains a rarity, despite the high number of self-governing towns that existed in the entire Roman Empire. Bronze was, of course, an expensive material that could be melted down and recycled. This possibility of reuse of the material in later times might explain the small number of surviving town charters. Equally, scholars have argued that not every town's charter was necessarily written on bronze tablets and that less durable material, such as wood, could also have been used.[295]

These municipal charters are valuable documents regarding our understanding of the practicality of the everyday government of a Roman town. As has already been stated, a town was ruled by a council, which was headed by two *duoviri* assisted by two *aediles* who were annually elected by the

[289] Tarpin 1999, 1. M. Tarpin list also Le Roux 1992, 183-200; Laffi 1988, Brown 1980, 16, 25, 31, 38-39. Jones 1974, 12-14.
[290] Rupprecht 1975, 33-34.
[291] Langhammer 1973, 188-189; Rupprecht 1975, 52-55.
[292] Lex Malacitana, *Leges Irnitana, Salpense and Ursonensis.* González 1986, 147-243.
[293] Bormann 1906; Galsterer-Kröll 1971; Weber 1972; Vetters 1991.
[294] Troesmensium: Eck 2015, 11-18; 2016a, 565-606. Ratiaria: 2016b, 538-544.
[295] Reynolds 1988, 16-17.

assembly of male citizens.[296] The term *quattuorviri* was sometimes used to refer to acts decided upon by all four magistrates together.[297] The *duoviri*, were the two highest ranked magistrates in a Roman town. They were responsible for the council meetings and the local juridical affairs and jurisdiction (*duoviri iure dicundo)*. They bore the ultimate responsibility for the decisions made by the local government. The *duoviri* were assisted by two *aediles* who were in charge of the public order and of the implementation of public works in general, including the construction and maintenance of roads and public infrastructure as well as the organisation of theatrical shows. The finances, including collecting, safeguarding and spending public funds, belonged also to the duties of the *aediles* when no *quaestores* were appointed.[298]

These offices received support from the *ordo decurionum*, the council of 100 men. There is evidence to suggest that not every town had enough wealthy citizens to support a town council of 100 *decurions*.[299] Membership of the *ordo* was for life and was obtained after fulfilling a magistracy, although there is some uncertainty about the election of the *decuriones*. Councilors enjoyed great respect since they not only had a major influence on the overall government of the town, but they were also known for their financial capacity and their contribution to the public benefits evoked via the *munera*.[300] Many of these magistrates emphasised that they held this position either in private inscriptions or in inscriptions related to public works. A person who had held office in a succession of these magistracies would refer to his career using the phrase *omnibus honoribus functus.* The attestation of *duovir*, *aedilis, quatuoviri*, *omnibus honoribus functus* or *ordo decurionum* (*decurio*) is therefore informative for the compilation of a list of self-governing and chartered Roman towns.

2.2.2 Towns with magistracies in the northern Alpine region

A short investigation of the epigraphic sources quickly confirms that the administration of the towns in the northern Alpine region followed the organisation explained above (Table 2.2). For all eight self-governing towns in Noricum, inscriptions could be found attesting the presence of a complete town council (Fig. 2.6). In addition to the offices of *duovir* and *aedilis*, the post of *quaestor* could also be attested in all towns, except for *Aguntum*. *Lauriacum* is the only other centre in Noricum for which a municipal magistrate was found in its epigraphic record. Whether the office of *aedilis* proves a municipal status for Roman Enns or not, is matter of debate.[301]

[296] Jacques 1990, 87-90; Du Plessis, Ando and Tuori 2016, 126. F. Jacques lists and discusses plural examples of the great corpus of propaganda concerning the election of magistrates that survived from Pompei.
[297] It has been debated in the past that the use of either *duoviri* or *quatuoviri* could be associated with a specific municipal status. There is, however, no evidence to assume that *duoviri* were appointed in *coloniae* or that the term *quatuoviri* was only applied in legislation related to honorary *coloniae* or *municipia.* It is generally accepted today that *quatuoviri* refers to the combined offices of the *duoviri* and the *aediles*. For more details see: Gascou 1991, 547-563; Du Plessis, Ando and Tuori 2016, 126.
[298] 2016, 126-128.
[299] Reynolds 1988, 25.
[300] Miglbauer 2006, 6-7; Pferdehirt 2014, 33-35; Du Plessis, Ando and Tuori 2016, 128-129.
[301] Galsterer-Kröll 1971, 339-340; Weber 1972, 187-189.

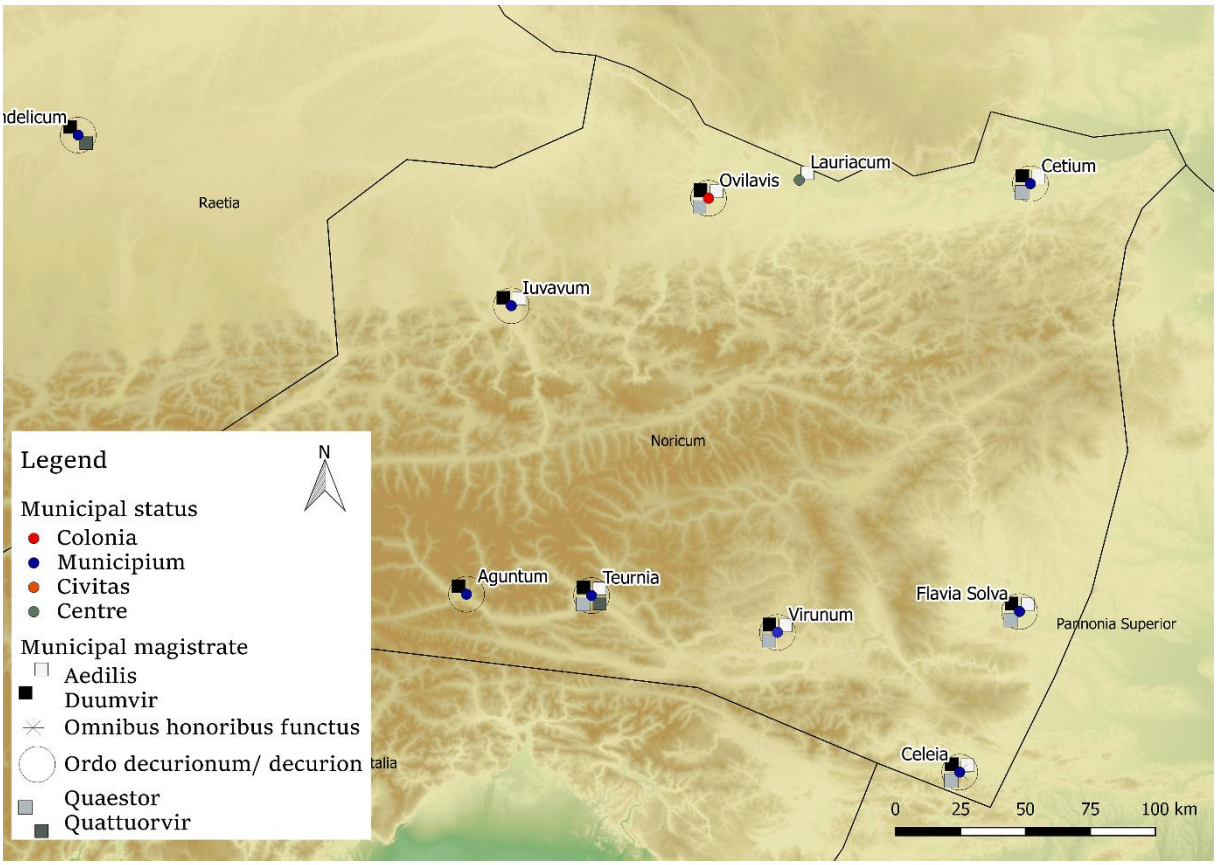


Fig. 2.6: Municipal magistracies in Noricum

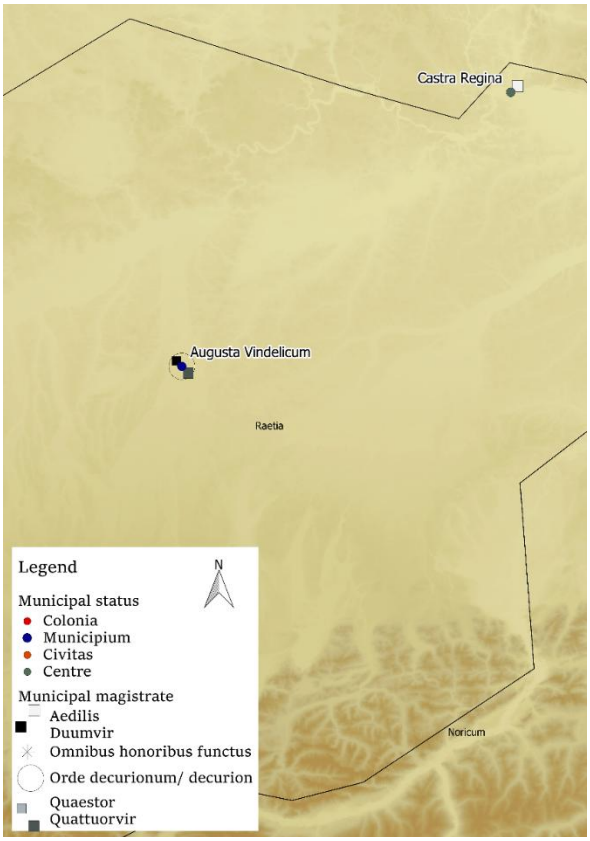


Fig. 2.7: Municipal magistracies in Raetia

In the entire province of Raetia only one place is known to have been granted municipal rights, more specifically the *municipium Augusta Vindelicum*. The offices of *duovir* and *aedilis* are attested in inscriptions, as well as an *ordo decurionum* (Table. 2.3 and Fig. 2.7). As is also the case in the province of Noricum, the only other centre where a municipal magistrate is mentioned in the epigraphy a legionary base, *Castra Regina*/Regensburg. Also here the magistracy of *aedilis* was recorded in stone.

The historical and epigraphic sources discussed in the chronological overview on municipal development could only prove the existence of three *coloniae* in the southern area of Germania Superior, more specifically the early colonies of *Augusta Raurica*/Augst and *Julia Equestris*/Nyon founded under Caesar or Augustus and the Flavian *colonia Aventicum*/Avenches. The presence of *duoviri* and other municipal posts further confirms that these were recognised self-governing towns in possession of a Romanised town charter (Fig. 2.8).

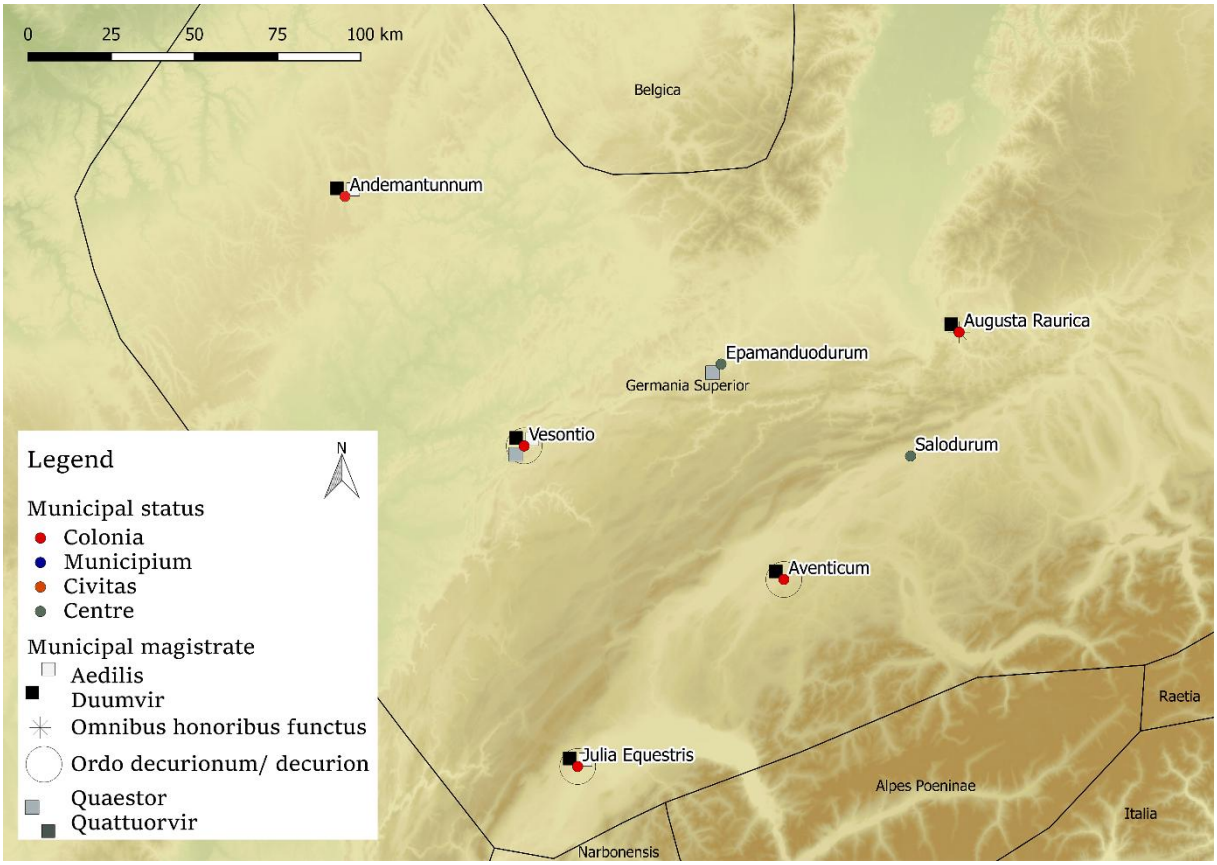


Fig. 2.8: Municipal magistracies in southern Germania Superior

While neither the term *colonia* nor the designation *municipium* has been found associated with *Andemantunnum*/Langres and *Vesontio*/Besançon the presence of Roman magistrates in their epigraphy indicates a promotion. At both places the highest municipal offices are attested, including *duoviri* and *aedilis*. The presence of such official magistrates indicates that these communities enjoyed the rights to organize themselves as self-governing towns with Roman town charters, therefore: *municipia* or *coloniae*.

The map in Figure 2.9 illustrates nicely that the northern area of Germania Superior stood apart in the way that the region was administered. In contrast to the high number of promoted centres in Noricum or in southern Germania Superior, there were almost none in this region, with the exception of the *municipium Arae Flaviae*/Rottweil, although no magistrates are known from this town. Many communities however were organised in *civitates,* mainly during the late 1st and 2nd century. As explained before, a *civitas* stood at the bottom of the municipal hierarchy, which expresses itself for

example in the absence of high official municipal magistracies, such as *duovir* or *aedilis* which are indicators of chartered towns.

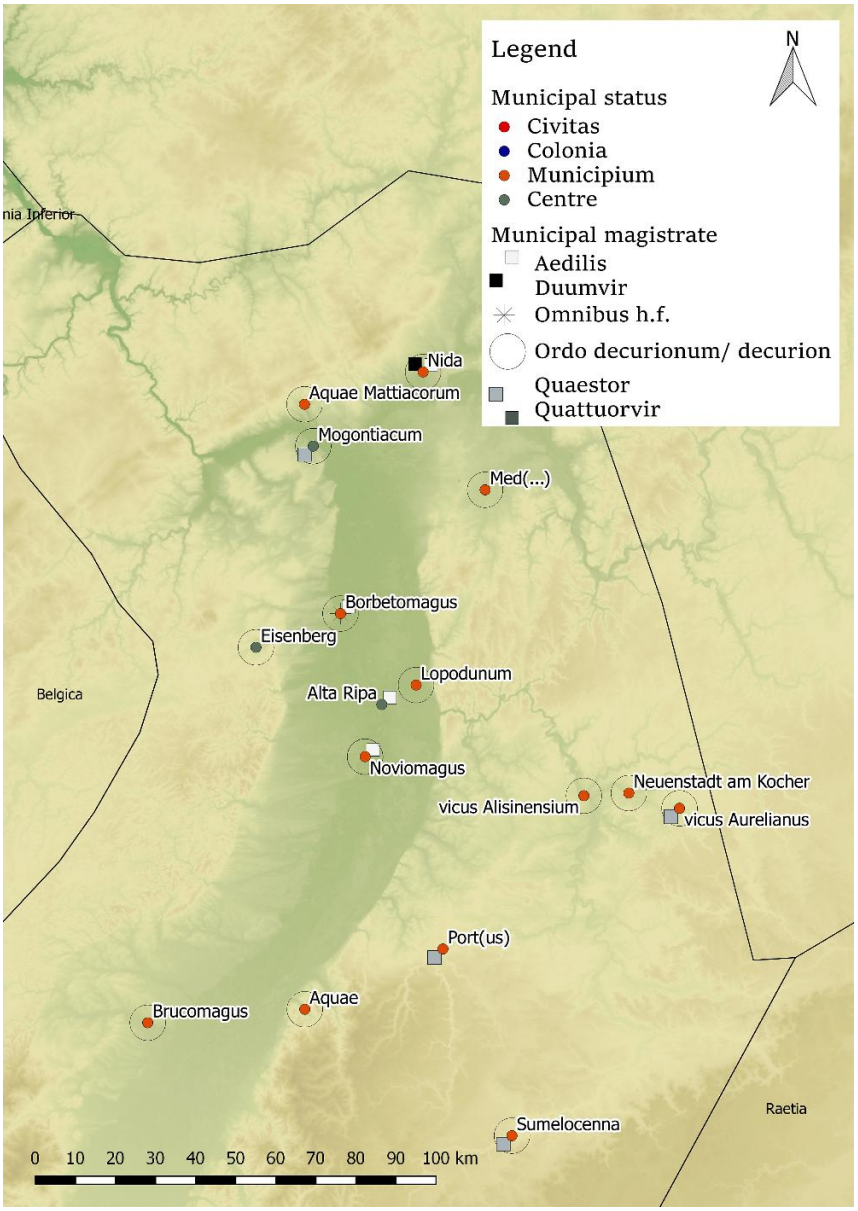


Fig. 2.9: Municipal magistracies in northern Germania Superior

The inscriptions of these administrative units mainly prove the actions of their councils and council members, with the exception of the *civitates Taunensium* (*Nida*) and *Vangionum* (*Borbetumagus*). These two *civitates* have left epigraphic proof of not only *decuriones* but also of higher municipal offices. In the case of *Nida*/Frankfurt-Heddernheim a *duovir* of specifically the *civitas Taunensium* is mentioned (CIL 13, 7265).[302] Another inscription (CIL 13, 6244) relates to a magistrate of the *civitas Vangionum* who fulfilled multiple offices.[303] An inscription found in *Alta* Ripa/Altrip mentions the office of *aedilis*. It is assumed that this magistrate also belonged to the government of the *civitas Vangionum*.[304] The attestation of such official municipal offices may suggest a promotion of these

[302] Nida: CIL 13, 7265: IIv(ir) c. T.
[303] Borbetumagus: CIL 13, 6244 : omnib. hon. f., de[ecurio ci]vitatis Vang.
[304] Nesselhauf 1937, 77.

specific communities. The possibility that *Borbetomagus* was a *colonia* was mentioned earlier, but dismissed as invalid. M.-T. Raepsaet-Charlier thinks that there is no doubt that the community of *Vangiones* was promoted to a *municipium*.[305] Broader, similar paths to municipal promotion are known from Gaul. It has been suggested by scholars, such as H. Wolff, that *civitates* in Gaul should be considered *municipia* or *coloniae*, because although we do not have strong evidence for their use of these titles, they appear to have functioned in the same way.[306]

2.3 The number of self-governing towns

The combination of the epigraphic data for magistracies in addition to that of statuses leads to a list of about 30 self-governing towns (Table 2.4). Seventeen promoted self-governing towns, including both *coloniae* and *municipia* within the entire northern Alpine region could be identified. In addition eight to possibly thirteen places could be classified as *civitas* centres based on the written sources.[307] These self-governing towns were unevenly distributed over the three provinces. In the entire Raetian province only one self-governing town is known. The territory of Noricum seems to have had a relatively high number of chartered towns with the existence of at least seven *municipia* and one *colonia.* This is comparable to the municipal structure in southern Germania Superior, although the communities here mainly received the status of *colonia*. In addition to the two veteran *coloniae* of *Iulia Equestris*/Nyon and *Augusta* Raurica/Augst, the centres of *Andemantunnum*/Langres, *Aventicum*/Avenches and *Vesontio*/Besançon were promoted during the Flavian period, although the evidence is not as clear. The recognition of *Arae Flaviae*/Rottweil as an official town relies only on the inscribed tablet mentioning its municipal status, because no evidence for any magistracy has been found. It might nevertheless not have been the only promoted centre in northern Germania Superior. Although this northern region's administration was strongly characterised by a *civitas* - structure, the evidence for the municipal organisation of both *Borbetumagus* and *Nida* suggests a municipal promotion. The sources discussed in the previous sections leave room for speculation about the municipal status of some places, more specifically of a few legionary towns.

2.4 The status of legionary towns

The army administered all communities that lived on military territory, including both those living in the military fort and the civilian settlements. After the pacification of conquered land and the movement of the Empire's frontier, the land was released and civilian centres were often assigned administrative tasks to replace the military control. Several *civitas* centres, such as *Lopodunum* and *Nida*, started to develop shortly after the departure of the army.

Likewise, the civil nuclei that developed in the immediate surroundings of a legionary fort, also known as *canabae*, could not be given any municipal autonomy. For a long time it was believed that some of these communities that belonged to legionary camps along the Danube, such as *Aquincum*/Budapest and *Carnuntum*/Petronell, gained the status of *municipium*.[308] A revision of this specific phenomenon resulted in the recognition that not one but multiple civil centres developed around these legionary bases and that not all were built on land owned by the military. It is now assumed that municipal rights were only granted to civil communities living beyond the territory owned by the army.[309] This means that several separate administrative units were operating within a

[305] Raepsaet-Charlier 1999, 293.
[306] Wolff 1989, 269.
[307] Other scholars identified twelve to sixteen civitates. Raepsaet-Charlier 1999, 272-352: 14 civitates; Thiel 2008, 59: 12 civitates; Klee 2013, 87: 16 civitates.
[308] Vittinghoff 1982, 132-135; 142.
[309] Móscy 2014, 139-140.

small region, because the legion remained in charge of all land *ad legionem*. There is also some debate about the municipal status of some centres around certain legionary camps in the northern Alpine region, more specifically of Lauriacum/Enns, *Castra Regina*/Regensburg and Mogontiacum/Mainz.

Lauriacum

Whether or not *Lauriacum*/Enns ever gained municipal rights has been a matter of debate for over forty years. Scholars are still divided. Ubl wrote in 2002 that the city rights for *Lauriacum* are generally accepted these days, but others remain sceptical.[310]

It all started with the discovery of several fragments of inscribed bronze tablets during excavations in the garrison settlement of Enns at the beginning of the 20th century. In 1906 E. Bormann identified these tablets as parts of a municipal charter. His argument was based on similarities with the then already known *Lex Rubrica* and *Lex Salpensana*. No place name was mentioned in the fragmented text, but E. Borman was able to restore parts of the imperial titles of Caracalla. This implies that it concerned a Severan municipal promotion.[311] H. Galsterer and B. Galsterer-Kröll who stated in their article of 1971 that these tablets did not prove that *Lauriacum* had become a Roman *municipium*.[312] Since then more bronze fragments possibly belonging to the same charter were found and scholars have tried to prove the opposite.

The main arguments used in the discussion include the context in which the tablets were found as well as the municipal developments of the wider region. Some of these fragmented tablets were found in a treasure pit together with a life-sized bronze statue, 325 coins and a golden necklace. In contrast to H. Galsterer and B. Galstere-Kröll who assumed that the bronze tablets came from a context that contained old metals ready to be reused, H. Vetters considered it an intentional deposit of valuable objects. This was a perfectly normal action considering the unrest of the 3rd century.[313] Also according to G. Alföldy, the municipal charter most likely belonged to *Lauriacum*. His argument is twofold. Firstly, the other Norican towns to which the charter could have belonged gained the status of *municipium* long before Caracalla. *Ovilavis,* the neighbouring town which has been suggested as an alternative, for example, was promoted by Caracalla to *colonia*.[314] Secondly, G. Alföldy's reading of CIL 3, 41216 lists *Lauriacum* as a self-governing community alongside the other eight Norican towns, but this interpretation can be questioned.[315] In addition, E. Weber found support in the epigraphic evidence for the municipal promotion of Lauriacum. Inscriptions prove the existence of a *collegium iuvenum* and two *aediles*. H. Galsterer and B. Galsterer-Kröll did not consider this evidence as proof of anything, since a *collegium* also existed in Roman Mainz and Benningen, two garrison settlements that did not have municipal rights.[316] Furthermore, E. Weber suggested that the broader regional context should be taken into account. According to him, we should accept

[310] It is generally accepted that *Lauriacum* had become a *municipum* under Caracalla according to Ubl 2002, 271. During the Römer Tagung in Erfurt 2015 Dr. Stefan Traxler and Dr. Felix Lang informed me that they are not convinced by the current evidence. Likewise, Dr. Renate Miglbauer remains cautious about considering *Lauriacum* as one of the official Norican Roman towns. Nevertheless, the following list of scholars illustrates the general acceptation: Haider 1987, 19; Kandler and Vetters 1986, 92; Zabehlicky 1999, 16.

[311] Bormann 1906, 316-317.

[312] Galsterer-Kröll 1971. The authors did not accept the municipal rights of *Lauriacum* since none of the fragments mentioned the place the municipal charter was intended for. Furthermore, the tablets were found in a depot for remelting metal, in the *fabrica* of the Roman fort and could have been collected anywhere.

[313] Vetters 1991, 53-57.

[314] Alföldy 1974, 273.

[315] Alföldy 1998, 1-6. CIL 3, 41216: aed(ili) cur(uli) civitates I[X] / [V]irunenses Celeienses [Teur]/nenses Ov[ilavenses] / [Lau]r[iacenses Solvenses] / Aguntense[s Iuvavenses] / [Ce]tienses [patrono fec(erunt)?] The inscription clearly lists seven of the eight Roman *municipia*: *Virunum*, *Celeia*, *Teurnia*, *Ovilavis*, *Aguntum*, (*Iuvavum*), and *Cetium*. Alföldy's reading of Lauriacum nevertheless relies only on one single 'r'.

[316] Galsterer-Kröll 1971, 339-340; Weber 1972, 187-189.

Lauriacum's possession of city rights since many other legionary towns along the Pannonian Danube gained municipal rights under the Severan dynasty, such as *Carnuntum*/Petronell and *Vindabona*/Vienna.[317]

But should events that occured west of *Lauriacum* not also be considered as a broader regional context? For both the towns around the legionary camps of *Castra Regina*/Regensburg and *Mogontiacum*/Mainz municipal rights have been suggested but not proven.

Castra Regina

CIL 3, 14370, found in the legionary fort of *Castra Regina/*Regensburg, mentions that the *aedilis* Artissius erected an altar dedicated to *Volkanus*. Whether *aedilis* here should be understood as the municipal magistracy or as part of the military governance remains unclear. According to G. Alföldy, it is most likely that the inscription belonged to the *canabae*. In that case, this aedileship cannot be considered as evidence for a self-governing town in Regensburg, since the *canabae* would have fallen under military control, thus excluding a municipal promotion.[318]

Mogontiacum

Mogontiacum/Mainz was home to a double legionary fort, housed the seat of the governor, and was the administrative centre of the province of Germania Superior. The absence of a civil centre here therefore seems at least peculiar, but whether or not *Mogontiacum* possessed a municipal status remains disputed. The earliest attestation of an administrative organisation of *Mogontiacum* dates to the 3rd century and is an inscription in which the *civitas Mogontiacensis* is mentioned.[319] Before that there is no *civitas* known in the region of the *Treveri* or in the territory of the *Vangiones*. How the area was organised or how the administration was carried out, remains unclear. Either the region remained military territory and fell immediately under the supervision of the provincial governor or the existence of an unknown *civitas* should be accepted, of which *Mogontiacum* might have been the administrative centre.[320]

Even if the *civitas Mogontiacensis* was established before the third century, there is no evidence of promotion to municipal status,[321] especially not since most surrounding communities were *civitates peregrinae*. The organisation of *cives Romani* known from *Mogontiacum*/Mainz was most likely an institution of the *canabae* or a *conventus*-like body of veterans or traders. There are similar examples from the regions which demonstrate that Roman citizens needed legal organisation in the absence of municipal autonomy.[322]

2.5 The nature of self-governing centres

2.5.1 The background of Roman self-governing centres

It has been mentioned several times that some self-governing Roman towns were the successors of Roman military forts, although no proof exists of self-governing towns developing from the civil communities near legionary forts in the northern Alpine region. The fact that the remains of a military fort have often been found underneath, or close to, known Roman towns has nevertheless stimulated the idea that a strong relationship existed between the army and the establishment of towns.

[317] 1972, 182-183; 187-189.
[318] Dušanić 2000, 360.
[319] CIL 13, 6727:civitas Mog[ontiac(ensis).
[320] Raepsaet-Charlier 1999, 311.
[321] Contra T. Bekker-Nielsen, who states that under Diocletian *Mogontiacum* had finally become a *municipium*. Unfortunately he does not refer to hard evidence to support this statement: Bekker-Nielsen 1989, 38.
[322] Rupprecht 1975, 232-233.

The chart in Fig. 2.10 shows that at least half of the self-governing Roman towns in the northern Alpine region had a military background. Figure 2.12 illustrates clearly that most of these towns were located in northern Germania Superior, with the exception of the governor's seats in Raetia and Noricum: *Augusta Vindelicum* and *Virunum*. In a certain way the foundation of the veteran colonies of *Augusta Raurica* and *Julia Equestris* was also embedded in a military context. The vast majority, however, were *civitas* centres (Fig. 2.11) that made the transition from military post to civil administrative centre. In the case of *Aquae* and *Sumelocenna* the evidence for a predecessor fort is indirect and relies only on finds, including stamped tiles and associated infrastructure such as a military bathhouse.[323] All this might imply a fairly intrusive Roman reorganisation of the land in which they showed little respect for the indgenious structures.

Although, as has already been mentioned in chapter 1, Roman forts were more often than previously assumed constructed in the vicinity of indigenous centres and although there is little evidence of continued occupation, in many cases self-governing towns developed nearby (Fig. 2.12). The depth of stratigraphy at these sites makes it difficult to reach the early layers that could reveal something about the nature and date of their origin.
Regarding the *civitates* in northern Germania Superior, the link between the Late Iron Age occupation and the Roman centre exists mainly in the name of the tribe which was often kept in the denomination of the civitas, i.e. the *Mattiaci, Nemeti*, *Triboci, Vangones*. The *civitas Taunensis,* however, suggests that occasionally complete new districts were created, since its name refers not to a tribe but to a topographical feature, namely the river Taunus.[324]
Pre-Roman inhabitation has been proven around the five Claudian *municipia* in the former territory of the Norican kingdom. In the case of *Aguntum* and *Teurnia* remains of Iron Age sanctuaries have been found on the neighbouring hills, but the actual settlements remain unlocated.[325] Remains of such Late Iron Age settlements were excavated on the Magdalensberg, the Hemmaberg and in *Iuenna*/Globasnitz, all prior to the *municipium Virinum*.[326] The hills around Salzburg too have revealed many traces of pre-Roman occupation.[327] Likewise, remains of Late Iron Age occupation have been found on the Frauenberg, near the Flavian town of *Flavia Solva*.[328] In Noricum a clear transition from Late Iron Age sites located in higher places to Roman centres in the valleys can be observed and one might refer here to a clear reorganisation of the centres. This contrasts with self-governing towns in southern Germania Superior which were often successors of pre-existing centres. Due to exceptional and relatively recent excavations, the transition from the Late Iron Age centres of Avenches, Langres and Besançon into Roman towns could be observed.[329] It has been suggested recently that even the veteran colonies of *Augusta Raurica* and *Julia Equestris* were not created *ex nihilo*, but might have existed already. The tribes in Gaul were generally organised around centres and the Romans presumably made use of the available infrastructure to impose their military and administrative structures.[330] We are led to the conclusion that the Romans used different approaches towards the foundation of self-governing centres which appear to be regionally distinct.

[323] Filtzinger, Plack and Cremer 1976, 475; Kortüm 2005, 155.
[324] Reynolds 1966, 70; Schmidts 2014, 43-48. T. Schmidts suggested that the origin of the *civitates* on the left bank of the Rhine find their origin in tribal districts, but that the ones on the right bank are more likely to be Roman creations, detached from any ethnical context, with the exception of the *civitates Ulpia Sueborum Nicretum* and the *civitas Mattiacorum*.
[325] Alzinger 1977,384; Gugl 2001, 307.
[326] Glaser 1982, 10-12; Gleirscher 2007, 105-106.
[327] Dopsch 2010, 10-13.
[328] Hinker 2010, 11.
[329] Avenches: website Aventicum.; Langres: Barral *et al.* 2014, 367-369.; Besançon: Vaxelaire and Barral 2007, 31; Barral, Gaston and Vaxelaire 2011, 91-103.
[330] Millett 1990, 75; Poux 2005, 14.

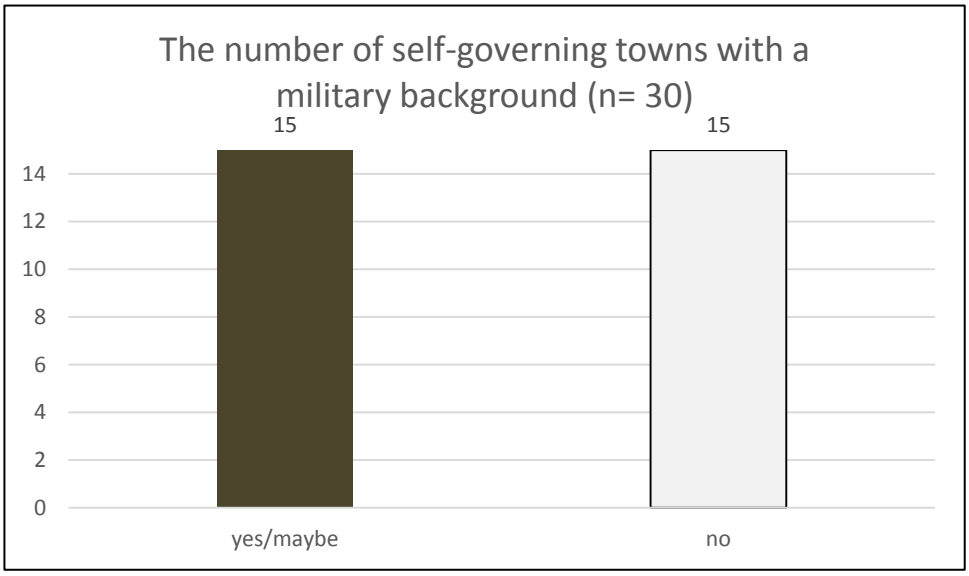


Fig. 2.10: Half of the self-governing towns possibly developed from a military base

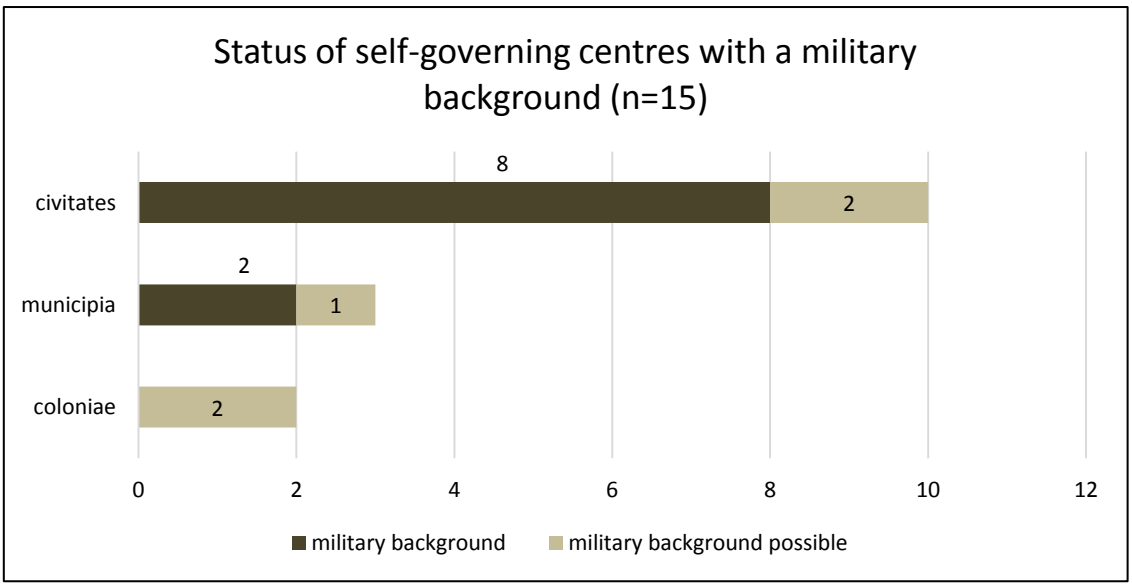


Fig. 2.11: The number of self-governing towns with possible military association grouped per status

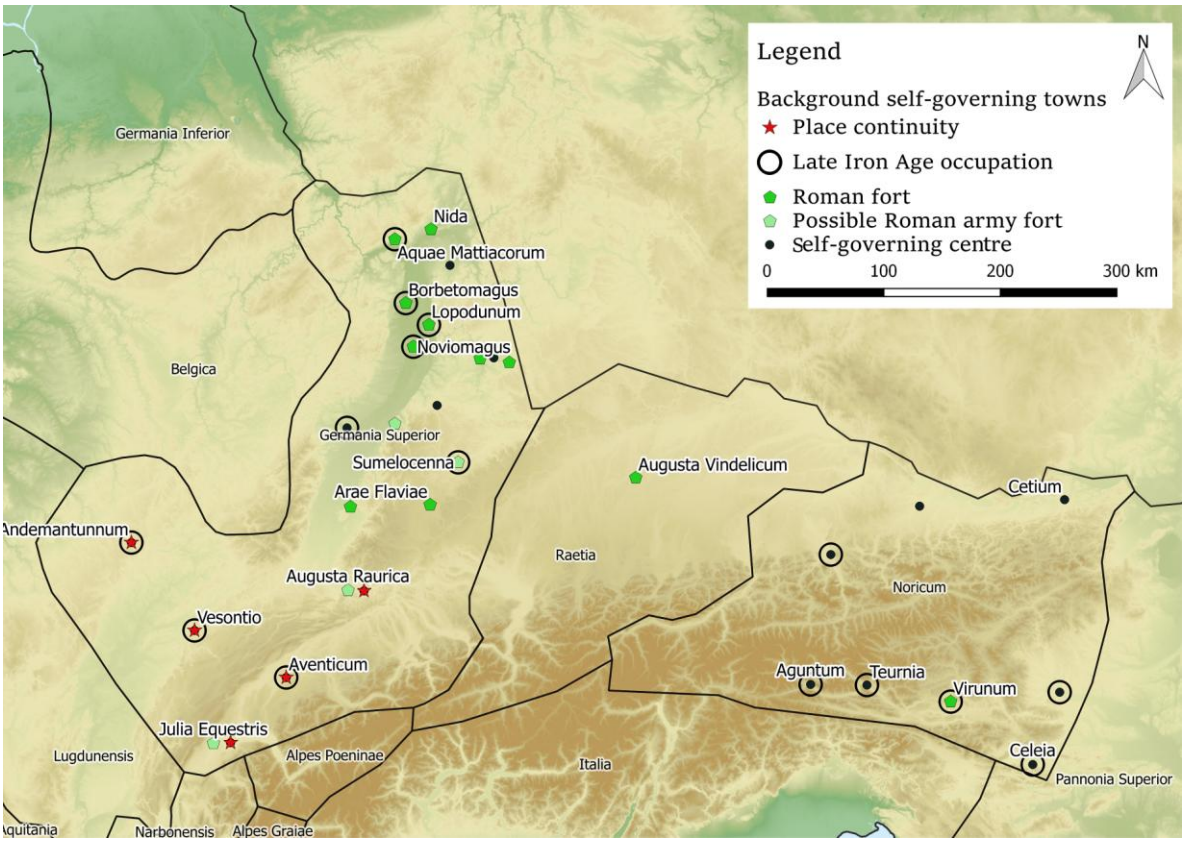


Fig. 2.12: The distribution of the self-governing towns and their background

2.3.2 The size of Roman self-governing centres and legionary bases

Regardless of their origin, self-governing towns not only fulfilled an administrative role, but also provided the location for all kinds of secondary and tertiary services or practices and businesses. The size that these self-governing towns grew to can give us an idea of their attraction and importance for a wider area.

It is nevertheless rare for the size of a Roman town to be known precisely, mainly due to the many factors impeding the recording of the archaeological structures. One such factor involves continuous occupation. Many of the Roman self-governing towns became the predecessor of Medieval and Early Modern cities.[331] Augst, Nyon and Rottweil in the territory of Roman Germania Superior, Augsburg in Raetia and Salzburg in Noricum are just a few examples. Also Roman garrison settlements, including the legionary ones, proved to be fruitful foundations for further town development. Because of the overbuilding of the Roman layers, these Roman centres only reveal their size and appearance gradually and often through accidental discoveries. Today the Roman structures in Enns, Mainz and Regensburg are largely overbuilt. Parts of the legionary camp of *castra Regina*, such as the wall and the *porta praetoria*, were only recently rediscovered in the streets of Regensburg during renovation works.[332] The Roman theatre of Mainz was discovered as a result of the construction of the railway at the beginning of the last century.

[331] Schmidts 2014, 43.
[332] For illustrations of the wall of the legionary fortress appearing after renovation works: Fischer and Sulk 2015, 193.

Additionally, some quarters of Roman towns may have been destroyed before they could be researched, due either to construction works or to natural processes. Rivers are an example of such a natural destructive force. The river Lech may have eroded 10 to 18 ha of the Roman town of Augsburg.[333] Another complicating factor is the perishable materials that were used for the construction of many town districts in the Roman period and which are far less visible in the archaeological layers than the stone-built equivalents. In earlier days in particular, timber structures escaped archaeological investigation.[334]

A further complication is that the size of most Roman towns fluctuated over time. The estimations concerning the size of *Celeia*/Celje range from 36 ha during the 1st century up to 65 ha a century later.[335] When collecting size data across a wide area, it is important to keep in mind the use of synchronic estimations. However, the archaeological reality of most sites does not allow a nuanced chronological overview of their dimensions. The accuracy of the size estimation of a Roman town depends on the archaeological visibility, the state of preservation and the level of coverage by later constructions. It will often rely on an overall image based on the distribution of finds spots and will only be representative of the size of the Roman town at the time of its greatest expansion.

Several self-governing towns were provided with a wall. Although these walled areas could give us a size indication, they are less clear and helpful for measuring the built-up area than they might at first appear. The development of living quarters outside the city wall or the inclusion of open space within the walled area obviously has an impact on the size of the built-up area of a town. The sizes of the self-governing towns and legionary bases that will be analysed here only represent their built-up area for the period between the late 1st century AD and the late 2nd or early 3rd century.

The chart in Fig. 2.13 displays the size of self-governing and legionary centres in the northern Alpine region for which an estimation could be found, divided over six size categories. The graph allows a few conclusions. The majority of the self-governing towns (79%) remained modest in size and did not extend beyond 60 ha. The size of *civitas* centres remained generally modest in this region, since the majority did not exceed the threshold of 40 ha. In terms of geographical distribution, the centres in southern Germania Superior generally expanded to become relatively large urban nuclei (fig. 2.14). The *coloniae* of *Augusta Raurica* and *Vesontio* expanded to 100 ha and are therefore the largest self-governing towns in the entire region.[336] Despite the wall surrounding the *colonia Aventicum,* enclosing a total of about 231 ha, the occupied zone was only one-third of the total area, about 80 ha.[337] The Roman colony of *Iulia Equestris* seems, with its 40 ha, seems rather small, although the centre may have been bigger.[338] The expansion of the modern town of Nyon makes the investigation of its Roman predecessor difficult. Centres of similar size can be found in proximity to the frontier. The legionary centres of *Mogontiacum* and *Lauriacum* grew as big as the largest self-governing towns, including both their military and the civilian structures.[339] Also, the town of *Ovilavis* easily reached 80 to 90 ha.[340] If its large expansion is related to its nomination as the provincial capital of Noricum Ripense under Dioclatian's administrative reorganisation is questionable.[341] Towns where

[333] Roeck 2005, 15-18; Gairhos 2016, 114-115.
[334] During recent excavation in Bregenz archaeologists witnessed that wood-built structures belonging to the Roman site of *Brigantium* were not observed during earlier investigations (Kopf and Oberhofen 2012, 18.).
[335] Lazar 2002, 75.
[336] Augusta Raurica: Wendt and Zimmermann 2008, 209. Vesontio: Barçon 2006, 71-73.
[337] Esmonde Cleary 2003a, 77.
[338] Grenier 1931, 336.
[339] The size of only the civilian quarters of these legionary bases measured around 81 ha in the case of *Lauriacum* and 90 to 100 ha for the Roman centre in Mainz.
[340] Miglbauer 1999, 44.
[341] Fischer 2002.

provincial governors resided or which played a role in the provincial administration tended to grow to a relatively large size, such as *Augusta Vindelicum*, *Virunum* and *Celeia*.[342]

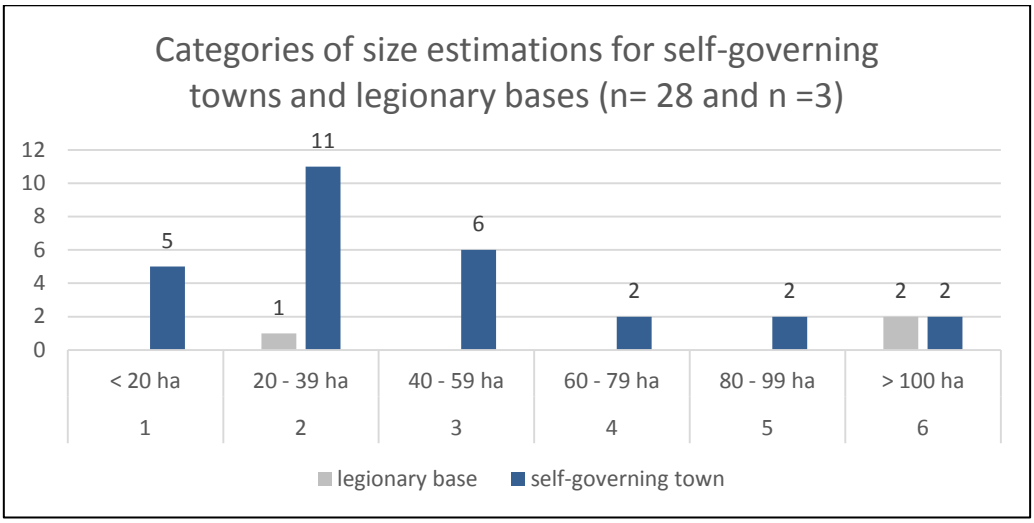


Fig. 2.13: The size of self-governing towns and legionary settlements

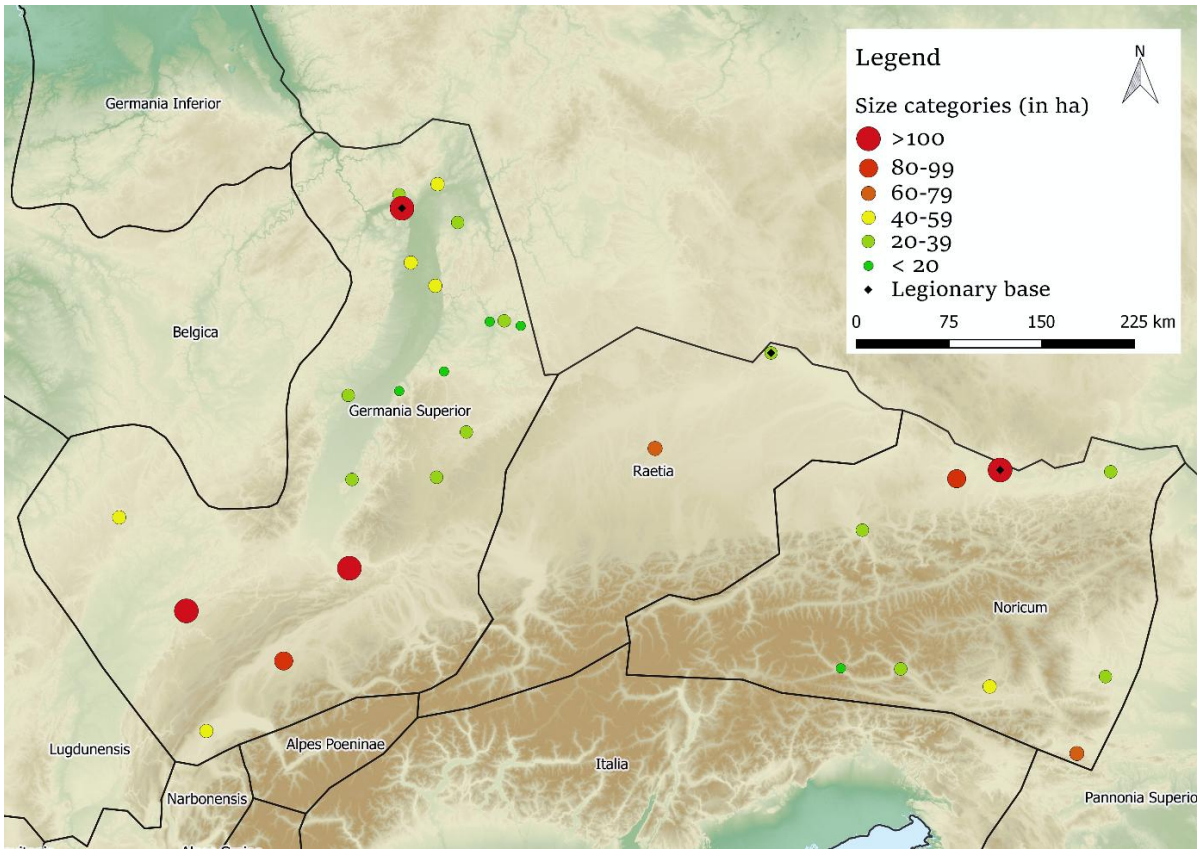


Fig. 2.14: Map showing the size of self-governing towns and legionary settlements

[342] That the governor's seat of the relevant provinces was located in *Augusta* Vindelicum and *Virunum* has been mentioned before. For the administrative importance of Celeia see: Visocnik 2008, 351.

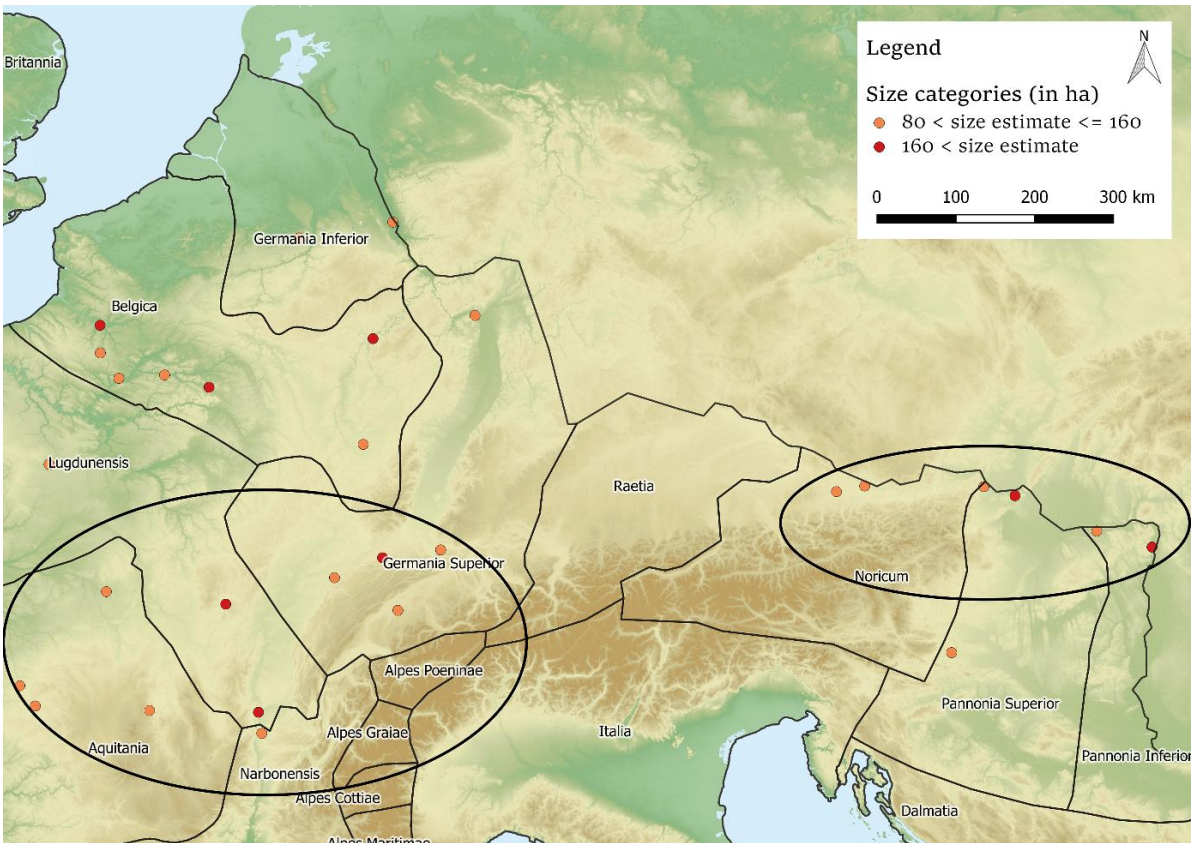


Fig 2.15: The largest towns in Gaul, the Rhine and Danube provinces
(Data derived from the Empire of 2000 cities project database)

The distribution of the larger self-governing centres in the northern Alpine region seems to correspond with wider regional tendencies. The map in fig 2.15 shows places in the northern areas of the Empire that were at least 80 ha or more. It becomes clear here that the large centres in southern Germania Superior relate to the development of the towns in Gallia Lugdunensus, their original regional context. Equally it illustrates that also in Pannonia the centres along the Danube frontier developed into large towns, a phenomenon that we may also catch a glimpse of in Noricum.

2.6 Conclusion

The aim of this chapter was to compile a list of the self-governing towns in the northern Alpine region and to compare regional differences.

About thirty self-governing towns were identified based on the evidence from titles, including *colonia, municipium* and *civitas,* and municipal magistracies, such as *duovir, aedilis* or *decurio*. The granting of these municipal rights appears to have happened in several stages. Following the events of the Gallic war the southern half of the territory of the later province of Germania Superior became divided into municipal districts under the direction of first Caesar and then Augustus. A first real wave of municipalisation happened under the reign of Claudius with the foundation of five *municipia* within the former territory of the Norican kingdom. After the chaos that was left behind by Nero, the Flavian dynasty brought peace to the region and with the exception of the creation of the German provinces and the inauguration of a few *municipia* the municipal landscape remained the same. A second important phase began under the reign of Trajan, who installed several *civitates* in the northern area of the newly pacified province of Germania Superior. In combination with the completion of the frontier, his successors Hadrian and Marcus Aurelius continued to elaborate the municipal organisation of this particular region. With the Antonine period, the municipal developments had reached their final stage as far as the imperial period. The *constitutio Antoniniana*

did not change the general administrative network. It is only in northern Noricum that we find indications that three communities might have enjoyed a promotion permitted by Caracalla. Nevertheless, only the upgrade of the *municipium Ovilavis* to *colonia* is confirmed epigraphically. The promotion of the *municipium Cetium* and the *legionary settlement of Lauriacum* remain for the time being tantalising enigmas.

The distribution of these self-governing towns over the three provinces seems to fall into four different zones, each with its own particular municipal development.

A first zone concerns the entire province of Raetia, which remained a municipal vacuum with the exception of the only known self-governing town of *Augusta Vindelicum*. In this chapter, written sources were used as the predominant type of evidence. In chapter four we will see that the archaeological record somewhat nuances this rigid image.

The concentration of *civitates* in northern Germania Superior formed another unique cluster within the overall municipal organisation of the wider region. Their main centres often developed from Roman military forts and garrison settlements and appear never to have grown into larger settlements. Indeed, the majority of *civitas* centres never grew to a size of more than 40 ha. That there was some Late Iron age occupation in the vicinity before the construction of these Roman centres is often assumed, but clear evidence remains absent. In general, it was an area that did not have any promoted towns, although the presence of municipal magistrates in *Nida*/Frankfurt-Heddernheim and *Borbetumagus*/Worms might suggest municipal privileges for these communities. The provincial administrative seat was in *Mogontiacum*/Mainz, but this community most likely stayed under military control and was never given any municipal autonomy.

In contrast, the southern half of the province of Germania Superior had a relatively dense concentration of chartered towns. It seems the only area in the entire northern Alpine region where one can speak of place continuity between the pre-Roman and Roman centres. Furthermore, the majority of all *coloniae* that existed in the entire northern Alpine region were located here. We are generally dealing with large Roman towns, varying between 50 and 100 ha. The only other centres within the municipal hierarchy that grew to this size were the legionary settlements of Mainz and Enns. Excavations have proven that early Roman alterations were made to the street network of the Late Iron Age predecessors of these towns in southern Germania Superior.

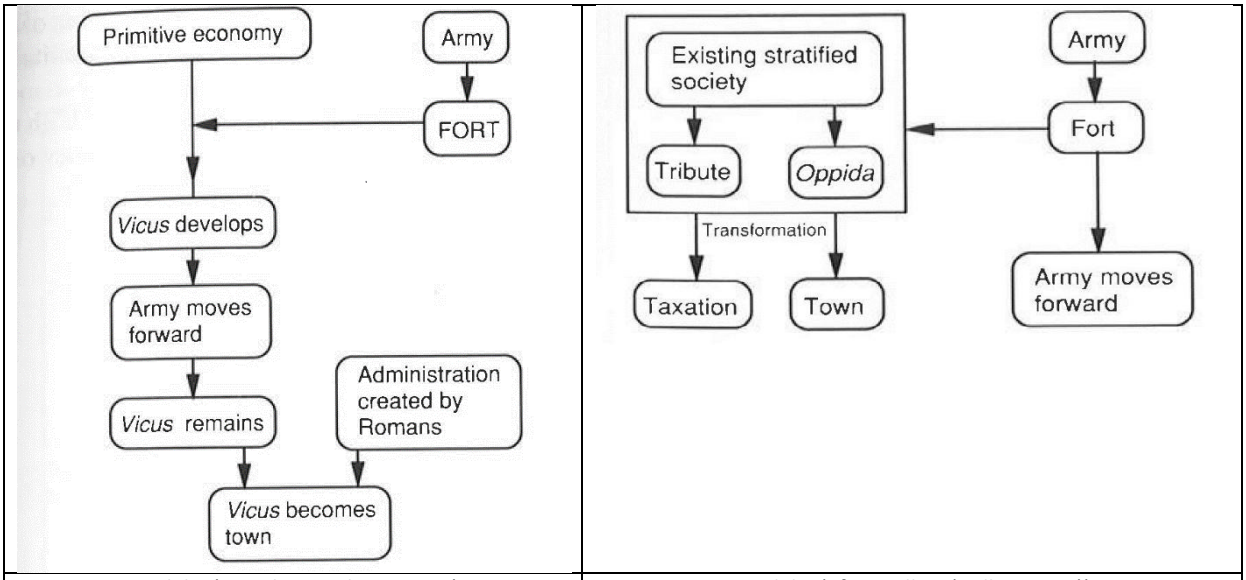
A final zone relates to the province of Noricum, a large part of whose territory was divided between eight *municipia*.[343] The municipal organisation of the province is remarkable for its uniformity, if the 3rd century promotion of *Ovilavis* is excluded. A clear sign of the Roman administrative organisation of the province was the firm break with the Late-Iron Age centres, which were often located on elevated places in the landscape. Such a clear disruption with pre-existing occupation could not be attested in northern Germania Superior and is in strong contrast to the continuous use of late Iron Age centres in southern Germania Superior.

This four-part pattern evokes a question about the processes that influenced the development of this specific municipal division. One obvious factor is the attitude of the conquered people towards domination by Rome, on the one hand, and their previous relationship with Rome on the other. The strong trade connections between the Noricans and Rome, and their cooperative attitude, probably gave the Noricans their municipal autonomy, despite the overthrow of the indigenous organisation.

[343] G. Alföldy has shown that certain areas were not subjugated to one of the Norican towns, but belonged to imperial estates. He used mainly military inscriptions. He noticed that some soldiers only used the name of the province while others mentioned the name of the town to indicate their origin. Alföldy concludes that the central area of the Norican province belonged to the emperor, including all the important places for natural resources, such as iron (Tiffen, Feldkirchen, Hohenstein, Hüttenberg, Friesach, Neumarkt, Eisenerz) and salt (Hallstatt): Alföldy 1970, 163-176.

The location where the Norican tribes had chosen to live clearly did not correspond with the Roman vision of what the urban network should look like. The figures in M. Millett's 1990 publication illustrate well the different possible processes taking place behind the various municipal constellations within the province of Germania Superior (Fig. 2.16). The late Iron Age centres in Gaul presumably provided a good base for the administrative organisation, which might explain why they developed further during the Roman period (Fig. 2.16, right). The difficult conquest of the Main and Neckar region and the many revolts by the Germanic tribes might reflect in the low number of municipal promotions in that region. The military forts erected in the area either replaced indigenous places or attracted the growth of the first centres (Fig. 2.16, left).

The northern Alpine region, far from possessing homogeneity, counts as a textbook example of how the Roman administration dealt differently with the various peoples and existing situations that it encountered. Furthermore, when set in a broader geographical context, it is easy to see how the situation in southern Germania Superior had much in common with parts of Gaul, and Noricum with the adjacent provinces to the east. The large towns in southern Germania Superior belong to a wider phenomenon that stretched out over the rest of Gallia Lugdunensis. The lack of a high number of promoted communities in the northern part of the same province reflects the administrative organisation of the provinces of Gallia Belgica and Germania Inferior. The larger towns that developed along the frontier in Noricum seem to be only the tip of a much longer strip of large self-governing towns located farther east along the Danube river.



Model 1 (Based on Webster 1966) | Model 2 (after Millett (Millett 1990))

Fig. 2.16: Different views on the development of Roman towns (Figure from Millett 1990, 75.)

Table 2.1: Town territories

Province	Provincial Territory in km^2	Self-governing centres (min) and legionary forts	Town territory in km^2
Germania S	93,500	22 +1	4,065
Raetia	80,000	1 + 1	40,000
Noricum	62,000	8 + 1	6,888

The urban network

So far only the known self-governing places and legionary forts have been taken into account. The question of whether subordinated centres, villages, rural habitation or military posts were of any importance for the urban network might become clear from the following simple calculation.

Following Fischer's estimations of the territory of the three provinces, the entire northwestern Alpine region covered a total of around 235,500 km^2 of land. Germania Superior at approximately 93,500 km^2, Raetia 80,000 km^2 and Noricum, being even smaller, with circa 62,000 km^2, makes them some of the smallest provinces within the Empire.[344]

When the assumed territories of these provinces are dived by their possible number of self-governing centres, the exercise results in very large city territories (Table 2.1). Even when we subtract from this area the known imperial estates, mines or *saltes* and mountain ridges, it is clear that territories ranging from 4,065 km^2 to 40,000 km^2 are of unbelievable dimensions. Therefore, the quest for a better understanding of the settlement system in Roman times should not stop at the self-governing towns. In the following chapters other criteria will be considered in order to identify more centres which contributed to the settlement system either in an administrative, logistical or economic way.

[344] Fischer 2002, 18.

Table 2.2: Epigraphic evidence and literary sources concerning municipal status		
Town	Status	source
Aguntum	Municipium	CIL 3, 11485 Pliny, NH 3 24. 146
Civitas Lingonum Andemantunnum	Civitas (Foederata)	CIL 13, 05708 CIL 13, 05681 Pliny HN 4, 106
Andemantunnum	Colonia (Honorary)	Tacitus 1,78,1 CIL 13, 05693
Aquae	Civitas Peregrina	CIL 13 9113 CIL 13 9116 CIL 13 9117
Aquae	Vicus	CIL 13, 6315
Civitas Ulpia Mattiacorum (Aquae Mattiacorum)	Civitas	CIL 13, 7587 CIL 13, 7061 CIL 13, 7062/7062a
Aquae Mattiacorum	Vicus	CIL 13, 7566a
Arae Flaviae	Municipium Latinum	EDCS 13302673
Argentorate	Vicus	CIL 13, 5967
Augusta Raurica	Colonia	EDCS 09401124 HD 047777 HD055396 HD 011148
Aelium Augustum (Augusta Vindelicum)	Municipium	CIL 3, 05800 HD 008661 HD 047105
Civitas Helvetiorum (Aventicum)	Civitas Stipendiaria	CIL 13, 5092
Civitas Vangionum (Borbetomagus)	Civitas	CIL 13, 06244
Aventicum	Colonia (Honorary)	CIL 13, 05102
Celeia	Municipium	CIL 3, 05227 Pliny HN 3,24,146.
Aelium Cetium	Municipium	CIL 3, 5663 CIL 3,5658 CIL 3, 5652 CIL 3, 3979
Flavia Solva	Municipium	Pliny: HN 3, 24.146
Iulia Equestris	Colonia	CIL 13, 05011 CIL 13, 05012 EDCS 11801067 EDCS 09200396
Iuvavum	Municipium	CIL 3, 5591 EDCS 14400454 Pliny, NH 3, 146
Civitas Ulpia Sueborum Nicrensium (Lopodunum)	Civitas	CIL 13, 09099 CIL 13, 06421 CIL 13, 06420
Lopodunum	Vicus	CIL 13, 06421
Civitas Audriensis (Med.)	Civitas	CIL 13, 7353
Civitas Ulpia Taunensium (Nida)	Civitas	CIL 13, 7352 CIL 13, 7386 CIL 13, 7370
Nida	Vicus	CIL 13, 7336 CIL 13, 7335 EDCS 10700471
Flavia Noviomagus	Civitas	CIL 13, 06106 CIL 13, 06659
Ovilavis	Colonia (Honorary)	CIL 3, 5630 HD035584

Port(us)	Civitas?	CIL 17, 653c Port(us) (Antiensis?)
Civitas Sumelocennensis (Sumelocenna)	Civitas	CIL 13, 06358 CIL 13, 06365 (saltus)
Sumelocenna	Vicus	CIL 13 6365
Teurnia	Municipium	CIL 3, 5462 Pliny, NH 3.24.146
Civitas Sequanorum (Vesotio)	Civitas	CIL 1674,1675
Vesontio	Colony (Honorary)	RIS 35
Civitas Alisinenses (vicus Alisinensium)	Civitas	CIL 13, 6482
Civitas Aurelia G	Civitas	CIL 13, 6462 EDCS 11202225
vicus Aurelianus	Civitas Peregrina	
Virunum	Municipium	EDCS 144400206 HD011277 Pliny, NH 3.24.146

Table 2.3: Epigraphic evidence and literary sources concerning municipal magistrates		
Place	Magistracy	Source
Germania Superior		
Alta Ripa	Aedilis	Nesselhauf 1937, 77
Andemantunnum	Aedilis	CIL 13, 05682
	Duumvir	CIL 13, 05689 CIL 13, 05690
Aquae	Decurion	CIL 13, 6339 CIL 13, 6323 Nesselhauf-Lieb 1957, 121
Aquae Mattiacorum	Decurion	CIL 13, 7062a
Augusta Raurica	Duumvir	ISchweiz 342
	Omnibus honoribus functus	ISchweiz 343
Aventicum	Duumvir	CIL 13, 05102 CIL 13, 05104
	Ordo decurionum	CIL 13, 05098
Borbetomagus	Aedilis	HD023931
	Decurion	CIL 13, 06244 CIL 13, 06225
	Omnibus honoribus functus	CIL 13, 6244
Brucomagus	Decurion	CIL 13, 7266 CIL 13, 7062 CIL 13, 7263
Eisenberg	Decurion	CIL 13 11698 CIL 13, 11696 CIL 13, 11697
Epamanduodurum	Quaestor	CIL 13, 5415 (aedilie quaestor??)
Julia Equestris	Aedilis	RISch-02, 00247 = AE 1978, 00567 = AE 1994,+ 01288 = AE 2003, +00080; CIL 12, 02614
	Decurion	CIL 13, 05005 EDCS-09200396 EDCS-11801067 RISch-02, 00247
	Duumvir	CIL 13, 05009 CIL 13, 05010 CIL 13, 05013
Lopodunum	Decurion	CIL 13, 6420a CIL 13, 6404 CIL 13, 6399
Med(...)	Decurion	Finke 1927, 183

Mogontiacum	Decurion	CIL 13, 6733 CIL 13, 6770
	Ordo decurionum	CIL 13, 6769
	Quaestor	CIL 13, 7222 CIL 13, 6676 CIL 13, 6775
Neuenstadt am Kocher	Decurion	CIL 13, 6462
Nida	Aedilis	CIL 13, 07370
	Decurion	CIL 13, 07352 CIL 13, 07357 CIL 13, 07386 CIL 13, 11810 (from Mayence)
	Duumvir	CIL 13, 7265
Noviomagus	Aedilis	Nesselhauf 1937, 77.
	Decurion	CIL 13, 06106 CIL 13, 06404
	Ordo decurionum	Nesselhauf 1937, 71-72.
Port(us)	Quaestor	CIL 13, 11721
Salodurum	Magistratus	EDCS-13900607
Sumelocenna	Decurion	CIL 13, 6384
	Quaestor	CIL 13, 6669
Vesontio	Aedilis	CIL 13, 11554 CIL 13, 11553 CIL 13, 05415
	Duumvir	CIL 13, 05367 CIL 13, 05343 CIL 13, 11554
	Ordo decurionum	CIL 13, 05451
	Quaestor	CIL 13, 05415
vicus Alisinensium	Decurion	CIL 13, 6482
vicus Aurelianus	Decurion	CIL 13, 6447 CIL 13, 6462
	Quaestor	CIL 13, 6541
Noricum		
Aguntum	Decurion	CIL 708
	Duumvir	CIL 3, 5583 CIL 5, 708 Wedenig (A6 - A7)
	Ordo decurionum	Wedenig (A4 and A5)
	Praefectus iure dicundo	CIL 3, 5583 Wedenig (A6 - A7)
Celeia	Aedilis	CIL 3, 5079, Wedenig (C1); CIL 3, 5143, Wedenig (C5); CIL 3, 5225, Wedening (C15, 35)
	Decurion	CIL 3, 5127, Wedenig (C6) CIL 3, 5194, Wedenig (C11) CIL 3, 5226:, Wedening (C16) CIL 3, 5236, Wedening (C22) CIL 3, 15205(3): dec(urio) municipi(i) Cla(udii) Celeiae, Wedening (C27)
	Duumvir	CIL 3, 5116 CIL 3, 5183 CIL 3, 5194 ; Wedenig (3 -9-11) CIL 3, 5237, Weding (C23) CIL 3, 5302, Wedning (C25, 28, 31, 32, 34, 37, 39?, 40?)
	Omnibus honoribus functus	CIL 3, 5111, Wedenig (C2)
	Ordo decurionum	CIL 3, 5159 CIL 3, 5205 Wedenig (C8-14)
	Quaestor	CIL 3, 5143, Wedenig (C5) CIL 3, 5229, Wedening (C19)

Cetium	Aedilis	CIL 3, 5663 Wedenig (Cet 5)
	Decurion	CIL 3, 5652 Wedenig (Cet 1)
	Duumvir	CIL 3, 5652 Wedenig (Cet 1) CIL 3, 5658 Wedenig (Cet 3)
	Quaestor	CIL 3, 5663 Wedenig (Cet 5)
Flavia Solva	Aedilis	CIL 3, 5309 Wedenig (S1) CIL 3, 5343 Wedenig (S10) CIL 3, 5344 5345 Wedenig (S11-12) CIL 3, 5430 Wedenig (S16) CIL 3, 11718? Wedenig (S22, 26)
	Decurion	CIL 3, 5323? Wedenig (S3) CIL 3, 5324 Wedenig (S4) CIL 3,5331 Wedenig (S7) CIL 3, 5435 Wedenig (S17) CIL 3, 11829 Wedenig (S23)
	Duumvir	CIL 3, 5324 Wedenig (S4) CIL 3, 5336 Wedenig (S9) CIL 3, 5457 Wedenig (S19) CIL 3, 5561 Wedenig (S20)
	Ordo decurionum	CIL 3, 5327 Wedenig (S6) CIL 3, 5334 Wedenig (S8) CIL 3, 5346 Wedenig (S13, 24)
	Quaestor	Wedenig (S 20)
Iuvavum	Aedilis	CIL 3, 5527, Wedenig I1
	Decurion	CIL 3, 5589 Wedenig (I11, 12, 13, 14, 15 , 20)
	Duumvir	CIL 3, 5572 Wedenig (I6,8, 9,10) CIL 3 5589 Wedenig (I11, 12, 13, 14, 15) CIL 3, 11777-11778 Wedenig (I 16, 17, 19, 20)
	Ordo decurionum	CIL 3, 5536 Wedenig (I3)
Lauriacum	Aedilis	CIL 3, 5678 Wedenig (L1)
Ovilavis	Aedilis	CIL 3, 5606 Wedenig (O1)
	Duumvir	HD035584 CIL 3, 5630 Wedenig (O8)
	Decurion	Cll 3, 5606 Wedenig (O1) CIL 3, 5630, Wedenig (O2)
	Quaestor	Wedenig (O6)
	Ordo decurionum	Miglbauer 2006, 8.
Teurnia	Aedilis	CIL 3, 471 Wedenig (T1) CIL 3, 5569 Wedenig (T9, 12)
	Decurion	CIL 3, 5462 Wedenig (T7)
	Duumvir	CIL 3, 5568 Wedenig (T8, 10)
	Ordo decurionum	CIL 3, 4741 Wedenig (T4, 11)
	Praefectus iure dicundo	CIL 3, 5568 Wedenig (T8 , 10)
	Quattuorvir	CIL 3, 471 Wedenig (T) CIL 3, 4724 Wedenig (T2)
	Quaestor	CIL 3, 4727 Wedenig (T3,T13)
Virunum	Aedilis	CIL 3, 4838 Wedenig (V12 CIL 3, 4864 Wedenig (V14 CIL 3, 4867 Wedenig (V17 CIL 3, 5073 Wedenig (V23 CIL 3, 5074 Wedenig (V24, 32-40-41-43)
	Decurion	CIL 3, 5031 Wedenig (V21) CIL 3, 11555 Wedenig (V27,35-44)
	Duumvir	CIL 3, 4859 Wedenig V13 CIL 3, 4865 Wedenig (V15) CIL 3, 4866 Wedenig (V16) CIL 3, 11673

		Wedenig (V28,35-42-45)
	Quaestor	CIL 3, 5092 Wedenig (V25)
Raetia		
Augusta Vindelicum	Decurion	CIL 3, 05787 CIL 3, 05826 CIL 3, 05800 CIL 3, 05825 CIL 3, 14370 CIL 3, 05828 EDCS 08900496 EDCS 11801091
Augusta Vindelicum	Duumvir quinquennalis	CIL 3, 5826
Augusta Vindelicum	Quattorvir	CIL 3, 05825
Castra Regina	Aedilis	CIL 3, 14370, 10
CIL	Corpus Inscriptionum Latinarum	
EDCS	Epigraphik-Datenbank Clauss/Slaby	
HD	Heidelberg Datenbank	
Nesselhauf	Neue Inschriften aus dem römischen Germanien und den angrenzenden Gebieten (1937)	
Wedenig	Epigrafische Quellen zur Städtischen Administration in Noricum (1997)	

Table 2.4: Self-governing towns

	NAME	PROMOTED STATUS	CIVITAS CENTRE	IIVIR	AEDILIS	(ORDO) DECURION	QUAESTOR
Raetia							
	Augusta Vindelicum	MUN	-	X (Quattuorvir)	x (Quattuorvir)	x	-
Noricum							
1	Aguntum	MUN	-	x	-	x	-
2	Celeia	MUN	-	x	x	X	X
3	Cetium	MUN	-	X	x	X	X
4	Flavia Solva	MUN	-	x	x	X	X
5	Iuvavum	MUN	-	X	x	X	-
6	Ovilavis	MUN/COL	-	x	x	X	X
7	Teurnia	MUN	-	X	x	x	X
8	Virunum	MUN	-	x	x	x	X
Southern Germania Superior							
9	Augusta Raurica	COL	-	X (c.omn. f.)	- (c.omn. f.)	- (c.omn. f.)	-
10	Andemantunnum	COL?	x	x	x	-	-
11	Aventicum	COL	-	x	-	x	-
12	Iulia Equestris	COL	-	x	x	x	-
13	Vesontio	COL?	x	x	x	x	X
Mid and Northern Germania Superior							
14	Arae Flaviae	MUN	-	-	-	-	-
15	Aquae	-	X	-	-	x	-
16	Aquae Mattiacorum	-	X	-	-	x	-
17	Borbetumagus	?	X	? (c. omn. f.)	x	x	-
18	Brucomagus	-	X	-	-	x	-
19	Eisenberg	-	?	-	-	X	-
20	Lopodunum	-	X	-	-	x	-
21	Med …	-	?	-	-	x	-
22	Neuenstadt am Kocher	-	?	-	-	x	-
23	Nida	?	X	x	x	x	-
24	Noviomagus	-	X	-	x	x	-
25	Portus …	-	?	-	-	-	X

26	Riegel	-	?	-	-	-	-
27	Sumelocenna	-	X	-	-	x	X
28	Vicus Alisinensium	-	X	-	-	x	-
29	Vicus Aurelianus	-	x	-	-	x	X

3. Different kinds of centres: the deeper layers of the settlement system

"Characteristic of the urbanism in the northwestern Roman provinces, where relatively little official Roman promotion of town centres happened and where the administrative territories of the few cities were extensive, was the importance of villages and subordinate centres, who provided some of the functions that were elsewhere reserved for chartered towns. Excluded from the rank of city and denied the full rights of municipal autonomy, numerous settlements existed which nonetheless acted as important local centres.", as A. Poulter phrased it.[345] It will be such centres that are the focus of this chapter. These places hosted institutions and practices that were not per se of an administrative or juridical kind, but which rather included economic, logistical, religious or other social matters. M.E. Smith described urban settlements therefore not as municipal autonomous communities, but as '*places that serve as the setting for institutions and practices that affect a larger, regional hinterland*'.[346]

As concluded in chapter two, investigating only the stratum of self-governing towns does not allow an in-depth understanding of the Roman settlement system in the northern Alpine region. J. Bintliff has even criticised the work of N. Pounds and T. Bekker-Nielsen for ignoring the urban processes occurring in the shadow of 'official' towns and pleaded for the inclusion of centres not meriting official town status when studying urbanism.[347] A perspective in which self-governing towns acted as the only focal points across the landscape has lost popularity and has given place to approaches in which travelling traders, smaller centres as well as villages and even rural inhabitation, played a more profound role in the organisation of daily life in antiquity and thus of the overall settlement system.[348]

The main aim of this third chapter will be to illustrate the diversity of the centres, other than the chartered towns, that belonged to the Roman settlement system in the northern Alpine region and that fulfilled certain central functions for a wider region. Following a brief overview of the debate concerning the denomination of these centres, their diverse nature, provisions and specialisations will be discussed over four sections. A first section will focus on garrison settlements. Production centres of ceramic wares will be explained in a second section and examples of centres specialising in other crafts, such as metal or stone processing, will be given. The third section focuses on the centres which provided a specific service for a wider region in terms of cultural, religious or logistical needs. A final section is dedicated to describing the nature and the general characteristics of this mix of possible urban centres that existed beside and between the self-governing towns.

3.1 Subordinate centres, *Kleinstädte* or *vici*?

The institution of administrative self-governing centres created an inequality between the municipal centres on the one hand and the many non-self-governing communities living in dispersed

[345] Poulter 2009, 829; 853-854.
[346] Smith 2010, 138.
[347] Bintliff 2002, 240.
[348] Condron 1995, 103; De Ligt 1993, 199-240.

agglomerations on the other.[349] Despite the fact that they might have possessed a range of administrative and economic functions, these non-self-governing centres apparently never gained municipal rights. Since these communities were dependent and owed allegiance to a higher authority, often a neighboring chartered town, modern scholars often call them 'secondary' or 'subordinate' centres.[350] Elsewhere these centres are referred to as 'small towns'/'townships' in English - or *Kleinstädte* in German scholarship. Modern scholars also regularly use the Latin term *vicus,* but that is not always justified. The term *vicus* appears frequently in inscriptions, but its exact meaning in Roman administrative language is not fully understood. The term was used to refer to many types of habitation, such as a town quarter, a built-up street, a complex building or a village-like agglomeration (far) outside the town centre.[351] Nevertheless, the usage of the term has in the archaeological literature developed to become an equivalent for village or small town, and is often applied to any Roman village-like site, regardless of the term's juridical connotations, epigraphic or literary proof.[352] However, when looking at places where inscriptions are found that confirm the existence of a *vicus*, a more cautious use of the term is appropriate.

Vicus, a pseudo-status

It has been suggested that the term *vici* related to communities that were given certain privileges or freedoms concerning legal affairs and market rights.[353] Inscriptions testify to the presence of certain magistrates who were active in these communities: *magistri vici.*[354] Although their position and role are not fully understood, it is generally accepted that these offices administered local and religious affairs and should not be considered equal to municipal magistrates.[355]

The map below (Fig. 3.1) shows the places in the northern Alpine region for which a *vicus* status could be confirmed epigraphically, while Table 3.1 gives an overview of the actual sources. A closer look at the inscriptions reveals that the evidence for a *vicus*-status is most often embedded indirectly in the way the inhabitants referred to themselves as *vicani*. It is furthermore apparent that the majority of these inscriptions belonged to communities within the province of Germania Superior, while only one *vicus* is known in Raetia. Not a single *vicus* could be attested in the epigraphic record of Roman Noricum.[356] This pattern corresponds strongly with the differences between the three provinces regarding their municipal organisation (discussed in chapter 2). More specifically, in the regions where chartered towns were more scarce and where *civitates* appeared to be the dominant

[349] Poulter 2009, 829.
[350] Corbier 1991, 212; Fischer 2002, 95; Poulter 2009, 853.
[351] Tarpin 1999, 4-6; Poulter 2009, 853; Czysz 2013, 265.
[352] Fischer 2002, 95; Tarpin 2002. The following definition by W. Czysz nicely illustrates the general application of the term *vicus* to all kinds of countryside agglomerations: *Vicus meint hier „eine kleine, eigenständige Siedlung auf dem offenen Land, jedoch ohne den landwirtschaftlichen Produktionshintergrund, und gebunden an eine Überlandstraße, die als verkehrstopographisches Element das Rückgrat der Ortschaft darstellt",* published in Heising 2012, 5.
[353] W. Czysz refers to a 2nd century text from S. Pompeius Festus and a Late Antique one by Isidorus from Hispala in which they emphased the independent government of *vici* concerning jurisdiction, and the right to keep markets (Czysz 2013, 265.). For the market function on centres referred to as *vicus*, see also: De Ligt 1993, 157-158; 173; 178.
[354] Inscriptions belonging to *Salodurum*/Solothurn in Germania Superior mention *magistri vici*, implying the existence of annually elected magistrates active in a non-self-governing centre (Niffeler 1988, 183.). Solothurn inscriptions: EDCS 13900607; 10900284.
[355] Tarpin 2003, 258-262; 264-265; Czysz 2013, 265.
[356] I see no reason to assume that different epigraphic traditions might have caused this discrepancy.

administrative unit, more *vici* are also attested.[357] Many *vici* seem to have been related to the settlements that developed in the vicinity of Roman forts. The *vici* of Benningen, *Grinario*/Köngen and the *vicus Scuttarensium/*Nassenfels are only a few examples.[358] A. Poulter has suggested that the offices for the management of civil agglomerations on military territory were based in *vici*, which might explain the strong relationship between *vici* and garrison settlements.[359] Some of these *vici* in the area of the Rhine and Neckar have been designated as the administrative centre of *civitates,* such as *Lopodunum*/Ladenburg, *Aquae Mattiacorum*/Wiesbaden or *Nida*/Frankfurt-Heddernheim.[360]

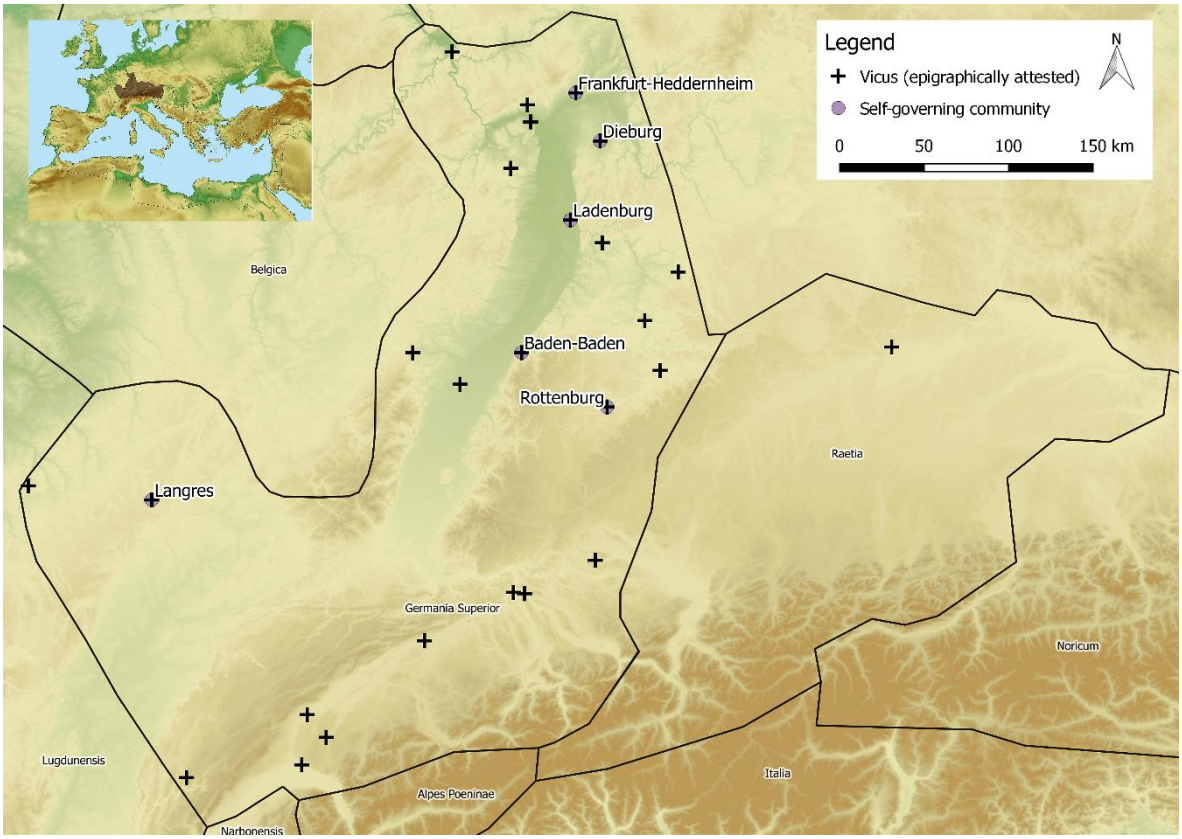


Fig. 3.1: The distribution of *vicus*-inscriptions in Germania Superior and Raetia

Overall, the distribution pattern of these *vici*-inscriptions and the privileges towards market rights and local affairs assigned to these communities, suggest to me that the term *vicus* should not be applied to all Roman centres lacking a municipal charter or subordinate to another town. Only a minority of the centres have yielded inscriptions proving their *vicus*-status. That certain communities could obtain a certain status emphasizes the diversity that characterised these unchartered Roman centres. What differentiated them even more was the range of the services that these places offered, as will appear from what will follow.

[357] For the municipal organisation of the three provinces, see chapter two.

[358] Benningen and Köngen: Filtzinger, Plack and Cremer 1976, 234-238; 333. Nassenfels: Czysz 1995, 485. The date of the inscriptions CIL 13, 11726 (Köngen) and CIL 13, 6454 (Benningen) is estimated between AD 151 and 200. I did not find a date for the inscriptions of Nassenfels.

[359] Poulter 2009, 846-847.

[360] See chapter two.

Table 3.1: Overview of the epigraphic evidence for *vici* in the provinces of Germania Superior and Raetia				
Place Name	Province	Inscription	Primary source	Reference
Alzey	Germania Superior	Vicani Altaienses	CIL 13, 6265	(Tarpin 2002, 372.)`
Baden	Germania Superior	Vikanis Aquensibus	CIL 13, 5233	(Schucany 2013, 224.; Tarpin 2002, 370.)
Benningen	Germania Superior	Vicani Murrenses	CIL 13, 6454	(Tarpin 2002, 376.)
Carden (Koblenz)	Germania Superior	Vicanorum	CIL 13, 7655	(Tarpin 2002, 372.)
Dieburg	Germania Superior	Vici	CIL 13, 6433	(Tarpin 2002, 377.)
Eschenz	Germania Superior	Vikani Tasgaetienses	CIL 13, 5254 CIL 13, 5257	(Schucany 2013, 224.; Tarpin 2002, 370.)
Frankfurt-Heddernheim	Germania Superior	Vicanis … Nide…	BRGK 58, 1977	(Tarpin 2002, 377.)
Horburg	Germania Superior	Vicanorum	CIL 13, 5317	(Tarpin 2002, 371.)
Köngen	Germania Superior	Vicanis Grinar… Vici Grinarionis	CIL 13, 11726 CIL 13, 11727	(Tarpin 2002, 376.)
Ladenburg	Germania Superior	Vicanis Lopodunensibus	CIL 13, 6421	(Tarpin 2002, 377.)
Langres	Germania Superior	Vici?	CIL 13, 5877	(Tarpin 2002, 371.)
Lousanne	Germania supwerior	Vikanorum Lousonnensium	CIL 13, 5026	(Schucany 2013, 224.; Tarpin 2002, 355.)
Mainz	Germania Superior	Vicanis Mogontiacensibus Vicani Mogontiacenses vici Novi Vicani	CIL 13, 6705 CIL 13, 6722 CIL 13, 6723 CIL 30, 6764	(Tarpin 2002, 372-373.)
Moudon	Germania Superior	Vicanis Minnodunensibus	CIL 13, 5042	(Schucany 2013, 224.; Tarpin 2002, 355.)
Nassenfels	Raetia	Vikani Scuttarenses	CIL 3, 5898	(Tarpin 2002, 355.)
Öhringen	Germania Supeior	Vicanis Aurelianensibus	CIL 13, 6541	(Tarpin 2002, 376.)
Rottenburg	Germania Superior	Vici? Magistri	CIL 13, 6365	(Tarpin 2002, 375.)
Sandweier (Baden-Baden)	Germania Superior	Vicani Bibienses?	CIL 13, 6315	(Tarpin 2002, 375.)
Solothurn	Germania Superior	Vico Saloduro	CIL 13, 5170	(Schucany 2013, 224.; Tarpin 2002, 370.)
Spechbach	Germania Superior	Vicani vici Nediensis	CIL 13, 6388 CIL 13, 6389	(Tarpin 2002, 376.)
Strasbourg	Germania Superior	Vici Canabarum et vicanorum Canabensium	CIL 13, 5967	(Tarpin 2002, 371.)
Vertault	Germania superior	Vikani Vertillensibus	CIL 13, 5661	(Tarpin 2002, 371.)
Villards-d'Heria	Germania Superior	Vicanorum?	CIL 13, 5352	(Tarpin 2002, 371.)
Wiesbaden	Germania Superior	Vicani Aquenses	CIL 13, 7566a	(Tarpin 2002, 374.)
Windisch	Germania	Vicanis	CIL 13, 5194	(Schucany 2013,

	Superior	Vondonissensibus		224.; Tarpin 2002, 370.)
Yverdon	Germania Superior	Vicani Eburodunenses	CIL 13, 5063-5064	(Schucany 2013, 224.;Tarpin 2002, 355.)
Zabern	Germania Superior	Vicani ….		(Tarpin 2002, 371.)`

3.2 From garrison settlement to civilian centre

A considerable number of chartered towns in the northern Alpine region appear to have originated as a Roman military base. The same also applies to many of the subordinate centres. The development of civilian centres in the vicinity of legionary forts was already noted in chapter two. Today, however, it is assumed that around every military fort, including the auxiliary ones, a civil settlement arose of small or large size.[361] These accompanying agglomerations at auxiliary forts were generally smaller than the *canabae* associated with legionary forts, but they underwent a similar development. These agglomerations are often labelled 'military *vicus*' or '*Kastellvicus*' in the academic literature.[362] However, to avoid the issue around the term *vicus* explained above, and to encourage an approach that includes both the military and the civilian aspects of these kind of sites, D. Mattingly has proposed the use of the term 'garrison settlement'. This term emphasises the symbiosis between the civil occupation and the fort, concerning their proximity, their shared culture and their administrative and economic unity.[363] Whether or not these garrison settlements eventually developed into civilian centres, they must have been stimulating places for the local economy. It is true that the existence of these garrison settlements is often explained by the economic stimulus created by the presence of a military unit.[364]

3.2.1 The inhabitants of garrison settlements

Roman forts generally occupied favourable locations, strategically positioned along important road junctions, and that of course attracted small groups of civilians. These people are often called 'camp followers'. When the soldiers were sent elsewhere, it is assumed that most of these people followed

[361] Until the 20th century the main interest on frontier studies focused on defensive works and pure military structures, such as forts. It was only gradually that the wider environment of these forts entered the research field and that the civilian structures on these sites became valued. The thesis of Professor C. S. Sommer "Kastellvicus und Kastell" from 1988 was the first work that analysed the settlement structures in these military environments and is still one of the leading works on the topic. Due to newer research instruments, such as the use of aerial photography and the application of geophysical survey, in combination with the UNESCO project *Frontiers of the Roman Empire*, the amount of data as well as knowledge about these military settlements has increased drastically over the last few decades. This increase in knowledge has led to the conclusion that at every Roman military site a civilian settlement can be assumed. See also: Sommer 2006, 96; 2008c, 253-254; Sulk 2011, 35-36; Czysz 2013, 271-274; Sommer 2015, 122.

[362] Sommer 1999a, 82; Sommer 2015, 125-126? The dimensions and the scale of the community around an auxiliary fort should have been smaller than a community that lived near to a legionary base. Nevertheless, similar developments and activities are assumed at both kinds of sites. For a thorough comparison of the nature of garrison settlements of legions and auxiliary bases, Sommer points out the lack of comparable studies on legionary sites.

[363] Mattingly 2007, 170-171. One cannot yet talk of a successful implementation of the term 'garrison settlement', since it is used almost exclusively in the English literature, while the extensive German literature continues to use the term Kastellvicus (military vicus). The influence of D. Mattingly's comments on the research agendas and the unification of both sides of these archaeological sites in recent investigations should nevertheless not be underestimated.

[364] Czysz 2013, 289; Sommer 2015, 122.

them, as is reported in some ancient writings.[365] It was mainly the relatives of soldiers and merchants whose relations (personal or professional) relied on the consumption of goods by the army unit that formed the population of these settlements.[366] Despite the fact that until the Severan period soldiers were not allowed to marry during their service, there is enough evidence that their (unofficial) wives and children lived close to them. Gravestones are regularly found from the cemeteries of these garrison settlements, erected by the wife or children of a soldier, or *vice versa*.[367] Although more and more evidence is being revealed of women who were living within the walls of the forts, it is most likely that the families of the majority of the soldiers lived in the houses built close to the forts.[368]

The entire garrison settlement must have been under the direct supervision of the military commander. The land was military territory and the closest *civitates* were probably too distant to have had any administrative influence.[369] From a few garrison sites, such as Saalburg and Bad Wimpfen, inscriptions survived proving the presence of some Roman citizens. It must have been rather common for retired soldiers to remain in the vicinity of the fort and their followers.[370] The civil communities inhabiting these garrison settlements probably invoked some community bodies, as is evidenced by archaeological remains of what were most likely *scholae* or meeting halls. Examples of these have been found in Munningen and Ruffenhofen.[371]

3.3.2 Local market spots

Just as in civilian centres, the backyards of the houses in garrison settlements were often used as a workshop for certain kinds of production, such as wood carving, metal processing or glass melting. Since women in antiquity were regularly involved in many kinds of economic activities, such as spinning, weaving, cloth-making and repairing, as well as trading, they would probably be responsible for a certain percentage of the crafts and commerce in these garrison settlements.[372] C. S. Sommer summarised that despite the weakness of the archaeological evidence, it is generally accepted that a certain proportion of the supplies of food, equipment and personal needs were produced within the settlement.[373] Of course, independent tradespeople and artisans also settled here, attracted by the market which the presence of an army unit created.[374] Epigraphic evidence dated to the occupation period of the forts of Bregenz, Kastel, Lorch, Passau, Rottenburg, and Wiesbaden confirms the

[365] Breeze 2015, 227-228. Caesar, BG 6, 36. Caesar, Bell. Afr. 75. Cassius Dio, 56.20.2.
[366] Sommer 2015, 122?
[367] Hanson 2005, 303; Breeze 2015, 225-226; Sommer 2015, 123?
[368] Some of the letters found in *Vindolanda* contained correspondence between two officer's wives (Bowman 2003, 50-51 and letters 31 -32.). Both in and around the *praetoriae* of *Vindolanda*/Hexham and Saalburg finds were excavated that are interpreted as children's toys as well as child sized shoe soles and thus suggesting the presence of an entire family (Hanson 2005, 304; Sommer 2015, 125?).
[369] 1997, 50; 2006, 128; Mattingly 2007, 127; Czysz 2013, 345.
[370] D. Breeze has shown that certain civilians in these garrison settlements gained privileges or certain rights which they could retain even when they moved to a new centre (Breeze 2015, 227-228.). Roman citizens have been attested in inscriptions from the garrison settlements of Saalburg (CIL 13, 7460, AD 101-150) and Bad Wimpfen (CIL 13, 11752, AD 90-150), all dated to the occupation period of the fort.
[371] Munningen: Baatz 1975. Ruffenhofen: Sommer 2015, 132.
[372] Breeze 2015, 226-227.
[373] Sommer 2015, 122. Indications for crop cultivation undertaken by the soldiers or camp-residents themselves include sickles, as for example found in Newstead. It is nevertheless believed that the amount of self-supply at garrison settlements remained insufficient (Wierschowski 2002, 113; Kehne 2007, 323.).
[374] Czysz 2013, 289.

presence of traders and merchants.[375] For every 500 soldiers it is assumed one or two potters were needed to provide the daily cooking and tableware. Traders found business in importing goods from farther away, such as olive oil, wine or terra sigiliata wares. The remains of a mill have been found in Dambach and Günz, indicating that some people were involved in food processing, but one can also assume the presence of bakers, fishermen, innkeepers and many others. [376]

These garrison settlements acted mainly as local markets. The road between the fort and the settlement was often widened, creating a triangular or square open space which was most likely used as a market square.[377] Examples are known from Eining, Kumpfmühl, Ladenburg, Ludwigshafen, Saalburg and Zugmantel.[378]

3.3.3 The development of garrison settlements during and after the military occupation

Garrison settlements often developed over a long time, changing from street-aligned settlements along the *via principalis* into agglomerations that encircled the fort. It is assumed that their earliest phases generally date back to the construction time of the forts.[379] This assumption is based on elements that suggest planning and measurements carried out by the army during the first occupation phases. Graveyards, for example, lie outside the borders of the settlement, indicating that these agglomerations were planned from the start. Moreover, the regularity of the house plots suggests professional land surveying techniques. The best and most-cited example comes from the garrison settlement in *Lopodunum*/Ladenburg where exactly the same lay-out of land plots was kept during rebuilding, even after the whole settlement had burned down, implying an official delimitation of the land.[380]

The majority of buildings in these civilian settlements were residential houses with a few for public use, such as inns, temples and bathhouses.[381] It is assumed that from the Flavian period every permanent military base had a bathhouse, generally at a distance varying between 20 to 120m from the fort.[382] Whether or not these military bathhouses were also used by civilians is still a topic of debate. The remains of private baths have been found at Gauting and *Tasgetium*/Eschenz, which might indicate a strict separation between military baths and civilian baths.[383] In a very few cases, the remains of an amphitheatre or theatre have been found on the outskirts of a garrison settlement,

[375] Sommer 1988, 589. CIL 13, 7588 (Wiesbaden), CIL 13, 7300 (Kastel), CIL 13, 6366 (Rottenburg), CIL 13, 6524 (Lorch), CIL 3, 13542 (Bregenz), Wolff 1984, 87 (Passau).
[376] Czysz 2013, 333-338.
[377] Sommer 2006, 117.
[378] Cüppers 1990, 455; Sommer 1999a, 87; Sommer 2015, 127.
[379] Depending on where the settlement developed with respect to the fort, C.S. Sommer created a three-part typology: 1) the street/ribbon type: settlement developed along the arterial road(s) from the fort 2) the tangential type, in which case the settlement developed mainly laterally along the highway leading past the fort and 3) the ring type when the settlement appeared as a ring formation along the roads surrounding the fort. More extensive explanations of these typologies can be found in Sommer 1999a, 82-83; Sommer 2006, 97-103; 2008c, 255-257; 2015, 123-127?
[380] 1997, 47; Hanson 2005, 304-305; Sommer 2006, 123; 2008c, 258.
[381] 1997, 45-46; Czysz 2013, 306-310.
[382] 2013, 306.
[383] Ibid., 310. The evidence for a separate civilian bath in Gauting relies on the interpretation of a structure as a private bath complex. In the case of Eschenz CIL 13, 5257 mentions the construction of a *balneum balneum* by the *vicani*.

such as in Arnsburg, Dambach and *Quintana*/Künzing.[384] These will be discussed in more detail in chapter four.

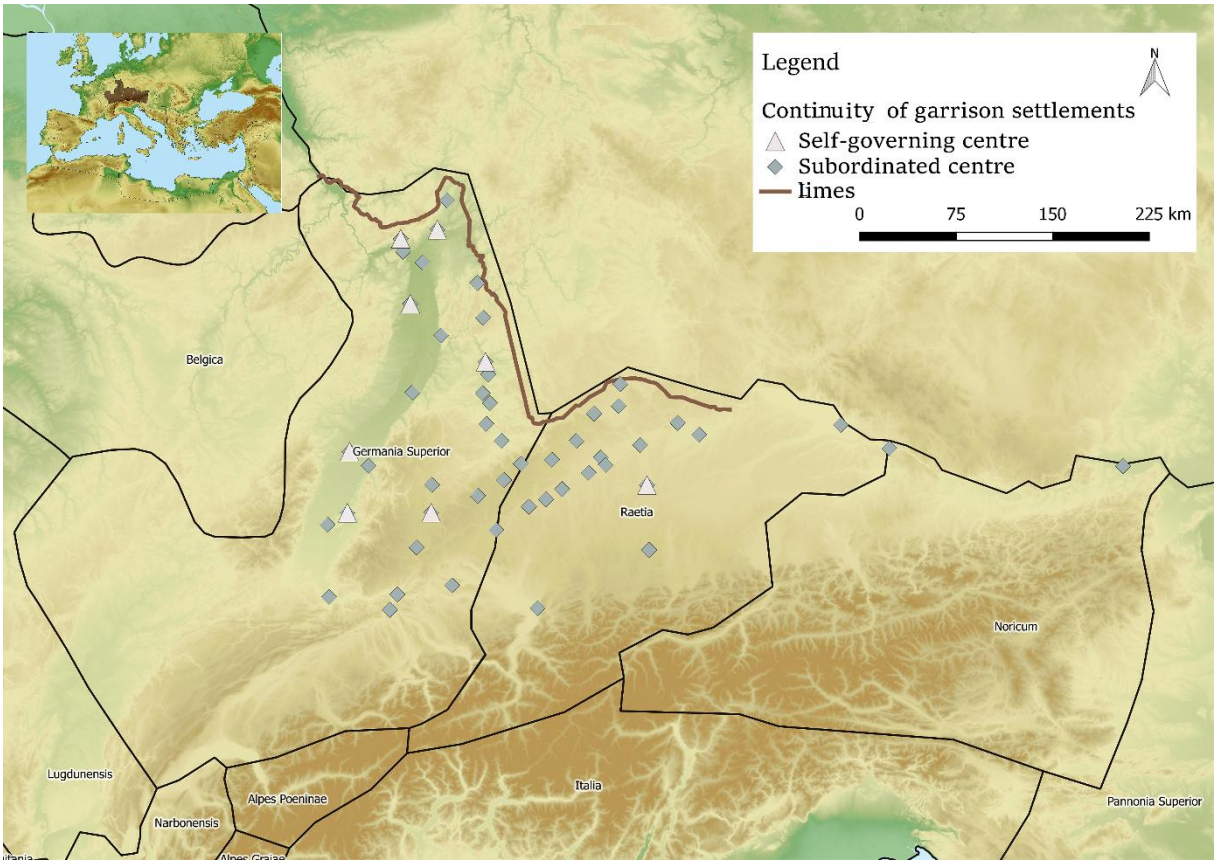


Fig. 3.2: Garrison settlements that continued in occupation after the retreat of the army unit

As has already been mentioned, forts were regularly constructed and abandoned because of shifts in the location of the frontier. It is assumed that most of the camp followers moved together with the soldiers to their new posting. However, in some cases the population - or a part of it - remained, living where they were. As a result, some garrison settlements developed into centres of local or regional importance (Fig. 3.2). The reasons for their success is a matter of debate. Their favourable location is frequently mentioned and it is assumed that their economic integration extended beyond the army to include the wider rural population.[385] As has been discussed earlier, over the course of time, some of these communities even gained municipal rights, such as Roman Augsburg, Bad Wimpfen, Frankfurt-Heddernheim, Riegel, Rottweil, Strasbourg, Wiesbaden and Worms. The majority, however, remained subordinate settlements within the territory of another higher municipal authority.

It is not always clear what happened to the area occupied by the previous military fort.[386] Rescue excavations in the past decade on the Roman site of *Brigantium*/Bregenz have shed interesting new light on this issue. The Augustan fort seems to have been made unusable by the army during the reign of Claudius when the garrison had to leave. Ditches were refilled, the ground leveled and the

[384] Sommer 2006, 103-105; Czysz 2013, 306-310.For more on public buildings in garrison settlements see: chapter 4 and Pazmany forthcoming.
[385] Sommer 2015, 137; Oberhofer 2016, 101.
[386] Czysz 2013, 293.

buildings were demolished.[387] Similar destruction works have also been attested at the fort of Munningen.[388] Table 3.2 contains some data on the after use of abandoned Roman camp sites. Sometimes, indications for the reuse of the building materials of the fort have been found, such as in Sulz, Bad Nauheim, Lützelbach and Munningen.[389] In Bregenz, large wooden construction beams from the previous fort were reused as the foundation for a *Lehmfach* building (mud house).[390] Inside other forts, evidence has been found for small-scale production workshops, such as in Bad Cannstatt.[391] In Ristissen and Walheim ceramics were produced in the period after the military occupation, while in Wiesbaden and Hesselbach remains of metal processing have been discovered.[392] In some cases, a bigger infrastructure with a more public purpose was erected on the place where the fort used to be. In addition to the ceramic workshops of Ristissen and Walheim structures were also recorded and identified as storage rooms. It is unclear to me whether these were warehouses for food storage or whether these buildings were related to the pottery production.[393] However, a similar storage building was also excavated within the area of the former fort at Neckarburken.[394] Another type of building that was regularly constructed in the area of an earlier fort was a guesthouse. Such structures have been identified in Köngen, Munningen and Rottweil.[395] The area of the original fort was frequently built over by the expanding settlement. Living quarters developed on top of the previous forts in Wallheim, Heidenheim, Gross-Gerau, Faimingen, Frankfurt-Heddernheim and Bad Cannstatt. In Bregenz a bath complex was erected on top of the previous fort,[396] and in Faimingen a temple for Apollo-Grannus was erected.[397] In Köngen, Nassenfels and Ladenburg, the civilian centre overbuilt the former fort completely.[398] In the case of Okarben and Seckmauern the prior military land became the scene for a Roman *villa rustica*.[399]

It seems therefore that in the transition from fort to civilian settlement no strict regulations existed regarding the further use of the land. It appears to have been common practice for the fort itself and the additional infrastructure to be cleared out and rendered unusable, but we cannot be sure of this in every case.

[387] Oberhofer 2015, 96.
[388] Schaflitzl 2016, 84.
[389] Lützelbach: Baatz and Herrmann 1982, 424. Münningen: Czysz 2013, 297. Bad Nauheim, Münningen and Sulz: Luik 2002, 79.
[390] Oberhofer 2015, 97; 2016, 101.
[391] Luik 2002, 79.
[392] Ristissen, Walheim, Wiesbaden: ibid., 79. Hesselbach: Baatz 1973, 81; Luik 2002, 79.
[393] 2002, 79.
[394] Schallmayer 1984, 121-124/127.
[395] Köngen, Rottweil: Luik 2002, 79. Münningen: ibid., 79; Czysz 2013, 297.
[396] Oberhofer 2015, 100.
[397] Luik 2002, 79.
[398][398] Bad Cannstatt, Faimingen, Frankfurt-Heddernheim, Gross-Gerau, Heidenheim, Köngen, Ladenburg: ibid., 79. Nassenfels: Czysz 1995, 485.
[399] Okarben: Baatz 1973, 81. Seckmauern: Schallmayer 1984, 63-65; Luik 2002, 72.

Table 3.2: Overview of the continued use of Roman fort sites							
Place name	**Retreat of the army**	**Reuse of building material**	**Houses**	**Workshops**	**Public infrastructure**	**Fully overbuilt**	**Reference**
Bad Cannstatt	AD 150	X	-	X	-	-	Luik 2002, 77. Oberhofer 2016, 101.
Bad Nauheim	-	X	-	-	-	-	Luik 2002, 77.
Bregenz	AD 50	x	x		Bathhouse		Oberhofer 2015, 95-100; 2016, 101-108.
Faimingen	AD 120	-	X	-	Temple for Apollo Grannus	-	Luik 2002, 79.
Frankfurt-Heddernheim	Around AD 100	-	-	-	-	But not densely, it was the periphery of the centre	Luik 2002, 79.
Gross-Gerau	AD 120-130		Only from AD 170 onwards				Luik 2002, 79.
Heidenheim	-	-	X	-	-	-	Luik 2002, 79.
Hesselbach	-	-	-	Iron/metal workshop	-	-	Luik 2002, 79. Baatz1982, 348. Baatz 1973, 81.
Köngen	AD 150-160	-	X	-	Street/station of *beneficiarii*?	X	Luik 2002, 75-77.
Ladenburg	-	-	X			X	Luik 2002, 79.
Lützelbach	AD 150-160	Houses in the vicinity built with material from the fort					Baatz 1982, 424.
Munningen	AD 98-117	Reuse of the palissade construction material	-	-	Street station and schola?	-	Luik 2002, 79. Czysz 2013, 297. Schaflitzl 2016, 84.
Nassenfels	AD 100-150	-	-	-	X	*Vicus* develops over area of earlier fort	Luik 2002, 79. Czysz 1995, 485.
Neckarburken (West)	-				Big structures, possible storage rooms		Schallmayer 1984, 121-124/127.
Okarben/ Neckarburken (Ost)	AD 150-160					*Villa*	Baatz 1973, 81.
Ristissen	AD 160?	-	-	2 ceramic killns	Big storage room for 20-30 years	-	Luik 2002, 77.
Rottweil	-	-	-	-	Mansion	-	Luik 2002, 79.
Seckmauern	AD 138					*villa*	Luik 2002, 79. Schallmayer 1984, 63-65.
Sulz	-	X	-	-	-	-	Luik 2002, 77.
Wiesbaden	AD 120		-	Bronze	-	-	Luik 2002, 77.
Walheim	-	-	X	Ceramic late 2nd century	Just east of the fort big storage halls were constructed	-	Luik 2002, 79.

3.3 Specialised production centres

Not all subordinate centres developed from a Roman military base. Others went back to the Late Iron Age or arose because of very specific economic and logistical motivations. At most centres a multitude of crafts were performed, such as in *Alesia*/Alise-St.-Reine. Since the overall activities at these agglomerations were so diverse, they are seldom categorised as specialised production centres.[400]

Specialised production and production quarters occurred both in self-governing towns as well as in subordinate agglomerations. A specific quarter of a town could function as a manufacturing district. In *Nida*/Frankfurt-Heddernheim, for example, the potters quarter located south of the settlement had no fewer than 150 kilns, used between AD 150 and AD 250.[401] This section, however, will focus further only on the nature of and the specialised production that took place in subordinate centres. The aim of this approach is to gain a better understanding of the nature of this kind of subordinate centre and its place within the wider settlement system.

3.3.1 Terra Sigillata production centres

A few places in the northern Alpine region intensively manufactured terra sigillata wares. The name of this ware refers to the fact that the pottery was stamped, '*sigile*'. Its red colour and shiny appearance makes these vessels and plates easily distinguishable from other types of tableware. Its earliest production occurred around 40 BC in northern Italy (region of Arezzo) as a rather luxurious product and was initially very popular with the army. Gradually, the production of terra sigillata expanded, first to southern and later to central and northern Gaul. Here big production centres, such as La Graufesenque, Banasac and Lezoux, contributed to the wide distribution of this type of ceramic ware as well as of skilled people in the northern and western areas of the Roman Empire.[402] The analysis of potter's stamps allows us to reconstruct the gradual spread of the terra sigillata skills. It can be derived from these potter's stamps that the terra sigillata production in the northern Alpine region had come originally from the workshops in Gaul (Fig. 3.3).

The terra sigillata centres of the northern Alpine region

The biggest terra sigillata production centre in the northern Alpine region was located in modern Rheinzabern. Based on the ancient place name *Tabernae, Tabernis*, it is assumed that the place initially served as a road station, situated on the river Rhine and between the important military centres of *Mogontiacum*/Mainz and *Argentorate*/Strasbourg.[403] A ceramic production centre had developed here from the reign of Claudius, mainly manufacturing building ceramics of which the production was probably intended for the construction of the forts and other military installations in the surrounding areas. Tiles produced in Rheinzabern have been found, for example, in the legionary

[400] Mangin 1994, 58.
[401] Baatz and Herrmann 1982. It is even assumed that the potters in *Nida* had an associated workshop outside the borders of the Empire. Ceramic production is attested in Haarhausen (Thüringen) that deviates clearly from the 'Germanic' style. The technology used in Haarhausen is based on provincial Roman manufacturing, shown by the construction of the kiln. Strong similarities with the production from *Nida* means a connection between both workshops is likely. Dusek 1992, 12-131.
[402] Roller 1965, 7-8; King 1990, 125-130; Van Oyen 2015, 281.
[403] Schulz 1999, 65; Fülle 2000, 152.

base of Mainz, but also in the forts of Worms, Speyer, Altrip and Andernach.[404] However, when the army moved further northwards during the Flavian period, the production in Rheinzabern decreased strongly, to the advantage of the new production site for building ceramics in Nied.[405] Around AD 130 a new heyday of production started in Rheinzabern, but this time with the making of terra sigillata fineware. The centre remained successful until AD 260. During this 130 years no fewer than 400 to 600 potters may have produced 50 up to 80 million vessels.[406] The influence of Reinzabern is reflected in the fact that the potters from most of the other terra sigillata workshops in the Rhine and Danube region had a relationship with Rheinzabern, not least because of their training.

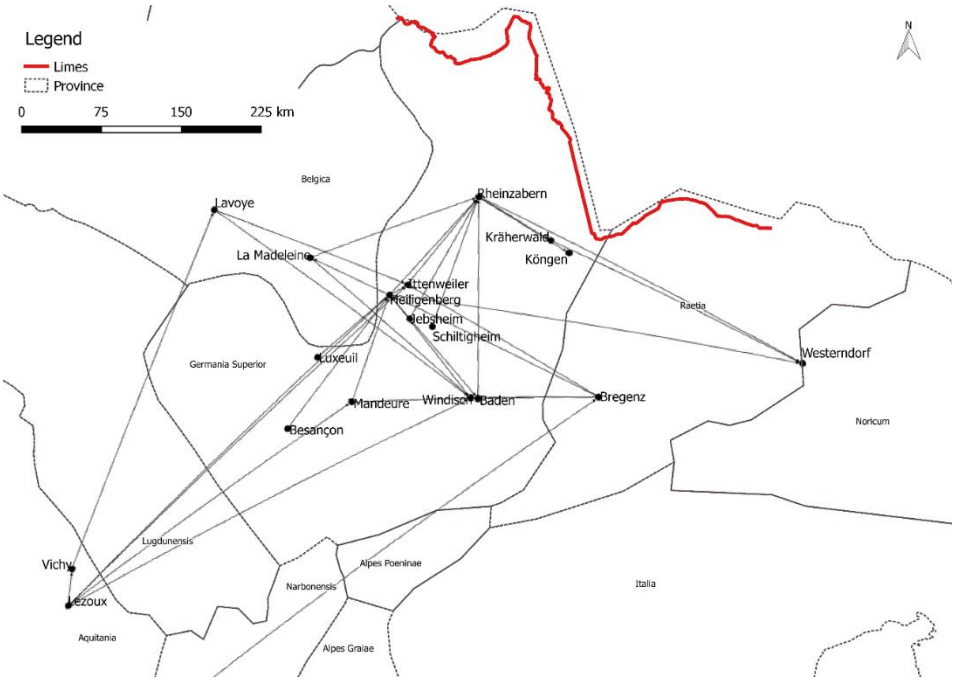


Fig. 3.3: Map showing the movements of terra sigillata potters, based on the analysis of stamps[407]

The first other production centre of terra sigillata appears to have been Westerndorf, which functioned as a subsidiary workshop of Rheinzabern (Fig. 3.4). It was located near the river Inn on the border between Raetia and Noricum.[408] The workshop in Westerndorf was probably set up around the end of the second century (AD 180-193). The kiln installations and the site's infrastructure are unfortunately very poorly known, with most information coming from reports from the 19th century after which the site was overbuilt.[409] Another ceramic production centre was discovered two kilometers away from Westerndorf, in Pfaffenhofen. Based on its production date and on morphological arguments, it is assumed that the workshop in Pfaffenhofen was an offshoot of Westerndorf. However, unlike the dependent relationship between the workshop at Westerndorf and Rheinzabern, the workshop in Pfaffenhofen has been interpreted as a new independent initiative.[410]

[404] Sprater 1948, 79-86.
[405] von Bülow 1975, 234; Biegert 1999, 15-50.
[406] Roller 1965, 8-10; Fülle 2000, 153.
[407] Forrer 1911. The network analysis was realised with the help of Pieter Houten.
[408] von Bülow 1975, 235-236.
[409] Radbauer 2013, 151-162.
[410] Kellner 1964, 80; 91.

Across the northern Alpine region existed more terra sigillata or pottery production centres existed of which the potters probably were trained in Rheinzabern but had started a new business of their own, such as in Blickweiler and Stuttgart. It is assumed that the craftsmen from the ceramic production in Waiblingen also learned their skills in Rheinzabern.[411] At least 30 kilns are known from this 5 to 8 ha large site.[412] Also in Schwabegg a specialised workshop in terra sigillata existed. So far, a minimum of 5 kilns have been discovered here, probably enough for at least ten potters. It is assumed that they too originally came from Rheinzabern.[413]

Rheinzabern, the most important terra sigillata workshop in the region

Based on the startup dates of the different terra sigillata workshops in the region (Table 3.3), it seems that Rheinzabern was the earliest production centre of this kind. Its sister centre in Westerndorf was founded almost half a century later and soon afterwards, around the turn of the second century, more terra sigillata workshops opened. The extensive export area of the Rheinzabern ware also emphasises the importance of the workshops (Table 3.4). Its most successful market was located along the frontier in Germania Superior and the Danubian provinces, up to Moesia and Dacia. Although some of the Rheinzabern ware was traded along the lower Rhine, the quantity was substantially lower. By contrast, the production of Blickweiler (Gallia Belgica) seems to have been more successful in this area.[414] Also Roman Britain did not belong to Rheinzabern's main distribution zone. The import of terra sigillata here originated primarily from Gaul and especially from the production centre in Lezoux. Despite the excellent connections provided by the river Rhine, the old trade contacts between Gaul and Britain continued and Rheinzabern never became a real competitor.[415] Like the extended workshop of Rheinzabern, the production centre in Westerndorf fulfilled an import role in satisfying the markets in the Balkan region, since Westerndorf terra sigillata has been found everywhere along the Danube. The wares were traded even beyond the river, into *Barbaricum*. The workshop in Schwabegg on the contrary, probably provided for only a very specific market. Pottery made in Schwabegg is rarely found on sites in Raetia and Noricum, but it is commonly encountered in Pannonia[416] In general, the terra sigillata ware produced in Rheinzabern is the only make that was traded all over the northern Alpine region and beyond. The market of the other centres was much more limited.

Table 3.3: Approximate start-up dates of the terra sigillata workshops

Potters centre	Start of terra sigillata production (AD)	Reference
Rheinzabern	130	(Roller 1965, 8-10.; Sprater 1948, 41.)
Westerndorf	180-193	(Radbauer 2013, 162.)
Schwabegg	200	(Czysz 2000, 77-78.)
Waiblingen	200	(Filtzinger, Plack, and Cremer 1976, 546-549.)
Pfaffenhofen	210	(Kellner 1964, 91.)

[411] Roller 1965, 10-14.
[412] Sommer 1994, 144.
[413] Czysz 2000, 77-78.
[414] Sprater 1948, 87-101; Roller 1965, 8; 14.
[415] 1965, 14-17.
[416] Czysz 2000, 78.

Table 3.4: Export areas of the different terra sigillata workshops							
	Germania Inf.	Germania Sup.	Raetia	Noricum	Pannonia Balkan	Britain	Reference
Rheinzabern	x	x	x	x	x	x?	(Fülle 2000, 154.; Roller 1965, 14.)
Westerndorf				x	X		(Radbauer 2013, 151-153.)
Schwabegg					X		(Czysz 2000, 78.; Radbauer 2013, 151-153.)
Waiblingen				x?	x?		(Radbauer 2013, 151-153.)
Pfaffenhofen				x?	x?		(Radbauer 2013, 151-153.)

The army as a consumer not as a producer

The development of terra sigillata workshops, emerging in Italy, dispersing to Gaul and later to the Rhine and Danube region correlates clearly with the gradual expansion of the Empire. Being part of this trend, the distribution of the terra sigillata centres in the northern Alpine region equally reflects the military developments, from the arrival of the troops to the establishment of a permanent frontier. New production centres were constructed close to the army camps and at convenient locations with easy access to the necessary raw materials, such as water, fuel (mainly wood) and red clay.[417] The site of Schwabegg, for example, was located on the edge of a clay-rich soil, the ground in Westerndorf consisted of glacial lake deposits and the surroundings of the Rheinzabern workshop contain an alluvial sandy soil.

Although the terra sigillata production had a loyal customer in the army, it is believed that these workshops were most likely private initiatives. Overall, these sites show little evidence for a military presence. Also the nature of the stamps on the ceramic wares produced in these terra sigillata workshops differs significantly from that of those on army produced ceramics. The early ceramic building materials made in Rheinzabern, for example, did carry stamps with the abbreviation of the legions that were responsible for the production. The later terra sigillata wares however were stamped with the name of the workshop owners, endorsing independent production.[418] The army's production in general is known to have been restricted to the manufacturing of construction materials.[419]

[417] Van Oyen 2015, 282.
[418] von Bülow 1975, 238-239.
[419] In Friedberg 2 of the 11 kilns could be assigned to the production of ceramic building materials, probably for military consumption, since stamps of *Cohors I Flavia Damascenorum, Legio XI* and *Legio XIV* have been identified (Biegert 1999, 52-56.).The tiles produced in Westheim even indicated some state intervention, based on stamps mentioning *Figlinae Caesaris Nostri* (Czysz 1985, 141-181.).

3.3.2 Production centres of different ceramic wares

In addition to the terra sigillata workshops there were also subordinate centres that intensively produced fineware in more local or mixed styles, such as Heidelberg in the *civitas Ulpia Sueborum Nicrensium* or Mathay in the *civitas Sequanorum* (Fig. 3.4).[420]

A ceramic production centre also existed on the outskirts of the centre of *Luxovium*/Luxeuil-les-Bains. The manufacturing of pottery here had started in the first half of the 1st century AD and consisted of a very wide range of shapes, including *terra nigra* wares, engobe decorated products, plates, dishes and cups. A very small percentage of the production consisted of terra sigillata, probably made exclusively for the nearby centre of *Epamonduodurum*/Mandeure. The production in *Luxovium* stopped rather early, in the course of the 2nd century, after which the centre developed into a spa centre. Adjacent extensions of the bath complex emerged in the former potter's quarter.[421]

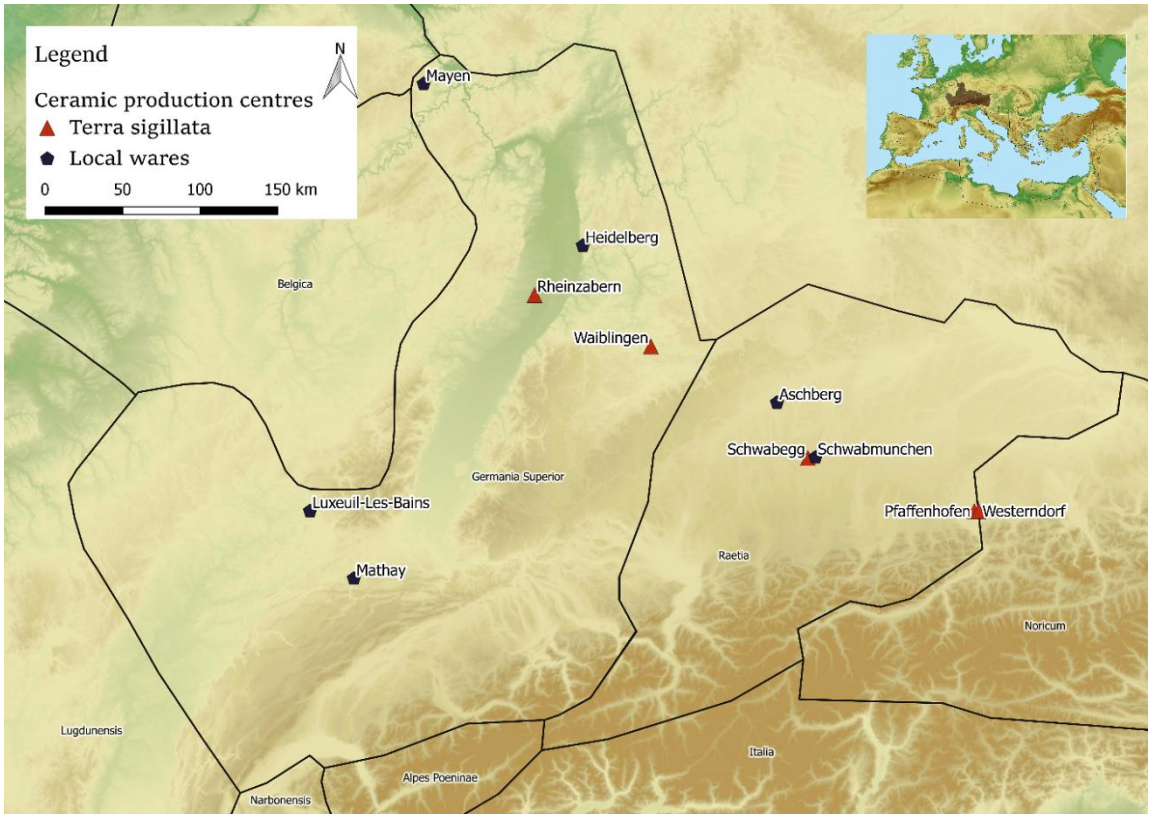


Fig. 3.4: Map with production centres of terra sigillata and other ceramic wares mentioned in the text

Manufacturing in the ceramic centre in *Rapis*/Schwabmünchen started during the Flavian period and also had a wide variation in shapes, from vessels, plates and cups to *mortaria*.[422] Its location, along the main road to Augsburg, guaranteed a successful outreach of the production to the town and the rural settlements in the foothills of the Alps. *Rapis* became one of the biggest ceramic centres in

[420] In around 1976, 60 kilns were already known at the Roman site of Heidelberg. Over a period of 150 years pottery in Terra Nigra and Terra Rubra style was produced here: Filtzinger, Plack and Cremer 1976, 278-291. Alongside other crafts, the production of ceramic wares was the main activity carried out in the Roman centre of Mathay, probably stimulated by the market of the nearby religious centre in *Epamanduodurum*/Mandeure: Carroll 2001, 84-91.

[421] Card 2008, 206; Vurpillot 2014, 208-209.

[422] Czysz 2000, 63; Czysz and Sorge 2000, 142.

Raetia. A minimum of 70-80 kilns have been excavated. Different from in Rheinzabern where there was a separate production quarter, the production here took place mostly in the backyard of the dwellings of the local population. It is assumed that during the 2nd century more than three quarters of the households were making a living from ceramic production. The size of the centre is estimated from 2 ha to a maximum of 5 ha, accommodating about fifteen residential units. The total population of *Rapis* is estimated at 100 people.[423] Since the later specialised terra sigillata workshop of Schwabegg was visible from this centre, it is assumed that a connection existed between the potter's centre in *Rapis* and the terra sigillata workshop found in Schwabegg. Most likely craftsmen from *Rapis* were sent over to Schwabegg because of the presence of better clay.[424]

Along the southern Danube street, close to Faimingen, another centre was discovered in which the inhabitants were widely involved in the manufacturing of ceramic wares, including products such as plates, dishes, jugs, vessels and pots in Raetian style, as well as ceramic building material. The site of Aschberg was rather small, about 1 ha, and its export area, which is not very well investigated, most likely extended downstream towards Noricum. It may also have provided a resting place for travelers, although the archaeological structures can be interpreted either as an inn or as a bathhouse.[425]

An example of a late ceramic production centre is Mayen, located in northern Germania Superior. Local wares were produced here in rather high quantities only from the 3rd century onwards. Previously, Mayen's business centre was related to stone mining, as will be discussed in a later section. The main distribution area for the Mayen ceramics included the Rhine as well as the Mosel region. Although the soldiers stationed along the frontier must have been important customers, the retreat of the army during the fifth century at the latest did not affect the production in Mayen. It remained one of the most important ceramic centres in the region until the 9th century.[426]

3.3.3 Centres with other kinds of specialised production

Overall southern Germania Superior and south-central Noricum were within the northern Alpine region the areas where most raw materials were mined during the Roman period. There is plenty of evidence for Roman iron quarrying in the Central Jura and the region of St Gallen. In addition, the Norican iron mines remained in use, of which the Hüttenberg and the Erzberg are only two examples. The Norican soil also contained gold and salt. Despite the fact that Polybius and Strabo report on gold in Noricum, its exploitation during Roman times was rather limited. It is assumed that the pre-Roman salt mining also continued, as the sites of Hallein and Hallstatt indicate. Also, the mountains right of the river Rhine were rich in minerals, such as silver, copper, lead and iron.[427]

The digging for raw materials encouraged the development of mining villages that were most often located on extra-municipal territory. Moreover, it is generally stated that from Tiberius onwards most of the important mines belonged to state-owned imperial domains. The administration of these mines and their associated settlements is not very well understood and may have varied from region to region. In Noricum, however, evidence has been found for *conductors,* who were under the

[423] Czysz 2000, 62-63.
[424] Ibid., 77-78; Czysz and Sorge 2000, 143.
[425] Czysz 2004, 176-178; 180; 197; 199-201.
[426] von Bülow 1975, 237.
[427] Davies 1935, 2-4; 165-181; Hirt 2010, 53-56.

supervision of the provincial governor and were responsible for the prosperity of the mining business.[428] It is most likely that the mines in the Rhine area were under the control of a military commander.

Before the booming pottery production of the 3rd century in Mayen the activities in the centre were mainly related to the stone quarrying that took place in the region. It has been suggested that Mayen operated as the administrative centre of an imperial mining district, although there is no evidence that confirms this assumption. The possible involvement of the army in the production activities, will be discussed in more detail in chapter 5.[429]

The Roman centre that developed in Eisenberg has also been suggested as a possible administrative quarter relating to the mining activities in the surrounding area, which was naturally rich in iron, copper and silver. As its name implies, the site of Eisenberg developed into a significant iron- and metal processing centre. The amount of waste and iron slag found on the site is very high. Factors such as the presence of extensive woods and the Eisenbach stream as well as the road connecting Metz and *Mogontiacum*/Mainz contributed to the favourable location of this centre and its metal processing. Since the kilns on the site were demolished after use, it is hard to estimate the level of production. However, based on the amount of production waste Eisenberg is considered an extensive production centre. The discovery of a *forum-basilica* complex and large storage halls in the centre has contributed to the discussion about whether or not the centre hosted an extra-municipal office for the *civitas Vangiones* or an imperial post.[430]

3.4 Secondary centres with a specific cultural or religious function

Some other centres did not develop because of industrial or commercial reasons, but were important for the wider settlement system and initially to their surrounding population and to visitors from other areas because of the cultural or religious functions they fulfilled. Examples of such sites are spas and sanctuaries.[431]

3.4.1 Hot springs and spas

The *raison d'être* and main source of income for a few centres in the region was the presence of thermal springs. At sites where hot water springs were available, the Romans often built bathing complexes, such as those at *Aquae*/Baden-Baden, *Aquae Helveticae*/Baden, *Aquae Mattiacorum*/Wiesbaden, Badenweiler, Bad-Gögging, *Eburodunum*/Yverdons-les-Bains and *Luxovium*/Luxeuil-Les-Bains (Fig. 3.5).[432] Both their ancient and modern names refer to their function as a spa or *Kurort*. These *Heilbäder* distinguished themselves from the regular bathhouses in any Roman town or village by their dimensions and the presence of big swimming pools or *piscinae*.[433] The bath complex of *Aquae Helveticae* measured 2,035 m^2 (55 m x 37 m), while the *Doppelanlage* of

[428] Alföldy 1970, 172.
[429] Glauben 2013, 63-67.
[430] Bernhard *et al.* 2007, 54-55.See chapter four for more information on the *forum-basilica* of Eisenberg. The inscriptions CIL 12, 11696 and 11698 mention a *decurion* from the *civitas St*. There is no *civitas St.* known. It has therefore also been suggested that Eisenberg was not a subordinate centre of the *civitas Vangiones,* but administrative centre of a separate *civitas* (see also chapter two).
[431] Goodman 2007, 172.
[432] The Roman baths in Luxeuil were probably the most imposing buildings and most significant infrastructures of the Roman centre, but are also the poorest researched, according to Vurpillot 2014, 210.
[433] Meyr 2012, 52.

Badenweiler was no less than 3,069 m^2 (93 m x 33m).[434] The dimensions of the Roman bath complex in Luxeuil is estimated as 5,000 m^2.[435] Since the remains of the Roman bathhouse at Bad Gögging lie beneath the modern centre, its currently known dimensions of 56m x 30m are only an indication for its minimum size.[436] Other centres had more than one bath complex. In *Aquae*, for example, there were at least three such *thermae:* the so called *Kaiserbäder* (imperial baths), the Roman baths found under the modern Friedrichsbad and the so-called *Soldatenthermen (Soldiers baths)*.[437] At modern Baden-Baden a minimum of twelve mineral rich hot springs come to the surface, of which some reach a temperature of 70 ˚C.[438] Such hot water was not available everywhere, the baths in Bad-Göging were fed by sulphurous springs with water of only around 14 ˚C and so needed a heating system.[439] Also at several locations in modern Wiesbaden parts of Roman baths have been found, such as in the *Schützenhofstrasse* and at the *Kranzplatz.* A possible third bath is assumed at the *Adlerquellen*, where circular structures have been found.[440] Even Pliny considered it worthwhile mentioning the hot springs of Wiesbaden where the water apparently kept its boiling warmth for three days.[441]

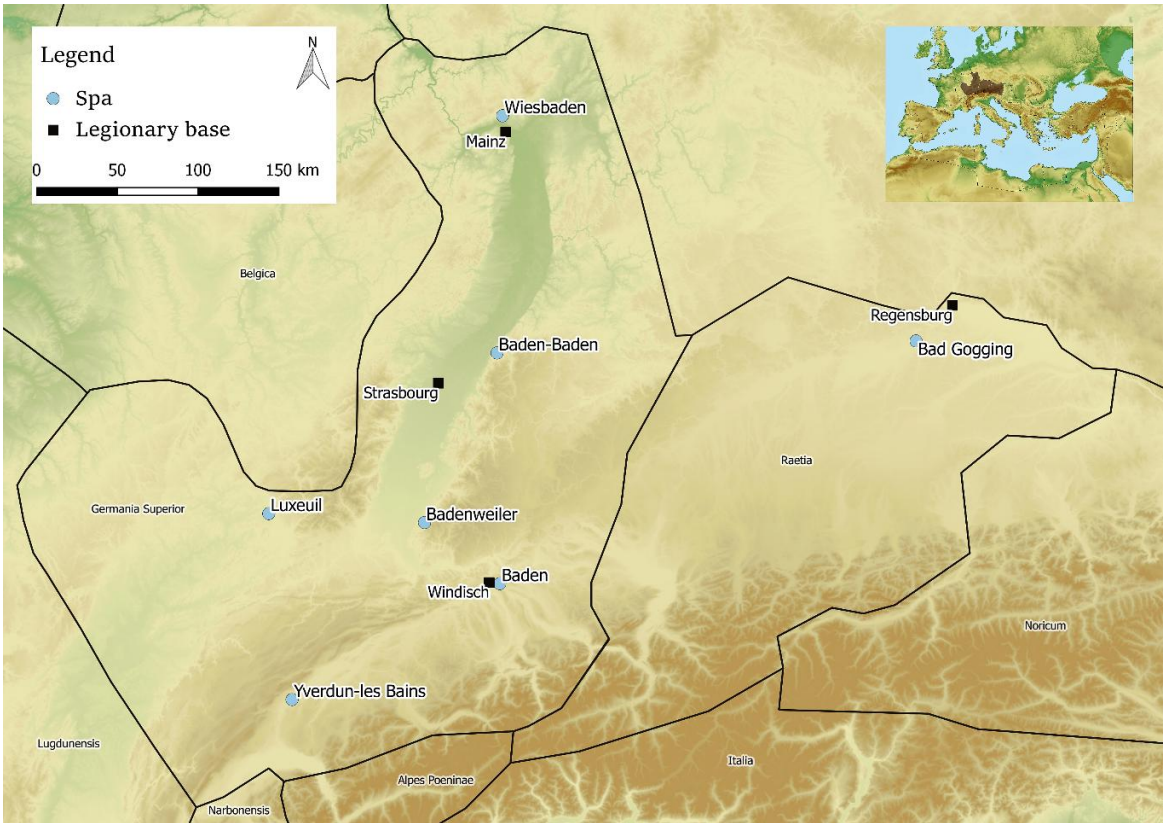


Fig. 3.5: Spas in the northern Alpine region

[434] Baden: Drack and Fellmann 1988, 348. Badenweiler: Sommer 1994, 136 (in the atlas).
[435] Bedon 2001, 200; Rorison 2001, 186.
[436] Nuber 1980, 7-11.
[437] Meyr 2012, 52.
[438] Kronenwett 2015, 43.
[439] Nuber 1980, 7-11; 2012, 66.
[440] Schoppa 1972, 229-230.
[441] Pliny, NH 31.17.

Spas for the soldiers?

The construction materials, including tiles and pipelines, used for the construction of these baths, often contain stamps of legionary workshops, for example, in *Aquae Helveticae* and *Aquae Mattiacorum*.[442] It is furthermore striking that these thermal baths frequently appeared in the vicinity of army camps, especially in the proximity of legionary bases (Fig.3.5). The centre of *Aquae* started to develop after the construction of a fort in the 1st century and the first bath installation also dates from that time. It was nevertheless the legionaries stationed in *Argentorate*/Strasbourg, some 50 km to the south, that were the most important visitors to this spa, according to H. Kronenwett.[443] In *Aquae Helveticae,* the oldest remains date back to around AD 15/16, the time of the foundation of the legionary fort of *Vindonissa*/Windisch, only 10 km west of Baden. Both the finds of tiles stamped with the initials of the legions posted in *Vindonissa* and the short distance imply a strong connection between the two places.[444] Pipes used for the construction of the bath complexes in *Aquae Mattiacorum* were stamped by the *Legio XIV Gemina M. V* and prove that the soldiers stationed in *Aquae Mattiacorum* were involved. The stamps of the *Legiones XIV, XXI, XXII* found on the tiles of the baths found at the *Kranzplatz* prove that the legions stationed in *Mogontiacum*/Mainz also helped out. Likewise, the thermal baths were visited not only by the soldiers stationed in Wiesbaden but by people from a wide area. This is suggested by the inscriptions on the many tombs that have been found in the surrounding graveyards.[445] The construction date of the bath complex in Bad-Göging corresponds with the foundation of the legionary fort in Regensburg during the second half of the second century. The stamps found on the tiles here are even more special. They refer not only to the *legio III Italica* and the *cohors III Brittonum Equitata,* which were indeed stationed along the Danube after AD 165, but some were even stamped with the letters CAESAR, implying that the construction of the baths of Bad-Gögging was carried out with imperial funds.[446]

All this together gives the impression that the soldiers were some of the most frequent visitors to such bathing centres, and also that the construction of the bath complexes regularly depended on army and state initiative. It therefore seems likely that these thermal sites initially fell under the supervision of the military governors. Some of these spa places, however, later grew into civilian agglomerations and sometimes even into self-governing centres, such as *Aquae* and *Aquae Mattiacorum*, which during the second century became the centres of the *civitates Aquensis* and *Mattiacorum*.[447]

3.4.2 Sanctuary sites

Sanctuary sites are another category of settlements generally recognised as a specific type of (subordinate) centre.[448] The map above gives an overview of sites where, mostly archaeological, evidence is found for one or more temples (Fig. 3.6).[449] Temples or small sanctuaries were, just like bathhouses, very well distributed and a kind of investment even most small centres and some rural

[442] Baden: Aargau 2011. Wiesbaden: Schoppa 1972, 229.
[443] Kronenwett 2015, 44.
[444] Wiedemer 1969, 45-46; Flutsch, Niffeler and Rossi 2002, 368-369; Aargau 2011.
[445] Schoppa 1972, 229.
[446] Nuber 1980, 17-18; 2012, 68.
[447] Baden-Baden: Dondin-Payre and Raepsaet-Charlier 1999, 319-321; Kronenwett 2015, 44.Wiesbaden: Schoppa 1972, 228.
[448] Mangin 1994, 58; King 1995, 186.
[449] According to S. Izri and P. Nouvel are the majority of Roman temples still undiscovered, so the map above naturally misses many of the already known and still unidentified temple sites: Izri and Nouvel 2011, 514-516.

estates could make, as is illustrated by the temples found at the garrison settlement of Pfünz, or the *villa* site of Avenches-en-Chaplix.[450] Since natural elements, such as mountains, rivers, springs or woods, were often given a sacred character, temples and sanctuaries appeared everywhere in the landscape.[451]

However, there is a considerable distinction to be made between Roman centres with one temple or several and centres where the sacred area was so extensive that most of its existence depended on, or was dominated by, it. The latter can be identified as sanctuary sites.

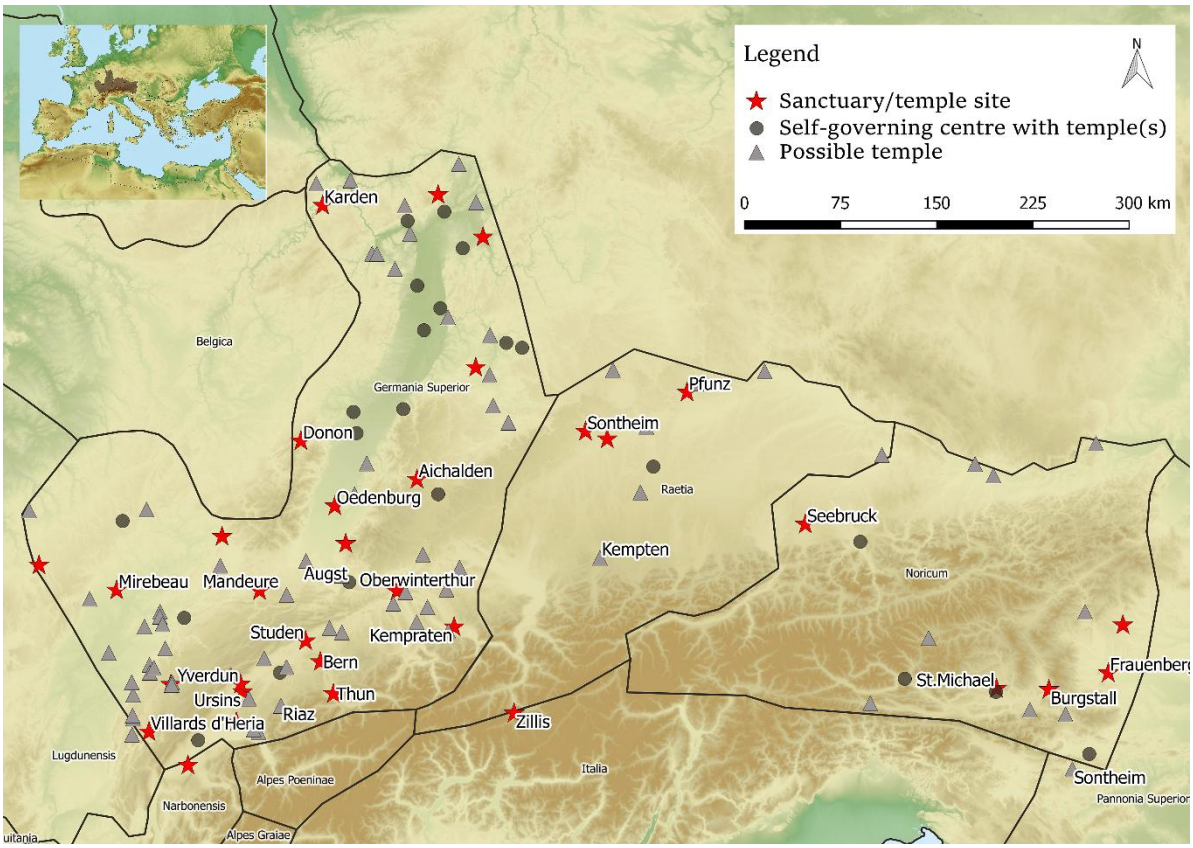


Fig. 3.6: Map with sanctuaries and temple sites

The location of sanctuary sites

Temple sites could develop within built-up quarters, but were most often located either on the periphery of a centre, along an access road or on an a isolated but meaningful location in the landscape.[452] A clear example of a Roman sanctuary at the periphery of an urbanised centre can be found in Kempten, but also in the smaller centres of Kempraten and Yverdun.[453] The temple site in Thun meanwhile was located a few kilometres away from the actual Roman centre of *Dunum*.[454] Also the Roman sanctuary in St. Michael was less than 3 kilometers from the *municipium Virunum*/Zollfeld.[455] The entrance to the sanctuary on the Martberg in Germania Superior was

[450] Budei 2016,71; 116.
[451] Ibid., 26.
[452] C. Cramatte in the overview of Roman sanctuaries in Switzerland makes a distinction between temple sites 'urbain', 'peri-urbain', 'dominaux' and 'extra-urbain'(Cramatte 2008, 265.).
[453] Weber 2000, 72.
[454] Martin-Kilcher and Schatzmann 2010, 23.
[455] Dolenz 2004, 241-242.

connected via a road with the settlement of *Cardena*/Karden. The link between the two places becomes clear from the distribution of the ceramic vessels that were locally produced in *Cardena* for votive gifts. These vessels are found at a temple that was erected along the road as well as in the sanctuary on the Martberg. Based on this evidence it is assumed that a pilgrimage route existed that began in the little village and led to the sanctuary, with a first stop at the temple along the road before the start of the climb up the Martberg.[456] Other temple sites, amongst which Petinesca/Studen and Riaz, were also located along important roads or visible from such roads.[457]

The location of some other sanctuaries was connected to particular landscape features.[458] Some sites provided a wide view over the Alps or towards the Black Forest, such as the one in Donon and Schauenburgflue close to Augst.[459] The isolated sanctuary of Villards-d'Heria must have been given a sacred aura by the *Lac d' Antre*, the river Heria and the many gushing springs.[460] During high tide, the sanctuary in Thun changed into a peninsula, enclosed by the rivers Kander and Aare.[461] The temple site on the plateau in Burgstall was connected with the river Lavant which flowed for longer by a kind of staircase that was cut into the rocks.[462]

Sanctuary sites and continuation (II)

The cave sanctuary of Zillis (Switzerland) that was discovered in the early '90s could count as another landscape featured sanctuary. In front of the cave was an enclosed area with various pits and hearths. The high number of animal bones, of which the majority belonged to sheep/goats, as well as the numerous fine ware vessels (cups, dishes, plates, etc.) points to ritual sacrifices or banquets. The sanctuary must have been well used between the late 2nd century and the 4th century AD, based on coin finds. Of even greater interest were the five, maybe even seven, early Medieval burials that came to light, suggesting that the cult practices here might have continued as late as the 8th century.[463]

The continuity of Roman cult places is however more commonly found in early churches; which were often built on top of an earlier sanctuary or erected with building materials of a Roman predecessor, such as in Bern, Oberwinterthur, Pfünz and Ursins.[464]

It has already been explained that sanctuaries tend to be places where continuity can be seen.[465] Just as the use of some Roman temple sites continued into the early Medieval period, some of them were successors of Late Iron Age cult places, such as the temple sites in *Brenodurum*/Bern and *Petinesca*/Studen.[466] Recent excavations in one of the three sacred areas (Champs des Fougères) of

[456] Budei 2016, 36-37.
[457] Ibid., 84-86.
[458] Some studies, such as the one by J. Budei, apply a typology for temple sites depending on the location, such as street-, mountain peak-, water- or spring sanctuary. This is not always applicable since one sanctuary can belong to multiple categories. One example is the sanctuary complex of Villards- d'Heria, where all factors - water, springs and height - played a role. For further discussion see: ibid., 66-67.
[459] Ibid., 32-33.
[460] Ibid., 65; 68.
[461] Martin-Kilcher and Schatzmann 2010, 19.
[462] Sedlmayer 2015, 313; 316-317.
[463] Liver and Rageth 2001, 123-124; 126.
[464] Budei 2016, 114-118.
[465] See chapter one.
[466] Bern: Martin-Kilcher 2008, 8 (check page). Petinesca: Flutsch, Niffeler and Rossi 2002, 397.

the Roman centre of *Epomanduodurum*/Mandeure revealed late La Tène finds, indicating a continuous use of the place.[467] The archaeological evidence is even more convincing at two other sites. At the sanctuary of Mirebeau-sur-Bèze (France), Iron Age and Roman structures were found. The ditch surrounding the space could be dated to the La Tène D2 phase and contained many animal bones associated with cultic ceremonies. Although the earliest Roman finds date to the late 1st century BC, a Roman monumental temple site only emerged during the 1st century AD.[468] A very similar situation could be reconstructed at the Frauenberg in Austria (near Wagna). Here two sanctuaries existed, one on top of the hill, the other 40 m down on the slope. The lower site consisted of an Iron Age temple that was overbuilt by Roman houses. Excavations revealed pre-Roman sacrificial pits, ditches and possibly four timber buildings. The archaeozoological finds contained the remains of at least 1,300 animals which were most likely involved in the cult practices. Since the discovery of a Hallstatt burial grave it is even questioned whether the cult practices on the Frauenberg date back as early as this. The other sanctuary was probably in use since 150 BC and was built on a terraced space on top of the hill. From the Flavian period onwards a Roman temple dominated the top of the Frauenberg.[469]

Table 3.5: General appearance of a sanctuary site

Place name	Total size (m^2)	Temples	Chapels	Altars	Enclosed	Reference
Aichalden		7				Von der Osten-Woldenburg 2013, 210-212.
Alise-Sainte-Reine	7,000	2			location	Budei 2016, 51; 56.
Bern		3				(Martin-Kilcher 2008, 8???.)
Burgstall	15,000	1				(Sedlmayer 2015, 316-317.)
Donon		3 (+ Jupiter columns)			location	Budei 2016, 22
Frauenberg	+/- 556	2				(Schrettle 2015, 292-295.) Budei 2016, 103-104.
Kempraten		2	2	X	X	(Ackermann 2013, 252.)
Kempten	40,000	1	6-7	X	U-shaped hall	(Weber 2000, 72.)
Lousanne		3				(Drack and Fellmann 1988, 423.)
Mandeure		Multiple sites (5+)			X	(Bossuet, Thivet, Marmet *et al.* 2012, 270-274.)
Mirebeau	50,000	2			Enclosed by colonnade	(Barral and Joly 2011, 551-552.) Budei 2016, 94-95.
Neuenstadt am Kocher	6,750	1		x	x	(Kortüm 2013, 159-160.)
Oedenburg	11,300	4	3-4		Oval structure and 2 rectangular annexes	(Schucany and Schwarz 2011)
Podkraj		1		x		(Sedlmayer 2015, 327-330.)
Riaz		1		x	X	(Martin-Kilcher 2008,

[467] Bossuet *et al.* 2012, 268-274; Thivet and Nouvel 2013, 423-426. Budei 2016, 94-95.
[468] Barral and Joly 2011, 552-553.
[469] Schrettle 2015, 292-298; Budei 2016, 103-104.

						8??.)
Rotteburg		2	2+ (2 cult buildings plus 1 half round structure)		x	(Gairhos 2008, 154.)
Sontheim	34,000	4	5 (+2 fenced sacred spaces)		X	Pöll 2013, 250-251.
St. Michael		1				(Dolenz 2004, 241-242.)
Studen	1,400	6-8	3	x	X	(Flutsch, Niffeler, and Rossi 2002, 397.; Martin-Kilcher 2008, 9-11.)
Thun	600	5	2	x	X	(Martin-Kilcher and Schatzmann 2010-20.)
Yverdon			3		X	(Meylan 2015, 132.)

The general appearance of sanctuary sites

Table 3.5 gives an overview of the number and kinds of buildings within the sacred area of a sanctuary, of which the majority were enclosed by walls or ditches. At Kempten and Mirebeau the wall also provided a sort of colonnade that surrounded the domain. The temple domain on the Mont Donon was not walled, but the steep mountainside served as the boundary of the sacred space.[470]

Most often the sacred area enclosed multiple temples as well as chapels, such as at the sites of Aichalden, *Cambodunum/*Kempten, Oedenburg, Sontheim, *Petinesca*/Studen and Thun where a total of seven or eight such monuments were constructed. Often at these sites a high number of altars is found spread between the temples or Jupiter columns, as for example in Donon. An exception in its monumentality is the sanctuary of Yverdun, where no temples have so far been found. The excavations only revealed some enclosed chapels together with some 20 ditches.[471] In some cases, certain structures have been interpreted as houses of priests, such as at *Petinesca*/Studen.[472]

Often amenities such as lodging and taverns were available on the non-sacred side of these temple sites or in the vicinity.[473] The remains of guests houses and *tabernae* have been found at the sites of Burgstall, Podkraj, St. Michael, Studen and Thun for example.[474]

Urban benefactors

A final question arises concerning these temple domains, namely, who maintained and financed these sanctuaries? In contrast to the bathing places, no military involvement could be derived from the archaeological evidence. According to S. Martin-Kilcher, the answer lies in their bond with the elite who lived in the towns.

Evidence for financial support in the development of local sanctuaries in the surroundings of the *colonia Aventicum* by the urban elite, for example, is derived from a statue in toga found on the site

[470] 2016, 22; 87.
[471] Meylan 2015, 1632.
[472] Flutsch, Niffeler and Rossi 2002, 397.
[473] King 1995, 186; Martin-Kilcher 2008, 16.
[474] Burgstall, Podkraj: Sedlmayer 2015, 316-317; 327-330., St. Michael: Dolenz 2005, 145., Studen: Flutsch, Niffeler and Rossi 2002, 397. and Thun: Martin-Kilcher and Schatzmann 2010, 20.

in Thun. Inscriptions record the aristocratic family of the *Camilli* on votive altars found in Riaz and a building inscription belonging to one of the temples in *Brenodurum*/Bern that involved a *duoviri* of the *colonia*.[475]

Even more curious is the relationship between the *municipium Iuvavum*/Salzburg and the temple domain for the local god Bedaium in Seebruck, 45 km west of the town. The majority of the votive inscriptions in *Bedaium* could be ascribed to *duumviri* who had their office in *Iuvavum*. While previously it was assumed that this was related to some pre-Roman cult practices, H. Grassl recently came up with a different and more convincing explanation. The lake must have been of great importance for the town's economy, in the form of income from fishing for example. In order to keep the god satisfied, and to safeguard the well-being of the town, the *duumviri* most likely organised periodic religious festivities for Bedaium, which are now only testified in these votive inscriptions. According to Grassl, the interval time between the erection of these inscriptions was 5 years, corresponding with the duration of a *lustrum* or one lease term.[476]

3.4.3 Road stations

All the centres discussed so far could only exist, flourish and participate within the settlement system because they were in contact with each other and people, information and goods could travel between them. The importance of the centres providing accommodation along these routes, waterways and roads can hardly be overestimated.

One of the earliest Roman investments in the newly conquered territories in the Alpine region and beyond was the construction of roads. Very often already existing tracks and paths were turned into paved roads, which were passable the entire year round.[477] The improvement of existing roads and the construction of new ones was deemed important by the emperors.[478] It was a state matter and the majority of the work was carried out by soldiers, although this mostly relates to the *viae publicae* and the *viae militares*, or in other words the main highways and the roads.[479] These roads initially had to serve efficient relocations and movements of army units, but contributed overall to an improved communication system that connected Rome with previously remote areas and supported the functioning of the Roman administration in the provinces.[480] They allowed people and goods in general to travel throughout the Empire.

From the time of Augustus onwards official couriers were employed for state-related communication exchanges, postal and other administrative services along these roads, the so-called *cursus publicus*. This created a need for stations where horses or men could be changed.[481] The literary sources use different terms, such as *mutatio*, *mansio* and *statio,* to refer to these kind of centres. However, their exact meanings are uncertain. It is assumed that these terms referred to stations with different sorts of infrastructure and function only from the 3rd to the 4th century onwards. I therefore will use the

[475] Martin-Kilcher 2008, 8-11.
[476] Grassl 2016, 121-123.
[477] Winkler 1985, 33.
[478] The concern of the emperors about decent roads is reflected in inscriptions such as: CIL 3, 7203 and 8267 (Meijer and van Nijf 1992, 145.).
[479] Bender 1975, 10-11; Kolb 2000, 206-207. H. Bender and A. Kolb both distinguish further a *viae privatae*, roads situated on private land and a *viae vicinales,* secondary roads that passed along smaller centres and connected parts of the *viae publicae*.
[480] Bender 1975, 6; Adams 2012, 229; Glaser 2014, 158-159.
[481] Kolb 2000, 49-51; 54.

more general term 'road station'.[482] Road stations were supposed to lie a distance of one day's journey apart from each other, implying an inter-distance of around 25 Roman miles (about 35 km).[483] However, estimations vary between 25 km to 40 km, depending on the landscape and its relief.[484] Often the first signs of activity at such road stations correspond with the earliest works on the roads, as archaeologically attested in Biberwier, Friesheim, Kippenheim and *Immurium*/Moosham.[485] Generally, these road stations either developed into smaller centres or were located nearby a town centre or military fort (Fig. 3.7).

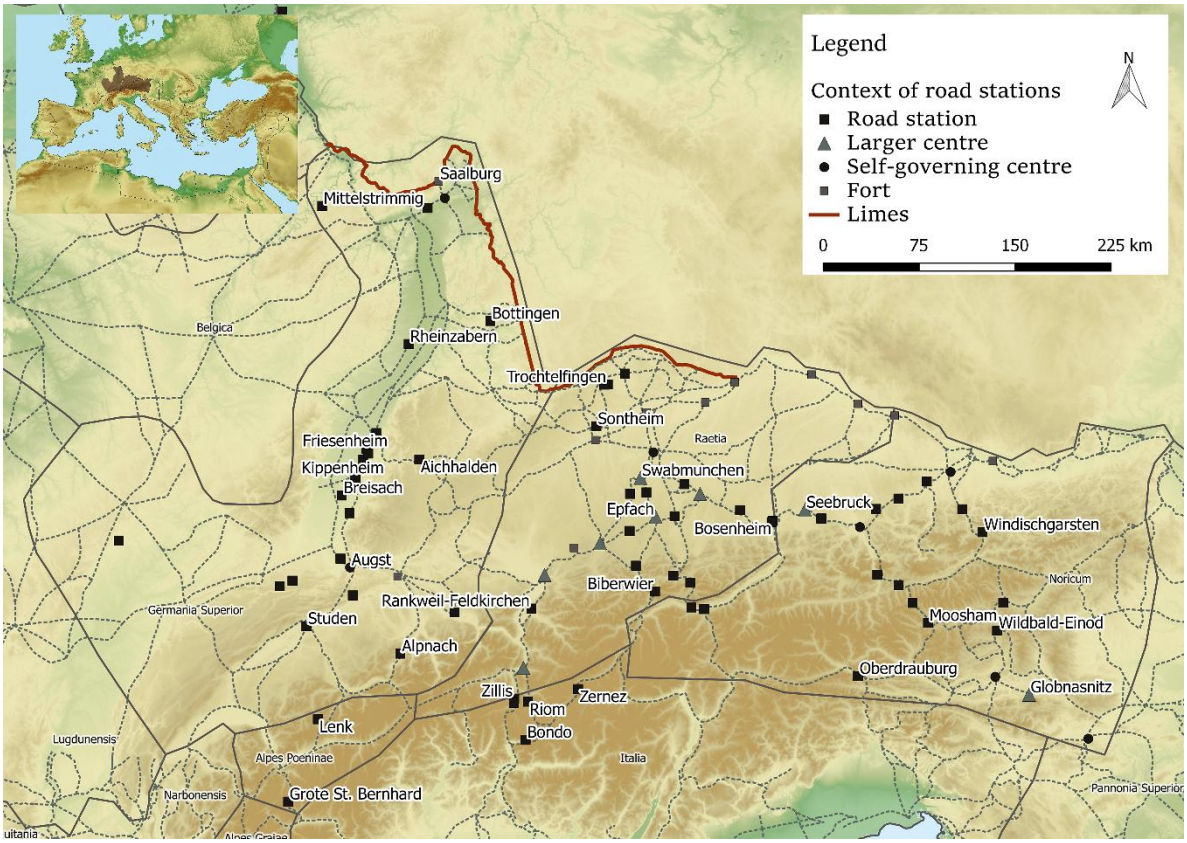


Fig. 3.7: Overview of road stations in the northern Alpine region

Reconstructing the road network and its stations

Both the *Tabula Peutingeriana* and the *Itinerarium Antonini*, provide overviews of towns, centres, stopping places and road stations along Roman roads, including the distances between them.[486] These documents are often used to reconstruct the ancient road network as well as to identify sites as possible road stations, despite the difficulties that this entails.[487] Not every place mentioned should be considered a road station, the temple in Kuchl for example was added as a landmark.[488]An unfortunate slip of the pen resulted in at least four different sites being suggested as the possible

[482] Bender 1975, 19; 2000, 262; Kolb 2000, 211-212; Kastler 2010b, 40.
[483] Bender 2000, 262.
[484] Pöll 2001, 244.
[485] Fingerlin 1976, 27-29; 30-31; Fleischer and Mouchka-Weitzel 1998, 47; Kolb 2000, 63; Grabher 2010.
[486] For a more extensive description of the nature and contents of these documents, see: Bender 1975, 13-16; 2000, 255-256; Winkler 1985, 21-23.
[487] Glaser 2014, 180; Bender 1975, 11-12; Walser 1997, 53-54; Glaser 2014, 158-159; Lang *et al.* 2016, 11-12.
[488] 2016, 15; Knauseder, Schachinger and Lang 2016, 138 ff.

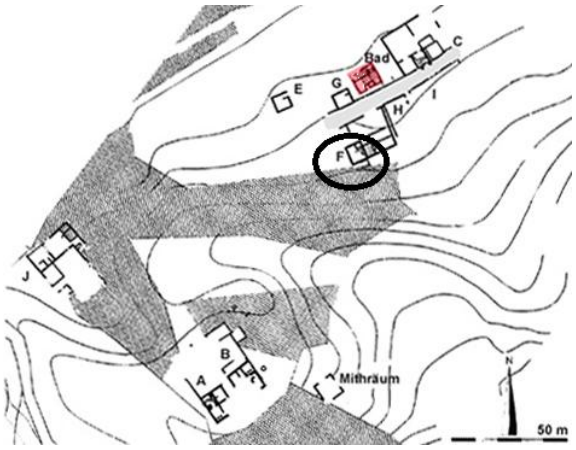
location of the road station *Ovilatus.* These days, however, it is generally accepted that the place must be the *municipium Ovilavis/*Wels.[489]

In addition to written sources, aerial photography and geophysical prospection tools have over recent decades contributed to new discoveries concerning the Roman road network. The geophysical survey of 2007 at the road station of *Immurium*/Moosham, is just one example. After a long period of speculation about the course of the road between *Virunum*/Zollfeld and *Iuvavum*/Salzburg at this particular spot, more clarity on its trajectory has finally been achieved.[490] Also the discoveries of milestones and other archaeological finds have contributed to the reconstruction of the road network.[491] In addition to this, our understanding of road stations, their appearance and infrastructure has improved due to recent archaeological excavations and surveys.

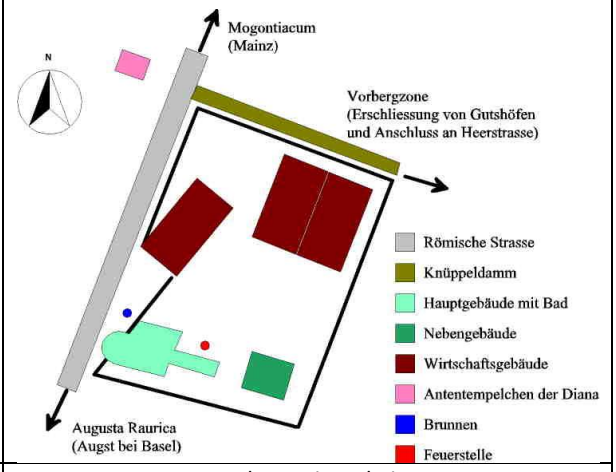
The general appearance of road stations and activities

It is assumed that road stations provided a shelter for animals and men, where one also could change horses or and have a broken chariot fixed. Although the idea of the existence of a standardized type of guesthouse (in the literary sources called *praetorium, taberna, deversorium, stabulum* or from the third century onwards *mansio*[492]) is no longer believed, there are nevertheless some recurrent elements in the archaeological remains that help to shape an idea of their layout (Fig. 3.8 a and b).[493] The main building often consisted of a central inner courtyard surrounded by single rooms or apartments, with a shared or individual cooking area for the guests, as well as a living area for the inn keepers. Very often some rooms were provided with a heating system, possibly the common rooms.[494] At some of these buildings a cellar where food and drinks could be stored and kept cool has been excavated, such as at Sontheim and Niederschopfheim.[495] Table 3.6 shows the variety of the dimensions of such guesthouses, ranging from a few hundred square meters up to a few thousand. These differences can partially be explained by the different activities hosted, whether or not inside the main building. In the guesthouse of Niederschopfheim, *Immurium*/Moosham and *Noreia*/Wildbald-Einoïd, for example, some rooms were used as stables, while in most places the stables and carriage houses were placed elsewhere within the domain, such as in Sontheim and Trochtelfingen.[496]

[489] Winkler 1991, 49-52.
[490] Groh and Lindinger 2008, 75-83; Fleischer 2010, 8-13.
[491] Although milestones have been rarely found *in situ*: Winkler 1985, 42-43.
[492] Bender 1975, on pages 19-20 refers to the following primary sources: CIL 3, 6123; AE 1995, 179 and Suetnonius, The Life of Vitellius (Chapter 7).
[493] For more on the discussion concerning the standardization of the Roman guesthouses in road stations see: ibid., 16-18; Pöll 2001, 248-249.
[494] Bender 2000, 262; Kastler 2010b, 41.
[495] Sontheim:(Pöll 2001, 250-251.) and Niederschopfheim: Website: Road station Niederschopfheim.
[496] Niederschopfheim: ibid, Moosham: Fleischer and Mouchka-Weitzel 1998, 12-41., Wildbald-Einoïd:Glaser 2014, 173-174., Sontheim: Pöll 2001, 250-251., Trochtelfingen: Krause 1990, 167-169.



a. Moosham (website: Transformation)



b. Friesenheim

Fig.3.8: Examples of a road station

Table 3.6: Overview of the dimensions of guest houses

Guesthouse	Dimensions (in m)	Area (in m^2)	Reference
Trochtelfingen	20 x 7 (incomplete)	140	(Krause 1990, 165.)
Wildbald-Einoïd	21 x 16	336	(Glaser 2014, 173-174.)
Riom	30 x 20	600	(Rageth 1982, 137.)
Moosham	32 x 23	736	(Fleischer and Mouchka-Weitzel 1998, 12-41.)
Kuchl	40 x 25	1,000	(Kastler 2010b, 38.)
Niederschopfheim	40 x 45	1,800	(www.hohberg.de)
Rankweil	75 x 50	3,750	(Pöll 2001, 239-242.)

Bathhouses also part of the standard amenities of a road station. These bathhouses were rather small, under 80 m^2, for example at *Murus*/Bondo and Riom, *Immurium*/Moosham and at Trochtelfingen.[497] In a few cases, such as *Grabomagus*/Windischgarsten and Niederschopfheim, the bath complex was inside the main building or annexed to it.[498]

As has been noted earlier, Roman society was permeated with religion and it is therefore not surprising that these road stations also present evidence for or the remains of cult places and temples. Travellers might have been willing to thank the gods for a safe journey and for a secure continuation of their journey.[499] Some places functioned as both a road sanctuary and a road station, such as Aichalden, Sontheim and *Petinesca*/Studen.[500]

Despite it being disputed whether or not it was common practice, some road stations hosted certain state officials, such as *beneficiarii* or toll collectors, as has been attested in *Ad Enum*/Bosenheim and *Pons Aeni*/Pfaffenhofen on the border between the Gallic and Illyrian toll districts at the river Inn.[501] Because of frequent appearances of *horrea* in road stations, for example in Pfaffenhofen and Sontheim, the existence of a relationship between the so-called *mansio*, *horreum* and the *beneficiarii*

[497] Bondo and Riom: Pöll 2001, 255., Moosham: Fleischer and Mouchka-Weitzel 1998, 12-14., Trochtelfingen: Krause 1990, 166-170.
[498] Windischgarsten: Pöll 2001, 251-252. and Niederschopfsheim: Website Road station Niederschopfsheim.
[499] von der Osten-Woldenburg *et al.* 2013, 212.
[500] Aichalden: ibid., 210-212. , Sontheim: Pöll 2001, 250-251., Studen: Flutsch, Niffeler and Rossi 2002, 397.
[501] Steidl 2010, 85-88; 96.

and the introduction of the *Annona militaris* in the Severan period has been assumed.[502] However, there is no evidence proving that the *cursus publicus* served the transport of the *Annona.*[503]

An edict found in the Roman town of *Sagalassos*/Aglasun in Pisidia (Asia Minor) gives an idea of the services and facilities available at (official) road stations. The edict stated that the residents must have ten wagons and the same number of animals at hand.[504] It also teaches us that the maintenance of the infrastructure and the provision of transport equipment for state affairs was part of the duties of local municipalities.[505] F. Glaser suggested that at one road station between 10 and 20 people were employed and estimated the number of animals that were kept in reserve at about 40.[506] Archaeological investigations have indeed revealed indications for animals being kept at several road stations. North of the road station in Sontheim (Raetia), for example fenced plots of land (some of 21m by 12m) were discovered and interpreted as meadows for draft animals.[507] The archaeozoological material derived from road station sites generally contains a large amount of bone from horse and cattle, typical travel and traction animals. The fact that these bones do not show any cutting marks, confirms that these animals were kept for their power and not for their meat.[508] Nevertheless, Glaser's estimations may be on the high side given the limited size of most of these road station sites. From the data in Table 3.7 it appears that the average size of a domain associated with a road station did not exceed 5 ha, although a larger agglomeration sometimes developed around or in close proximity to these nuclei, such as in Epfach and Breisach. Of course, the bigger the agglomeration, the fewer the buildings that were actually part of the road station's framework.[509]

Table 3.7: Overview of the total size of the domains of road stations

Road station	Size (in ha)	Reference
Aichhalden	2	(von der Osten-Woldenburg *et al.* 2013, 208-212.)
Moosham	3	(Groh and Lindinger 2008, 89.)
Bosenheim	4	(Steidl 2010, 93..)
Kuchl	2-3	(Kastler 2010, 21-43.)
Pfaffenhofen	2-3	(Steidl 2010, 86.)
Sontheim	3-4	(Pöll 2001, 251-252.)
Seebruck	5	(Keller 1981, 130.)
Epfach	9	Information displayed on the archaeological site
Breisach	9 (max)	(Gassmann 1992, 130-132.)

That some of these road stations developed into bigger agglomerations is related to the economic stimulus these places generally provided for their predominantly rural environment, creating work for innkeepers and craftsmen. They attracted merchants who travelled along these busy trade routes. At some of the bigger pottery centres, such as *Pons Aeni/*Pfaffenhofen, *Rapis*/Schwabmünchen and Rheinzabern, a road station was present that dated to the earliest stages

[502] Bender 1975, 22.
[503] Kolb 2000, 228-229.
[504] Ibid., 55-56. SEG XXVI 1392, 8-10.
[505] Ibid.-56.
[506] Glaser 2014, 158-159.
[507] Nuber 1992, 196.
[508] Steidl 2010, 86-87.
[509] Grabher 2010, 248-250.

of the site.[510] The number of crafts generally practised in road stations was nevertheless rather limited and small-scale, such as the ceramic production attested in *Abodiacum/*Epfach and *Petinesca/*Studen.[511] Since many sites, such as for example *Abodiacum*/Epfach, *Iuenna*/Goblasnitz, Moosham, Niederschopfheim, *Noreia*/Wildbald-Einoïd and possibly Riom, have yielded traces of metal and iron workshops, the presence of a smith is considered standard practice. There must have been a considerable need for the repair of chariots, horse equipment, or similar objects.[512]

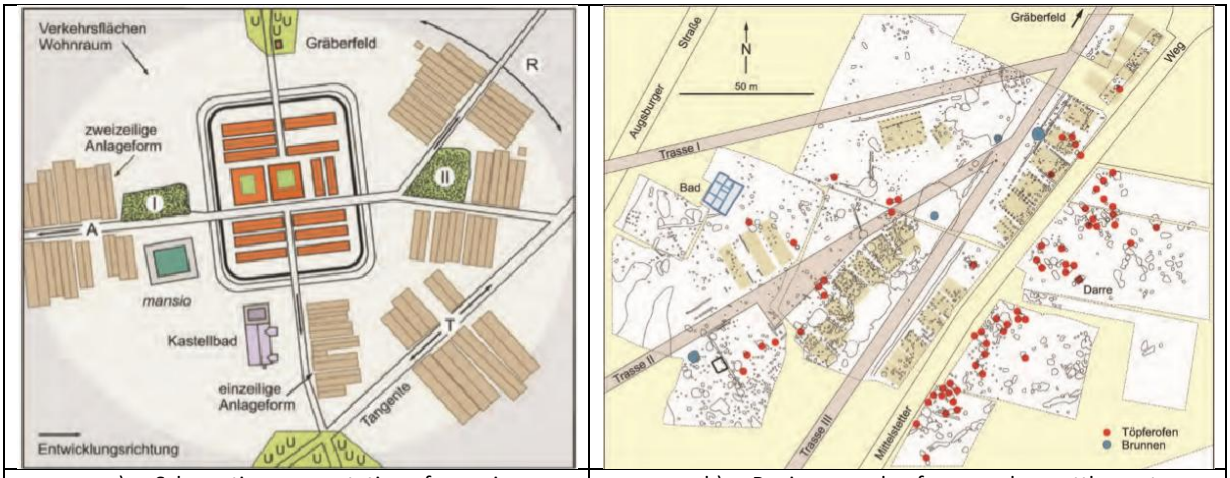
The road station of *Immurium*/Moosham (Fig. 3.8a), is probably one of the better investigated sites of its kind. It illustrates the sorts of businesses that could have been located at a road station. The road station excavated in Moosham was located along the route leading from *Virunum*/Zollfeld to *Iuvavum*/Salzburg, not far from entering the Alps. Building F has been interpreted as a specialised tailor workshop for the manufacture of cloaks. It is easy to imagine that couriers and traders coming from the south were interested in warm clothing before moving further north.[513] That such a road stations benefited from its location on a main road and along important trade routes is also apparent from the kinds and number of import goods. At *Immurium*/Moosham rather exceptional ceramic ware has been excavated, such as pottery originating from the East (Ephesos) and from North Africa (Djilma).[514] Such African wares are reasonably common finds in town centres in southern Noricum. The amount of African ware at *Immurium*, however, is considerably higher than the amount found in northern Norican towns, such as *Iuvavum*/Salzburg. This proves that this road station benefited from the ongoing south-north trade.[515] Finds such as lead labels and scales imply that the place functioned as an important intermediate trade or transit post.[516] This example shows that road stations played an active role not only in transport but equally in the trading network.

3.5 The nature and size of subordinate centres and garrison settlements

The majority of subordinate centres tended to develop on or close to the transport network.[517] For many settlements the street provided the main artery of their existence. The general appearance and development of garrison settlements and civilian subordinate centres is comparable, except the fort structures (Fig. 3.9a and b). Houses were usually positioned along the streets and provided space both for living and for most economic activities performed by the inhabitants. The majority of these houses can be categorised as strip houses or *Streifenhäuser*,[518] characterised by their long

[510] Pfaffenhofen: Steidl 2010, 85-86., Schwabmünchen: Czysz and Sorge 2000, 142-145., Rheinzabern: Schulz 1999, 65.
[511] Epfach: Information on site; Studen: Zwahlen 1993, 71; Flutsch, Niffeler and Rossi 2002, 397.
[512] Epfach: Information at the site, Goblasnitz: Glaser 1982, 16-18., Moosham: Lang *et al.* 2016, 16-17., Niederschopfheim: Website Road station Niederschopfheim, Riom: Although it is not clear whether after the construction of the main building the metal processing continued: Rageth 1982, 137., Wildbald-Einoïd: Glaser 2014, 173-180.
[513] Fleischer and Mouchka-Weitzel 1998, 49.
[514] Ibid., 55-62; Fleischer 2010, 2.
[515] Kastler and Gschwind 2015, 84.
[516] Kastler 2008, 136-137.
[517] Czysz 2013, 276.
[518] The assumption that the strip house was the standard house in the northwestern provinces during the Roman period has been questioned by B. Steidl, who found evidence for Roman agglomerations in the region of *Lechtal* (Raetia) which distinguished themselves from the stereotyped image of a Roman agglomeration by a completely different, indigenous architectural tradition, mostly in perishable material. Because of a research

rectangular shape of which the dimensions could vary from 6 m to 12 m in width and 12 m to almost 40m in length. It is assumed that most of them had a pointed roof and that the houses themselves were mainly constructed in post-and-beam or half-timbered style. In general, a transition from pure wooden constructions to stone (foundations) can be observed during the 1st- and 2nd centuries. In some regions cellars are more frequently attested than in others, and the possibility of one to two floors is accepted.[519] The houses were placed with their short side towards the street, where sometimes evidence for a *porticus* is found, for example in Alise-St.-Reine, Ehl, Güglingen and Vertault.[520] They either shared a wall with the neighbouring house or were detached, separated by a very narrow alley. Since these houses hosted both the living area for the entire family, as well as the workspace, a spatial division can often be seen. The front part of the house generally seems to have served as a workshop, while the rear area of the house served as living and kitchen area.[521] Behind the house there was often some land where the remains of wells and latrines have been found. Furthermore, these backyards were also used to grow herbs and vegetables (in very limited amounts). It is also in this backyard that most evidence for the performance of certain crafts, such as kilns appears.[522]



a) Schematic representation of a garrison settlement

b) Rapis, example of a secondary settlement

Fig. 3.9: Strip houses allocated with the small side towards the streets gave a similar lay-out to garrison settlements and civilian centres (Czysz 2013, 303; 336)

narrowly focused on the strip house settlements, Steidl suspects the excistence of a possible large gap in our overview of the Roman inhabitation (Steidl 2016, 78.)

[519] In southern Germania Superior as well as at the left bank of the Rhine the houses were more often provided with a cellar than in the region of North Germania Superior according to Klee 2013, 142.

[520] Alise-St.-Reine: Bedon 2001, 63., Ehl: Gilles 1994, 170-171., Güglingen: Neth 2013, 167-180. and Vertault: Bedon 2001, 300.

[521] The division of living and workspace could also be the other way round or could be changed over time. At the settlement of *Vitudurum*/Winterthur, for example, the front part of the houses were regularly used as workshops, but after AD 50, they were moved to the rear of the houses: Jauch 2008, 92.

[522] Jütting 2000, 109-110; Ertel 2008, 27; Klee 2013, 141-142. For more explicit details of the construction of these strip houses see, Czysz 2013; 316-331. In this publication W. Czysz discusses the possible look and design of these strip houses which are regarded as typical for the western provinces during the Roman period: Czysz 2016, 58 ff.

A high variety of crafts were carried out in these subordinated centres.[523] At the site of *Vitudurum*/Winterthur evidence for ceramic production, leather tannery, textile industry and shoemaking has been found, as well as workshops for metal and bone processing. It is assumed that this wide variety of production was mainly sold at the local market to local residents and the rural population, who probably lived mainly from agriculture, except in the case of the production centres as discussed above.[524]

The population of subordinate centres varied from a few hundred to a few thousand and consequently they grew to different sizes. The chart below (Fig. 3.10) displays the size categories of subordinate civil centres and garrison settlements in the northern Alpine region for which respectively 73 and 70 sites were included. The size estimation corresponds to the built-up area of these settlements. In the case of garrison settlements this relates to both the military and the civilian structures.

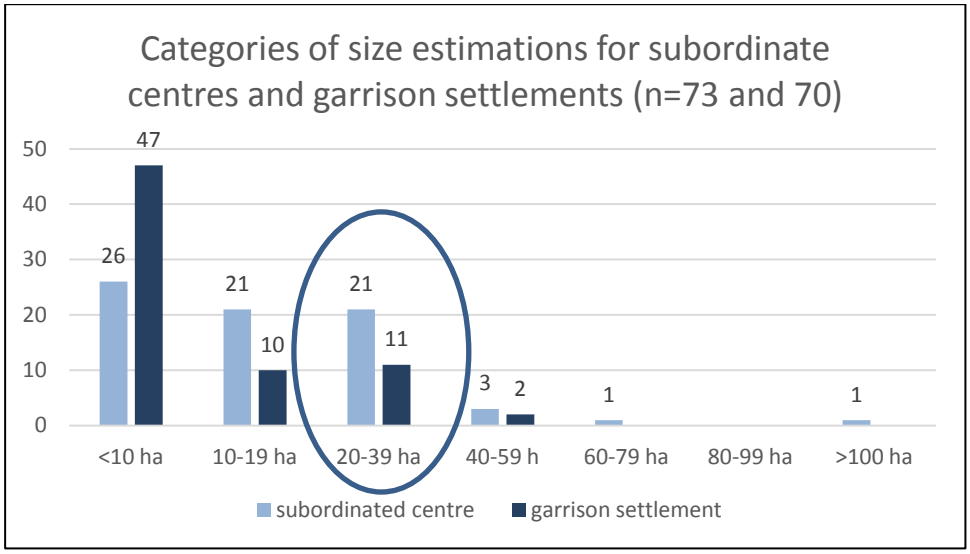


Fig. 3.10: Size categories of the subordinate centres and the garrison settlements

The chart shows that the majority of subordinate centres and garrison settlements did not exceed 20 ha. In fact, for both types of settlements the category below 10 ha contains the highest number of sites. This means that the overall size of subordinate centres was smaller than that of the self-governing towns. The most dominant size category of self-governing centres of between 20 ha and 39 ha (indicated with a circle in Fig. 3.10), corresponds to the size of some of the larger subordinate centres and garrison settlements. Whilst legionary bases turned out to be among the largest centres in the northern Alpine region, the majority of garrison settlements were within the smaller categories of the settlement system. It appears to have been exceptional for subordinate centres in general to become larger than 40 ha. The site of *Epamanduodurum*/Mandeure with its size estimation of 250 ha does not fit the general pattern at all. The Roman centre of Mandeure is considered to have been the second most important centre of the *civitas Sequanorum*. Earlier estimations for its built-up area varied between 60 ha and 120 ha. Recent geophysical research however has put even more living quarters on the map. Estimations reach now up to 500 ha, of

[523] Ertel 2008, 27.
[524] Jauch 2008, 89-95.

which at least half are considered to have been densely populated.[525] *Epamanduoudurum* stands out from the average subordinate centre. Apart from its expansion, this centre had a high level of monumental buildings, with no fewere than three religious areas and a theatre. The centre seems to correspond very well with the Gallo-Roman phenomenon of large urbanised centres without a town administration.

Although subordinate centres were dominanted by residential houses, *Epamanduodurum* was not the only centre with some monumental architecture. In Offenburg, for example, a Corinthian-style column was found. The Roman place is now heavily overbuilt, preventing any suggestion of the type of (public) building the column might have belonged to.[526] The fact that the presence of urban-like infrastructures and public buildings, such as monumental squares and theatres, was rather low but not uncommon in subordinate centres will become clear in the next chapter.

3.6 Conclusion

The aim of this chapter was to demonstrate the variety of subordinate centres, comprising the agglomerations spread out over the territories of the chartered towns as well as the settlements that developed around the auxiliary army bases administered by the military officials. Despite their submission to a higher authority, these centres were essential stepping stones in the settlement system, allowing people to organise their lives and their goods to be moved from one place to another.[527] There were many more subordinate centres than self-governing towns. They were therefore most likely the main contact points with urban services for a vast majority of people living in the countryside.[528]

Certain subordinate centres distinguished themselves from one another in their size or in the privileges they were afforded, but what differentiated them even more was the services and activities that drove them. Despite the fact that agriculture was the main occupation of many communities, not all subordinate centres lived exclusively from the growing of crops. Some centres hosted regional markets, while other centres flourished because of the manufacture of certain products, including ceramics, stone or metal. Cultural and logistical facilities, such as spas, sanctuaries or lodging accommodation equally formed the base for the existence of a centre.

This leads us to the important question why some of these subordinate centres developed to a higher urban level or grew larger than others. As we have seen, the majority of subordinate centres were of a modest size (i.e. smaller than 40 ha), notwithstanding that some were larger than the average chartered Roman town in the region. Why did flourishing production centres, such as Rheinzabern or Mayen, not develop into wealthy urban centres but remained small agglomerations? The proceeds of the production clearly belonged elsewhere, such as surrounding elites or imperial administrators. In contrast, the religious centre of *Epamanduodurum*/Mandeure did become a monumentalised urban centre.

[525] Rorison 2001, 187; Bossuet *et al.* 2012, 16.
[526] Schrempp 2013, 201.
[527] Baret 2013, 31-32.
[528] Gräf 1995, 190.

An analysis of the archaeological remains of why the subordinate sites highlitghts the interaction between the urban developments, the civil world and the stimulus given by the presence of the Roman army in the region. The support of the army was most apparent in the development of the bath complexes and from the expansion of the road network, but also helps to explain the flourishing of the terra sigillata centres in the northern Alpine region.

Clear urban investments were made towards the maintenance and development of sanctuaries, involving the *munera* of the town officials. The investment in public buildings and monuments by citizens was thus not restricted to the town centres, as will be further discussed in the following chapter.

4. Public buildings: urbanity through monumentality

K. Lomas wrote that 'There is no doubt that public buildings were regarded in Antiquity as a significant part of the urban landscape and vital to the city's status and identity.'[529] In the Roman mind the concept of city was inseparably connected with a certain type of monumental centre, equipped with a definite set of public buildings. Subordinate centres however, could equally develop a certain level of monumental core. Exactly these public buildings and infrastructures will serve as a guide through this chapter to investigate the physical aspects of Roman centres.

The aim of this chapter is to investigate the monumental character of the Roman centres in the northern Alpine region. Since in the case of the north-western Alpine region certain forms of evidence, such as epigraphy, are rather limited, archaeological remains and in particular the remnants of public buildings offer a good opportunity to broaden the investigation of the Roman settlement network, its towns and their townscapes. The emphasis is placed on four elements of the set of public buildings, namely *forum-basilica* complexes, spectacle buildings, water provision and baths, and finally circuit walls.

4.1 Public monuments: the threshold of a Roman urban centre

Modern scholars have often used ancient literary sources to legitimate the importance attached to public monuments when researching ancient towns. In his classic article on the ancient city, written in the 1970s, M. Finley, for example, concluded that certain 'necessary conditions of architecture and amenity, which in turn expressed certain social, cultural and political conditions', existed, and which were seen as essential by classical authors before a settlement could be considered a true city.[530] Writing at the same time as M. Finley, L. Homo, in his book *Rome impériale et l'urbanism dans l'antiquité*, started with a general theoretical approach to how urbanism was seen in antiquity, analysing Greek and Roman authors, from Aristotle to Vitruvius.[531] In a recent summary on Roman urbanism, J. Edmondson also draws on several passages from Vergil's Aeneid to conclude that a city needed to be equipped with a monumental centre, just as much as it required laws, a constitution, local magistrates or a local senate.[532] Edmondson not only uses written sources, but also refers to ancient images of towns to demonstrate the significance of public monuments.[533]

Naturally, the archaeological record has also played a large part in this debate. J.E. Stambaugh has considered the physical remains of ancient cities as the starting point for constructing an understanding of urban life in antiquity and advocating the use of multiple approaches to investigation, including social, topographical, or architectural perspectives.[534]

P. Zanker has pointed out the influence of the Roman socio-political ideology on the physical appearance of Roman cities. According to him, its origins go back to the Republican period and lie more specifically in the public infrastructure of the *forum* and the *basilica*. From the age of Augustus

[529] Lomas 2003, 30.
[530] Finley, 1977, 305-306; Pausanias, 10.4.1 and Aristotle, Politics 1330a, 34ff.
[531] Homo 1971, 13-24.
[532] Edmondson, 2006, 250-251. Edmondson refers to Vergil's Aeneid, sections 1. 419-429, 441, 446-449, 505-509.
[533] Edmondson 2006, 250-254.
[534] Stambaugh 1988, 1-2.

onwards the theatres, amphitheatres and bath complexes became also reflections of this ideological framework. Because of these buildings, the visual and physical aspect of the meaning of a Roman urban centre increased. M. Horster summarises Zanker's view as follows: 'The abstract ideals of the built environment defined the Romanness of a city in the Roman Empire'.[535] According to Zanker the initial fixed layout for new Roman cities in the provinces, consisting of a centrally located *forum-basilica* complex, gradually faded into the background once more buildings joined the typical physical look of a Roman town.[536] Horster adheres to this point of view by stating that most town plans were not designed beforehand, but rather resulted from a shared viewpoint of what a city should be, namely a monumental urban centre with specific public buildings. The monumentality of a Roman town was the mirror of its prosperity and wealth, mainly concentrated within the social class of the ruling elite. Both Zanker and Horster stress the influence and investments of the local elite as incentives for the building programmes. From the archaeological remains as well as from building inscriptions, they find a profound connection between the wealthy upper class and the construction and maintenance of a city's buildings.[537] The construction of these large-scale public buildings was a vital element in the changing character of urban places in Late-Republican and Early-Imperial Italy and developed into a model for urbanity throughout the Roman Empire.[538] In addition to this, scholars over recent decades have agreed on the fact that these monumental features became common characteristics of Roman centres, regardless of status or specific function. M. Rostovtzeff considered these public infrastructures as part of the general aim of every Roman community, namely to create a comfortable living environment.[539] The communities in the northern Alpine region also participated in this urban process.

4.2 *Forum-basilica* complexes

Fora performed as the centres of towns, originally hosting both political and commercial activities. The *forum* was the place where politicians and traders met. The paved square was enclosed on one side by the *basilica* and on the other sides was surrounded by *tabernae*, shops and offices. According to Vitruvius, the *basilica* was 'constructed on a site adjoining the forum and preferably in the warmest possible quarter, so that in winter business men could gather in them without being troubled by the weather'.[540] The *basilica* of the Roman centre in Riegel, for example, was located along the southern side of the forum.[541] Sessions of the local law courts were also held in the *basilica*. Its apsidal shape made sure, so wrote Vitruvius, that 'those standing before the magistrates were not in the way of the business men'.[542] The remains of a *basilica* building are therefore often recognised by the apse. It is believed that the other important buildings relating to the governing and administration of a town, such as the *curia*, treasury and prison, were generally also situated on the *forum* or in its immediate vicinity.[543] It has been argued by F. Laurence, S. Esmonde Cleary and G.

[535] Horster 2014, 517.
[536] Zanker 2000, 25-41.
[537] Ibid., 25-41; Horster 2014, 515; 517-518; Duncan-Jones 1990, 174-184.
[538] Lomas 2003, 28.
[539] Rostovtzeff 1957, 142-145; Laurence, Esmonde-Cleary and Sears 2011, 2.
[540] Vitruvius, The ten books on Architecture, 5.1.4.
[541] Dreier 2005, 188.
[542] Vitruvius, The ten books on Architecture, 5.1.8.
[543] Laurence, Esmonde-Cleary and Sears 2011, 170.The *forum* of the *colonia* Augusta Raurica is described as a typical *forum* with *basilica* and *curia* (Flutsch, Niffeler and Rossi 2002, 367.). Although the interpretation of the

Sears that it was the example of the *forum* developed in northern Italy at places such as Brescia, Luni and Benevagienna during the first half of the 1st century AD, that provided the model of the Roman *forum* in the western provinces.[544] The biggest change had been the addition of the religious aspect, through which the *forum* became dominated by one or more temples. That the *capitolium* – temple for Jupiter, Juno and Minerva – had become a dominant element of the *fora* in provincial towns, has recently been questioned in a study by J. C. Quinn and A. Wilson. They concluded that these *capitolia* were in fact not a very common and well distributed type of temple in Roman towns across the Empire, with the exception of the regions of Italy and Roman North Africa. According to their study no remains of a *capitolium* have been found in any centre in the northern Alpine region.[545] This contrasts with the interpretation of *capitolia* by regional scholars on the archaeological sites of, for example, Augst, Besançon and Celje.[546] Whether or not we are dealing with *capitolia*, adjacent to the *forum* the construction of a temple or temples lining the *forum* were often part of to the initial lay-out.[547] The imperial cult also influenced the appearance of the *forum*. Statues of members of the imperial family were erected all over these squares, followed by monuments and sculptures of local benefactors. Being the impressive monumental centre of the town became the function of the *forum* during the High Empire.[548]

4.2.1 Different kinds of centres with different kinds of *fora*

The term *forum* in secondary literature can refer to a central square with related political and commercial buildings surrounding it as described above, and equally refer simply to an open market square, which makes it difficult to determine whether an official *forum* is meant. That the typical layout of a Roman *forum,* provided with porticos and *tabernae* surrounding the square, was taken over in the design of market squares, compounds these terminological difficulties further.[549] However, at 53 sites in the northern Alpine region remains of a sort of public square have been identified (Fig. 4.1).

Only seven self-governing centres have *forum-basilica* complexes that have been relatively well investigated, including the *civitas* centres of *Borbetomagus*/Worms, *Lopodunum*/Ladenburg and Riegel, the *coloniae Aventicum*/Avenches and *Julia Equestris*/Nyon, all located within the borders of the province of Germania Superior, as well as the Norican *municipia Teurnia*/St. Peter in Holz and *Virunum*/Zollfeld.[550] There are three more *forum-basilica* complexes known from subordinate

remains is uncertain, the *forum*-complex in Eisenberg was most likely provided with a *basilica* and *curia* (Bernhard *et al.* 2008, 137-138.).

[544] Laurence, Esmonde-Cleary and Sears 2011, 171 ff.

[545] Quinn and Wilson 2013, 117-128; overview of capitolia: 133-134.

[546] Augst: Drack 1958, 7-8; Drack and Fellmann 1988, 239; 452. The remains in Augst have more recently been described as a podium temple for the imperial cult (Flutsch, Niffeler and Rossi 2002, 367.); Besançon: Castan 1869, 28-31.; Celje: Bausovac 2014, 17-18.

[547] Rivet 1966, 104-112.

[548] Laurence, Esmonde-Cleary and Sears 2011, 170-197.

[549] Sommer 2007, 90-93.

[550] Worms: Cüppers 1990, 673 Ladenburg: Sommer 1992a, 127-128; Carroll 2001, 47-48.; Riegel: Dreier 2005, 188; 2010, 60-61.; Avenches: Carroll 2001, 48; Castella *et al.* 2015, 69-70.; Nyon: Grenier 1931, 336; Drack and Fellmann 1988, 452; Carroll 2001, 48.; St. Peter: Glaser 2002, 140.; Zollfeld: Luschin 2003, 171.

centres, namely from *Alesia*/Alise St. Reine and Vidy (Lausanne) in Germania Superior and from *Cambodunum*/Kempten in Raetia.[551]

Although every chartered town must have had a *forum-basilica* complex, the archaeological remains frequently fail to confirm this. That the *fora* of some towns currently remain unlocated is often due to the fact that the modern town covers the Roman site entirely. This is the case, for example, at Roman Augsburg, Salzburg and Wels.[552] The presence of a strict street grid can in some cases help to locate the *forum-basilica* complex since the political and commercial heart of a town was normally located at the intersection of the two main streets, the *cardo decumanus* and *decumanus maximus*. The area of *insulae* 20, 23, 25, 26 was always indicated as the possible location for the *forum* of the Norican *municipium Flavia Solva*/Wagna. A survey carried out in 1999 in *insula* 23 did reveal remains of the forum, a square surrounded by halls and rooms (most likely *horrea* and *tabernae*).[553] The location of the *forum-basilica* complex of *Nida*/Frankfurt-Heddernheim, the centre of the *civitas Taunensium*, is also assumed at the conjunction of the two main roads in front of the military fort.[554] Concerning the *forum-basilica* complex of *Brucomagus*/Brumath, the centre of the *civitas Tribocorum*, the remains of a 14,5 m long building found in the current *Rue des Juifs* together with structures that possibly belonged to a temple and a high number of decorated architectural fragments, have been interpreted as a *basilica*. The actual *forum* is unlocated, but it is almost certain that it was situated at the crossing of the *cardo decumanus* and *decumanus maximus*.[555]

It is interesting however that the number of possible official *forum-basilica* complexes is considerably higher than the number of chartered towns that could be identified in chapter two. Remains of possible *fora-basilica* complexes were found at the sites of several subordinate centres in Southern Germania Superior, such as in Lenzburg and *Vertillum*/Vertault.[556] In Kempraten a public square was found belonging to the centre of *Centum Prata* that was surrounded by several formal looking buildings, but none has been identified as a *basilica*.[557] This phenomenon is highly interesting concerning the province of Raetia where the *municipium Augusta Vindelicum* remains the only attested chartered town. The high level of urban development of the Roman site of *Cambodunum*/Kempten is generally known and has led to the suggestion that the place may have served as the governor's seat before *Augusta Videlicum*/Augsburg took over that position. The *forum* dated to the Flavian period, and was provided with a *basilica* and decorated with columns.[558] Remains of possible *forum-basilica* complexes were also found at the Roman sites of *Bratananium*/Gauting, *Brigantium*/Bregenz and *Curia/*Chur.[559] Could it be that some of these centres were not only of regional importance because of trading, logistical or religious services, but also

[551] Alise St.-Reine: Bedon 2001, 65.; Vidy: Drack and Fellmann 1988, 423; Carroll 2001, 49.; Kempten: Weber 2000, 52-53; 99.
[552] Augsburg: The Stefansgarten is assumed to be the place of the *forum* (Bakker 2000, 88-94.).; Salzburg: G. Thüry gives an in-depth overview of all location considered for the location of the *forum* of the Roman town (Thüry 2014b, 307-318.).; Wels: The area west of the current Kaiser Josef Platz is suggested for location of the Roman *forum* (Miglbauer 2006, 11.).
[553] Groh, Neubauer and Eder-Hinterleitner 1999, 38; Groh *et al.* 2002, 130.
[554] Website: Transformation.
[555] Petry and Kern 1974, 30. Bedon 2001, 127.
[556] Lenzburg: Paunier 1994, 84-85.; Vertault: Bedon 2001, 322.
[557] Website: Römersiedlung Kempraten.
[558] Weber 2000, 53.
[559] Gauting: Czysz 1995, 447.; Bregenz: see footnote 32.; Chur: Flutsch, Niffeler and Rossi 2002, 374.

because of administrative and municipal activities? It seems very likely that some of these places could have been the central settlement of some unknown *civitates*. In the case of the site of *Brigantium,* for example the epigraphic sources are very limited. However, the centre flourished thanks to its location along important roads and became an important headquarters after the withdrawal of the frontier to the lake Constance during the 3rd century. Despite the small number of epigraphic finds, a few *cives* are attested. It has been suggested that these may have been inhabitants of a *civitas* (maybe the *civitas Brigantiensis?)*, although the presence of some Roman traders seems a more likely explanation.[560] If some of these centres belonged to a *civitas*, the municipal network of Raetia would have been much more dense and the municipal organisation of the province would have been more similar to the situation in Gaul and the two Germanic provinces. Unfortunately, the evidence is as yet insufficient to support this suggestion. The distribution of the known *forum-basilica* complexes in Noricum is rather peculiar in the sense that they seem to be restricted only to the self-governing towns. Probably due to the relatively high density of chartered towns in this province, there was no need for other centres to provide these infrastructures and the accompanying services.[561]

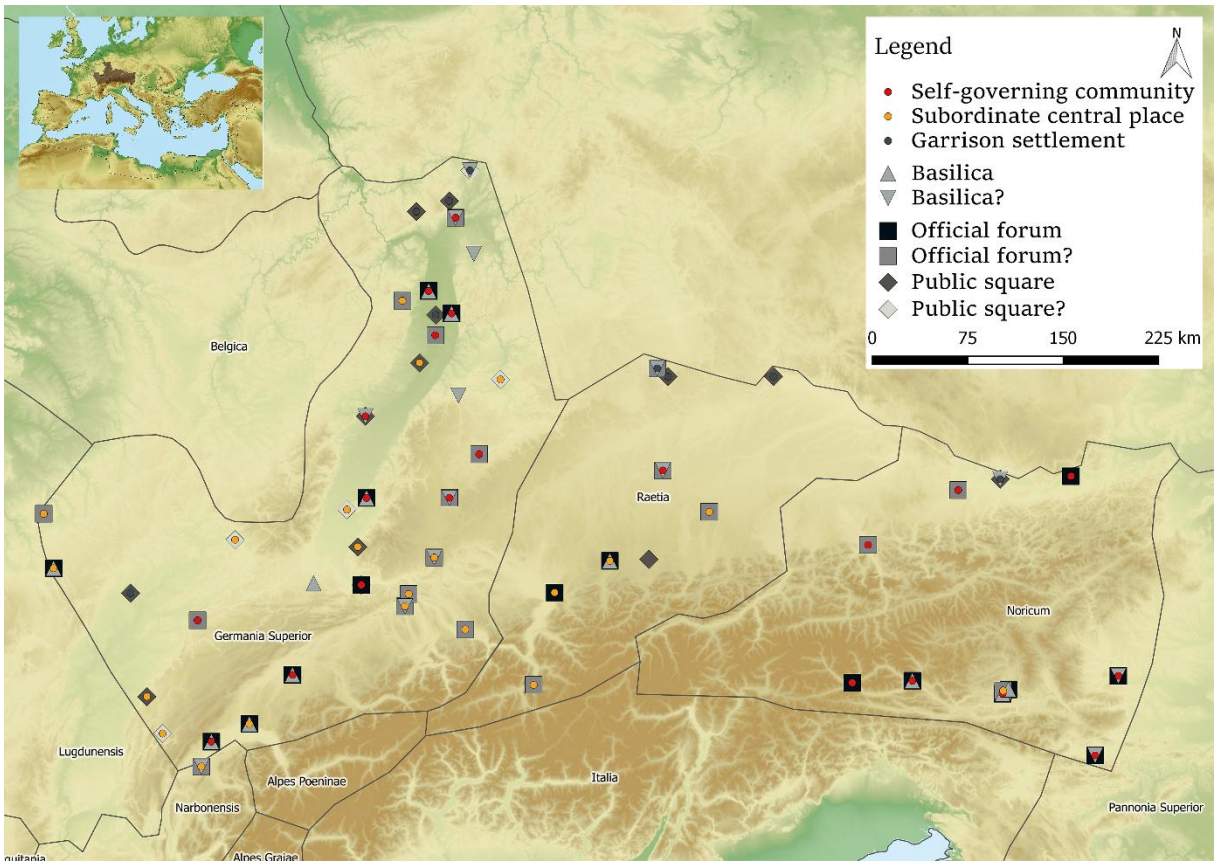


Fig. 4.1: Overview of public squares and *forum-basilica* complexes.

[560] Heger 1985, 13 ff. and also website: The Princeton Encyclopedia of Classical Sites, Brigantium.
[561] The only possible exception is the uncertain identification of an imperial forum in St. Michael am Zollfeld, near the *municipium Virunum* (Groh 2005, 93.).

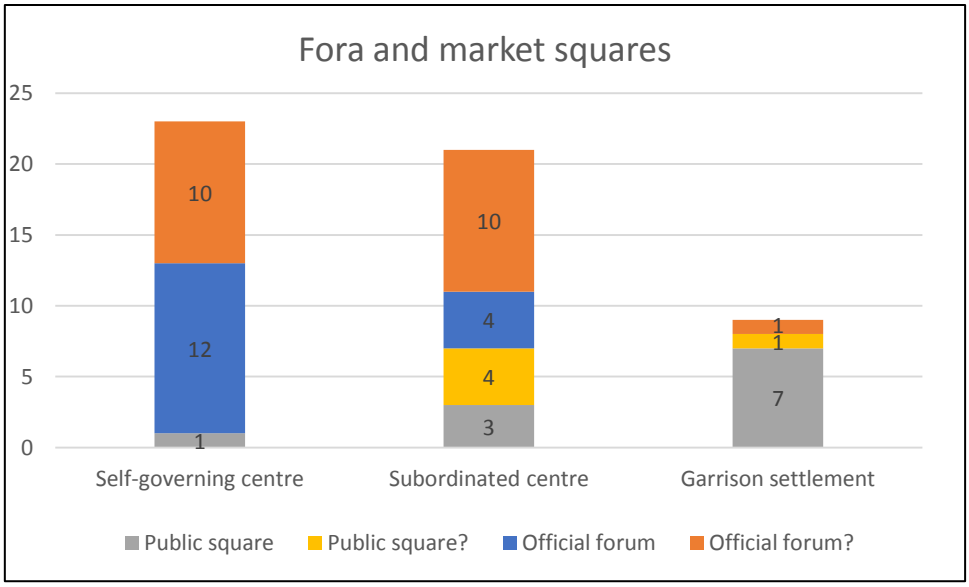


Fig. 4.2: Squares and *forum* complexes in different kinds of centres

Not all remains of public squares at the 53 sites should be considered as an official *forum-basilica* complex as described above (Fig. 4.2). Some chartered towns had second public square in addition to their *forum*, such as in the case of the *coloniae Augusta Raurica*/Augst and *Julia Equestris*.[562] From the data it appears that many subordinate centres also had an open space that possibly served as a public or market square, such as the potters centre in Rheinzabern or the spa centre of *Luxovium*/Luxeuil.[563] The relatively high number of garrison settlements with a market square fits in with the idea of garrison settlements as regional markets for both local residents and the immediate hinterland. According to C.S. Sommer, these were open spaces intentionally planned from by the initial construction phases of the garrison settlements, including the fort and the living quarters of the civilian population.[564] Some of these open spaces were rectangular in shape, such as in the legionary base of Mirebeau and the garrison settlements of *Briciniacum*/Weissenburg, Kumpfmühl and *Iciniacum*/Theilenhofen.[565] There are also garrison settlements where the open space had a roughly triangular shape, as for example in Saalburg I and Zugmantel.[566] The remains of a trapezoidal-shaped market were found in the garrison settlement of the legionary base of *Lauriacum*/Enns.[567]

In general, the remains of these squares distinguished themselves from the official *fora* by the absence of structures that could be interpreted as official or commercial buildings, such as a *basilica* or *curia*, although there are a few contested cases. Geophysical research at Theilenhofen revealed, in addition to the outlay of an open square, the contours of an adjacent rectangular building. This prompted the questions of whether one could interpret this complex as a *basilica* and whether it is possible to speak of an official *forum-basilica* complex in the garrison settlement of *Iciniacum* (Fig

[562] Augst: Ferdière 2004, 355-359.; Nyon: Drack 1958, 8.
[563] Rheinzabern: Cüppers 1990, 533.; Luxeuil: Bedon 2001, 200.
[564] Sommer 1999a, 87.
[565] Mirebeau: Goguey 2008, 239.; Weissenburg: Sommer 2014, 30.; Kumpfmühl: Sommer 1999a, 87.; Theilenhofen: Mischka, Obmann and Henrich 2010, 10-13.
[566] Saalburg and Zugmantel (Zugmantal II however had a rectangular shaped square): Sommer 1999a, 87.
[567] The market in *Lauriacum* was a *forum venale*, a trapezoidal shaped square (57m x 64m) and surrounded on three sides by halls and shops (Kandler and Vetters 1986, 92. and website: Lauriacum.).

4.3).[568] Similar results were derived from the geophysical survey in Arnsburg (Fig. 4.3).[569] Nevertheless, more archaeological research is needed before such conclusions can be drawn and until then an interpretation as storage halls is equally, if not more, likely. Also, the remains of a building alongside the *forum venale* in *Lauriacum* have been interpreted as a possible *basilica*.[570]

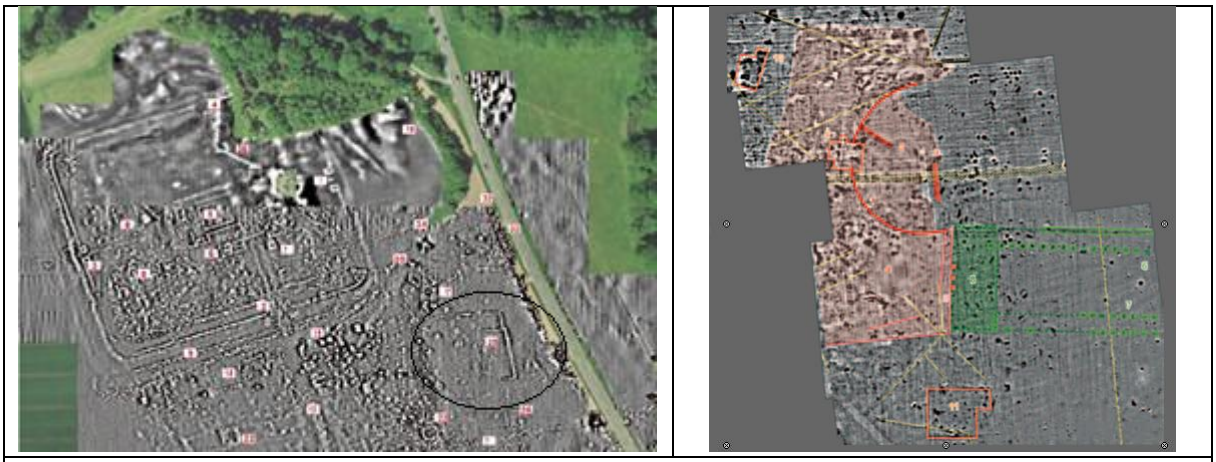


Fig. 4.3: Results of the geophysical surveys in Arnsburg (left) and Theilenhofen (right), with the structures of the possible *forum-basilica* complex encircled.[571]

4.2.2 The chronology and size of *forum-basilica* complexes

In the three provinces in question, only a few of the *forum-basilica* complexes are dated with any degree of accuracy (Table 4.1). Some are only known via geophysical survey or have recently been excavated, so that information about their building phases has not yet been published. Elsewhere, the architectural buildings of many of the Roman towns are poorly known and their dating is therefore often based on important key moments of the centre's development. The *forum-basilica* complexes of the *municipia Arae Flaviae*/Rottweil and *Augusta Vindelicum*/Augsburg are only vaguely known or partially investigated. Yet one finds foundation dates for these squares in secondary literature that are closely related to their urban or municipal history.[572]

The earliest *forum-basilica* complexes in the northern Alpine region were built within the centres that played a significant administrative role in the first decades after the conquest. These included the centre on the Magdalensberg, the site of *Cambodunum*/Kempten, and the *coloniae Iulia Equestris*/Nyon and *Augusta Raurica*/Augst (Fig. 4.4). Otherwise there did not exist a strong correlation between the construction dates of *forum-baslica* complexes and the granting of municipal rights to communities. The earliest phases of the public squares of *Teurnia*/St.Peter and *Cetium*/St.Pölten pre-dated the period in which these two centres were granted the status of *municipium,* during the reign of Claudius and Hadrian respectively.

It appears that self-governing centres tended to have a larger *forum-basilica* complexes than other types of places, with a minimum threshold of around 5,000 m^2 (Fig. 4.5). However, larger centres did

[568] Mischka, Obmann and Henrich 2010, 10-13.
[569] von Kaenel, Wenzel and Zickgraf 2010, 14-20.
[570] Kandler and Vetters 1986, 92. Website: Transformation.
[571] Image Arnsburg: von Kaenel, Wenzel and Zickgraf 2010, 18-19.; Image Theilenhofen: Mischka, Obmann and Henrich 2010, 11.
[572] Rottweil: Rabold 2005, 101; Rüsch 1976, 583. Augsburg: Tremmel and Pöllath 2012, 7-14.

not necessarily have larger public squares. The *fora* attested in garrison settlements and other subordinate centres tended to be considerably smaller. This reinforces the impression that these *plazas* should not be considered official *fora* in the sense of being the monumental and political heart of a centre.

Table 4.1: Overview of foundation dates of *for a*

Specific Overview		**General Overview**					**References**
		Late Republic -Julian Dynasty		**Claudius**	**Flavian Dynasty**	**Late 1st century - early 2nd century**	
Place (province)	**Specific Date**	**Augustan**	**Tiberian**			**Antonine Period**	
Aguntum				x			(Tschurtschenthaler and Auer 2015, 341-343.; 2016, 10-11.)
Area Flaviae (N)	AD 100?				x		(Rabold 2005, 101.; Rüsch 1976, 583.)
Augusta Raurica (GS)	1st Century		x--------	--------	----------		(Drack and Fellmann 1988, 323-336.; Ferdière 2004, 355-359.)
Augusta Vindelicum (R)				X?			(Tremmel and Pöllath 2012, 7-14.)
Aventicum (GS)			x				(Castella, Blanc, Flück *et al.* 2015, 69-70.)
Borbetomagus (GS)	AD 80				x		(Cüppers 1990, 673.)[573]
Brigantium(R)	AD 70				x		(Grabher 1994)
Cambodunum (R)	Flavian (with earlier phases)		-------	x-------	----------		(Weber 2000, 196.)
Celeia (N)	Flavian/Pre-Domitian				---------x		(Bausovac 2014, 17-18.)
Cetium (N)					x		(Scherrer 2002a, 225-226.)
Iulia Equestris (GS)	first half 1st century		--------	x			online[574]
Lopodunum (GS)	117					x	(Rabold 2005, 101.; Sommer 1999a, 87.)
Magdalensberg		x					(Dolenz, Krmnicek, Schindler-Kaudelka *et al.* 2009, 238-249.)
Noviomagus			X				(Cüppers 1990, 560.)

[573] Website: Roman Worms.
[574] Website: Transformation- Nyon.

Riegel						x	(Dreier 2002, 40.)
Teurnia (N)	Augustan *forum*, basilica 2nd century	x					(Glaser 2002, 140.)
Vidy (GS)			X				(Flutsch, Niffeler, and Rossi 2002, 382.)
Virunum				X			(Luschin 2003, 157.)
Total		2	4	5	5	2	18

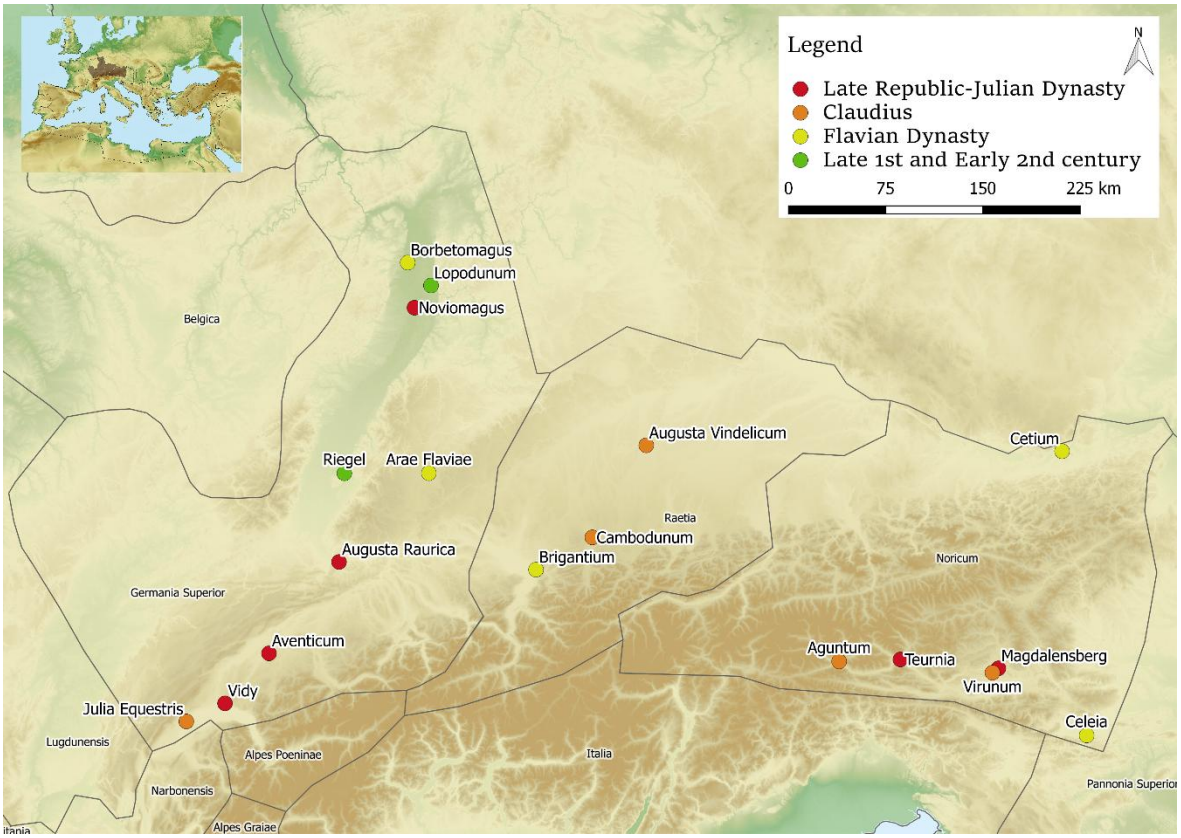


Fig. 4.4: Dates of *fora*

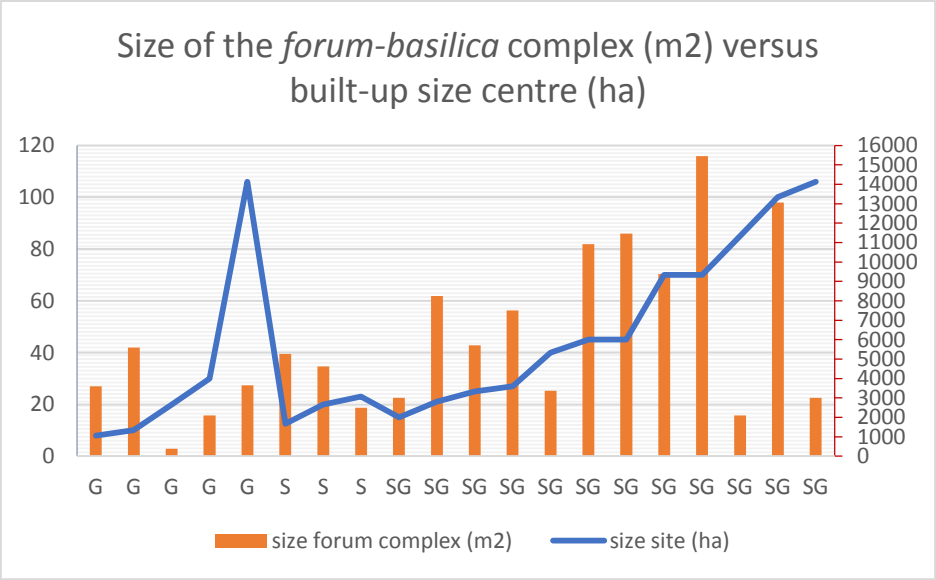


Fig. 4.5: The size of *forum-basilica* complexes
(G: garrison settlement, S: subordinate centre, SG: self-governing community)

4.3 Spectacle buildings

Equally embedded in the physical appearance of a Roman urban centre was the presence of one or even multiple spectacle buildings. Regarding the northern Alpine region, this concerns theatres and amphitheatres. So far, no remnants of a *circus* have been found in the entire region.

Not only the word but the whole tradition and concept of theatre, including the type of performances as well as the monumental construction, had originally come from across the Adriatic Sea. In contrast to the eastern parts of the Empire, theatre buildings were not a feature of Late Iron Age centres in the northwestern provinces. This cultural habit had entered the Roman world via the Greek colonies in Southern Italy and Sicily. Drama and mime evolved under the Roman taste and other acts such as pantomime were added to the different acts displayed on stage. Over time the design of theatre buildings changed in response to the needs of the diversifying activities that were organised, and as a result of the developing skills of the architects. One of the most striking differences in the construction of theatre buildings by Greeks and Romans was the technological know-how to construct the edifice without the need for any earthen support or hill slope. Wooden constructions regularly predate later stone-built theatres.[575] It is again Vitruvius who explains the ideal design of the Roman theatre.[576]

In contrast to the theatre, the amphitheatre was a typical Roman building, not relying on any Greek predecessor.[577] Recent scholarship has focused on the design and building techniques,[578] and on the urban and social context in which these buildings existed. Amphitheatres were places where spectacles such as gladiatorial combats, animal fights, beast hunts and the execution of prisoners

[575] Brothers 2008, 98-99.
[576] Vitruvius, 5.3. For an extensive study of the architecture of Roman theatre buildings, together with a catalogue which serves as a good starting point for an overview of all the theatres in the whole Roman Empire see, Sear 2006.
[577] Brothers 2008, 113.
[578] Golvin and Landes 1990, 85-154; Rosin and Trucco 2005, 2 ff; Jones 2009a, 5-16.

took place. This typical Roman type of entertainment gained popularity in the rest of the Empire. In the early days, these gladiatorial camps and other fights just happened in open spaces, or at the *fora* with no need felt for a specific building.[579] Over time however the amphitheatre became a well distributed monument, especially over the course of the 1st and 2nd centuries. In the Greek-speaking Roman world, more modifications can be seen of existing theatres to the demands for these new Roman shows than new construction projects. It was mainly in the western provinces that inhabitants of cities invested in the foundation of new and monumental amphitheatres, in addition to theatre buildings.[580] There is only one known example of such a conversion within the study region. In the *colonia Augusta Raurica*/Augst the first century theatre constructed in the heart of the centre was converted into an amphitheatre around the reign of Trajan. Nevertheless around AD 170-180 a new amphitheatre was constructed on the outskirts (Augst Sichelengraben) and the old spectacle building was again modified to serve as a theatre.[581]

These spectacle buildings were often located just outside the built-up area, but on a spot that benefitted their accessibility and visibility, as for example the theatres in Avenches, Mainz and Zollffeld, or the second amphitheatre in Augst (Sichelegraben).[582] There was also often not enough space left within the existing centre of Roman towns when these large spectacle buildings were constructed during later development phases. This might explain why many can be found on the outskirts of Roman centres along one of the main access roads. The non-central location of many theatres may have been partly due to the availability of space, but possibly also due to their connection to the sacral area belonging to these centres. According to E. Bouley, Roman theatres often appeared nearby or even within a sacred area, as for example in the centres of Roman Mandeure, Ladenburg and Bad-Kreuznach. Elsewhere, they formed one monumental complex with the temple, such as in Avenches.[583]

4.3.1 Different kinds of centres with different spectacle buildings

The remains of a total of 29 spectacle buildings have been found (18 theatres and 11 amphitheatres) within the three provinces of the northern Alpine region. Many more of this kind of venue probably consisted, since there is indirect evidence for at least 4 or 5 more theatres and 7 more amphitheatres (Fig. 4.6). One assumes, for example, that the Roman subordinate centres of Basel and Dijon (*Divio*) were provided with a theatre.[584] Based on a building inscription, it is thought that the centre around the legionary base of Mirebeau also had a theatre, although it has been suggested that the theatre belonged to the civil centre in Langres.[585] The Roman fort in Alzey was constructed with building material taken from other Roman monumental buildings of the centre of *Altaiensium*. Based on the inscriptions on some of the *spolia*, one suspects the existence of a Roman theatre here.[586] At the sites of the garrison settlements of Arnsburg and Unterkirchberg and at the centre of *Brigantium*/Bregenz, circular structures have been found which are thougth to be the remains of

[579] Vitruvius, 5.1.1.
[580] Zanker 2014, 113; Brothers 2008, 113; von Hesberg 2005, 168.
[581] Hufschmid 2009, 105 ff.
[582] Dumasy 2011, 6; Zanker 2000, 37. Augst: Hufschmid 2009, 105.
[583] Bouley 1983, 552-57; 561-568.
[584] Basel: Sear 2006, 219. Dijon: Frézouls 1988, 231.
[585] CIL 13, 5614 and Frézouls 1988, 367; Joly 2003, 235-237.
[586] Website: Theatrum.

amphitheatres.[587] The idea that the legionary base in Mainz also might have had an amphitheatre rests on two pieces of evidence: the discovery of an undefined large stone construction, and on the mention of a Roman amphitheatre in Mainz in the Medieval saga called the Sigehard Passion.[588] The epigraphical attestation of deities who were traditionally connected to games, such as Diana Nemesis or reliefs of gladiators and wild animals, is for some scholars enough evidence to assume the presence of a Roman amphitheatre, as for example in the case of the Norican *municipia Ovilavis*/Wels and *Teurnia*/St. Peter in Holz.[589]

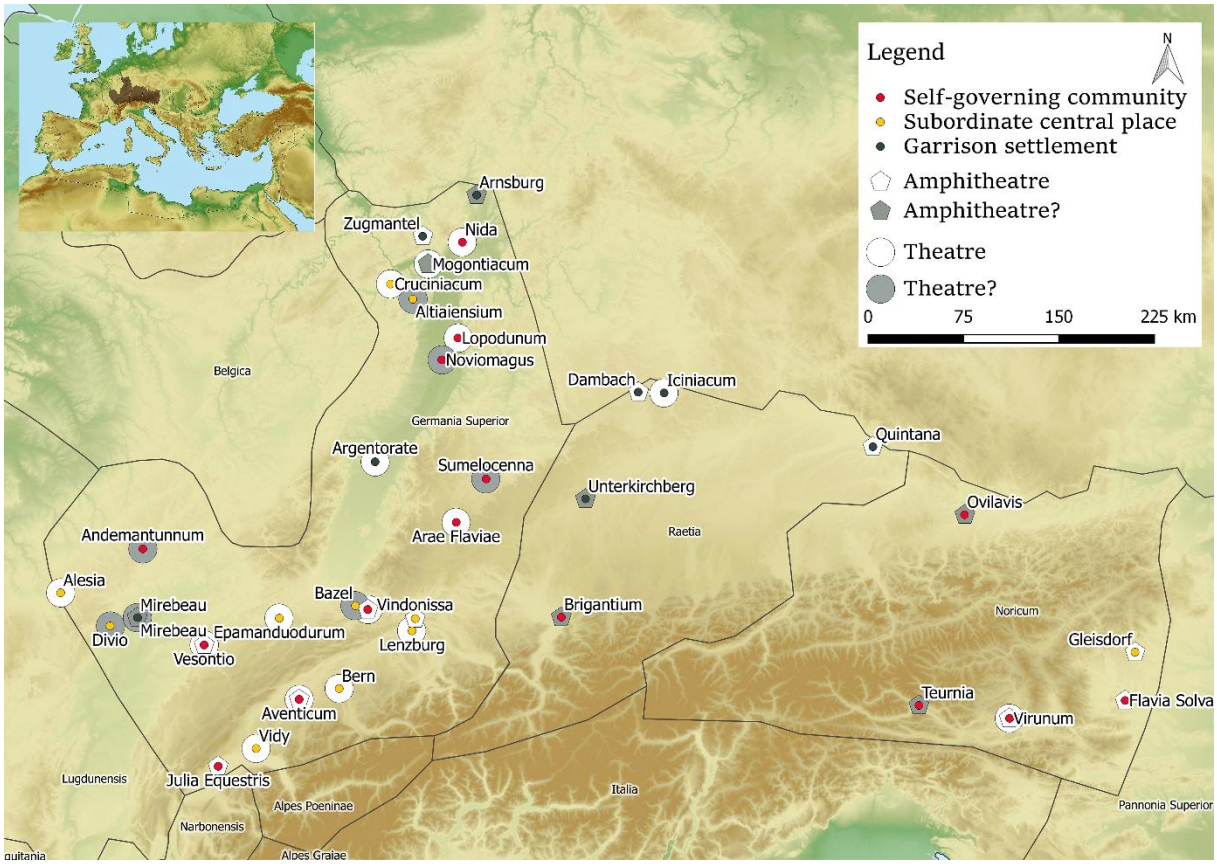


Fig. 4.6: The distribution of Roman spectacle buildings

The distribution of spectacle buildings in the northern Alpine region, displayed on the map (Fig. 4.6), shows a majority of monuments belonging to centres within the province of Germania Superior, including between 17 and 22 possible theatres and between 6 and 9 amphitheatres. A much smaller concentration shows up along the frontier in Raetia and in the southern part of Noricum. The cluster of arenas in southern Noricum might be explained by a local tradition of hunting and animal breeding. For a long time, most of the wild beasts used for races and fights in the arenas in Rome and Italy had come from North Africa. But D. Bomgardner explained that due to overexploitation the population of wild beasts must have dropped. Almost simultaneously one notices an increased use of trained, rather than of wild animals in the Mediterranean theatres.[590] According to S. Groh these

[587] Arnsburg: Sommer 2006, 109; 2009, 47; von Kaenel, Wenzel and Zickgraf 2010,17 Unterkirchberg: Sommer 2009, 53. Bregenz: Gairhos 2016, 123.
[588] Website: Amphi-Theatrum.
[589] Wels: Kandler and Vetters 1986, 56-58.; St. Peter: Glaser 1992, 28-29.
[590] Bomgardner 1992, 161-164.

amphitheatres in Noricum were used to give horse breeders a place to prepare their animals for races in Mediterranean arenas.[591]

Because municipal magistrates shouldered the costs of many public buildings and also of shows and games, it is not surprising that spectacle buildings are more often found in or nearby chartered towns and *civitas* centres than elsewhere (Fig. 4.7). Despite the lack of archaeological evidence, it is assumed that the *municipium Augusta Vindelicum*/Augsburg, the main centre of the provence of Raetia, was also provided with at least one spectacle building.[592] It appears furthermore that it was more common for communities living in subordinate centres to invest in theatres, whilst the remains of amphitheatres are more frequently found on the territory of garrison settlements. The spectacle buildings in garrison settlements turn out to be variants of those built within a civilian context, when comparing their nature, their purpose, or their building material.

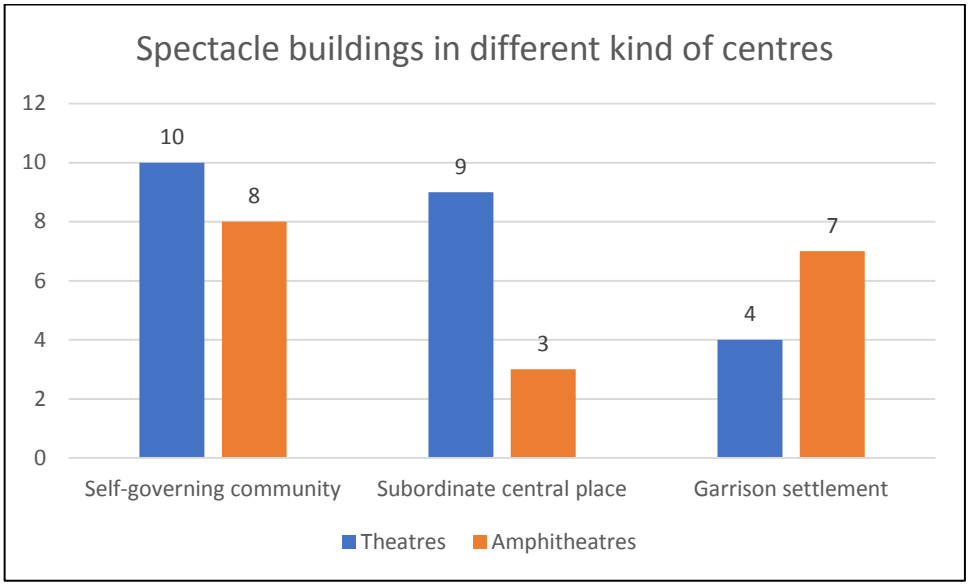


Fig. 4.7: Spectacle buildings in different centres

It was very common for a theatre first to be constructed in timber and only later rebuilt in stone. Nevertheless, some were never completely converted into stone, such as the ones in *Nida*/Frankfurt-Heddernheim or *Brenodurum*/Bern.[593] During the 1st century wooden amphitheatres appeared regularly in the northern provinces, often accompanied by the presence of a military unit. A perfect example is the amphitheatre at *Vindonissa*/ Windisch, of which the first wooden phase is dated to the reign of Tiberius. However, after its destruction in a fire around AD 40 a new stone-built amphitheatre was erected during the reign of Claudius.[594] It continued to be common for only the

[591] Groh 2005, 98-100.

[592] The river Lech eroded quarters of the Roman town. It is plausible that the centre's spectacle building(s) also got washed away. It might be that the Roman theatre or amphitheatre is still buried beneath the modern centre of Augsburg. According to S. Gairhos, the likelihood of the building being constructed in perishable materials is high, since the region was naturally poor in natural building stone. The only indications for the presence of a Roman spectacle building in Augsburg are arena scenes depicted in mosaics (Gairhos 2016, 123-124.).

[593] Frankfurt: Baatz and Herrmann 1982, 275.; Bern: Martin-Kilcher and Kaufmann 2009, 17.

[594] Matter 2011, 8-12; Matter and Auf der Maur 2011, 30-38;42. However, it is uncertain whether a relationship can be seen between the changes in the legionary unit and the rebuilding of the amphitheatre. In any event, it is clear that a new stone-built amphitheatre was constructed after the wooden version had been destroyed.

outside and the foundation structures to be erected in stone, but the interior and seating were made out of wood. This was the case with the theatre of *Alesia*/Alise-St.-Reine and possibly *Iciniacum*/Theilenhofen.[595]

From the charts in figures 4.8 and 4.9 a clear division becomes apparent between the building material used for spectacle buildings in garrison settlements on the one hand and civilian centres on the other hand. The vast majority of theatres and amphitheatres built in civilian centres were stone-built monuments. These were costly investments - both in terms of money and labour. The spectacle buildings attested in garrison settlements meanwhile were most often made out of perishable materials or of a combination of stone and less durable material. The only exceptions were the spectacle buildings of legionary bases, such as the monumental theatre from *Mogontiacum*/Mainz and the stone-built amphitheatre in *Vindonissa*/Windisch.[596] More limited financial resources may be a partial explanation for this difference, in addition to the different purposes these buildings served within the garrison settlements.

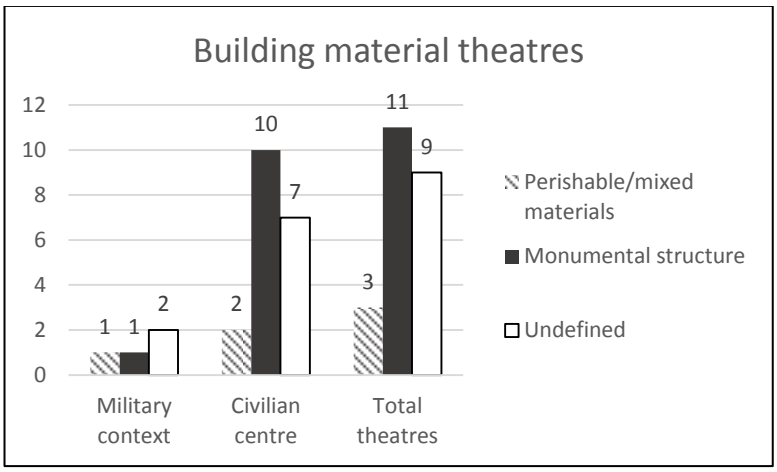


Fig. 4.8: Building materials used for Roman theatres

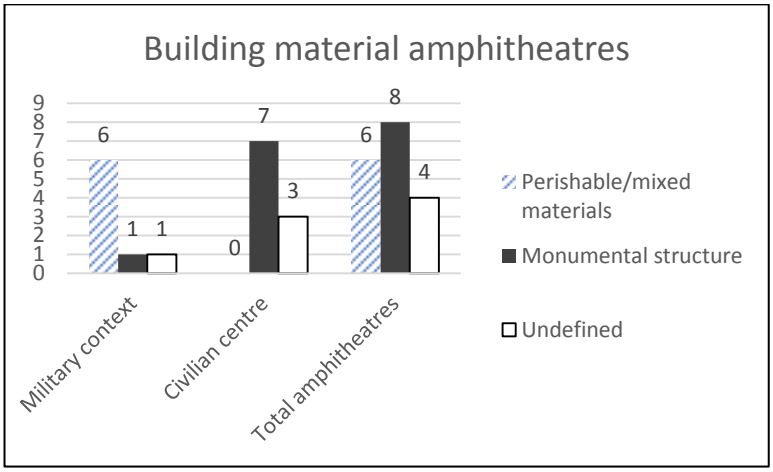


Fig. 4.9: Building materials used for Roman amphitheatres

[595] Alise St.-Reine: Bedon 2001, 64-65.; Theilenhofen: Mischka, Obmann and Henrich 2010, 10-13.
[596] Mainz: Carroll 2001, 53. Windisch: Drack and Fellmann 1988, 537 and website: Amphi-Theatrum.

M. Junkelmann has suggested that amphitheatres in a military context should be considered as *Mehrzweckgebaude*, buildings with multiple purposes, serving as training grounds, gathering places and the locations of spectacles and games, such as gladiatorial fights. One could expect there to have been one at each legionary and auxiliary fort.[597] This assumption however can hardly be endorsed, based on the weak evidence from the few remaining structures of amphitheatres attested along the frontiers. C.S. Sommer explained that these amphitheatres were generally even too small to serve as training grounds.[598] Moreover, often immediately around the fort, or between the fort and the civilian settlement, more suitable land was kept free for this purpose.[599] Executions, which were also performed in amphitheatres, have also been suggested as a possible explaination for the erection of these arenas found close to military forts. It is likely that the *legati legionis* had the right to exercise this punishment, apart from the provincial governor. Nevertheless, it is unlikely that commanders of auxiliary units had the same authority. It is also doubtful whether a few executions made it worthwhile to construct an arena.[600] It is indeed believed that the amphitheatres in garrison settlements were nevertheless temporary constructions, erected for special occasions, such as commemorative festivities or the visit of an emperor.[601] The fact that these amphitheatres were erected in wood, or in a combination of stone and earth, rather than durable stone, counts in favour of a limited period of existence.[602] K. Schmotz, in the particular case of *Quintana*/Künzing, thinks it likely that the wooden amphitheatre here could be related to Hadrian's visit to the northern frontier.[603] Archaeological research has indicated that from the mid-2nd century onwards the arena was no longer in use and had possibly turned into a rubbish dump. It is not unlikely that the area became overbuilt again as well.[604] Only inscriptions could provide the true facts and reasons for the creation of these amphitheatres, but the question is whether such evidence will ever be found.[605]

4.3.2 The chronology and size of spectacle buildings

Questions arise about the point in time when these spectacle buildings were built and when they became part of the architectural core of Roman centres in the northern Alpine region. The earliest examples date to the early first century and the Flavian period (Fig. 4.10). These monuments belong to centres which were located within the southern area of the province of Germania Superior and which, due to the relatively early conquest, underwent changes in their urban character before other parts of the study region, examples include the *colonia Augusta Raurica*/Augst and the centres of *Alesia*/St.Alise-Reine, *Brenodorum*/Bern, *Epamanduodurum*/Mandeure and Lenzburg.[606] In the

[597] Junkelmann 2000, 21.
[598] For an overview of the sizes of amphitheatres in garrison settlement found along the Roman frontiers see Sommer 2009, 48.
[599] Ibid., 55-58. S. Bödecker interpreted circular structures showing up in the airborne laser scan images of military sites along the Lower Rhine as practise grounds for soldiers (Bödecker 2013, 10-13.).
[600] Sommer 2009, 60.
[601] Ibid., 47 (Arnsburg).
[602] However, the use of perishable building materials, such as wood and earth was rather typical for this northwestern Alpine region and should therefore not been dismissed out of hand as temporal complexes. The amphitheatre of the Colonia *Ulpia Trajana* by Xanten was also largely constructed out of earth and timber. The main part of the *cavea* of the amphitheatre of *Carnuntum* (Pannonia) is supposed to have been of wood, see: Hönle and Henze 1981, 154; 156-157. Even in Rome theatres were constructed in wood, but due to the nature of the material they did not survive into the modern town: Lomas 2003, 34.
[603] Schmotz 2006, 114.
[604] Ibid., 112-116; Schmotz 2007, 145-149.
[605] Sommer 2009, 60.
[606] Sear 2006, 215-218; 221; Martin-Kilcher and Kaufmann 2009.

course of the late first century, and mainly during the 2nd century, a building explosion took place, with spectacle buildings constructed in, for example, the *coloniae Aventicum*/Avenches and *Iulia* Equestris/Nyon and the *civitas* centres *Lopodunum*/Landeburg and *Nida*/Frankfurt-Heddernheim.[607] Most apparent, however,, were the investments made in southern Noricum during the reign of Hadrian. In the *municipium Virunum*/Zollfeld a theatre and amphitheatre were built. A large amphitheatre also appeared in the *municipium Flavia Solva*/Wagna and in the Roman subordinate centre of Gleisdorf. As mentioned earlier, S. Groh has suggested a connection with an increased demand for trained animals from the 2nd century onwards. [608]

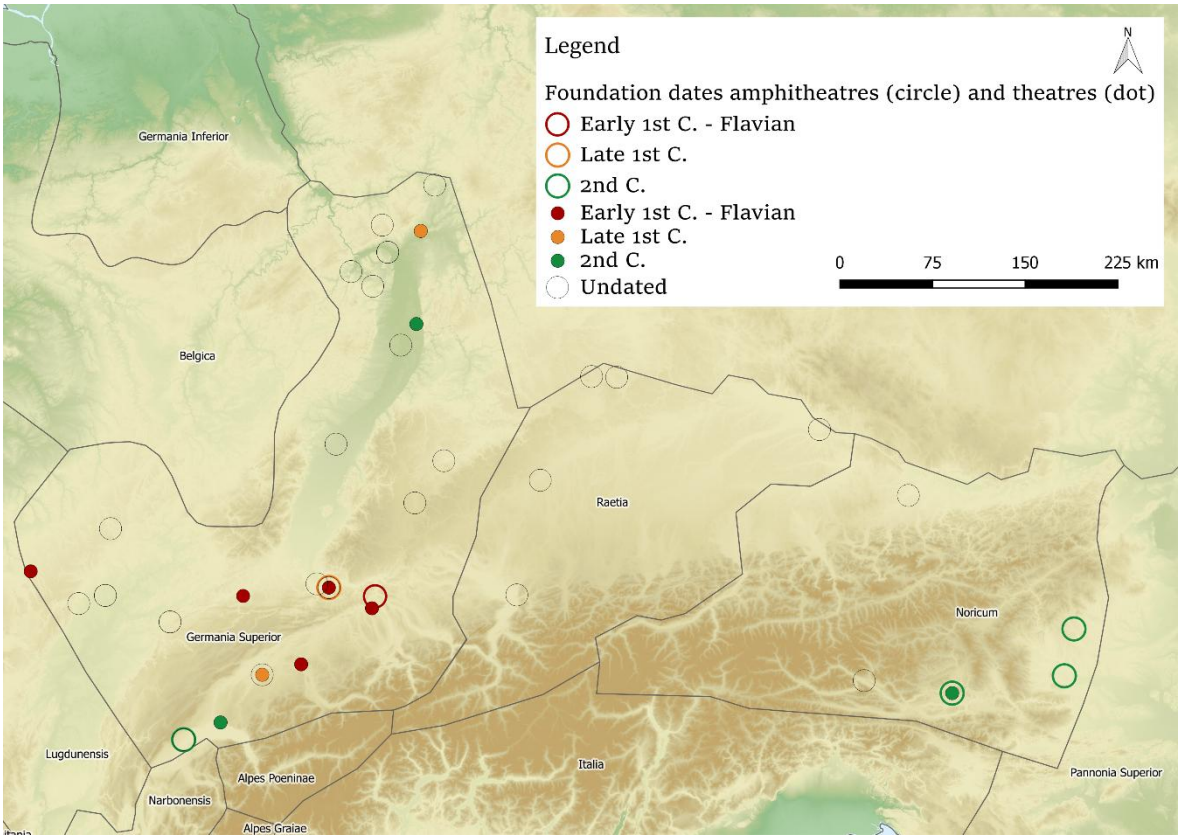


Fig. 4.10: Chronological overview of spectacle buildings

The amphitheatres in Noricum are also amongst the largest of all the arenas attested in the northern Alpine region, with the exception of those at the legionary bases of Mirebeau and *Vindonissa*/Windisch (Fig. 4.11).[609] There does seem to appear a vague indication of standardisation, since the sizes of the arenas in Augst and Avenches had very similar dimensions.[610] The arenas of the amphitheatre structures found in garrison settlements, although considerably smaller than those built within civilian centres, also had comparable dimensions.[611] Apart from the dichotomy between

[607] Avenches: Castella *et al.* 2015, 41.;Nyon:Flutsch, Niffeler and Rossi 2002, 389.; Landeburg and Frankfurt-Heddernheim: Sear 2006, 218-219.
[608] Groh 2005, 98-99.
[609] Norican amphitheatres: Flavia Solva: 83,5m x 36,7m; Gleisdorf: 45m x 65m; Virunum: 93m x 30m (all: ibid., 92.); Mirebeau: 100m x 70m (Goguey 2008, 236.); Vindonissa: 73m x 58m (Frei-Stolba *et al.* 2011, 9.).
[610] Augst: 1) 49, 33m x 36m 2) 50,6m x 33,38m (Hufschmid 2009, 111; 114.); Avenches: 51,7m x 38,72m (Castella *et al.* 2015, 41.). M. Carroll also commented on the standardisation of the dimensions of Roman amphitheatres (Carroll 2001, 53.).
[611] Arnsburg: 31m diameter; Dambach: 32m diameter and Zugmantel: 26m diameter (Sommer 2009, 48.).

the size of the amphitheatres built in military and in civilian contexts, there seems to be no further relationship between the type or the size of the centre and the dimensions of the monument. This in contrast to theatres which tended to be bigger in larger centres (Fig. 4.12). The diameter of the *cavea* shows a slight increase along with the size of the built-up area of the centres. The smaller theatres in subordinate centres seem to be all related to temples, for example, at the sites of Basel and of Lenzburg.[612] However the largest theatre in the region belonged to the subordinate centre *Epamanduodurum*/Mandeure and was also part of the centre's sacral area.[613] As the phenomenon of a strong connectedness between theatres and temples appeared to be mainly limited to (southern) Germania Superior, it can possibly be considered as a typical Gallic tradition, as it has also been described by E. Bouley.[614] However, the large Roman theatre in Mainz could equally be considered a cult theatre, providing space for a large audience far beyond *Mogontiacum's* own inhabitants. It is assumed that the theatre was used during the annual commemoration of Drusus and the associative festivities.[615]

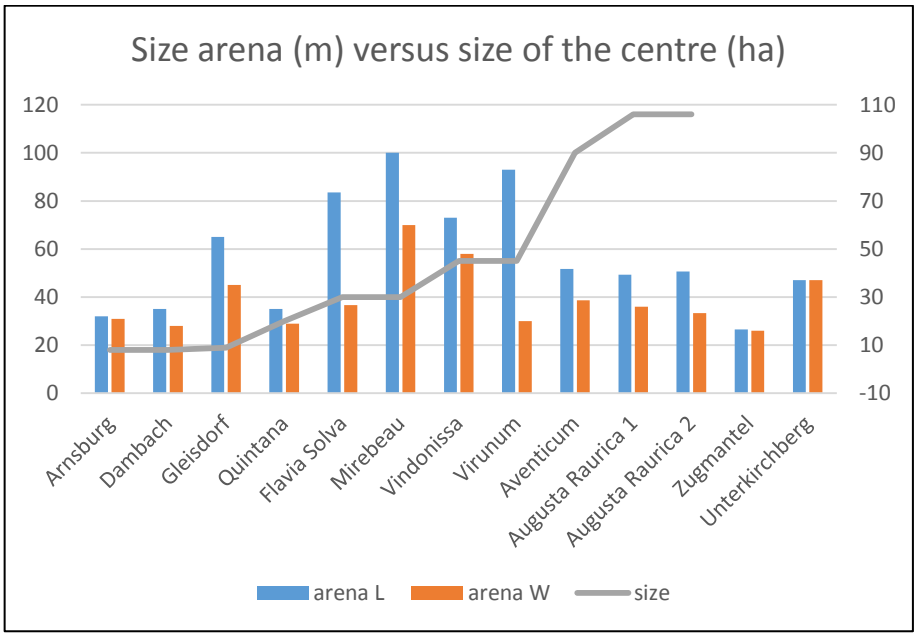


Fig. 4.11: Size of Roman amphitheatres

[612] Basel: diameter *cavea* 32m; Lenzburg: diameter *cavea* 74m (Sear 2006, 218-219.).
[613] The *cavea* of the theatre in Mandeure measured 142 (ibid., 217.). Roman Mandeure flourished because of its sanctuary.
[614] Bouley 1983, 552-557; 561-568; Laurence, Esmonde-Cleary and Sears 2011, 244. In the study by R. Laurence *et al.* the specific connection between theatres and sacred spaces also emerged as a Gallic element of the spectacle building. Archaeological research in other regions, such as North Africa, did not confirm the often assumed association between theatres and temples.
[615] Diameter *cavea*: 116, 25m. Cüppers 1990, 463; Carroll 2001, 53; Sear 2006, 218.

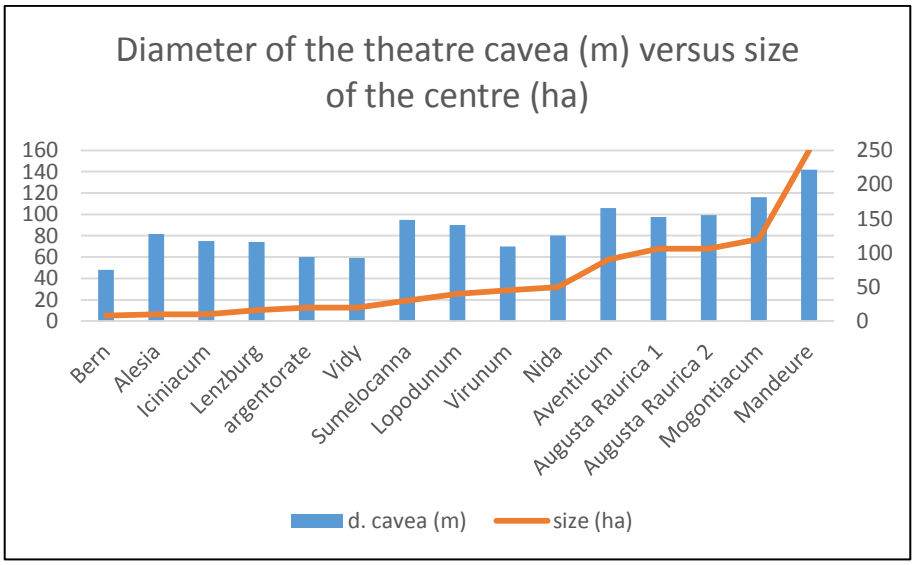


Fig. 4.12: Size of Roman theatres

4.4 Aqueducts and baths

Where people live, there must be water. In the Roman period water was commonly drawn from local streams, springs and wells, even in the biggest urban centres, such as Rome.[616] A.T. Hodge stressed the importance of private wells and cisterns, since these rather simple infrastructures often formed the biggest sources for water in most centres and settlements. Some centres, such as Roman London for example, never felt the need to increase the amount of water and ran their whole existence purely on – even is some cases small - water wells. Similarly, in the case of the town of *Andemantunnum*/Langres it seems most likely that the whole centre was provided with water from wells and cisterns, including all public buildinigs, such as the baths. So far, there is no indication of a public water management system.[617] In the *municipium Celeia*/Celje, only a few elite houses were connected to the general water canals that ran through the centre. The majority of the households drew water from private wells.[618] In other words, local springs and water basins were the primary sources of water supply in a Roman centre. Aqueducts, as A.T. Hodge says, were a luxury.[619]

It is often stated that aqueducts were one of the most ingenious constructions of Roman architectural engineering.[620] That the aqueduct which supplied the Roman centre of *Vindonissa*/Windisch remained responsible for the town's water supply until 1897 and still feeds one of the fountains, amply illustrates the durability of this Roman engineering work.[621] The most well-known aqueducts, such as the Pond du Gard in France, or the aqueducts of Segovia, Merida and Tarragona in Spain or Carthage in North Africa, are nevertheless rather exceptional.[622] Apart from

[616] Frontinus, The Aqueducts of Rome 1.4.
[617] Bedon 2001, 183-184.
[618] Reuckl 2012, 423.
[619] Hodge 1991, 48-66., 48-66.
[620] Ibid., 48; Garbrecht 1986, 23-28.
[621] Website: Kanton Aargau - Wasserleitung – Aquaeductus.
[622] Gockel 1986, 146-215.

these elevated aqueducts, the Romans more often used surface channels 0.50-1.0m below the surface. These were generally made out of brick, as for example in Mirebeau.[623] Within the northern Alpine region, the best example of such a subterranean aqueduct is the water channel in Nyon, excavated in 2003.[624] Furthermore, water was often fed via open channels, such as in *Augusta Vindelicum*/Augsburg, Cetium/St.Pölten, Iuvavum/Salzburg or Lauricaum,[625] or via pipes made out of ceramic, stone or wood. The most important aspect of these aqueducts is that water could be transported over long distances, coming from a river or fresh water spring kilometres away from the urban centre.

As far as is known, the aqueduct in Roman Augsburg had the most distant source in the region. The aqueduct was built in the 1st century AD and brought water into the centre of *Augusta Vindelicum* from over 35 km away.[626] The water in the centre of *Argentorate*/Strasbourg was brought in from nearly 20 km away.[627] The six aqueducts that ran through the centre of the *colonia Aventicum*/Avenches obtained water from a source located at a maximum distance of 17 km away.[628] The aqueducts in the *coloniae Iulia Equestris*/Nyon and *Vesontio*/Besançon were fed by springs located about 10 km away from the towns.[629] Likewise, the water that fed the water system in the legionary base of *Mogontiacum*/Mainz was transported over a distance of 9 km.[630] The water source that provided the *colonia Augusta Raurica*l/Augst and the centre of *Sumelocanna*/Rottenburg with water was not further away than 7 km.[631] If water was supplied from outside the Roman centre, the source was generally located within a radius of less than 10 km (Fig. 4.13). Once the water had entered the city, it was collected in big reservoirs or immediately channeled off to different locations.[632] In the case of *colonia Augusta Raurica*/Augst, the incoming water was stored in a water tower, and distributed via wooden pipes to public fountains, baths and latrines, as well as to some of the richer houses.[633]

Among the prestigious architectural monuments and buildings that used water were bathhouses. Such facilities often led to an increased demand for water. The bathing culture became an important part of the Roman society, especially during the late first and second century.[634]
Bath complexes were one of the biggest and most expensive buildings, both in terms of their construction, their renovations and constant maintenance ever after.[635] The bath complex in the *municipium Aguntum*/Lienz was rebuilt at least three times and an annex was added to the 1st

[623] Goguey 2008, 247-248.
[624] Website: Roman museum Nyon.
[625] Augsburg: Website: Roman Aqueducts romaq.org, last seen on 13.8.2015; St.Pölten, Salzburg and Enns: Reuckl 2012, 423-424.
[626] Website: Roman Aqueducts.
[627] Website: Roman Aqueducts.
[628] Carroll 2001, 50; Ferdière 2004, 360. and Website: Roman Aqueducts.
[629] Nyon: Drack and Fellmann 1988, 452. and website: Roman museum Nyon; Besançon: Bedon 2001, 105.
[630] Baatz and Herrmann 1982, 427-428; Cüppers 1990, 459; Carroll 2001, 50.
[631] Augst: website: Augusta Raurica (besuchen – Sehenswuerdigkeiten – Wasserleitung); Rottenburg: Rabold 2000, 101.
[632] Garbrecht 1986, 26; Hodge 1991, 93-106.
[633] Drack and Fellmann 1988, 323-336. Website: Augusta Raurica (besuchen – Sehenswuerdigkeiten – Wasserleitung).
[634] Nielsen 1999, 38; Wilkes 1999, 17-18; Laurence, Esmonde-Cleary and Sears 2011, 365.
[635] 2011, 375-376.

century bathhouse in the garrison settlement of *Briciniana*/Weissenburg.[636] Where possible, the consumption of energy was well thought through, as illustrated by the reuse of the water from the baths in the latrines in the garrison settlement in Schirenhof.[637]

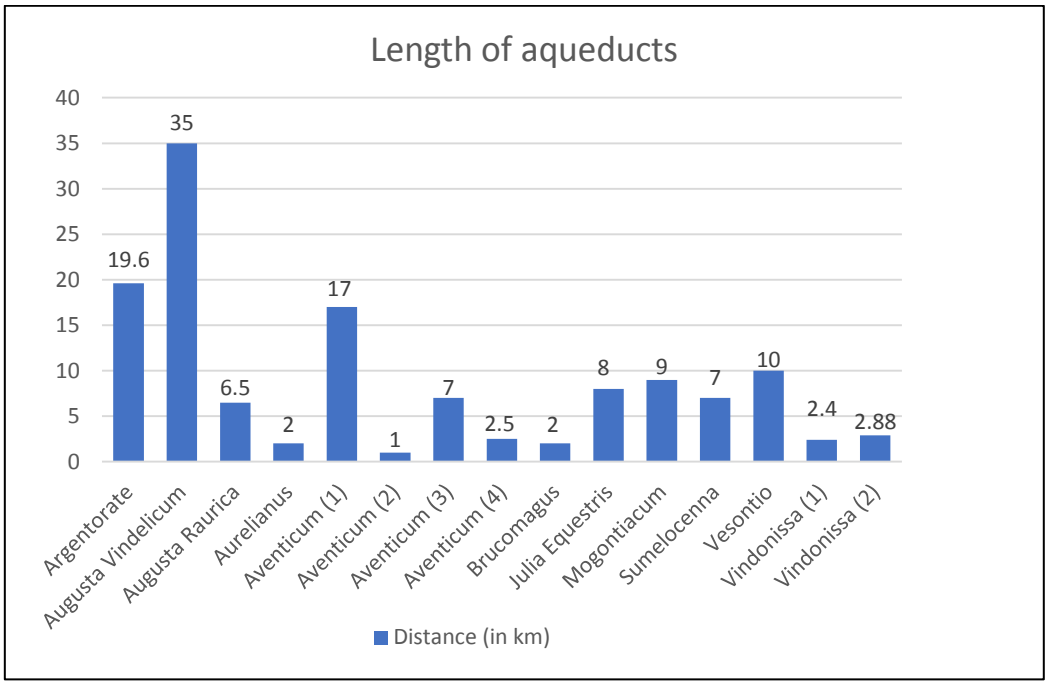


Fig. 4.13: Distance over which water was transported to Roman centres

G. Fagan, J. DeLaine and many others have stressed how different the Roman culture of public baths and bathing was from the modern spa fashion.[638] Bathing was considered an essential part of a healthy life and guaranteed good health.[639] However, perhaps even more importantly, it also supported the social constellation. Visiting the baths defined a person as civilised and urban, distanced from the barbarians who used rivers.[640] Bathhouses were from this perspective 'social theatres'.[641] It is also clear that the construction of support for these bath complexes needs to be interpreted within the context of the culture of euergetism, because the cost of construction, maintenance, and fuel was a major investment.[642]

It should therefore come as no surprise that there was a huge variation in Roman bathhouses. Not all bathhouses were large, or richly decorated with mosaics and marbles. The overall lay-out of the bathhouses in the western provinces of the Empire relied on the building tradition well known from the Italian peninsula, and more specifically from Campania.[643] Much research has been done on the typology of Roman bathhouses (rectangular, double rectangular or circular shaped), but the location, the climate, the architect's individuality and the available financial resources all contributed to an

[636] Lienz: Zabehlicky 1999, 16; Walde 2002, 155; Tschurtschenthaler and Auer 2015, 341.; Weissenburg: Czysz 1995, 534.
[637] Filtzinger, Plack and Cremer 1976.
[638] Fagan 2002; DeLaine 1999.
[639] Isrealowisch 2015, 117-124.
[640] Laurence, Esmonde-Cleary and Sears 2011, 215.
[641] Zajac 1999, 97-105.
[642] Ibid., 97-105; Laurence, Esmonde-Cleary and Sears 2011, 212.
[643] Nielsen 1999, 42-43.

endless variation.[644] The three main rooms, *frigidarium* (cold water bath), *tepidarium* (tepid water bath) and a *caldarium* (warm water bath), were sometimes supplemented with sport halls and swimming pools.[645]

In the Roman west, bathhouses were very well spread and constructed in many different kinds of centres.[646] A Roman town had to have a bath or it could not be considered an urban centre.[647] Some towns had multiple public baths, such as *Andemantunnum*/Langres, *Augusta Raurica*/Augst, *Aventicum*/Avenches or *Celeia*/Celje.[648] Bathhouses were equally part of the facilities in subordinate centres. Religious centres, such as the previously described sites of Villards d'Heria, *Epamanduodurum*/Mandeure or *Juliomagus*/Schleitheim, were all provided with a bath complex.[649] Accommodating the expectations and needs of travelers, road stations, such as Biesheim, *Immurium*/Moosham, Petinesca/Studen or *Pons Aeni*/Pfaffenhofen also had a bathhouse.[650] Remains of bathhouses have been found at the majority of garrison settlements. There is, however, some uncertainty as to whether these facilities were open for non-military users.[651] These complexes were most often situated a few hundred metres away from the fort, but in a few exceptional cases they were constructed within the fort, for example in *Favianis*/Mautern and Niederbieber.[652] In his publication on the bathhouse in Zülpich (Germany), M. Dodt concluded that civilian baths in smaller settlements could look like military baths and occasionally were built with the help of the army, or at least with the know-how from soldiers and former soldiers.[653] At the site of *Brucomagus*/Brumath, similarities between the bath complex here and that of the garrison settlement in Niederbieber may be due to the support of the army.[654] Bathing infrastructure was present even in elite houses, in urban centres such as *Cambodunum*/Kempten or Hallstatt, or on *villa*-estates.[655]

In some centres the bath complex took up the surface of an entire insula, as for example in the *coloniae Augusta* Raurica/Augst and *Aventicum*/Avenches.[656] The size of public baths in most Roman towns did not exceed 5,000 m^2, with the exception of the bathhouses in Roman spa centres, as described in chapter 3. Those in *Cambodunum*/Kempten, for example, measured 4,200 m^2 and the two complexes in *Nida*/Frankfurt-Heddernheim 2,304 m^2 and 3,060 m^2.[657] However, the majority of bathhouses however were not bigger than 1,500 m^2.[658] The baths attested in garrison settlements or

[644] Brödner 1983, 39.
[645] Fagan 2002, 10-11.
[646] Ibid., 1; Laurence, Esmonde-Cleary and Sears 2011, 203.
[647] 2011, 377.
[648] Langres: Bedon 2001, 183.; Augst: Drack 1958, 7-8.; Avenches: Castella *et al.* 2015, 77-81.; Celje: Lazar 2002, 75; Bausovac 2014, 20.
[649] Isrealowisch 2015, 117.Villards d'Heria: Rorison 2001, 194.; Mandeure: ibid., 187.; Schleitheim: Petit and Mangin 1994, 130; Paunier 1994, 84-85.
[650] Biesheim: Reddé 2011, 178-180.; Moosham: Fleischer and Mouchka-Weitzel 1998, 22-27.; Studen: Drack and Fellmann 1988, 519.; Pfaffenhofen: Steidl 2010, 85-86.
[651] Fagan 2002, 6.
[652] Sommer 1999a, 86; Sommer 2006, 97-103. Mautern: Flynt 2005, 96; Steigberger 2012, 89-95.; Niederbieber: Cliff 2009, 10.
[653] Dodt 2003, 97-101.
[654] Petry and Kern 1974, 31.
[655] Kempten: Weber 2000, 69.; Hallstatt: Fischer 2002. and Pliny, The Letters 2.17.
[656] Carroll 2001, 49-50.
[657] Kempten: Weber 2000, 69.; Frankfurt-Heddernheim: Baatz and Herrmann 1982, 275.
[658] Laurence, Esmonde-Cleary and Sears 2011, 216.

in road stations did not exceed a few hundred square metres.[659] Regardless of the grandeur of the bathhouses, their association with the societal value of '*humanitas'* was ubiquitous.[660]

4.5 Wall circuits

City walls are the last monumental feature strongly connected to the image of Roman towns that will be discussed in this chapter. P. Goodman described city walls as '*a characteristic feature of Roman urbanism that served to mark the limits of that which was strictly urban'.*[661] In contrast to the many other elements of the Roman idea of an urban centre, such as *fora* and spectacle buildings, many centres in the western provinces had no circuit wall during the High Empire. Nevertheless, other kinds of visual markers were used to demarcate the border of the urban centre, not in the least, monuments, natural features, or the organisation of the street- and road network.[662]

Remains of wall circuits have been found at 19 possibly 24 sites (Fig. 4.14). Only three city walls were constructed during the 1st century, namely those encircling the centres of *Alesia*/Alise-St.Reine and the *coloniae Augusta Raurica*/Augst and *Aventicum*/Avenches, all located in the southern area of *Germania Superior.* In this respect too, this particular region corresponds strongly with the building tradition of city walls around Gallo-Roman centres.[663] From the late 2nd century onwards a new series of defensive walls appeared.[664] The wall circuit surrounding the *municipium Augusta Vindelicum*/Augsburg, for example, is thought to have been built not long after the Marcomannic wars.[665] A strong increase in the number of walled centres can also be observed along the northern frontier in Germania Superior. This development mainly affected places appointed as the centres of *civitates,* including *Alisinensium*/Bad Wimpfen, *Nida*/Frankfurt-Heddernheim, *Med.*/Dieburg, *Lopodunum*/Ladenburg.[666] According to S. Gairhos, these defensive structures were a response to invasions of Germanic tribes that caused unrest and threatened the region. He considers these investments as part of a bigger strategic plan to fortify the hinterland as a reaction to a weakened frontier.[667] The fortification of urban centres continued into the 3rd century, with walls being built around centres such as *Phoebiana*/Faimingen and *Sumelocenna*/Rottenburg.[668] The construction of defensive walls was no longer limited to the frontier region, but became a striking element of Late Antique urbanism, that stretched deep into the northern Alpine region, but even more convincingly into the three Gallic provinces as well as into the Balkan region.[669] The circuit wall erected in *Celeia*/Celje in the 3rd century, however, was probably not constructed in response to an increased

[659] The bathhouse of the road station in Moosham measured 120 m^2 (Fleischer and Mouchka-Weitzel 1998, 22-27 (12 m x 10 m). The size of the military baths found in Buch was 800 m^2 (Filtzinger, Plack and Cremer 1976, 5004-514 (40 m x 20 m).), in Hüffingen 570 m^2 (ibid., 303; Peuser 2012, 22 ff (19 m x 30 m).) and in Zurich 600 m^2 (Drack and Fellmann 1988, 571 (20 m x 30 m).).
[660] Laurence, Esmonde-Cleary and Sears 2011, 216.
[661] Goodman 2007, 62.
[662] Ibid., 63-65.
[663] Esmonde Cleary 2003a, 74.
[664] Goodman 2007, 203; Hanson 2016, 59.
[665] Czysz 1995, 423; Bakker 2000, 92.
[666] Esmonde Cleary 2003a, 77.
[667] Gairhos 2008, 153.
[668] Esmonde Cleary 2003a, 77; Gairhos 2008 , 153.
[669] Goodman 2007, 203; Poulter 1992, 104.

level of unrest or violence, but in response to flooding problems caused by the river Savinja around that time.[670]

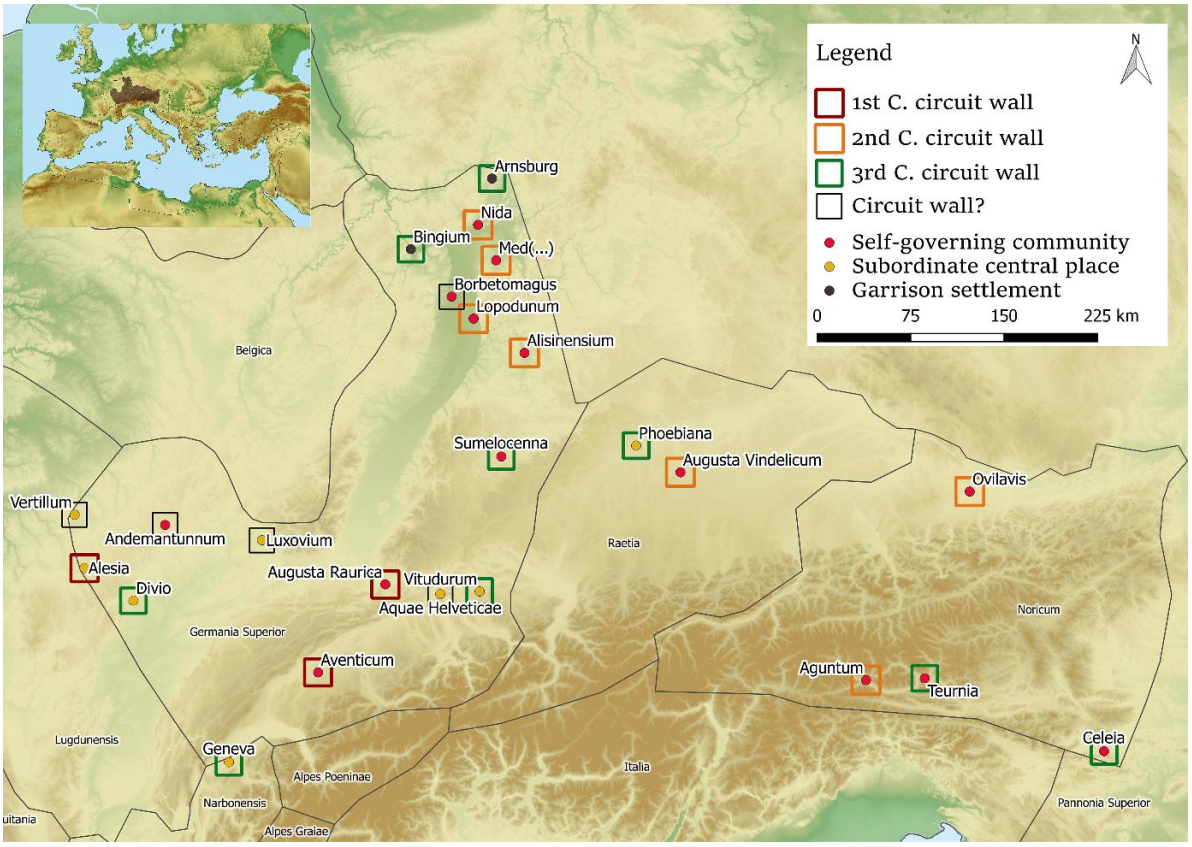


Fig. 4.14: Chronological overview of the construction of circuit walls

From the data it appears that the majority of circuit walls were built by self-governing communities, although only about half of the total number of self-governing communities in the northern Alpine region were fortified (Fig. 4.15). The aspect of protection only gained priority in the later centuries, whereas initially these walls were expressions of prosperity and prestige. The 1st century circuit wall in *Aventicum,* for example, was very thin and tall, and its watchtowers were, very exceptionally, not orientated outwards but towards the city centre and had therefore little defensive power. Likewise, the *colonia Augusta Raurica* was never entirely enclosed by its wall, despite the fact that the earliest investments date back to the 1st century. Monumental entries to the city centre were clearly of higher priority.[671] The inhabitants of subordinate centres also invested in circuit walls, although to a lesser extent. This urban feature meanwhile remained almost entirely absent in garrison settlements. The trapezoidal-shaped ditches enclosing the Roman garrison settlement in Arnsburg, discovered by geophysical survey, are therefore very uncharacteristic.[672]

These late 2nd and 3rd century walls often redefined the urban centres; they regularly surrounded only a small portion of the previously built-up area or they blocked off streets.[673] The majority of the late wall circuits did not enclose an area bigger than 40 ha, with the exception of the centres of

[670] Lazar 2002, 90.
[671] Esmonde Cleary 2003a, 74.
[672] von Kaenel, Wenzel and Zickgraf 2010, 15-16.
[673] Goodman 2007, 203-204; Hanson 2016, 59.

Augusta Vindelicum/Augst and *Nida*/Frankfurt-Heddernheim (Fig. 4.16). In contrast to the 1st century walls in Augst and Avenches, which enclosed large plots of open land, Late Antique walls cut across existing town quarters in the centres of *Celeia*/Celje, *Divio*/Dijon, *Lopodunum*/Ladenburg and *Teurnia*/St. Peter in Holz. All these centres shrank at least 10 ha.[674] Various reasons could lie behind the diminishing size of the Roman centres. A smaller walled centre created a more effective defensive structure, which was an important motivation for their construction. Furthermore, the erection of a circuit wall was a major financial investment. The Roman walls built, for example, in Bad-Wimpfen, Ladenburg and Rottenburg, had a length of 1,9 km, 1.2 km and 2,05 km respectively. S. Gairhos has estimated that at least 175 000 tons of stone were necessary for their construction. This was an expense which stretched thin the financial resources of many Roman centres in the late 2nd and early 3rd century.[675] Because of the high cost, it is not surprising that some walls were never finished, for example in *Aguntum*, or that creative solutions were found with the available resources. In *Lopodunum*/Ladenburg, for example, the wall consisted of stone-built sections that were connected with segments of ditch and bank.

Despite the fact that circuit walls were a prestigious monumental expression of urbanity within the Roman concept of town life, the majority of walls were only built during the late 2nd and early 3rd centuries. Their appearance has therefore been connected to the increased unrest and stress on the Empire's borders around that time. S. Gairhos even speaks of a well-considered fortification plan involving the most important centres on main information routes in the hinterland of the collapsing frontier. Most of the walls built around centres in the northern Alpine region were in the first place defensive structures rather than an expressions of urban culture.

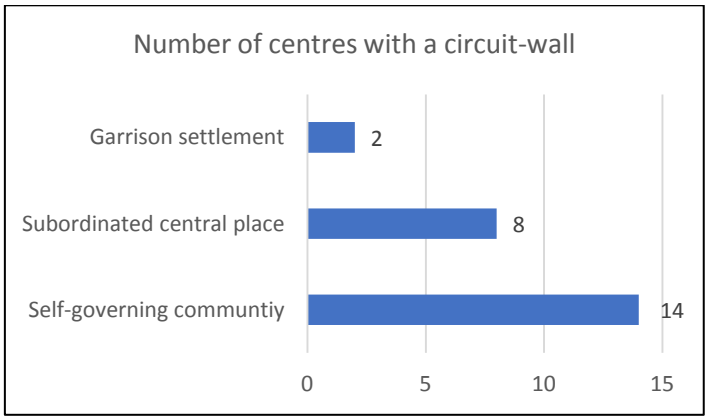


Fig. 4.15: Circuit walls in different kinds of centres

[674] The walled area in *Aventicum* was much bigger than the actual built-up area. Of the 230 ha area enclosed by the city wall, only 90 ha were inhabited. Geophysical and archaeological investigations have not brought to light any signs of occupation or inhabitation concerning this open land. It has been suggested that this 140 ha open space was possibly used for livestock (Jacobi 1996, 490; Esmonde Cleary 2003b, 74; Ferdière 2004, 360; Castella *et al.* 2015, 25-27. I am grateful to Matthias Flück who has always been very kind in answering my questions concerning *Aventicum's* wall and sharing information from his own PhD research in which he focuses on this Roman monument in particular.).

[675] Gairhos 2005, 197.

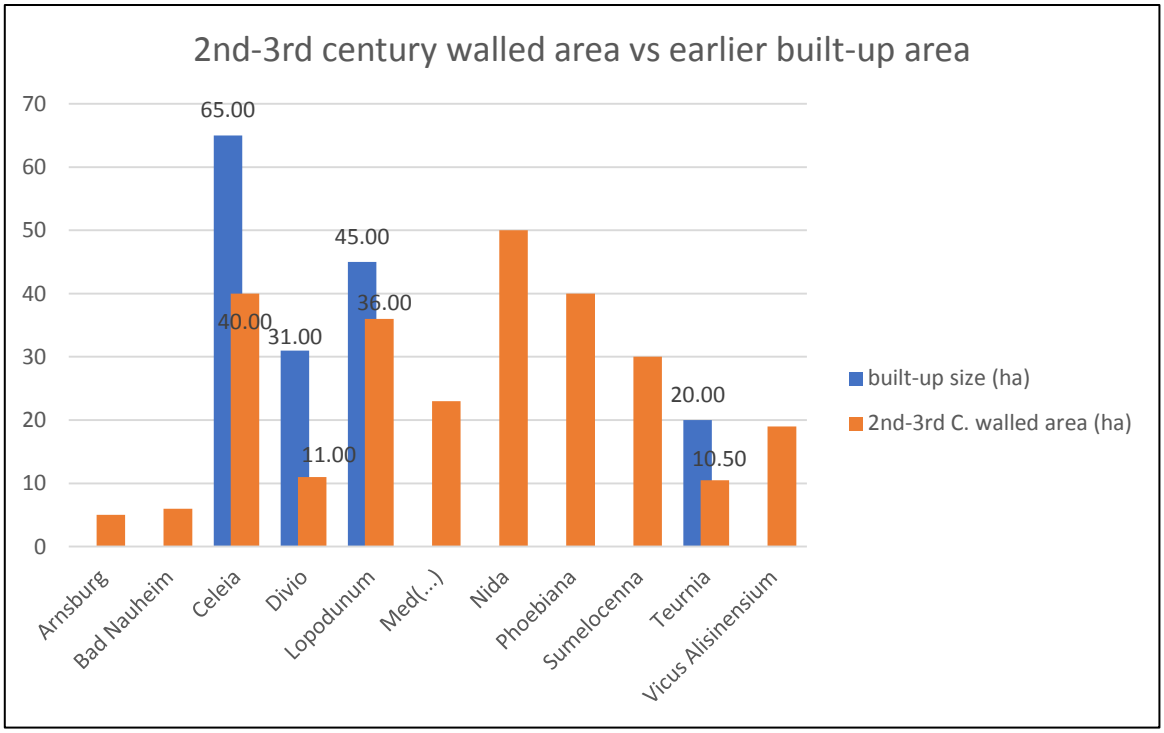


Fig. 4.16: Late 2nd and 3rd century walls reduced the urban core of many centres

4.6 Conclusion

In this chapter it became clear that many centres within the northern Alpine region did – to a greater or lesser extent – live up to the set of public buildings described by ancient writers and modern scholars as characteristic of Roman urban centres, including a *forum-basilica* complex, spectacle buildings, baths and a circuit wall.

The analysis has shown, however, that baths were so deeply established within Roman culture that the presence of a bathhouse should not be considered as a townlike feature. Only their richness and size separated the urban from the non-urban bath complexes, with a general threshold of 1,500 m^2. Defensive circuit walls also appeared to be a less strong urban feature than initially assumed, with the exception of the earliest 1st century examples, such as those in Augst and Avenches. The majority of circuit walls in the northern Alpine region were late 2nd and 3rd century additions to existing centres. Defensive motives rather than civic aspirations lay behind their construction. The consistent fortification of many *civitas* centres in the hinterland of the collapsing frontier has been interpreted as a conscious act of improving inland security. It is even possible that the army was involved in this endeavour. Only the *forum-basilica* complex and the spectacle buildings remain of the set of typical Roman urban public buildings. It appears that many centres of all kinds were furnished with a public square. However, most squares were not an official *forum*, built-up with commercial, administrative and political buildings representing the urban lifestyle. In most cases they were little more than a market square. Nevertheless, the number of official *forum-basilica* complexes in places that have not yet provided evidence of being self-governing is very striking. This phenomenon was very strong in Raetia and therefore seems of high importance to our understanding of the municipal organisation of this province. If the sites where remnants of a *forum* complex have been found belonged to unknown *civitates*, the urban network would have been much denser than can currently can be reconstructed

from epigraphic and literary sources. It also appeared that in the northern Alpine region spectacle buildings did not belong to the initial public infrastructure of the Roman centres, but were added to the monumental core during later building phases. The late 1st and 2nd centuries AD were the period during which the majority of theatres and amphitheatres were constructed. A vague correlation could be observed between theatres and civilian contexts on the one hand and amphitheatres and military environments on the other hand, with the exception of chartered towns.

From the archaeological record – as it is now known – the southern region of the province of Germania Superior seems to have been the most densely monumentalized area. This region - more than elsewhere - flourished slightly earlier in terms of the construction of *forum-basilica*-complexes, as well as circuits walls and spectacle buildings. In general, the region shows similarities in its development to Roman Gaul, for example in the strong connection of the urban centre with religious places, i.e. sacred areas or temples.

As a general rule, chartered towns had the most extensive building programmes. At the sites of *Augusta Raurica*/Augst, *Aventicum*/Avenches and *Iulia Equestris*/Nyon, *Vesontio*/Besançon in Germania Superior and the *municipium Virunum*/Zollfeld, archaeological evidence has been found for almost all monuments discussed in this chapter. Yet the state of preservation of the archaeological remains does not always allow a good reconstruction of the townscape, since many Roman towns have been overbuilt by modern towns, such as Augsburg, Salzburg and Wels, to name but a few. The centres of *civitates* tended to have a less monumental appearance. Most of them had a *forum* or *forum*-like square, baths and a circuit wall. At some centres indications have been found for a spectacle building, most often a theatre. Although the majority of the houses had access to water via private wells, some centres had a limited public water management system. A market square and a small bathhouse were ubiquitous features of subordinate centres, in contrast to the presence of a spectacle building which proved to be highly exceptional. Archaeological research over the last decade has revived the question concerning the urban character of Roman garrison settlements, with surprising results of urban-like infrastructure on the sites of Arnsburg and Theilenhofen, for example. Open spaces between the forts and the settlements have been interpreted as market squares, but lacked any infrastructure that characterises a Roman *forum*, such as shops or administrative buildings. The latter were, of course, present within the walls of the fort itself. At a few garrison settlements remains of a spectacle building were attested. Nevertheless, they can hardly be considered urban features, because of their temporary nature, built from perishable materials and used for only a short time. One can expect the presence of a bathhouse at every garrison settlement, but the public character of these buildings is questionable. The vast majority of the garrison settlements, however, seem to have lacked the monumental infrastructure distinctive for a Roman urban centre, with the exception of the legionary bases.

Overall, this analysis of public buildings has illustrated that in the northern Alpine region the Roman concept of a monumental built-up centre influenced the appearance of the Roman towns, especially the chartered towns. Centres that were positioned lower in the administrative hierarchy generally exhibited a lower monumental profile. In order to understand the relationships between the different centres of the settlement system, the research focus should move beyond the individual centres. Answers to questions such as how these different kinds of centres related to each other, or how men and goods moved between them, will be sought in the following chapter.

5. Beyond urban dynamics

So far, several elements often used to describe an urban centre have been used as a guide in the search for a better understanding of the Roman settlement system in the northern Alpine region. The focus has mainly been on identifying characteristics of urban centres or places with town-like and central place functions. This has included the Roman administrative description of a town, urban or central place services and architectural characteristics. Overall, previous chapters looked at urban developments within individual Roman centres. In what will follow the emphasis will shift from approaches in which Roman centres are considered as isolated hubs to an approach in which the relationship between different settlements and between urban and rural environments will be explored.

The aim of this chapter is to move beyond the urban dynamics of single centres, and focus on the entire settlement system. The first section deals with the Roman settlement system of the northern Alpine region as a whole. An essential element within the settlement system that has not yet been discussed concerns the rural settlements. Rrural habitation will play an important role in the second section of this chapter. The great critics of urban studies P. Horden and N. Purcell have noted that these rural forms of inhabitation are often excluded from research on urbanism, including ancient urbanism.[676] Of course, the relationship between an urban centre and its hinterland, or even broader landscape relations, is key to understanding the dynamic behind any particular form of urbanism. I have included three case studies in which the dynamics between urban centres and their hinterlands will be discussed in more detail, namely the regions of Regensburg (north-east Raetia), Mayen (north-west Germania Superior) and Salzburg-Wels (north-west Noricum). These choices have been governed by a number of factors. I have tried to find areas for which sufficient research on rural sites was available and which were at the same time broadly comparable. All three case studies involve an area located in the immediate hinterland of the frontier and the military zone. At the same time, I also looked for regions that were to a degree distinctive: different economic systems drove these areas and different kinds of centres characterised the three local settlement hierarchies.

5.1 From individual centres to settlement systems

Braudel's famous statement that 'a town is a town wherever it is' is in need of deconstruction. As will be clear from the earlier chapters, there exists no single definition of an urban centre. Moreover, any definition creates aporia of different kinds, from too static to unmanageable considering the available sources. The wide meaning of 'urban', is not only due to its complex nature or its changeable contents, but even more so because of the interconnectedness of towns with their environments.[677] Studies of urban history have often considered towns as the driving force of a society, or considered towns as isolated urban clusters. The research has thus been dominated by a division of urban and rural.[678]

[676] Horden and Purcell 2000, 96.
[677] Ibid., 90-91; 92 ff.
[678] Ibid., 90-91.

Nevertheless, since the late 1970s, voices pleaded for a reunion of the city with its natural and immediate environment.[679] Among others M. Finley underlined that the town and its hinterland formed one unit, in terms of administration, cult and economy.[680] That hinterland did not *per se* always correspond to any actual territory of the centre, but could also refer to the region that was affected by the centre's institutions and practices.[681] Older theories attempting to take into account the entire settlement network, such as Christaller's Central Place Theory or Zipf's rank- size rule, have been criticized for being too narrow in scope, too inflexible, or deviating from the archaeological reality.[682] A new era might have started with P. Horden and N. Purcell's *The corrupting sea: a study of Mediterranean history*, published in 2000, in which they plead for a 'microecological' model that considers towns only as loci or contact points of different systems.[683] However the feasibility of this model might stand under pressure and a reversal in the tradition of urban studies seems still far away. As becomes clear from J.W. Hanson's *An Urban Geography of the Roman World, 100 BC to AD 300* which was published in 2016,[684] or the case studies discussed later in this chapter, the information needed for such analyses is seldom accessible.

5.1.1 The Roman settlement system: geographical determination or historic influence?

In order to gain an overview of the patterns of the Roman settlement system in the northern Alpine region, single definitions of urban centres must be surpassed and the information derived from the different approaches used in previous chapters has to be amalgamated. When the three aspects of size, monumentality and administrative status are combined, different groups of centres belonging to different levels of the administrative order can be defined (i.e. settlement tiers). I distinguished five tiers of settlements relying on different features, as is shown in Table 5.1. In doing so, an attempt has been made to approach the various parameters equally, so that the attention is not diverted by one single definition, focusing solely on status or size for example. In total 306 sites were included in this analysis.

Table 5.1: Explanation of tiers
* uncertainty exists about either the size of the site (/) or the level of monumentality or public infrastructure (_) of the sites concerned

Tier	Size (ha)	Urban monuments and public infrastructure	Municipal status	Number of sites	Possible extra number of sites *	Total (n=306)	%
1	100+	Present	Colonia/Municipium Civitas Legionary base	2 2		6	1%
	95+		Subordinate centre Garrison settlement	1			
	80-99		Colonia/Municipium Civitas Legionary base	1			
	80-95		Subordinate centre Garrison settlement				

[679] Abrams 1979, 2-24; Hopkins 1979, 36; Horden and Purcell 2000, 99.
[680] Finley 1999, 123-126. Similar ideas can be read in the work of M. Millet (Millett 1995, 30.), P. Erdkamp (Erdkamp 2012, 245-246.) and J.W Hanson (Hanson 2016, 18-19.).
[681] Smith 2010, 138.: Urban settlements are places that serve as the setting for institutions and practices that affect a larger, regional hinterland.
[682] Horden and Purcell 2000, 102-104.
[683] Ibid., chapter 4; p100; 108ff.
[684] Hanson 2016.

2	60-79	Present	Colonia/Municipium Legionary base	4		13	4%
	40-59		Colonia/Municipium Legionary base	2			
	60-79		Subordinate centre Garrison settlement	1			
	40-59		Subordinate centre Garrison settlement	3 1			
	40-79		Civitas	2			
3	20-39	Present/assumed	Colonia/Municipium Legionary base	5 1		52	17%
			Civitas	8			
			Subordinate centre Garrison settlement	20 10	4(_) 3(_)		
	10-19		Colonia/Municipium Legionary base	1			
4	10-19	Relative high level	Civitas	1	1(/)	39	13%
			Subordinate centre Garrison settlement	6 5	2(/) 1(_)		
		Low level	Civitas				
			Subordinate centre Garrison settlement	13 6	1(/) 3(_)		
5	1-9	Relative high level	Civitas			156	51%
			Subordinate centre Garrison settlement	5 2	4(/)		
		Low level	Civitas	1			
			Subordinate centre Garrison settlement	23 46	26(/) 2(_) 46(/) 1(_)		
NOT_IDENTIFIED			Subordinate centre Garrison settlement	18 22		40	13%

The group of Roman centres assigned to tier 1 includes the largest places in the northern Alpine region, independently of their position within the municipal hierarchy. These largest places had sizes of 80 ha and more. In addition to their exceptional dimensions, these centres were characterised by an extensive number of public monuments and infrastructures of a high urban level. The colonia *Augusta Raurica*/Augst, for example, belongs to this group of Roman centres. The centre's size is estimated at around 106 ha and was built up with public monuments, such as a forum-basilica complex, spectacle buildings, bathhouses and religious buildings. The coloniae of *Aventicum*/Avenches and *Vesontio*/Besançon had similar centres. The best example to illustrate that not only centres which enjoyed a high municipal status grew that large or were characterised by a high level of urban infrastructure and monumentality and to emphasis the importance of combining the different definitions of an urban centre, is the subordinate centre of *Epamanduodurum*/Mandeure. It is believed that this place was more than 200 ha and functioned as the religious heart of the *civitas Sequanorum*, characterised by a theatre building, baths and several temple- and sanctuary sites within the centre. Also the legionary bases of *Lauriacum*/Enns and *Mogontiacum*/Mainz belonged to the biggest places in the northern Alpine region, since the size of both centres, including the forts and the civilian occupation surrounding them, exceeded 100 ha. Although, administrative buildings, such as a basilica, were absent here one finds urban-like buildings, such as market halls, spectacle buildings, *porticoes* and religious buildings.

Tier 2 comprises the centres which, according to the observations made in chapter 2 and chapter 3 concerning the size of self-governing centres and legionary bases and of subordinate centres and garrison settlements respectively, became relative large places regarding the average size of a Roman centre in the northern Alpine region. This implies a size of more than 40 ha or 60 ha for places with a high municipal status, such as *coloniae* and *municipia* on the one hand and for subordinate centres and garrison settlements on the other hand. Also, these Roman centres were generally characterised by a high level of urban monumentality. Examples of centres included in this category are the Norican *municipia* of *Celeia*/Celje and *Virunum*/Zollfeld. It is apparent that *Nida*/Frankfurt-Heddernheim and *Borbetumagus*/Worms appear to be some of the largest and monumental *civitas* centres. This observation may reinforce the suggestion made earlier that these places may have been possible chartered towns, based upon the attestation of municipal offices in epigraphical sources. The estimation of a size of around 50 ha for the garrison settlement of Echzell is exceptional. The archaeological remains of the settlements are, however, of a lower urban character, just as in the subordinate centre of Chassey-les-Montbozon. It is believed that the latter was also 50 ha. However, the public infrastructure and monuments in these larger centres of a lower position within the municipal hierarchy are rather limited to bathhouses and temples.

Tier 3 includes the centres which enjoyed a high municipal status (i.e. *colonia*, *municipium,* legionary base) but which remained of a relatively modest size (10-19 ha and 20-39 ha) compared to other centres that enjoyed this status. The *municipia* of *Aguntum*/Lienz, *Cetium*/St. Pölten *Flavia Solva*/Wagna, *Iuvavum*/Salzburg, *Teurnia*/St. Peter in Holz are good examples. Furthermore, tier 3 also includes relatively large centres that enjoyed fewer municipal freedoms, such as the *civitas* centres of *Lopodunum*/Ladenburg, Med./Dieburg, Neuenstadt am Kocher or Riegel. One can suggest that subordinate centres and garrison settlements which reached a similar size of 20 to 39 ha might have been more important within the settlement system than other centres of their kind which remained smaller or less developed. These centres, such as the potter's centre of Rheinzabern or the centre of Vidy equipped with among other public buildings a *forum* and a theatre, are therefore also assigned to tier 3.

The settlements categorised as tier 4 and tier 5 belong to the smaller ones within the size-spectrum of Roman centres. Nevertheless, a considerable distinction could still be made between the number of public monuments and infrastructure that could be attested at the sites. The small subordinate centre of Gleisdorf in Noricum for example was characterised by a large monumental amphitheatre. Equally, excavations on the site of Eisenberg (Germania Superior) revealed the remains of possible public administrative buildings. These two examples illustrate the major contrast with other small subordinate centres, such as the production site of Mayen, where no sign of any public investment in public monuments or infrastructure has been attested. Similarly, it was illustrated in chapter 4 that certain garrison settlements, such as *Iciniacum*/Theilenhofen and *Quintana*/Künzing had more public infrastructure than others, including an amphitheatre or possible multi-purpose halls. Regardless that fact that the appearance of these public infrastructures was less imposing than their urban equivalents, these garrison settlements accommodated functions their neighbouring centres did not.

Unfortunately, archaeological research has not provided sufficient insight into the character of all Roman centres that were included in this analysis. Forty Roman settlements could not be assigned to any of the tiers explained above. However, since so little is known about them, or since many left so few remains, one could reasonably assume that those places were small and little monumentalised

centres. The character of the majority of these 'unidentified centres' was probably similar to that of the centres assigned to tier 5.

From the analysis one can conclude that the Roman centres of tier 1 and tier 2 form the exception, at only 5 %. Those centres were mainly *colonia, municipia* and legionary bases. Interesting too is that there appear to have been slightly more settlements of the type of tier 3 (17%) than of tier 4 (13%). A relatively large number of Roman centres must have taken a middle-ground position within the wider settlement system, including *civitas* centres, subordinate centres and garrison settlements. 51% of the centres were categorised as tier 5 and were almost solely subordinate centres and garrison settlements. However, taking into account the 'unidentified places' and the large number of Roman sites that still need to be researched or discovered, tier 5 most likely represents not half but the majority of Roman centres.

The geographical distribution of the five settlement tiers (Fig. 5.1a) shows us that the centres of tier 1 mainly occurred along the frontier or in the southern area of Germania Superior. Centres belonging to tier 2 appear to correspond with centres which became of importance for the provincial administration, such as *Augusta Vindelicum*/Augst in Raetia, *Ovilavis*/Wels and *Celeia*/Celje in Noricum or with centres along important trading routes, especially in southern Germania Superior. It is worth stressing that the area that originally belonged to Gaul, but later on formed part of the province of Germania Superior is the area in the northern Alpine region with the most dense concentration of these very highly ranked centres. Well distributed over the entire region are the centres of tier 3. They seem to be located at certain intervals along important arteries, such as the road south of the Danube frontier or the *Rheintalstraße*, and bridge the distance between the larger centres. The smaller centres of tier 4 and tier 5 which still showed a relatively high level of monumentality and public infrastructure were mainly located in southeast Germania Superior, southeast Noricum or along the *limes*. It has already been suggested that some of those places also performed certain central functions or that some were unidentified *civitas* centres. The majority of the centres with a small size and a low urban profile – identified as tier 4 and 5 with a low level of public infrastructure – can be found along the frontier and along older frontier lines.

One of the key challenges here is to find answers to the question of why the Roman settlement system in the northern Alpine region developed in this way. There are, of course, influential geographical factors which have to be taken into account. The Alpine mountains are a factor that determines the northern Alpine region and had without doubt an enormous impact on the development of the settlement system also in Roman times. The distribution pattern of Roman centres is clearly affected by the presence of these high mountains, resulting in an urban vacuum in southern Raetia and central Noricum. Apart from road stations along the major Alpine passes, no Roman centre developed in this highly rugged, mountainous terrain. Larger centres only appeared at the foot of the mountains and often at locations well connected to these Alpine passes, such as *Brigantium*/Bregenz and *Curia*/Chur in Raetia or *Salzburg*/Iuvavum and *Virunum*/Zollfeld in Noricum. Furthermore, these larger centres were generally situated no higher than about 700 m above sea level. This contrasts with the road stations, for example the well-researched site of *Immurium*/Moosham, which was located at an altitude of 1,100 m. Equally, the Roman centres that developed in the Jura region were presumably located no higher than 500m above sea level, such as the *coloniae Augusta Raurica*/Augst and *Iulia Equestris*/Nyon or the centres of *Eburodunum*/Yverdun and *Petinesca*/Studen. Outside the core zones of the mountain ranges, the northern Alpine region is

characterised by a fairly similar climate, with average temperatures varying between 8 and 11°C and average rainfall everywhere well above 400mm per annum. Climatological reasons are therefore not the origin of the distribution pattern and of the urban development in the entire region.

In addition to the elementary geographical elements, the Roman settlement system seems to have been shaped mainly by historical events and human actions and interactions – as far as one can disconnect these from the landscape. Many centres appear to have been located along roads, including the main trade and communication routes, some of which predated the Roman period. The Roman centres in the southern region of Germania Superior, corresponding with today's Franche-Comté and the Haut-Marne for example, were located within the Rhône-Sâone-Seine network that has connected places, people and goods since the Late Iron Age.[685] Flourishing Roman centres, such as those in Langres and Besançon, were located along these trade routes and were often successors of existing places. The Roman centres in Augsburg, Bregenz or Kempten in Raetia were equally situated along the main arteries of communication within the province, expanded during Roman rule by the *Via Claudia Augusta* and other new roads. However, these places were strategically chosen by the Romans for military or administrative reasons. Also, the *Rheintalstrasse* formed an important connecting route and was the location of many agglomerations (Fig. 5.1a).

The dense concentration of centres in the northern half of the province of Germania Superior and north of the Danube in Raetia must undoubtedly be connected with military events and the changeable frontier. As discussed before, many Roman centres here developed from a military base around which a smaller or more extended agglomeration emerged, often inhabited by people related to the soldiers or attracted by the opportunities for trade. As a consequence of the regularly redefined frontier during the 1st century AD, the army units stationed in these garrison settlements moved away. However, many of these settlements remained inhabited and developed into flourishing regional centres. The settlement pattern in this area indeed shows the linear stretches of the former frontier, resulting in parallel roads with agglomerations at regular intervals. Without the presence of the Roman army the Roman settlement system would have looked different here. All this suggests to me that the urban developments in the northern Alpine region during the Roman period were heavily influenced by historical events, including a deliberate Roman policy.

One may then also expect to find a well interconnected settlement system in which people and goods could travel back and forth to these central places within one a day. It has been argued that within a market-based settlement system the centres should ideally not be located further from each other than a distance that could be bridged under optimal circumstances in three to four hours, allowing a return within a day for rural populations taking advantage of marketing and other services in central places; this corresponds approximately with a distance of 30 km.[686] Figure 5.1b shows this distance of 30 km between the Roman towns and centres with town-like functions which were discussed earlier. It has been claimed that military sites should be excluded from so-called central places.[687]

Previously, I argued, however, that garrison settlements must have played a significant role in the Roman settlement system in this region. The garrisons settlements assigned from tier 1 to tier 4 have

[685] King 1990, 115-117.
[686] Millett 1995, 31; Bintliff 2002, 216-217.
[687] Kunow 1988, 55.

therefore been considered centres with a catchment area that stretched further than the military logistics. The 30 km distance is represented by a circular buffer with a radius of 15 km. The interconnectedness of the settlement system in the northern Alpine region is expressed here by the fact of joining buffer areas around many centres in large parts of the study area. Even more, in certain parts of the northern Alpine region the centres could be reached in less than a one-day return journey, since the buffer areas frequently overlap, such as in northern Germania Superior and northern Raetia. In these parts of the northern Alpine region one could speak in geographical terms of a two-dimensional service centre system. Various factors could be suggested as the driving force for the the settlement system in these specific regions to develop according to the 'provisioning principle', not in the least the fertile soils and a relatively high population living in both rural and more urbanised places. Similar developments could be assumed for northern Noricum. J. Kunow also observed parallel trends for the adjacent region of southern Germania Inferior.[688] These northern areas contrast with the southern parts of the provinces of Raetia and Noricum. Here the settlement system seems to occur as a one-dimensional linear system, often associated with the limes region, where one main road connects the different centres.[689] The zones of the different phases of frontier development exhibit in particular a well connected settlement system. It is of course self-evident that the army provided an optimal communication and supply system, which resulted in a well-connected (garrison) settlement system. This characteristic development, also called the 'transport principle', could possibly be explained in these southern areas of the northern Alpine region by the rougher terrains of the Alps and a less fertile environment which was consequently less densely inhabited.

Furthermore, the map shows that the supposed catchment areas of the Roman centres, displayed schematically on figure 5.1b as Thiessen polygons, are often larger than the 30 km buffer area used to analyse a market based settlement system.[690] These catchment areas depend on and can vary related to the needs of the population living outside the particular centre. A centre's catchment area will be larger when it provides more unique services than when it offers functions which other centres also offer.[691] A market would be found in more centres than a theatre, for example. In areas where the buffer area does not correspond with the theoretical hinterland of a centres, a low population density could offer a possible explanation, as in the Alps, for example. Elsewhere, the archaeological research might have not revealed the remains of some Roman sites. The land east of Augsburg and west of Salzburg is an example of such a less integrated zone. It has been suggested that due to the state of preservation and the state of archaeological research, some agglomerations might still be undiscovered.[692] Previous occupation, such as the Late Iron Age centre in Manching, nevertheless proved that the area was suitable for successful urban development.

Furthermore, the fact that no centre has yet been found does not mean that such 'empty' areas were not inhabited during the Roman period. There is after all still one type of agglomeration that has so far not been paid much attention so far and that might explain certain gaps in the settlement system,

[688] Ibid., 64.
[689] Ibid., 56-57.
[690] The catchment area of a town refers to the hinterland from where people come to make use of the services and institutions provided by or available in the centre, see: ibid., 56. .
[691] Bekker-Nielsen 1989, 5.
[692] Steidl 2016, 77-78.

namely rural settlements. As will be discussed later, certain Roman *villae* estates may indeed have performed specific central functions.

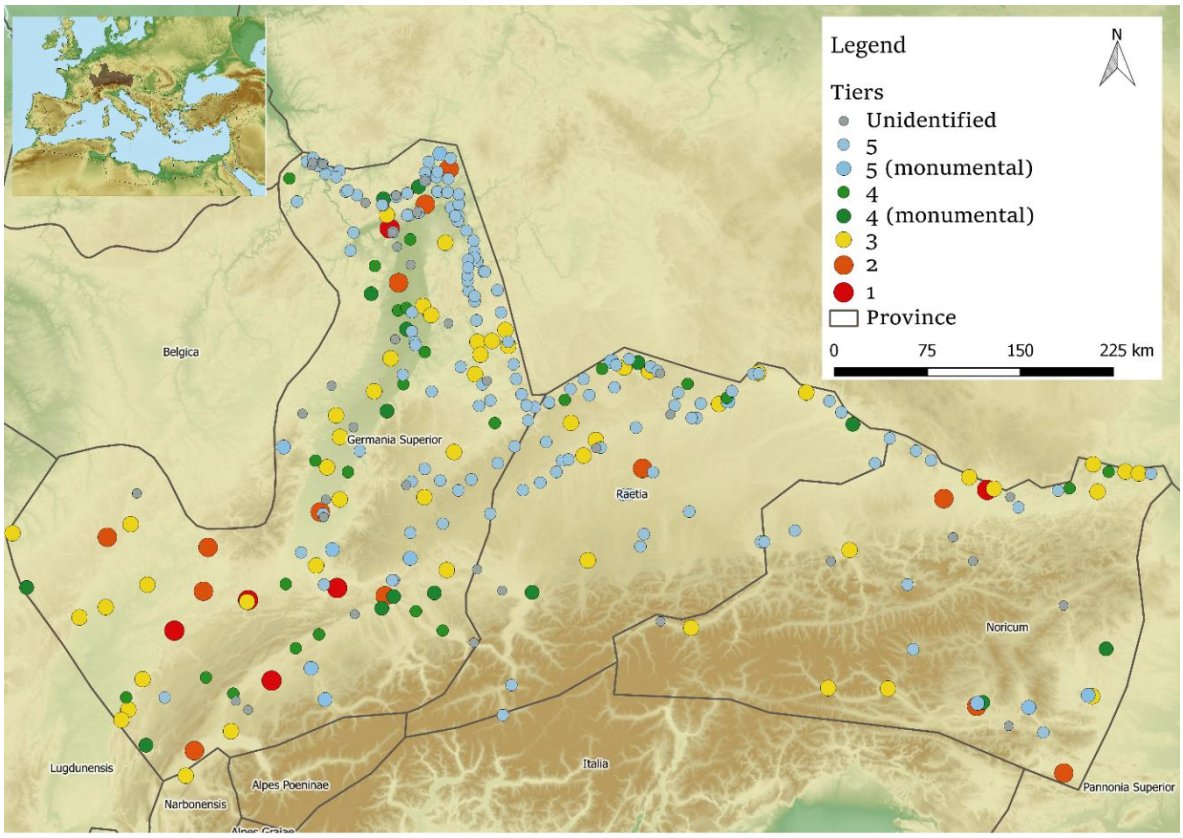


Fig. 5.1a : Geographical distribution of the settlements divided into 5 tiers

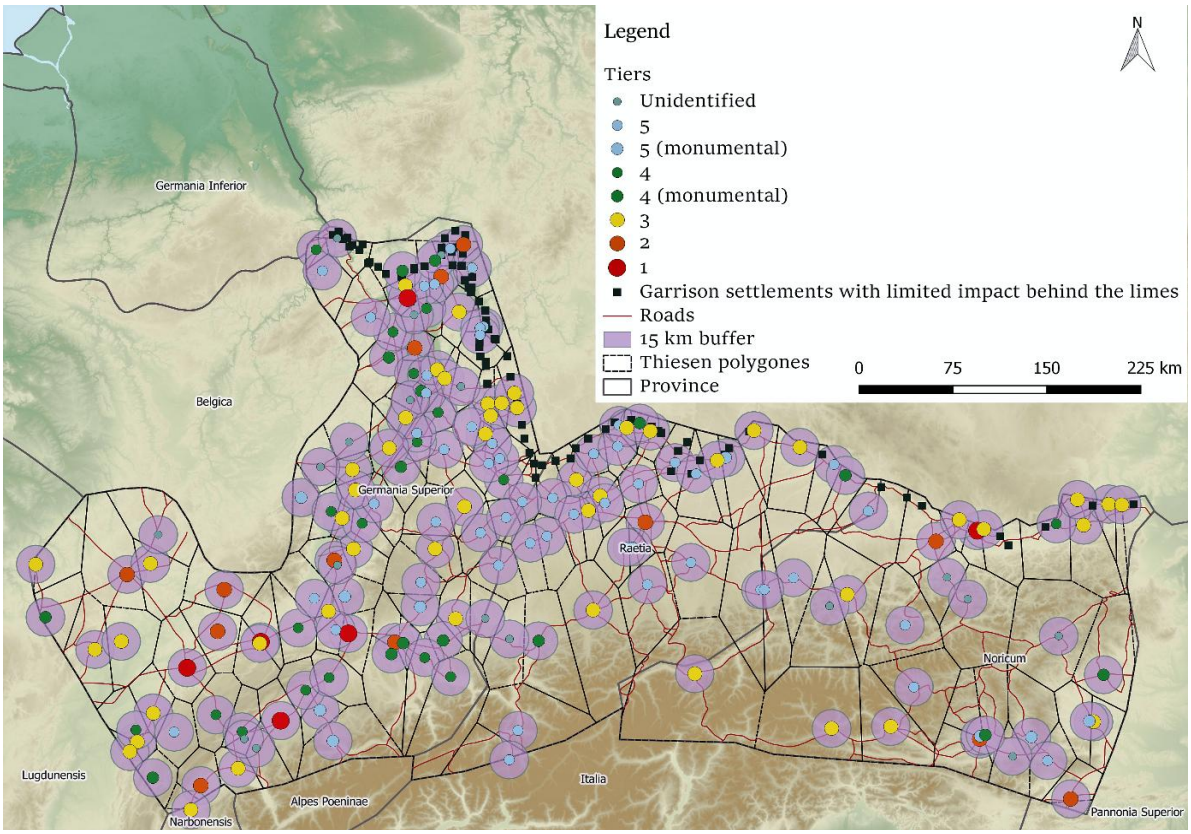


Fig. 5.1b: The interconnectedness of the Roman settlement system in the northern Alpine region

5.2 The rural settlements

Although initially little studied, since the 1990s works on the rural landscape and its inhabitation have increased in number. The doctoral research on the environment of Roman Regensburg by Thomas Fischer was one of the earliest studies questioning the relationship between pre-Roman occupation and the rural settlements of the Roman period.[693]Over recent decades more research has focused on both the agricultural use of land in Roman times as well as onrural habitation. These studies often stress the high number of rural inhabitants together with a relatively intensive cultivation of the land compared to earlier, or to following, eras.[694] More effort has been put into compiling inventories of known rural sites for specific areas, for example in Upper Austria[695] or in the regions of France and Germany.[696] These studies include old excavations as well as new discoveries. Indeed recent archaeological research, especially in the form of geophysical survey, has extended the knowledge of rural sites.[697] This has led to deeper and more detailed case studies on the dynamics between farming estates, both in terms of chronology and function.[698] The increased interest in rural

[693] Fischer 1990.
[694] Focusing on the German provinces: Wendt and Zimmermann 2008, 191-195. Studies more specific on the Eifel region: http://web.rgzm.de/ (9-12-2016); Baur 2012. ; Giljohann 2012; Grünewald and Wenzel 2012.
[695] Traxler 2004: Römische Guts- und Bauernhöfe in Oberösterreich, 13 ff; Kastler, Lang and Traxler 2017, 40: overview of new archaeological (field) investigation done after 2004.
[696] Ferdière *et al.* 2010.
[697] Henrich and Mischka 2012, 327-335; Kühne 2012b, 205-211; 2012a, 85-88; Lambers 2017, 181-186.
[698] A good example for the Middle Aare valley (Switzerland) can be found in: Schucany 2011, 275-283.

habitation has also generated further insights into the constellation of the archaeological remains and the related terminology.

The research on the rural settlements in the northern Alpine region has now resulted in the identification of a relatively high number of rural sites (Fig. 5.2). The majority of the northern Alpine region had a favourable climate for agricultural activities. One notices densely populated hinterlands in the vicinity of larger centres, such as the legionary base of *Mogontiacum*/Mainz or the *colonia Augusta Raurica*/Augst.[699] Nevertheless, the largest clusters of known rural sites was located in the immediate vicinity of the *limes*, and more specifically in the area north of the Danube and parts of the *Agri decimates*. A minimum of 4,000 rural estates and farms have been attested along the so-called *Obergermanisch-Raetische Limes* and the limes in Raetia and west Noricum.[700] The northern frontier region must have been of great importance for the food supply within the Empire: the region operated as one of Rome's agricultural gardens.[701] The extent to which the rural habitation is investigated remains an academic deadlock. The number of rural sites that have not yet been discovered or have not been recognised as part of the Roman settlement system is unknown. Equally, problems concerning the terminology and definition of these rural sites have an impact.

The term *villa* is ubiquitous in research on the rural aspects of the Roman society. Despite its Latin origin, the meaning of the modern term of 'villa' – a large country home - differs from the Roman idea best translated as 'farm'. Such an agricultural estate included a large luxurious residence (*pars urbana*) accompanied by several additional buildings including a bathhouse and secondary buildings for agrarian or craft purposes as well as farmland (*pars rustica* and *pars fructuaria*). In modern archaeological and historical research the term *villa rustica* is often used to refer to the entire estate, which is incorrect according to its Roman meaning.[702] More recently, suggestions have been made towards the implementation of more neutral and modern terms such as farming estate, farmstead and rural village.[703] The description of *villae* as known from the writings of classical authors, such as Cato, Varro or Columella, is derived from the situation in the Mediterranean region. According to R. Kastler, F. Land and S. Traxler this is another important reason to avoid the Latin term, since the rural settlements in the Roman provinces were characterised by their own development. Adhering too much to the writings of the Roman agronomists may mean that the individuality of provincial rural occupation becomes overlooked.[704]

Due to a fairly late incorporation into the research agenda, most of the Roman rural sites are - if not destroyed - probably either still undiscovered or only partially excavated.[705] Regardless of the nature of the Roman remains found in rural contexts, these sites are frequently labeled as *villae* (*rusticae*).

[699] The correlation between a more densely occupied hinterland and larger centres or places with a high position in the settlement hierarchy has been analysed by Hodder and Millett 1980, 74-75.
[700] Flügel and Valenta 2017, 52.
[701] Ibid., 54.
[702] Traxler 2004, 5-6.
[703] Smith 1997, 10-11; King 2004, 349-350; Roymans and Derks 2011, 2. In the German literature *Baurnhöfe* or *Gutshöfe*: Traxler 2004, 6.
[704] Kastler, Lang and Traxler 2017, 21.
[705] For Britain, Bavaria and northwest Noricum: Hingely 2004, 330-333; Traxler 2004, 3-4; Moosbauer 2009, 148; Kühne 2012b, 205-206.

All too often, the interpretation of a *villa* site relies on a few finds, including indications of prosperous living standards, such as mosaic tiles, fragments of wall paintings or of hypocaust heating, and at other times is based on isolated remains, such as stone foundations. The lay-out of a Roman *villa* was, however, not unique and is very strongly reminiscent of that of a road station or other form of inhabitation.[706] It is unclear whether the sites of, for example, Bad Reichenhall Langacker, Kraiburg am Inn or Tittmoning in north-west Noricum, belonged to a rural agglomeration or to a farm estate.[707] I. Heitmeier therefore warns against an often too simple outcome found in ascribing such archaeological structures to a Roman *villa* site, while other rural living forms are ignored.[708] This questions the idea, introduced by Th. Fischer among others, that in the northwestern provinces no other kind of rural inhabitation existed than these typical Roman *villae* domains.[709] In Gaul, however, research has proven that *villae* often stimulated the emergence of rural villages.[710] Moreover, rural inhabitation in local building style has often been wrongly ascribed to pre-Roman societies.[711]

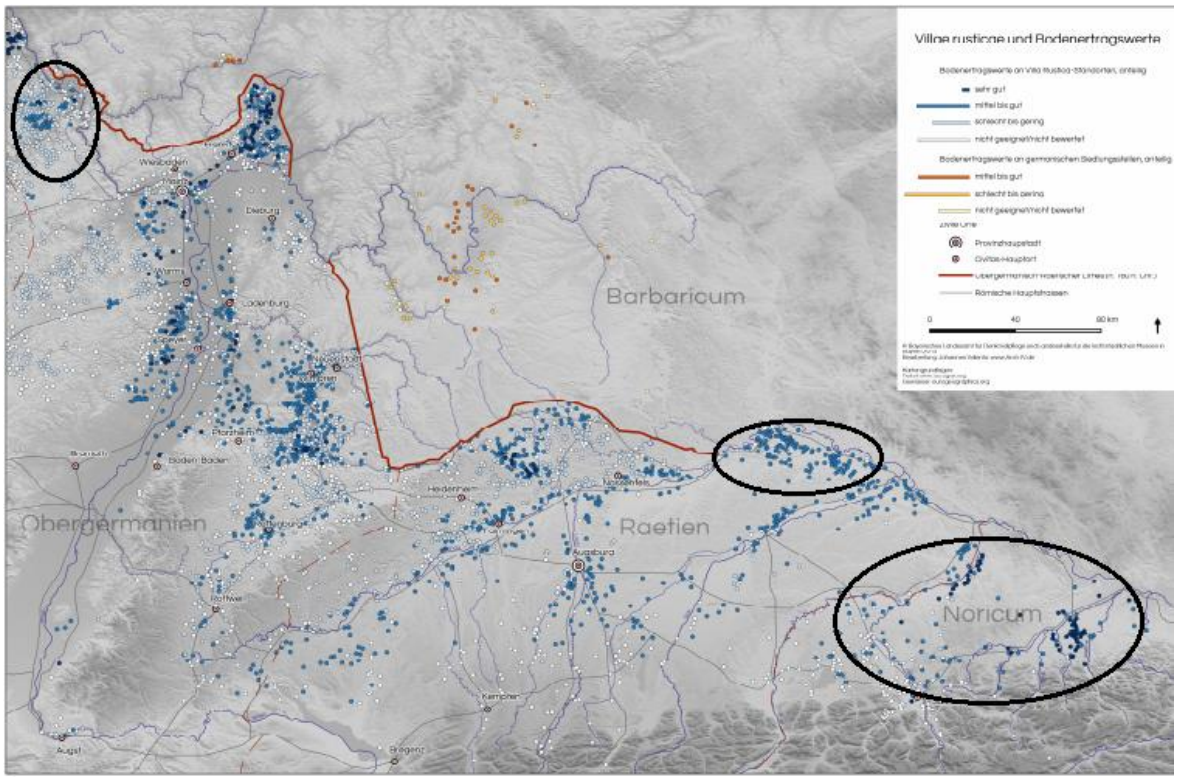


Fig. 5.2: Archaeological sites of rural settlements in the frontier regions of Germania Superior, Raetia and Noricum (indicated in blue and white), state of research 2016. The regions encircled are those discussed in the three case studies. Online:http://www.museen-in-bayern.de/fileadmin/Daten/Landesstelle/Zivilkarte_30062016_300dpi_01.pdf

[706] Bender 1975, 19; Pöll 2001, 246; Grabher 2010, 248-250; Kastler 2010b, 40-41.
[707] Kastler, Lang and Traxler 2017, 8.
[708] Heitmeier 2005, 106.
[709] Ibid., 106.: *'… in nördlichen Provinzen des römischen Reiches bestimmte ausschliesslich der römisch-mediterrane Bautypus der villa rustica das Erscheinungsbild der ländlichen Siedlung. Neben den Villen existierende Siedlungsformen, etwa Bauerndörfer einer weniger romanisierten Bevölkerung, sind in den Provinzen Obergermanien, Raetia und Noricum nicht bekannt.*, by Th. Fischer (römische Landwirtschaft, 273.) This idea can be found in the work of many others, such as: Oelmann 1990, 174.
[710] Leveau 2002, 7-8.
[711] Hingely 2004, 327; Roymans and Derks 2011, 2.

Studying the inhabitation and activities in the countryside is highly important, since the majority of people will have spent their lives there, but also because its relationship with urban and smaller centres will have been vital for the way life was organised in antiquity.[712] The population living in central places was never fully or primarily engaged in agrarian activities.[713] Despite a certain level of production expected in every centre, one assumes that some of them outgrew their own production capacities and therefore needed supplies from the country side.[714] The presence of the army, too, will have raised the demand for agrarian products in the northern Alpine region considerably.[715] Suggestions regarding the nature of the interaction between centres and the countryside range from consumer- or parasitic models to modular systems and symbiotic relations, but overall every situation remained unique.[716]

The three following case studies - including the regions of Regensburg (northern Raetia), Mayen (north-west Germania Superior) and Salzburg-Wels (north-west Noricum) - will shed light on the wide range of possible dynamics (Fig. 5.2). Due to limited textual sources, local researchers have sometimes attempted to broaden their understanding of rural life in these areas by looking for possible parallels in other regions of the Empire, such as North Africa.[717] Nevertheless, conclusions will mainly have to be drawn from observations made based on the archaeological record. The case studies should allow a supra-regional comparison of the interaction between rural and urban centres and influences such as local resources or the presence of the Roman army.

[712] Mansuelli 1990, 330; Horden and Purcell 2000, 92; Roymans and Derks 2011, 1.
[713] There is a tendency to assume a relatively high agrarian lifestyle for many central places, especially for subordinate centres: Hiddink 1991, 215-216.
[714] Hopkins 1979, 73-77; Finley 1999, 125; Wilson 2011, 161-162.
[715] Wendt and Zimmermann 2008, 212; citation of Th. Fischer 1999, 46; Sommer 2013.
[716] Finley 1999, 123-125. For the consumer city model see: Parkins 1997, Roman urbanism beyond the consumer city. For argumentation on a modular town system see: de Ligt 2016.
[717] The work of E. Kostner concerning the region of Mayen and P. Herz regarding the rural life in northwest Noricum are two examples which will be cited later on.

5.3 Case study 1: Rural life in Raetia. The countryside around *Castra Regina*/Regensburg

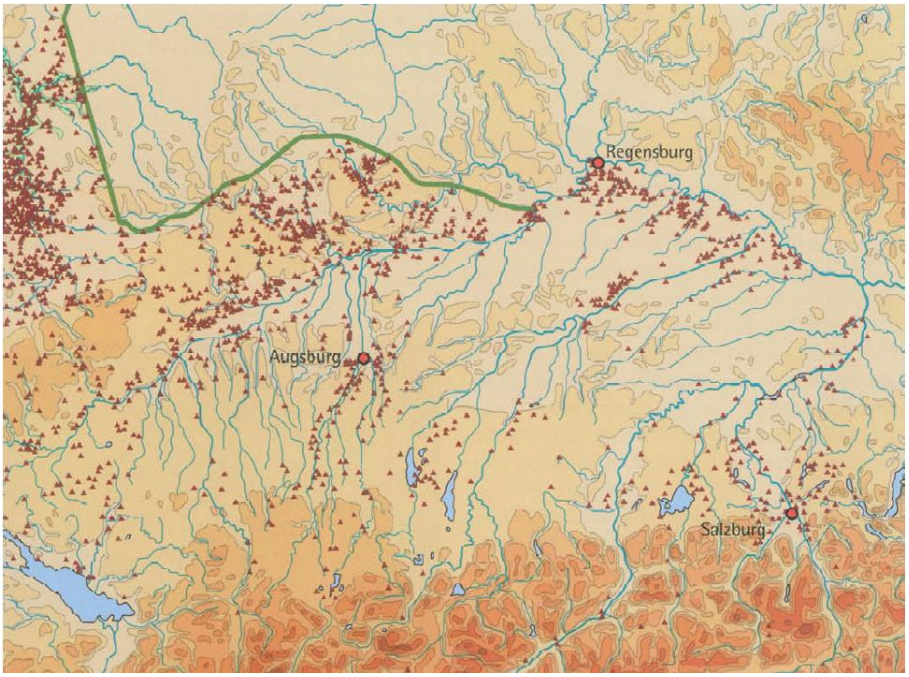


Fig.5.3: Distribution of *villa*-sites and rural settlements north of the Alps in Raetia (Sommer 2013, 5: map by A. Faber based on the state of investigation in 2005.)

Due to the natural geographical features, not least the Alpine mountains, rural inhabitation in the southern areas of the province of *Raetia* remained limited. By contrast, the northern half the province was characterised by fertile soils. The densest concentrations of *villa* sites from the Roman period in Raetia have been found in the northern parts of the province and more specifically in the northwest, in the area north of the river Danube and south of the frontier (Fig. 5.3). According to C. S. Sommer, the formation of such farm estates is clearly linked to the presence of the army. As he points out, the oldest foundation dates of these rural sites go back to the late 1st and 2nd centuries AD and were thus contemporary with most of the military installations at the frontier.[718]

Nowhere else in the province could a similar density of farming estates be observed from the archaeological finds. River valleys, however, such as the Lech- and Wertachthal south of Augsburg, were also regions with a relatively densely occupied countryside. With regard to the number of rural sites identified, the region between the garrison settlement of *Castra Regina*, modern Regensburg, and the river Isar to the east is also worthy of note. This last region will be the focus of this case

[718]Some have argued for a desolate landscape since LT D1 which needed complete new rehabilitation of the countryside during the imperial period, among others Th. Fischer 1990, 23; S.C.Sommer 2013, 134-135. More recently, voices were raised disagreeing with this thesis and calling for more continuity of rural inhabitation. At the *villa* site of Bad Abbach (Poing), remains of a late Iron age farm have been identified within the structures of the later Roman estate. G. Moosbauer therefore suggested that the presence of the army did not necessarily stimulate the emergence of more farmsteads. He calls instead for an intensification of production while accepting a slight increase in the number of farms (Moosbauer 2009, 154-158.).

study. The area around Regensburg is one where the rural Roman occupation is slightly better investigated than elsewhere in *Raetia*. At this moment, around 200 occupation sites are known, of which half are categorised as farmsteads.[719] This relatively dense concentration of rural sites seems heavily connected to the presence of the legionary base in Regensburg.

5.3.1 The legionary base and rural occupation

When in the Flavian period the frontier in eastern *Raetia* was extended to the north, a first cohort base was established in Regensburg around AD 80.[720] With the violence of the Marcomannic wars between AD 160 and AD 170, the basecamp was destroyed along with the residential areas around it. In response to this disorder a new permanent legionary camp was founded, *Castra Regina,* in AD 179.[721] The legionary fort was surrounded on its east, south and west sides by residential areas.[722] The streets of the garrison settlement were partly paved and sometimes equipped with porticos. The central zones were characterised by modest strip houses, but elsewhere, such as in the western quarters, bigger house complexes have been found. These were of 75 m x 35 m in size, and had a courtyard, a nymphaeum and hypocaust heating. These wealthier houses can probably be ascribed to military officers or to prosperous civilians. No more urban-like infrastructure, such as a *forum-basilica* complex, has been found[723] and it is assumed that administratively the inhabitants fell under the supervision of the army.[724]

It is believed that under the influence of this new legionary base, the population number within this small area in eastern *Raetia* increased within a few decades to somewhere in the region of 12 000 to 15 000 people. This must have had a major impact on the environment, both in terms of construction materials as well as on the demand for food. It is estimated that 30,000 m^3 of stone was needed for the construction of the fort alone and in addition a huge amount of timber, excluding the building materials used for the barracks and houses.[725] G. Moosbauer suggested that for the strip of frontier between the fort of Eining in the west up to Passau, including about ten forts, one of which was a legionary base, 5,000 tonnes grain had to be provided on a yearly base. This would feed all soldiers and military staff, civilians and animals. He asserts that a *Raetian villa* of 100 ha could easily produce 50 tonnes of grain. He therefore puts the minimum number of farmsteads around Regensburg at 200 in order to feed both the inhabitants of the garrison settlements and the farmers themselves.[726]

With its dry and warm summers, mild autumns, and its precipitation of 600-700 mm the region of Regensburg is one of Germany's most fertile areas. The landscape is defined by low terraces with loamy soils, high terraces with *löss* soils and hills which stretch out to the Danube. Most Roman farmsteads have been found, either on the *löss* soil terraces or in the hilly areas, in other words the

[719] Waldherr 2009, 199-201.
[720] Moosbauer 2009, 145-147.
[721] Waldherr 2009, 186-188; Fischer 1990, 26. The two legionary bases of Regensburg and Enns were taken into use around the same time.
[722] The garrison settlement did not develop from one large core habitant, but from different concentrations of smaller agglomerations, such as the settlement at Grossprüfening at the debouchment of the Naab or at Mangolding. (Waldherr 2009, 192; Dietz 1979, 248; Fischer 1990, 40.).
[723] Dietz *et al.* 1979, 230; Waldherr 2009, 194-198.
[724] 2009, 194-198. The juridical status of the garrison settlement in Regensburg was also discussed in chapter 2.
[725] Ibid., 187-188.
[726] Moosbauer 2009, 158-159. Slightly different calculations can be found by Waldherr 2009, 204-205, who claims a yearly consumption of 7500 ton of grain.

more fertile soils in the region. The emergence of these farms was also connected with the road network, as the many finds along the road between *Castra Regina*/Regensburg and Straubing illustrate.[727]

The best investigated *villa*-site in the region of Regensburg is Burgweinting-West. The *villa* was surrounded by a trapezoidal wall and included an area of 9,700 m^2 in which a total of 11 structures have been found. This site shows us a second more modest living house, in addition to the main residence building - in this case provided with hypocaust heating, a bath and a well. The majority of the buildings, however, performed the function of a workshop, a storage room or a barn.[728] This description corresponds very well with the general characteristics Th. Fischer sums up for the Roman farmsteads in the Regensburg area for which he mentions a surrounding wall (rectangular or trapezoidal), at least one stone-built luxurious house, a bath and several outhouses for different kinds of activities. The water supply was mostly provided via private wells. A bath installation, sanctuary and private graveyard were standard elements of a Roman *villa* in the region around Regensburg.[729]

Many of the farmsteads show traces of crafts, such as tiles (*tegulae)* or glass production, metal and iron processing. The assumption is that most of this production was not intended for trade, although the ceramic production at the villa of Barbing-Kreuhof may be an exception.[730]

As has already been mentioned, most of the farms were located on slopes orientated southwards, while the lower lands were often used for herding.[731] In analyses of the animal bones, one finds pigs and horses in addition to cattle, which were an important source of power as well as of leather for which a strong demand existed among the soldiers. Sheep and goats were also kept, providing meat, milk and cheese, but also leather and wool. In the fields barley was the most common summer crop, while in winter it was replaced by spelt.[732] It is thought that the size of the *villa*-domains varied between 40 ha to over a 100 ha, depending on their location. Those located in hilly areas tended to be smaller (40-70 ha) while in more flat land their size could reach 60 ha and even 120 ha.[733] Studies on Roman farmsteads in general give population estimates of 20 people. The number of people actively working on the fields might have still varied depending on the season.[734]

It is assumed that a percentage of the *villae* were probably managed by veterans, either as tenants or as owners.[735] Evidence for such an assumption is found in the many *militaria* found at some *villa* sites, as for example at Treuchtlingen-Weinbregshof.[736] One assumes that it was in general ex-

[727] 2009, 198; 201; 204.
[728] Moosbauer 2003, 64; Hornauer 2009, heading 3.5.2.
[729] Fischer 1990, 41.
[730] Waldherr 2009, 206-211.
[731] Ibid., 204.
[732] Moosbauer 2009, 154-155; Waldherr 2009, 204-205.
[733] Moosbauer 2009, 148-149; Waldherr 2009, 205.
[734] It has been suggested that in harvest time potential seasonal workers came to the farm estates. These were most likely inhabitants of nearby villages. Moosbauer 2009, 149-153. Hiddink 1991, 214-215.
[735] Waldherr 2009, 203.
[736] The luxurious golden necklace and other exotic finds even point in the direction of an ex-officer or other higher positioned ex-soldier who owned the estate. For more see: Koch 1993, 51-52. The *villa* of Treuchtlingen-Weinbregshof was however not located in the hinterland of Regensburg, but a good 100 km more to the west.

legionnaries or former military officers who became engaged in the ownership of an agricultural estate rather than veterans from an auxiliary unit.[737]

5.3.2 Food for the army

It seems obvious that most of these farmsteads around Regensburg supplied agricultural produce to the legionary base and the nearby garrison settlements, especially since no other centre existed in this area. Both roads and rivers, such as the Isar or the Danube, will have provided an efficient transport network. Some sites seemed to have functioned as important hubs within the supply network. The large harbour at the garrison settlement of Straubing indicates that the site was an important emporium.[738] Other places may have been equipped with large halls which could be used for the storage and redistribution of goods.[739] If on these farmsteads goods of non-agrarian origin were produced for the market seems unlikely; where evidence has been found, it seems rather small-scale. It has been argued that the *villae*'s primary occupation was farming and that other kinds of production were performed elsewhere, such as in the garrison settlements.[740] The *tegula*-production site of Sittling (nearby Eining) confirms this assumption. The workshops here stood under supervision of the legion and had a rather wide distribution area - ranging from Eining to Passau.[741] The relationship between the countryside around the legionary base and the army becomes reaffirmed if indeed veterans moved to these rural areas and managed such an agricultural estate or farm. A general trend of decline in the late 3rd century is not only noticeable at the garrison settlements along the frontier but also in the rural inhabitation.[742] Where the rural population moved to is unclear. The centres of Regensburg and Augsburg seem two plausible options, but no archaeological evidence exists to support this idea.[743] A general trend towards more inhabitation in areas farther away seems to appear, since rural sites seem to have experienced a revival in the late 3rd century, such as Denning (München) and Koningsbrünn (South of Augsburg).[744]

[737] A parallel can be found in the involvement of ex-military personnel who took up municipal offices, as, for example, Derks 2011, 109, argues.
[738] The harbour was probably found together with the Flavian fort (IV), Fischer 2015, 196.
[739] Moosbauer 2009, 145-147. Examples of big hall-shaped structures have been found elsewhere, as for example in Oberstimm (Manching), Tannet and Künzing. Onken assumes that even every garrison settlement in Northern Britain did have a *horreum* to keep the stock, see: Onken 2003, 62-63.
[740] Dietz *et al.* 1979, 259. Onken also suggests that craftsmen at the garrison settlements were either in the fort or had their workshop in the surrounding settlement, especially if they were involved in metal processing or weapon making or if they worked as black smiths,: Onken 2003, 152.
[741] Moosbauer 2009, 206-209.
[742] Ibid., 159 ff; Waldherr 2009, 203.
[743] There are no archaeological indications for an expansion of these two centres nor for an increased population density.
[744] Czysz 2013, 358-360.

5.4 Case study 2: Rural life in northern Germania Superior. The region of Mayen and its stone quarries

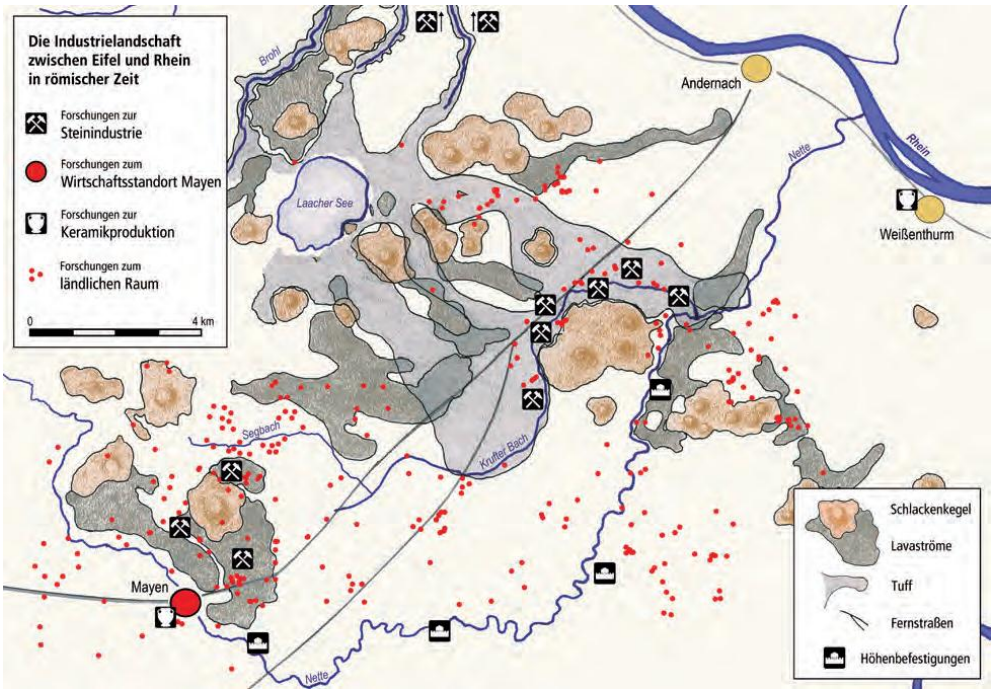


Fig. 5.4: The region between Andernach and Mayen is especially rich in Tuff, while the region immediately north of Mayen is high in basalt. The rural settlements are indicated with red dots. (Map: Hunold 2016, 168).

P. Wendt and A. Zimmermann stated that a stable economic situation can be assumed within the province of Germania Superior, implying that the region was usually self-sufficient in terms of food production.[745] The focus in this second case study will be on the specific region between Andernach and Mayen in the eastern Eifel (North Rhineland-Pfalz). My attention was drawn to this particular area because of its economic importance for developments in their garrison settlements and larger urban centres in both eastern Germania Inferior and northwestern Germania Superior. It is a region that is naturally very rich in volcanic rock (Fig. 5.4). The stone deposits were exploited even during the Iron Age, with an increase from the Augustan period onwards.[746] The local tuff stone was suitable for the construction of military forts, for the creation of public buildings and for inscriptions. Likewise, the basalt stone was used for the production of millstones, which are found at many military camps (Fig. 5.5), including along the Lippe in Germania Inferior.[747]

[745] Wendt and Zimmermann 2008, 212. Others have argued that the region of the Germanic provinces was not always capable of producing enough to maintain the army and parts of the Gallic stable had to be brought in, see: Wierschowski 2002, 280-281.
[746] Hunold 2016, 169 afb.3.
[747] Giljohann 2012, 247; Glauben 2012, 89-93; Hunold 2016, 167.

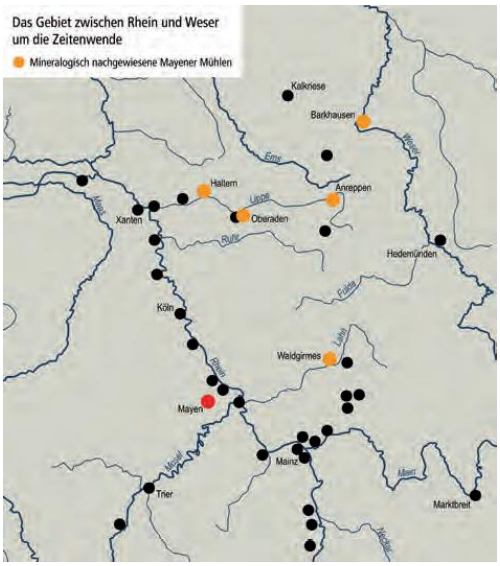


Fig. 5.5: Archaeological sites (in orange) of millstones from Mayen (in red): (Map: Hunold 2016, 170.)

5.4.1 The production centre of Mayen and its surroundings

It is believed by E. Köstner, amongst others, that this region was originally governed as an imperial estate with the village of Mayen as its administrative centre, although little evidence to endorse this assumption has been found. The hypothesis relies mostly on a comparison with Roman North Africa[748] The site of Mayen itself has so far not revealed any official buildings of any kind. The Roman settlement of Mayen was already encountered in chapter 3 as an example of a production centre of millstones and pottery. The archaeological remains indicate a rather modest settlement. Apart from a bathhouse and a 2nd century temple no other public buildings are known. The houses were rather small and combined living and working space. Waste material from stone working suggests that there was no labour division but that every workshop – of which are seven known so far - undertook the entire production process, of millstones for example. The dynamics in the region probably changed a little during the 2nd century. E. Köstner believes that the area was by then no longer run as an imperial domain but was leased out to tenants. Nevertheless, most military installations and administrative centres in the vicinity were erected around this time and the state's interest in the quarries might have diminished.[749] It is around the 2nd century that the pottery production at Mayen began. A total of 17 pottery kilns have been found. The location of the workshops adjacent to the street was probably to facilitate the supply of raw materials and the transport of goods for sale. Many roads as well as the river Nette, a tributary stream of the Rhine, passing by this centre will have encouraged the distribution of the products from Mayen's various workshops.[750]

The landscape in the vicinity of the settlement of Mayen was densely studded with rural farmsteads during the imperial period (Fig. 5.4). There are indications of continuity in land use from the pre-Roman to the Roman period, both at graveyards and at *villa* sites, such as those of 'Brasil' and 'am Kendel' (Mayen).[751] Some of the farmsteads can be dated to the 1st century AD, but a strong increase is noticeable during the 2nd century.[752] In the area between Andernach and Mayen alone a total of 75

[748] Köstner 2012, 79-81. The argument is mainly based on comparison with Roman North Africa.
[749] Ibid., 79-81.
[750] Baur 2012, 241; Glauben 2012, 89-93; Hunold 2016, 172.
[751] Baur 2012, 241-242; Giljohann 2012, 252.
[752] It is hard to judge to what extent this observation is influenced by the transition from timber to stone constructions and thus by a higher visibility grade of the archaeological remains.

sites was known in 2012. Most of the discoveries were made during the development works of the 1950s, but unfortunately none of the sites has been entirely excavated. It is likely that only a small percentage of all Roman rural habitation has been identified and it is assumed that the region probably had at least twice as many rural farmsteads.[753] Since the soil in the immediate vicinity of the stone quarries is of poor quality, most rural sites were situated in areas where tuff stone was absent. The *villae* were generally well connected to the road network.[754]

The sizes of the *villa* domains are estimated between 30-50 ha up to 70-80 ha, although for the farmland of the *villa* of Lungenkärchen (Mendig), 100-120 ha has been suggested.[755] Just as in the region of Regensburg, the architecture of these estate residences generally shows signs of a prosperous lifestyle. Sometimes a small wall separated the *pars urbana* from the *pars rustica,* as for example at the sites of Fraukirch in Thür or 'Am Kendel' in Kruft. The lay-out of the domain could be either of the dispersed or of the axial type and the *pars rustica* contained various kinds of workhouses. A surprisingly high number of water pipes have been found spread over the entire region. The water provision of some of the rural sites happened most probably via small aqueducts, made out of timber, basalt stone or masonry, which conducted water over several hundreds of metres through the fields to the estates. The generally prosperous nature of these farmsteads is often attributed to the business of stone quarrying in the region and contrasts strongly with the modesty of the Roman craft centre of Mayen itself.[756]

A prosperous estate: Lungenkärchen-Mendig

The *villa* site of Lungenkärchen (Mendig) is an example of such a rich estate (Fig. 5.6). The main building had projecting wings (*risalits*), hypocaust heating, a bath complex and decorative additions such as pillars and wall paintings and large water basin in front. The *pars rustica* of the farmstead, however, had rather moderate dimensions. The barns and the possible *horreum* confirm agricultural activities. Nonetheless, it is suggested, based on the small size of the work space, the rather extravagant look of the main building and its prominent location, that this could be the residence of either a *conductor* of an imperial estate or a landowner.[757] Confirmation of this suggestion has been found in deposits of basalt stone at sites such as 'Am Kendel' (Kruft) and 'Im Winkel' (Mendig), varying from raw material to semi-finished products, suggesting the presence of stone workshops at these *villae*.[758]

[753] Hunold 2016.
[754] Baur 2012, 235.
[755] Giljohann 2012, 250-251; Grünewald 2012, 171-172.
[756] Baur 2012, 235-236; Giljohann 2012, 254; Hunold 2016, 173-174.
[757] Grünewald 2012, 165-174.
[758] Giljohann 2012, 252-254; Wenzel 2012, 133; Hunold 2016, 175-178.

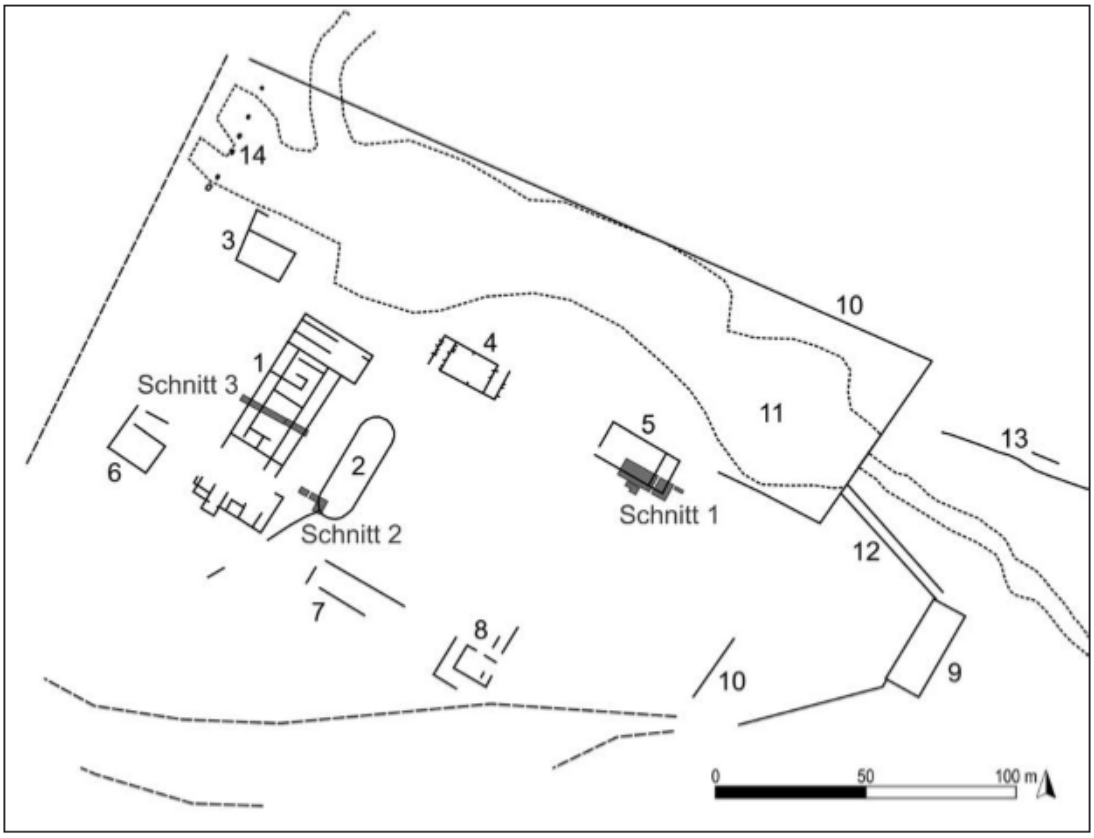


Abb. 6 Mendig, »Lungenkärchen«. Ausgrabungsschnitte (grau) und Umzeichnung (schwarz) der geophysikalischen Untersuchungen sowie Luftbilder. – **1** Hauptgebäude. – **2** Zierbecken. – **3. 6-8** – Nebengebäude. – **4** *horreum* (?). – **5** Stallungen. – **9** Mühle (?). – **10** Hofgrenze. – **11** Stausee (?). – **12-13** Mühlkanäle (?). – **14** Aquädukt (?). – (Graphik B. Streubel, RGZM).

Fig.5.6: Site plan of the *villa* in Lungenkärchen (Mendig). Map: (Grünewald 2012, 66.).

Nevertheless, a relatively large part of the activities at these rural estates will also have included agricultural production. Due to the emergence of bigger and monumentalized centres, the presence of the army, and consequently a higher number of workmen in the stone quarries, the population in this region will have increased along with the demand for food.[759] It is assumed that the many drain pipes found in the region of the Segbachtal not only provided the *villae* with water, but were also part of the drainage systems that helped in the reclamation of land for crops.[760] Further indications of agricultural activity can be found in the few *burgi* (fortified depots) - such as the one on the Katzenberg nearby Mayen and at Obermendig close to the *villa*-site of "Im Winkel"- which were erected along the Nette during the period of late antiquity. Analysis of carbonised botanical plant remains from the *burgus* at "Im Winkel" have shown a cleaned harvest, meaning that almost all weeds were removed. Spelt was the most common type of grain in the sample, which is not surprising since it was a very common grain in the north-western provinces during the Roman period. A more interesting find was the identification of apples. The function of a storage hall in a *burgus* is not unusual, since the function of defence and depot were often combined, especially in the vicinity of *villae*.[761] It is estimated that a capacity of 128, 000 kg of grain, corresponding with the harvest of 80 ha, could be stored in the *burgus* at Obermendig. This would keep around 400 men fed for an entire year. It is most likely that the surplus of several *villae* was stored together here. *Militaria*

[759] Grünewald and Wenzel 2012, 218; Hunold 2016, 172.
[760] Grünewald and Wenzel 2012, 219.
[761] Wenzel 2012, 140-146. The contents of other Roman *burgi* and *horrea* have shown a similar stock, including both grains, seeds and different type of fruits. See for more: Zerl 2012, 210.

among the small finds suggest that the stock was controlled by the army and probably used to feed the workers in the stone industry.[762]

5.4.2 State business?

The stone quarried and processed in the region of Mayen was mainly distributed to the army bases along the Rhine and Lower Rhine, civic centres, and in smaller quantities also to the countryside. The workshops where the raw stones were worked into products ranging from stone blocks to millstones, are found either in domains in the countryside which had the same appearance as *villae*, or in the centre of Mayen. The revenues from this business were not displayed in large, highly monumentalised centres. On the contrary, the settlement of Mayen was rather modest. Some of the farmsteads, on the other hand, proved to be more luxurious than in other places. The most prosperous rural estates, such as the site of Lungenkärchen (Mendig), may have belonged to the *conductores* or managers of the quarries and the surrounding land.[763] The role of the army in the organisation of these quarrying districts is probably not to overestimate, even after the establishment of the military infrastructures. Evidence of the role of the military can also be found in the *burgi,* which were supervised by the army and contained food supplies for the miners. The region continued to flourish until the late antique period; it is only in the remains of 5th century the occupation of the that a decline can be observed.[764]

5.5 Case study 3: Rural life in north-west Noricum. A combination of Roman civil and military life[765]

The last case study concerning the dynamics between the countryside and its urban context focusses on the region of northwest Noricum (modern southeast Bavaria and Upper Austria) which is believed to have been one of the most densely populated areas in the province. It is also one of the better investigated parts of Noricum in terms of rural settlements, together with the surroundings of *Flavia Solva* (Wagna).[766]

The data for this section have been derived from a number of key works. Firstly, the doctoral research of Dr. S. Traxler: *Römische Guts- und Bauernhöfe in Oberösterreich*, which contains a discussion of the archaeological evidence as well as a catalogue with all the possible rural sites in the region of Upper Austria as of 2004.[767] Secondly, the work of L. Lambers, who – for the purpose of her doctoral research – carried out rural surveys in the region and kindly shared with me information about new discoveries as well as ideas about the region.[768] Also of high interest was the doctoral

[762] Wenzel 2012, 137; Hunold 2016, 177-180.
[763] Rural surveys in the western Eifel have revealed indications for a *villa* hierarchy. The larger, more prosperous farm estates tended to have up to thirteen other smaller farms in their vicinity. This might indicate a deliberate organisation of the rural land and the subordination of some farms to bigger estates, according to Henrich and Mischka 2012, 328-329.
[764] Baur 2012, 245.
[765] Without the support, time and information I was given by Dr. Felix Lang (University of Salzburg), Dr. Stefan Traxler (Oberösterreichisches Landesmuseum) and Lena KühneLambers (LMU München and University of Leiden), this case study would have been impossible to realise. I therefore wish to express my gratitude towards them once more.
[766] Kastler *et al.* 2012, 69-71.
[767] Traxler 2004.
[768] Kühne 2012b, 203.

thesis of Dr. F. Lang on artisanal production in this particular part of Noricum.[769] The publication *Neue Forschungen zur ländlichen Besiedlung in Nordwest-Noricum* appeared just before the finalisation of this research.[770]

The region of northwest Noricum was bounded by natural features, such as the river Inn to the west; the river Danube to the north and the river Enns to the east. The Alps formed a natural barrier to the south.[771] In contrast to the regions of Mayen and Regensburg, two self-governing centres were present in this area, namely the *municipium Iuvavum* (modern Salzburg) and the *municipium Aelium Ovilavis* (modern Wels).[772] Traditionally it was believed that the entire region was governed from these two centres (Fig. 5.7). However, no clear evidence concerning the region's organisation exists.[773]

The region was well inhabited during the pre-Roman period. Some of the Roman settlements, such as Hallhein and Kuchl, were inhabited long before the Roman conquest.[774] Also new agglomerations arose during the first decades after the conquest. The oldest occupation levels at *Ovilavis*/Wels and Hallstatt-Lahn, for example, date to the first half of the 1st century AD.[775] The Roman centre in Salzburg was the first self-governing centre north of the Alps when it was given municipal rights by Claudius. An important centre in the territory of *Iuvavum* was the emporium and sanctuary site of *Bedaium*/Seebruck, 45 km west of the town. This settlement, located on the banks of the lake Chiemsee, performed important economic functions, not least in the terms of the supply of food. *II-viri* of *Iuvavum* regularly organised festivities for the god of the lake. Also a road station and a post for *beneficiarii* existed in *Bedaium*.[776] The Salbach flowed right through the Roman centre of *Iuvavum*. Several vital roads also met here, providing a connection to *Teurnia* and *Virunum* in the south of Noricum, to the *municipium* of *Aelia Augusta* in Raetia, and to the centre of *Ovilavis* and the southern Danube road in the north. The territory of *Iuvavum* therefore had several road stations, such as *Artobriga*, *Bedaium* and Pfaffenhofen, the latter probably at the western end of the town's territory, and eastwards *Tarnatone* and Mösendorf which is thought to have been on the border of the territory with *Ovilavis*.[777] This town had also a good location, on the banks of the river Traun and immediately adjacent to the important east-west route which ran south of the Danube. The community of *Ovilavis* gained municipal rights under Hadrian. The eastern border of the centre's territory probably coincided with the river Enns and in the north with the Danube and the military frontier. The administrative changes of the late 2nd and 3rd centuries AD must have had an impact on these borders. For instance when the legionary station of *Lauriacum* in modern Enns was founded, or when *Ovilavis* became an honorary *colonia* and housed the seat of the provincial governor.[778]

[769] Lang 2011.
[770] Lang, Traxler and Kastler 2017.
[771] Kastler, Lang and Traxler 2017, 7.
[772] The latter became a *colonia* under Caracalla: *colonia Aurelia Antoniniana Ovilavensium*.
[773] Kastler, Lang and Traxler 2017, 7.
[774] Ibid., 10.
[775] Ibid., 11.
[776] Keller 1981, 121-123; Burmeister and Schröter 1998, 73-74; Grassl 2016, 121-123. The site in Seebruck is also discussed in chapter 3.
[777] Moosleitner 2004a, 12-14.
[778] Kastler, Lang and Traxler 2017, 12-13.

It was around AD 179 - the same time as the establishment of the legionary base in Regensburg – that another legionary unit was sent to *Lauriacum*. A small centre, including a road station and a military base, existed here already before the arrival of the *Legio II Italica*, probably since the middle of the 1st century AD. The suggestion that *Lauriacum* became a self-governing centre is controversial, but it is certain that the arrival of the legion increased the overall population and influenced the local economy.[779] According to P. Herz, this event doubled the number of soldiers stationed in *Noricum* and consequently also the market demand for food, clothing and other products.[780]

5.5.1 The rural sites in north-west *Noricum*, their appearance and their production

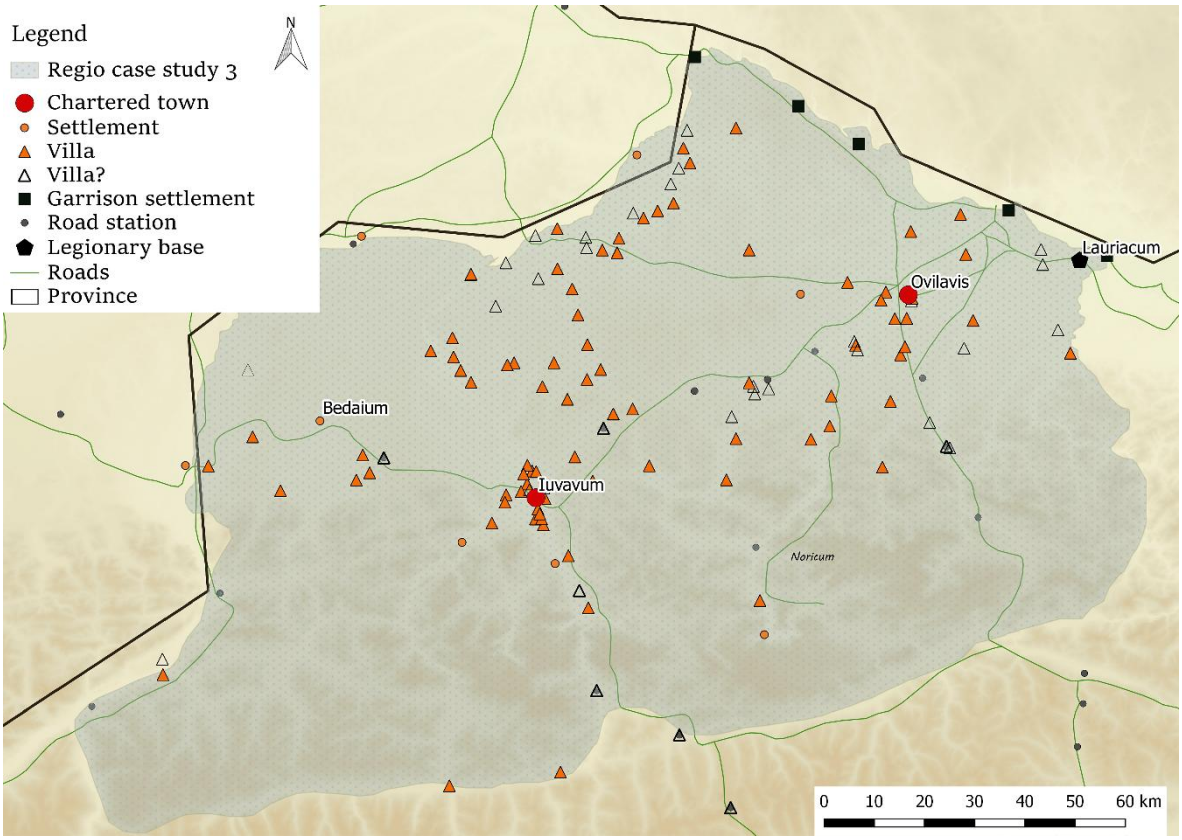


Fig. 5.7: Overview of all sites included related to case study 3

For the analysis of rural life in north-west *Noricum* data were collected relating to 145 sites (Fig. 5.7), including 88 *villae* sites, a further 29 possible farmsteads,[781] 6 garrison sites including one legionary base (*Lauriacum*), the two self-governing centres of *Iuvavum* and *Ovilavis*, and 20 settlements of which 13 probably performed as (or hosted) a road station. It must be stressed that these 145 sites

[779] Traxler 2009, 190-191. In response to the strong increase in population around the end of the 2nd century around Enns, one assumes a more densely occupied and farmed hinterland. Yet, these *villae* are not archaeologically attested. The low number of archaeological sites may be explained by modern building projects or the destructive factor of modern agricultural techniques. Another possible explanation is that the food for the legion and its followers was supplied from elsewhere, via the Inn and the Danube (Kastler, Lang and Traxler 2017, 19.).

[780] Herz 2012, 56-60. He mentions a minimum of 12,500 more people living at the Norican frontier after AD 180.

[781] The places categorised as *villa* are sites where the archaeology shows the clear infrastructure of a farm estate, such as a residence house with several additional buildings or where at least signs of a luxurious life style are attested, such as wall paintings and mosaics.

are only a proportion of those inhabited during the Roman period.[782] The oldest *villae* sites were concentrated around the centre of *Iuvavum*/Salzburg and date to the early 1st century AD. Their number increased during the Flavian period, when *villae* also appeared around *Ovilavis*/Wels and along the river Inn in the west. It is assumed that until the second half of the 1st century AD the Late Iron Age (rural) settlements, including villages consisting of simple huts, also remained inhabited. The question arises whether the model of the Roman *villa* displaced the indigenous living traditions. Since it was only by the end of the 1st century that stone-built constructions became common in the region, it remains difficult to estimate the overall level of rural occupation. Other forms of settlement evidence remain more difficult to detect and wooden dwellings often escape archaeological research.[783]

The character of rural inhabitation

In general, the *villa* sites in north-west Noricum did not differ from the general description of Roman farmsteads elsewhere in the northwestern provinces. In the region, both estates with an axial- and a scattered layout are known, although the latter seems the dominant type.[784] Some of these *villa*-domains were fenced, such as those at Goldegg-Hausfeld, Loig and Lederau.[785] Geophysical survey has revealed more examples, such as the *villa* in Steinhaus.[786] In other cases, for example Berndorf, Kerath-bergheim and Pfongau II,[787] neither excavations nor surveys showed any evidence for a fenced area, leading to the suggestion that some farmsteads were perhaps lined by vegetation or were left unenclosed. In many cases, the dimensions of these domains are poorly known.[788]

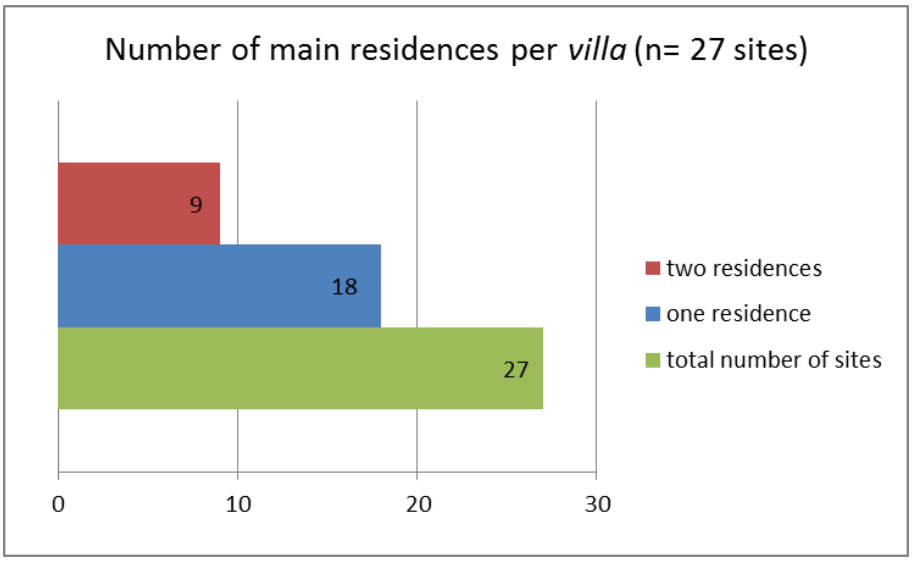


Fig. 5.8: Number of residences on a villa domain

[782] S. Traxler speaks of a gap in Roman farmsteads north of Wels and around Enns which he attributes to the current state of research (Traxler 2004, 167; 2014, 118-120.).
[783] Kastler, Lang and Traxler 2017, 15-16; 23-24.
[784] Traxler 2004, 177; Kastler, Lang and Traxler 2017, 21.
[785] Goldegg: Hampel and Imre 2017, 94. ;Loig: Gruber 2014, 60.; Lederau: Schulz and Jäger-Wersoring 2004, 66-72.
[786] Traxler 2014, 120-121.
[787] Respectively: Kastler *et al.* 2012, 69-88; Ries 2012, 275; Kastler 2010a, 96.
[788] Traxler 2004, 190.

As elsewhere, the Roman rural estates of northwest Noricum were characterised by an ostentatious main residence building, which generally shows a high level of architectural variation.[789] Similar to the *villae* in the region of Regensburg,[790] two residences have regularly been identified on one estate. The bar chart above includes 27 sites on which information about the residence could be collected (Fig. 5.8). This shows that a second manor has been found at one-third of the *villae* sites researched in north-west Noricum. In these cases, the private bathhouse was usually situated between the two houses.[791] In general, the main residence tended to be two or three times bigger than these second residences (Table 5.1).

Table 5.2: Comparison of the two residences at certain *villa*-sites

Name	Residence 1 (m^2)	Residence 2 (m^2)	Multiplier	Decorative elements residence 2	Reference
Bachloch	?	176		*Porticus* Hypocaust Wall paintings	(Schulz and Jäger-Wersoring 2004, 37-45.)
Bad Endorf	667	360	1.9	Hypocaust	(Kühne 2012a, 85-86.)
Bernau	936	240	3.4		(Kühne 2012a, 87.)
Berndorf				Hypocaust Wall paintings	(Kastler, Zickgraf, Buthmann *et al.* 2012, 69-88.)
Erlstätt				Hypocaust mosaic	(Kühne 2012b, 206.)
Glas	1,440	484	3		(Kastler 2010c, 568-575.)

It is mainly the presence of architectural and decorative elements, such as a *porticus*, wall paintings or mosaics, that distinguishes these second residence houses from workhouses on the property. One has to take into account the need for living space for the permanent labour forces and their families on these *villae*, but these secondary residences seem too luxurious to have served that purpose. More modest accommodation is usually interpreted as homes of the work forces, for example buildings F en G of the *villa*-site in Pfongau I.[792] Several explanations have been given for the existence of two residences on one farm estate. R. Kastler has found a possible explanation by considering the main manor as the residence for the owner of the estate and ascribing the secondary one to the manager. However, he refers also to Hell's interpretation of possible *tabernae* or inns and to J. T. Smith's suggestion of shared ownership.[793]

In some cases the residential area was separated from the agricultural part of the estate by a wall, for example in Bad Endorf and in Oberschauersberg.[794] At the site of Pfongau II small fences seem to indicate separate allotments for gardening or livestock.[795] However, additional buildings and workshops on these estates have been less well investigated, since originally excavations were mainly focused on the *pars urbana*. Furthermore, these buildings for artisanal and agrarian work

[789] Lambers 2017, 188. For a more elaborate typology on the *villae* in northwest Noricum, see Traxler 2004, 179.
[790] Fischer 1990, 41.
[791] Kastler, Lang and Traxler 2017, 30.
[792] Ibid., 33.
[793] Smith 1997, 195-198; Kastler 2010a, 99; Lambers 2017, 189. If these secondary residences were *tabernae*, one would expect to find more individual guest rooms. When J. T. Smith speaks of joint ownership, he is referring to large estates that housed two separate living compartments.
[794] Bad Endorf: Kühne 2012b, 208. Obershcauerberg: Tober 2004, 87-93.
[795] Kastler 2010a, 95.

were often timber constructions, as is presumed for the site of Weyregg am Attersee for example.[796] As a consequence, their archaeological visibility is also much lower. At some sites more than ten additional buildings have been found. As little is known about their chronology, it is unfortunately impossible to say whether or not all these workshops were used simultaneously.[797]

The *villae* of northwest Noricum were often located close to a stream or a river and were generally well connected to the road network.[798] A very small number had an exclusive location, as for example the *villa* of Weyregg which overlooked the Attersee. This estate was probably in the hands of a member of the elite of one of the neighbouring towns. Three hundred metres from the *villa* a small harbour installation, dating from the 2nd to the 3rd century, was discovered at the lakeside. It seems unsuitable as a mooring place for boats, but it must have been a good fishing spot.[799]

Rural production

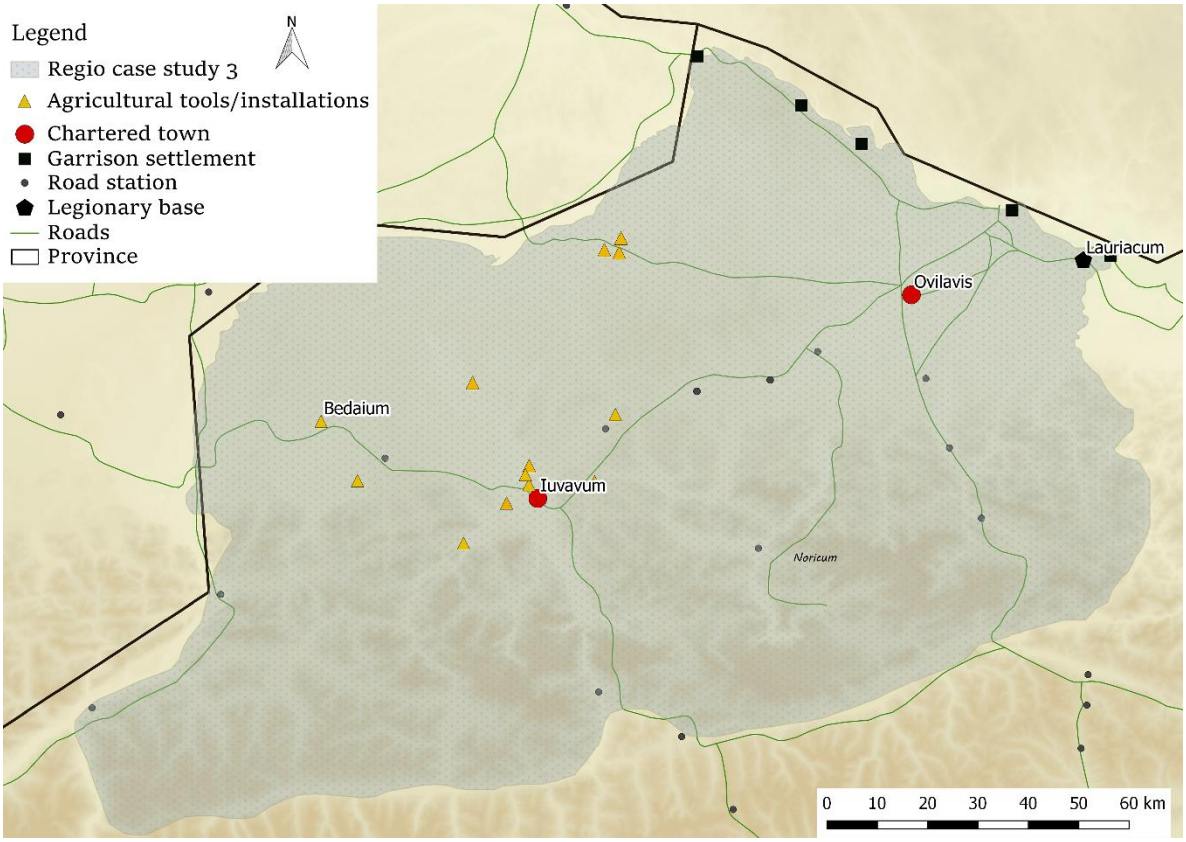


Fig. 5.9: Sites with indications of agricultural activity

Undoubtedly the vast majority of *villae* in north-west Noricum were primarily involved in agricultural production. The archaeological evidence for these farming activities is, however, very hard to identify. Figure 5.9 shows the *villa* sites where indications of such activities have been found, either

[796] Traxler 2004, 94-110.
[797] This issue formed one of the aims in the recently published doctoral research by T. Schubert, in which the central focus was on the artisanal and agrarian buildings on Roman *villae*, their use and chronology (Schubert 2016.).
[798] Kastler *et al.* 2012, 69-71; Kastler, Lang and Traxler 2017, 24; 33.
[799] Traxler 2004, 94-110; Breitwieser and Jansa 2012, 12 ff.

in the form of tools, such as at Hof-Elsenwang, or of oast installations,[800] as has been attested in, for example, Holzhausen, Karlstein, Liefering, Neumarkt-Pfongau and Salzburg-Forellenweg.[801] The most fertile lands of the region were to be found south-east of the river Inn, north-west of Salzburg and Wels. Not everywhere was the soil suited for crop growing and a significant role for animal husbandry is assumed.[802] This would correspond nicely with the intensive textile production that is assumed in the region of Salzburg, based on the high number of textile tools found on rural sites in the region and on a marble relief from a tomb stone picturing a scene of cloth packing, found in Salzburg.[803]

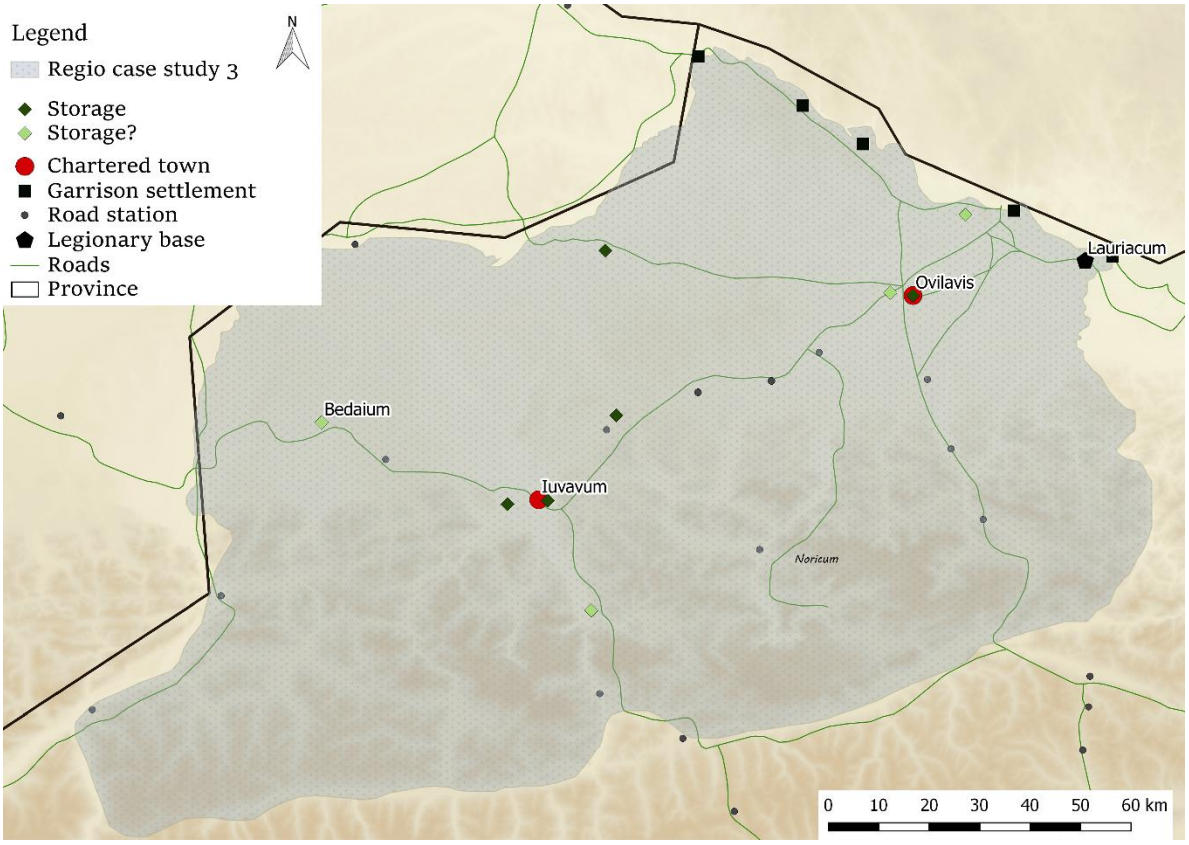


Fig.5.10: Sites with indications of storage of agrarian products and other goods

Some sites have yielded remains of *horrea* or storage halls. Based on the current state of research the majority of these buildings have been found on sites near town centres thelselves (Fig.5.10). Several rooms with traces of grain were excavated in Wels, for example. These rooms have been interpreted as *horrea.*[804] The *villa* sites of Altheim-Simetsberg and of Pfongau I show that rural estates, too, were provided with halls used for storing crops. It is assumed that these buildings had drying or storage rooms on the first floor, while on the ground floor other activities might have been

[800] An oast house is a drying kiln for wheat and other crops (German: eine Darre).
[801] Lang 2011, 77.
[802] Traxler 2004, 190. Concerning the research conducted on Roman rural settlements in northwest Noricum, the use of land remains one of the underexposed topics (Kastler, Lang and Traxler 2017, 7.) In conversations with L. Lambers, I learned that the modern land use in the region still consists of a mixed form of agriculture.
[803] Gostenčnik 2013, 72-74. Textile production was probably an important industry for Noricum, since this business is mentioned in both the Dioceltian Price Edict and the *Expositio totius mundi*: 2009, 55.
[804] Miglbauer 2012, 122.

carried out. Compared with the *horreum* found at the *villa* in Loig, 4.5 km south-west of Salzburg, these storage halls were of modest size, measuring 7.5 m x 7.2 m and 16 m x 25 m respectively.[805]

The hall at the estate of Loig was 122 m x 50 m when it was constructed during the 2nd century AD and 148 m x 50 m after its expansion in the 3rd century. Its storage capacity is estimated at a maximum of about 95 000 kg of grain.[806] According to C. Gruber this storage capacity requires farmland of around 350 ha to 450 ha for the enterprise in the 2nd century and of 850 ha to over 1,000 ha in the 3rd century.[807] It is likely that a large amount of land belonged to the *villa* of Loig, since no other farmsteads are known in its surrounding area. It has been suggested that some of the *villae* within a perimeter of 2.5 km to 6 km were leaseholds of the estate of Loig, including the sites of Gepping, Hellbrunn, Liefering, Maxglan and Morgz.[808] Wether such a large *horreum* existed in Loig because the *villa* functioned as a central depot for the collection of grain, either from its own land or from leaseholds, is a question that C. Gruber leaves unanswered.[809] However, *villae* where *horrea* have been found are often located in the vicinity of main roads and road stations, such as the ones at the *villa* sites of Kellau (Kuchl road station), Pfongau II (Neufahren road station) and at the emporium of *Bedaium/*Seebruck (Fig. 5.10). This may point to a central role in the collectionof agricultural surpluses.[810]

Many more activities were carried out on these farmsteads in addition to farming, including the production of ceramics (both building material and pottery), metal processing, bone- and woodwork. The last two crafts are less often attested, partly due to their perishable nature. At some *villa* sites animal bones with cut marks have been found, such as in Anif and Engelhof.[811] At Loig, antlers, intermediate products and pearls were found.[812] There is no doubt that wood was worked at *villa*-sites, but apart from a few tools, the evidence is scarce.[813] It is deemed more likely that the woodwork done at *villae* was for construction purposes and that skilled people from elsewhere were hired for this job.[814] An 11 m long dry dock for logs was found at the *emporium* of Seebruck/Bedaium.[815]

At the sites of many *villae* a certain amount of metal processing has been attested. The evidence consists mainly of iron slag and casting waste (Fig 5.11). The size of the workshops or the amount of waste are too small to consider workshops or metal processing as a major source of income. One can therefore only presume metallurgy for home consumption. Nevertheless, compared to the regions of *Gallia Belgica* and *Germania Inferior*, the number of sites in the region of Salzburg where metal

[805] Altheim-Simetsberg: Schulz and Jäger-Wersoring 2004, 9-22. Neumarkt-Pfongau: Lang *et al.* 2010, 116-119; Kastler *et al.* 2012, 61.
[806] Gruber 2015a, 20-42.
[807] Ibid., 42 Table 1.
[808] Ibid., 44.
[809] Ibid.-45.
[810] That certain *villae* performed a 'central' function has been suggested before. C. Flügel and J. Valenta described the Roman farm in Ingolstadt-Etting in these terms. The remains of a water mill discovered here was probably used to process the crops harvested on the land of many rural estates in the surroundings (Flügel and Valenta 2017, 51.).
[811] Lang 2011, 81.
[812] Gruber 2015b, 371.
[813] Woodworking tools were found at the site of Pfongau II: Kastler 2010a, 100.
[814] Gruber 2015b, 375.
[815] Lang 2011, 74.

objects, such as belt attachments and *fibulae* were made is relatively high. F. Lang has explained this phenomenon by assuming that itinerant craftsmen who owned workshops in larger centres travelled around to do some of their work on site.[816]

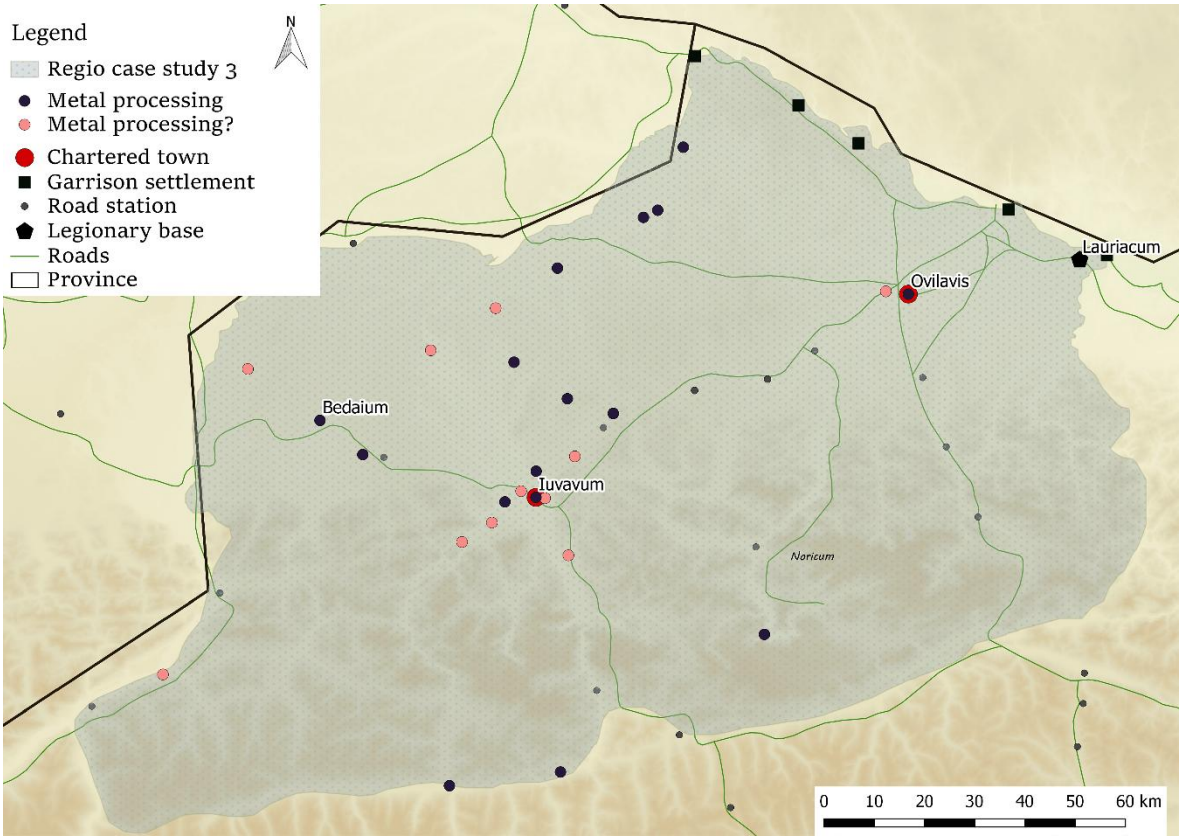


Fig. 5.11: Sites with indications of metal processing

The production of ceramic might have been organised differently. Installations for the production of building ceramics, including *tegulae* and *tibuli*, have been found on farmsteads close to the town centres (Fig.5.12). At the *villae* of Pfongau I, north of Salzburg, two *tegulae* kilns were found which supported a production that was far beyond the needs of a single farmstead. Clay was extracted on the estate itself, or in the direct vicinity (no more than 5 km to 10 km away).[817] When the town centre of *Iuvavum* was rebuilt during the Severan period, a tile production business was founded at the site of Eichentwald, presumably especially for this purpose. It does not seem unlikely that this farmstead belonged to the estate of Loig. Just south of Wels, at Oberschauerberg (Steinhaus) a *villa* was found with a 1,500 m^2 production area committed to the production of building ceramics, including workshops, kilns and drying rooms.[818] Lime too was a popular building material. Recently a battery of at least 12 lime burning kilns was found just outside the legionary fort of *Lauriacum*.[819] A pattern seems to emerge in which ceramic building materials were made especially for construction works near to urban centres.

[816] Ibid., 89-93; 95-103; 2012, 90.
[817] 2011, 107-108; Kastler *et al.* 2012, 64-65; Lang *et al.* 2012, 355-357.
[818] Tober 2004, 87-93.
[819] Traxler and Lang 2016, 19-22.

Cooking wares and fine wares meanwhile appear not to have been mass produced on farmsteads, that is, with one possible exception. In the direct vicinity of the ceramic production centres of Westerndorf and Pfaffenhofen, a concentration of rural sites producing similar wares and even terra sigillata, has been discovered (Fig. 5.13). One of these sites is Amerang-Evenhausen.[820] The connection between this rural production and the ceramic production centres is unclear. It is possible that the local elite tried to join in meeting market demand by producing similar ware or it is even possible that the owners of these workshops were related. Nevertheless, the vast majority of ceramic wares were imported (Fig. 5.14). Some wares were made in workshops in northern Italy or in southern Gaul. Ceramics from the Rheinzabern workshops and their affiliated ateliers could be identified at more sites. In exceptional circumstances *villa* owners used North African terra sigillata, such as in the case of the *villa* in Kellau-Kuchl.[821] U. Ehmig was able to prove that for the import of luxury goods, such as olive oil and wine, the area of Salzburg and Wels relied on the western transport network. These products, originating from the western Mediterranean and especially from Spain, reached north-west Noricum via the river network of the Rhône, Rhine and Danube. This contrasted with the trade contacts elsewhere in the province. Other Norican centres consumed olive oil and wine originating from north-east Italy and the eastern Mediterranean. These products were imported over land, rather than using river transport.[822] Within one province different regions were thus involved in various trade networks, depending on their connectedness and accessibility.

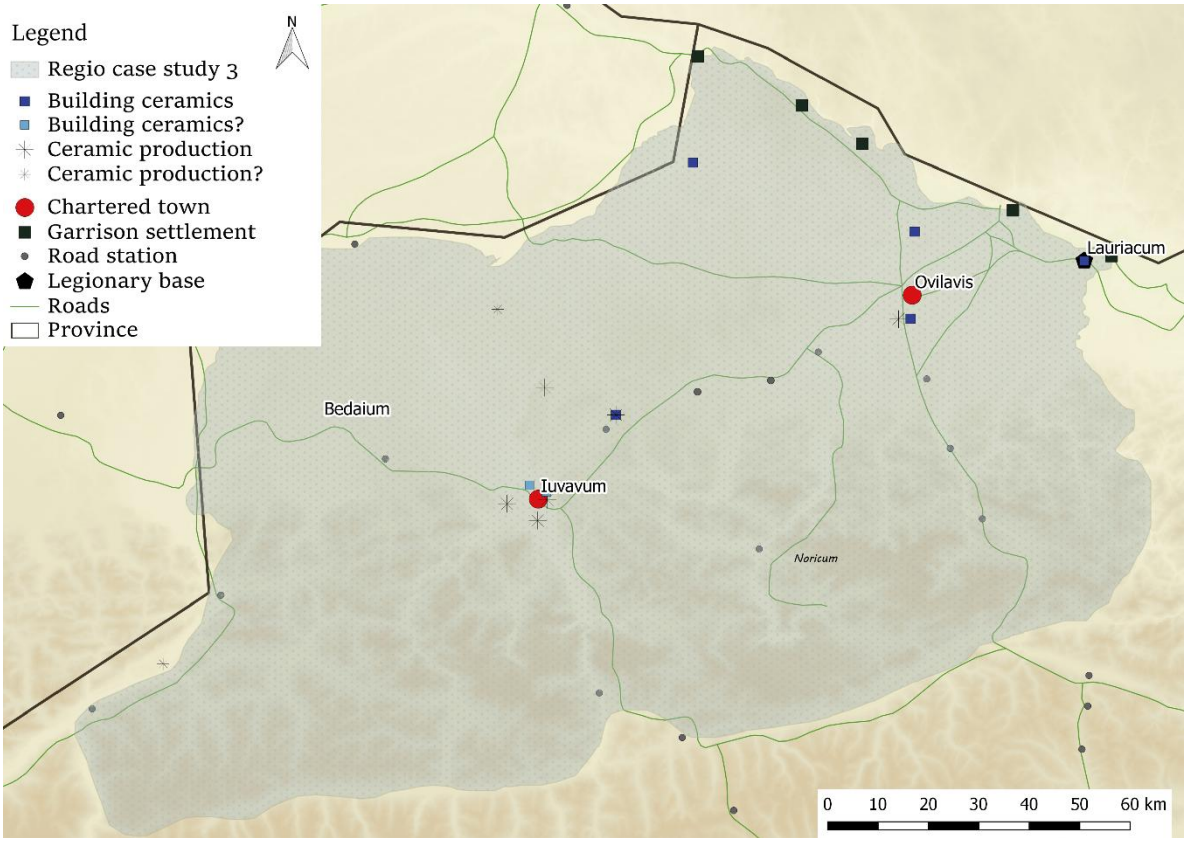


Fig. 5.12: Sites with indications of the production of building ceramics

[820] Lang 2011, 114.
[821] Kastler and Gschwind 2015, 82. The trade route between northern Italy and northern Noricum via Moosham, bringing exotic wares to the Danube, was discussed earlier in the chapter on secondary agglomerations.
[822] Ehmig 2007, 109; 2012,22-35.

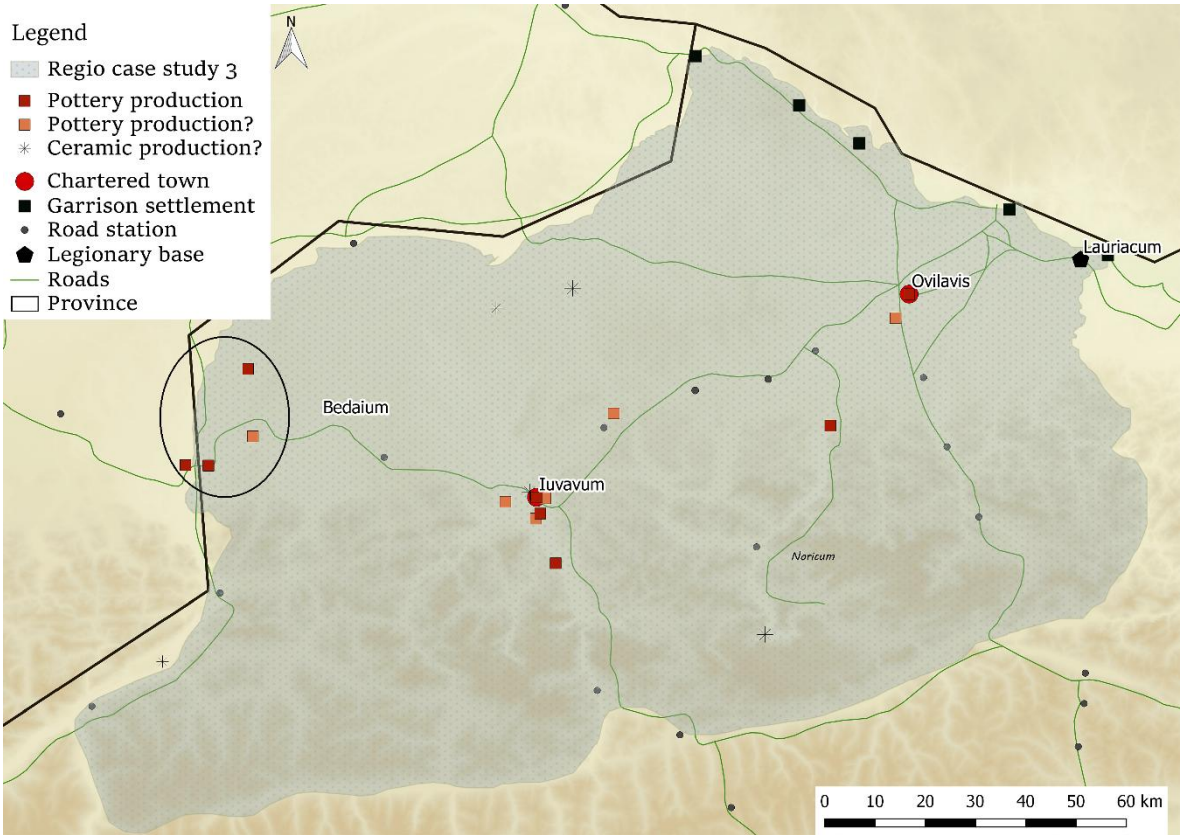


Fig. 5.13: Sites with indications of ceramic production. The rural sites producing terra sigillata ware in line with the manufacturing in the ceramic production centres are encircled.

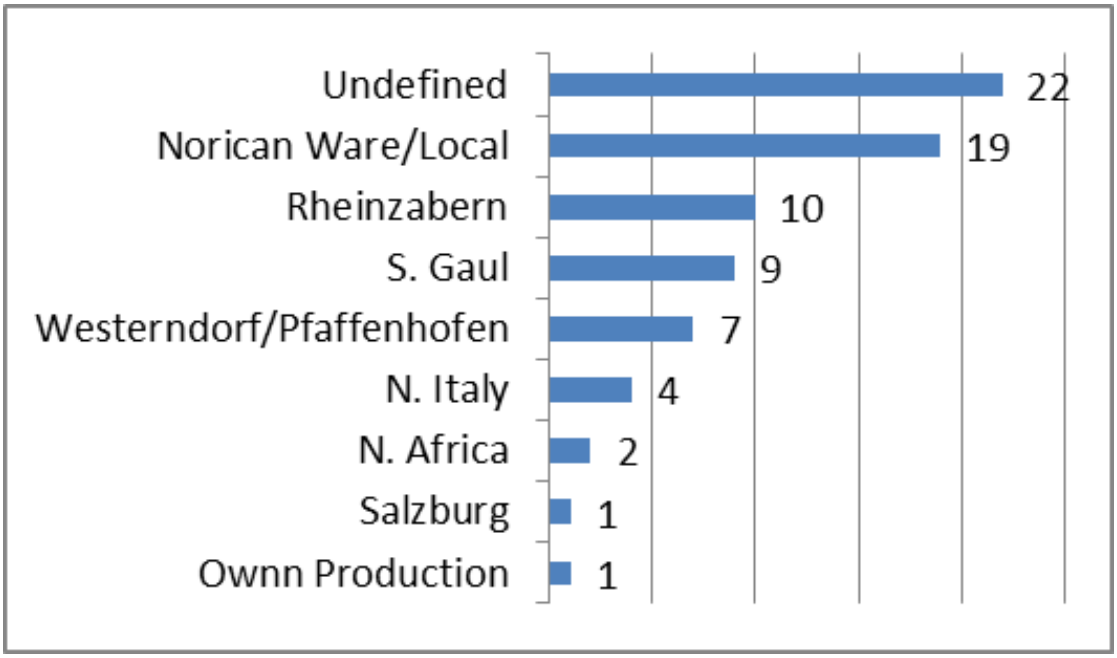


Fig. 5.14: The origin of table ware found in the north-western Noricum

5.5.2 The army as an incentive for rural and urban success

The reinforcement of the military presence in northwest Noricum in the 2nd century undoubtedly had a great effect on the surrounding area. The arrival of the legionary unit in Roman Enns must have been an important factor for the economic activities, including both local production and long-distance import.[823] The Danube undoubtedly formed one of the main routes to redistribute products. We cannot rule out the possibility that goods were supplied from the southern territory of the province, but, in view of the inconvenience of the landscape created by the Alps, overland transport must have been difficult.[824]

The rural community in northwest Noricum was mainly concerned with the production of agrarian products for both the garrison settlements and the two towns of *Iuvavum/*Salzburg and *Ovilavis*/Wels, including crop cultivation and animal husbandry. The waste from skilled crafts conducted on these rural estates generally indicates a low production level. This was mainly personal consumption or was related to maintenance and construction work on site, possibly carried out by *ad interim* craftsmen. The production of building ceramics remains exceptional in the sense that a few estates seem to have been producing especially for construction works in the towns. Generally, workshops for metal processing and coarse ware, were to be found in medium-sized and larger centres. We know, for instance, that a wide range of crafts were practised in garrison settlements.[825] The exceptionally high number of textile tools found in the garrison settlement of *Favianis/*Mautern indicate that cloth making could take place at these centres.[826] A growing research interest in the remains of workshops and artisanal activities in Roman centres has also broadened the insights on production levels in Roman towns.[827] R. Miglbauer referred to the north-eastern part of *Ovilavis* as the town's production quarter, since most workshops were found in this area, including places with pottery production and metal processing.[828] Bone working took also place here.[829] Archaeological excavations have equally revealed many types of production in the centre of *Ivavum*/Salzburg.[830] The production in these towns was related to the local demand. Nevertheless, *Ovilavis*' proximity to the frontier seems to have affected the type of goods manufactured, based on the high level of weaponry and armoury.[831]

There are some indications that the rural population in north-west Noricum felt exploited, because of high taxation (*octava* or *decuma*) on their agricultural output.[832] P. Herz based this assumption on the unrest of the *populus*, which is reported in the funeral inscription of officer Tiberius Claudius

[823] Strobel 2007, 234-236.
[824] Herz 2012, 59. There are, however, indications of a strong connection between the textile production in *Flavia Solva*/Wagna in southern Noricum and the army stationed along the Danube. K. Gostenčnik suggested that cloth making and textile production had expanded to become a specialised occupation in this Roman centre and that the army ordered inflammable equipment among other things from here, see Gostenčnik 2010, 62-64; 2013, 69-71.
[825] Wamser 2000, 124-129.
[826]Gostenčnik suggests that the textile occupancy in Mautern did not cover the entire process, that for example spinning and sewing were done elsewhere: Gostenčnik 2013, 72.
[827] In the case of the Roman town of Tongeren (Belgium): Vanderhoeven 2015, 199.
[828] Miglbauer 2012, 122.
[829] Gostenčnik and Lang 2010, 204.
[830] Lang, Knauseder and Kovacsovics 2012-117.
[831] Jilek 2005, 165-167.
[832] Herz 2012, 59-60.

Candidus.[833] Revolts by peasants and farmers are known from other regions as well, such as Roman North Africa.[834] Also in Tacitus' *Agricula* one finds the admission that the taxation on the local population of Roman Britain was too high.[835]

Information about the ownership of the rural estates is generally scarce, but a few inscriptions are enlightening. A funerary inscription found in Mondsee belonged to a veteran who lived in *Iuvavum* and owned a farmstead in the countryside.[836] A similar inscription from a veteran of the *Legio II Italica* was found at Litzlberg am Attersee.[837] It is unfortunate that the associated *villae* have not been located yet. In other words, veterans moved away from the garrison settlements into the countryside and the towns.[838]

Taken together, these findings illustrate the local dynamics between the presence of the army, the increase of rural activity during the 2nd to 4th centuries and the flourishing town centres of *Iuvavum* and *Ovilavis*. It seems that the rural elite had a history in the army and became responsible for the increased prosperity of the countryside and the urban centres in north-west Noricum. It is probably also in this context that one should place the upgrade of *Ovilavis* to a *colonia* during the Severan period.

5.6 Conclusion

The relationship between larger centres and their hinterland formed the central focus of this chapter. The academic discourse concerning urbanism in antiquity increasingly endorses the importance of the study of entire settlement systems. It is fair to state that Roman towns *per se* would not have existed without their environment, including all other forms of settlements. In recent times, a strong call for research focused on rural activities has dominated the research agenda. Attempts are being made to overcome the dichotomy between town and countryside.

Recent excavations and especially geophysical surveys carried out over the last few decades have considerably increased not only the number of known rural sites, but also the knowledge about them, including in the northern Alpine region. Three case studies concerning the frontier region in the provinces of Germania Superior, Raetia and Noricum, were discussed in more detail. There remains however a backlog on certain aspects. Older excavations often focused on the main residence for example, resulting in a generally poorer understanding of the size of *villa*-estates and their workshops. Overall, *villa* sites varied between 1 ha and 5 ha, whilst the associated land could be 50 ha to 100 ha large in size.[839] One can state that a rather wide variation of *villae* existed in the northern Alpine region, diverse in terms of their lay-out, their wealth and their size. Furthermore, the rural settlements must have had an even larger variation, including indigenous living forms. *Villae*

[833] CIL 2, 4114: adversus rebelles hh(ostes) pp(ublicos) / item Asiae item Noricae
[834] Hauken 1998, 2: concerning the *saltus Burunitanus*; Hobson 2015, 54-56. The increased pressure on the agriculture in N. Africa corresponded, according to M. Hobson with the higher level of export on African ceramics to Italy during the 2nd century.
[835] Onken 2003, 61. – Tacitus, Agricola. 19.
[836] Schulz and Jäger-Wersoring 2004, 73-79.
[837] Traxler 2004, 139.
[838] More evidence can be found in the large amount of *militaria* and the number of funerary monuments of veterans in *Ovilavis* (Jilek 2005, 165; Hemmers and Traxler 2012, 37-70.
[839] Flügel and Valenta 2017, 51.

were generally located on a region's most fertile soils and were in fact always located relatively close to the road network. The latter was of high importance for the integration of rural sites in the settlement system.[840] It has been shown that the rural estates' primary occupation was agrarian. The few exceptions of specialised artisanal production prove the rule. The stone quarries in the region of Mayen evidently encouraged stone working also in the rural context. Generally, however, smaller and bigger centres formed a more natural habitat for skilled *métiers*. This implies that both garrison and civilian centres were places of consumption concerning agricultural products, but places of production concerning non-agricultural products, although the production level seldom exceeded the demand from the local market. Collaboration between rural estates and urban workshops is also known from elsewhere, for example, the meat supply in the *colonia Augusta Raurica*/Augst in Germania Superior and the *municipium Atuatuca Tungrorum* in Germania Inferior.[841]

The three case studies also confirmed that the arrival of the Roman army must have been a stimulus for the rural inhabitation. The positioning of a legionary unit put more pressure on the countryside in the case of Regensburg and northwest *Noricum*. The stone quarrying around Mayen and the inhabitation of the countryside around it were originally connected to the construction of the infrastructure at the frontier in both Germania Superior and Inferior. The army thus increased the demand of agrarian products, but probably also contributed considerably to the number of rural inhabitants, since many veterans retired on a farmstead not too far away from where they had been stationed. Whilst in the region of Mayen this expressed itself mainly in wealthy estates in the countryside, a stronger connection could be observed between the urban elite of the chartered towns of *Iuvavum* and *Ovilavis* and estate owners in Noricum. Roman *villae* must thus have performed essential functions within the settlement system. Certain rural estates even performed a central function, in the collection, storage and redistribution of goods for example. This shows that the Roman settlement system only existed in the way we know it because of the actions and interactions of people who lived in not only the largest but also the smallest agglomerations.

[840] Vanderhoeven 2015, 190.

[841] Augst: Deschler-Erb 2002, 232-235.; Tongeren: Vanderhoeven 2015, 192-199. Veldwezelt, Kesselt, Heerlen-Trilandis and Jesseren-Bosstraat, Kerkrade-Winckelen are some of the settlements mainly investing in cattle breeding or nursing mentioned by A. Vanderhoeven and are characterised by byre houses and drinking pits. The butchery installations found in the Hondstraat and the Elisabeth wall correspond well with the idea of cattle breeding in the countryside and workshops in the centre processing the meat and secondary products for sale in the local market.

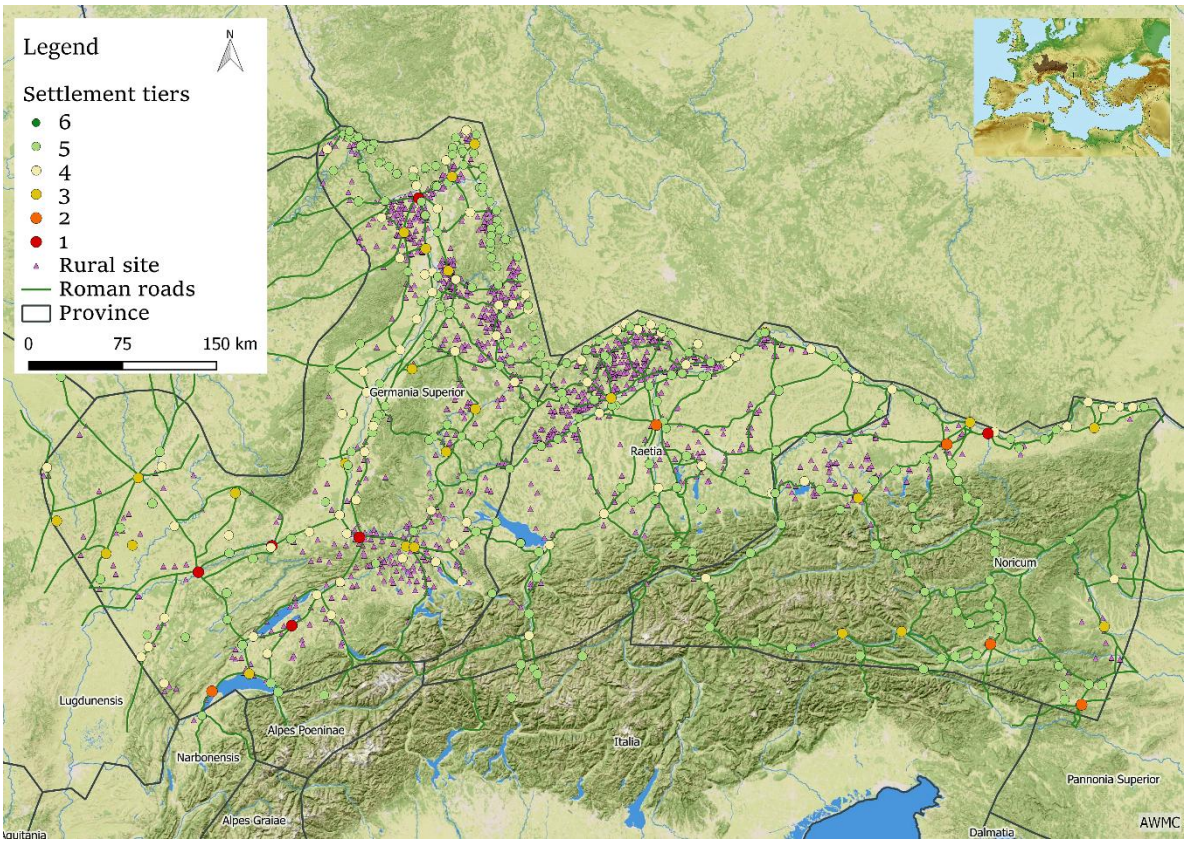


Fig. 5. 15: Settlement system with rural sites

The overall pattern of the settlement system leaned towards a southern area characterised by larger, more monumentalised centres and chartered towns and a northern half which was mainly occupied by smaller centres. Mountains were a dominant feature in the shaping of the settlement system as were rivers, roads and old routes. Rural sites are generally found in the vicinity of most Roman centres. The boom in *villae* in the immediate hinterland of the frontier and especially north of the Danube and east of the Rhine is unmistakably an indication of the granary function the area performed (Fig. 15.6). Due to state and military infrastructures, the settlement system in the northern Alpine region was relatively well interconnected. Nevertheless, not all areas in the region seem to have been densely occupied, which results in gaps within the network. How far this settlement system represents the Roman reality and what percentage remains undiscovered or uninvestigated is an unanswerable question. We can only form an understanding of the Roman settlement system based upon what remains of it today. These remains help us to formulate research questions and at the same time feed the investigations. The way these ancient remnants are managed today is therefore of equal importance.

6. The Roman centres in the northern Alpine region today

In the last 40 years,…, archaeology has undergone a transformation from being a relatively restricted area of interest, pursued by a few and interpreted by even fewer, towards having an increasingly extensive public profile. … recognition of the relevance of archaeology in a globalizing world does appear to be on the increase for a variety of reasons that are political, social and economic.[842]

Today, few archaeologists would dispute that our understandings of the past are a product of the present. Moreover, archaeology is accepted as a public concern with political, ethical and social implications in wider society.[843]

I find it undersandable that the social relevance of a research project is questioned and reflected upon. Additionally, attempts to underline its possible contributions to societal issues should be encouraged. Indeed, archaeological and historical research is funded and conducted in part because of 'valuable and educational' contributions to society. However, all too often a clear substantiation and explanation of these so-called intrinsic public values is lacking.[844] Moreover, these values are no longer endorsed as self-evident or considered satisfactory even within both the archaeological and heritage fields and by societal partners.[845] In particular under the influence of Critical Heritage Studies (CHS), the different roles and functions of heritage and its professionals, amongst which archaeologists and historians, are heavily questioned.[846]

In this chapter I want to reflect upon the heritage derived from the remains of the Roman settlement system in the northern Alpine region whilst using the appraisals of the critical heritage debate as a guideline.[847] The aim of this chapter is not to plead for - nor to illustrate - the social relevance of the disciplines concerned, since numerous studies and articles have been published on this already.[848] Instead, I will try to give an impression of how the archaeological remains of Roman centres and their monuments in the northern Alpine region are managed, and how they are presented to and experienced by the public, or used in their contemporary context. I will try to shed light upon what story about Roman town life is actually told and by whom. I hope in this way to bring together the academic interpretation of and research on this Roman past on the one hand and its presentation to the wider public on the other. The ultimate goal of this chapter is to determine general trends in - as well as - implications of the heritage policy pursued.

The available literature on the various ways the work of archaeologists and historians is communicated to others and the publications concerning the relationship between these academic fields and the wider society are generally dominated by case studies. This can result in an absence of adequate critical reflections.[849] This chapter may therefore create the opportunity to observe some

[842] Schadla-Hall 2007, 75.
[843] Jones 2013, 163.
[844] Carman 2003, 97; Jones 2013, 171.
[845] Stone 1997, 27; Stottmann 2010, 1.
[846] Waterton and Smith 2009.
[847] The course *Challenging Eternity*. *World Heritage, Urban interventions and the city of Rome,* KNIR (Koninklijk Nederlands Instituut Rome), which I attended in April 2017, definitely helped me to think and rethink my vision upon heritage management and above all gave me plenty of examples of the complexity of heritage.
[848] The social applications are varied, such as contributing to the collective historical and cultural knowledge and reshaping our ideas about the past. However, archaeology's social embedding reaches even further, ranging from conveying tools for critical reflection, encouraging economic incentives, improving social cohesion and acting as mediator in politico- cultural conflicts, to contributing to the quest for a sustainable society. See for examples: Stone 1997, 23-32; Stottmann 2010, 1-3; McNeill 2011, 80-89; Pollock-Ellwand 2011, 236-242; Stone 2013, xiii.
[849] Carman 2003, 118-119.

regional trends within the wider area of the northern Alpine region, including the modern countries of Austria, Germany, France, Slovenia and Switzerland.[850]

The chapter starts with a brief introduction to the changing climate of heritage and its management. The following sections will discuss the preservation levels of - as well as - applied approaches to the presentation of the Roman monumental remains in the northern Alpine region in the light of the Critical Heritage Studies. The UNESCO World Heritage Site of the Frontiers of the Roman Empire will be considered as a unique case of heritage management and will allow reflection upon the Authorised Heritage Discourse. A final section will give a reflection upon the heritage practices encountered.

6.1 Short introduction to the current heritage debate: the influence of critical theory

6.1.1 Developments within the heritage field

Under the influence of the rise of Critical Heritage Studies (CHS) and the leading work of D. Lowenthal and L. Smith among others, many traditional ways of making and experiencing heritage have been questioned.[851] While until the late 20th century heritage was mainly concerned with physical remains and monuments of the past which were considered as grand, old or historically and aesthetically important, today a tendency towards an expanding concept of heritage can be observed, which also includes, for example, non-physical culture.[852] Heritage is in other words increasingly recognised as a cultural practice.[853] The field of heritage studies has also been confronted with a growing realisation that the value of heritage is heavily dependent on its societal context and is not necessarily intrinsic to the material remains themselves.[854] L. Smith has even argued that all heritage is intangible, because meaning and value constitute the real determining factors.[855] One of the main questions in this debate is still what are these values and who should be defining them. Although much research into value-based management has been conducted,[856] a major obstacle is the ascendancy of the traditional heritage authorities, a selected and powerful group of people who appropriated the right to define heritage and decide the management policies according to their interests. This so-called Authorised Heritage Discourse (AHD), in which experts are assigned the role of the only stewards and caretakers of the past, is institutionalised by conventions and charters with repercussions for international and national levels of heritage management, constituted by lobby groups, such as ICOMOS and UNESCO. These conventions determine what heritage is, how and why it is of great importance and what the best heritage policy is. Moreover, these codes maintain and legitimate the authority of this heritage discourse.[857]

Only a few sites are recognised as World Heritage within the area of the northern Alpine region. The city centre of Salzburg in Austria, for example, is praised because of its Medieval heritage, but its Roman past is not recognised as such. The same applies to the city centre of Bern in Switzerland.

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[850] Ibid., 119; Callebaut 2004, 17.: These authors have pointed out that every country has different approaches towards public outreach and public archaeology practices. Everywhere people have different reasons and motivations for whether or not to preserve archaeological remains and other ideas about what to do with it.

[851] From the 2012 Manifesto of the Association of Critical Heritage Studies (ACHS) which was written by L. Smith and is accessible on the website of this organisation: http://www.criticalheritagestudies.org/history/. D. Lowenthal's book (*The Past as a foreign country*, is an often cited work and a must-read when reflecting upon heritage studies. *The uses of heritage* (2006) is only one of L. Smith's many publications and immediately confronts the reader with critique upon past and current heritage management policies and approaches.

[852] Shalaginova 2012, 4 ff.

[853] Smith 2006, 44 ff. Smith 2099, 44-45.

[854] Harrison 2010, 25-26.

[855] Smith 2006, 56.

[856] Lippe 1984-11; Smith, Messenger and Soderland 2010; Ababneh 2016, 41.W.

[857] Smith 2006, 29-34; Smith & Waterton p 29-30; Cleere 2007, 72.

Strasbourg is on the list in recognition of its monuments from the 15th and 18th centuries. The list of World Heritage Sites does include Roman artefacts, within the modern countries involved, but not within the northern Alpine region as defined in this research. For France, one finds the following heritage subjects listed: the Roman monuments in Arles, the Roman theatre and its surroundings in Orange, the Pont du Gard, and the historic site of Lyon. For Germany, the Roman monuments in Trier are recognised as heritage of world value. The only Roman World Heritage site in the study region is the German-Raetian Limes.[858] This site will therefore be treated separately in order to investigate the effects of such an authorised heritage label in more detail (section 6.5).

Critics of the Authorised Heritage Discourse (AHD) have pointed out that the objects of heritage as well as the concept itself have been restricted, as as the active involvement of a large group of the target audience to whom that heritage also belongs. Equally, the possible uses of heritage were never fully explored because of this very narrow vision of heritage management, dominated by a top-down approach and a specifically western orientation.[859] Heritage management should by contrast pursue a constructive policy based upon the ideas of all the different stakeholders, and should ultimately aim to increase the significance to society of the environment and heritage. During previous decades scholars have been denouncing the discrepancy between the academic thinking on the one hand and heritage management guidelines and practices of professional institutes, governments, cultural bodies and agencies on the other.[860] Today, these new ideas are gradually finding their way into international policy-making institutes, such as EU, ICOMOS and UNESCO, but progress on this front is slow.[861] The UNESCO convention of 2003 recognises the importance of intangible heritage.[862] The ICOMOS charter of 2008, on the interpretation and preservation of Cultural Heritage Sites, clearly states that what constitutes heritage is an interpretation by current society, that conservation can only be realised through communication and the encouragement of inclusiveness, whereby all stakeholders and communities are actively involved.[863] The *Recommendation on the Historic Urban Landscape* (UNESCO 2011) is a clear attempt to provide a holistic approach that takes to heart the goals of heritage conservation as well as of social and economic development, in particular of built-up environments.[864]

6.1.2 A critical archaeological discourse

Similar trends can be observed within the subdisciplines of heritage, including archaeology and archaeological heritage management (AHM). The engagement of the public, for example, is gaining more and more attention as an academic topic in its own right.[865] Within public archaeology, one understands '*the various ways in which the work of archaeologists is made available to others and the relationship between archaeologists and other groups of people',*[866] but much ambiguity and debate still exist about what exactly it should involve.[867]

The importance of the study of the past for the general benefit of society, its remains and the position of its professional caretakers was hardly questioned within the 'positivist approach' held by the New Archaeology. Since the late 20th century, however, the increased influence of fundamental principles of critical theory and post-modern approaches within the discipline of archaeology have stimulated growing attention for societal and political interests that tie remains of the past to the

[858] Website: List UNESCO World Heritage Site.
[859] Smith 2006, 11; 29-34; Harrison 2010, 26-27; Smith and Waterton 2009, 34; 43-44; Waterton and Smith 2009, 29-30; Ababneh 2016, 41.
[860] Skeates 2000, 9-10.
[861] Skeates 2000, 11-18.
[862] UNESCO 2003.
[863] ICOMOS 2008, more specifically in the preamble and in the Objectives nr.6.
[864] UNESCO 2013, 5.
[865] Copeland 2004, 133; Merriman 2004, 3.
[866] Carman 2003, 118.
[867] Jones 2013, 166.

present.[868] Archaeological heritage now no longer embraces only the remains of the material culture of past societies it equally involves the process in which these remains of the past are again evaluated and used in the present.[869] Within the archaeological field, this paradigm shift has also caused a relativisation of the so-called inevitable benefit for society of archaeological remains and of the legitimated authoritarian position of the professionals. At the same time it has created room for discussing other aspects, such as the competing and conflicting interests of different heritage stakeholders or the badly maintained communication with the public and the relationship with the public in general.[870] The common approach of public archaeology prior to the beginning of the millennium has been challenged and is now referred to as the 'deficit model'. This approach to public archaeology had, after all, secured the monopoly of the experts and allowed a heritage management process in which the experts controlled the consumption of archaeology whilst pursuing their own interests. Or to put it differently, this model had maintained a positivist approach in which the public was told what to see and in which this public remained undefined, unconsulted and uninvolved.[871] This so-called 'deficit model' has not been entirely replaced but is today in competition with approaches influenced by constructivist thinking. *'Archaeology should stop taking archaeology to the public for archaeology's sake but should start doing it to meet the general public's educational, social and cultural needs.'*, Merriman wrote.[872] It is more and more about a two way process and no longer a blind communication from the experts to an unknown audience.[873] This may, of course, call for a tolerant attitude from the archaeological professionals towards the diversity of the public and its different interests as well as to the many interpretations and perspectives on history this might entail.[874]

To what extent the ideas of this critical theory are already applied in the heritage practice of the Roman period, or how feasible it is, will become clear from the following analyses.

6.2 What remains of the Roman centres

In order to confront the ongoing management of the heritage derived from Roman urban civil centres in the northern alpine region with the changing heritage visions described above, data on the preservation and presentation of the various sites had to be collected. I decided to focus only on the remains and the presentation of Roman urban monuments and this for various reasons. The remnants of monumental buildings have survived much better than other types of infrastructure and building materials. This, together with a dominant heritage definition concentrated on majestic and imposing remains of the past, has ensured that monumental urban features were easily recognised as heritage. As a consequence, only a certain segment of the presentation of the Roman settlement system will be included in this analysis, in which the architectural aspect of Roman urbanism is again predominant. This is disadvantageous for all other types of Roman settlements, not in the least the smaller villages and rural sites. How the preservation and presentation of remnants of less imposing infrastructures, such as houses, streets or interesting stratigraphic layers, is managed, is consequently left out of this overview. In general, two types of data were collected. These included information on the physical remains of Roman monumental architecture typical for urban sites in the region, as well as material on museum exhibitions related to these archaeological sites (Fig. 6.1).

[868] Leone and Potter 1992, 139; Jones 2013, 163-164.
[869] Skeates 2000, 9-10; Shanks and Tilley 2016, 27.
[870] Leone and Potter 1992, 139.
[871] Copeland 2004, 133; Merriman 2004, 5-6; Schadla-Hall 2007, 80-10.
[872] Merriman 2004, 6-7.
[873] Ibid., 8.
[874] Copeland 2004, 135; Merriman 2004, 8; Thomas 2008, 145.

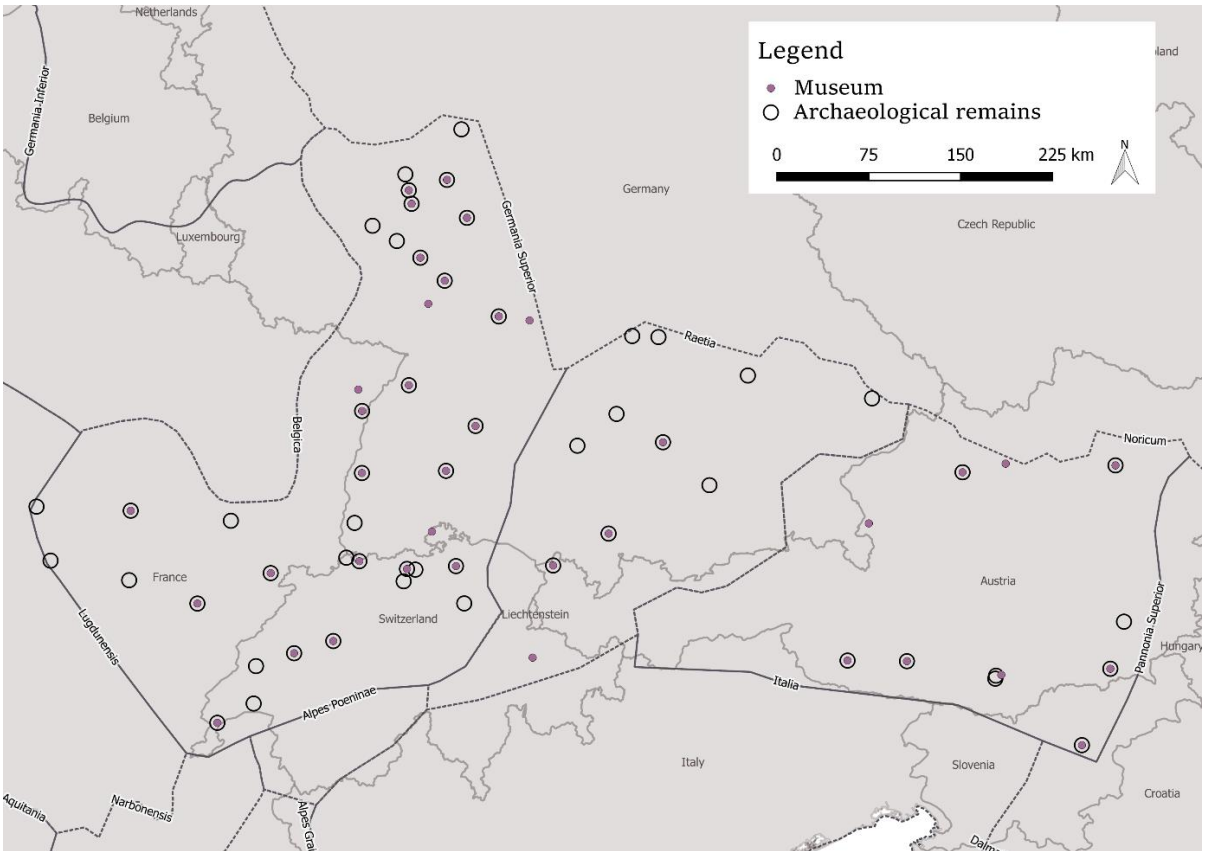


Fig. 6.1: Map showing all sites and museums included in the analysis of the preservation and presentation of ancient Roman remains

6.2.1 Data collection on the preservation and presentation of physical remains of Roman urban monumentality

The remnants of the *forum-basilica* complexes, spa complexes, spectacle buildings and city walls as discussed in chapter 4 are included here as physical remains of Roman urban monumentalit. For all the different types of monuments and infrastructure, information was collected on their state of preservation, their visibility and their management. The latter involves an interest in the integration of the remains in their current environment, including their present-day use and their presentation. The sources used mostly relate to secondary literature, in combination with the consultation of municipal and regional websites or weblogs of hobbyists. I also visited many sites, which gave me a better idea of the heritage and its surroundings.[875] Additionally, I examined available low-resolution satellite images via applications such as Google Images and Google Earth. These have been used as a survey tool to discover further whether or not there are still extant remains of the Roman public buildings as well as their current context.[876] This survey entailed a list (Table 6.1) of 55 Roman centres in the northern Alpine region with 86 remnants of the building types named above. At least 43 (50%) of the total number of Roman monuments included are still in some way present today.

[875] My participation in various conferences and workshops helped me to discover several Roman sites in reality. The Limes Congress of 2015 held in Ingolstadt (Germany) indeed brought me to many former Roman forts and garrison sites. But also the workshops hold in Innsbruck (2014) and Enns (2016) allowed me to get acquainted with the remains of the Roman centres of *Brigantium* and *Lauriacum*. Augsburg, Epfach, Frankfurt, Kempten, Obernburg a. Main, Salzburg and Wels are just a few more places I was able to visit during my research thanks to the support of the ERC-funded project *An Empire of 2000 Cities*.

[876] The website Archaeology Travel provides an interactive map with Google Earth interface of many Roman amphitheatres. The website is not a scientific source and the data collection is incomplete, but nevertheless formed a handy starting point to collect impressions of the state of preservation of these Roman remains.

Table 6.1: Archaeological sites included in the analysis of the preservation and presentation of the different types of Roman urban monumentality

- number of buildings attested
- () = number of buildings still visible
- ? no information found or unclear
- * site visited by author

	Site	Amphitheatre	Theatre	Forum	Defensive wall	Spa
1	Aguntum			1 (1)	1 (1)	
2	Alesia		1 (1)	1 (1)	1 (1)	
3	Alisinensium				1 (?)	
4	Altiaiensium		1 (0)			
5	Andemantunnum				1 (?)	
6	Arae Flaviae		1 (0)	1 (0)		
7	Argentorate		1 (0)			
8	Arnsburg	1 (0)				
9	Augsta Raurica	1 (1)	1 (1)	1 (1)	1 (1)	
10	Augusta Vindelicum*			1 (0)	1 (0)	
11	Aventicum	1 (1)	1 (1)	1 (?)	1 (1)	
12	Aquae					3 (3)
13	Aquae Helveticae				1 (?)	1 (0)
14	Aquae Mattiacorum					1 (0)
15	Badenweiler					1 (1)
16	Bad Gögging					1 (1)
17	Basilia		1 (?)			
18	Brenodurum		1 (1)			
19	Borbetumagus			1 (0)	1 (1)	
20	Brigantium*			1 (1)		
21	Bratananium			1 (0)		
22	Cambodunum*			1 (1)		
23	Celeia			1 (1)	1 (1)	
24	Centum Prata			1 (1)		
25	Cetium			1 (0)		
26	Cruciniacum		1 (0)			
27	Dambach	1 (0)				
28	Eburodunum					1 (?)
29	Epamanduodurum		1 (1)			
30	Flavia Solva	1 (1)		1 (0)		
31	Gleisdorf	1 (?)				
32	Iciniacum*		1? (0)			
33	Julia Equestris	1 (1)	1 (0)	1 (0)		
34	Lenzburg		1 (1)			
35	Lopodunum		1 (0)	1 (1)	1 (0)	
36	Luxovium				1 (?)	1 (?)
37	Med(…)				1 (1)	
38	Mirebeau	1 (0)				
39	Mogontiacum*		1 (1)			
40	Nida*		1 (0)	1 (0)	1 (1)	
41	Ovilavis*			1 (0)	1 (1)	
42	Phoebiana				1 (0)	
43	Quintana*	1 (1)				
44	Riegel			1 (0)		
45	St. Michael am Zollfeld			1 (?)		
46	Sumelocenna				1 (1)	
47	Teurnia			1 (1)	1 (1)	
48	Vertillum				1 (1)	
49	Vesontio	1 (1)	1 (1)	1 (0)		
50	Vidy		1 (0)	1 (1)		
51	Vindonissa	1 (1)				
52	Virunum	1 (1)	1 (?)	1 (0)		

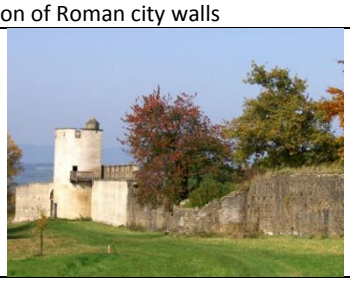
53	Vitudurum				1 (?)	
54	Unterkirchberg	1 (0)				
55	Zugmantel	1 (0)				
	Total (visible remains)					
	86 (43)	14 (8)	19 (8)	24 (10)	20 (12)	9 (5)

The extent to which these 43 monuments are still extant varies considerably, as I will illustrate here using remains of Roman city walls (Table 6.2). Only the Roman city walls of *Aventicum* and *Borbetumagus* are still (partly) standing. Also in Dieburg the modern centre is characterised by an old city wall, but one which dates back to the 13th century. Nevertheless, it is believed that this Medieval wall largely follows the trace of its ancient predecessor and also that it was mainly built with construction material from this predecessor.[877] Of the majority of the extant Roman city walls, however, only some foundations are still preserved. In Augst, the surviving remains consist of the east gate and a small part of the wall of Roman *Augusta Raurica*, which are now presented as a monument with some information panels.[878] Similar in presentation is the small stretch of Roman wall that once surrounded Roman *Sumelocenna*/Rottenburg. One part of the city wall of Roman *Aguntum* has been recently excavated and is now part of the archaeological park of the site.[879] In Wels, however, the remains are nothing more than a two-metre long part of a foundation wall of one of the towers that decorated the Roman city wall of *Ovilavis* and is now positioned between the pavement and the busy *Schubertstrasse*.[880] Information about the city wall of Nida can be found on an information panel in the street *In der Römerstradt* at house number 77. Some foundation stones of the Roman wall are preserved in the low wall bordering the front garden of *Am Forum* number 29. It is possible that some stones of the wall which once surrounded the *municipium* of *Celeia* are visible in the underground museum in Celje.[881] At the site of *Teurnia*/St.Peter im Holz excavations have taken place which brought to light more information about the town wall. Judging from the images available on Google Earth the remains of the city wall are still mostly covered by trees.

Nevertheless, the remains, either still in use, excavated, reconstructed or marked with modern materials, show some spatial distribution. (Fig. 6.2). A few areas with a clear concentration of surviving or displayed Roman remains can be identified. A first cluster can be found in northeast France and Switzerland. Here, there are all together 21 remnants of Roman monuments still visible, which is almost 50 % of the total number of still extant Roman public buildings included in this analysis. It concerns 5 amphitheatres, 5 theatres, 4 *fora*, 4 city walls and one Roman spa centre with three bathing complexes. The districts of Carinthia and Styria in southern Austria also have a relatively high number of Roman public monuments which are to some extent still present today. The remains of 2 amphitheatres, 3 *fora* and 3 city walls can be visited in this region today. A third concentration can be found in the area of the Middle Rhine region where remnants of at least 7 Roman monuments are still visible, amongst which 1 theatre, 1 *forum*, 4 city walls and 1 spa complex. These three areas of course correspond with the parts of the northern Alpine region where most Roman towns and urban centres could be identified in earlier chapters. Nevertheless, one should absolutely not conclude from this map that elsewhere no remains of the Roman past are integrated in the contemporary environment or subject of heritage policies. Many other Roman remains, such as temples, aspects of production centres or parts of military sites, survived the course of time or are displayed at in the present day, but could not be included in this analysis.

[877] Website: Internetzeiting für Rhein-Main und Mittelhessen.
[878] Table 6.3 (2).
[879] Table 6.3 (18).
[880] Visited by author in September 2016.
[881] Table 6.3 (10).

Table 6.2: The differences in quality of preservation of Roman city walls

		
Augusta Raurica/ Augst	Aventicum/ Avenches	Borbetumagus/ Worms
		
Nida/ Frankfurt-Heddernheim	Ovilavis/ Wels	Sumelocenna/ Rottenburg

6.2.2 Data collection on museum exhibitions of Roman centres

The remnants of these Roman sites have a story to tell. In addition to other popular media, such as television, film, books and magazines, this story is often told in museums associated to these Roman towns and their archaeological sites. For this analysis, only museum exhibitions and practices have been included.

Data on permanent museum exhibitions were collected for 38 Roman centres (Table 6.3). The information was derived from museums, of which 19 deal with the Roman history of centres, the majority of which could be identified as possible *civitas* centres[882]. Furthermore, the list includes 4 museums displaying the past of Roman *coloniae*[883], 10 and 5 more with respectively Roman *municipia*[884] and legionary forts[885]. The websites of the museums again formed the main source for data collection, sometimes in combination with regional or cultural websites. These generally contain information about themes presented in the museum exhibitions, and the different possibilities applied for informing about and experiencing the Roman past, often including guided tours, workshops, theme days and more.

[882] Andemantunum, Aquae, Aquae Mattiacorum, Borbetumagus, Brenodurum, Brigantium, Brucomagus, Cambodunum, Curia, Dieburg (Med.), Epamanduodurum, Juliomagus, Nida, Noviomagus, Lopodunum, Riegel, Sumelocenna, vicus Aurelianus, vicus Alisinensium.

[883] Augusta Raurica, Aventicum, Julia Equestris and Vesontio

[884] Aguntum, Arae Flaviae, Augusta Vindelicum, Celeia, Cetium, Flavia Solva, Iuvavum, Ovilavis, Teurnia, Virunum.

[885] Castra Regina, Lauriacum, Mogontiacum, Vindonissa, Argentorate

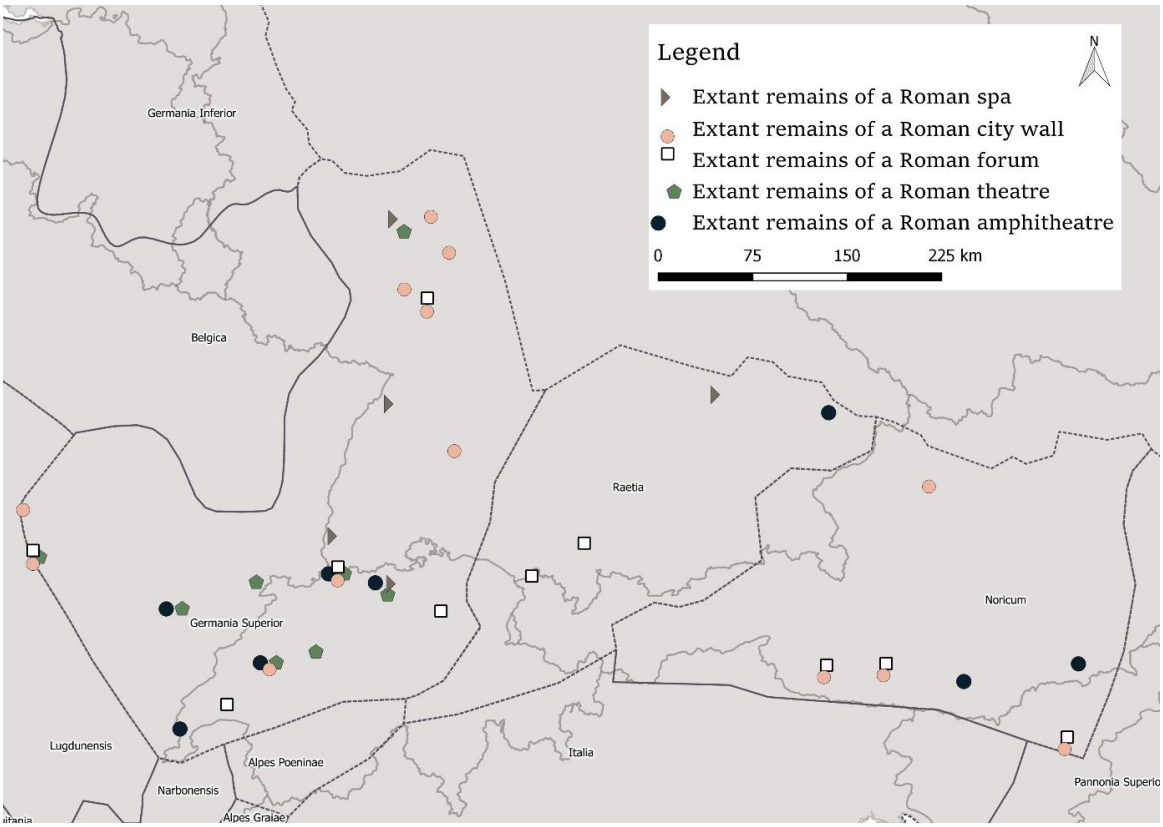


Fig. 6.2: Map showing the Roman buildings of monumental architecture with extant remains

Table 6.3: Museums related to Roman centres				
	Modern name	Ancient name	Website(s) and sources consulted	Last visit
1	Augsburg	Augusta Vindelicum	❖ http://www.augsburg.de/kultur/museen-galerien/roemisches-museum/	23.8.2016
2	Augst	Augusta Raurica	❖ http://www.augustaraurica.ch/	19.06.2017
3	Avenches	Aventicum	❖ http://www.aventicum.org/index.php/fr/	25.10.2016
4	Baden-Baden	Aquae	❖ http://www.baden-baden.de/tourist-information/sehenswuerdigkeiten/roemische-badruinen/ ❖ http://www.carasana.de/de/roemische-badruinen	26.10.2016 26.10.2016
5	Bad Wimpfen	Vicus Alisinensium	❖ http://www.badwimpfen.de/kultur-veranstaltungen/museen-und-ausstellungen/historisches-museum.html	26.10.2016
6	Bern	Brenodurum	❖ http://www.bhm.ch/ ❖ https://www.probrenodor.ch/ ❖ personal e-mail correspondance with Vanessa Haussener of the Historical Musuem of Bern	13.1.2017 25.1.2017 23.1.2017
7	Besançon	Vesontio	❖ http://multimedia.inrap.fr/atlas/besancon/ ❖ http://www.mbaa.besancon.fr/les-collections/archeologie/	10.6.2017
8	Bregenz	Brigantium	❖ http://www.vorarlbergmuseum.at/	2.9.2016
9	Brumath	Brucomagus	❖ http://www.brumath.fr/mairie-brumath/loisirs-detente-musee-archeologique.html ❖ http://brumath.shabe.free.fr/index.html	26.10.2016 26.10.2016
10	Celje	Celeia	❖ https://www.pokmuz-ce.si/en	29.8.2016
11	Chur	Curia	❖ http://www.churtourismus.ch/ ❖ http://www.chur.ch/	13.1.2017
12	Dieburg	Med (?)	❖ http://www.dieburg.de/index.php/museum-kultur-100	26.10.2016
13	Enns	Lauriacum	❖ http://www.museum-lauriacum.at	10.6.2017

14	Frankfurt	Nida	❖ http://www.archaeologisches-museum.frankfurt.de/	6.9.2016
15	Kempten	Cambodunum	❖ http://www.apc-kempten.de/	25.8.2016
16	Ladenburg	Lopodunum	❖ http://www.m-ladenburg.de/Sehenswuerdigkeit.php?id=71&language= ❖ http://www.lobdengau-museum.de/	7.9.2016 7.9.2016
17	Langres	Andemantunum	❖ http://www.musees-langres.fr/	26.10.2016
18	Lienz	Aguntum	❖ http://www.aguntum.info/?home	26.8.2016
19	Mainz	Mogontiacum	❖ www.mainz.de/kultur-und-wissenschaft/stadtgeschichte/roemisches-mainz.php ❖ http://web.rgzm.de/museen/roemisch-germanisches-zentralmuseum-mainz	5.9.2016 5.9.2016
20	Magdalensberg		❖ http://www.landesmuseum.ktn.gv.at/210227_DE-LMK-Museen.?aussenstelle=2	25.8.2016
21	Mandeure	Epamanduodurum	❖ http://www.patrimoine-pays-de-montbeliard.fr/ ❖ http://www.agglo-montbeliard.fr/culture-et-patrimoine/patrimoine/le-theatre-gallo-romain-de-mandeure.html ❖ https://vimeo.com/31022535 ❖ https://vimeo.com/31022783 ❖ https://vimeo.com/31023383	26.10.2016
22	Nyon	Julia Equestris	❖ http://mrn.ch/	25.10.2016
23	Öhringen	vicus Aurelianus	❖ http://www.limes-cicerones.de/ ❖ http://weygang-museum.de/	26.10.2016 26.10.2016
24	Salzburg	Iuvavum	❖ http://www.salzburgmuseum.at/	23.6.2016
25	Schleitheim	Juliomagus	❖ http://www.museum-schleitheim.ch/juliomagus.htm	25.10.2016
26	Speyer	Noviomagus	❖ http://www.museum.speyer.de/	12.9.2016
27	St. Peter in Holz	Teurnia	❖ http://www.landesmuseum.ktn.gv.at/210227_DE-LMK-Museen.?aussenstelle=3	25.8.2016
28	St. Polten	Cetium	❖ http://www.stadtmuseum-stpoelten.at/STADTMUSEUM	10.6.2017
29	Strasbourg	Argentorate	❖ https://www.musees.strasbourg.eu/musee-archeologique	10.6.2017
30	Riegel		❖ http://www.museum-riegel.de/	9.9.2016
31	Rottenburg	Sumelocenna	❖ http://www.rottenburg.de/sixcms/detail.php?id=49255&lnav=49255	26.10.2016
32	Rottweil	Arae Flavia	❖ http://www.dominikanermuseum.de/	25.10.2016
33	Wagna	Flavia Solva	❖ https://www.museum-joanneum.at/en/roman-museum-flavia-solva	26.8.2016
34	Wels	Ovilavis	❖ http://www.ooemuseumsverbund.at/museum/274_stadtmuseum_wels_-_minoriten_archaeologische_sammlung	31.8.2016
35	Wiesbaden	Aquae Mattiacorum	❖ http://www.wiesbaden.de/microsite/sam/index.php	8.9.2016
36	Windisch	Vindonissa	❖ https://www.ag.ch/de/bks/kultur/museen_schloesser/vindonissa_museum/vindonissa_museum.jsp	10.6.2017
37	Worms	Borbetumagus	❖ http://www.worms.de/de/tourismus/museen/museum-der-stadt/	12.9.2016
38	Zollfeld	Virunum	❖ http://www.landesmuseum.ktn.gv.at/210225_DE	10.6.2016

Based on the descriptions of the permanent exhibitions of these Roman towns on the websites of the associated museums, nine frequently cited themes could be indentified around which the story of the Roman towns often seems to have been created. These themes include: 'city foundation', 'military life', 'trade', 'crafts', 'traffic', 'gods and religion', 'everyday life', 'art' and 'death and afterlife'.[886] The chart below (Fig. 6.3) indicates that the topic of 'everyday life' is most popular, since it was mentioned 21 times in total for all the different museum presentations. Also, the themes of 'art' (11), 'crafts' (12), 'gods and religion' (15), 'military life' (12) and 'city foundation' (8) turn out to be often part of the story. As discussed in previous chapters, for many places the presence of the Roman army and the city foundation were of course heavily intertwined. 'Trade', 'traffic' and aspects of 'death and afterlife' are generally mentioned less frequently as separate themes. Nevertheless, these topics may be more present than shown in this graph, since they fit in with other topics, such as 'crafts' or 'gods and religion'. Furthermore, different aspects of Roman history seem to be emphasized for the different types of Roman centres. As illustrated in the graph, the topic of 'gods and religion' (9) in addition to 'everyday life' (10) form an important part of the story created around the artefacts and sites of (*civitas*) centres. In the case of the four *coloniae*, it seems that mainly 'crafts' (2) and 'art' (2) are substantial components of the presentation. The museums dealing with *municipia* highlight a mix of these themes, including 'everyday life' (8), 'crafts' (4) and 'gods and religion' (4). It is self-evident that the story about the military life is the main protagonist in the presentation of legionary centres.

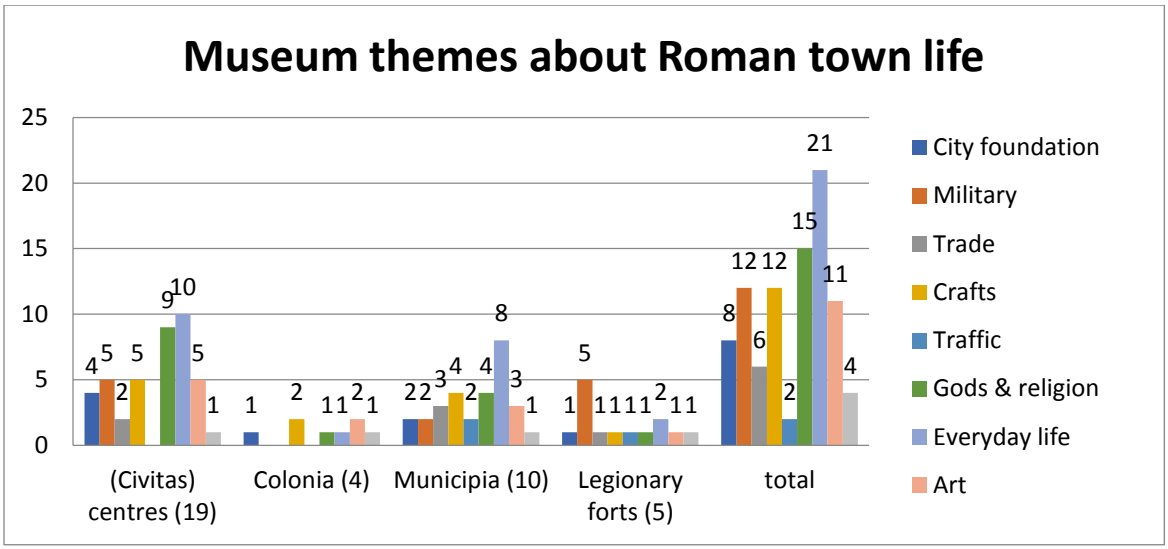


Fig.6.3: Chart showing the themes present in museum exhibitions (n= 38) of Roman urban centres

In short, one can conclude that there are plenty of remains still standing and even more artefacts on display that form a great base from which to create a story about Roman towns and centres. Nevertheless, there are some questions that can be raised. Are the physical remains of these centres utilised in the most benefitting way for both archaeology and present-day society? Does the story presented contain enough variation? Or is the story written and told by the right authors? In the next section points of attention important in the Critical Heritage Discourse will be tested against the common heritage practice regarding the Roman past.

[886] Only the permanent collections and exhibitions have been included; the subjects of temporary expositions are not treated.

6.3 An overly passive role for heritage

It is generally agreed that archaeological remains without a function, and isolated from the urban fabric, lose their historical and societal value.[887] Unused heritage has no utility or value.[888]

The reuse of buildings, infrastructures and remnants of former times is nevertheless a centuries old natural process. Transforming existing buildings, changing their function or use was a common practice since the Medieval period, if not earlier.[889] This natural costume in which that what existed was reused, came to a halt with the admiration of Antiquity, especially from the 19th century onwards. This resulted in the dismantling of additions or alterations to ancient monuments dating to a later period as well as in an increase of the isolation of ancient remnants and of protective concrete covers.[890] A large proportion of the Roman urban monuments in the northern Alpine region are indeed still extant due to markings or partial reconstructions with modern materials (Table 6.4, a-m). The amphitheatres of *Julia Equestris*; *Flavia Solva*, *Vesontio*, *Virunum* and *Quintana* are all visualised with the help of modern materials. These include asphalt, as for example in *Flavia Solva*, or concrete such as in *Virunum*. The wooden amphitheatre discovered in Künzing, belonging to the Roman garrison settlement *Quintana*, has now been re-raised in the form of a timber construction which outlines the dimensions of the temporary spectacle building.[891] There are many more examples. The outline of the Roman theatre in Bern was set in concrete and after the excavations in the Roman theatre in Mainz were finished, the *cavea* was re-erected with modern materials.[892] In Augst a framework represent the shape of the *forum* temple and in Kempraten a pilar and some stairs have been built to give an impression of the Roman *forum*.[893] If defensive walls are reconstructed in the northern Alpine region, these walls are generally of the *murus gallicus* type, such as in Alise St. Reine and Vertillum.[894] Sometimes the Roman remains are not reconstructed or rebuilt but marked with different material in the street or pavement surface, as for example in Baden-Baden. The contours of one of the three Roman spa complexes here, the so-called *Soldatenthermen*, are highlighted with black stones on the modern market square.[895] Some house blocks of Roman Kempten lie beneath modern living quarters. In the modern *Cambodunumweg* the Roman street plan has been marked with cobbled stones between the asphalt. The floor plans of the Roman houses and pottery kilns excavated in the court-yard of the Salzburg museum are now also represented with light pink tiles within the white floored patio.

[887] Hellerstörm, Hökerberg and Klynne 2009, 216-217.
[888] Jones 2009b, 137.
[889] Plevoets and Van Cleempoel 2011, 155-156.
[890] Millett 2007, 31-35; Federici 2011, 37.
[891] Visited by author during the Limes Congress in 2015.
[892] Bern: Tabel 6.3 (6); Mainz: Google Earth (last visited 19/6/2017).
[893] Augst: Tabel 6.3 (2) Kemptaten: Website: Roman sites in Switzerland.
[894] Alesia: Website: Alesia.; Website Vertillum.
[895] Meyr 2012, 52.

Table 6.4: Modern markings and reconstructions of Roman monumental buildings

	
a) Amphitheatre of Julia Equestris/Nyon	b) Amphitheatre of Flavia Solva/Wagna
	
c) Amphitheatre of Vesontio/Besançon	d) Amphitheatre of Quintana/Künzing
	
e) Theatre of Brenodorum/Bern	f) Theatre of Mogontiacum/Mainz
	
g) Forum Augusta Raurica/ Augst	h) Forum Centrum Prata/ Kempraten
	
i) Murus gallicus Alesia/ Alise st. Reine	j) Murus gallicus Vertillum
	
k) Spa complex Aquae/Baden-Baden	l) Roman street plan beneath the Cambodunumweg in Kempten

m) Roman houses and kiln in the Salzburg museum

These markings and reconstructions can also be considered as attempts to visualise the historic stratification of a place.[896] In Augsburg, one has opted for another strategy and created 'archaeological areas' in the town where some remnants of the Roman period are either displayed or left uncovered. Also the archaeological city walks offered by certain municipalities, such as Ladenburg, Frankfurt-Heddernheim and Wels pursue the binding of the historic layers.[897] It is indeed believed that the integration of heritage and of archaeological monuments within the urban planning helps to revitalise urban, sub-urban and non-urban places. If urban layers from different epochs can be read, interpreted and integrated into architecture and urban planning, opportunities will be created to give a deeper meaning to the urban landscape and its spaces.

The integration of cultural heritage into urban design and other pursuits for contemporary and future living space, such as sustainable development, requires an interdisciplinary dialogue between fields amongst which architecture and archaeology.[898] Since the second half of the 20th century adaptive reuse has become an common practice for the conservation of cultural heritage, or so it is written.

The majority of the remnants of Roman towns, however, function currently as monuments. During an evaluation of archaeological heritage in Rome, scholars at the Swedish Institute of Rome made the observation that plenty of ancient relicts in the town are preserved as a monument but are also often closed off from public use, amongst which the remains along the *Via Tiburtina* and in particular the *Porta Tiburtina*. This heritage remains thus with only documentary value, meaning that its function is reduced to that of an object for study.[899] There are plenty of such examples to take from the northern Alpine region too.

Table 6.5: The current different functions of Roman urban monuments

	Original Function	**Archaeological site/monument/museum**	**New function**
Theatres	1	5	1
Fora	/	10	/
Heilthermen	/ (3?)	5	/
Walls	/ (2?)	10	1
Total	1 (7?)	35	2

Table 6.5 shows that a large majority of the remains of the Roman monumental buildings discussed earlier today perform the function of an archaeological site or monument. This includes both remains which are still visible in the street view of today's urban centres as well as monuments in the countryside or archaeological parks. One can think of the amphitheatres in Augst, Nyon, Windisch and Zollfeld, the theatres in Avenches and Bern, the *forum* in Kempten or the remains of the Roman city wall in Augst, Rottenburg or Wels, to name but a few. The site of *Aguntum* for example, lies 4 km

[896] Federici 2011, 40.
[897] The city walk in Frankfurt-Heddernheim and Wels concentrate specifically on the Roman period.
[898] Bjur 2009, 32-33; Hellerstörm, Hökerberg and Klynne 2009, 211; 216-217; Plevoets and Van Cleempoel 2011, 155-156; 162.
[899] Hellerstörm, Hökerberg and Klynne 2009, 211.

east of modern Lienz and is the only Roman town in the region of Tirol.[900] In this environment one could suggest that the conservation of the site entails unique values from both educative and research perspectives.

According to F. Federici and other authors, it is, however, highly desirable to think past that obvious function of monument or museum.[901] Sometimes the remnants are again used in a similar way as in ancient times. The Roman amphitheatres in Avenches and Windisch, and the theatre in Augst are these days used again as venues for spectacles and cultural events, such as concerts. One could argue that the Roman baths, lying underneath the modern ones, such as in Baden and Wiesbaden also still fulfill their original function, just as the still standing parts of the city walls in Avenches and Worms. Where it is not possible to reuse the ancient infrastructures in the same way, these remnants should perhaps more often be given a new function in order to reintegrate them into the contemporary context. In the northern Alpine region, only rarely is a new function given to these remains, allowing an active use of this heritage and one that supports their current context. The only two known examples attested both come from the same city, namely Besançon, where the remains of the Roman amphitheatre of *Vesontio* are now the surroundings of a car park and the remains of the Roman theatre form the setting of a small park. According to F. Federici, we should think of a wide variation of possible functions for archaeological remnants to host, such as libraries, documentation centres, concert halls, bases for associations, recreation domains, or locations for social events or for art expositions.[902] With this in mind, it seems fair to state that the wooden framework recaling the amphitheatre of *Quintana*, for example, does not create any functions for that area within the modern village of Künzing. With all good intentions from an heritage perspective, one ought possibly to have thought about a combined functionality of the space, such as the construction of a football pitch or playground surrounded by benches within the wooden frameworkss of the amphitheatre.

6.4 An overly passive role for the public

Although the role of the public is generally endorsed, both in the academic literature, as well as in international heritage conventions, the nature of participation ascribed to the public remains rather passive.[903] It is one of the key points cited in the critical heritage studies regarding the Authorized Heritage Discourse (AHD). As L. Smith and E. Waterton wrote: '*Individuals and interest groups outside the professional sector are rarely acknowledged as playing any sort of active role in the defining, conserving and maintenance of heritage and are instead characterised as audience, visitor or consumer.'.*[904] Carman described it as a contradiction within the concept of 'public interest', advocated in the global system of heritage management, that the public generally does not have access to the heritage, or to the policy decisions regarding heritage, its research, its safeguarding, maintenance or repurposing.[905] Generally being excluded from the archaeological process, the public all too often has to be satisfied with a product derived from the archaeological research, which C. Tilley has described as a 'dry and tasteless cake'.[906]

Skeates describes it as a great challenge to overcome these problems, and especially to translate the trends of the academic debate into widespread practice.[907] Also regarding the heritage experience of the Roman centres, the public generally appears to play a passive role. This is most likely partly facilitated by the dominant 'documentary value' ascribed to the majority of the Roman remains,

[900] Mitterer and Pöll 2016, 42-43.
[901] Federici 2011, 40.
[902] Ibid., 40.
[903] Skeates 2000, 84-85.
[904] Smith and Waterton 2009, 29-30.
[905] Carman 2003, 108.
[906] Tilley 2008, 76.
[907] Skeates 2000, 123.

which makes the archaeological remains distant and untouchable for the wider public. Also, the museum exhibits mostly allow acquaintance with the Roman past via educational and teaching means, despite the efforts made to make exhibitions and guiding tours more interactive.

In the 38 museums that have been investigated, a wide variation of methods and media has been consulted to spread the story of Roman centres. The most evident one is that of the classical museum exposition. Nevertheless, with the resources available, the majority of these museums tries to present the objects and artefacts of the Roman history on display in a way that is in line with the contemporary living world and experience of their visitors. The description of the museum of the legionary centre of *Vindonissa* illustrates this attempt: *"Die permanente Ausstellung ist nach aktuellen Grundsätzen der Museologie neu konzipiert worden.".*[908] During the course of this research, some museums were even closed because of renovation works, such as the museums in Schlietheim (closed until May 2017), in Besançon (closed until 2018), in Augsburg (already closed since 2012) and the museum in Enns (closed since January 2017).

Additionally, almost all museums provide guided tours. In some cases the museum is supported by historical and archaeological associations, whose members conduct volunteering work such as giving guided tours. The Swiss associations of Pro Brenodor and Pro Vindonissa are two such examples.[909] Depending on the museum, guided tours are either always available or have to be booked in advance. A minority of the museums, which includes that of Rottweil, Rottenburg and Worms, also provide guided tours at fixed intervals, such as every fourth Sunday of the month.[910] The museums of Frankfurt, Mainz and Wiesbaden also organise periodical tours, even combining them with a programme specifically for families, including workshops for children.[911] Elsewhere, museums try to supplement their exhibitions with modern technology. The museum of Augst, for example, has created an app called 'Rendre visible l'invisible'.[912]

According to T. Copeland the traditional presentation management in most cases remains 'deficient', since the individual experience still does not constitute self-learning and self-participation through exploration. His view is that the information in museums is still too provocative and not instructive enough. Improved ways of presentating archaeology takes into account the participation of the public and allow for multiple possible readings and experiences of the past by different audiences.[913]

The ideas of the constructivist approach are, however, gradually finding acceptance. In the archaeological literature, the concept of an archaeological park is often described as an excellent option for heritage management, with its possibilities and shortcomings.[914] The project of the archaeological park of *Viminacium* on the Danube[915] aimed to revive the archaeological remains and develop its function as atourist attraction through a combination of science and education, recreation and cultural development. This proved to be a successful strategy, based on the high number of visitors, as well as the economic incentives created for the region since the opening of the park.[916] However, these positive outcomes do not entirely fulfil the project's aim of public engagement. As discussed earlier, within public engagement the public is involved not only in using the site, but also in its creation including the processes of decision-making on excavation, preservation and presentation. It is on these particular elements that the reporting remains unclear.

[908] Table 6.3 (36).
[909] Table 6.3 (6)
[910] Rottweil: Table 6.3 (32); Rottenburg: Table 6.3 (31); Worms: Table 6.3 (37).
[911] Frankfurt: Table 6.3 (14); Mainz: Table 6.3 (19); Wiesbaden: Table 6.3 (36).
[912] Table 6.3 (2).
[913] Copeland 2004, 135-137.
[914] Golubovic and Korac 2013, 55-73; Mitterer and Pöll 2016, 42-43.
[915] *Viminacium* was not located within the northern Alpine region, but belonged to the Roman province of Moesia.
[916] Golubovic and Korac 2013, 66; 72.

Another archaeological open-air museum is that of the *Porta Praetoria* of the legionary fort of *Vindonissa* in modern Windisch. Visitors to this site are encouraged to make their own interpretation of the past. Whilst in earlier times representations of the Roman military site aimed to show the public as correct as possible a version of the ancient situation, the design is now different. Visitors are informed about the archaeological practices and the changing approaches over time. Furthermore, the public is stimulated to be critical and to make their own interpretation of the Roman history of Windisch based on the current state of research.[917] This new design is thus a successful example of multivocality in which every interpretation and presentation of the past is explained as a temporary construction, created by the contemporary society. The understanding of history becomes then neither universal, sustainable nor authoritative.[918]

It seems that plenty of room is left for improvement regarding the involvement of the public in heritage management. Nevertheless, the kaleidoscopic constellation of the public constitutes a fundamental difficulty in the realisation of complete public involvement, due to the many and diverse interests of the stakeholder groups. Nevertheless, as the example of *Porta Praetoria* in Windisch shows, a new approach allows certain responsibilities to be passed on to the heritage user, not least the making of a personal interpretation.

6.5 An UNESCO World Heritage Site: Frontiers of the Roman Empire

So far, the discussion has focused on the heritage of Roman urban and civilian places. From previous chapters, however, it became clear that the frontier and the many garrison settlements along it also played an important role in the settlement systems of the northern Alpine region. It is, therefore, beneficial to look at their management as well. I decided to discuss the military sites at the Roman frontier separately, because, prompted by the '*Frontiers of the Roman Empire*' (FRE) project, the Frontier of the Roman Empire World Heritage Site is now included in the UNESCO World Heritage List, giving this heritage a separate status.

I will first give a short description of the project, followed by a short introduction of the World Heritage Site of the Upper German-Raetian Limes. I will then discuss some of the realisations of the FRE project towards public outreach and engagement. Finally a short evaluation will follow in which again some observations are made on the presentation of this official heritage in the light of the general trends in heritage management discussed in previous sections of this chapter.

6.5.1. What did the Frontiers of the Roman Empire project entail?

The *Frontiers of the Roman Empire* started as a European Culture 2000 project in 2005.[919] Encompassing several European partner countries, amongst which Austria, Germany, Hungary, Slovakia, Slovenia, Spain, Poland and the UK, this multinational project aimed to encourage archaeologists 'to extend and deepen their existing relationships and collaborations concerning the Roman frontiers'.[920] Parts of this ancient border are preserved in different countries in Europe, the Middle East and North Africa. Standards and traditions in the care of these ancient remains have been different across the individual countries. Hadrian's Wall in the UK was already declared a World Heritage Site (WHS) in 1987. In 2005, the stretch of the Upper German-Raetian Limes was also recognised. There is no intention to put an end to the variety of approaches within frontier management, but an overarching framework seemed desirable.[921]

[917] Trumm and Flück 2013, 55; 56-60.
[918] Skeates 2000, 89; Lowenthal 2004, 26-27.
[919] Breeze 2008a, 5.
[920] Ibid., 5; Breeze and Jilek 2008a, 7.
[921] Sommer 2008a, 129; Breeze *et al.* 2013, 16.

This project had two main aims to inform the public about the frontiers of the Roman Empire, and to improve the research on and, the documentation of Roman frontiers, resulting in a more complete database. The latter should also enhance the levels of information that could be made available to a wider audience. These main objectives of the project were supported by the following activities:[922]

- the creation of a web-portal[923]
- a series of exhibitions on Roman Frontiers
- the improvement of documentation on Roman Frontiers[924]
- the formulation of guidelines relating to the protection, preservation, management, presentation and interpretation of Roman military sites.[925]

While the Frontiers of the Roman Empire project came to an end in 2008, its long-term aim, namely to have all appropriate preserved elements of the Roman frontiers listed as part of the Frontiers of the Roman Empire World Heritage Site (WHS), continues to the present day.[926] This transnational site will eventually entail more than 20 nations and cover some 5,000 km.[927] The Frontier of the Roman Empire Site is taken to mean "*the Roman line(s) of the frontier at the height of the Empire from Trajan to Septimius Severus (AD 100-200), and military installations of different periods which are on that line. These installations can include fortresses, forts, towers, the limes road, artificial barriers and immediately associated civil structures"*.[928]

Since 2008 the Antonine Wall in Scotland has also been recorded as part of the Site.[929] Archaeologists in Austria, Hungary, Slovakia and Croatia have for the last few years been busy having their stretches of the Roman frontier nominated. A joint application between the Netherlands and Germany to include the Lower Rhine frontier in the area already classified as World Heritage Site is currently being prepared.[930] The changing policy of UNESCO towards serial sites has, however, impeded these processes.[931]

A World Heritage Site is protected by UNESCO under the World Heritage Convention of 1972, because of outstanding universal value.[932] From an academic perspective the Roman frontiers are believed worthy of being protected and preserved for future generations because of their transnational cultural and research values. Moreover, these frontiers are considered common heritage. The Roman frontiers have left traces in the current landscape, connecting many countries. These frontiers also represent the definition of the Empire as a world state and are commonly seen as defining elements for the development of successor states to the Roman Empire, perhaps not least Europe itself. The Roman frontiers are considered of high significance for illustrating the complexity and the organisational abilities of the Roman Empire. Furthermore, these frontiers are seen as instruments through which ancient Greek and Roman culture was spread within and beyond the borders of the Empire. The history of the frontiers of the Roman Empire is furthermore also viewed as complementary to the World Heritage Sites of the many Roman cities, amongst which Rome, Pompeii (Italy), Leptis Magna (N. Africa), Palmyra, Petra (Asia), Mérida, Tarraco (Spain) or the monuments in Trier (Germany) or Arles and Orange (France).[933]

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[922] Breeze and Jilek 2008a, 7-14.
[923] For more specific literature on the web-portal: Borgulya *et al.* 2008, 15-18.
[924] For more concrete literature on this particular goal: Breeze and Jilek 2008c, 57; 71; 75; 79; 99.
[925] For more concrete literature on this particular goal: Jilek 2008, 54-55.
[926] Breeze and Jilek 2008b, 25.
[927] Website: Limes Congress 2015.
[928] Breeze, Jilek and Thiel 2005, 22.
[929] Jilek 2009, 7; Breeze 2011, 87.
[930] Website: Limes Congress 2015.
[931] Breeze and Jilek 2008b, 25; Macinnes 2015, 379.
[932] 2015, 373.
[933] Breeze and Jilek 2008b, 25-27; Breeze and Young 2008, 29-30.

6.5.2 The Upper German-Raetian Limes

Since 2005, the Upper German-Raetian Limes has had the status of World Heritage Site. The Upper German Limes is mainly a land frontier. It starts in the west at Rheinbrohl, consisting of a ditch and/or palissade. From Miltenberg to Lorch at the border with the province of Raetia, the defensive structure consisted of the river Main. The Raetian Limes stretched from Schirenberg to Eining and initially also consisted of a ditch and palissade. During the 2nd century it was converted into a stone wall. Just before reaching Regensburg, the Empire's border turns back into a river frontier with the Danube as marker. The 'Upper German-Raetian Limes' covers 550 km in total and includes about 900 watchtowers and 120 military forts of different kinds.[934] The remains of the Upper German-Raetian Limes are the only Roman remains in the northern Alpine region that are recognised as UNESCO World Heritage, the highest recognition of heritage value in the authorised discourse.[935]

This large site is considered as one protected zone, consisting of linear monuments, such as ditches; earthen ramparts, palisades, walls and roads, as well as of 'heritage islands' including the structures of watch towers, forts, settlements and their immediate environment.[936] Similar to the WHS parts of the Antonine Wall and Hadrian's Wall, there are now maps of the 'Upper German-Raetian Limes' available online on the UNESCO Frontiers of the Roman Empire webpage.[937] These 25 maps show the German part of the Site as it is registered on the World Heritage List. The WHS property is indicated in red, the so-called buffer zones in blue (Fig. 6.4). The latter include '*the physical extent of the landscape that is visually and perceptibly linked to the perception of the WHS and that can still be practically protected or managed*.'.[938] These buffer zones also comprise the location of ancient features once part of the Roman frontier but no longer visible, as well as modern reconstructions which have didactical value or which are located on top of the archaeological site.[939]

Fig. 6.4: Detail of map 2 of the Upper German-Raetian Limes as protected WHS.

[934] Website: Limes Congress 2015.and Website: Deutsche Limeskommission.
[935] Macinnes 2015, 375.
[936] Website: Limes Congress 2015.
[937] Website: List UNESCO World Heritage Site.
[938] Dower 2008, 113.
[939] Jones and Thiel 2008, 101-102; Breeze 2008b, 111.

The Upper German-Raetian Limes is managed by the Deutsche Limeskommission in collaboration with the federal states of Bayern, Hessen, Rheinland-Pfalz and Baden-Württemberg, as well as with the local authorities of the 150 municipalities involved and with landowners.[940]

6.5.3 The realisations of public outreach on the Roman Frontiers

Since the start of the Frontiers of the Roman Empire project in 2005 a better and more intense cooperation between archaeologists from different countries has been achieved. Additionally, the public has better access to information about the Roman frontiers.[941] This is not only because of improved documentation but also because of a joint effort to enhance public outreach and major investments made in museums and in tourism in general.

As written in the project's aims, a web portal was in operation. However, after the end of the project in 2008 this digital information system – which was supposed to provide both the general public and the academic community with information on the Roman frontiers, its research and its documentation – was no longer maintained. The intentions were different: 'Considerable thought was given to the continuing maintenance of the web portal. The concept of the FRE web-application, which was set up with a technical straightforwardness, involves the possibility that in the case of need it can be run with a minimum of funding. In the meantime RCAHMS has agreed to host the FRE web portal and Dr Sonja Jilek, archaeological co-ordinator of the FRE Culture 2000 project, will ensure that the archaeological information is kept up-to-date.'.[942] The disappearance of the web portal has led to a more disparate provision of information. Now, when one does an internet search for 'frontiers of the Roman Empire', many websites designed by international or local work groups, governments and associations appear.[943] The web user is left somewhat in limbo fregarding where to start or how to connect the different pieces of knowledge.

A DVD was made presenting a 17-minute overview of the monuments and landscapes along the European frontiers. Copies have been distributed to museums as well as to schools. Posters on various topics have been designed for national and international limes presentation[944] and several booklets have been published (both in paper print and online) providing a general introduction to Roman frontiers and various structures and monuments in different parts of the limes.[945]

Furthermore, investments were made to improve the cultural routes along stretches of the WHS. Similar to the Hadrian's Wall Path, one can now easily explore the Upper German-Raetian Limes by bicycle and on foot.[946] This is considered a successful way of not only creating awareness around, protecting and preserving the remains but also of reviving and presenting the heritage. It is regarded as an authentic approach to rediscovering the archaeological landscape.[947] Supporting the use of these routes, and the remains of the Roman frontier in general, an application for mobile devices has been created for the so-called Main Limes, Middle Franconia Limes and the Antonine Wall. These apps provide geo-referenced data, including information spots, videos, audio sequences and photographs as well as information about the museums. Such an application is seen as a handy tool which can help to revive the generally difficult presentation of the remains of this World Heritage Site, all too often destroyed or overbuilt, and consequently not visible on the ground. Moreover,

[940] Macinnes 2015, 377-378. Website: Deutsche Limeskommission.
[941] Breeze and Jilek 2008a, 14.
[942] Borgulya *et al.* 2008, 17.
[943] Websites such as: www.unesco.org; www.romanfrontier.eu; www.antoninewall.org; www.deutsch-limeskommission.de; www.romeinselimes.nl; www.limes-oesterreichh.at.
[944] Breeze and Jilek 2008a, 8.
[945] Breeze, Jilek and Thiel 2005; Breeze *et al.* 2008; Jilek 2009; Breeze *et al.* 2013.
[946] Website: Limesstrasse.
[947] Breeze and Jilek 2008a, 9; Datow-Ensling 2013, 32; 34; Walda 2014, 209-224.

these applications can provide a link between the physical remains, the archaeological sites and the artefacts exhibited in the many museums along the Roman frontier.[948]

Moreover, these museums are considered key elements for the presentation of the Frontiers of the Roman Empire World Heritage Site. Although the finds and artefacts exhibited in museums are not part of the protected monument of this World Heritage Site, local museums can, in addition to presenting a general overview of the limes, highlight specific aspects of it or exceptional finds. This allows them to contribute to the contextualisation of the remnants of the frontier installations. These museums and the finds on display should therefore be acknowledged as an 'integral and inseparable part' of this entire Frontiers of the Roman Empire Site.[949]

That the archaeological sites and museums along the Roman frontier have been benefitting from the WHS project is expressed in the recent management measurements taken concerning their presentation and their museum exhibitions, equipped with modern materials and technological support. The following examples are taken from the of Upper German-Raetian Limes.

Within the *Investitionsprogramm* 2012-2013 of the national UNESCO World Heritage Site the presentation of the remains of the north-eastern tower of the Roman fort *Celeusum* in Pförring was given a complete new lay-out. A steel framework visualised the silhouette of the former gate. The construction gives an image of what the tower might have looked like and offers a visitors platform providing a good overview of the environment.[950] The museums and archaeological parks in Aalen, Eining, Künzing, Dalkingen or Rainau, to name but a few, were all modernised within the context of the Frontiers of the Roman Empire World Heritage Site.

After becoming an administrative centre of the UNESCO World Heritage Site in the region of Stuttgart, the museum and the exhibition on the Roman period in Welzheim were completely refurbished. In the county of Ansbach, the documentation centre of Ruffenhofen performs that function of administrative centre. The newly opened (2012) LIMESEUM and Roman park were nominated for the European Museum of the Year Award in 2015. With its round shape and enormous glass panorama window, the new museum exhibition provides a different approach to the archaeological site (Fig.6.5). Film and audio recordings aim to bring the everyday life of a Roman soldier in Roman Ruffenhofen back to life, whilst the visitor has a view of both the ancient landscape and the archaeological park. The fort has been rebuilt in miniature form while the structures of the actual remnants have been visualised with plants.[951]

Following the nomination of the Upper German-Raetian Limes as a UNESCO World Heritage Site, the visitors centre at the Roman baths in Weissenburg was also redesigned, including a new entrance and reception hall as well as a new didactic concept. To improve the visitor experience, an international team consisting of local experts and members of the Hadrian's Wall Trust designed a new concept for the museum based upon their experiences on visitors' behaviour and living world. This led to the creation of an information wall and 3D animated film that now supplements the exhibition of the Roman archaeological remains.[952]

[948] Dobat, Walkshofer and Flügel 2013, 104; 106; Flügel and Schmidt 2013, 36-37.
[949] Flügel 2008, 175.
[950] Häffner and Feulner 2013, 16-17.
[951] Pausch 2013, 22-27.
[952] Philipp 2013, 22-25.

Fig. 6.5: Photos of the LIMESUEM and the archaeological park in Ruffenhofen.

6.5.4 Influence of the World Heritage Site label

Becoming part of a World Heritage Site can have both positive and adverse effects. In the case of the Frontiers of the Roman Empire World Heritage Site, one can name numerous positive developments in terms of research, preservation and especially presentation. This has only been possible because of the financial resources made available. Furthermore, because of a common endeavour, a more coordinated and tuned story is created which is promoted in many different countries, via many different media and institutes. These two elements, the financial merit and the shared framework, distinguish this heritage from the general management of archaeological remains of the Roman civil centres discussed in the previous sections. One can only wonder, since the Roman frontiers are seen as a complementary aspect to the history of civil life in antiquity, why within the Frontiers of the Roman Empire World Heritage Site and its promotional material no more links were created to these other elements of the Roman past. The Limes apps and the bike and hike tours try to integrate remains of the Roman past other than only the military features.[953] Nevertheless, the overall image is that instead of one past, two histories are being told; one about the army and the border of the Empire and one about civilian life. The question is: is this not a dichotomy one would ideally want to overcome rather than to promote?

The World Heritage Site of the Roman frontiers has clearly taken shape within the structures of the authorised heritage discourse (AHD). From the description of the realisations made towards public engagement, a clear authorised position of the archaeologist and heritage professional appears. Due to the efforts made, the public now has more access to information and education about the frontiers and the archaeological remains. Nevertheless, the establishment of a dialogue between the experts and the wider public during the creation of this World Heritage Site seems almost completely absent. The interaction with and the involvement of the public thus appear to be a point of attention.

The publication *Presenting the Romans. Interpreting the Frontiers of the Roman Empire World Heritage Site*[954] indicates that the way the Roman Frontiers are interpreted and presented to a wider audience is a current concern that is debated and written about. The book includes chapters reflecting on various issues, including media and modern technologies that can support the reconstruction of and the communication about Roman frontiers, such as 3D reconstructions or mobile applications. It is, however, apparent that most contributions writing about ways to engage the public seldom involve any engagement by the public in any part of the process of heritage making and its presentation. In other words, public interpretation and presentation still seem considered as 'for the wider public' and not 'together with the public'.[955]

One should not be too pessimistic. The reconstruction of the Roman watchtower in Limeshain is the result of a project that did invite specialists from other fields and members of the wider public to

[953] Datow-Ensling 2013, 32.
[954] Mills 2013b.
[955] Spearman 2013, 119.

help with this archaeological experiment. In total, six *Aktionstage* (action days) were held during which interested people were welcomed to help out with taking measurements, excavation, tree cutting, transport of timber and stone, construction work and wood processing. But most of the work was done by specialised craftsmen in collaboration with the local archaeologists.[956] On the one hand it is amazing that this project welcomed laymen to participate, but on the other hand the experts not only controlled all opportunities for participation, but also the entire process of decision-making.

Finally, there may still be many opportunities to engage this heritage even more in the present, to connect the present with the past and to stimulate critical reflection within our society and amongst its members. P. Stone writes that these frontiers have much to offer to provoke thought.[957] I wonder if the presentation of the knowledge about the Roman frontiers should not more often respond to present-day political issues in order to encourage that reflection in a more concrete way. The recent climate is favourable. The barriers put up by European countries as a reaction to the current stream of refugees could be a starting point to reflect upon ancient borders. It has been said that the public presentation on the Roman frontiers still has a tendency to avoid broader political, economic and social issues.[958]

6.6 Conclusion and critical reflection

The central theme of this chapter was to gain a better understanding of the preservation conditions of the remains of Roman centres and their use and interpretation as heritage. Although the analysis only focused on a selection of the different layers of the settlement system, some general trends can be perceived and observations can be made.

Within the wide field of heritage, a clear movement is taking place which is changing the perspectives on the contents and the practice of heritage. In general, heritage is increasingly regarded as a process whereby the heritage is made by people and not so much by material culture itself. Heritage has little or no intrinsic value itself; it receives its appraisal through its societal context. Criticism is expressed on the authoritative position that heritage professionals have given themselves in terms of access to and use of the heritage. There is therefore a strong pursuit of a more constructive and inclusive heritage approach in which an active role is delegated to the public and in which the use and the functionality of the heritage are optimised. These ideas are slowly beginning to leave the ivory tower of the academic world and being implemented in both international treaties and more every day practice. These tendencies are also visible within the archaeological field, as for example in the growing attention towards a more constructive and multivocal public archaeology.

The analysis of the preservation and presentation of the remains of the Roman centres in the northern Alpine region shows many nice initiatives. Nevertheless, there still seems space to realise more dialogue with the public regarding the management of these Roman remains and the function they can perform in current and future society.

The analysis showed first of all, that of every different type of Roman urban monument discussed, including amphitheatres, theatres, *fora*, city walls and spa complexes, several examples still exist today within the northern Alpine region. The state in which they are preserved varies greatly; many are only excavated foundations, while others are still standing at several metres in height. The way these monuments are presented to the public varies equally, buried, marked or (partly) reconstructed. A clear outcome of this overview is that the majority of these Roman remains are considered and approached as heritage monuments, archaeological sites or parks. Only occasionally

[956] Becker and Lindenthal 2013, ,26-31.
[957] Stone 2013, xiii.
[958] Mills 2013a, 1 (point 5).

do these remains either perform their original function or they are given a new function. Such an approach - in which such remains are protected or presented as monuments - unfortunately isolates the heritage from its current societal surroundings, does not invite people to participate in the heritage-making and limits its functions and applications. Being left with only so-called 'document value' even endangers the heritage.

Moreover, the analysis has demonstrated that museums are seeking appropriate and new ways of bringing the story of Roman towns to a wider public. The museums are creative in their attempts to attract the public to their exhibitions and try to make use of the new technologies available.

The analysis also showed that the story of these Roman centres told at archaeological sites or associated museums entails many facets, ranging from art to town foundation, but the theme of 'everyday life' appears most popular. According to D. Callebaut, it is highly important that the story about the past is adjusted to the frame of reference of visitors, a challenge that the theme of everyday life certainly allows.[959] A few topics related to Roman town life seem, in relation to the content of the five previous chapters of this thesis, rather absent in this popular version of that history. What it meant to be a Roman town in terms of politics and administration seems perhaps an underexposed facet. Also, the dynamics and relations between different towns or between centres and their hinterland come across as less common themes, despite the attention given to these topics within academic research. That most exhibitions present the history and the artefacts from only one specific place may partly explain the absence of these perspectives. It might nevertheless be a challenge for both academics and museum curators to think about how to bring the more analytic research on Roman towns to the public. The project created around the World Heritage Site of the Frontiers of the Roman Empire focusses mainly on the military side of history and the associated remains. It feels like a missed opportunity that the project did not evoke more synthesizing work concerning the dynamics between the frontier and the Roman occupation farther inland.

The case of the Frontiers of the Roman Empire (FRE) gave a good illustration of what recognition as World Heritage Site makes possible in terms of both research and public outreach because of more financial resources. Nevertheless, it can maybe be said that, despite the great realisations, such as the improved documentation and the various media through which the public can now get access to the remains of the Roman frontier, chances for a more actively involved public within the creation of the Site have not been fully taken or explored. From this point of view, one could say that within this World Heritage Site project the authorised heritage discourse is still dominant.

A frequently recurring stumbling block cited in the literature is the minimalistic effort made to get to know the public, who they are, what their background is, how they experience and how they interpret the archaeological heritage.[960] Inviting the public into the heritage process may include the exercise of a more bottom-up approach relating to archaeological practice and interpretation.[961] This seems to be a difficult exercise, in particulary because the public is as diverse as the number of individuals it consists of. The public is a group of people with endless different affinities with different aspects of heritage, with different experiences, different needs and interests. One could therefore argue that a multivocal public heritage experience or archaeology is impossible to realise. I think nevertheless, that the attempts made and especially the various local initiatives prove differently. If we adopt a very local and situational approach towards heritage, I believe the ideals of the Critical Heritage Study are more feasible than they seem at first. Public heritage management is therefore contextually bounded, unique and changeable. The role of heritage professionals and archaeologists can currently still be called largely authoritative, since they create the heritage,

[959] Callebaut 2004, 18.
[960] Skeates 2000, 117; Merriman 2004, 8, 10; Carman 2003, 163-164.
[961] 2003, 108; Jones 2013, 163-164.

provide the interpretation and presentation and guide active amateurs.[962] As heritage professionals, we are facing the challenge of trying to move towards a more intermediate position in which we can stimulate and interest the public (including ourselves) in the exploration of what heritage is, how to approach and experience it and what we want to learn from it.

[962] 2013, 167.

7. Concluding thoughts: A settlement system with different regional patterns

The Roman settlement system consisted of a complex constellation of different kinds of settlements dispersed over many diverse landscapes within the Empire. The study of urbanism has for a very long time been considered one of the key themes necessary for developing an understanding of ancient societies, and this is no different for the Roman period. Exploring the character of the Roman settlement system in the northern Alpine region, focussing on the provinces of Germania Superior, Raetia and Noricum, was one of the central aims of this research. This included further questions regarding the development of this system, the defining elements of a Roman centre, the various ways different kinds of centres emerged and were integrated into the larger economic and political whole.

Research concerning urban development during the Roman period in the northern Alpine region has so far been characterised by a local approach, with the focus being either on one specific archaeological site, or on one specific region. All too often these regions of study have been defined by modern administrative borders. Rarely has this great swathe of territory comprising the rivers draining north of the Alps been approached as one study area. More frequently these three provinces have been considered additions to research focussing on Roman Gaul or *Pannonia*. The demarcation of the northern Alpine region created a unique opportunity to explore the urban developments of the Roman period in this part of the Empire. Perhaps not surprisingly the analysis of the settlement pattern across the three provinces in the Roman period allowed the identification of some clear divisions to be identified within the study area. Regional differences were observable across several categories of evidence concerning the settlements, including municipal status, size, monumentality and the influence of the army on urban development. The patterns observed could often be seen to belong to broader regional trends extending both west and east of the study region. Some of these related to historical differences between these regions that pre-dated the Roman period, such as the attitude of Late Iron Age tribes towards the encroaching power of the Roman Empire. Other regional patterns were either exacerbated or created by administrative structures of the Roman state, and its methods of conquest and governance.

The settlement system of the pre-Roman period not only served as a starting point for this study, it also formed an impetus for further urban developments in the region. The conventional *oppidum* model in which large Late Iron Age defended hilltop sites were interpreted as the largest *foci* of essentially pre-urban societies needs to be replaced. Recent research - not in the least under the guidance of M. Fernandez-Götz - has demonstrated that the settlement system of the Late Iron Age in temperate Europe prior to the Roman conquest was more diverse, responsive and complex. Largely defended or undefended, densely occupied centres developed both on hill tops and on open land without a hierarchical structure *per se*. These places were surrounded by smaller settlements and rural sites. Typical Roman products, such as ceramic wares and amphorae, express the convenience of the contacts between these northern regions and the Mediterranean area at the time. The Norican tribes, united under the Norican kingdom, for example, built a *friendly* relationship with Rome, which resulted in several trading posts being inhabited by Italian tradesmen. The *emporium* at the Magdalensberg is probably the most well-known example. Nevertheless, the overall settlement system in the northern Alpine region around the middle of the 1st century BC underwent a clear change. Many important sites became largely abandoned, such as the site in Manching. This can be attributed to several different causes, including natural processes or rivalries between different tribes. Nevertheless, there are increasing signs that the time of the Roman conquest was

characterised by a higher degree of continuity than was previously assumed. Evidence for this has been found at religious sites, rural settlements and early Roman military posts.

Although the settlement pattern seems to have been fairly comparable over most of the northern Alpine region at this time, from the conquest of the northern Alpine region onwards, different accents became more and more pronounced. These were often the direct result of deliberate policy making by the Roman emperors. A first determining phase entailed the Gallic war led by Caesar during which the Jura region was incorporated into the Roman territory. This region, which was Gallic in origin, remained different from the rest of the northern Alpine region over the following centuries. Chapter 1 and 4 showed that there was a strong continuing affliation with Gaul, especially in terms of its administrative organisation and the emergence of large monumental subordinate centres. A second phase can be identified in the last decades of the 1st century BC and the first decades of the 1st century AD, during which the Norican and Raetian tribes were overpowered by Roman troops led by Tiberius. This extended the northern frontier to the banks of the Danube. However, it was not until the first half of the 1st century AD that the Romans started actively administering the region. It was most likely Domitian who established a stable and peaceful situation at the Rhine and created the province of Germania Superior. Awaiting the issuing of administrative power to local communities, several Roman posts were erected in the newly conquered territories, including the later veteran towns of *Augusta Raurica* and *Iulia Equestris* and the sites on the Auerberg and the Magdalensberg. These early posts quickly lost their function after the Romans allowed an active municipalisation policy, in some regions causing a clear alteration in the existing settlement system. Large Roman centres in the southern half of Germania Superior, including the sites in Avenches and Langres, often developed from pre-existing centres. Alterations of a Roman kind to these town plans have generally been dated to the reign of Augustus, and show the influence of the Roman conception of town planning. By contrast, a clear change in the location preference of centres in the province of Noricum could be observed, shifting from settlements located at altitude to centres located in the valleys. The foundations of the earliest chartered towns have been ascribed to Caesar and Augustus and all were situated in the southern parts of the later province of Germania Superior. After Claudius's municipal development of the province of Noricum, the entire northern Alpine region gradually became filled with towns and communities enjoying different administrative freedoms. Defined by a municipal status, or indirectly by the attestation of municipal magistrates, about 30 self-governing towns could be identified across the entire northern Alpine region.

This municipalisation process left the northern Alpine region characterised by several regions with different administrative structures (chapter 2). Firstly, the province of Noricum had eight *municipia,* of which one was titled *colonia* during the Severan period. These chartered towns were situated around the northern and southern borders of the province. It is believed that the mountainous interior regions, which were rich in natural resources, belonged to imperial domains. From a municipal point of view, the province of Germania Superior fell into a northern and a southern half. The southern half was characterised by the highest number of *coloniae* in the entire study area, whilst in the northern half *civitates* predominated, with centres that had often developed from a military post after the pacification of the area. The province of Raetia remained rather empty in terms of chartered towns, with the *municipium Augusta Vindelicum* as the only exception. One imagines that the actual administrative organisation of the province might have been similar to northern Germania Superior with numerous *civitates*. Unfortunately, the epigraphic and archaeological research cannot confirm the existence of such *civitates*, despite the suggestions made for sites such as *Brigantium* or *Curia*. In contrast to the situation in neighbouring regions, the civilian centres that developed in the vicinity of legionary bases in the northern Alpine region remained under military supervision. Although often suggested and stimulated by the discovery of bronze

tablets belonging to a municipal charter near the legionary camp of *Lauriacum*/Enns, no municipal status could be confirmed for any of the legionary centres within the three provinces.

The municipal promotion of the chartered towns went had in hand with the administrative subordination of many other centres, not all of them small or insignificant. Criticism has arisen over recent decades regarding the high number of studies on Roman urbanism focussing solely on self-governing centres, overlooking the importance of and the interplay with all other intermediate levels of the settlement system including its rural hinterland.[963] H. Gräf, among others, has stressed that centres with urban or central functions could be relatively small and even indistinguishable from villages.[964] For a better understanding of the different elements of the Roman settlement system, the definition of urbanism was broadened from an administrative political vision - based upon the presence of a town charter and the attestation of municipal magistrates - to a more functional understanding of the concept of 'urban'. The broad diversity of subordinate centres and their varied services were discussed extensively in chapter 3. Subordinate centres were often essential stepping stones within the settlement system, allowing people and goods to move from one place to another, not in the least the road stations. Furthermore, some of these subordinate centres took up a very specific place within the wider system, such as that of a regional market, production place, religious or logistical centre. Connections between chartered towns and the development of subordinate centres could be seen in the investments made by the urban elite in sanctuary sites located within a town's territory, for example. The site of *Bedaium*/Seebruck in north-west Noricum was especially enlightening in this regard since epigraphic evidence informed us about the involvement of the *duumviri* of the *municipium Iuvavum*/Salzburg in the organisation of festivities for the local god *Bedaium*.

Part of the success of the administrative structures through which Rome governed was that they allowed and encouraged the participation of local municipal aristocracies, or even village elites. Urban competition created a certain hierarchy within the settlement system, which could furthermore be expressed in the presence of public buildings and infrastructure for example. As has been seen in chapter 4, monumentally built-up hubs, typical for Roman urban places, were not restricted only to the centres that could be identified as self-governing towns. Regularly one, or a few, urban edifices could be attested in subordinate centres, such as a bathhouse or a spectacle building. A weak correlation could be observed between the construction of theatre buildings in civilian centres in the interior and southern parts of the three provinces on the one hand and between the presence of amphitheatres in garrison settlements along the northern frontier on the other. Nevertheless, the number of public buildings in subordinate centres was generally lower and their dimensions were smaller than in chartered towns. The investment in aqueducts turned out to be an example of such a type of public infrastructure that was less well distributed. The water provisions of the majority of Roman centres relied on private wells and cisterns. Despite the fact that many centres and places will have had a market or open square, the archaeological evidence has confirmed that the *forum-basilica* complex remained a type of infrastructure typical of chartered towns or centres with similar services concerning administrative and socio-economic activities. Although the investment of a circuit wall was first limited to the bigger and richer centres in the southern parts of the provinces, defensive structures became more common in the immediate hinterland of the frontier, when, in the late 2nd and 3rd centuries, the unrest along the border increased. Furthermore, chartered towns tended not only to have a more monumental built-up centre, they also tended to grow to a larger size. The chartered towns in the northern Alpine region

[963] Bintliff 2002, 240; Horden and Purcell 2000.
[964] Gräf 1995, 1990.

reached an average size of between 40 ha and 60 ha. Only the legionary sites and *coloniae* tended to reach a size of about 80 ha to 100 ha. Subordinate centres and garrison settlements meanwhile tended to not expand over 40 ha, with the majority of them varying between 5 ha up to about 20 ha. However, it was observed that centres which seemed at first important economic centres, such as specialised production sites, did not develop into large or monumentalised Roman centres. The revenues from this production must have been spent elsewhere. The production centre of Mayen, for example, never developed into a rich Roman centre and stood out from the rich *villa*-sites in its surroundings. It must be concluded that not all subordinate centres can be considered 'towns', and not even 'small towns', but they all belonged to a broader settlement system that was intimately connected.

Many different kind of centres, which all belonged to the Roman settlement system in the northern Alpine region, were discussed over the previous chapters. The analysis of the settlement system in chapter 5 showed that the largest and most urbanized centres (tier 1) took up a rather exceptional position within the constellation of the settlement system, representing only 5 percent of all places. It concerned mainly high ranked self-governing towns as well as legionary bases in southern Germania Superior and along the frontier. The analysis showed also that a relative high percentage of moderate centres (17 %), amongst which *civitas* centres, subordinate centres and larger garrison settlements, fullfilled a middle-ground position. The majority of Roman centres were subordinate centres and garrison settlements which remained modest in size and monumental display. It was furthermore discussed that the settlement system in this particular region was defined by the landscape, but also by existing pre-Roman settlement networks, Roman policy and the development of the frontier.

In large parts of the region the settlement system was well connected, in more fertile areas, such as northern Germania Superior and Raetia or along the frontier, the population density was relatively high and centres were relatively close to each other. Elsewhere, in the more rugged and mountains areas of the region, such as southern Raetia, central and southern Noricum, the distance between centres was larger and more difficult to overcome. The number of centres and their diversity in these parts of the settlement system was generally lower. The connection between larger centres was in these areas guaranteed by road stations. The distribution of Roman centres furthermore showed a reasonably interconnected settlement pattern, especially when also the lowest ranked and least urbanised centres are included. Even the smallest nuclei, such as the rural sites, seem to have performed important functions, not only in the sense of agricultural production but also in terms of food collection, redistribution and supply, or the provision of lodgings.

In conclusion, it can be said that the settlement system in the northern Alpine region was heavily characterised by regional differences. Firstly, the geography of the northern Alpine region had a large influence on the urban developments. In particular, the Alpine and Jura formations divided the region into the Alpine foreland in the north and the mountain ridges in the south. The river Rhine created a north-south divide across the province of Germania Superior, whilst the Danube dominated the northern parts of Raetia and Noricum. Equally, contact routes between the different peoples living in that landscape that were established before the Roman period, remained characterizing features within the shaping of the Roman settlement system. This regionalism was furthermore detected in the distribution pattern of Roman centres, which developed from Late Iron Age centres and Roman military bases or which were created *ex novo.* In addition, the different ways in which the provinces of Germania Superior, Raetia and Noricum were administered and divided into communities reflected distinctive patterns for each province. Although the level of monumentality of Roman centres corresponded to a certain extent with their position within the municipal hierarchy,

in which *coloniae* were characterised by the most extensively built-up cores, certain public buildings shed new light upon patterns within the Roman settlement system. The interaction between Roman centres and their hinterland also depended heavily on the regional context, including the available natural resources and administrative bodies and the presence of the Roman army. The Roman settlement system in the northern Alpine region was typified by different regional patterns.

The influence of the Roman army on the urban developments

In every aspect of the Roman settlement system discussed so far, the involvement of the army has been clearly visible, ranging from the construction of all kinds of infrastructure to the upswing of agricultural production and rural life in the northern Alpine region. The army, for example, constructed many roads in the newly conquered territories and erected countless numbers of forts. These projects stimulated both the implementation of road stations on the one hand and the development of accompanying settlements around these military forts on the other. High quantities of building material were required for these constructions. Traces of the production of such materials are found at the garrison settlements themselves, but also in specialised production centres, such as the initial phases of Rheinzabern and later on in Nied. The supervision of this production by the army is evident from the stamps of military units on the ceramic building materials. Thanks to these stamps, the involvement of the army in many constructions can be observed. It was explained earlier that most Roman spas, such as Bad-Göging and Wiesbaden, appear to have been erected with the help of the army. Equally, public baths in civilian settlements were regularly built with bricks labeled with army stamps. This phenomenon might be valid on a much bigger scale, including all kinds of public infrastructure in both smaller centres as well as in self-governing towns. Two gravestones found to the east of Avenches, for example, prove that soldiers of the legions stationed in Mainz were sent to help with the building of the city wall.[965]

Furthermore, soldiers and army relatives may have constituted a relatively large proportion of the population and were certainly responsible for a significant amount of consumption. One can wonder for instance, whether without their presence ceramic production centres such as Rheinzabern, Westerndorf and Waiblingen - to name but a few - would have existed or flourished in the same way, since the highest amounts of their goods appear to have been used in garrison settlements. This population group also formed probably the majority of the consumers of luxury products such as olive oil and wine. It seems that long-distance trade was stimulated by the army, and, according to K. Verboven, the merchants involved in this supply network were often relatives of military staff or veterans.[966] The case studies concerning rural settlements have pointed out that farming estates in the hinterland of the frontier produced for both the larger centres in their vicinity as well as for the garrison settlements. Furthermore, a percentage of the former inhabitants of these garrison settlements, or their relatives, eventually moved either to the countryside or to the urban places. Additionally, it is striking how many civilian settlements and centres developed from a pre-existing garrison settlement, such as Lensburg, Gross-Gerau and many others.[967] There also seems to be a correlation between a certain degree of administrative independence and a military origin. Despite the uncertainty of the term, many of the places which could epigraphically be identified as *vici,* were originally garrison settlements. Likewise, a certain number of these fort-survivors even became self-governing towns. Places such as *Arae Flaviae*/Rottweil, *Augusta Vindelicum*/Augsburg, *Lopodunum*/Ladenburg, and *Nida*/Frankfurt-Heddernheim are only a few examples that illustrate this

[965] M. Flück, presentation at the Römertagung in Erfurt, 15th June 2015.
[966] Verboven 2007, 304.
[967] The conference and associated publication *Der Übergang vom Militärlager zur Zivilsiedlung* hold in Innsbruck from 23-25th of October 2014, was entirely dedicated to the influence of the Roman army in the urban development of the northwestern provinces (Grabherr *et al.* 2016).

phenomenon. The army thus contributed in a number of different ways to the urban developments taking place during the Roman period in the northern Alpine region; as constructor of infrastructure; as stimulating factor for artisanal and agrarian activity, and as founder of the administrative organisation. Moreover, studies on the Late Antique period too have shown a strong correlation between Late Roman military posts (*castra*) and Early Medieval centres. The *Castrum Raurecense*, for example, was one of the most important centres in the Jura-Rhine region between the 3rd and the 7th centuries AD.[968]

The present and future of Roman urbanism

Research into Roman urbanism has often been inspired by the relatively large number of remains of the settlement system that survived and is still in a certain way present today. Generally, these physical remains stimulate academic research, but at the same time are considered heritage. It is therefore important to reflect on the social significance of these remnants from an academic point of view. The analysis in chapter 6 showed that these ancient remains are often managed as monuments, as archaeological sites, or are integrated into an archaeological park or exhibited in museums. Museums are generally considered important places where meaning can be given to the often vague archaeological traces of the past. An overview of the different themes that shape the presentations on the Roman remains in these museums shows a wide variation, although the topic of everyday life was most common. In addition, the analysis indicated that most remnants do not fulfil any active or integrated role in their current context. This passive role often attributed to these remains is an important point of criticism within the current heritage debate. Different ways to experience heritage or to reuse and repurpose these structures should form leading objectives within future heritage management. Such achievements would more easily be fulfilled when the heritage is 'given back to the public'. The Critical Heritage Studies observed that heritage professionals have positioned themselves all too often as the only caretakers of these remains, which has largely excluded the participation of the public, discouraged the public's interest and let many opportunities for the creation and experiencing of heritage slip away. Recognised heritage sites, such as the Frontiers of the Roman Empire, are an *exemplum* of this so-called 'Authoritative Heritage Discourse'. However, locally-orientated projects have shown how heritage can be managed differently, with the input of the local community, from excavation to presentation. Providing information about heritage does not always have to stand for educating the public, *a fortiori* the challenge lies in how to allow them their own creation of heritage and their own presentation of the past.

Finally, despite the effort made in this study to collect all of the relevant information about the Roman settlement system, many more opportunities for future investigations remain. Although excavations reveal more and more indications of continuity between the settlement system of the Late Iron Age and the early Roman period, both are generally approached as two completely separate eras. Future research may shed more light on the gradual transition of the settlement system. Likewise, the societal changes of the Late Antique period changed the Roman settlement pattern, but this transformation fell outside the scope of this thesis. Although the Roman frontier is no longer considered a physical border, but rather a membrane through which people exchanged goods and culture, research concerning the Roman period almost never looks beyond the Empire's edges. Nevertheless, just as time periods function as set frames, the borders of the Empire were also an artificial division. Life, settlements and history continued far beyond it. It was not possible within the scope of this research to investigate how the settlement system continued outside the borders of the Roman Empire. The recent discoveries of Roman *villae* beyond the frontiers will certainly

[968] Schwarz 2011, 307-349.

encourage future research to investigate the settlement system on the other side of the frontier in the light of the developments within the Empire [969]

Furthermore, the research presented has approached the settlement system mainly from a top-down perspective, in which the administrative organisation and physical appearance have been dominant elements. A more detailed understanding of Roman urbanism would however be gained with studies based on the movement of people and goods. This may generate even more valuable insights into the interconnectedness of the different types of settlements and their environment. Promising results have already been achieved with studies such as A. Vanderhoeven's, *Town-Country relations from the perspective of Roman Tongeren*[970] or L. I. Kooistra *et al.'s*, '*Could the local population of the Lower Rhine delta Supply the Roman Army*'[971], but synthesising works for and comparisons with larger and different parts of the Empire remain a real challenge. There is thus certainly a promising future ahead regarding Roman urbanism, both in terms of academic research and in strengthening the relationship between the remaining enigma of Roman towns and the contemporary societies who live within the borders of that Empire of yesteryear.

[969] Flügel and Valenta 2017, 54-56.l
[970] Vanderhoeven 2015.
[971] Kooistra *et al.* 2013.

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