

ROME'S FIRST FRONTIER. THE FAILURE OF *GERMANIA MAGNA*
AND THE DEVELOPMENT OF THE LOWER RHINE *LIMES*

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The Rhine: Rome's preordained frontier¹

In the opening of his account *On the war in Gaul*, Julius Caesar famously presented the river Rhine, “exceedingly broad and deep”, as the natural dividing line between the more culture-susceptible peoples of Gaul and the inveterately warlike Germans.² The reality, of course, was more of a cultural and political continuum, certainly in the Lower Rhine region, as the contemporaneous triquetrum coinages illustrate.³ Caesar himself was well aware that “most of the Belgae were of German origin” and that several tribes living on the left bank of the Rhine were in fact German.⁴ The Treveri likewise claimed a German origin and regularly tried to involve groups across the Rhine in their resistance against Caesar.⁵ But despite all those cross-river links, in the context of the subjugation of Gaul, the Rhine, given its geographical position, was destined to impose itself as the mark of Roman dominion. From the start Caesar had made clear, to Ariovistus in 58 BC and to others later, that Rome's ordering power was to be understood as extending up to the Rhine—and beyond, if Roman interests were at stake.⁶ Interestingly, some of the trouble-makers on the right bank, like the Sugambri, reverted to the same rhetoric if it suited their cause, proclaiming that “the Rhine marked the limit of the Roman Empire”, and Caesar should not interfere with them.⁷ The Menapii had used the river to separate themselves from the wandering Usipetes and Tencteri and, for some time successfully guarded it as a defensive obstacle.⁸ The Rhine was the inescapable dividing line of hegemonic rhetoric

¹ I thank David Breeze and the editors of this volume for their comments on a first draft of this paper.

² *Gallie War*, I, 1, 3-2, 1.

³ Roymans 2019a, p. 80-83.

⁴ *Gallie War*, II, 3, 4; IV, 1; VI, 2, 3; 32, 1

⁵ Caesar, *Gallie War*, V, 2, 4; VI, 2, 3; 9, 1; Tacitus, *Germany*, XXVIII, 4.

⁶ Caesar, *Gallie War*, I, 35; IV, 16; VI, 9, 1. See Whittaker 1994, *passim*, on the role of ‘natural’ boundaries in Roman imperial rhetoric and space claims—where the reality often was a cultural continuum.

⁷ *Gallie War*, IV, 16, 4.

⁸ *Gallie War*, IV, 4.

and territorial claims. Caesar's massacre of the Usipetes and Tencteri, somewhere in the Dutch river area, left no room for mistake about who ruled the river's left bank.⁹

There can be no doubt that, by the start of the imperial period, all land and population up to the Rhine counted as subject to Rome. When the Treveri rebelled in c. 30 BC, they were duly suppressed by M. Nonius Gallus, resulting in Roman garrisons being placed in their oppidum on the Titelberg and at Trier-Petrisberg.¹⁰ A decade later, in 19 BC, Augustus' mainstay Agrippa was sent to Gaul. It must have been under his governorship that a road was constructed via Trier up to the Rhine,¹¹ and a large fortress built at Nijmegen, apparently receiving troops earlier housed at Trier-Petrisberg and/or the Titelberg.¹² It was probably now that the Ubii were transferred to the left bank of the Rhine.¹³ If so, the Batavi are likely to have been part of the same package.¹⁴ Based on early Roman coin distribution, Nico Roymans has recently argued that ethnic recruitment in the Batavian area started around 20 BC.¹⁵ The new fortress at Nijmegen was superbly placed to keep watch over Agrippa's arrangement: it was situated close to the soon-to-be-developed *civitas* capital *Oppidum Batavorum*, while occupying, from the Roman perspective, the most advanced plateau to overlook the potential landing grounds of incursions coming from the North-German plain. "Agrippa's decision reflects a new policy, intended to reduce the Suevic pressure on the Rhine-Weser-Germans and to install in the periphery of Gaul, where habitation was probably drastically thinned out by Caesar's merciless actions, a population loyal to Rome and with a personal interest in preventing new raids or migration attempts."¹⁶ The Rhine was to be Gaul's boundary and bulwark.

A greater-German province?

Shortly after Agrippa's settlement, in 17 or 16 BC, the Usipetes, Tencteri and Sugambri again crossed the Rhine and inflicted a painful defeat on the governor Lollius, taking the eagle of the Fifth Legion.¹⁷ The impact of this event on Augustus' German

⁹ *Gallic War*, IV, 11-15. For Caesar's genocidal campaigns in northern Gaul: Roymans 2019b.

¹⁰ Cassius Dio, *Roman History*, LI, 20, 5; Metzler 1995, p. 95-98, 111-119; Löhr 2003.

¹¹ Timbers of the earliest bridge at Trier date to 18 and 17 BC: Hollstein 1980, p. 135.

¹² Kemmers 2006, p. 57-67.

¹³ Tacitus, *Annals*, XII, 27, 1, and Strabo, *Geography*, IV, 3, 4, say that the Ubii were transferred under the governorship of Agrippa. Eck 2004, p. 46-55, makes a convincing case for his second tenure.

¹⁴ Tacitus, *Histories*, IV, 12, 2; *Germany*, XXIX, 1. Silver staters of the Lith type were long considered a proxy for the early Batavian settlers and their networks, but it has now become clear that "silver and bronze triquetrum coins were widely distributed across the entire Lower Rhine region, where they were used and probably also minted by various Germanic groups" (Roymans 2019a, p. 83). This neutralises earlier objections against a transfer of the Batavians as late as c. 19 BC.

¹⁵ Roymans (forthcoming).

¹⁶ Polak, Kooistra 2013, p. 395.

¹⁷ Cassius Dio, *Roman History*, LIV, 20, 4-5; Velleius Paterculus, *History*, II, 97, 1.

policy has been questioned,¹⁸ but its resonances in the court poets suggest serious agitation in Rome,¹⁹ and there is a coherent logic in what we see unfold in the following years. In 16 BC, Augustus came over to Gaul,²⁰ to stay there for three years. By then, or shortly after, an offensive policy had apparently been decided for the Balkans, the Alpine region, and probably Germany as well. While the governor of Illyricum, Silius Nerva, annexed Noricum, Drusus and Tiberius campaigned in the Alps in 15 BC, thereby improving Roman access to the wider German theatre, with a first base planted at Dangstetten, *across* the Rhine. The Balkan project appears to have been considered the toughest job, as Agrippa was appointed to Illyricum in 13 BC, with Tiberius and Drusus probably tasked with Germany.²¹ During his three-year stay in Gaul, Augustus certainly oversaw the process of Gaul's further administrative incorporation, culminating in the inauguration of the altar of Rome and Augustus at Lyon in 12 BC. However, this did not prevent preparations for major operations across the Rhine, whatever the precise objective at that point. The scale of Drusus' campaigns from 12 BC on was such that a rough two-year rule of thumb for logistic build-up in case of major operations²² must have applied in this instance too, certainly when venturing into Germany which was not known for its abundance in harvests and other provisions.

The ever troublesome Sugambri appear to have been one of the prime targets of Drusus' first trans-Rhenish manoeuvres in 12 BC.²³ However, this does not mean that the German adventure started off unpremeditated, as a punitive campaign. Interestingly, Drusus first had to act, militarily it appears, against the tribes that were placed on the left bank of the Rhine, likely including the Ubii and/or the Batavians.²⁴ The operations later in the season targeted the Frisians, the Chauci, and, probably, the Bructeri in the North-German plain and coastal area.²⁵ This was clearly something more than punishing the Sugambri and their usual allies, the Usipetes and Tencteri. The 12 BC campaign, which included major waterborne operations, would normally have required wide-ranging logistical preparation. It is difficult, and unnecessary in light of a close reading of Cassius Dio,²⁶ to imagine this coastal campaign as a spontaneous action, carried out with a motley collection of vessels requisitioned here and there.²⁷

¹⁸ Polak, Kooistra 2013, p. 397.

¹⁹ Kerremans 2018.

²⁰ In response to Lollius' defeat, both Cassius Dio, *Roman History*, LIV, 20, 6, and Velleius Paterculus, *History*, II, 97, 1, state.

²¹ Eck 2018, p. 132-133. After the sudden death of Agrippa early in 12 BC, Tiberius took over Illyricum.

²² Graafstal 2023, p. 22-24.

²³ Cassius Dio, *Roman History*, LIV, 32, 1-2.

²⁴ Cassius Dio, *Roman History*, LIV, 32, 1; Livy, *Periochae*, CXXXIX. See Polak, Kooistra 2013, p. 404-405. After the Varian disaster of AD 9, several of them again wavered in their loyalty (Velleius Paterculus, *History*, II, 120, 3).

²⁵ Strabo, *Geography*, VII, 1, 3, with Polak, Kooistra 2013, p. 406.

²⁶ *Roman History*, LIV, 32, 1, implies that campaigning had started well before the inauguration of the altar at Lyon on August 1.

²⁷ See Polak, Kooistra 2013, p. 405; 412-413.

From the start it was clear that Drusus' campaigns were about establishing a permanent presence. He imposed a tax in kind on the Frisians²⁸, probably in 12 BC, while the fortress whose construction started at the end of the next campaigning season, Oberaden,²⁹ was clearly intended to last, initially perhaps as a stronghold to keep in check the Sugambri. It had an unlocalised counterpart in the territory of the Chatti.³⁰ But Drusus' aims went much further: the 11 BC campaign had also targeted the Cherusci and would have crossed the river Weser, Cassius Dio reports, had the supplies not been depleted.³¹ The campaigns of 10 and 9 BC appear to have focused on the tribes living in the Mittelgebirge north of the Main. In 9 BC, Drusus attacked and pillaged the Chatti, Suebi, and Cherusci. He finally reached the Elbe, and made a failed attempt at crossing the river, placing trophies on its left bank as a replacement.³² At some point, the Elbe (pretty much the end of the known world)³³ must have suggested itself as a natural limit. Conquering this vast space also meant subjecting the Suebi, the long-standing troublemakers in the Germanic background.³⁴ A planned new campaign via the northern coastal waters and river mouths is implied if Tacitus is correct about the date of the groyne that Drusus had begun constructing at the bifurcation of the rivers Rhine and Waal, its purpose being to divert more water to the former and thereby to the river Vecht, the crucial connection to the north German coastal waters and river mouths.³⁵ Following the unexpected death of Drusus, Tiberius in 8 BC was able to traverse most of Germany without much resistance.³⁶ In AD 5, while restoring order after the somewhat mysterious *immensum bellum*, he campaigned victoriously up to the headwaters of the Elbe, leaving nothing to be conquered, according to his sycophant Velleius, save the Marcomanni in Bohemia.³⁷ In his political testament, Augustus duly claimed to have pacified Germany up to the Elbe.³⁸

In the western core area of the conquered territory, broadly defined by the rivers Lippe and Lahn, a process of provincialisation had started well before the beginning of the common era. For all its military appearance, the pioneer town of Waldgirmes was clearly intended as an administrative centre, its forum adorned with imperial statues.³⁹

²⁸ Tacitus, *Annals*, IV, 72, 1: cowhides for military use.

²⁹ Kühlborn 1992, p. 122-133.

³⁰ Cassius Dio, *Roman History*, LIV, 33, 4.

³¹ Cassius Dio, *Roman History*, LIV, 33, 1-2.

³² Cassius Dio, *Roman History*, LIV, 36, 3; LV, 1, 2-3.

³³ Timpe 2007.

³⁴ Suebi are mentioned among the allegedly 40.000 people resettled on the left bank of the Rhine by Tiberius following his successful sweep over Germany in 8 BC (Suetonius, *The Twelve Caesars, Augustus*, XXI, 1; *Tiberius*, IX, 2).

³⁵ *Annals* XIII, 53, 2; *Histories*, V, 19, with Polak, Kooistra 2013, p. 401, 404, 407.

³⁶ Velleius Paterculus, *History*, II, 97, 4: Tiberius "subdued the country as to reduce it almost to the status of a tributary province" (trans. Shipley 1924, p. 253, 255).

³⁷ Velleius Paterculus, *History*, II, 104-109.

³⁸ *Res gestae Divi Augusti*, XXVI.

³⁹ von Schnurbein 2003.

Its foundation followed within a few years after Tiberius' triumph of 7 BC, which had marked the successful conclusion of the German war, and there may have been others.⁴⁰ At Haltern, the excess of residential buildings suggests the presence of high-ranking individuals involved in not just military but administrative tasks.⁴¹ Its monumental burials are unparalleled in early Roman military contexts.⁴² At Brilon, in Sauerland, lead extraction was soon organised on an industrial scale.⁴³ By AD 9, a Cheruscan, Segestes, was officiating as the priest of an altar at Cologne—the German counterpart of Lyon.⁴⁴ This was a province in the making—a province that apparently was to include the Ubii and other German tribes on the left bank of the Rhine, where winter bases for the army had also been established.⁴⁵

The integration process was shattered by the annihilation of Varus' army in the Teutoburg Forest in AD 9. This event has often been framed as the turning-point of Augustus' German policy, but it was not. Rome had never surrendered territory it had claimed as subjected, let alone a province that had existed for over a decade.⁴⁶ Reversals had always been won back, no matter the cost. Pannonia had just been brought back into the fold in a series of hard-fought campaigns after the revolt of AD 6. Following the Varian disaster, new units had been raised and Tiberius sent to the Rhine immediately, first to restore order on the left bank. Joined by Germanicus, he crossed the Rhine in AD 11 followed by fleet expeditions and ground troops.⁴⁷ Soon reconstruction appears to have started at Waldgirmes.⁴⁸ In 13, Augustus, Tiberius, and Germanicus seem to have taken a joint imperial acclamation, suggesting substantial success on the battlefield.⁴⁹ In the same year, Germanicus was appointed as commander of the forces on the Rhine, totalling eight legions, about a third of the Roman army. When Augustus was revising the text of his *Res gestae* in the summer of 14, he must have felt confident that the final pacification of Germany up to the river Elbe was on its way.⁵⁰ It is this river Augustus must have had in mind when he gave Tiberius the famous injunction 'to keep the Empire within its (present) boundaries' (*consilium coercendi intra terminos imperii*).⁵¹

⁴⁰ Eck 2013, p. 21. Cassius Dio, *Roman History*, LVI, 18, 1, speaks in the plural (poleis).

⁴¹ von Schnurbein 2003, p. 97.

⁴² Eck 2004, p. 16-17.

⁴³ Eck 2013, p. 22.

⁴⁴ Tacitus, *Annals*, I, 57, 2.

⁴⁵ Eck 2018, p. 137.

⁴⁶ Eck 2018, p. 134 (author's rephrasing).

⁴⁷ Velleius Paterculus, *History*, II, 120-121.

⁴⁸ Becker, Rasbach 2016, p. 68-72.

⁴⁹ Syme 1978, p. 53-61.

⁵⁰ By then a *praesidium* had been placed in Chaucian territory: Tacitus, *Annals*, I, 38, 1.

⁵¹ Tacitus, *Annals*, I, 11, 4. Eck 2018, p. 135-137.

Tiberian *stasis*?

After the campaign of AD 16, Germanicus was summoned back to Rome. Tiberius gave various reasons for his decision, but concealed the most pressing one: fear of his adoptive son's popularity.⁵² Following the death of Augustus in 14, the Rhine army had rebelled and wanted to proclaim Germanicus as emperor. In contrast to Tiberius, both Germanicus and his wife Agrippina had a bloodline with Augustus. A resounding victory in Germany, which seemed imminent after the AD 16 campaign, might have seriously endangered Tiberius' position. In 17, a special *senatus consultum* carefully curtailed Germanicus' powers for his new eastern command, showing that Tiberius was fearful of his nephew's popularity and dynastic position.⁵³ Other factors must have played a role. Costs may have been weighed against benefits, like Strabo did at much the same time for Britain in a detailed calculation, perhaps reflecting imperial policy.⁵⁴ On a more structural level, it has often been observed that Germany, lacking proto-urban settlements and other fixed assets, was a less easy prey for the proven Roman methods of subjection.⁵⁵ Perhaps, in retrospect, the whole Augustan project in Germany was simply a matter of "too much, too soon".⁵⁶

Following Rome's withdrawal to the left bank of the Rhine, the objectives of the post-Varian campaigns, and indeed the whole German project, were carefully rephrased. According to the same *senatus consultum* of AD 17, Germanicus' triumphal arch in Rome was to carry an inscription stating that the Germans had been defeated in war and repelled from Gaul, revenge had been taken for the Varian disaster, and Gaul put to order again.⁵⁷ In this context, Tiberius presumably (mis)used Augustus' *consilium* to motivate the reinstatement of the Rhine, instead of the Elbe, as Rome's pre-ordained frontier.⁵⁸ He may for a moment have considered retaining the core area of the Larger-German province, based on the Lippe and Lahn and containing the lead mines of Sauerland and some of Dio's *poleis*,⁵⁹ but it was decided to abandon all positions beyond the Rhine. The bases at Mainz, Neuss, and Xanten were reoccupied, the former and latter housing two legions, while new legionary bases were placed on the Upper Rhine at Strasbourg and Windisch, far away from the recent hotbeds of warfare, presumably with an eye on Gaul.⁶⁰ The new arrangement clearly was the result of a strategic decision, with the Rhine now again serving as a boundary, barrier and logistic feeder, aspects explored below.

⁵² Tacitus, *Annals*, II, 26.

⁵³ Eck 2013, p. 23.

⁵⁴ Strabo, *Geography*, IV, 5, 2, 3.

⁵⁵ Hanson 2002, p. 28-30; but already in Luttwak 1976, p. 45.

⁵⁶ Polak, Kooistra 2013, p. 444.

⁵⁷ Polak, Kooistra 2013, p. 435.

⁵⁸ Eck 2018, p. 136.

⁵⁹ Tacitus, *Annals*, II, 41, 2, mentions the Chatti and Cherusci as subjected by Germanicus without reserve.

⁶⁰ Polak, Kooistra 2013, p. 436.

The Tiberian disposition on the Rhine is a fine example of the early Roman policy to place massive strike forces in key positions that controlled the main theatres of potential unrest. It was not coincidental that the two double fortresses, Xanten and Mainz, each stood at the base of the natural penetration axes into Germany, the Lippe valley and the Vortaunus-Wetterau-Giessener Becken route. The Rhine was garrisoned with eight legions, projecting an immense military power far and wide into the Barbaricum. With the Germanic peoples recently reminded of Rome's military might, and usually divided among themselves, often also internally,⁶¹ there was no chance for them to throw the left bank of the Rhine into serious trouble again. Military threats continued to arise in the 1st century, but these were usually dealt with swiftly.⁶² More importantly, the 'big stick' of the Rhine garrison served to back up a policy of indirect dominion via client kings.⁶³ A faction of the Cherusci is reported to have asked Rome for a king in 47, whereupon they received Italicus, a close relative of Varus' adversary Arminius.⁶⁴ Later in the 1st century, a king was forced upon the Bructeri.⁶⁵ Often it sufficed to fuel the proverbial Germanic *discordia* by selectively providing, or withholding, military or financial support. Rome also made sure that it kept control over the right bank of the Rhine. In 58, Frisian settlers were forcefully evicted from the zone across the river that was reserved for military use.⁶⁶ At some point, *Legio I Minervia*, stationed at Bonn, had its *prata* across the Rhine enlarged and marked out.⁶⁷ Exercises were held on the right bank by the legions and their associated auxiliary units, witnessed by the practice camps around Geislar and Wesel-Flüren across Bonn and Xanten, respectively. A *Tegularia Transrhenana* is attested for the pre-Flavian period through many tile stamps. It all helped to support the official position that the province of *Germania*, which probably had included the *civitates* on the left bank from the start, had never been abandoned.⁶⁸

It is tempting to read a purpose-made 'river frontier' into the military disposition that we see unfold along the Lower Rhine after 16. Several caveats are in place, however. First, the dense chain of installations of the late 1st century was not a coherent design, but the result of a 70-year incremental development, with installations of various nature and purpose being added in successive steps. In the Tiberian period we are essentially looking at a few main bases, at Xanten, Neuss, and Cologne-Alteburg, where the German fleet was based, with branch establishments and special-purpose sites elsewhere,⁶⁹ like Bonn-Erste Fährgrasse (a logistic hub?) and Nijmegen-Kops Plateau (seat of a *praefectus*

⁶¹ See Tacitus, *Annals*, XI, 16, 1; *Germany*, XXXIII.

⁶² For a handsome list: Eck 2013, p. 25.

⁶³ Will 1987.

⁶⁴ Tacitus, *Annals*, XI, 16, 1.

⁶⁵ Pliny the Younger, *Letters*, II, 7, 2.

⁶⁶ Tacitus, *Annals*, XII, 54.

⁶⁷ *AE* 1996, 1106.

⁶⁸ Eck 2013, p. 23-24.

⁶⁹ Gechter 2006, p. 125-126, aptly speaks of *Schwerpunktlager* and *Dienststellen*.

gentis for the Batavi,⁷⁰ and/or a cavalry training centre?⁷¹), and a few outposted cavalry units keeping in check the flanks, like at Kalkar and Bonn-Rathausplatz.⁷² In the Rhine delta, the Tiberian bases at Arnhem-Meinerswijk, Vechten and Velsen were too widely spaced to exert the level of control associated with the classic *limites* of the 2nd century. They may have played a role in controlling and supporting the watery motorway to the north and, in the case of Velsen, with governing and taxing the Frisians.⁷³ Feeding the forces of Lower Germany was a logistical challenge. Most of the food supply had to be conveyed from the Gaulish interior—over water, as villa-based surplus production in the Rhineland did not emerge until the later 1st century.⁷⁴ This factor alone suffices to explain that all the military installations were drawn to the river bank. For the same reason, legionary fortresses elsewhere, with few exceptions, were situated on navigable rivers. Concentrating the military infrastructure on the left bank of the Rhine killed three birds with one stone: the river-based *praesidia* provided secure harbours, facilities for maintenance and support, and military surveillance of river traffic.

After 16, the Rhineland remained the most strongly held frontier sector of the Roman world for seven decades. The main bases between Mainz and Xanten effectively guarded the gates to the heartlands of the Bructeri, Cherusci, and Chatti. The double fortress at *Vetera* projected military power far into Germany due to its position opposite the mouth of the Lippe. At the same time, *Vetera*, due to its terrain setting, was formally oriented to the south.⁷⁵ In this context it bears quoting Tacitus' comment on the legionary disposition in 23: "But our chief strength was on the Rhine, as a defence *alike against Germans and Gauls*."⁷⁶ After all, when the post-Varian disposition took shape, it was little more than one generation ago that the future province of Lower Germany had been repopulated with what would in time become the Ubii, Cugerni, and Batavians. If the constitutive Batavian core group was transferred to the Rhine delta in c. 19 BC, as argued above, the synchronous foundation of Nijmegen-Hunnerberg, close to their future capital, is noteworthy. In general, one can observe a broad spatial and chronological correspondence between early military bases and resettled Germanic tribes all along the Rhine.⁷⁷ It would appear that Rome's military might was there *inter alia* to monitor delicate integration processes in recently repopulated borderlands. The attempted Gaulish uprising of Florus and Sacrovir in 21 and the Frisian rebellion in 28 illustrate the point.⁷⁸

⁷⁰ Slofstra 2002, p. 27-28.

⁷¹ Driessen 2007, p. 70-76.

⁷² For a similar pattern in Moesia: Karavas 2001, p. 134-136, 147, with map 17.

⁷³ For the latter: Slofstra 2002, p. 26-27.

⁷⁴ See e.g. Schamuhn, Zerl 2009.

⁷⁵ Graafstal 2024. The pattern is replicated on the Lower Danube, with the foundation of Oescus closely connected with the settlement of 50,000 Getae in the interior (Ivanov 1998, p. 504-505) and that of Novae almost synchronous with the provincialisation of Thrace (Graafstal 2023, p. 7).

⁷⁶ Tacitus, *Annals*, IV, 5, 1.

⁷⁷ Graafstal 2024.

⁷⁸ Tacitus, *Annals*, III, 40-47; IV, 72-74, respectively.

Early communication and corridors

In the quest for signs of early frontier development scholarly attention has obviously focused on roads. Early evidence of road construction, dating to the first two or so decades of the 1st century, has indeed been found in the Xanten-Cologne sector, the core area of Lower Germany. This includes a dendrochronological date of AD 17 for a branch road at the Waidmarkt just outside the south gate of Cologne.⁷⁹ However, the question is whether the early Rhineland road can be seen as the equivalent of the frontier roads of the classic age of *limites*, like the *Alblimes* and Odenwald roads in Upper Germany and the Stanegate in England. More directly comparable, and more closely contemporary, would be the Fosse Way which linked up the early British bases at and between Lincoln and Exeter from c. AD 47. The road cut through several tribal territories and did not necessarily define the edge of Roman control; rather it served as a baseline and springboard for military action at any point in, behind or beyond the broad zone of military occupation.⁸⁰ The early Rhineland road, likewise, would have allowed for swift 'horizontal' troop displacement, enabling the main striking forces to quickly deploy for action at any point along the line, whether it be in the foreland or in the hinterland. But it also served as a backup for the river as the system's main logistic artery.⁸¹

The conditions of river traffic certainly influenced military deployment. In the late Augustan period, the installations at Andernach and Remagen had been placed in 'bottle-neck' positions, just upstream of a sudden narrowing of the river valley, with ensuing difficulties for river traffic. This curious locational preference is a hallmark of what has been labelled 'fortified transport corridors', i.e. river stretches through difficult terrain, usually away from the main forces, where the protection, propulsion, and further support of river traffic posed special challenges, leading to relatively early, and in places dense, chains of installations, often including fortlets and/or towers. Examples are the late Tiberian-early Claudian installations on the Upper Danube and in the Iron Gate gorge in Serbia.⁸² In this light, the somewhat triangular installation at Moers-Asberg (*Asciburgium*), and a rather similar early enclosure with associated Augusto-Tiberian finds at Kalkar (*Burginatum*),⁸³ remind us of the *Uferkastelle* (riverbank forts) at Haltern and the harbour fort of Velsen 1. Many dots on our Roman military maps, certainly those of the pre-Flavian Rhine and Danube frontiers, may in fact be to do more with supply logistics and the conditions of river traffic, including fleet operations, than with the preclusive, linear security systems of the 2nd-century *limites*.

⁷⁹ Becker 2009. How relevant the Waidmarkt evidence remains to be seen, as cities, like forts, will have received at least stub lengths of roads projecting from their gates at an early stage.

⁸⁰ Jones, Mattingly 1990, p. 93-95.

⁸¹ This role is hinted at by the milestones of 44 found at Boppard, Kapellen, and Koblenz in Upper Germany (*CIL* XIII, 9142-9143, 9145). The Rhine valley road was part of a coherent road-building scheme focussing on the main arteries, often river-based, that were to support the invasion and occupation of Britain in AD 43: Graafstal 2023, p. 17-19.

⁸² Graafstal 2017.

⁸³ Pers. comm. Steve Bödecker.

Developments in the Rhine delta and beyond

The early 40s saw important changes in the military disposition, especially in the Rhine delta, triggered by Caligula's planned and Claudius' successful invasion of Britain. Whether two newly discovered bases of (near-)legionary size, at Valkenburg and Velsen⁸⁴, are related remains to be seen. The former, with an associated dendrochronological date of 39-40, appears to have been a short-lived if not abortive affair, while the latter saw construction work going on in 42-43, perhaps as a replacement for Valkenburg.⁸⁵ Velsen was better placed to monitor the administrative integration of the Frisii, a process that was in full swing in the following years.⁸⁶ One is reminded of the near-contemporary British fortresses, like Exeter, Usk and Wroxeter, all commanding their own regional 'legionary fronts'.⁸⁷ Along the Rhine, a broad coincidence is observable in the early Roman period, spatially and chronologically, between major military bases and key areas of recent colonisation and tribal construction.⁸⁸ In the end, the Frisian project, and the fortress at Velsen, were abandoned by Claudius in 47, for reasons unspecified by Tacitus,⁸⁹ but likely to do with a wish, or need, to focus on the new British province. The governor Corbulo's next documented project was the digging of a canal between the mouths of the rivers Rhine and Meuse, "to avoid the dangers of the sea",⁹⁰ hinting at Britain-bound provisioning traffic.

Claudius' instruction to Corbulo to withdraw his forces from Frisia long counted as the birth certificate of the dense chain of forts between Vechten and Valkenburg. However, the dendrochronological dates obtained during major excavations at Alphen aan den Rijn in 2001-2002 now indicate that this fort was built starting with timbers felled in the winter of AD 40-41 and continuing into 42.⁹¹ The formation of Alphen's 'coin pool' started with a sharp Caligulan spike,⁹² a pattern replicated at De Meern,⁹³ while a late Caligulan date had earlier been proposed for the auxiliary fort at Valkenburg.⁹⁴ Woerden may have been part of this new chain of forts from the start.⁹⁵ Interestingly, all new foundations conform to what has been styled the 'delta type', meaning reduced forts which lack the usual rear (*retentura*) strip of buildings.⁹⁶

⁸⁴ Vos *et alii* 2021; Bosman 2021, respectively.

⁸⁵ See Graafstal 2023, p. 13.

⁸⁶ In 47, Corbulo was about to give them 'a senate, magistrates and laws' (Tacitus, *Annals*, XI, 19, 1).

⁸⁷ Coby 2022, p. 38.

⁸⁸ Graafstal 2024.

⁸⁹ *Annals*, XI, 19, 3.

⁹⁰ *Annals*, XI, 20, 2.

⁹¹ Polak *et alii* 2004, p. 249 with appendix 1.

⁹² Kemmers 2004.

⁹³ Kemmers 2008, p. 11-12.

⁹⁴ de Weerd 1977.

⁹⁵ Blom, Vos 2008, p. 11, 65, 284, 409-412.

⁹⁶ Polak *et alii* 2020, p. 43. The most easterly known specimen, Arnhem-Meinerswijk, occurs at the base of the Rhine delta.

A recent analysis of the system underlines its unitary design.⁹⁷ A link with the invasion of Britain in 43, which had been in preparation for three years, to judge the evidence of milestones, seems undeniable.⁹⁸

Most forts to the west of Vechten were situated across, or next to, the mouth of lesser waterways that exposed the Rhine corridor to waterborne raiding.⁹⁹ A concern to monitor the river traffic seems to lie behind the positioning of the watchtowers in the well-researched Leidsche Rijn area west of Utrecht. All four sites in question have produced *ballista* missiles, hinting at their potential to keep the river under artillery fire.¹⁰⁰ The Oude Rijn string of forts is a textbook example of the earlier mentioned 'fortified transport corridors'.¹⁰¹ When discussing the purpose of incremental military investment along rivers outside such corridors, like as happened around the same time in the German Rhineland, with new auxiliary forts placed at Till-Steincheshof and Wesel-Büderich, protection and practical support (harborage, storage, towing, transshipment) of river traffic should always be considered as a possible (co-)motive.

The coming of age of the *auxilia* and the conversion in stone of the legionary bases

If we are right that the dense chain of forts between Vechten and Valkenburg was much involved in the support and protection of river traffic, there is good reason to suppose that occupation may have fluctuated, at least initially. Provisioning was a seasonal activity, driven in large part by the yearly harvests, notably of grain. Most of the thousands of shiploads of foodstuffs needed to feed the Lower German army in the pre-Flavian period,¹⁰² would have been transported within a couple of months. A fluctuating occupation may have been provided by mixed detachments of legionaries and auxiliaries drawn from the main bases in the Rhineland. Such practice was perfectly normal well into the Claudian period. When the Frisians rose in AD 28, they found the fort *Flevum* (probably Velsen), occupied by a mixed garrison.¹⁰³ Typically legionary equipment (*pila*, rectangular shields, artillery missiles) is regularly found in the pre-Flavian forts of the Rhine delta¹⁰⁴ as well as those along the Upper Danube. The somewhat fleeting nature of this early occupation may account for the scant evidence of contemporaneous civil settlement and burial activity. At Utrecht and De Meern,

⁹⁷ Buijtendorp 2021, p. 71-75.

⁹⁸ Graafstal 2023.

⁹⁹ See Tacitus, *Annals*, XI, 18, 1; Pliny the Elder, *Natural History*, XVI, 76, 203.

¹⁰⁰ Graafstal, Hessing 2021, p. 131-132.

¹⁰¹ Graafstal 2017.

¹⁰² See n. 139.

¹⁰³ Tacitus, *Annals*, IV, 72, 3.

¹⁰⁴ Polak 2019, p. 639-640.

the first development of *vici* and cemeteries is now broadly datable to the Neronian period.¹⁰⁵ This is matched by the evidence in Britain where we can see increasing operational and 'occupational' autonomy of the *auxilia* in those years.¹⁰⁶

Under Claudius (41-54) a beginning was made with the conversion into stone of the legionary bases on the Rhine, including Windisch, Bonn, and Neuss.¹⁰⁷ This process in itself does not mean that the military disposition in Lower Germany was by now considered definitive. Replacement of turf-and-timber structures in stone after a certain time was a normal phenomenon in Roman military construction. There was also a status aspect involved: legionary fortresses usually came first, while in auxiliary forts the headquarters and *latera praetorii* often had priority.¹⁰⁸ In the Rhine delta, the latter process may have started only in the Trajanic period, probably with the HQ buildings.¹⁰⁹ As said, building in stone does not in itself indicate that the military disposition was fossilising: Inchtuthil was receiving stone defences at a point in time when the old Flavian policy of total conquest of Britain was still in force, while the defensive perimeter of Hanau-Kesselstadt was built in stone straight away, with the military occupation of the Wetterau only just having begun to unfold. In Lower Germany, likewise, Bonn and Xanten might have supported a future extension of the province to include the old core area of the Larger-German province between Lahn and Lippe, had such a policy been adopted in Rome.

The Domitianic disposition

The Flavian period started with a reminder that the Rhine garrison was there for internal as much as external security issues. The Batavians had risen in 69, bringing havoc and chaos to the whole Lower Rhine region, so they needed to feel (and the surrounding region needed to see) Rome's iron fist. A legion, *X Gemina*, was quartered on the Hunnerberg again, close to the old *oppidum Batavorum*, some 10 km behind what counted as the imperial boundary. New forts were built at Kesteren and Maurik on the Rhine, but also at Rossum on the river Waal, far behind the imperial frontier, but close to Lith-Kessel, one of the Batavians' major cult centres. The new installations effectively formed a ring of forts around the Batavian *civitas*. In the final stage of the AD 69 rebellion, the Treveri and Lingones had declared independence, while the loyalty of other Gaulish tribes had wavered. In a reversal of the main trend forward, a legion, *VIII Augusta*, was planted in the territory of the Lingones shortly after 70. The fortress at Mirebeau-sur-Bèze occupied a turntable position in the main Gaulish road

¹⁰⁵ Graafstal, Hessing 2021, p. 128-130, 136.

¹⁰⁶ E.g. in Wales: Burnham, Davies 2010, p. 40-42.

¹⁰⁷ Bechert 1969.

¹⁰⁸ Hanson 2009.

¹⁰⁹ Polak 2009, p. 951.

network and was situated close to a cult centre.¹¹⁰ It stayed there until the mid-80s, when the whole deployment in Upper and Lower Germany was reorganised.

Following his Chattan war of c. 83¹¹¹ (another example of an imperial campaign on the northern frontiers launched in order to gain battlefield credits for a new emperor without a military track record¹¹²), Domitian finally turned the military commands of Upper and Lower Germany into formal provinces. The previous arrangement had been unique in the Roman world, a declaration almost that the German agenda was still on the table.¹¹³ In Upper Germany, the military presence on the other side of the Rhine had stepwise unfolded, first opposite Mainz at Wiesbaden and Hofheim, next in the Groß-Gerau area, then with the Rhine bridge at Koblenz of AD 49¹¹⁴, and finally, under Vespasian, along various axes, with fort-building in the Neuwieder Becken (Bendorf), in the Vortaunus-Wetterau region, and around Rottweil on the Upper Neckar.¹¹⁵ By the early 80s, with the Armenian issue settled under Nero and Britain now close to complete conquest, the German question was the big remaining issue of Roman 'foreign policy'. From Pliny the Younger we learn that his uncle had written "twenty books on the German wars, in which he assembled all the wars we have fought with the Germani" — "so long have we been in conquering Germany", Tacitus would add.¹¹⁶ Karl Strobel has convincingly argued that:

it was Domitian's (and his advisers') declared aim from the beginning, in connection with a personally led campaign against the Chatti, to declare the Germanic question, which had been left open as an option since Augustan times [...] to be solved and, through the proclamation of *Germania capta*, with the associated creation of the Germanic provinces, to lay claim to have concluded a century of Roman Germany policy with a final success.¹¹⁷

Domitian's German 'victory' and settlement were broadly publicised as surpassing the successes of his father and brother,¹¹⁸ and to a certain extent even those of Augustus, as the renaming of the months of September and October to Germanicus and Domitianus implied.¹¹⁹

Strobel makes a strong case for 84 as the year in which the two German provinces were instituted, heralded by the *Germania capta* coin issues which started later in

¹¹⁰ Reddé 2006; Vernault 2006.

¹¹¹ On the many chronological difficulties: Southern 1997, p. 79-82. Strobel 1987 makes a strong case for the Spring-Summer of 83.

¹¹² Graafstal 2023. For Domitian: Strobel 1987, p. 427-428.

¹¹³ Strobel 1987, p. 431. For a rebuttal of the view that two German provinces had existed since the Augustan period: Eck 2013, n. 24.

¹¹⁴ Not a campaign affair, it would appear: Strobel 1987, p. 427, n. 26.

¹¹⁵ Kemkes 2005, p. 45-48.

¹¹⁶ Pliny the Younger, *Letters*, III, 5; Tacitus, *Germany*, XXXVII, 2.

¹¹⁷ Strobel 1987, p. 431.

¹¹⁸ See Martial, *Epigrams*, II, 2.

¹¹⁹ Strobel 1987, p. 431-437.

that year.¹²⁰ In Upper Germany, the new lines of forts and fortlets that unfolded from c. 85/90 largely prefigured the later provincial contour, taking in several pockets of land with good agricultural potential.¹²¹ In the Wetterau, the line from Hanau-Salisberg to Heldenbergen, including a running ditch-and-rampart guarded by fortlets, can now be dated to the early Domitianic period, showing the concept of artificial preclusive frontiers to be in development by then.¹²² In Lower Germany, the existing disposition was basically retained, but not without consideration. The old Augustan installation at Moers-Asberg was abandoned and a new *ala* fort planted at Dormagen, filling up one of the last remaining gaps in the Rhineland, perhaps suggesting that a spacing norm had by now become de rigueur. Interestingly, the earliest dendrochronological date connected with the *limes* road in the Rhine delta is 89,¹²³ or perhaps 86/87.¹²⁴ In the Utrecht area, it appears that the road did not develop out of earlier trackways, but was a new creation, by-passing the two local forts that lay somewhat tucked away in northward river bends, thus forming the shortest possible horizontal baseline for swift movement conceived on a supra-local level.¹²⁵

The Rhine: frontier barrier, operational axis, logistic lifeline

It has often been stated that rivers are not good as frontiers, their natural role being to connect rather than divide peoples. In the Roman context, we hear that communities on both sides of the Rhine and Danube often had more in common between them than with the centre of the Empire.¹²⁶ This may all be true, but it is an observed fact that, throughout history, rivers have often been proclaimed as ‘natural’ boundaries by states and empires.¹²⁷ One of the reasons is that many rivers—and this certainly includes the Rhine and Danube for most of their length—are formidable obstacles for armies and war bands alike, and therefore perform excellently as part of military defence systems. In his military handbook, Vegetius devoted a chapter to the difficulties and dangers of crossing a river with an army column.¹²⁸ For a raiding band, crossing a 0.5-1 km wide river in substantial numbers required serious preparation, including the collection of vessels. Such a transfer took time and made any party vulnerable. In the case of raiding, the intruders, if sensible,

¹²⁰ Strobel 1987, p. 435-437.

¹²¹ Strobel 1987, p. 447-449.

¹²² Lindner 2018.

¹²³ At Utrecht-Veldhuizen, possibly in a secondary position within a fast-developing stratigraphic sequence: Graafstal, Den Braven 2020, p. 63.

¹²⁴ Assuming that the revetment in question is related to the road's crossing of the Corbulo canal at Leiden-Roomburg: Hazenberg 2000, p. 34, 36.

¹²⁵ Graafstal 2021, p. 119.

¹²⁶ E.g. Maxfield 1987, p. 139.

¹²⁷ Mattern 2013, p. 216-217.

¹²⁸ Vegetius, *De re militari*, III, 7.

would need to leave behind part of their force in order to guard the vessels.¹²⁹ There is a good reason why there were no bridges over the rivers Rhine and Danube where these served as the boundary of the Roman Empire.¹³⁰ When the Upper German-Raetian *limes* was abandoned in the later 3rd century, the new frontier line was rerouted to follow the rivers Danube, Iller and Rhine,¹³¹ in spite of this creating a re-entrant into Roman territory.

Roman military planning authorities appear to have been aware of the security benefits of major rivers like the Rhine and Danube. In general, excluding 'fortified transport corridors', distances between forts along those rivers were appreciably longer than on contemporary artificial frontiers. In the Rhineland, the average distance between the fortifications between Remagen and Till-Steincheshof in the 2nd century was about 17 km; on the busy stretch of the *ripa Pannonica* in Hungary between Budapest and *Altinum* it was *c.* 15 km; in Moesia Inferior, between *Novae* and *Carsium*, where the Danube in many places was over 1 km wide, the average interval increased to 26 km.¹³² On Hadrian's Wall, in contrast, spacing was much closer at 11 km for the primary forts, and 8 km in the final disposition (excluding Vindolanda); on the *Vordere Limes* between Miltenberg and Lorch it was 13 km; on the exposed the *Wetterau-Limes* from Großkrotzenburg to the Saalburg a mere 8.5 km. Our picture of watchtowers along river frontiers is admittedly lacunose, partly because there is no artificial barrier to guide us to their remains, partly because their sites are naturally prone to erosion. But the general impression is that river frontiers could do with much fewer towers. In the Rhineland, a well-placed watchtower could easily oversee 3-5 km of the river (their surface is much easier to monitor than land covered with scrubs and vegetation), whereas artificial frontiers had towers every *c.* 0.5-1 km.

Finally, the Romans were well aware of the value of rivers as logistic axes and operational baselines in campaign conditions.¹³³ Strabo casually mentions "the Danube, on which the Romans used to convey their equipment for war".¹³⁴ In the Rhine delta, Drusus constructed "canals with prodigious labour",¹³⁵ in anticipation of one of his waterborne campaigns. Before launching his first Dacian war in 101, Trajan had taken two years for improving the towpath and other infrastructure of the Iron Gate, which included a harbour basin at Prahovo (*Aquae*) and a 3.2 km long canal.¹³⁶ During the Marcomannic wars, M. Valerius Maximianus was charged with "the conveyance, by way of the Danube, of the goods that were shipped for the supply of Pannonia and both of its armies".¹³⁷

¹²⁹ Rankov 2005, p. 179-181.

¹³⁰ Rankov 2005, p. 178. Hadrian had the superstructure of Trajan's magnificent Danube bridge at Drobeta demolished to prevent barbarian incursions (Cassius Dio, *Roman History*, LXVIII, 13, 6). The bridges at Mainz, Stepperg, Eining, and Drobeta can all be regarded as situated *within* Roman territory.

¹³¹ Breeze 2015, p. 18.

¹³² All measured in QGIS, following the (probable) line of the frontier road.

¹³³ Roth 1998, p. 196-197, and *passim*.

¹³⁴ *Geography*, VII, 3, 13, referring to recent Augustan campaigns.

¹³⁵ Suetonius, *The Twelve Caesars*, *Claudius*, I, 2. See also Tacitus, *Annals*, II, 8, 1.

¹³⁶ Graafstal 2023, p. 9.

¹³⁷ *AE* 1956, 124.

It is not just in wartime that the Rhine and Danube functioned as logistic lifelines. We've touched upon this aspect earlier, but it is worth specifying what we are talking about. Feeding the army of the Germanies was a serious challenge, certainly in the pre-provincial period, when there were eight legions to cater for and villa-based surplus production of grain had barely started in the immediate hinterland. For Lower Germany alone we're talking about some 40,000 troops.¹³⁸ About 2,000 shiploads of grain were needed to feed the pre-Flavian Rhine garrison.¹³⁹ Over and above that came quantities of wine, oil, fish sauce, beer, and non-food items like timber, stone, leather and metals. Heinrich Konen has pointed out the crucial importance of the Rhine and Danube as supply lines in the 1st century, their tributaries and overseas connections opening up remote areas. The pre-Flavian army in Lower Moesia was supplied by regions as far away as Gaul, northern Italy and Asia Minor.¹⁴⁰ At the beginning of the 2nd century, the *Cohors I Hispanorum Veterana* stationed at *Scupi* in northern Macedonia had some of its men procuring cloths as far away as Gaul.¹⁴¹ So dependent were pre-Flavian Lower Germany (and Britain) on supplies from the wider Gaulish and Mediterranean hinterlands that plans were made around 58 to construct a canal between the headwaters of the Saône and the Moselle.¹⁴² Building materials were another matter. The oak piles for Hadrian's *limes* road in the Rhine delta were sourced some 150 km upstream—and conveyed over water.¹⁴³ Most military stone construction in Lower Germany was carried out in tufa which was quarried in the Brohl valley in the Eifel, just outside the province. It was also thanks to river transport that the brickworks at Nijmegen-Holdeurn could supply the whole Dutch frontier sector with ceramic building materials.

Rome's first frontier

The foregoing survey of Lower Germany, with occasional forays beyond, lends little support to the view that Roman frontiers gradually fossilised because the imperial system favoured 'complacency, even apathy'.¹⁴⁴ The British experience, in particular, may suggest that Roman advance repeatedly came to a halt on the threshold of military overstretch.¹⁴⁵ But more typically the locality of Roman frontiers was the result of imperial

¹³⁸ Polak 2009, p. 949.

¹³⁹ Konen 2008, p. 304, a conservative calculation which does not cover the extended military community including grooms and slaves, and the extramural residents.

¹⁴⁰ Graafstal 2023, p. 8.

¹⁴¹ British Museum pap. 2851, as emended by Fink 1958, p. 104.

¹⁴² Tacitus, *Annals*, XIII, 53, 2.

¹⁴³ Visser 2015.

¹⁴⁴ Mann 1979, p. 178. See also Hanson 2002.

¹⁴⁵ A concept usefully explored by Coby 2022, but all of this needs to be seen within a context of frequent reports to Rome and fresh imperial *mandata*.

decision-making, with campaigns, and intended conquests, often planned two or three years in advance.¹⁴⁶ It was the same with the abandonment of territory. This was usually not the result of a gradual crumbling away of the Roman position, but the ordered outcome of central decision-making—*vide* Germany in 16, Frisia in 47, Scotland *c.* 86 and *c.* 105, trans-Danubian Raetia in 254, Dacia around 270, and trans-Rhenish Upper Germany later in the 3rd century.¹⁴⁷ It bears underlining that such decisions of advance or retreat were not within the authority of provincial governors, but normally required special imperial *mandata*.¹⁴⁸ We have the Lower German example of Corbulo to illustrate the point.

Lower Germany also exemplifies the magnetic effect of Europe's main rivers. The scale of the Rhine and Danube, in terms of width, depth, and length, enhanced their riparian utility as the markers of Roman territorial claims, operational axes, logistic lifelines, and security barriers. The Rhine in particular provided a connection, also via the Rhône, Saône and Moselle, between the Mediterranean world and the southern coasts of the North Sea. If Rome was to rule Gaul, control of the Rhine's left bank was essential. Because of these benefits, especially in the sphere of supply traffic, the Rhine and Danube tended to distort the expected patterns of military deployment, inviting an early jump forward at a point in time where the occupying forces still had much unfinished business *at their back*. For the interior of the Rhine provinces, we have a dense track record of unrest and uprising occurring at least in 12 BC, AD 9, 21, 28 and 69.

We have seen that the Lower German *limes*, in its final, late 1st-century state, was the result of a long and complex development. All the named functions of Rome's frontier rivers are reflected in the installations that successively, and incrementally, landed on the left bank of the Rhine. In the foregoing we have discussed Rome's early bulwark in the far north, Nijmegen, the winter bases of Drusus' campaigns, the concentrated striking forces of the Julio-Claudian period, the 'fortified transport corridor' between Vechten and Valkenburg of the early 40s, the ring of fortifications around the Batavians of the early 70s, and a few adjustments in the mid-80s. By the time the Rhine provinces were instituted and the first steps towards preclusive artificial frontiers were made in Upper Germany, a dense and continuous chain of installations had come about on the Lower Rhine. Before long, auxiliary forts started to emerge in greater density along the Danube from Noricum to Lower Moesia. In that sense, Lower Germany was home to Rome's first frontier.

Domitian claimed to have settled the old German problem for good. His equestrian statue in Rome showed his horse trampling a personification of the captive river Rhine, as the epitome of Germany.¹⁴⁹ There is certainly some truth in Domitian's claim. With the military disposition as it solidified from the mid-80s onwards, Rome for several generations achieved effective control of trans-Rhenine Germany without occupation. There was no reason for further forward action. And there was a powerful factor that

¹⁴⁶ Graafstal 2023.

¹⁴⁷ See the contributions of Flügel, Scholz, especially in this volume.

¹⁴⁸ Reuter 1997.

¹⁴⁹ Statius, *Silvae*, I, 1, 50-51.

kept things as they were: the river Rhine—connector and barrier at the same time. There are good reasons why the rivers Rhine, Danube, Euphrates, Jordan (until 106) and Elbe (under Augustus) were proclaimed, and maintained, as the boundaries of Roman-controlled territory.¹⁵⁰ Tacitus called Rome's frontier rivers "the old defences of the Empire".¹⁵¹ Perhaps more importantly, they were the lifelines of supply. David Breeze has plausibly suggested that the Rhine and Danube "became too convenient to abandon especially for a people so wedded to bureaucracy and so organised when it came to supplying their troops as the Romans were".¹⁵²

Between c. 250 and 300, Rome stepwise abandoned the territories it had held beyond the Rhine and Danube for one and a half centuries or more. Somewhere in that same period, most forts in the Rhine delta were vacated (with scant evidence for structural occupation in the following century), and the sandy soils of the Maas-Demer-Scheldt area in the southern Netherlands and northern Belgium depopulated, in a forced manner, it would appear, as part of a reorganisation of the Lower German frontier.¹⁵³ But the old military bulwark on the Rhine, between Bonn and Nijmegen, was largely kept in place, replicating the pattern of the early Roman period. While Roman governors continued to reside in Cologne until 456, gold payments to Frankish war-band leaders, both inside and outside the old province, went on for a few more years,¹⁵⁴ keeping up the 500-year-old claim that Rome ruled the Rhine.

Bibliography

Abbreviations

AE = *L'Année épigraphique*.

CIL = *Corpus inscriptionum latinarum*.

Primary Sources

Bailey D.R. (ed. and trans.) (2015), *Statius, Silvae*, Cambridge (MA) / London (The Loeb Classical Library, 206).

Boissevain U.P. (ed.) (1898), *Cassii Dionis Cocceiani historiarum Romanorum quae supersunt*, vol. 2, Berlin.

Boissevain U.P. (ed.) (1901), *Cassii Dionis Cocceiani historiarum Romanorum quae supersunt*, vol. 3, Berlin.

Borzák S., Wellesley K. (ed.) (1989), *Cornelii Taciti libri qui supersunt*, vol. 2/1, Leipzig (Bibliotheca scriptorum Graecorum et Romanorum Teubneriana).

¹⁵⁰ Eck 2022, p. 5.

¹⁵¹ *Histories*, IV, 26, 2.

¹⁵² Breeze 2015, p. 17, with reference to Roth 1998.

¹⁵³ Heeren 2017.

¹⁵⁴ Roymans, Heeren 2017.

- Elefante M. (ed.) (1997), *Ad M. Vinicium Consullem libri duo*, Hildesheim / Zurich / New York (Bibliotheca Weidmanniana 3).
- Freyburger M.-L., Roddaz J.-M. (ed. and trans.) (1991), *Dion Cassius, Histoire romaine. Livres 50 et 51*, Paris (Collection des universités de France. Série grecque, 340).
- Heubner H. (ed.) (1994), *P. Cornelii Taciti libri qui supersunt*, vol. 1, Stuttgart (Bibliotheca scriptorum Graecorum et Romanorum Teubneriana) [rev. edn].
- Jal P. (ed. and trans.) (1984), *Abrégés des livres de l'Histoire romaine de Tite-Live*, vol. 2, Paris (Collection des universités de France. Série latine, 267).
- Kaster R.A. (ed.) (2016), *C. Suetoni Tranquilli De Vita Caesarum Libros VIII et De grammaticis et rhetoribus librum*, Oxford (Scriptorum classicorum bibliotheca Oxoniensis).
- König R., with the assist. of J. Hopp (ed. and trans.) (1991), *C. Plinius Secundus d. Ä. Naturkunde; C. Plinii Secundi Naturalis historiae libri XXXVII. Buch XVI: Botanik; Liber XVI*, Munich / Zurich (Sammlung Tusculum).
- Perret J. (ed. and trans.) (1997), *Tacite. La Germanie*, Paris (Collection des universités de France. Série latine, 125) [rev. edn. by G. Devallet].
- Radt S. (ed. and trans.) (2002), *Strabons Geographika*, vol. 1, Göttingen.
- Radt S. (ed. and trans.) (2003), *Strabons Geographika*, vol. 2, Göttingen.
- Reeve M.D. (ed.) (2004), *Vegetius. Epitoma rei militaris*, Oxford (Oxford Classical Texts).
- Schönberger O. (ed. and trans.) (2013), *Caius Iulius Caesar. Der gallische Krieg; De bello Gallico*, Berlin (Sammlung Tusculum) [4th edn.].
- Shipley F.W. (trans.) (1924), *Velleius Paterculus, Compendium of Roman History – Res gestae Diui Augusti*, London / New York (The Loeb Classical Library, 152).

Secondary Sources

- Barrett A.A. (2015), *Caligula. The Abuse of Power*, London / New York (*Roman Imperial Biographies*) [2nd edn].
- Bechtert T. (1969), "Zu einigen Bauinschriften aus römischen Legionslagern", *Epigraphische Studien*, 8, p. 39-52.
- Becker A., Rasbach G. (2016), *Die Ausgrabungen in der spätaugusteischen Siedlung von Lahnu-Waldgirmes (1993-2009)*, t. 1, Darmstadt (Römisch-germanische Forschungen, 71).
- Becker T. (2009), "Straßenbau als Grenzetablierung. Neue Erkenntnisse zur Anfangsdatierung der Limesstraße in Niedergermanien", in A. Morillo, N. Hanel, E. Martín (eds), *Limes XX. XX^e Congreso internacional de estudios sobre la frontera Romana, León (España), Septiembre 2006*, Madrid (Anejos de Gladius, 13), p. 931-943.
- Blom E., Vos W.K. (2008), *Woerden-Hoochwoert. De opgravingen 2002-2004 in het Romeinse Castellum Laurium, de vicus en van het schip de 'Woerden 7'*, Amersfoort / Leiden (ADC-rapport, 910).
- Bosman A.V.A.J. (ed.) (2021), *Velsen 2. Het onderzoek naar de vroeg-Romeinse basis in de periode 1945-2005*, Dordrecht (Military Legacy rapport, 38).
- Breeze D.J. (2015), "The Role of Water in defining the Limits of the Roman Empire", in L. Vagalinski, N. Sharankov (eds), *Limes XXII. Proceedings of the 22nd International Congress of Roman Frontier Studies, Ruse, Bulgaria, September 2012*, Sofia (Bulletin of the National Archaeological Institute, 42), p. 17-18.
- Buijtdorp T. (2021), "The Cradle of the Western *limes*", *Talanta*, 53, p. 49-106.
- Burnham B.C., Davies J.L. (eds) (2010), *Roman Frontiers in Wales and the Marches*, Aberystwyth.
- Coby P. (2022), *Forts and Roman Strategy. A New Approach and Interpretation*, Barnsley.
- de Weerd M.D. (1977), "The Date of Valkenburg 1 reconsidered: The Reduction of a Multiple Choice Question", in B.L. van Beek, R.W. Brandt, W. Groenman-Van Waateringe (eds), *Ex horreo. IPP 1951-1976*, Amsterdam (Cingula, 4), p. 255-289.
- Driessen M. (2007), *Bouwen om te blijven. De topografie, bewoningscontinuïteit en monumentaliteit van Romeins Nijmegen*, Amersfoort (Rapportage Archeologische Monumentenzorg, 151).
- Eck W. (2004), *Köln in römischer Zeit. Geschichte einer Stadt im Rahmen des Imperium Romanum*, Cologne (Geschichte der Stadt Köln, 1).

- Eck W. (2013), "Roms Germanenpolitik vom 1. bis 3. Jahrhundert n. Chr. Von der Dominanz zur Schwäche", in G. Rasbach (ed.), *Westgermanische Bodenfunde. Akten des Kolloquiums anlässlich des 100. Geburtstages von Rafael von Uslar am 5. und 6. Dezember 2008*, Bonn (Kolloquien zur Vor- und Frühgeschichte, 18), p. 21-30.
- Eck W. (2018), "*Consilium coercendi intra terminos imperii*: Motivationswandel in der augusteischen Expansionspolitik?", in S. Segenni (ed.), *Augusto dopo il bimillenario. Un bilancio*, Milano (Studi sul mondo antico, 8), p. 128-137.
- Eck W. (2022), "Das Imperium Romanum: seine Grenzen nach aussen und die Grenzen im Innern", *Der Limes*, 16/1, p. 4-11.
- Fink R.O. (1958), "Hunt's *pridianum*: British Museum Papyrus 2851", *The Journal of Roman Studies*, 48, p. 102-116.
- Gechter M. (2006), "Die Grenze in Deutschland. Der niedergermanische Limes in Nordrhein-Westfalen", in G. Klose, A. Nünnerich-Asmus (eds), *Grenzen des römischen Imperiums*, Mainz (Zaberns Bildbände zur Archäologie), p. 123-32.
- Graafstal E.P. (2017), "River Frontiers or Fortified Corridors?", in N. Hodgson, P. Bidwell, J. Schachtmann (eds), *Roman Frontier Studies 2009. Proceedings of the XXI International Congress of Roman Frontier Studies (Limes Congress) held at Newcastle upon Tyne in August 2009*, Oxford (Archaeopress Roman Archaeology, 25), p. 186-193.
- Graafstal E.P. (2021), "Utrecht in de Romeinse tijd. Een nieuwe kaart", *Jaarboek Oud-Utrecht 2021*, p. 106-133.
- Graafstal E.P. (2023), "Roman 'Grand Strategy' in Action? Claudius and the Annexation of Britain and Thrace", *Britannia*, 54, p. 1-28.
- Graafstal E.P. (2024), "Immigrants from the *Barbaricum*. Controlled Colonisation of *deserta* in the Augustan Period. A Forgotten Aspect of Early Roman Frontier Policy", in H. Van Enkevort, M. Driessen, E. Graafstal, T. Hazenberg, T. Ivleva, C. Van Driel-Murray (eds), *Proceedings of the 25th International Congress of Roman Frontier Studies*, vol. 2, Leiden, p. 89-97.
- Graafstal E.P., den Braven A. (2020), *Weg boven water. WTL01: inventarisatie limesweg Waterland (werkput 2 en 3) ten behoeve van de rijksbescherming van het terrein 'Veldhuizen'*, Utrecht (Basisrapportage Archeologie, 51).
- Graafstal E.P., Hessing W.A.M. (2021), "Central. From Wijk bij Duurstede to Woerden", in W.A.M. Hessing, W.K. Vos, E.J. van Ginkel (eds), *Romans on the Waterfront. Evaluation of Archaeological Interventions (1997-2020) along the Dutch Part of the Lower Rhine and Coastal Limes*, Amersfoort (Nederlandse Archeologische Rapporten, 71), p. 121-139.
- Hanson W.S. (2002), "Why did the Roman Empire Cease to Expand?", in P. Freeman, J. Bennett, Z.T. Fiema, B. Hoffmann (eds), *Limes XVIII. Proceedings of the XVIIIth International Congress of Roman Frontier Studies held in Amman, Jordan (September 2000)*, Oxford (BAR. International Series, 1084), p. 25-32.
- Hanson W.S. (2009), "Building the Forts and Frontiers", in W.S. Hanson (ed.), *The Army and Frontiers of Rome. Papers offered to David J. Breeze on the Occasion of his Sixty-fifth Birthday and his Retirement from Historic Scotland*, Portsmouth (Journal of Roman Archaeology. Supplementary Series, 74), p. 33-43.
- Hazenberg T. (2000), *Leiden-Roomburg 1995-1997: archeologisch onderzoek naar het kanaal van Corbulo en de vicus van het castellum Matilo*, Amersfoort (Rapportage Archeologische Monumentenzorg, 77).
- Heeren S. (2017), "From Germania Inferior to Germania Secunda and Beyond. A Case Study of Migration, Transformation and Decline", in N. Roymans, S. Heeren, W. de Clercq (eds), *Social Dynamics in the Northwest Frontiers of the Late Roman Empire. Beyond Decline or Transformation*, Amsterdam (Amsterdam Archaeological Studies, 26), p. 149-179.
- Hollstein E. (1980), *Mitteleuropäische Eichenchronologie. Trierer dendrochronologische Forschungen zur Archäologie und Kunstgeschichte*, Mainz (Trierer Grabungen und Forschungen, 11).
- Ivanov R. (1997), "Das römische Verteidigungssystem an der unteren Donau zwischen *Dorticum* und *Durostorum* (Bulgarien) von Augustus bis Maurikios", *Berichte der Römisch-Germanischen Kommission*, 78, p. 467-640.
- Jones B., Mattingly D. (1990), *An Atlas of Roman Britain*, Oxford.

- Karavas J. (2001), *The Evolution of Roman Frontier Defence Systems and Fortifications in the Lower Danube Provinces in the First and Second Centuries AD*, Durham, Durham University, <http://etheses.dur.ac.uk/3957/> [unpublished Ph.D. dissertation].
- Kemkes M. (2005), "Vom Rhein an den Limes und wieder zurück. Die Besetzungsgeschichte Südwestdeutschlands", in S. Schmidt, M. Kempa, A. Wais (eds), *Imperium Romanum. Roms Provinzen an Neckar, Rhein und Donau. Begleitband zur Ausstellung des Landes Baden-Württemberg im Kunstgebäude Stuttgart, 1. Oktober 2005 bis 8. Januar 2006*, Stuttgart, p. 44-53.
- Kemmers F. (2004), "Caligula on the Lower Rhine: Coin finds from the Roman Fort of Albaniana (the Netherlands)", *Revue belge de numismatique*, 150, p. 15-49.
- Kemmers F. (2006), *Coins for a Legion. An Analysis of the Coin Finds from the Augustan Legionary Fortress and Flavian canabae legionis at Nijmegen*, Mainz (Studien zu Fundmünzen der Antike, 21).
- Kemmers F. (2008), "De Romeinse muntvondsten van het terrein De Hoge Woerd in De Meern (gemeente Utrecht)", *Jaarboek voor munt- en penningkunde*, 95, p. 1-64.
- Kerremans B. (2018), "A Real Roman Defeat: Memory, Collective Trauma and the Clades Lolliana", *Acta Classica*, 61, p. 69-98.
- Konen H. (2008), "Die Bedeutung und Funktion von Wasserwegen für die römische Heeresversorgung an Rhein und Donau in der frühen und hohen Kaiserzeit", in C. Halm (ed.), *Rom auf dem Weg nach Germanien: Geostrategie, Vormarschtrassen und Logistik. Internationales Kolloquium in Delbrück-Anreppen vom 4. bis 6. November 2004*, Mainz (Bodenaltertümer Westfalens, 45), p. 303-322.
- Kühlborn J.-S. (ed.), with the assist. of S. von Schnurbein (1992), *Das Römerlager in Oberaden*, vol. 3, Münster (Bodenaltertümer Westfalens, 27).
- Lindner C. (2018), "Two Fortlets in Hanau-Mittelbuchen. New Evidence on the Wetteraulimes in the late 1st and early 2nd Century AD", in C.S. Sommer, S. Matešić (eds), *Limes XXIII. Proceedings of the 23rd International Limes Congress of Roman Frontier Studies, Ingolstadt 2015*, Mainz (Beiträge zum Welterbe Limes, 4), p. 876-881.
- Löhr H. (2003), "Das frühromische Militärlager auf dem Petrisberg bei Trier. Landesgartenschau und Archäologie", *Funde und Ausgrabungen im Bezirk Trier*, 35, p. 21-30.
- Luttwak E.N. (1976), *The Grand Strategy of the Roman Empire from the First Century AD to the Third*, Baltimore / London.
- Mann J. (1979), "Power, Force and the Frontiers of the Empire", *The Journal of Roman Studies*, 69, p. 175-183.
- Mattern S.P. (2013), "Barbarian Friends and Foes. Hegemony beyond Rhine and Danube, AD 14-98", in D. Hoyos (ed.), *A Companion to Roman Imperialism*, Leiden / Boston (History of Warfare, 81), p. 213-224.
- Maxfield V.A. (1987), "Mainland Europe", in J. Wachter (ed.), *The Roman World*, London / New York, p. 139-217.
- Metzler J. (1995), *Das Treverische Oppidum auf dem Titelberg (G.-H. Luxemburg). Zur Kontinuität zwischen der spätkeltischen und der frühromischen Zeit in Nord-Gallien*, Luxembourg (Dossiers d'archéologie du musée national d'histoire et d'art, 3).
- Polak M. (2009), "The Roman Military Presence in the Rhine Delta in the Period c. AD 40-140", in A. Morillo, N. Hanel, E. Martín (eds), *Limes XX. XX Congreso internacional de estudios sobre la frontera Romana, León (España), Septiembre 2006*, Madrid (Anejos de Gladius, 13), p. 945-953.
- Polak M. (2017), "The Roman Military Presence in the Rhine Delta in the Pre-Flavian Period", in N. Hodgson, P. Bidwell, J. Schachtmann (eds), *Roman Frontier Studies 2009. Proceedings of the XXI International Congress of Roman Frontier Studies (Limes Congress) held at Newcastle upon Tyne in August 2009*, Oxford (Archaeopress Roman Archaeology, 25), p. 636-641.
- Polak M., Bödecker S., Berger L., Zandstra M., Leene T. (2020), *Frontiers of the Roman Empire – The Lower German Limes. Nomination File for Inscription on the UNESCO World Heritage List*, s.l., <https://www.limeswerelderfgoed.nl/werelderfgoed/documenten>.
- Polak M., Jansma E. (forthcoming), "Farewell to the Late Roman Phase of the Fort at Valkenburg? A Revision of the Tree-ring Dates".
- Polak M., Kloosterman R.P.J., Niemeijer R.A.J. (2004), *Alphen aan den Rijn-Albaniana 2001-2002. Opgravingen tussen de Castellumstraat, het Omloopkanaal en de Oude Rijn*, Nijmegen (Libelli noviomagenses, 7).

- Polak M., Kooistra L.I. (2013), "A Sustainable Frontier? The Establishment of the Roman Frontier in the Rhine Delta, part 1. From the End of the Iron Age to the Death of Tiberius (c. 50 BC-AD 37)", *Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz*, 60, p. 355-458.
- Rankov N.B. (2005), "Do Rivers Make Good Frontiers?", in Z. Visy (ed.), *Limes XIX. Proceedings of the XIXth International Congress of Roman frontier studies held in Pécs, Hungary, September 2003*, Pécs, p. 175-181.
- Reddé M. (2006), "Mirebeau-sur-Bèze, Le camp de la VIII^e légion", in M. Reddé, R. Brulet, R. Fellmann, J.-K. Haalebos, S. von Schnurbein, P. Aupert (eds), *L'architecture de la Gaule romaine. Les fortifications militaires*, Paris / Bordeaux (Documents d'archéologie française, 100), p. 331-334.
- Reuter M. (1997), "Zu den Befugnissen römischer Provinzstatthalter bei militärischen Bauprojekten", in W. Groenman-Van Waateringe, B.L. van Beek, W.J.H. Willems, S.L. Wynia (eds), *Roman Frontier Studies 1995. Proceedings of the XVth International Congress of Roman Frontier Studies*, Oxford (Oxbow Monograph, 91), p. 189-194.
- Roth J. (1999), *The Logistics of the Roman Army at War (264 BC-AD 235)*, Leiden / Boston / Cologne (Columbia Studies in the Classical Tradition, 23).
- Roymans N.G.A.M. (2019a), "Late Iron Age Coin Hoards with Silver Rainbow Staters from Graetheide (NL) and the mid-1st Century BC Hoard Horizon in the Lower Rhine / Meuse Region", *Germania*, 97, p. 65-92.
- Roymans N.G.A.M. (2019b), "Conquest, Mass Violence and Ethnic Stereotyping. Investigating Caesar's Actions in the Germanic Frontier Zone", *The Journal of Roman Archaeology*, 32, p. 439-458.
- Roymans N.G.A.M. (forthcoming), "Ethnic Recruitment and the Genesis of the Batavi as a Soldiering People. The Numismatic Evidence".
- Roymans N.G.A.M., Heeren S. (2017), "The Late Roman Solidus Hoard from Lienden (prov. Gelderland / NL)", *Archäologisches Korrespondenzblatt*, 47/3, p. 397-412.
- Schamuhn S., T. Zerl (2009), "Zur Landwirtschaft der Kelten, Römer und Germanen im Gebiet von Nordrhein-Westfalen. Kontinuität oder Wandel?" in S. Zimmer (ed.), *Kelten am Rhein. Akten des dreizehnten Internationalen Keltologiekongresses – Proceedings of the Thirteenth International Congress of Celtic Studies. 23. bis 27. Juli 2007 in Bonn*, Vol. 1, Mainz (Bonner Jahrbücher des Rheinischen Landesmuseums in Bonn und des Rheinischen Amtes für Bodendenkmalpflege im Landschaftsverband Rheinland und des Vereins von Altertumsfreunden im Rheinlande. Beihefte, 58), p. 239-250.
- Slofstra J. (2002), "Batavians and Romans on the Lower Rhine. The Romanisation of a Frontier Area", *Archaeological Dialogues*, 9, p. 16-38; 55-57.
- Southern P. (1997), *Domitian. Tragic Tyrant*, London / New York.
- Strobel K. (1987), "Der Chattenkrieg Domitians. Historische und politische Aspekte", *Germania*, 65, p. 423-453.
- Syme R. (1978), *History in Ovid*, Oxford.
- Timpe D. (2007), "Mitteleuropa in den Augen der Römer", *Bonner Jahrbücher*, 207, p. 5-32.
- Venault S. (2006), "Mirebeau-sur-Bèze, La Fenotte", in M. Reddé, R. Brulet, R. Fellmann, J.-K. Haalebos, S. von Schnurbein, P. Aupert (eds), *L'architecture de la Gaule romaine. Les fortifications militaires*, Paris / Bordeaux (Documents d'archéologie française, 100), p. 334-335.
- Visser R. (2015), "Imperial Timber? Dendrochronological Evidence for Large-scale Roadbuilding along the Roman *limes* in the Netherlands", *Journal of Archaeological Science*, 53, p. 243-254.
- von Schnurbein S. (2003), "Augustus in Germania and his New 'Town' at Waldgirmes East of the Rhine", *The Journal of Roman Archaeology*, 16, p. 93-107.
- Vos W.K., Blom E., Cornelisse B., de Bruin J., Loopik J., Ruiter A., Tol A., van der Feijst L. (2021), "A Legionary Fortress at Valkenburg. Discovering a Springboard for the Conquest of Britannia?", *Current World Archaeology*, 108, p. 24-31.
- Webster G. (1981), *Rome against Caratacus. The Roman Campaigns in Britain AD 48-58*, London / New York.
- Whittaker C.R. (1994), *Frontiers of the Roman Empire. A Social and Economic Study*, Baltimore / London.
- Will W. (1987), "Römische 'Klientel-Randstaaten' am Rhein? Eine Bestandsaufnahme", *Bonner Jahrbücher*, 187, p. 1-61.