

The importance of internal borders in the Roman Empire: Written sources and model cases

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Throughout the Roman Empire, borders divided territories such as provinces, customs areas, and cities. This paper aims at presenting examples of written sources which illustrate the function and significance of internal borders. A dispute over a canal building (Tac. ann. 13,53) provides an example for problems that could arise from cross-border activities. The control of boundaries could be ensured by military posts, as indicated by votive inscriptions to border gods. The exceptional marking of a provincial boundary in the Danube area has to be seen in context of territorial changes. Some milestones refer to provincial borders and seem to have occasionally served as border markers.

Keywords: Provincial Borders, Provincial Territories, Military Stations, Boundary Markers, Milestones

1. Introduction

Over an area of approximately 6 million square kilometres, the Romans ruled an enormous Empire, encompassing about 50 to 80 million people. The consolidation and administrative pervasion of this global empire was the primary aim Roman rulers sought to achieve. They therefore imposed administrative subdivisions and created a functional infrastructure for communication. Still in the 7th century, Isidorus of Sevilla (15,15,1) testified the Romans' desire for structure: *Maiores itaque orbem in partibus, partes in provinciis, provincias in regionibus, regiones in locis, loca in territoriis, territoria in agris, dividerunt... – Thus our ancestors divided the earth into parts, parts into provinces, provinces into regions, regions into locales, locales into territories, territories into fields...*

Based on surveying, regions and areas were divided. The provinces, customs areas, and self-administering territories of cities testify to this. All were divided by the internal borders of the Roman Empire. Understanding them is fundamental to answering a range of historical questions concerning administration, law, finances, and society.

The definition of borders was primarily based on a local scale, as provinces consisted of *civitates*, local communities, often roughly equivalent to the national or tribal groupings existing before the annexation of their territory. Thus, the division of land in the Roman Empire begins with its expansion in the 4th century BC. When new colonies were founded or plots distributed to veterans and settlers, areas were divided by *centuriatio* or *limitatio*. The methods of the land surveyors, their duties and problems, such as legal disputes about land categorizations and boundaries, were compiled in the 5th century CE (*Corpus Agrimensorum Romanorum*). The results of the surveyors' activities are still visible today archaeologically in the remains of grid structures on the land, but also in epigraphic sources. Borders (*finis*) were marked on the ground by boundary stones (*termini*) and covered by land registries (*formae*). In case

of dispute between cities, tribes, or private individuals, the decision fell usually in the realm of the provincial governor or an official commissioned with the task (Dilke 1971; Gals-terer 1992; Von Cranach 1996; Campbell 2000; Lewis 2001; Willi 2014; Kolb 2016).

Numerous inscribed stones document such controversies over borders. Mostly they arose over the size of a land plot, which determined the revenue generated from civic real estate and the tax revenue due to both state and local community. Location and size of private real estate were crucial for determining not only rights of way, but also taxes and duties, e.g. regarding road maintenance and transportation services (Mommsen 1887, 994; Aichinger 1982; Eck 1990; Burton 2000; Meyer-Zwiffelhofer 2002, 103–116; for a detailed discussion of documents Elliott 2004; Cuomo 2007, 103–130; Wesch-Klein 2008, 142–144).

The borders of the provinces were drawn in a pragmatic way according to Rome's aims: sometimes respecting traditional boundaries, in other instances destroying old relationships in order to prevent alliances against the empire. Although there is much discussion about the external borders of the Empire, which are well known (Whitakker 1994; Isaac 1992; Breeze 2011; Hekster & Kaizer 2011; Richardson 2011), very few sources refer to internal borders between provinces. The duty of drawing of these borders fell to the provincial governor.¹ It seems reasonable to assume that this task was, as a rule, an uncontroversial one. Our sources mostly result from special cases reflecting military and political changes.²

This paper aims to present relevant examples of written sources which illustrate the function and significance of internal borders of the Roman Empire.

2. Tacitus' account on a cross-border canal-building project (55 CE)

The execution of large-scale road building projects proves that, at the highest level of imperial administration, provin-



Figure 1. Votive inscription dedicated to the *Fines*, found on the Vinxtbach at the boundary between Germania inferior and superior (CIL XIII 7732) (Eck 2004, 13, fig. 1).

cial boundaries were virtually irrelevant for the planning of infrastructure (cf. Schneider 2014, 30). We would expect that these boundaries served as effective limits for the activities of a provincial magistrate, but this is difficult to prove. In the juristic writings relating to the duties of a governor, the *provincia* is rarely treated as a limited territory (e.g. Dig. 1,16,4,3; 47,2,7,5; 48,22,7,1 (Ulpianus), cf. Meyer-Zwiffelhofer 2002, 68). An account of the historian Tacitus (ann. 13,53) on the failure of a cross-border canal building project by Lucius Antistius Vetus (PIR² A 776) could therefore be instructive. In the year 55 CE Vetus, the commander of the Rhine army in the upper German military district intended to deploy his forces for an infrastructure project: *Vetus Mosellam atque Ararim facta inter utrumque fossa conectere parabat... – Vetus prepared to connect the Moselle (Mosel) and the Arar (Saône) by running a canal between the two... Creating a link between the river systems of the Rhine and Rhône would have facilitated the provisioning of the Rhine army and made possible navigation between the Mediterranean Sea and the Atlantic Ocean. The project can be seen in the tradition of other waterway buildings realised in the early principate in the lower Rhine area.³ But Vetus' undertaking was opposed by Aelius Gracilis (PIR² A 182), the legate of Gallia Belgica, who deterred him from bringing his legions into another one's province and so drawing to himself the popularity in Gaul... ne legiones alienae provinciae inferret studiaque Galliarum adfectaret...⁴ According to Tacitus, Gracilis became jealous and warned his colleague repeatedly not to terrify the emperor with his plans (*formidolosum id imperatori*). Much to Tacitus' regret, the boundary became an obstacle for this building initiative. Given the technical difficulties inherent in the project, this intrigue was probably not the main reason for its failure.⁵*

But the reported dispute between the two legates sheds nevertheless some light on the perception of these internal boundaries.

3. Votive inscriptions at the provincial boundary between the two Germanies

The border between Germania Inferior and Superior, was – according to geographer Ptolemy – formed by the *Ob-rincas* (2,9). The watercourse in question can be identified as the Vinxtbach, a small stream between Bad Breisig und Brohl-Lützing that discharges into the Rhine and derives its modern name from the Latin word '*finis*' (Matijević 2010, 237–239). A series of votive inscriptions provide further information on the importance of this place. In the beginning of the 19th century, building activities for a bridge over the Vinxtbach brought to light ancient walls and coins, as well as two votive inscriptions dedicated by Roman soldiers: The dedication found on the northern side of the river explicitly addresses the border gods, among other deities (CIL XIII 7732 = Matijević 2010, nr. 66: *Finibus et / Genius loci / et I(ovi) O(ptimo) M(aximo)...*; 122–250 CE). It names two members of Ulpia Victrix, the 30th legion, that resided in Xanten (Germania inferior) (Ritterling 1925, 1821–1829, Le Bohec 2000, 71–74). The inscription from the southern riverbank (CIL XIII 7731 = Matijević 2010, nr. 65; 150–250 CE) was set up by one Tertinius Severus, a *beneficiarius consularis* who belonged to the 8th legion Augusta, based in Strasbourg as a part of the army of Germania Superior from Flavian times onwards (Ritterling 1924/25, 1652–4; Reddé 2000; Farnum 2005, 21). Two other votive inscriptions found in the same region could be connected to the stones from the Vinxtbach: An altar erected by Arcius Severus and his wife was found in 1974 in the church of Neustadt an der Wied (AE 1992, 1296; 15. July 207 CE). Severus carried out the function of a *beneficiarius consularis* and belonged to the *legio XXII Primigenia Pia Fidelis*, which had its base in Mainz (Germania Superior) from the end of the 1st to the 4th century (Ritterling 1924/25, 1797–1819; Schumacher 2003). A fourth inscription, first mentioned in the 17th century as being located in Brohl, is passed down only as vague transcription, but the fragmentary text can be reconstructed as another dedication to the *Fines* (CIL XIII 7713 = Matijević 2010, nr. 64): *[Ge]ni[lo] l[oc]i / et [Fi]ni[b]us / et I(ovi) O(ptimo) M(aximo) / T(itus) Fl(avius) Vere/cundus / et [M(arcus) Dom(itius) / Atto mil(it)es] [leg]ionis?* (reading of Zangemeister in CIL; 2nd–3rd century). The reference to the *Genius loci* in all four inscriptions indicates that the soldiers officially stayed here for a longer time (Eck 2004, 14; but see Matijević 2010, 250 for a different view). As it is shown by the dedications to the *Fines*, the soldiers' presence has to be seen in close connection to the provincial boundary.⁶ They were probably detached by the governors from the provincial military corps to serve over a period of several months

in a small military post (*statio militum*). During the principate, an increased number of *stationes* of this kind were disposed in the provinces at suitable points, such as important road junctions or boundary crossings (Nelis-Clément 2006, France & Nelis-Clément 2014). In general, the stations should have contributed to maintaining security and public order (Tert. apol. 2,8). The majority of the soldiers detached to *stationes* were *beneficiarii consularis*, but ordinary legionary soldiers are also attested (France & Nelis-Clément 2014, e.g. CIL XII 144, Massongex). During their service in the stations, they fulfilled various judicial and police functions in connection with traffic and transport. They played also an important role as intermediates, and their duty included the transmission of documents and information (Ott 1995, Nelis-Clément 2000, 211–268, France & Nelis-Clément 2014, 216f). The establishment of military stations at the Vinxtbach seems to indicate a special interest of the governors in controlling the persons, goods, and information that passed at this point of the provincial boundary. We can assume that such border stations or checkpoints were found elsewhere as well.⁷

4. Boundary stones of provinces in the Danube region

A group of at least eleven very similar inscriptions designating the border *inter Moesos et Thracas* are known from the Danube region. Six of them were found in various locations between the legionary fortress at Novae and the polis of Nicopolis ad Istrum.⁸ Five more – with a different order of ethnics (*Thracas et Moesos*) – were discovered near modern-day Roman in the valley of the Iskar river ca. 100 km to the west.⁹ These boundary inscriptions were set up in 135 CE under Hadrian and were commissioned by M. Antius Rufinus (PIR² A 784), an unspecified and otherwise unknown magistrate, either the governor of the adjacent province *Moesia*, or, most likely, a special legate of the emperor (Aichinger 1982, 198, Elliott 2004, 236, discussion summarised by Ruscu 2007, 216, n.10). The inscriptions raise a number of questions. As only the ethnics *Thracas* and *Moesia* are used as designations, an ongoing discussion has arisen on the nature of the territories separated by the boundary stones. Various suggestions have been made, including the interpretation as a demarcation between the customs areas of *Publicum portorium Illyrici* and *Ripa Thraciae* (Nesselhauf 1939, 331–338; De Laet 1949, 200–210; Vittinghoff 1953, 361ff.). Following a more recent hypothesis, the boundary was seen as a division of tribal territories (Kolendo 1975, 89; Tomas 2007, 40). But the majority of the scholars see the stones as *termini* marking the boundary of the territory of Nicopolis ad Istrum, which in this sector coincided with the provincial boundary between *Moesia inferior* and *Thracia*, until the incorporation of Nicopolis into the province of *Moesia inferior* towards the end of the 2nd century (Gerov 1979, 223–224; Gerasimova-Tomova 1987, Elliott 2004, 236;

Ruscu 2007, 216). This exceptional marking of a provincial boundary by a series of *termini* may have been the result of profound changes to the territorial pattern in this area south of the Danube during the early 2nd century. The foundation of Nicopolis ad Istrum under Trajan was supposedly one of the most important factors (Ruscu 2007). In what way this might have influenced the course of the provincial boundary is the subject of an ongoing study.¹⁰ For now, we can only point out the fact that, one generation after major changes on the Danube were initiated, the emperor Hadrian decided to clarify the situation and mark the provincial boundary along certain sectors specifically.

5. Milestones

Roman milestones (*miliaria*) were the characteristic markers along public roads (*viae publicae*). Every mile they indicated the distance from the road's starting-point (*caput viae*) and hence gave orientation to the traveller.¹¹ At the same time they served as symbols of Roman power, since their inscriptions mention Roman officials and emperors. Furthermore, milestone inscriptions enlighten us on imperial policy and the upkeep of the road network, but also on provincial administration. *Miliaria* form the largest group of epigraphic monuments that attest to the survey and assessment of space via traffic infrastructure. Nowadays, a total of seven to eight thousand milestones are known (Hirschfeld 1907; in short Kolb 2004; Kolb 2016, 232–235).

The public roads, traversing the provinces and landscapes of the Empire, cut through local territories intersecting or dividing contiguous areas – whether private, civic, or provincial. Thus, property rights and tax obligations could have conflicted. The function of milestones in this regard can be observed as twofold, because milestone inscriptions either mention local borders or serve as demarcations in the local context.

The naming of borders of *civitates* is not uncommon in Roman inscriptions or on milestones (CIL XVII/2, 375, 377–380. 432–439. 441. 491), but it is not to be confused with the place names *Fines* or *Adfines*, found in several regions of the Empire. Milestones typically equate the boundary of a city territory with the course of a road (CIL XI 6668): ... *viam Cassiam / vetustate colla<p>sam / A Clusinorum finibus / Florentim perduxit...*(cf. AE 1926, 112: ... *viam novam [Tra]ia[n(am)] / a Volsinis ad fines / Clusinorum fecit ...*; IK 31, 55: *a Bithynio Hadriana / ad fines / ζ*; AE 1983, 899; cf. Cortés Bárcena 2013).

In addition, milestones seem to have served as demarcations on a regional level, set up as a result of land surveying. To a certain extent, they may be seen as replacing the boundary stones found at the local level. Diverse examples illustrate that responsibilities, such as road building and maintenance or transportation services, were assigned based on the subdivision of the road by the milestones.¹²

Figure 2. Boundary stone marking the border *inter Moesos et Thracas*, reused in the Monastery of the Holy Trinity near Veliko Tarnovo (AE 1985, 730). (Klearchos Kapoutsis, 2010, Creative Commons Licence).



A similar system is found in milestone inscriptions referring to provinces. They commonly mention provincial borders, such as, for example, several stones from the province of Arabia (AE 1995, 1606): ... *redacta in / formam provinciae / Arabia viam novam / a finibus Syriae / usque ad mare Rubrum / aperuit et stravit* (cf. AE 1897, 143; CIL III 14149,19; CIL III 14149,30). After the establishment of the province Arabia, the new road, traversing the provincial territory, had to be built starting from the border of the neighbouring province of Syria and ending at the Red Sea. On the one hand, the text records Arabia's promotion to the status of a province; on the other hand, it describes the extent and the opening up of the provincial territory by the new road. The milestone-inscription is not a mere building document. By using the provincial border as one outer limit and the sea as the other, it rather becomes a propaganda statement. Similar texts referring to provincial borders stem from the provinces of Baetica (CIL II 4721), Africa proconsularis (CIL VIII 10083 = 22073: ... *viam a Karthag[ine] / usque ad fines Numi/diae provinc[iae]*) and Mesopotamia (AE 1984, 920: ... *viam ab Euphrate / usque ad fines regni Sept[imii] / Ab[gl]ari*).

To postulate the milestones' function as border markers along province frontiers seems reasonable, even if our evidence is sparse. It may only be deduced from the original, ancient location of a stone. This seems to be possible with the famous column of Rabland dating from 46 CE. It was found in the borderland between Italy and the province of *Raetia*. Its inscription celebrates the provision of Roman infrastructure from the Po in Italy to the Danube via a road named *Via Claudia Augusta* (CIL V 8003 = CIL XVII 4, 1): *Ti(berius) Claudius Caesar Augustus German(icus) ... viam Claudiam Augustam / quam Drusus pater Alpibus / bello patefactis derexserat (sic) / munit a flumine Pado at (sic) / flumen Danuvium per / m(ilia) p(assuum) CC[CL] ---*. "The emperor Tiberius Claudius Caesar Augustus Germanicus ... paved the *Via Claudia Augusta*, which his father Drusus had laid out straight after he had opened up the Alps in a military campaign, from the river Po to the river Danube for a distance of 350 miles."

With this, the emperor Claudius boasted his road-building activities, setting up a communication line to the north of the empire spanning over 350 Roman miles. This "milestone," so called due to its form, is one of a few monuments documenting the overall length of a road. Its inscription praises the emperor and his road in a poetic way: naming the river Danube as destination and the Italian Padus as origin sounded more impressive than giving simple place names and hence fitted the stone's function as a border monument.¹⁵ The perception of the empire's sphere could be visualized through this marker.

Other milestones show similar texts, describing the borders in a poetic way in order to extol the space of the empire. Several milestones from Corduba in southern Spain, the Roman province of Baetica, count the miles from the river Baetis to the Mediterranean Sea: ... *a Baete et Iano August(o) / ad Oceanum / LXIII* (CIL II 4701; cf. CIL 4703. 4707–4709. 4711–4712. 4715–4717). The *Ianus Augusti*, an arch in honor of Augustus, stood at the banks of the river Baetis, which formed the boundary between Baetica and Tarraconensis, shown by a later stone: ... *ab arcu / unde incipit Baetica / viam Aug(ustam)* (CIL II 4721). With respect to this arch, all of the milestones along this road, even down to Gades, were numbered. However, the actual border maker was the arch mentioned in the milestone inscriptions.¹⁴

6. Summary

In the Roman Empire, provincial borders were well known and observed. Therefore demarcation monuments exist. Some of them are actual border markers, like the boundary markers from Thracia which seem to be needed after changes – the supposed formation of a new city territory, in this case. Others are monuments which could function additionally as demarcation, but do not name the border explicitly like milestones. And still others only indicate the borders indirectly by venerating the border gods. These monuments/inscriptions do not further explain the significance of the borders. Only the military stations count for control over territory, probably mainly in respect of security as checkpoints being useful in a vast empire. To sum up, more information is needed about the use of internal borders. There is work to do.

Bibliography

- Aichinger A. (1982). *Grenzziehung durch kaiserliche Sonderbeauftragte in den römischen Provinzen*. ZPE 48, 193-204.
- Binnering S. (2009). *Le trophée d'Auguste à la Turbie*. (Paris).
- Breeze D. (2011). *Frontiers of Imperial Rome*. (South Yorkshire).
- Burton G. (2000). *The Resolution of Territorial Disputes in the Provinces of the Roman Empire*. Chiron 30, 195-215.
- Campbell B. (2000). *The Writings of the Roman Land Surveyors. Introduction, Text, Translation and Commentary*. Journal of Roman Studies Monograph No. 9. (London).
- Castellvi G., Nolla J. M. & Roda I. (2008). *Le trophée de Pompée dans les Pyrénées (71 avant J.-C.). Col de Panissars: Le Perthus, Pyrénées-Orientales (France), La Jonquera, Haut Emporda (Espagne)*. (Paris).
- Cortés Bárcena C. (2013). *Epigrafi en los confines de las ciudades romanas. Los termini publici en Hispania, Mauretania y Numidia*. (Roma).
- Cuomo S. (2007). *Technology and culture in Greek and Roman antiquity*. (Cambridge).
- De Laet S. J. (1949). *Portorium. Etude sur l'organisation douanière chez les Romains, surtout à l'époque du Haut-Empire*. (Brugge).
- Dilke O. A. W. (1971). *The Roman Land Surveyors*. (Newton Abbot).
- Eck W. (1990). *Terminationen als administratives Problem: Das Beispiel der nordafrikanischen Provinzen*. In: Eck W. (ed.) *Die Verwaltung des Römischen Reiches in der Hohen Kaiserzeit 1*, 355-363. (Basel).
- Eck W. (2004). *Köln in römischer Zeit. Geschichte einer Stadt im Rahmen des Imperium Romanum*. (Köln).
- Eck W. (1985) *Die Statthalter der germanischen Provinzen vom 1.-3. Jahrhundert*. (Bonn).
- Elliott T. (2004). *Epigraphic Evidence for Boundary Disputes in the Roman Empire*. PhD Diss. (Chapel Hill).
- Farnum J. H. (2005). *The positioning of the Roman imperial legions*. (Oxford).
- France J. & Nelis-Clément J. (2014). *Tout en bas de l'empire. Les stations militaires et douanières, lieux de contrôle et de représentation du pouvoir*. In: France J. & Nelis-Clément J. (ed.) *La statio. Archéologie d'un lieu de pouvoir dans l'empire romain*, 117-245. (Bordeaux).
- French D. H. (1991). *The definition of territories: Cappadocia*. In: Le Guen-Pollet B. & Pelon O. (ed.) *La Cappadoce méridionale jusque'à la fin de l'époque Romaine. Actes du Colloque d'Istanbul (Institut Français d'études Anatoliennes) 13-14 avril 1987*, 49-59. (Paris).
- French D. H. (1993). *Road terminus-stones*. In: Başgelen, N. & Lugal, M. (ed.) *Festschrift für Jale Inan Armagani*, 17-26. (Istanbul).
- Galsterer H. (1992). *Die Kolonisation der hohen Republik und die römische Feldmesskunst*. In: Behrends O. & Capogrossi Colognesi L. (ed.) *Die römische Feldmesskunst. Interdisziplinäre Beiträge zu ihrer Bedeutung für die Zivilisationsgeschichte Roms*, 412-428. (Göttingen).
- Gerasimova-Tomova V. (1987). *Zur Grenzbestimmung zwischen Mösien und Thrakien in der Umgebung von Nicopolis ad Istrum in der ersten Hälfte des 2. Jh. n. Chr.* Tyche 2, 212-240.
- Gerov B. (1979). *Die Grenzen der römischen Provinz Thracia bis zur Gründung des aurelianischen Dakien*. In: ANRW VII.1, 1979, 212-240.
- Grabherr G. (2006). *Die Via Claudia Augusta in Nordtirol – Methode, Verlauf, Funde*. In: Grabherr G. & Walde E. (ed.) *Via Claudia Augusta und die Römerstrassenforschung im östlichen Alpenraum*, 36-284. (Innsbruck).
- Grewe K. (2008). *Tunnels and Canals*. In: Oleson J. P. (ed.) *The Oxford Handbook of Engineering and Technology in the Classical World*, 319-336. (Oxford).
- Grewe K. (2013). *Streckenmessung im antiken Aquädukt- und Strassenbau*. In: Fischer T. (ed.) *Strassen von der Frühgeschichte bis in die Moderne*. (Wiesbaden).
- Hekster O. & Kaizer T. (ed.) (2011). *Frontiers in the Roman World. Proceedings of the Ninth Workshop of the International Network Impact of Empire (Durham, 16-19 April 2009)*. (Leiden).
- Herzog E. (1898). *Zur Okkupations- und Verwaltungsgeschichte des rechtsrheinischen Römerlandes*. BJ 102, 83-101.
- Hirschfeld O. (1907). *Die römischen Meilensteine*. Sitzungsberichte der Berliner Akademie, 165-201. Kleine Schriften, 1913, 703-743. (Berlin).
- Isaac B. (1992) *The Limits of Empire: The Roman Army in the East*. (Oxford).
- Kolb A. (2003). *Römische Grenzsteine*. Reallexikon der Germanischen Altertumskunde 25, 88-90.
- Kolb A. (2004). *Römische Meilensteine: Stand der Forschung und Probleme*. In: Frei-Stolba R. (ed.) *Siedlung und Verkehr im römischen Reich*, 135-155. (Bern).
- Kolb A. (2016). *The Romans and the World's Measure*. In: Bianchetti S., Cataudella M. R. & Gehrke H.-J. (ed.) *Brill's Companion to Ancient Geography*, 223-238. (Leiden/Boston).
- Kolendo J. (1975). *Témoignages épigraphiques de deux opérations de bornage de territoires en Mésie Inférieure*. Archeologia 26, 83-94.
- Le Bohec Y. (2000). *Les légions de Rome sous le Haut-Empire*. (Lyon).
- Lewis M. J. T. (2001). *Surveying Instruments of Greece and Rome*. (Cambridge).
- Matijević K. (2010). *Römische und frühchristliche Zeugnisse im Norden Obergermaniens. Epigraphische Studien zu unterer Mosel und östlicher Eifel*. (Rahden/Westfalen).
- Meyer-Zwiffelhofer E. (2002). *Πολιτικὸς ἄρχαιον. Zum Regierungsstil der senatorischen Statthalter in den kaiserzeitlichen griechischen Provinzen*. (Stuttgart).
- Mommsen Th. (1887), *Römisches Staatsrecht*, I-III. 1-2. (Leipzig).
- Nelis-Clément J. (2000). *Les beneficiarii: militaires et administrateurs au service de l'empire (Ier s. a.C.-Vle s. p.C.)*. (Bordeaux).
- Nelis-Clément J. (2006). *Les stationes comme espace et transmission du pouvoir*. In: Kolb A. (ed.) *Herrschaftsstrukturen und Herrschaftspraxis. Konzepte, Prinzipien und Strategien der Administration im römischen Kaiserreich*, 269-298. (Berlin).
- Nesselhauf H. (1939). *Publicum portorii Illyrici utriusque et ripae Thraciae*. Epigraphica 1, 331-338.
- Ott J. (1995). *Die Beneficiarii. Untersuchungen zu ihrer Stellung innerhalb der Rangordnung des Römischen Heeres und zu ihrer Funktion*. (Stuttgart).
- Pekáry Th. (1968). *Untersuchungen zu den römischen Reichsstrassen*. (Bonn).
- Rathman M. (2003). *Untersuchungen zu den Reichsstrassen in den westlichen Provinzen des Imperium Romanum*. (Bonn).
- Richardson J. R. (2011). *Fines Provinciae*. In: Hekster & Kaizer 2011, 1-12.
- Ritterling E. (1924/1925). *Legio*. In: RE XII,1 & XII,2, 1211-1837.
- Schneider H. (2014). *Infrastruktur und politische Legitimation im frühen Principat*. In: Kolb A. (ed.) *Infrastruktur und Herrschaftsorganisation im Imperium Romanum*, 21-51. (Berlin).
- Schumacher L. (2003). *Mogontiacum. Garnison und Zivilsiedlung im Rahmen der Reichsgeschichte*. In: Klein M. J. (ed.) *Die Römer und ihr Erbe. Fortschritt durch Innovation und Integration*, 1-28. (Mainz).
- Smith N. A. F. (1977/78). *Roman Canals*, Transactions of the Newcomen Society 49, 75-86.
- Thomasson B. (1996). *Fasti Africani. Senatorische und ritterliche Amtsträger in den römischen Provinzen Nordafrikas von Augustus bis Diokletian*. Acta Instituti Romani Regni Sueciae 4,53. (Stockholm).

Tomas A. (2007). *Inter Moesos et Thracas. A Contribution to the Studies on the Rural Hinterland of Novae in Lower Moesia*. *Archeologia* 58, 31-47.

Vittinghoff F. (1953). *Portorium*. In: RE XXII,1, 346-399.

Von Cranach Ph. (1996). *Die opuscula agrimensorum veterum und die Entstehung der kaiserzeitlichen Limitationstheorie*. (Basel).

Wesch-Klein G. (2008). *Provincia. Okkupation und Verwaltung der Provinzen des Imperium Romanum von der Inbesitznahme Siziliens bis auf Diokletian. Ein Abriss*. (Wien/Berlin/Zürich)

White K. D. (1984). *Greek and Roman Technology*. (London).

Whittaker C. R. (1994). *Frontiers of the Roman Empire*. (London).

Wikander Ch. (2000). *Canals*. In: Wikander Ö. (ed.). *Handbook of Ancient Water Technology. Technology and Change in History* 2, 321-330. (Leiden).

Willi A. (2014). *Land Division and Water Management in the West of the Roman Empire*. In: Kolb A. (ed.) *Infrastruktur und Herrschaftsorganisation im Imperium Romanum, 197-221*. (Berlin).

Notes

1. In 197 BC the governors of the Hispanic provinces were ordered to fix the boundaries Liv. 32,1,1: *terminare iussi qua ulterior citeriorve provincia servaretur*; see Richardson 2011, 4–5 explaining the term provincia as an area of exercise of imperium. In 195 CE the border between the new province of Osrhoena and the kingdom of Abgar was drawn by the governor AE 1984 919: *Ex auctoritate Imperatoris Caes(aris) / L(uci) Septimi Severi Pii Per(tinacis) Aug(usti) ... C(aius) Iul(ius) / Pacatianus procl(urator) Aug(usti) inter / provinciam Osrhoenam et / regnum Abgari fines posuit*; see Wesch-Klein 2008, 142 with other examples which are disputed: AE 1912, 200 (bronze tablet from Thracia reign of Carus and Carinus) and the stones between *Moesi et Thracas*, see the next note.
2. Eight border markers from Africa proconsularis show Rutilius Gallicus (Thomasson 1996, 43–44, n. 48) as legate like AE 1902, 44 (Chetlou): *[Ex] au]ct(orate) Imp(eratoris) Vesp(asiani) Caes(aris) Aug(usti) p(atris) p(atriciae) fi/nes provinciae no/vae et veter(is) de/recti qua fossa / regia fuit per Ru-/tilium Gallicum / co(n)s(ulem) pont(ificem) et Sen/tium Caecilia/num praeto/rem legatos / Aug(usti) pro pr(aetore)*. Eleven boundary stones dividing the *Moesi* and *Thracas* 135 CE, see Tomas 2007; further below in this paper.
3. A canal between the Rhine and IJssel was begun in 12 BC by Drusus (Tac. ann. 2,8; 11,1; Suet. Claud. 1). The canal linking the Rhine and Maas was built 47 CE by Cn. Domitius Corbulo (Tac. ann. 11,20; Cass. Dio 61,30). For a general overview on Roman canals see White 1984, 227–229, t. 6; Wikander 2000, 328–330, Grewe 2008, 333–336.
4. The German military districts were transformed to regular provinces only about 85 CE under the reign of Domitian (cf. Eck 1985, 148). Although they nominally belonged to the Gallia Belgica in 55 CE, this units were de facto administered separately and Vetus would apparently have surpassed the limits of his area of responsibility.
5. For the discussion of the feasibility of this canal with the technology available see Smith 1977–78, 80–3, Wikander 2000, 329, Grewe 2008, 335. For Antistius Vetus career Eck 1985, 24.
6. The veneration of deities of the borders is common in antiquity. E.g. the cult and the festivities for the god *Terminus* in Rome (Dion. Hal. 2,74; Ovid, Fasti 2,658). Dedications to river-gods are well attested in the northern part of the Empire. Votive inscriptions to *Rhenus*, were found in the nearby Remagen (CIL XIII 7790–1). Other examples come from various spots along the course of this river: CIL XIII 5255 (Eschenz); 8810–1, (Vechten); AE 1969/70, 434 (Strasbourg).
7. Fragments of an altar found in the Rotenbachtal at the provincial border of Germania Superior and Raetia (Herzog 1898, 83) probably belonged to a votive monument similar to the inscriptions of the Vinxtbach.

8. AE 1985, 730 (Veliko Tarnovo), CIL III 749; AE 1985, 733 (both from Svishtov/Novae); CIL III 12407 (Nedan), CIL III 14422,1 = AE 1902, 106 (Jadjdzi); AE 1985, 729 (Polski Senovets). The *termini* bear more or less the same text with some minor variations: *Ex auctoritate Imp(eratoris) Caesaris divi Traiani Parthici fil(i) divi Nervae nepo(tis) Traiani Hadriani Aug(usti) p(atris) p(atriciae) pontificis maximi tribuniciae potes(tatis) XX co(n) s(ulis) III [M.] Antiu(s) Rufinus inter Moesos et Thracas fines posuit*.
9. ILBulg 184 (Roman). Four very similar *termini* were found 2003 together with an uninscribed stone in the remains of a Roman building in Staro Selo (AE 2004, 1306).
10. PhD thesis on the importance of provincial boundaries by L. Zingg (upcoming publication in 2017).
11. The distance on milestones is measured in Roman *m(ilia) p(assuum)* ("one thousand paces" = 1,618 yards = 1,480 m), except in the Germanic and Gallic provinces (though not *Gallia Narbonensis*, which had been under Roman rule the longest), where from Trajan's reign onwards distances were sometimes measured in Celtic *leugae* (1 *leuga* = 1.5 *milia passuum*) instead of Roman miles (see CIL XVII.2, 312–317). On the discussion about the *leuga* see Rathmann 2003, 115–120; Grewe 2013, Kolb 2016, 233.
12. This can be illustrated in detail by a fragmentary inscription from Phrygia documenting the dispute between two villages (in an imperial domain) about the responsibilities arising from transportation services along the roads in their area SEG XVI 754 Z. 4–6 with Pekáry 1968, 135–137; French 1991, 57; French 1993. Other examples are AE 1979, 257 (Torviscos, Venetia et Histria); CIL X 1064 (Pompei, Campania); CIL VIII 26534 (Thugga, Africa proconsularis, IThrakAig 433; *447).
13. Furthermore, its unusual diameter size of 70 cm (more than the usual 35-50 cm) supports the conclusion. The restoration of the mile number results from the textual "twin-stone" (describing the same road with the same wording) which was found near Cesio Maggiore in northern Italy, far from the border (with a diameter of 56-58 cm); this stone seems to have had only regional significance because of its posting at an Italian crossroad (near Feltre) giving the roads origin as Altinum (not the *flumen Padus*) CIL V 8002 = ILS 208 (Cesio): *...munit ab / Altino usque ad flumen / Danuvium m(ilia) p(assuum) CCCL / -----*; summarizing the research Grabherr 2006, es. 68–69.
14. Other border monuments are the trophy of Pompeius in the Pyrenees (Le Perthus, Plin. Nat. 3,18: *Pompeius Magnus tropaeis suis, quae statuebat in Pyrenaeo, DCCCLXXVI oppida ab Alpibus ad fines Hispaniae ulterioris in dicionem ab se redacte testatus sit*) or the *tropaeum Augusti* (La Turbie, Plin. Nat. 3,136–137, CIL V 7817) between Italy and Narbonensis, see Castellvi et al. 2008; Binninger 2009.