# Colonia Ulpia Traiana: The Economy of a Garrison and Border Town at the Lower German Limes

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Around AD 100, Emperor Trajan granted the rights of a colony to a settlement on the northeastern border of the province of *Germania Inferior*, which was not known by name.¹ *Colonia Ulpia Traiana* (CUT), as the city was known from then on, was located on the west bank of the Rhine above a bluff slope. Presumably, the favourable location for a river port was the decisive factor for the creation of a civilian settlement here, in Tiberian times at the latest. Its development was intimately linked to the legionnaires' camp Vetera, which was located farther south, on the Fürstenberg. Vetera had been built around 13/12 BC. In a strategic position, opposite the confluence of the Lippe and the Rhine, it had been established as a base camp for the campaigns of Drusus and Tiberius. The camp had offered accommodation to at least two legions since 14 AD at the latest.² Supplying more than 10,000 soldiers on the then sparsely populated Lower Rhine represented a huge logistical challenge that could only be mastered by the creation of a suitable infrastructure (roads, harbour) and the settlement of traders and craftsmen.

After Agrippa had connected the Rhineland to the Roman highway network with the new road from Lyon to Cologne via Trier, the following decades saw the further development of the viae publicae in the territory of what was to become the province of Lower Germany. These included the Limes Road, which ran alongside the Rhine. Access to the hinterland included a road that led from Xanten via Heerlen to Cologne.<sup>3</sup> The transport of particularly heavy goods, such as timber and stones, as well as food such as grain and olive oil, was conducted as far as possible by water. A suitable river port was essential for this. Well preserved remains of a harbour quay have been excavated on the east side of the CUT in front of the city wall, opposite insula 36. Drillings for geological investigations prove that the harbour was on the main course of the Rhine and not - as previously suspected - on a side channel. The oldest archaeologically established harbour quay dates back to 46 AD. Dendrochronological analysis shows that reconstruction became necessary in 92 AD and then again forty-five years later (fig. 1). It is still unclear whether the military and civilian population shared the port or whether the military had its own port further upstream.<sup>4</sup> Due to massive post-Roman changes to the course of the Rhine, any harbour for the legionary camp, which may have existed, has been destroyed.

On the Rhine, transport vessels consisted mainly of flat-bottomed boats (barges). The 5–35 m long barge type Zwammerdam is characterized by a large load capacity and a very low draft, so that it was also possible to use it near the shore or at low tide. Evidence for this in the Xanten area are two wrecks as well as other finds of individual parts. The barge from Xanten-Wardt may have been used as a ferry to cross the Rhine. Ceramics and building materials were transported on barges as well as food in sacks, barrels or amphorae. The



Fig. 1: The harbour of the Colonia Ulpia Traiana. Virtual reconstruction.

legionnaires stationed in Vetera had manufactured tiles since the 40s of the first century AD. Their products not only covered military needs, but were also used to some extent for public buildings of the CUT.<sup>7</sup> For the construction of the city wall built in the early 2<sup>nd</sup> century, tuff, which was broken by military detachments in the mines of the volcanic Eifel, had to be shipped first over smaller streams and then along the Rhine to Xanten.<sup>8</sup> Most of the timber procured from the Odenwald and the Black Forest, which was required for pile gratings to create stable foundations or for the casing of foundations in concrete, was most likely brought on barge type Zwammerdam to Xanten.

Archaeological finds of other goods of long-distance and regional trade, which may have reached Xanten mainly by water, include ceramic products of all kinds, especially tableware and kitchenware, and indirectly also those foods that were filled in amphorae such as olive oil and fish sauce from southern Spain, wine from Italy and later from Gaul. Fine tableware was imported from Italy in the early years, then from southern Gaul in the third decade of the first century AD, after production shifted there, to shorten the transport routes to the military sites in the Rhineland. A certain number of goods were also imported from the eastern Mediterranean. These probably included dates, as shown by fragments of Levantine amphorae from the CUT, and various types of marble, which were obtained in the form of sawn plates and used to furnish public buildings.

The needs of the military – and very soon of the growing civilian population – for various craft products, probably led to the establishment of many businesses in the early days of the pre-colonial settlement, and to the emergence of a larger civilian settlement.

Potteries produced a wide range of fine and heavy vessels as well as oil lamps in the area of the later Harbour Temple and at the harbour. Despite the sometimes outstanding quality of the products, they did not find any significant distribution beyond Xanten and the nearby region.<sup>12</sup> The evidence for other craft branches in the pre-colonial settlement and the CUT include workshops for metalworking (coarse and fine smithy), bone carving, tanning or fulling, leather processing, glue boiling, painting and perhaps also brewing. Meat processing workshops (butchery, smokehouse) also seem to have had some importance.<sup>13</sup>

The Batavian revolt in 69/70 AD affected the pre-colony settlement and its further development in ways that are difficult to estimate (Schmitz 2008, 134 note 521). After the end of the revolt, only one legion was stationed in the newly established legionary camp Vetera II. The number of potential buyers of goods and services in the pre-colonial settlement was thus significantly lower than in previous decades. That the settlement was still of (strategic) importance was impressively underlined by the fact that it was raised to the status of a *colonia* in 100 AD.

However, a first inspection of the findings on the craft activities, some of which were published only in preliminary reports, reveals that the majority of these – as far as they are dated – belonged to the pre-colonial settlement. This finding is surprising and needs further investigation. It cannot be ruled out that the special conditions of conservation in the CUT could give a distorted picture – the massive plundering of stones in the Middle Ages and the modern era could disproportionately affect the younger strata. Only after a careful reworking and a more precise dating of the individual findings will we know whether we can assume that there was a decreasing number of craft enterprises in the course of the second and third centuries AD.

Little is known about the direct surroundings of the CUT. So far, only individual findings in the immediate vicinity of the city have been excavated.<sup>14</sup> There is little doubt that the CUT functioned as a central marketplace in the *Civitas Cugernorum*. Here, on market days, the surplus of agricultural production in rural areas was traded, and here the farms of the surrounding area were able to acquire important products such as kitchen utensils, tools and more. This intensive exchange is testified by the high proportion of Roman ceramics in the total ceramics of the indigenous settlements.<sup>15</sup>

#### Notes

<sup>&</sup>lt;sup>1</sup> Abstract of my paper presented at the AIAC conference, Bonn 2018. References have been strongly limited, mainly to those contributions published in the last decade.

<sup>&</sup>lt;sup>2</sup> Hanel 2008.

<sup>&</sup>lt;sup>3</sup> Andrikopoulou – Jenter 2018.

<sup>&</sup>lt;sup>4</sup> Selke – Leih 2018.

<sup>&</sup>lt;sup>5</sup> Obladen-Kauder 2008. 2016.

- <sup>6</sup> Schmidhuber-Aspöck 2018.
- <sup>7</sup> Schmidts 2018.
- 8 Schaaff 2018.
- <sup>9</sup> Rudnick 2018.
- <sup>10</sup> Höpken 2018.
- <sup>11</sup> Ruppiene 2018.
- <sup>12</sup> Liesen 2018.
- <sup>13</sup> Reuter 2008; Rothenhöfer 2018.
- <sup>14</sup> Bridger Kraus 2008; Bridger 2009.
- <sup>15</sup> See the article by M. Brüggler and others in this volume.

# **Image Credits**

Fig. 1: LVR-Archäologischer Park Xanten (virtual reconstruction: Faber-Courtial GbR, Darmstadt).

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