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POTTERY INDUSTRY OF THE AQUINCUM MILITARY TOWN

THESES OF THE PhD-DISSERTATION

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The aim of this dissertation is to discuss the beginning and development of pottery industry in the Military Town, the settlement formed around the Aquincum legionary camp.

The last scholarly summary of the topic was published over a half-century ago by Klára Póczy (*Die Töpferwerkstätten von Aquincum*. *ActaArchHung* 7, 1956, 73–136). This thorough summarising study became, thanks to its publication in German, a much-cited article abroad as well. Over the almost 60 years since the article appeared new excavations were launched, which significantly expand, refine, and of course, to some extent revise the picture created by Klára Póczy. This dissertation seeks to present and evaluate the results of these developments.

The chapter on the **History of Research** will present the main stages in the discovery of the pottery industry in the military town, and the expansion of our knowledge on the topic.

Naturally, these stages are closely connected to the history of research on larger settlement units, thus on Aquincum itself, and within it the military town. Hence, these stages, where appropriate, will be presented in the context of larger developments.

There were three main periods of excavation in the Aquincum military town: the industrialisation – and connected to it, the urbanisation – of Óbuda from the second half of the 19th century to the 1920s and 30s, the large social housing construction programs of the late-1960s to the mid-1980s, and the tide of new investments following the fall of socialism. During these periods, the topographical image of the legionary camp and the surrounding settlement, and the function of particular regions within it, became increasingly better known. And thus regions connected to pottery production too could be identified.

Beyond the presentation of the individual workshops, this paper will seek to draw up the **topographical and geographical conditions**, which explain the original factors in the establishment of particular workshops.

In scholarly literature, the topographical area in the 3rd district of Budapest circumscribed by the Danube, Bogdáni street, Hévízi street, Bécsi street, and Nagyszombat street is referred to as the military town. This topographical designation is used in the literature for the entire span of Roman occupation, regardless of settlement density. As for the history of the settlement type around the *legio*-camp, known as the *canabae* (belonging to the military *territorium* as defined by land law): it was formed in a particular period, and, following the changes in imperial politics, it was repeatedly rebuilt according to urban planning schemes current at the

time. During all such reorganisations, the area, nature, and district divisions of the settlement were always changed. Unfortunately, we do not know, where the boundaries of the former military *territorium*, and within it the *canabae*, were drawn in a legal sense, and how these changed over the centuries.

In the last decades, however, south of the above-mentioned topographical area, between Nagyszombat Street and Zsigmond Square, such features were found, which indicate not only burials, but also settlement and industrial (including pottery) activity. It is therefore necessary to treat the traditional topographical unit of the military town together with its “southern extramural area”.

We must also note that prior to the formation of the military town, we must also reckon with another area: the *vicus* of the earlier *ala*-camp and its extent. We know rather little about this, as it was relatively short-lived, lasting 16-18 years, after which it was incorporated in the territory of the early *canabae*. It appears that the potters, when establishing the earliest workshops (Lajos Street- Nagyszombat Street), took into account the close proximity of raw materials (clay and water), as well as the geographical extent of the area.

The natural borders of the military town are formed on the east by the Danube and on the west by the Buda mountain range. Of the latter, the eastern slopes of the Tábor, Remete and Mátyás mountains enclose a slightly narrowing area in the southwest. This south-westerly direction breaks in the line of Nagyszombat Street, and the flatland continues south, becoming a gradually narrowing, approximately 1 km-long strip by the river, bordered on the west by the foothills of the Kis-Kecske and Szemlő Mountains.

The three most important factors in the establishment of a pottery workshop are: clay, water, and fuel. The ancient potters, familiar with the geological conditions of Aquincum and the environs, used the Oligocene Kiscell clay. This wide clay formation covers the lower ranges of the Buda Mountains like a mantle. And it is on its zones of mountain margins and piedmont surfaces with vast stores of Kiscell clay that the pottery workshops and quarries were established. Access to water, too, was guaranteed. In certain areas we can reckon with perennial or temporary springs, which were fed by atmospheric precipitation. Another possible source was the ground waters and contact springs from the gravely-sandy layers of the surface of the Danube terraces to the west and south of Aquincum, which were brought to the city with aqueducts. Possibly, the construction of some of these aqueducts was also

motivated precisely by the increased water demand of the intense brick- and pottery-production.

A third possible source of water was the wells, for which, too, there is evidence from a number of sites.

Firewood for the heating of the kilns was clearly sourced from nearby forests. The workshops in the early phases presumably had the same easy access to the woodlands as to the clay deposits. The optimal temperature for the firing of bricks and vessels must have required a large amount of fuel, hence we must reckon with a significant degree of deforestation.

The individual regions and workshops were excavated in different periods with different excavation techniques. Furthermore, features and finds of various types and functions discovered on the sites could be used to determine that the area had been used for pottery production. These differences clearly make the task of analysing the various sites difficult. In the section on the **criteria for analysis and identification** I will seek to present a unified system of criteria, which may be used to analyse the excavated features – connected by their excavators to pottery production – and the ceramic finds – found in the fillings or vicinity of the aforementioned features, and identified as “wasters”.

Beyond locating the pottery workshops, the other task is to identify the connected products and, if possible, to determine the production profile of the workshops.

The aforementioned system of criteria was used in the case of every workshop with the following considerations:

The relationship of the kilns and the “filling”

The possible interpretations of the ceramic wasters

The possible identification of the products of particular workshops

After presenting the aforementioned topographical and geographical conditions, and the methodology of the analysis, I will discuss the **workshops identified in the military town.**

Presumably two sites can be connected to **workshops from the vicus period.**

The connection of one of the two appears to be more certain: in the section of the site excavated on the **corner of Lajos and Nagyszombat Streets** in 1995 three kilns and a significant amount of pottery wasters were found. Based on the latter, the production profile of the workshop too could be established. The potters of this workshop were probably still

partly or wholly local, who presumably catered for the troops of the *ala* camp and the residents living in the settlement surrounding it.

Sections of the Selmeci Street workshop were found in 1935. Two pottery kilns were discovered, and within their filling, the excavator Lajos Nagy found objects, which he identified as remains of former workshop's products. Unfortunately the excavation documents did not survive, and the available ceramic finds cannot be identified as the products of the workshop, but only as regular household waste.

Even though this workshop had an unknown production profile, based on its topographical location, we can place it among the workshops of the vicus-period.

The military pottery workshop was situated in a larger zone, the first sections of which were discovered in 1928-29 during the excavation of the plot of **77-79 Kiscell Street**. The excavation documents did not survive, but we know from the brief reports by Lajos Nagy that two kilns and a well were found. Some of the finds were presumably lost, and some of the available finds are presumably not the products of this workshop.

About 100 metres south-west from this plot, the remains of multiple brick kilns and four pottery kilns, ceramic fragments, lamp- and terracotta moulds, a mould fragment and a brick stamp of the *legio II adiutrix* were found between 1965 and 1975 **in the plots of 120-128 Bécsi road**.

About 200 metres north-east from the Kiscell street plot, Tibor Nagy led excavations during 1967-1968 in the large connected plots of **60-70 Zápor street**. There he found three features, which could certainly be identified as pottery kilns; he also found a number of levelled, highly burnt, debris layers, which also might have been previously used as kilns.

The plot of **75 Kiscell street** proved to be a key site (directly next to the plot of 77-79 Kiscell street excavated by Lajos Nagy), where, in 2001-2 a rather large amount of finds, which could mostly be identified as waster, was found. These finds in part can be connected to the finds from the Bécsi road strip and the Zápor street zone. With their help we can prove that the three sites are sections of the same large workshop, which originally supplied the pottery for the legion stationed here.

Based on the analysed ceramic fragments, we can reckon with a large workshop with a wide range of products. Among its products we find all major pottery types from tastefully-designed fine ceramics, terra sigillata imitations and other relief-decorated ceramics through simpler coarse wares (pots, jugs), to thick mortars and household ceramics (washbowls, chamber pots). Pottery aside, the workshop probably also produced large quantities of lamps. Through their examination we can prove that the military pottery workshop was established when the *legio II Adiutrix* was transferred here in 89. The potters of the workshop were probably of Italian origin. The transfer of the *legio X Gemina* to Aquincum in 105 is highly visible in the archaeological record. The potters, who had arrived with the legion from Noviomagus, continued production with their usual designs in Aquincum as well. This is particularly apparent in the case of fine ceramics. In many cases, these were made with a design identical to the so-called “Holdeurn” ware, known from Noviomagus. The period following 118 – i.e. after the return of the *legio II Adiutrix* – can only be studied in the outlines. The date for the closure of the workshop too is somewhat uncertain. It probably occurred sometime during the mid-2nd century, or slightly later, in the second half of the century. The discontinuation of pottery production here is presumably connected to the establishment and flourishing of the large pottery workshop of the civilian town.

After the closure of the military pottery workshop, the ceramic supply of the military town was probably taken over by the **smaller civilian workshops established during the late-2nd century and the 3rd century.**

The workshop in the zone of 103-105 and 111-117 Vörösvári Road, was probably in operation during the first half of the 3rd century. One of the workshop’s characteristic products was the beaker imitating the forms of Trier black-slipped ware. Additionally, the workshop mostly produced pots, jugs, simpler red-slipped tableware, and lamps.

The pottery workshop around 203 Bécsi Road was probably in operation during the 3rd century. We know very little of the workshop: parts of a small circular pottery kiln were found, and around it two lamp moulds and such fragments, some of which may be identified as the remains of the products of this workshop. This workshop too probably produced lamps, pots, jugs and simpler red-slipped tableware.

We may suspect that a large workshop was established in the zone south of the military town **between the plots of 4-6 and 11 Ürömi Street.** In **4-6 Ürömi Street** a kiln was found, which

collapsed presumably while in operation, hence it contained the vessels from the final firing. These were reduced coarse wares and cups imitating the forms of Trier black-slipped ware. Judging from the latter, the workshop was in operation probably during the first half of the 3rd century.

70 metres northeast from here, in plot 11, two brick kilns were found. Based on the proximity of the two plots, we may assume that they belonged in the same period to a large workshop producing both pottery and bricks.

We know of further **workshops of uncertain dating and unidentifiable production profiles** from the north-eastern region of the military town, from the excavations of the plots of **34 Laktanya Street and 4-10 Harrer Pál Street**, and from the southern zone of the military town, from the plot of **38-42 Bécsi Road**. The remains of a pottery kiln has been found on each of these sites, yet, due both to their stratigraphical position and to the absence of fragments, which can be connected to the workshop's products, we can only arrive at uncertain chronological conclusions.

To summarise the results, we may make the following statements:

In the case of the pottery workshops operating in the territory of the military town, multiple factors in their establishment could be identified: on the one hand, being close to the raw materials, on the other, following of the boundaries of the settlement.

The earliest workshops were established in the 70s. These were opened on the edge of the village-like settlement around the *ala* camp. These were probably smaller, short-lived workshops, operated by native potters, who produced pottery for the unit (following some sort of agreement) and the settlement. This set-up could work for supplying a community not larger than 2-3000 people, but, when the legion arrived in 89 a new solution was found. The *legio* brought its own enlisted, well-trained potters to ensure the ceramic supply, who, in addition, were also able to supply the inhabitants of the gradually urbanised settlement surrounding the legionary camp. Due to the restructuring of the settlement, the earlier small workshops were closed and a large military pottery and brick workshop was established, in what was then the edge of the military town. The heyday of the workshop can be placed under Domitian and Trajan. The workshop probably reached its greatest capacity at this time. From the 120s, the civilian workshops probably also played a part in the decline of production here.

After the military workshop had been closed, civilian pottery workshops were established on the edge of the late-2nd–early-3rd-century settlement. Their period of production can be dated primarily to the first half of the 3rd century.

Workshops manufacturing late-Roman pottery, based on finds discovered in excavations, certainly operated in Aquincum, and presumably in the military town as well. Nevertheless we do not have unequivocal evidence for the identification of such workshops.

The publications of the author connected to the subject:

Fazekasműhely az aquincumi canabae déli részén. (Töpferwerkstatt im südlichen Teil der Canabae von Aquincum). *Archaeologiai Értesítő* 127 (2002) 5–87.

The Types of Pottery Kilns in Aquincum. *Rei Cretariae Romanae Fautorum Acta* 41 (2009) 67–73.

Some remarks on military pottery in Aquincum. *Acta Archaeologica Academiae Scientiarum Hungaricae* 63 (2012) 395–406.

Majdnem terra sigillata. Adatok az aquincumi canabae katonai fazekasműhelyének legkorábbi periódusához (Fast Terra Sigillata – Angaben über die frühesten Periode die militärische Töpferei in den Canabae von Aquincum). In: Balázs, P. (red.): *Fiatal Római Koros Kutatók III. konferenciakötete*. Szombathely, 2014, 143–160.