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ROMAN POTTERY FROM THE
LEGIONARY FORTRESS OF
POTAISSA

DOCTORAL THESIS SUMMARY

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KEY WORDS: *Potaissa*; *Legio V Macedonica*; Roman *Dacia*; *Moesia Inferior*; *Troesmis*; roman pottery; roman legionary fortress; plain *terra sigillata*; stamped pottery; LDKW; pontic *sigillata*; military pottery; military workshops; local pottery production; import *amphorae*; antropomorphic pots; face pots; paleodermatoglyphics; *tituli picti*; *graffiti*; textile prints; military diet; legionary rations; military supply; military lifestyle; military architecture; *scholae*; *contubernia*; *foculi*.

SUMMARY: The above mentioned thesis represents a comprehensive and extremely detailed analysis of the Roman pottery discovered in the legionary fortress of *Potaissa*. The finds were brought to light through systematic archaeological excavations carried out in the years 1951, 1971-2015, and are now being stored at the History Museum Turda (98% of the material used in this study), as well as the National History Museum of Transylvania (the 2011-2012 campaigns). The archaeological investigations lead to the identification of very large quantities of roman pottery over the years, from which about 10.000 individual earthenpots associated with the legionary fortress are still available to this day. The entirety of these pots have been analysed in this study, resulting in a voluminous catalogue of 1230 pages, 139 plates with graphic representations and 76 charts (all unique materials, created by the author of this study for the first time).

During the first stages of research (February 2014), the Roman period collection of the museum was comprised of 17.099 artifacts, representing 57% of the total of mobile cultural goods belonging to this institute. At the same time, it must be mentioned that total of 98% of the material used in this study is represented by never published before artifacts, which will be hereby analysed for the first time. To facilitate the work of future researchers, for a better administration of the material and to be able to create an accurate catalogue, around 4000-4500 individual earthenpots had to be inventoried first at the History Museum Turda, throughout a period of one year and seven months. Through this endeavour, the Roman era collection of the museum was enriched from cca. 17.000 artifacts, to 21.000 in less than two years. From the 10.000 individual earthenpots utilized in this study, approximately 6.000 were already inventoried starting with the year 1951. As the material was stored into random boxes, dividing the pottery finds into categories, groups, typologies etc and their initial places of discovery was not an easy task at all. The thorough analysis has concluded that out of the 10.000 earthenware from the legionary fortress of *Potaissa*, 3463 represent special types of pottery (2639 local plain *sigillata*; 141 plain imported *sigillata*; 484 *amphorae*; 199 amphoric

operculae), which needed a special treatment, as every individual pot has its own personality, history, chronology, typology and origin.

The entirety of the material was divided in separate chapters, allocated to the specific place of discovery within the legionary fortress, such as: *principia*, *centuriae* (*praetentura sinistra* and *dextra*; *latus praetorii dextrum*; *latus praetorii sinistrum*; *retentura sinistra* and *dextra*), *thermae*, *porta decumana* and *horrea*. Every individual structure has provided new data, specific to the activities that were carried out in those areas of the fortress.

For a better understanding of the pottery production at *Potaissa*, all the categories, classes, groups, forms and typologies present inside the camp have been identified, without exception. At the same time, one of the main objectives of the thesis was the clarification of subjects which are less known in *Dacia*, such as the commercial connections of Legio V Macedonica with other provinces, based on the import of *terra sigillata* and the goods that were transported in the amphorae discovered at *Potaissa*. The careful analysis of this material has led to new informations related to the supply, military lifestyle, military diet, hygiene, and the level of education of the legionaries. Another interesting aspect is the clarification of several issues which have appeared throughout the years when discussing the ceramic material from *Potaissa*, such as the presence or absence of certain groups of pottery, like imported *terra sigillata*.

A ceramic study has been elaborated individually for every building, area or archaeological trench within the legionary fortress, with an end goal of identifying all the typologies specific to this fortress, without exceptions. This approach allowed me offer a better understanding to the pottery production specific to the workshops at *Potaissa*, but most importantly the military workshops connected to this camp. Also, it resulted into a very detailed typology of all the forms identified within the fortress, which are now accompanied by numerous charts and tables that portray the exact numbers and quantities identified in any area of the legionary camp.

The main benchmark in this study was the bibliography associated with the legionary fortress. All the previous studies which focused on the ceramic finds from *Potaissa* concluded that imported *terra sigillata* finds within this fortress were scarce and considered very rare goods in these parts, with a total of around 20 such products. Also, as far as luxury pottery is concerned, only two groups were known, namely relief decorated *sigillata* and stamped pottery, both present in small quantities. The lack of luxury products within a legionary fortress seemed odd and therefore, this phenomenon needed an explanation. From the find published in these previous studies, only six *terra sigillata* finds had been made in the

civillian settlement (from Central Gaul/Lezoux), and another five such products had been identified in the legionary fortress (from East Gaul/Rheinzabern).

Through my study I was able to identify the solution and the answer to why *terra sigillata* finds had not been discovered previous to this study. After carefully analyzing more than 10.000 products from within the fortress, I was able to identify a completely new ceramic class for *Potaissa*, a class that had been previously ignored, due to lack of knowledge or interest in less impressive finds. This new class presents itself as plain *terra sigillata*, meaning ceramic luxury goods without any kind of decoration on their bodies. This type of pottery has been discovered in impressive quantities inside the fortress, both imported and locally produced ware. This class takes over all other groups of pottery present at *Potaissa*, being the most numerous when it comes to fine fabric or luxury goods. Therefore, the study will offer a better understanding to this phenomenon, explaining why this class makes an appearance in these parts at the end of the second century AD.

The analysis of approximately 10.000 individual earthenware from the legionary fortress of legio V Macedonica has led to a complete and extremely complex view regarding the logistics of the Roman army at the end of the second century AD and the first half of the third century AD. Therefore, this branch, tied to the art of war, which meant the supply of the Roman army with the necessary goods for a decent living, has been identified at *Potaissa* as well through the study of its ceramic finds. The attention of the study did not stop to only the analysis of pottery, but it also included elements which are closely tied to the military life, economy, religion or art, elements without which the analysis of pottery would have stopped to simple typologies and statistics.

The main aim of the analysis was not only the study of the archaeological object, but also the reanimation of a world which had been long lost in time. It is the image of the human that lived in the past and created and utilized these goods. Only through such an approach we will be able to explain the apparition of certain phenomena, which are specific only to *Potaissa*. These are details which would otherwise be lost, given the fact that the written sources do not offer any other clues. In this case, the pottery finds from the legionary fortress have acted in the same way as the written field of an inscription, offering a series of extremely valuable informations about the past of the legion.

Therefore, I was able to prove that the legionary logistics did not focus only on the acquisition and supply of equipment, weapons or foods for the soldiers, but also pottery goods produced in own pottery workshops, which made the fortress independent from the civillian settlement. This phenomenon is known throughout the Roman Empire from the

beginning of the first century AD, when most legions would start to manufacture their own pottery supplies. This pottery is specific to the military environment, and the particularities will be carried and spread through legionary presence in a certain location. The same happened for *Potaissa*, when at the end of the second century AD, approximately 5.000 soldiers arrived to nowadays Turda (Cluj county), from their old garrison in *Moesia Inferior*. Their arrival helped the development of the city, but also the ceramic industry carried out on Dealul Zânelor, close to the fortress. Throughout time, the archaeological research has proven that in this location, at least one of the pottery workshops discovered here is military in nature (Workshop I), having in mind that several military equipment elements were identified here, as well as *tegulae* with the legion's stamp.

Therefore, some of the most noteworthy results of this thesis are as following:

- 1) The identification of all groups, classes, typologies and forms of pottery within the legionary fortress of *Potaissa*;
- 2) The clarification of the “absence of *terra sigillata* goods” within the fortress;
- 3) It was proven that at the end of the second century and the third century AD, stamped pottery did not represent the most frequent type of ceramic goods as it was previously believed, this group of earthenware being produced in rather small quantities when compared to other newly identified classes of pottery;
- 4) Next to the other 20 perviously known imported *terra sigillata* goods, another 141 plain *sigillata* impored ware have been identified now;
- 5) A completely new class of pottery has been identified for the legionary fortress of *Potaissa*, which was unknown or ignored in previous ceramic studies related to this site; out of the approximately 10.000 earthenware analyzed in this thesis, 2639 such pots belong to the plain *terra sigillata* class, both imported and locally produced goods;
- 6) The number of types of imported *terra sigillata* ware grows from four known types, to 33, and for the plain *sigillata* finds a number of 47 new types have been added;
- 7) Two new groups of imported ware have been identified within the fortress, namely pontic *sigillata* and LDKW (Lower Danube Kaolin Ware); these goods arrive here from *Moesia*, through the presence of the soldiers;
- 8) Two new forms of pottery have been identified at *Potaissa*, unknown so far in Roman Dacia: *foculi* (portable ceramic brazier or heaters) and jugs with three double handles (*aryballoi?*); they have not yet been identified anywhere else in the province, but here;

- 9) Through the spatial distribution of the pottery, I was able to clarify the functionality of certain areas or buildings within the Roman fortress;
- 10) New data regarding the Roman army logistics and legionary rations have been offered;
- 11) New data regarding writing and education among the roman soldiers have been pointed out through the identification of a series of *graffiti* deicted on the pottery finds from *Potaissa*;
- 12) I was able to clarify the situation of all the amphoric finds from the *principia* of the fortress; through a carefull analysis, all the *amphorae* have been identified and classed, leading to a total number of 484 *amphorae* and 199 amphoric *operculae*;
- 13) A series of new ceramic centers with ties to *Potaissa* have been pointed out, such as Chios;
- 14) New data regarding the textile production at *Potaissa* has been presented through a thorough study of textile prints on the surface of several pots;
- 15) New data regarding the paleodermatoglyphics (ancient fingerprints) identified on the pottery from the legionary fortress from *Potaissa* has been pointed out through a special study dedicated only to this subject;
- 16) Drawings and graphic representations or reconstructions have been offered for all the ceramic types identified at Potaissa;
- 17) Every area, structure, building or room within the fortress is now very well represented by the exact quantities and typologies of pottery discovered there through thorough statistics and charts.

If the arrival of the Vth Macedonian legion at Potaissa around the years 168-170 AD meant one of the most important moments in the history of this city, then it is certain that one of the “industries” which will now “profit” off of the legionary presence is the ceramic production. On different occasions it was pointed out that compared to other cities in Roman Dacia, at Potaissa, the military presence is very heavily felt, leaving its mark in most fields that evolve in this town at that time. Indeed, the same military feel or touch can be felt in the pottery production available at Potaissa until the middle of the third century AD.

Known as big pottery consumers, from the moment the legionaries were stationed here, we notice a very big change in the pottery production, which was transformed from an activity meant to supply only the local needs of a vicus, into a real “industry” with very specific demands, meant to satisfy the needs of the legion.

Given the fact that the legion arrives at *Potaissa* from a different environment to that of Dacia, they will bring with them traditions specific to the pottery production of *Moesia Inferior*. These traditions will continue to exist and evolve in the new workshops. Therefore, a new type of pottery will be produced around that time, specific to the military environment, mainly plain sigillata, which is discovered in the legionary fortress from *Potaissa* in very large quantities.

The thesis offers a very elaborate body of work regarding the ceramic analysis of the pottery finds from the legionary fortress of *Potaissa*, being the first site of this kind from Roman Dacia, and one of the few from the Roman Empire, to have all the earthenware analysed (in such big quantities and from all its internal structures). The importance of the study grows even more due to the fact that the legionary fortress has been archaeologically investigated starting with the 50s, and most of its inner structures remained untouched by modern constructions, thus offering a greater look into the past of this location.