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**BEYOND MILITARY ARCHITECTURE.**  
**SMALL FINDS AND SPACE USE IN THE ROMAN FORTS OF DACIA**  
**- SUMMARY -**

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The present PhD paper is structured in ten chapters, on the principle from *macro* to *micro*, making it easier to follow the basic concepts of the theme. The first three chapters are all, in a certain way, introductory chapters for the next three, dedicated to each case study. The chapter of conclusions and remarks complements the individual conclusions associated with each previously treated fort, the last three chapters being, to some extent, annexes.

The paper deals with small finds and aims to identify the different uses of the spaces in a Roman fort, mainly with the help of this material evidence and the assemblages of finds. More precisely, it is a comparison between the physical division of space, its use as it appears in ancient sources and as it was understood and accepted until recently, with the finds in these spaces, which can sometimes either contradict or complement our knowledge of the basic activities in which the soldiers engaged. The focus is on the northwestern segment of the Dacian limes, more precisely on the auxiliary forts of Bologa and Buciumi and the legionary fortress of Turda-*Potaissa*. All three are representative of the Dacian limes in its most complex section, being defence points along two of the most important arteries of the Dacian province: the limes road and the imperial road.

Since most Roman civilian settlements are overlapped by modern localities, very little is known about the urban side of Dacia, which is what makes the study of the Roman frontier such a popular field. Therefore, the importance of the present work comes, first of all, from the revival of a set of discoveries, some of which have already been published – sometimes misinterpreted – but also of those that were not considered worthy of publication. The tradition of typological studies and catalogues of finds increasingly leaves room for the analysis of sets of discoveries, as well as the study of “consumed”, rather than “produced” goods. In addition, the present study brings the research of the Roman army in Dacia on the same path started several decades ago by Western researchers, who shifted attention from a positivist approach to artifacts to processual and post-processual interpretations.

Thus, by analyzing the assemblages of finds in context, space by space and building by building, I aimed to create a functional fort plan for each of the case studies, based on the different activities and people involved, as reflected in the patterns of find distribution. This approach, inspired by similar research used for Pompeii, Britannia, the Rhine, and Danube limes, is still quite unusual for Roman Dacia.

Methodologically, the study is conceived as a comparison between the functional labels of space and the activities carried out there, as they can be understood through the archaeological material, especially the small finds. Thus, the first step was to contextualize the theme: in the study of the Dacian province the emphasis has only recently shifted towards the use of artifacts to create what can be called stories of everyday life. Therefore, among the themes addressed here are the presence of women and other civilians, evidence of personal care or different crafts practiced inside the forts, themes that have all been investigated in the past, but separately and not always in relation to the physical context of the finds.

The next step was to build a corpus of artifacts and distribution assemblages of finds, which facilitated the visibility of their spread across the entire perimeter of the forts. For these I relied largely on already published materials, which were reanalysed and correctly identified where necessary, then reorganized and recontextualized, and the technical details of the excavations had to be compiled with the discovery location given for each artifact (usually in the form of “section, meter, depth”) to ensure the creation of what Penelope Allison called “pseudo-GIS” models. To these already published items, a number of 919 finds from the fort of Bologa were added, grouped in the final catalogue, of which 760 come from the more recent excavations at the *praetorium* (campaigns of 2012-2024), while 159 are non vidi items from Nicolae Gudea's research in the same fort during the period 1967-1976 and omitted by him from publication.

Finally, the pseudo-GIS models were analysed and interpreted quantitatively and qualitatively, in order to identify a real use of the space from which they come. The expected results were not always met, due to several factors, such as a deficient and selective publication of the material, as well as a lax description or even lack of discovery place in many cases. This is, therefore, the main limitation of this study, the fact that it presents only a snapshot of life on the Dacian limes in the 2<sup>nd</sup>-3<sup>rd</sup> centuries.

The framework is also divided into sub-themes. Starting from the outside towards the inside, I began by defining the space. The main primary sources describing the layout of a fortress are Pseudo-Hyginus, Polybius, Josephus, and Vegetius, whose writings have long remained handy solutions in identifying different buildings based on location or planimetry. Starting from here and together with the results available at the time, Harald von Petrikovits' work, *Die Innenbauten römischer Legionslager während der Prinzipatszeit* (Abhandlungen der Rheinisch-Westfälischen

Akademie der Wissenschaften, Bd. 56, 1975), also provides a typical plan of a legionary fortress, with a standard location of each building, a work that has long been a working tool in drawing fort plans. The actual use of these spaces was also subject to assumptions or preconceived judgments, such as the prohibition of women's access.

Among the researchers who have proposed a paradigm shift are Rikke Giles (*Roman Soldiers and the Roman Army. A Study of Military Life from Archaeological Remains*, Oxford, Archaeopress, 2012) and Penelope Allison (*People and Spaces in Roman Military Bases*, Cambridge, Cambridge University Press, 2013). In the first case, the author aims to identify the most frequent activities taking place in the forts of Britannia starting from the distribution of small finds, while Penelope Allison focuses more on the people involved in the daily life of the forts, in a similar methodological approach, but having as a working tool the previously mentioned pseudo-GIS maps. Thus, the present PhD paper follows these working models, starting from the assumption that beyond the labels of functionality – *principia* = command, *praetorium* = commander's residence – space can be divided into more precise functionalities, such as domestic spaces (including sleeping and accommodation), administrative spaces, work and storage spaces, leisure spaces and spaces for bodily care, all of which are also open to civilians and have different degrees of access.

The definition of space is followed by the definition of activities. These were thought of in six broad categories: military activities, domestic activities, security concerns, leisure activities, body care, and the presence of women and children. Their organization in this order was not random, but aimed at illustrating the activities in a fort from the most obvious – military and administrative – to the least expected, such as the female presence. A large section was dedicated to each category, both descriptive and justificatory.

This section is complemented by the one on the objects used. Grouped according to the activity to which they correspond, here too each category of finds has been extensively treated, with special attention where necessary, such as in the case of *fibulae*, *hipposandales*, or feminine objects. This section ends with a table containing the information systematized in the form activity – types of associated finds – type of suggested space.

The following three chapters are dedicated to case studies. The first fort treated here, in order of complexity, is that of Bologna. Five subchapters contain the technical information essential

to understanding the situation resulting from the analysis of the finds distribution patterns. The most relevant technicality is the way in which research was carried out in this fort. The archaeological excavations undertaken by Mihail Macrea and later by Nicolae Gudea seem to have followed a well-established work agenda, more precisely identifying the plan of the fort, and the collection of material with the precise place of discovery marked was not always a priority. This represented one of the problems of the present study, so that many items had to be ignored. The research undertaken by Felix Marcu at the *praetorium*, on the other hand, brought results that radically changed the plan initially proposed by Nicolae Gudea, identifying a much more complex planimetry than initially thought, with two timber phases and three of stone, the last of which seems to indicate a construction with an industrial, rather than domestic character, much less a commander's residence. The material from these researches, more precisely the 2012-2024 campaigns, was properly collected and could be included in the present work, representing an integral part of the innovative character of the work.

The following subchapters deal with the distribution of the different categories of finds in the spaces of the fort, in text, table, as well as in the form of pseudo-GIS models, and their interpretation. Thus, in the first decades of existence of the fort, since it was built shortly after the conquest of the province by Emperor Trajan, both the architecture and the material culture indicate a small troop, possibly only a detachment (*cohors I Ulpia Brittonum*), whose role is to prepare the ground for a future, more robust military base, and to provide a first attempt to secure the newly built border. The space is austere, predominantly residential, but of a temporary dwelling with a fairly wide degree of access, considering that women seem to have been present in these spaces since this phase, without, however, confirming their habitation in the fort.

A few decades later, probably during the reign of Emperor Hadrian, the garrison was replaced by two infantry troops (*cohors II Hispanorum* and *cohors I Aelia Gaesatorum*). The Empire now faced some challenges, as the new emperor left behind a vast and somewhat turbulent legacy from his predecessor in several regions: unrest on the borders of Germania, Britannia, and Mauritania, as well as revolts in Cappadocia and Judea and those of the Sarmatians and Roxolani. The latter led to the drastic decision to abandon parts of the Dacian province and to strengthen the western border, hence the need for a double garrison in several forts, including Bologa. The camp is still built in timber, but with a slightly enlarged space to the south and east. From now on, a

substantial increase in both the number and diversity of utilitarian parts is observed, which is true not only for the barracks, but also for the commander's residence. Having been rebuilt in stone, it is only now beginning to take on an increasingly prominent residential appearance. The degree of access in the fort does not undergo substantial changes.

In the third and final phase, at the beginning of the 3rd century AD, the entire fort is rebuilt in stone, with only minor changes in dimensions. This renovation is probably in line with the general situation in the province, when a notable event must have been the announced visit of the emperor Caracalla (213 AD), triggering a series of preparations, including the consolidation and beautification of the limes. The fort of Bologa continued to exist until the abandonment of the province. This short period of about half a century was extremely turbulent, in the province of Dacia numerous timber fortifications are rebuilt in stone, a greater movement of troops is visible and, with these, more attempts are made to secure an increasingly dangerous border. Against this background, numerous economic problems also arose, the army being a very expensive institution. All this is visible in the use of space at Bologa, where the same two units are now located, forced to coexist in a space that seems increasingly cramped by chores. However, the only building that underwent extensive architectural changes was the commander's residence, which eventually completely lost its main function and seems to have been gradually transformed into a *fabrica*, even if it may not have been officially designated as such by the army (present or not at the time in the garrison). The situation of the *praetorium* at Bologa is not unique, a very close analogy from this point of view being at Vindolanda. Here, the distinction between *praetorium* and *fabrica* was, over time, almost completely abandoned, accepting the possibility that the two functions could have coexisted in the same space. Access to the camp still seems to be relatively open, predominantly in the *praetorium*, where, if we accept its transformation into a workshop, freedom of movement is certainly no longer subject to scrupulous monitoring.

Chapter V is dedicated to the auxiliary fort at Buciumi. As in the case of Bologa, the most relevant technicalities concern the methodology for selecting the items. Systematic research started in 1963, continued until 1976 and then resumed, sporadically and with a rescue character in the 2000s in the context of conservation and restoration works (e.g. at the *principia*), led to the identification of two phases and several subphases of construction of the fort. However, the material selected by the authors for publication often represents only special categories and,

moreover, information on the place of discovery is often minimal. For this reason, the discoveries could not be divided into levels of habitation, and a temporal evolution of space use could not be more clearly outlined.

In the case of the Buciumi fort, the pseudo-GIS models outline a slightly more balanced space in terms of use, even if almost as cramped and multi-functional as in the case of Bologa. The separation of living and working spaces is more visible in the case of the barracks, without, however, leading to higher living standards. Here too, utilitarian small finds, such as those for metallurgy, predominate, and are only followed by pieces of military equipment or other objects of daily use. The *principia* has not been exhaustively researched, but at the current stage it presents a good analogy with Elginhaugh, where indications of a metallurgical workshop were also detected in some rooms on the long sides, probably the *armamentaria*. The *praetorium*, although almost empty of discoveries, seems to have retained the exclusive role of the commander's residence. At the same time, the adjacent baths need not have been for the exclusive use of the commander, a similar situation being encountered at Vindolanda, where the *praetorium* becomes a real meeting and social centre when the baths are added, in the 4<sup>th</sup> cent. Buildings C1 and C2 were attributed a residential character upon discovery, while C5 and C6 were thought to be *horrea*. Although the planimetry points in this direction, not enough material evidence has emerged from these areas to lead to any conclusion.

Therefore, it can be said that the use of barracks B1, B3, and B6 was as sleeping and accommodation spaces, with somewhat restricted access. Barracks B2, B4, and B5 were intended for storage and work, most likely with access allowed only to those who worked there. Seeing how little availability for domestic spaces exists in *praetentura*, we can assume that the barracks in *retentura* were intended for accommodation, but this remains only an assumption. Based solely on the available evidence, we can assume that general access to the *principia* was restricted; room F could indeed have been an administrative office, and room C the *aedes*, while room H indicates more a storage and work space. The *praetorium*, as already mentioned, is only a private residence, and since no objects associated with spending leisure time at the baths were found, we can assume that they functioned primarily as hygiene spaces; given their connection with the *praetorium*, access must have been allowed to anyone accepted by the commander.

Chapter VI is dedicated to the legionary fortress at Turda. Here, as in Buciumi, the different phases of reconstruction or redevelopment could not be correlated with changes in the use of the space, the reason being the same, namely the research undertaken at different times and the selective collection of small finds, according to different recording methodologies. However, in the three areas of interest for the present work (*thermae*, *principia*, and the barracks of *praetentura sinistra*), the collected material could often be placed with precision in the different rooms of the buildings, which substantially increases the relevance of the interpretations.

Thus, the general observation that should be made about *Potaissa* at this point is how canonically the use of space is respected. The legion seems to respect the functional labels of each building, partly because of the rigor imposed on their rank, but also because they enjoyed a much larger surface area to carry out their daily lives in separate activity spaces. The barracks in *praetentura sinistra* are exclusively accommodation spaces, in the same way that at the *principia* administrative activities (in the office areas) are almost proportionally intertwined with domestic and leisure activities (in the *scholae* and guard areas) and with work and storage (in the access areas towards the *via principalis*). The *thermae* of *Potaissa* also present the combination of hygiene and social spaces that ancient authors speak of, with the mention that they were not frequented only for relaxation, but also for maintenance and cleaning. As for the presence of women, it is difficult to say whether those in the *principia* were prostitutes, functionaries (those *a manu* found in various public offices in Rome and Ostia), or cooks and service women, just as those at the baths could be there both to bathe and to work. It is certain that access to the fortress of *Potaissa* is not as limited as one would expect from a legionary camp, but rather presents an intensification proportional to the canonical role of the space, much more visible than in the auxiliary camps.

A few final observations can thus be drawn. In the two auxiliary forts it is clear that space is an architectural feature, almost a social construct, a necessity, and does not define a place destined for a particular activity. The soldiers use and reuse everything they can, including space, cramming multiple daily activities into the barracks, and when these are no longer sufficient, they turn to other, even more inappropriate spaces, such as the *praetorium* at Bologna, which, at a certain point, completely loses its residential role. This demonstrates that functional labels are often just



that, since the apparent planimetry on which they were initially based fades in the light of the ensembles of discoveries.

On the contrary, the space of the legionary fortress at Turda is used quite correctly, thus creating the image of a highly organized unit, within which each activity benefited from an adequate space and also each space had a clear function. The discrepancies between soldiers and officers are not very striking, with few visible quantitative and qualitative differences between military ranks. The same attitude that is observed in the use of space can also be observed in its abandonment: it is clear that the legionnaires left the fortress in an organized and systematic manner, from where everything of value was recovered, while the auxiliaries left behind much of what, in the end, had come to have value only as reusable material. However, although the legion lived in better conditions than the auxiliaries, within the same troop, it is the practicality and adaptability of the army that generally seeps through. Small differences can be observed, but not to an extent that would indicate a humble soldierly life in contrast to the extravagance of the officers. Therefore, the use of space was evolutionary and could change significantly, influenced by the political state of the empire and its military requirements.

The catalogue and the final plates illustrate unpublished items, processed by the author, resulting from the 2012-2024 research at the *praetorium* of Bologa. A series of non vidi items, discovered in other areas of the same fort by Nicolae Gudea and unpublished by him, were also included in the catalogue.