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In memoriam

LIGIAE BÂRZU

(1930-2003)

archaeologist and professor

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**Remembering LIGIA BÂRZU**  
**(1930-2003)**



Florica (**BOHÎLȚEA**) **MIHUȚ**, University of Bucharest  
Rodica **URSU-NANIU**, University *Spiru Haret* of Bucharest

We shall never truly know to what extent an encounter, a person, a book or a life situation has influenced our destiny and becoming. If not for the awakening of self-consciousness, that *imago, transformation* and *becoming* of each of us, was prepared long before it occurred, through providential encounters with those who guided our formation, without us being aware of this thing. The awareness of the moment in which the assumed construction of one's own status begins coincides with the understanding of the importance of the people met by the will of destiny and without whom one's own becoming would not have been possible. Only then, reliving the stages of life in the mind, the image of the mentors takes shape, enveloped in an overwhelming gratitude, in a deep and ever-growing admiration for their way of being, of thinking, of working. Although the tumult of life and daily challenges do not always leave room for prolonged memories, it is always a moral obligation to commemorate those who supported us morally and professionally at the outset of our carrier. Evoking the teacher and scientist Ligia Bârzu is both a privilege and a moral duty. A privilege because she was successively our teacher, guide, and colleague. A moral duty as a natural part of our existence because the cultivation of memory is, equally, a recuperative gesture for those who have left and a purifying one for those who remain. We owe to professor

Ligia Bârzu not only a part of our personal and scientific development, but also the inspired example of a dignified, assumed, and honest life.

She was a dedicated and hardworking person, who traversed the various stages of her university teaching career, progressing from lecturer to teacher. Her education was under the guidance of esteemed teachers such as Ion Nestor, D. M. Pippidi, Gheorghe Ștefan. Devoted to scholarly pursuits, she excelled in researching an extremely complicated and complex issue related to the period of the great migrations. Her doctoral thesis, entitled 'Continuity of the autochthonous population in Transylvania in the IV-V centuries' and coordinated by Professor Ion Nestor, was printed in 1973 at the Romanian Academy Publishing House. Faced with a scarcity of written sources depicting the historical evolution of the first half of the 1st millennium AD, when the former Roman province of Dacia was exposed to waves of migrants, archaeological research assumed paramount importance. Thus, Ligia Bârzu's participation in the archaeological excavations at Bratei, Mediaș, Sărata-Monteoru, Dridu became an important part of her professional growth, mirroring her analytical and synthesizing skills in interpreting archaeological findings and aligning them with other historical sources. The outcome of these research endeavours becomes evident in the subsequent monographic works. These publications, in particular, focused on the issue of Daco-Romanian continuity within the northern regions of the Lower Danube and the ethnogenesis process of the Romanian people, representing major themes that hold significant importance in understanding Romanian civilization, language, and history.

Working in an extremely difficult period from a historiographical point of view, Ligia Bârzu managed to establish important collaborations with the archaeological school from Cluj, under the conditions of a particular evolution of Romanian archaeological research that tended towards the fragmentation of archaeological interests.

The results of her work, especially the data collected from the archaeological sites such as Sărata-Monteoru and Bratei-Mediaș, were integrated into a meticulous interpretation, based on the tools offered by typology, analogy and contextualization, avoiding rigid interpretations and leaving permanent place not only for nuances, but also for reinterpretations generated by new discoveries. Another distinctive aspect of her scientific contribution lies in the comprehensive perspective she applied to the addressed problem. She incorporated findings from related fields such as geography, topography, and linguistics, allowing her to formulate extremely interesting conclusions. The examples presented below illustrate this dual focus: avoiding fragmentation and categorical

conclusions, on the one hand, and on the other, identifying, by broadening the geographical framework of the historical phenomena addressed, a legitimacy for similar historical processes in various cultural spaces.

For example, the publication of the preliminary data obtained through the research of the Gepids cemetery, conventionally named ‘cemetery 3 from Bratei’, afforded the author the opportunity to apply this instrumental-methodological set that accompanied detailed exposition of the funeral inventory:

”Trebuie făcută precizarea că nici una din analogiile amintite nu prezintă un tip identic cu piesa noastră (este vorba despre discuția asupra unei cataramă de centură din argint, *n.n.*), care diferă în primul rând prin structura verigii în partea în care sînt fixate placa și spinul. Toate exemplarele menționate (anterior sunt prezentate peste 10 exemple pentru discușarea analogiilor potențiale, *n.n.*), cu excepția cataramă de la Kisterenye, au clar demarcată porțiunea de verigă destinată montării plăcii, în vreme ce la Bratei veriga este continuă, dar mai subțire decît în partea anterioară. Avînd în vedere acest detaliu, ca și absența oricăror elemente ornamentale cu excepția acelor de la baza spinului, ca și unele deosebiri în forma acului, putem considera cataramă de la Bratei drept o variantă a tipului luat în discuție, ale cărei origini **pot fi căutate** (*s.n.*) în cataramăle cu placă ovală descoperite în M.34 și M.181 din cimitirul 1 de la Bratei 8 și în cataramăle cu placă ovală din medii provinciale romane tîrzii, cum sînt cele descoperite în necropola de la Callatis”

‘It must be specified that none of the above mentioned analogies present an identical type to our piece (all this discussion concern a silver belt buckle, *our note*), which differs primarily in the structure of the link in the part where the plate and the spine. All the mentioned specimens (more than 10 examples were presented within this intended demonstration using typology method, *our note*), with the exception of the buckle from Kisterenye, have clearly demarcated the portion of the link meant for mounting the plate. In contrast, in Bratei the link is continuous, but thinner than in the previous part. Considering this detail, along with the absence of any ornamental elements except those at the base of the spine, as well as some differences in the shape of the needle, we can consider the buckle from Bratei as a variant of the type under discussion, whose origins **can be sought** (*our emphasis*) in the oval plate buckles discovered in M.34 and M.181 from cemetery 1 at Bratei 8 and in the oval plate buckles from late Roman provincial environments, such as those discovered in the Callatis necropolis’ (‘Monumente germanice descoperite la Bratei, jud. Sibiu/Germanic monuments discovered at Bratei, dep. of Sibiu’, *SCIVA*, tom. 37, nr 1, 1986, p. 89-104, p. 94)

In other cases, the approach carefully combines the conceptual benchmarks of analysis with validating exemplifications or exceptions, always keeping room for redefinition. Thus, in the



textbook of *General Archaeology* (edited by the ‘University of Bucharest Publishing House’, in 1985, later re-edited with an updated content), the emergence of cities starts from the presentation of the concept of ‘urban revolution’, authored by Gordon Childe and subsequently re-discussed by Renfrew Collins. Based on numerous examples, covering the ancient Near East and European civilizations and also the pre-Columbian cultures, Ligia Bârzu concluded:

”În același context pot fi amintite discuțiile relative la momentul în care Roma a devenit oraș. Și aici se pune problema măsurii în care încetarea folosirii văii dintre cele șapte coline drept loc de înmormântare și transformare a ei în piață publică, reprezintă un moment definitoriu pentru statutul așezării. Cu privire la acest aspect, opiniile variază în legătură cu valoarea acordă de către un specialist sau altul informațiilor din cartea I a lucrării lui Titus Livius. Pe de altă parte, aceste opinii oscilează în funcție de importanța atribuită criteriilor arheologice de judecată, cum sînt pavarea forului, înălțarea unor construcții monumentale, apariția unor locuințe fastuoase, efectuarea de lucrări edilitare (aducțiuni de apă, pavarea străzilor etc.). În sfîrșit, discuția presupune inclusiv rolul dinastiei etrusce în procesul transformării Romei dintr-un grup de sate într-o așezare urbană. Aceste câteva date (cu referire la întreaga discuție din acest subcapitol, *n.n.*) destul de disparate, sînt suficiente pentru a realiza **complexitatea problemei, pe de o parte, și pe de altă parte, imposibilitatea de a găsi o explicație pentru o evoluție sau alta, dacă se recurge la concepte rigide** (s.n.)”  
(*Arheologie generală*, București, 1985, p. 223)

‘In the same context, we can mention the discussions related to the moment when Rome became a city. That touches upon the pivotal moment when the valley between the seven hills shifted from being a burial region to transforming into a public space. This transformation has an important significance in defining the status of the settlement. Varied perspectives emerge regarding the weight assigned by different scholars to the information found Book I of T. Livy’s work. However, these viewpoints oscillate depending on the importance attributed to the archaeological criteria used in the topic of the Rome’s urban genesis, such as the paving of the forum, the construction of monumental buildings, the appearance of luxurious homes, the performance of construction works (water intakes, street paving, etc.). Finally, the discussion also includes the role of the Etruscan dynasty in the process of transforming Rome from a group of villages into an urban settlement. These few data (pertaining to the entire discussion in this chapter, *our note*), quite disparate, are enough to realize **the intricacy of the problem, on the one hand, and on the other hand, the impossibility of providing pertinent explanations for one evolution or another, if rigid concepts are favoured** (*our emphasis*).’ (*General Archaeology*, Bucharest, 1985, p. 223)

The rigour with which she understood the interpretation of archaeological evidence often led to integrate her own assertions into wider geographical contexts, not leaving out written testimonies.

Her demonstrations sought to highlight causal aspects, particularisms or, on the contrary, similar aspects. A consistent feature of her documentation and interpretation activities was the meticulous care for exemplification and the coherence of the working premises. Here are some relevant examples in this regard, the first referring to the colonization process of Dacia, the other to the withdrawal of Roman authority from the North-Danube province, both topics generating a whole polemic in historiography:

”Un alt argument pe care se întemeiază autorul privește originea coloniștilor, mai precis marea pondere a coloniștilor de origine neoccidentală. Din nou ne găsim în prezența unei idei vechi preluate de André Du Nay. Afirmarea nu este însă deloc exactă, întrucât nu se bazează pe studiul onomastic al inscripțiilor. O statistică mai recentă (cu indicarea referinței, *n.n.*) dă doar cca 75 nume orientale (semito-siriene) în raport cu 100 nume illyrice, 65 de nume celtice, mai mult de 2000 nume romane sau de factură romană, 400 nume grecești sau de tip grecesc și 70 nume traco-dacice. La datele de ordin epigrafic se adaugă rezultatele cercetărilor arheologice care confirmă ideea unei colonizări masive cu populație originară din provinciile ”occidentale” sau sud-dunărene: Noricum, Pannonia, Moesia, Thracia și Dalmatia. Cimitire cum sînt cele de tip Zlatna - Alba Iulia - Romula sau de tip Cașolt-Calbor nu pot fi atribuite decît unor coloniști originari din Illyricum, Pannonia și, respectiv, din Noricum.”

‘Another argument considered fundamental by the author concerns the origin of the colonists, more specifically the large part of settlers having a non-Western origin. Again we find ourselves in the presence of an old idea reused by André Du Nay. However, such a statement is not at all accurate, as it is not based on the onomastic study of the inscriptions. A more recent statistic (with the indication of the reference, *our note*) gives only about 75 Oriental (Semite-Syrians) names, while the inscriptions offered 100 Illyrian names, 65 Celtic names, more than 2000 Roman or Roman-derived names, 400 Greek or related to the Greek names and 70 Thracian and/or Dacian names. In addition to the epigraphic data, the results of archaeological research confirm the idea of a massive colonization with a population originating from the ‘western’ or South-Danube provinces: Noricum, Pannonia, Moesia, Thracia and Dalmatia. Cemeteries such as those of the Zlatna, Alba Iulia, and Romula type or of the Cașolt-Calbor type can only be attributed to colonists originating from Illyricum, Pannonia and from Noricum, respectively.’ (‘Un nou “Anonymus”. Comentarii pe marginea lucrării lui André Du Nay, *The Early History of the Rumanian Language/ A new “Anonymus”. Comments on the work of André Du Nay, The early history of the Romanian language*’, in *Revista de istorie*, tom. 33, no. 78, 1980, p. 953-973, p. 963)

”O altă problemă importantă, pentru care există contradicții în izvoarele scrise amintite, toate mai târzii decît evenimentul respectiv, este aceea a datei părăsirii Daciei. Astfel, Sextus Aurelius Victor, Orosius, Eutropius, Rufius Festus și Iordanes se referă la părăsirea Daciei (*amissa Dacia*) în vremea lui Gallienus

(253-259), dar, cu excepția lui Sextus Aurelius Victor, Orosius și Eutropius, și sub împăratul Aurelian, fără de nici o explicație. Datele arheologice, epigrafice și numismatice vin însă în sprijinul tezei evacuării Daciei sub Aurelian, neexcluzându-se, prin acestea, posibilitatea ca zona de est a Transilvaniei să fi fost totuși abandonată sub Gallienus, mai ales că în această zonă lipsesc orașe romane.”

‘Another important problem, for which there are contradictions in the above mentioned written sources, all of which post-dated the event in question, is that of the date concerning the Roman abandonment of Dacia. Thus, Sextus Aurelius Victor, Orosius, Eutropius, Rufius Festus and Iordanes refer to the ‘lost Dacia’ (*amissa Dacia*) during the reign of Gallienus (253-259). But, with the exception of Sextus Aurelius Victor, the other two authors, Orosius and Eutropius, also mention this loss under the era of emperor Aurelian, without offering any explanation. However, the archaeological, epigraphic, and numismatic data supports the thesis of the evacuation of Dacia under Aurelian. This does not exclude the possibility that the eastern area of Transylvania had already been abandoned under Gallienus, especially considering the absence of Roman cities in that area’ (quotation from the chapter that presented the causes of leaving Dacia by the Roman administration, in M. Petrescu-Dâmbovița et alii, *History of Romania, from the beginnings to the 8<sup>th</sup> century*, Bucharest, 1995, p. 270).

By scrutinizing the historical sources – both written and archaeological – in a such manner, Ligia Bârză has often formulated interpretations considered by her colleagues (archaeologists, classicists or historians) valid and convincing. One such example involves her interpretation of Deceneu’s reduction of the areas cultivated with vines as a component of broader religious reforms accomplished by Burebista and his priest (see Ligia Bârză, *La continuité de la création matériel et spirituelle du peuple roumain sur le territoire de l’ancienne Dacia*, Bucharest, 1979, p. 27).

At the same time, the research activity of archaeologist Ligia Bârză was doubled by a prodigious teaching career carried out with great responsibility, before and after 1989, within academic institutions in Bucharest (Faculty of History of the State University and Faculties of History from private institutions: ‘Spiru Haret’ University and ‘Dimitrie Cantemir’ University). The experience of the researcher and the teacher materialized in wide range of special and general courses related to archaeology, Ancient Near East, Greco-Roman world, the history of the first millennium together with the era of migrations. She professionally covered a vast thematic area, chronologically from prehistory to the dawn of the Middle Ages, and geographically – the spaces of at least four continents (Asia, Europe, Africa, North and Central America) inhabited during this long period of time. A course with professor Ligia Bârză was a solid and consistent anchoring to historical evidence, it was an experience of rigour, it was an invitation to reflection. Extremely

well documented, she answered questions precisely, especially in activities such as special courses and seminars, constantly providing references to the primary and secondary bibliography along with multiple interpretive options. Before 1989, she encouraged her students to explore historical and archaeological literature beyond any ideological prejudices. She consistently stimulated critical reading of foreign publications (accessible to her due to her proficiency in five modern languages: Russian, French, English, Italian and German). Firmly believing in the necessity of staying connected to the archaeological discoveries, historical writings, and methodological advancements, she constantly motivated her students. Younger teachers, who were her colleagues, found effective support and guidance from her in their training and publishing activities.

She was a person averse to confrontation, yet she consistently spoke candidly, not in pursuit of justice, but to unveil the truth. She overcame the more difficult moments without resentment. She knew how to do her duty and did not allow herself to be enticed by all kinds of partisanship, inherent in any collective, earning her occasional label of a ‘challenging partner’. At the same time, over the years, she maintained her reputation as an honest and sensitive person, preserving an untarnished human and scholar profile, helping those around her unconditionally, regardless their professional status. This profound generosity was complemented by her deep love for animals lacking shelter or care.

Through the education received in the family, she had acquired an openness towards Christian love and a discerning appreciation for the value of things or various activities. She would often share anecdotes of her father, a priest and teacher, insisting that she and her sisters undertake various household tasks. When they tried to decline on the grounds that ‘we have paid staff for this’, her father would clarify: ‘Indeed, we do have assistance, and probably you all will also have when you will be married. Nevertheless, it’s essential to know how to accomplish any work in order to be able to reward it properly.’

This sense of justice, an innate thirst for knowledge, openness to share the readings, and a genuine concern for the education of her students reflect the human nature of this specialist who, for the authors of these lines, was more than just a teacher and a scholar. These sentiments remained unspoken during her lifetime, as expressing them would surely have upset her. She lived with dignity and altruism, departing this world while actively worked on the monograph of the Gepid cemetery at Bratei (later published in German). Her commitment to the profession and real values remains a true model. Such an existence prompts professional optimism and hope for the

perpetuation of human-moral values even in this current world characterized by fluid and extremely dynamic landmarks.

In 1997, an honouring scientific volume was published by the University of Bucharest Publishing House, coordinated by her former students and contributed by many others seeking to convey their respect. Ligia Bârză, in response, offered brief thanks, allowing her eyes to express the anticipated joy of the upcoming reading. Indeed, she had a deep love for reading.

Now we dedicate this issue of the *CICSA Journal* to the memory of this scholar, teacher, and special person who departed from us prematurely two decades ago.

#### List of works:

##### Books:

- *Continuitatea populației autohtone în Transilvania în secolele IV-V e. n. (cimitirul nr. 1 de la Bratei)*, Biblioteca de Arheologie XXI, București, 1973;
- *Continuitatea creației materiale și spirituale a poporului român pe teritoriul fostei Dacii*, Biblioteca de Arheologie XXXVII, București, 1979 (ed. și în lb. franceză);
- *Der Fortbestand der Rumänien im ehemaligen Dazien*, București, 1981 (co-author);
- *Arheologie generală*, București, 1985 (2<sup>nd</sup> ed. 1991; 3<sup>rd</sup> ed. 1997);
- *Paradisul pierdut. O istorie a societăților primitive*, București, 1993;
- *Originea și continuitatea românilor: arheologie și tradiție istorică*, București, 1995 (co-author);
- *Istoria României de la începuturi până în secolul al VIII-lea*, București, 1995 (co-author);
- *Credințe și practice religioase în Europa Preistorică și Antichitatea Greco - Romană*, texte și comentarii, București, 2001 (co-author);
- *Ein gepidisches Denkmal aus Siebenbürgen: das Gräberfeld Nr. 3 von Bratei*, Cluj-Napoca, 2010 (co-author).

##### Studies:

- *Contribuția arheologiei la cunoașterea perioadei hunice la Dunărea de Jos*, AUB, 10, 20, 1961, p. 13-24;
- *Continuitatea populației autohtone în Transilvania la sfârșitul secolului I și începutul secolului V, pe baza descoperirilor de la Bratei*, AUB, 15, 1966, p. 35-48;
- *Romani și daco-romani în secolul IV e. n.*, AUB, 19, 2, 1970, p. 19-35;
- *Cercetarea în domeniul istoriei vechi a României, universale și arheologiei* (co-author), AUB, 22, 1, 1973, p. 9-15;
- *Un nouvel "anonymus". Commentaires du travail de Andra Du Nay, The early History of the Rumanien language*, Revista de istorie, 33, 1980, p. 953-973;
- *Monumente germanice descoperite la Bratei*, SCIVA, 37, 1986, p. 89-104;
- *Gepidische Funde von Bratei*, Dacia, NS, 35, 1991, p. 211-214;
- *La station no. 1 de Bratei, dép. De Sibiu (IVe-VIIe siècles), avec une expertise de Maria Bulai-Știrbu*, Dacia, NS, 38-39, 1994-1995, p. 239-296;
- *Romanitatea orientală între secolele IV-VII e. n.*, în Zoe Petre, Stelian Brezeanu (eds.), *Miscellanea in honorem Radu Manolescu*, București, 1996, p. 68-76;
- *Sărata Monteoru. Săpăturile arheologice din Poiana Scorușului din 1952 și 1954/Sărata Monteoru. Les fouilles archéologiques de Poiana Scorușului (dép. de Buzău). Rapport préliminaire pour les années 1952—1954*, în MCA, SN, I, 2001, 1999, p. 41-58;
- *Migratori și autohtoni în sec. III-VI e. n.*, SAI, 62, 2002, 57-64;
- *Gepiden als Nachbarn der Longobarden und das Gräberfeld von Bratei*, în Jan Bemann, Michael Schumauder (eds), *Kulturwandel in Mitteleuropa: Langobarden, Awaren, Slawen*, Akten der Internationalen Tagung in Bonn vom 25. bis 28. 2008, 513-578.

# Exchanging genes and goods: How ancient DNA can potentially illuminate complex mobility patterns in the Black Sea region

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**Abstract:** Ancient DNA (aDNA) has emerged as a groundbreaking tool in the field of archaeology, providing insights into the movement of individuals and their goods. The field combines genetics, anthropology, and archaeology to reconstruct the intricate complexities of human history. Here, we discuss how ancient DNA analysis has the potential to enhance our understanding of historical mobility patterns in the Black Sea region, specifically in Dobrogea. We also offer broad guidelines and optimal practices that researchers should consider following when working with skeletal collections if they are interested in performing aDNA analyses. As aDNA methods advance and become more refined, we anticipate that our ability to unravel the intricate interplay between human mobility and cultural exchange in the past will also improve.

**Keywords:** ancient DNA, human mobility, Dobrogea, Romanian archaeology, Black Sea history

## Introduction

Ancient DNA (aDNA) has made significant contributions to the field of archaeology on a broad range of topics. For instance, aDNA extracted from human teeth and petrous bones have elucidated the genetic relationship between humans, Neanderthals, and Denisovans.<sup>1</sup> Empirical observations in the field have also afforded a chronological window of how the genetic profiles of regions have continued to be reshaped and re-established over time.<sup>2</sup> In several instances, aDNA has brought forth evidence that challenged our previous understandings. As an example, a study analyzing hundreds of ancient genomes from various locations within the Southern Arc, spanning more than 11,000 years, has shown the remarkable diversity within this region.<sup>3</sup> While these remarkable strides by the aDNA field are notable, one region has remained relatively underexplored: Dobrogea. Although Dobrogea was situated in a historical junction where

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<sup>1</sup> Krause *et al.* 2010; Reich *et al.* 2010; Meyer *et al.* 2012.

<sup>2</sup> Nielsen *et al.* 2017; Antonio *et al.* 2019; Llamas *et al.* 2016.

<sup>3</sup> Lazaridis *et al.* 2022; Lazaridis *et al.* 2022.

Mediterranean and steppe cultures converged, our understanding of the extent of the interactions between these cultures remains limited. As such, the benefits of performing aDNA research in Dobrogea are compelling, but it is equally important to undertake certain precautions before proceeding.

We outline the several precautions that should be implemented when carrying out an aDNA project involving human remains. We also describe how such techniques can have the potential to elucidate the reasons underlying the need for heightened attention to populations in the Dobrogea region. We argue that studying the genetic landscape of this region can provide novel insights into its unique migration patterns, cultural exchanges, and genetic diversification. In the following sections, we provide an overview of the methodology of aDNA, current hypotheses and research objectives, and guidelines for future researchers to consider if they too wish to perform aDNA analyses.

### **Overview of aDNA methods and history**

All aDNA studies require careful scientific and ethical planning when being carried out. During this process, formal agreements between collaborators are generally established. This process may encompass, though not exclusively, researchers reaching a consensus on factors such as the quantity of samples to be collected, the allocation of authorship, and the overall project scope. We recommend that all researchers reach a consensus on each of these considerations before the sampling process.

Because all aDNA research involves the destructive sampling of biomaterial, especially human teeth and dental calculus, samples should be photographed with a high-resolution camera and a millimeter-scale ruler. This step is important as it provides a record of the visual aspects of a sample, which can be important in downstream analyses. Notes pertaining to the oral health status, age, and sex should also be documented before sampling begins. In the case of collecting dental calculus, researchers should document the location of where the sample was collected (e.g., the type of tooth, tooth surface, and gingival margin).<sup>4</sup> Furthermore, it is recommended to decontaminate the sampling area and equipment with NaCl solution before proceeding. After each sample, researchers should wipe down the area and tools with a cleaning solution (ideally bleach),

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<sup>4</sup> Moore and Weyrich 2021; Farrer *et al.* 2018; Welch *et al.* 2020.

which will minimize the effects of cross contamination. If possible, controls should also be collected during this process. This may involve taking a cotton swab of the sampling area or collecting soil samples around the human burial. Such measures can help monitor the amount of contamination present in the samples and improve the robusticity of results if included.

Following sample collection, samples are generally shipped to a facility dedicated for aDNA research. The initial first step in the laboratory involves decontamination. Various protocols for decontamination exist, lacking an unanimous consensus.<sup>5</sup> However, they often involve UV irradiation and NaCl treatment. DNA purification and concentration are the next steps, which are then used to construct a Next Generation Sequencing (NGS) library.

Applying NGS techniques to archaeological biomaterials represent a pivotal breakthrough in aDNA research.<sup>6</sup> Unlike the previous PCR-based approaches, NGS methods can recover millions of DNA fragments from a sample in parallel. Furthermore, only NGS-based methods provide the means for researchers to determine whether the DNA they recover from archaeological biomaterial are ancient or modern contaminants.<sup>7</sup> A key characteristic of aDNA is the increased occurrence of Cytosine (C) to Thymine (T) substitutions in proximity to the 5' ends.<sup>8</sup> Conversely, this implies that aDNA also exhibits a heightened frequency of Guanine (G) to Adenine (A) substitutions nearer to the 3' ends. These distinctive traits of aDNA led to the development of MapDamage,<sup>9</sup> which employs a Bayesian algorithm to gauge whether the DNA of an archaeological sample exhibits post-mortem damage. This assessment, in turn, aids in determining whether the DNA fragments in a sample are authentically ancient or derived from modern contaminants. Numerous studies utilizing this tool have demonstrated correlations between the age of the sample and the burial environment with the frequency of misincorporations,<sup>10</sup> specifically older samples and samples from warmer climates having higher rates of post-mortem damage. The advent of other computational methods that were designed for NGS datasets over the past decade have continued to improve the reliability of results.<sup>11</sup> For instance, PMDtools separates DNA fragments with post-mortem damage (PMD) from ones without, ensuring that only aDNA

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<sup>5</sup> Farrer *et al.* 2021; Warinner *et al.* 2017.

<sup>6</sup> Orlando *et al.* 2021; Wright *et al.* 2021.

<sup>7</sup> Liu *et al.* 2022; Jónsson *et al.* 2013; Ginolhac *et al.* 2011.

<sup>8</sup> Hofreiter *et al.* 2001; Hansen *et al.* 2001; Brotherton *et al.* 2007.

<sup>9</sup> Jónsson *et al.* 2013.

<sup>10</sup> Sawyer *et al.* 2012; Garcia-Garcera *et al.* 2011.

<sup>11</sup> Knights *et al.* 2011; Renaud *et al.* 2015; Huang and Ringbauer 2022.



sequences are included in downstream analyses. The tools discussed here, along with additional ones, have continued to enhance the reliability of aDNA analyses, especially when investigating the mobility of past peoples.

In addition to improving the overall quality of data generated, NGS methods have also made it possible to generate genome-wide data of ancient individuals.<sup>12</sup> Such high-resolution has provided a greater deal of confidence in assessing the degree of admixture within populations, estimating the biological sex of individuals, and understanding kinship relationships. Although the number of tools to understand population structures continues to grow, Principal components analysis (PCA) and ADMIXTURE remain two popular choices.

In population genetics, PCA serves as a powerful tool to understand the genetic interconnectedness among individuals. PCA enables the visualization of genetic relatedness of individuals through the calculation of eigenvalues and eigenvectors derived from the covariance matrix of allele frequencies across all pairs of individuals. This approach reduces the multidimensionality of the data and indicates which allele-frequency space accounts for most of the variation in a dataset. Throughout its extensive application, PCA has consistently demonstrated a robust connection between geographic origins of individuals and their placements within the principal components space.<sup>13</sup> The efficacy of PCA to investigate the genetic relatedness of individuals to address questions pertaining to cultural exchange and migration has additionally been validated through follow-up investigations that use this technique, consistently revealing analogous patterns.<sup>14</sup>

ADMIXTURE is a widely used tool in population genetics to infer the ancestral proportions of individuals or populations based on their genome-wide SNPs (Single Nucleotide Polymorphisms).<sup>15</sup> In aDNA research, ADMIXTURE assists in discerning the population structure and identifying the potential genetic ancestral groups for a given ancient population, elucidating their migration patterns, cultural exchanges, and their interactions with other genetically distinct groups. As such, the program offers insights into where individuals or populations intermix genetically due to migration or cultural contacts. However, a major limitation of ADMIXTURE is

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<sup>12</sup> Haak *et al.* 2015; Allentoft *et al.* 2015.

<sup>13</sup> Novembre *et al.* 2008.

<sup>14</sup> Lazaridis *et al.* 2022; Haak *et al.* 2015; Allentoft *et al.* 2015; Margaryan *et al.* 2020; Mathieson *et al.* 2015; Mathieson *et al.* 2018.

<sup>15</sup> Alexander *et al.* 2009.

that it assumes a simple model of population admixture, where the genes of ancestral populations can be mapped to fixed cultural identities.<sup>16</sup> It also relies on the availability of appropriate reference populations for ancestral inference. Therefore, if the reference population(s) is not included in the analysis, the results that are generated would be misleading. As such, researchers must be aware of the assumptions and limitations of this tool.

In summary, aDNA has furthered our understanding of the genetic landscapes of past populations. The advancements in the wide array of techniques, ranging from sample collection and DNA extraction to authentication and population structure analyses, have enabled researchers to uncover the complex population dynamics of the past in unprecedented ways. These aDNA techniques will continue to offer a multidimensional perspective that archaeology can continue to use to shed light on ancient migrations and interactions.

### **Exploring the Untapped Potential: Rationale for Ancient DNA Research in Dobrogea**

Dobrogea represents an historical region that is situated in southeastern Europe, between the Danube and the Black Sea. The archaeological record in Dobrogea is rich with archaeological material, from prehistoric settlements to Roman forts and medieval trading centers. While the geographic positioning of this region along with its wealth of archaeological material makes it an ideal study area to investigate complex interactions between cultural and genetic exchange, Dobrogea remains an understudied region in aDNA research.

Extensive aDNA research has been conducted on populations from the southeastern European region. Genome-wide data from hundreds of individuals in southeastern Europe, dating from 12,000 to 500 BCE, indicate that the region was a place of genetic admixture and cultural exchange for millennia.<sup>17</sup> Subsequent investigations have filled in geographical and chronological gaps in southeastern Europe, but yet Dobrogea and populations from its many historical periods remain overlooked. A few studies have conducted aDNA studies on archaeological populations from Dobrogea,<sup>18</sup> but they employed only low-resolution techniques (i.e., mtDNA) that only give a small glimpse into the complex genetic history of the region. Generating genome-wide data for these populations could have huge implications in transforming our understanding about the

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<sup>16</sup> Lawson *et al.* 2018.

<sup>17</sup> Mathieson *et al.* 2018.

<sup>18</sup> Rusu *et al.* 2018; Rusu *et al.* 2019; Gînguță *et al.* 2021.

population dynamics of this region. For instance, generating aDNA for the Babadag culture could provide insights into the genetic origins of this enigmatic group, which is currently poorly understood. The Babadag culture emerged in Dobrogea during the 11<sup>th</sup> century BCE, when a demographic boom in the region occurred.<sup>19</sup> More than a hundred settlements associated with this culture have been excavated in Dobrogea, eastern Wallachia, and south-eastern Moldavia.<sup>20</sup> This culture has several defining characteristics, but it is mostly known for its pottery style, pits, and oval-shaped dwellings. While the material record for this culture is rich, many researchers are still puzzled on whether the Babadag culture was an autochthonous or allochthonous group. Furthermore, it still remains an open question whether this group left any genetic traces in the region after the arrival of the Greek colonists. Potentially, comparing the aDNA of the Babadag culture with their predecessors, contemporaries, and successors counterparts may offer the evidence needed to answer these questions.

Exploring the aDNA of individuals who adhered to Roman burial customs may also provide critical insights into the ramifications of Roman annexation on populations in Dobrogea. Genetic studies on Roman era populations remain limited, but have already been fruitful. For instance, Rome, during the Imperial era, had a much greater diversity of genetic ancestries from across the Mediterranean and Near East than inhabitants who lived in the area during the previous historic periods.<sup>21</sup> The extent to which Roman imperialism impacted the genetic diversity of its *limes*, or provinces, in a similar fashion is poorly understood, especially in Dobrogea. Characterizing the genetic ancestry of individuals from Roman settlements in Dobrogea, such as Jijila and Histria, will help determine whether individuals practicing Roman burial customs were locals or non-locals, especially when the aDNA data is integrated with other lines of evidence, such as isotopic data. These potential findings would elucidate the social dynamics of Roman imperialism on its Danubian frontiers.

## Summary

In summary, aDNA research will help unravel the complex social dynamics of Dobrogea that are currently unattainable with current approaches. We anticipate that aDNA research in Dobrogea

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<sup>19</sup> Ailincăi 2013.

<sup>20</sup> Ailincăi and Constantinescu 2015.

<sup>21</sup> Antonio *et al.* 2019.

will reshape our understanding about the population dynamics in this remarkable region. Furthermore, we encourage researchers who work with archaeological biomaterials, whether in the field or institutional setting, to consider following the precautions described in this article as such adherence will, hopefully, minimize the amount of contamination introduced samples, and therefore, will improve overall results. In doing so, aDNA analyses will have the power to help disentangle the complex social interactions, migrations, and cultural exchanges that are unique to the history of Dobrogea.

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# **Defining the Human Condition in Stoic Philosophy: A Case Study on the characterization of Emperor Marcus Aurelius**

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**Abstract:** This paper investigates, from a psycho-sociological perspective, notions of self-reflection and the human condition in the Greco-Roman world during the ancient period, focusing on the social constructionism of personal characterisation. In this context, Marcus Aurelius, one of Rome's most remarkable philosopher-emperors, was considered an exemplary, wise, and moral leader during a tumultuous period marked by wars, epidemics, and betrayals. The positive image of Marcus Aurelius has endured in history due to the efforts of recording and transmission of this depiction in ancient sources, which emphasised the enrichment of imperial power with attention to the philosophical form. Both within the Stoic doctrine and from the perspective of symbolic interactionism, the human condition is perceived as a result of social construction and subjective interpretations, in which the individual has the power to shape their own experience and create their reality. Qualitative research methods associated with symbolic interactionism emphasise individual experience and understanding of the world, being helpful in explaining broad social changes and the agency of participants. This perspective provides a broad framework for analysing interactions that shape social architecture through which the image of Marcus Aurelius is propagated.

**Keywords:** self-reflection; free will; symbolic interactionism; social constructionism; agency.

## **Introduction**

Ancient philosophy elucidates the human condition by establishing a connection between the elements within human control and those beyond their influence. It also emphasises the necessity of maintaining a tolerant attitude towards external events dictated by providence. Stoic philosophy, rooted in traditional Hellenic thought, makes a clear distinction between an objective, rational, introspective mode of thinking, detached from the sensory realm, and a subjective mode of thinking based on attachment to value judgments. Maintaining a balance between personal development and fulfilling social responsibilities represents a crucial theme in governing an empire. This philosophical approach, rooted in Stoicism, explores how leaders, especially during the imperial period of ancient Rome, were required to manage and integrate aspects related to physical health, mental stability, and intellectual development into their policies and actions. In numerous ancient texts from various philosophical schools, a particular form of self-reflection is encountered. This type of attention

has been extensively analysed in scholarly works by authors such as Michel Foucault, Pierre Hadot, and Anthony Long, where self-perception or self-awareness seems to resemble the modern notion of subjectivity, even though the Stoics did not have a specific term to define the self. In the Greco-Roman world, philosophy was not just about acquiring erudite discourse and specific teachings; it primarily promoted 'recipes', states, and attitudes through which individuals could attain self-awareness. The purpose of this paper is to analyse the context in which the role of the leader Marcus Aurelius unfolds, primarily how the image of the 'good emperor' was constructed, as it appears in ancient sources such as the *Historia Augusta*, Cassius Dio, or the correspondence with Cornelius Fronto. By comparing this characterization with the imperatives Marcus Aurelius uses to define his responsibilities associated with his role, the following questions emerge: *How was the image of Marcus Aurelius as a philosopher-emperor, considered one of the best and wisest rulers of the empire, created, and transmitted in history? How did Marcus Aurelius adapt the notions of self-perception and the exploration of the human role in the universal context to maintain a balance between personal development and social duty? How does the emperor define his social role in his notes, and how does he present this role in public contexts in interaction with others?* In order to answer these questions, the theoretical perspective of symbolic interactionism has been employed to analyse the proposed case study. This interdisciplinary approach has the potential to contribute to a deeper understanding of the human condition in ancient history because sociological and anthropological perspectives can provide explanations for the diversity of cultural practices, while ancient history provides the socio-political context in which these societies existed. The creation and reproduction of social structures, as explained by Anthony Giddens, offer a stable framework for analysis. At the same time, the narrative descriptions of individuals about themselves, as interpreted by Jerome Bruner, highlight the construction of individual reality and its relation to the public sphere. Additionally, the perspective of the mobility of structures in space and time and the role of objects in this relationship, presented by Bruno Latour, underscores the actors' capacity to influence social structure.

### **Theoretical framework**

Recent theoretical developments in sociology and anthropology, stemming from the perspective of symbolic interactionism, have emerged as a reaction to the rigid view of social structure proposed and produced by sociologists at the end of the 19<sup>th</sup> and the beginning of the 20<sup>th</sup> century. This field of study was defined around the writings of American psychologist,

philosopher, and sociologist George Herbert Mead, who argued for the existence of consciousness only in relation to action and interaction. The theorization of social structure, already declining in the research interests of sociology and anthropology by the mid-1960s, gave way in the early 1970s to what came to be called interpretivism.<sup>1</sup> Interpretivism sought to improve static models of social structure by emphasizing practice and interaction. With the theory of practice, anthropological and sociological research shifted their focus to the agent, person, self, individual, or subject, who, by definition, possesses the freedom to choose and the capacity to act.<sup>2</sup> The relationship between agent and structure can be more easily understood in contrast to the issue of the relationship between the individual and the collective and reiterates, in sociological terms, the philosophical dilemma of free will versus determinism. Do the structural circumstances so constrain individuals that they lack free will, or are social structures merely a consequence of what actors do while pursuing their personal desires?<sup>3</sup> As described by sociologist Anthony Giddens, Structuration Theory serves a similar purpose and provides a model that encompasses structure and agentive action, elaborating on their mutual constitution. The duality of structure occupies a central position in this theory, where Giddens posits that actors carry the structural properties of significant and enduring social groups as forms of competence that allow them, through the authentic or modified reproduction of a general form of practice, to act in specific ways in appropriate situations. Any single act cannot alter the structural properties of a culture or group. Only the multiple reproduction or alteration of practices by numerous actors over long periods can solidify or revise the structural traits characteristic of that culture or group.<sup>4</sup>

The theory developed by anthropologist Bruno Latour in the 1980s, known as Actor-Network-Theory (ANT), aimed to integrate structuralist and functionalist perspectives with the interpretative methods characteristic of symbolic interactionism in order to explain social life by identifying the motives behind actions. The author presents the issue of the social realm in terms of motivational force through the exercise of free will: "*When we act, who else is acting?*" "*How many agents are also present?*"<sup>5</sup> Who or what compels us to act? Is there free will, or are we subject to forces created more at the collective level than the individual one? The author argues that action, defined as a conglomerate of many sets of agents, does not occur under the complete control of consciousness. Throughout his career, the author has been interested in

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<sup>1</sup> Birx 2006, 2097.

<sup>2</sup> Birx 2006, 2097.

<sup>3</sup> Turner 2006, 15-16.

<sup>4</sup> Giddens 2006, 108; Turner, 2006, 613.

<sup>5</sup> Latour 2005, 43.

developing a methodology that incorporates the idea, contrary to traditional approaches in science, that both living and non-living entities should be considered ‘actors’ exhibiting agency.

Terms associated with ethnomethodology, such as ‘account’, have also emerged from the perspective of symbolic interactionism. This concept has a solid historical basis and has been viewed as a linguistic tool of argumentation that can be used as an empirical window through which one can glimpse the shared moral inclinations of a studied social group through explanations and justifications.<sup>6</sup> Throughout his life, psychologist Jerome Bruner made substantial contributions to the field of cognitive psychology through his research on self-construction, with a particular focus on language acquisition and development. Bruner believed that the self is constructed through interaction and is a product of transactions and discourse<sup>7</sup>. The narratives that respondents evoke about themselves in an interaction reveal modes of belief organisation, personal identity protection, or engagement with the surrounding reality. The methodology proposed by Bruner in his work *A Narrative Model of Self Construction* (1997) for analysing the narrative construction of the self follows several indicators of individualism that emerge when we think about ourselves. These indicators primarily serve two functions. The function of species maintenance through enhancing species reciprocity (*other people are like us in being them*). This action is based on mutuality and mutual attention and is organised around questions such as ‘*What particular beliefs can be expected from others, and what can they expect from us? What legitimate courses of action can be pursued? How should values be applied?*’<sup>8</sup> The other function pertains to the individualisation of the self and has two facets, one oriented towards personal preferences and understanding and the other toward what is appreciated and considered legitimate.

### **Self-reflection**

The historian Anthony Long extensively explored the concept of self-reflection in ancient philosophy.<sup>9</sup> Numerous ancient texts belonging to various philosophical schools show a distinct concern for introspection and self-knowledge. The focus on the self involves a separation of the whole into a part that directs attention and a part upon which attention is directed. From this arises the theme of self-perception, which, as discussed in scholarly works,

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<sup>6</sup> Turner 2006, 1.

<sup>7</sup> Bruner 1997, 150.

<sup>8</sup> Bruner 1997, 151.

<sup>9</sup> Long 2001.

has led to an association between the modern notion of subjectivity and the ancient notion of the soul.<sup>10</sup> Regarding self-reflection, the defining features of the human condition can be traced precisely in the individual's capacity to separate themselves from the world, to create a distance between themselves and the immediate experience. This enables planning, flexible thinking, inventiveness, and taking control of the world around them, in contrast to a passive attitude<sup>11</sup>. The relationship between the evolution of self-awareness and the sense that others are beings similar to us, thus evoking empathy and understanding, is confirmed by the close relationship between the development of self-perception and what is referred to in psychology as the 'Theory of mind', defined as the ability to exercise empathy, to put oneself in another person's place.<sup>12</sup>

The relationship with the master is essential for the practice of philosophy in the ancient period because it establishes a framework of interdependence wherein the individual, in order to know oneself, first needs to know the other. The indispensable role that 'the other' occupies in the context of self-care is structured by Michel Foucault into three aspects, which relate to learning by example, acquiring the concrete skills of the master, and adopting the Socratic model of inquiry and dialogue. Thus, the master serves as an actor who generates the desired outcomes in the individual's reform and in shaping his identity as a subject, akin to a patient's relationship with a doctor. The master acts as a mediator in the individual's relationship with their constitution, facilitating the transition from ignorance to knowledge, as ignorance can no longer be the element that brings knowledge. The subject cannot be the person who accomplishes their own transformation, hence the need for a guide. This is the central point on which the necessity of a mentor is based in classical thought<sup>13</sup>. In the ancient period, introspection encouraged by philosophy contributed to defining the individual's relationship with others and to a deeper understanding of one's existence, while the effective communication promoted by sophists generated both power and influence in both the private and public domains. Regarding the oratorical training technique, the recurring theme of metaphor was identified in the letters of Fronto. Metaphorical thinking is fundamental for understanding our universe because metaphor defines a shared experience, with separation existing only at the linguistic level<sup>14</sup>. Discussing how the analogy between human behaviour and an object produces contamination of elements, in which the objectification of humans

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<sup>10</sup> Bejan 2018, 10.

<sup>11</sup> McGilchrist 2019, 21.

<sup>12</sup> McGilchrist 2019, 88.

<sup>13</sup> Foucault 2005, 133.

<sup>14</sup> McGilchrist 2019, 115.

becomes equal to the personification of objects, philologist Bruno Snell states that ‘...a person must listen to an echo of themselves before they can hear or know themselves.’<sup>15</sup>

### **Case study: Characterization of Emperor Marcus Aurelius**

#### 1. Construction of the Virtuous Emperor image

Marcus Aurelius has left a lasting legacy in history as one of the most notable philosopher-emperors of ancient Rome, renowned for being a paragon of moral leadership. The constructed and perpetuated characterization in primary sources repeatedly emphasizes his ability to uphold imperial power through philosophical wisdom. He proves this ability by fulfilling his responsibilities dutifully and displaying tolerance and acceptance in the socio-political context that dictates his obligations toward the citizens that define the empire.

According to Anthony Giddens' theory of structuration, groups have specific structural properties and characteristic patterns of relationships that persist over long periods, and these structures/patterns either remain stable or change when reproduced in interactions between individuals. Interaction is the fundamental element that maintains and creates the group's structure, but simultaneously, members' interactions occur within an existing structure.<sup>16</sup> This dichotomy expresses the central concept of structure and agency, and ontologically, the contradiction stems from the philosophical issue of free will. Giddens uses the concept of competence to connect the structural perspective with personal agency, emphasizing the importance of a person's ability to act in accordance with the rules of the structure and to recognize social structures in the actions of others.<sup>17</sup> The ancient writers' characterization of Marcus Aurelius as a good emperor is made in the context of Stoic philosophy that influences the belief systems and values adopted, applied, and integrated within the governance of an empire through networks of political and social actors. According to the narratives presented in *Historia Augusta* and the works of Cassius Dio, these authors shaped and perpetuated a favourable image of Emperor Marcus Aurelius, consistently highlighting aristocratic virtues, wisdom, and, above all, his inclination toward tolerance and clemency. In his book *Meditations* the emperor pays special attention to these qualities, which he considers essential characteristics of a good emperor. These qualities, rooted in Stoic philosophy, reflect his competence, bridging the structure formed around the role of the ruler with the space of

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<sup>15</sup> Snell 1960, 200.

<sup>16</sup> Giddens 2006, 108.

<sup>17</sup> Turner 2006, 613.

interaction in which the role is reproduced. They correspond to the Senate's requirements for selecting the emperor based on merit<sup>18</sup> rather than genetic inheritance, so both the Senate and the emperor possess the competence to identify and reaffirm the social structure of the 'best' and reproduce it in interactions.

## 2. Analysis of primary sources

Although, upon analysing the primary sources, it can be observed that references in this regard are very few, there are also moments when the image of being a good emperor does not correspond to the opinion of those close to him. Contradictory events in the emperor's life highlight the aspects discussed so far and raise questions about the extent to which Marcus Aurelius' self-image aligns with his public image. Are there differences between what the emperor thinks and what he does in specific moments? What do these discrepancies reveal about the role of philosophy in his life? What role do certain material or immaterial elements play in the decisions made during tense moments? The events I will discuss below bring to attention periods of external or internal conflict in which specific contexts lead to changes in the emperor's behaviour. These situations highlight the tensions that arise from the need to reconcile one's perspectives and viewpoints with social responsibility, which requires rational, objective distancing from subjective, personal beliefs. This process is often marked by an emphasis on the emperor's forgiving attitude.

Within the significant events recorded in ancient sources, Marcus Aurelius stands out for adopting a forgiving attitude, and this desire becomes even more substantial in situations of economic or political crisis due to external pressure. Although the emperor has solid training in controlling his emotions, as his father Antoninus says when Marcus Aurelius loses control, *'neither philosophy nor the empire can make emotions disappear'*.<sup>19</sup> The betrayal by Avidius Cassius, this pivotal event in the life of Marcus Aurelius, was extensively documented by Cassius Dio. Presenting the actions Marcus Aurelius undertook during this period, Cassius Dio mentions that *'as he passed through all the populations that had risen in favour of Cassius, he behaved with unusual magnanimity toward all'*.<sup>20</sup> His discourse in front of the soldiers, agitated by circulating rumours, reveals a multitude of dissonances that Marcus Aurelius tries to resolve by maintaining the facade of a wise and forgiving man. Marcus Aurelius, approaching his role as emperor with seriousness and depth, highlights in the speech addressed to the soldiers the

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<sup>18</sup> Pliny, *Panegyric* 63.2: „*uns ex nobis*”=like one of us. Eck, 2012, 98.

<sup>19</sup> *Historia Augusta, Antoninus Pius*, 10.

<sup>20</sup> Cassius Dio 71, 28.



conviction that the greatest reward he could receive was the ability to forgive Avidius Cassius for the attempted revolt he undertook.

*'It would mean that I would be deprived of a great reward, expected both from the war I am waging and from the victory we will achieve, namely a reward such as no man has ever received. What do I mean? I mean the possibility I have of forgiving someone who has done wrong, of remaining friends with someone who has violated friendship. These words may undoubtedly seem incredible to you, and yet you must not doubt their sincerity...'* (Cassius Dio, 71, 26).

The preference for a modest manner of living is an integral part of the philosophical school to which Marcus Aurelius adheres. However, generous acts of forgiveness of debts, taxes, or substantial rewards to the people also appear in times of tension, war, or emotional distress. An example mentioned by Cassius Dio that showcases this aspect is the moment when Marcus Aurelius returns to Rome from Athens after his wife's death. According to custom, citizens raised eight fingers in the air, hoping to receive an equal number of gold pieces, but M. Antoninus granted them 200 *denari*, an extremely generous sum. The manner in which the emperor employs forgiveness to showcase his competence is intriguing not only in major life events but also discernible in minor occurrences as well, such as the condemnation of a circus performer who brought a trained lion into the arena to eat people. Interestingly, Marcus Aurelius does not grant him pardon; instead, he condemns him, despite the people's wishes. Here, his aversion to any act of violence is emphasized, which, besides fulfilling his moral duty to the citizens he must set an example for, is also a personal preference. Marcus Aurelius's aversion to violence is altruistic and aimed at educating the public, but it is also a subjective opinion. In this context, it is worth noting that Cassius documented the emperor's profound aversion to '*shedding blood*'.

*'Indeed, Marcus Antoninus felt such a strong aversion to shedding blood that in Rome, the gladiatorial contests he watched were harmless, just like athletic games. He never allowed the gladiators to fight with sharp swords, and all they had in their hands were swords with blunted tips, as if they were covered with sheaths.'* (Cassius Dio, 71, 29)

Indeed, as argued earlier, sociologist Anthony Giddens states that no single act, not recognized and repeated through imitation, can create a structure around it. However, the actions of Marcus Aurelius, such as not freeing the circus performer and the ‘peaceful’ gladiator contests, do not actually reproduce a structure to which Marcus Aurelius adheres. On the contrary, he attempts to change the context of certain practices. Confirming the sociologist’s statements, it can be observed how the gladiators’ custom of not using sharp swords was abandoned after the reign of Marcus Antoninus, who was succeeded by one of the most violent rulers of the Empire.

In an effort to offer a more integrative view of the duality of structure, the free will of the agent, and the role of interactions as a basis for creating meaning, Bruno Latour suggested that both living and non-living entities are social actors. The agency of objects within the sphere of Marcus Aurelius’s role as emperor is understood by the ruler through the lens of philosophy, as Stoic beliefs about physics and ethics generate theories about all the elements that make up the world, including objects endowed with forces and properties. Primarily, the attitude toward objects is dictated by an attempt to maintain an objective internal discourse without assigning value judgments through methods such as division into quantitative parts or the analysis of causal relationships with events dictated by nature. In a contemporary context, when people and objects act, networks for transmitting information are formed because living beings and things possess agency.<sup>21</sup> Thus, the network structure is not static but involves a context of interaction between humans and objects. In Marcus Aurelius’s book, there are several examples where he refers to the manner of using particular objects that hold symbolic significance for his role as emperor, intending to emphasize that an austere lifestyle is desired and dictated by the laws of nature.

*‘From the gods: living at the court, it is possible not to use guards carrying spears, nor elegant clothing, nor chandeliers, statues, and such objects, and a luxury of the like...’ (M.A., Meditations, 1, 17).*

Among the enumerations of things he learned from his mentors, as presented in Book I, are remarks regarding the manner of wearing the toga (for example: ‘...not to walk around the house dressed in a toga, not to do such things’<sup>22</sup>). This behaviour, acquired through the

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<sup>21</sup> Latour 2005, 65.

<sup>22</sup> M.A. 1, 7.

examples provided by those responsible for his philosophical education, is recalled both in the biography compiled by Cassius Dio: ‘...*In his own home where he lived... he greeted the highest-ranking dignitaries without wearing the formal toga befitting his status..., even receiving them in the room where he slept*’<sup>23</sup> but it also has strong echoes in the accounts in the *Historia Augusta*. Surprisingly, this remark is addressed and can be found in the biography of his father, Antoninus Pius: ‘...*Indeed, he often received his friends without the robes of state and even in the performance of domestic duties...*’<sup>24</sup>.

In an attempt to provide a clearer definition of the relationship between the agent and social structure, Bruno Latour exposes the difference between understanding the term ‘social’ as ‘social ties’ and ‘social’ in the sense of ‘associations’, with the latter being closer to the original etymology.<sup>25</sup> Contrary to previous sociological perspectives, for Latour, the social does not designate a domain of reality or a particular object but rather is the name of a movement, a displacement, or a transformation. It represents an association of entities that cannot be recognized as social in the usual sense, except for the brief moment when they are associated, as is the case with the toga as an object in itself and the space in which it is or is not worn, or with the dull-tipped swords, which become agents of the emperor's intention. These transformations are, in fact, what will later become the ‘networks’ through which actors express their capacity to act.<sup>26</sup> Thus, from Bruno Latour's theoretical perspective, ‘social’ is the name of a type of momentary association characterized by the way it brings together new forms of actors, both living and non-living. In the particular case analysed in this work, the relationship between Marcus Aurelius' behaviour and the context in which he performs his role is not solely dictated by social forces that impose a specific type of conduct learned and reproduced through imitation. As Latour argues, a power relationship that mobilizes only basic social skills would be limited to very short and fleeting interactions. Shifting the focus to associations and short-term interactions through the analysis of practical means and the ingenuity employed in expanding said interactions, reveals aspects related to the sustainability of society and those related to its substance.<sup>27</sup> Therefore, even though the type of interaction between humans and objects in this case is dictated by the tenets of Stoicism, the specific manner in which these rules are put into practice denotes Marcus Aurelius' unique perception of the world and

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<sup>23</sup> Dio 71, 35.

<sup>24</sup> *Historia Augusta, Antoninus Pius*, 6.

<sup>25</sup> Latour 2005, 64.

<sup>26</sup> Latour 2005, 65.

<sup>27</sup> Latour 2005, 66.

himself. This perception implicitly contributes to the construction of the social reality in which he is involved. Although wearing the toga represents a straightforward example, it is not the only object that gains agency in interaction networks. Others that are worth mentioning are the letters of correspondence that Marcus Aurelius insists on writing by hand, a fact emphasized in the three sources, the statues erected in honour at certain times, or even immaterial things like principles, defined as objects of thought in Stoic philosophy. Because the analysis of ancient sources reveals cases where Marcus Aurelius' interaction with these objects is inconsistent, distinctions denote the difference between personal motivation, social responsibility, and the effects these actions have on the social context in which they are integrated. Despite the Emperor's characteristic seriousness in maintaining correspondence, during moments like the betrayal by Avidius Cassius, he neglects to dispatch informative letters to the Senate (and destroys those that could harm his image). Although a preference for a modest and restrained lifestyle is highlighted in both his book and ancient sources, the *Historia Augusta* points out that ‘...in general, he bestowed great honours upon his teachers and even maintained golden statues of them in his chapel...’<sup>28</sup>. From these contexts, it can be inferred that social architecture is fluid, and the condition to fulfil certain roles is closely related to an individual's ability to balance their intention and the purpose of their duties.

In the process of forming social structures, Bruno Latour emphasizes motivational force or free will and argues that action is not entirely under the control of consciousness. The author provides an example that illustrates this worldview, demonstrating that certain aspects persist over long periods, even if there seems to be no apparent connection between the initial identifiable moment of an action and its replication over time. This aspect is also evident in a seemingly insignificant detail from the emperor's life, but it is relevant to the ongoing discussion.

*‘Among other illustrations of his unfailing consideration towards others, this act of kindness is to be told: after one lad, a rope dancer, had fallen, he <Marcus Aurelius> ordered mattresses spread under all rope-dancers. This is the reason why a net is stretched under them today.’ (Historia Augusta, Marcus Antoninus, 12).*

Although the period in which the *Historia Augusta* was written remains uncertain, the gesture continues to be practiced today, nearly 1800 years later. This quote highlights the

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<sup>28</sup> *Historia Augusta, Marcus Antoninus, 3.*

perpetuation of social practices through the actions of individuals and objects within social structures. Of course, it cannot be said whether the idea of providing safety to entertainers first appeared in human history due to Marcus Aurelius. Upon brief research into the history of safety nets in entertainment performances, it can be observed that there are numerous instances where, following an accident, a decision was made to protect performers 'for the first time'. However, the generosity of Marcus Aurelius, which is always manifested through his appreciation for human life, is repeatedly emphasized because his devotion to providence and loyalty to the Roman state create enduring networks for information transmission. Although the example mentioned above pertains to an apparently trivial matter within a specific context, it broadly reflects the emperor's attitude towards himself and the universe. This deep inclination towards subjective awareness of the connection with nature, responsibility towards the social aspect, and creating a community united by divine rationality resurfaces in collective experience throughout history. Complex social structures are formed through the mimetic capacity of individuals to replicate specific practices derived from experience.

## **Conclusions**

In Stoic philosophy, the human condition is shaped by the relationship between the individual and the world. Humans are endowed with reason and can use this reason to act virtuously. It is believed that nature is providential, and therefore, it is essential to accept external events as they occur. Being a part of this nature, each individual bears the responsibility to act for the benefit of the community. Each person develops a personal relationship with the concept of providence, and the understanding that only the intellect, especially its rational part, can be controlled represents a central goal in the practice of ancient philosophy.

As a leader, Marcus Aurelius strives for an ideal model in accordance with divine nature because the duty he carries towards himself actually reflects the duty he fulfils towards the citizens. Politics without philosophy is not in harmony with nature, as these two aspects are interdependent, just as self-care and care for others are intertwined.

In the ancient sources, Marcus Aurelius is highly praised. In his own work, he outlines an ideal of imperial leadership during a period when introspection had already become an institutionalized practice, and the concern for personal development was characteristic of individuals with leadership aspirations. In the biographies of the leader, the emphasis on qualities such as forgiveness and tolerance in specific contexts serves as a means to create the

image of a good emperor, as these qualities are indicators of adherence to a particular doctrine. The adoption, reproduction in interactions, and recognition of these qualities in others form the structure through which the conception of a good emperor is propagated. However, in ancient historical sources, there are instances mentioned where his behaviour does not meet the ideal standard. Even though these incidents are sometimes mentioned briefly and superficially, they can provide insights into the questions raised.

Marcus Aurelius's indulgent behaviour becomes pronounced in situations of economic or political crisis when external pressure is higher. To resolve the cognitive dissonance that arises due to the limitations of free will, the emperor believes that Roman citizens are subject to the same laws, have the same rights, and are equal in free expression. When the subjective perspective (personal preference) contradicts the action toward the good of the community, it appears camouflaged in the intention of social behaviours, which seemingly have an altruistic character. Moreover, the way he uses objects to emphasize different qualities demonstrates that social structures are not just rigid rules to be followed or customs to be imitated. They are dynamic, and objects such as the toga, swords with dulled tips, statues, or letters play an active role in social interactions that, together with people, form complex networks for transmitting information. Therefore, the notions of subjectivity and objectivity correspond to how people generally perceive reality and represent specific functions that Marcus Aurelius uses to balance the private and public aspects of life. The self cannot be perceived as a passive entity entirely subjected to external influences. In the process of defining one's identity, individuals not only act within specific contexts but also actively contribute to shaping community structures. The processes of accumulating information and imitating customs intertwine in a complex manner with the exercise of free will, revealing numerous connections between individual experience and abstract systems.

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# Some preliminary conclusions regarding the end of the Roman Provincial Coinage in *Dacia*

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**Abstract:** The topic of the present study represents a complex matter in the numismatics of the 3<sup>rd</sup> century AD. This is reflected by the multiple interpretations of the situation and the numerous aspects that could have affected the end of the Roman Provincial Coinage in the entire Roman Empire. If the monetary system had a dual character at the end of the 2<sup>nd</sup> century AD (composed of the local and central coinage), the situation would be completely different one century later. At that point, a new framework could be distinguished: the dual system was replaced by a centralized framework of coinage produced and controlled by the new system of imperial mints. *Dacia* represents an interesting case study for the mentioned phenomena. Taking into consideration the numismatic material, the mint of the province was active only during the chosen period for the present study. Besides, *Dacia* is an important case study for illustrating the effects of the central policies at the local level. The main question of the article: What were the causes of the end of the Roman Provincial Coinage in *Dacia*?

**Keywords:** *Dacia*, raids, coinage, crisis, mint.

## Introduction

The territory of *Dacia* was an essential region in the Roman Empire. In the 3<sup>rd</sup> century AD, the province became one of the most relevant warfare zones, because of the multiple attacks of the threat of the Transdanubian tribes (the Carpi, Sarmatians, etc.). The chosen territory was also highly active in the provincial monetary production and circulation type during the 3<sup>rd</sup> century AD.

The Roman History of the period between the Severans and until the middle of Diocletian's reign (193-296 AD) is complex, and the events in other regions are also important, but the content of this study will be focused on *Dacia* to obtain a more precise and complete analysis of its situation. The numerous events that marked the region were critical elements in the development of the Roman Empire, which entered a period of 'crisis' at the beginning of the mentioned century. Even if the measures undertaken at the central level did not always have a direct influence on the types and quantities of coins minted in the provinces, the different coinage types are still interconnected. In the 3<sup>rd</sup> century AD, it is also visible how the external threats and the Roman policy regarding them affect in multiple ways the provincial coinage, including the one of *Dacia*.

At the beginning of the studied period, it could be observed how the imperial coinage was accompanied by local production in the Balkan, Eastern, and Southern provinces. This analysis will reflect the exciting shift from a dual monetary system to a unified one, a change that happened during the 3<sup>rd</sup> century AD. In 294-296 AD, the Roman monetary



system had a new framework in which a unified currency system existed. Latin became the only language used in the legends of the coinage, and the only mints that existed were the imperial ones.<sup>1</sup>

### ***Dacia* – a brief chronology of its coin circulation and production**

The Roman province of *Dacia* was founded in 106 AD after the two Dacian wars between the local king, Decebal, and the emperor Trajan. The new Roman sphere of influence included the region between the Carpathian Mountains, the Danube, and River Olt (Fig.1).<sup>2</sup> The new province was administered by a *legatus Augusti pro praetor*.<sup>3</sup>

The mentioned details regarding the foundation and its status are essential for the context of further discussions.<sup>4</sup> As far as the right to mint coins is concerned, the situation in *Dacia* differs from that in *Moesia Inferior*. If the cities of the latter territory could strike their own coins<sup>5</sup> and use them in daily transactions, *Dacia* didn't have this quality until the reign of Philip the Arab.<sup>6</sup> This mint's activity was influenced by various aspects of the imperial economic, political, and military development.<sup>7</sup>

During Septimius Severus' reign, the army's payment was substantially increased. An important aspect is that this type of subsidy consisted of silver coins, especially *denarii*, and with Septimius Severus' reign, the provincial coinage was also part of the soldiers' salaries.<sup>8</sup> In connection with the new soldiers' payment, the emperor raised the production of the coins by reducing their fineness. For example, in 195 AD, the *denarii* of Rome became a coin with 40 % silver. This was a high decrease knowing that at the beginning of the same year, the *denarius* had 70% silver.<sup>9</sup> But not only the silver coinage was affected. Rome's *officinae* started to produce smaller quantities of bronze coinage, and the *sestertius*, *dupondius*, and *as* were rarely issued.<sup>10</sup> The same phenomenon – the decrease in the level of bronze coinage – was also present in *Dacia*'s case (Fig.2).<sup>11</sup>

The graph based on the data collected and presented by Cristian Găzduc in his work *Monetary circulation in Dacia and the provinces from the Middle and Lower Danube from Trajan to Constantine I (AD 106-337)* reflects several vital elements of the evolution of coin production in the studied period and territory (Fig. 2). The effect of Severus' reform regarding the *denarius* is visible in the statistics. Between 193 and 238 AD, the *denarius* remained the main silver denomination based on the high rate of this type of coin found on the territory of *Dacia* (46.4%).<sup>12</sup> The data provided in Figure 3 regarding the evolution of the *antoninianus* illustrates the increased debasement of the coin starting with 238 AD. This process could mean a higher quantity of bronze and other base metals used to produce the silver currency, and, from this point of view, the debasement of the silver coinage could have led to a scarcity in the supply of bronze.<sup>13</sup>

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<sup>1</sup> Estiot 2012, 538.

<sup>2</sup> Map 1. Roman *Dacia* - Găzduc 2010.

<sup>3</sup> Găzduc 2010, 50.

<sup>4</sup> Piso 2023, 111-2.

<sup>5</sup> Dima 2018, 55-7.

<sup>6</sup> Pick 1898, 1.

<sup>7</sup> Varbanov 2005, 33; Piso 1974, 306.

<sup>8</sup> Duch 2017, 84; Dima 2018, 55-7.

<sup>9</sup> Metcalf 2012, 504.

<sup>10</sup> Abdy 2012, 504.

<sup>11</sup> Găzduc 2010, 151.

<sup>12</sup> Table E1 - Găzduc 2010.

<sup>13</sup> Estiot 2012, 541-3.

Before the creation of the mint of *Dacia* (246 AD), the emperor opened one at *Viminacium* (239 AD), which was in charge of the bronze coinage supply of the region. This measure came as a result of the high amount of production of civic Greek coins, but also of the “cast” (plated) coins of bronze (Fig.2).<sup>14</sup> Even if the mentioned mint was the principal source of coins of the neighboring provinces, *Dacia* was still in a difficult situation. This shortage of bronze coinage there reflected the necessity of local production that would happen through the mint of *Dacia* starting from 246- 247 AD. It is argued that the starting point of the minting in the province was the campaign of Philip the Arab against the Carpi. The mentioned years are considered the local year I of *Dacia* according to the system of minting registered on the coins. Each of them bore the year of its production.<sup>15</sup>

During these years, the territory of *Dacia* also became an important zone of warfare with numerous troops. Because of this new reality, numerous regions of the Empire began to strike their own coinage, including the “cast” bronze coins. As visible in Figure 2, this type of coinage reached high levels in 193-218 AD (36.7%), 218-238 AD (21.2%), and 238-244 AD (16.1%).<sup>16</sup>

Considering this context, the Empire decided to open new mints which had to produce bronze coins according to the system from Rome. This could have also been the case for *Dacia*. In the specialized literature, a possible role of supplier of the troops for *Dacia* is mentioned: ‘These coins were most probably minted chiefly to supply the troops in this area with good bronze coin.’<sup>17</sup> A relevant argument could be that most of the bronze coin finds from the site of *Porolissum* (one of the most important sites from Roman *Dacia*) were found in the military zones (64%), and less in the settlements (36%) (Fig. 4).<sup>18</sup>

First of all, a mandatory aspect of the presentation of this mint is its typology. Generally, the Roman Provincial Coinage consists of five groups: the coins of ‘client kings’ (for example, the issues of King Sauromates II from the Bosphoran Kingdom), the provincial issues; (they were produced in large quantities sufficient to supply specific regions of the Empire), ‘koinon’ coins, the alliance coinages, and the civic coins.<sup>19</sup>

Regarding the PROVINCIA DACIA coinage, it was part of the ‘provincial issues’ group and had several characteristics. Depicted on the obverse were the Roman emperors or the members of their families with a legend that contained the official elements and titles of the rulers in Latin. On the reverse, PROVINCIA DACIA is represented by a female figure accompanied by an eagle and a lion (symbols of the two legions: the *13th Gemina* and *5th Macedonica*). Another aspect is the location of the mentioned mint. This topic provoked numerous debates in the literature. The two centers of the mint that are primarily commented on by the researchers are *Ulpia Traiana Sarmizegetusa* (the residence of the *concilium Daciarum trium*) and *Apulum*, where *legio 13<sup>th</sup> Gemina* had its garrison. In the mint from *Viminacium*, the authority on the coinage was the *concilium provinciae*. This idea was also applied in the case of *Dacia*. Currently, the location of the

<sup>14</sup> Table E1 - Găzdac 2010.

<sup>15</sup> Pick 1898, 3; Găzdac, Alföldy-Găzdac 2005, 145.

<sup>16</sup> Table E1- Găzdac 2010.

<sup>17</sup> Găzdac 2004, 136.

<sup>18</sup> Găzdac, Alföldy-Găzdac 2005, 655.

<sup>19</sup>Typologies presented on the Roman Provincial Coinage online platform accessed at <https://rpc.ashmus.ox.ac.uk/introduction/whatisrpc> on 1.06.2023.

mint is considered *Ulpia Traiana Sarmizegetusa* more probable.<sup>20</sup>

For *Dacia*, the Carpic invasions and the emperor's intervention here in 245/6-247 AD<sup>21</sup> could have been the reason for the intense production of PROVINCIA DACIA coinage during the first year of its production (Fig. 5-6). This year, the production of local coinage represented 51.7% of the total coin finds. After this first year, the production of PROVINCIA DACIA coinage continued to decrease. This confirmed that the opening of the mint from *Dacia* was just a temporary measure for the supply of coinage in the region. The percentage of this type of coin from the next period (249-253 AD) is drastically lower: 15.5% (Fig. 5). Also, the devaluated *antoninianus*, which in this period contained only 15% of silver needed to be produced in higher numbers for the payment of the troops, reached a rate of 50.4% in the coin finds from the province of *Dacia* (Fig. 5).<sup>22</sup>

The role of intensive hoarding during the study period is also reflected in the case of *Dacia*. The periods of warfare (the invasions of the Carpi and other tribes) are also the ones with the highest number of hoards ending with specimens from the time. In *Dacia*, the coin hoards (Fig. 7- 8) that ended during the reigns of Gordian III, Philip the Arab, and Trajan Decius are the most numerous out of all the hoards ending with coins between 193 and 275 AD (42 out of 62) (Fig.7).<sup>23</sup>

The problematic context from the middle of the 3<sup>rd</sup> century AD (the numerous raids) affected *Dacia*. It is argued that the numerous attacks from the years 248-257 AD led to a considerable increase in the fragility of the strategic position of *Dacia*. The immediate consequence was the transfer of numerous military units to other places of the Empire. This measure might represent the beginning of the abandonment of the province by the Roman administration and army. The army had a strong impact on the development of the monetary circulation in the province. Practically, the primary role of the mint of *Dacia* was to provide the coin supply for the legions present there. If these troops are transferred to other regions, then the need for this type of monetary production is also moved. Considering this fact, the movement of these troops<sup>24</sup> to northern Italy and Gaul could be a reason for the scarcity of local coinage here.<sup>25</sup>

The decrease in the provincial issues of *Dacia* is even more visible between 253 and 268 AD – only 7.8% (Fig. 5).<sup>26</sup> This percentage could be explained through various elements. One of them is the already mentioned gradual abandonment of the province, a process that is even more visible in 253-256 AD when more troops from *Dacia* were dispatched for the campaign of Valerian I's in the East. This moment reflects the end of the role of the local mint. This stage is also the one in which the end of the local coin production is usually dated (257 AD), so, as a result, the mint of *Dacia* had a short period of activity.<sup>27</sup> In the next part of the article, an attempt to reconstruct the possible explanations would be made.

### Several preliminary explanations of the studied phenomenon

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<sup>20</sup> Găzdac, Alföldy-Găzdac 2008, 145.

<sup>21</sup> Touratsoglou 2006, 137-8.

<sup>22</sup> Table P1 – Găzdac 2010.

<sup>23</sup> Data generated through the online platform CHRE- Coin Hoards of the Roman Empire.

<sup>24</sup> A detailed description of the possible influence of this aspect on the studied phenomenon would be presented in the final part of the article.

<sup>25</sup> Găzdac, Alföldy-Găzdac 2008, 143.

<sup>26</sup> Table P1 – Găzdac 2010.

<sup>27</sup> Găzdac, Alföldy-Găzdac 2008, 146.

The end of the Roman Provincial Coinage in *Dacia* was a cumulative result of the central and local evolutions. Both the barbarian attacks and the imperial monetary and military policy influenced the destiny of the mint.<sup>28</sup> In the first place, an element that attracted attention was the fact that the mentioned event was strongly influenced by the relationship between the central and local coinage, and this is highly visible for *Dacia* (Fig. 2, Fig. 5).<sup>29</sup>

Between 193-296 AD, the Empire underwent serious changes. Rome's imperial institution was characterized by new elements: short reigns, the difficulty of establishing a dynasty (an important element throughout Roman history), and the continuous change of its relationship with the army. All the mentioned aspects contributed to the instability of the Empire, and it could be considered that was hard to maintain a stable monetary system in the context of the rapid succession of rulers and usurpers, and successive massive attacks on the frontiers.<sup>30</sup> Practically, during the Severans the situation was relatively stable, but in a short time, the context became more and more difficult from various points of view.<sup>31</sup>

The army started to have an increasing role in the state's affairs and their payment was also raised from the period of Septimius Severus' reign.<sup>32</sup> Cassius Dio mentions an interesting piece of advice that the emperor gave to his sons: 'Be harmonious, enrich the soldiers, and scorn all other men.'<sup>33</sup> This measure affected the economy of the Roman Empire as the increase in the soldiers' salaries contributed to a powerful rise in military payments and to the debasement of the silver currency (the most used for the army). This devaluation could be identified two times in the studied period when the expenditures of the Empire were strongly increasing.<sup>34</sup>

The *denarius* was the silver coin that was debased from the period of Septimius Severus. The decrease in the silver fineness of the coins led to a more consistent use of bronze or other base metals for the production of the *denarius*. The main consequence was the decrease in the presence of imperial bronze in the Empire, an element that was visible in *Dacia* (Fig.2).<sup>35</sup>

The other coin that was debased during the period of the study was the *antoninianus*. This example has an interesting path. It was introduced by Caracalla as a temporary measure. After this, it was not produced anymore until 238 AD, when Pupienus and Balbinus revived the denomination.<sup>36</sup> This story is one of reference in the present study, because of its significance on both central and local levels. Figure 3 shows the debasement of the new silver currency, that is relatively slow until 250 AD. After this year, the devaluation reached new peaks and the so-called silver became a bronze coin because of its low level of precious metal (253 AD – 35 % silver, 260 AD – 15 % silver, 268 AD – 2.5 % silver).<sup>37</sup>

The dynamics of the central monetary system had important effects on the local production of coinage. Figure 2 shows the strong relationship between the imperial and provincial coinage in *Dacia*'s case. Here, in the period between

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<sup>28</sup> Touratsoglou 2006, 144-5.

<sup>29</sup> Table E1, P1– Găzdac 2010.

<sup>30</sup> Mennen 2011, 46-9.

<sup>31</sup> Corbier 2007, 333-6.

<sup>32</sup> Boteva 2010, 232; Boteva 1998, 77-80.

<sup>33</sup> Dio Cass., LXXVII, 15, 2.

<sup>34</sup> Duch 2017, 84.

<sup>35</sup> Table E1 - Găzdac 2010.

<sup>36</sup> Touratsoglou 2006, 165.

<sup>37</sup> Estiot 2012, 543.

244 and 249 AD, the *antoninianus* represents a percentage of 25.4%, while bronze coinage prevails (for example, the *sestertius* – 52.3%). After this year (249 AD), the relationship between the two types of coinage changed, and the *antoninianus* started to dominate the monetary circulation (249-253 AD – 55.9 %; 253-268 AD – 89.8%).<sup>38</sup>

Between 253 and 268 AD, the state's economic development entered a new stage during Gallienus and Valerian I's reign.<sup>39</sup> Mints in the proximity of the army started to be used intensively for the production of imperial issues of debased *antoniniani*. Relevant examples are *Trier*, *Mediolanum*, *Siscia*, and *Cyzicus*. But this was not the only decision. The mint of Rome also underwent multiple changes: the number of *officinae* was increased from six to twelve.<sup>40</sup>

These new measures were also visible in the monetary circulation from *Dacia*. When the local coinage was at its lowest level, the mint of Rome was again strongly present through the coin finds with a percentage of 56.2%. The other mints were also represented as follows: *Mediolanum* – 7%, *Siscia* – 7%, *Cyzicus* – 5.4% for 253-268 AD (Fig. 10). During the following periods, these imperial mints were present in an increasing percentage. For example, the mint from *Siscia* had in 268-275 AD 22.6% of the total coin finds in *Dacia*, which is an impressive and considerable development compared to the previous time frame.<sup>41</sup> It is clear that the mentioned stage had relevant consequences: the imperial coins were flooding the space of the whole Empire, and the provincial coinage gradually decreased in production. It could be stated that the end of the Roman Provincial Coinage in *Dacia* was part of a bigger process at the scale of the entire Roman Empire.<sup>42</sup>

As far as the military dimension is concerned, the raids of the 3<sup>rd</sup> century AD powerfully affected *Dacia*. Until 250 AD, its situation was relatively stable (Fig. 6). The creation of the mint is also linked to Philip the Arab's campaigns against the Carpi in 246-247 AD. After these campaigns, the imperial interest shifted to other regions such as Gaul and the northern part of the Italic peninsula. Because of this, troops were moved to these particular regions and the local production decreased. The mentioned aspect is an argument for the combination of military and economic factors. When the soldiers and, later the Roman administration were moved to other territories the mint of *Dacia* gradually lost its role.<sup>43</sup>

The movement of legions and troops was part of the gradual abandonment of the province by the Roman army and administration. There are numerous perspectives regarding the event. Constantin Petolescu affirms that the reign of Gallienus marked the loss of *Dacia*, and Aurelian was the emperor who just officially abandoned the province.<sup>44</sup> Besides this opinion, D. Ruscu presumes that it could have been possible that just a part of the Roman administration and army left *Dacia* during the 260s<sup>45</sup> and that the final abandonment was during Aurelian's reign.<sup>46</sup> Considering the possibility that the process started during Gallienus' reign (253-268 AD), the end of the Roman Provincial Coinage in *Dacia* could be linked with the decrease of the imperial presence here (the level of provincial issues – 7.8% – Fig. 5).<sup>47</sup>

The concept of this gradual abandonment could be demonstrated by comparing coin finds from the Northern

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<sup>38</sup> Table E1 - Găzdac 2010.

<sup>39</sup> Corbier 2007, 349.

<sup>40</sup> Corbier 2007, 349.

<sup>41</sup> Table P1 - Găzdac 2010.

<sup>42</sup> Bowman, Garnsey, Cameron 2007, 348.

<sup>43</sup> Găzdac, Alföldy-Găzdac 2008, 142-143.

<sup>44</sup> Petolescu 1995, 124-129.

<sup>45</sup> Ruscu 2000, 272; Ruscu 2003, 212.

<sup>46</sup> Ruscu 2000, 273; Ruscu 2003, 234.

<sup>47</sup> Table P1 - Găzdac 2010.

part and the Southern part of *Dacia*. Between 249 and 284 AD, the shift from the North to the South is visible. If in 249-253 AD the northern finds prevailed over the southern ones – 72 pieces and 33 pieces, respectively – the situation changed in the next periods. In 253- 268 AD, during Gallienus' reign, the southern coin finds reached a number of 58 pieces, and in 268-275 AD they summed up to 113 pieces. Comparing these numbers with the ones of northern coin site finds (253-268 AD = 70; 268-275 AD = 30), the growing coin finds from the southern sites reflect the movement of troops and people to the South of the Danube (Fig. 9).<sup>48</sup>

For *Dacia*, it could be considered that the low percentage of coin hoards which end with issues of Trajan Decius (8.87%), Trebonianus Gallus (9.67%), and the next ones compared to the coin hoards ending with the coinage of Philip the Arab (33.06%) verify the idea of the gradual movement of troops from here to other provinces (Fig. 7).<sup>49</sup> It could be considered that most coin hoards of *Dacia* could have resulted from the expenditures of the army present in the province.<sup>50</sup>

Considering the presented aspects of the evolution of *Dacia* in the studied period, several preliminary explanations for the mentioned phenomenon could be stated. In the first place, if the right to produce coins was given to each of the mints by the imperial authority, then the decision that the same mints cease their production could have also been a central measure because of the challenging context in which the imperial monetary system found itself. Even before the *antoniniani* were in the last stage of their devaluation, the problems that they were provoking in terms of exchange were affecting the Empire negatively. When the quantity of silver used for the coin was less than 50% (42% in 238 AD and 35% in 253 AD<sup>51</sup>), the amount of bronze existing in the coin was far more than the one of silver. In this context, the possibility of establishing a stable exchange ratio between the so-called silver coinage and the bronze one (both central and local) was extremely difficult. Sylviane Estiot mentions the crisis of the bronze coinage on the central level: 'The striking of bronze became ruinous for the issuing authority, and its rate of exchange could not be maintained against a silver piece that had become in fact a simple copper token that has silver only in theory.'<sup>52</sup>

If the coinage of *Dacia* was produced according to the patterns from Rome, it could be considered that the end of the provincial minting here could have also followed the central evolution. The local coinage in *Dacia* ended in 257 AD. This moment corresponds with the period in which bronze coinage gradually stopped being produced in the entire Empire, an aspect confirmed by Roger Bland who mentions that the last major production of this coinage is dated during the reign of Valerianus and Gallienus.<sup>53</sup> As far as these details are concerned, it seems clear that the end of the provincial bronze coinage was part of the broader process at the level of the Empire, a process that ended with a unitary system of coin production.<sup>54</sup>

Aurelian and Diocletian's reforms had an essential influence on the new economic framework of the Empire. When Aurelian came to power, the situation was critical. He punished the workers of the central mint of Rome, who were the main ones responsible for actively worsening the process of debasement of the coinage. They were sent to

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<sup>48</sup> Table R2 - Găzdac 2010.

<sup>49</sup> Data provided through the online platform CHRE (Coin Hoards of the Roman Empire).

<sup>50</sup> Găzdac 2010, 146.

<sup>51</sup> Estiot 2012, 543.

<sup>52</sup> Estiot 2012, 541.

<sup>53</sup> Bland 2012, 525.

<sup>54</sup> Bowman, Garnsey, Cameron 2007, 348.

*Serdika* – the minting center in one of the new *Dacian* provinces (one of the provinces created after abandoning the old province north of the Danube). After their punishment, the reform of Aurelian was introduced in 274 AD, and its main scope was to reintroduce the trimetallic system from the time of Caracalla. This marked the appearance of the *aurelianus* with a weight of 4.03 g. The other element of the system was *laureate denarius*. The *aureus* was also stabilized at its level from the period of Caracalla. Besides the new structure of the monetary system, the network of mints was changed compared to the earlier stages.<sup>55</sup> Even from Aurelian's period, we could observe the growing importance of the imperial mints that were producing the reformed coinage (8 mints – *Lyon, Rome, Ticinum, Siscia, Serdika, Cyzicus, Antioch*, and *Tripolis* with 39 *officinae*).<sup>56</sup>

The next step in the evolution of the monetary system of the Roman Empire was the reform of Diocletian, which finalized its centralisation and the abandonment of dualism. The components of the new imperial monetary framework were: the *argenteus* (80% silver), the *nummus* (with the universal type *GENIO POPULI ROMANI* and 4% silver), the *neo-aurelianus*, *neo-denarius*, and *denarius communis*.<sup>57</sup> These two reforms mark the final stages in the reformation of the coinage of the Empire. In this complex process, the end of the Roman Provincial Coinage came in 296 AD with the end of the local minting in *Alexandria* and marked the shift to a new system based on the imperial coinage and its centers of production. This development was caused by multiple factors: local and central, but also military, political, and economic.<sup>58</sup>

The external threats had an important influence on the fate of the coinage, but the situation was mainly influenced by the Roman policy in the region and in the whole Empire. When the local minting in *Dacia* was at its peak, there was an important number of troops and legions (the 5th *Macedonica*, 13th *Gemina*), but because of the increase in conflicts in the other parts of the Empire, multiple troops were moved to other regions. As a result, its role disappeared with the gradual abandonment of the province.<sup>59</sup> Besides this aspect, because of the accelerated debasement of the *antoninianus* after 250 AD (the period of a drastic decrease in the production of *Dacia*), it was harder to maintain both silver and bronze currencies at a healthy level of exchange. Because of this, the bronze coinage started to not be produced anymore, and, in consequence, the provincial bronze also stopped gradually in the whole Empire.<sup>60</sup>

The answers presented in the current study are several preliminary conclusions for the subject of the end of the Roman Provincial Coinage in *Dacia*. The subject is very complex, and it implies more detailed research that would be continued further. The present work is a general image of the topic which is essential for a deeper understanding of the events regarding this component of the Roman monetary system. The clear aspect is that the end of local coin production was caused by the combined action of the political acts, the raids, and not at the very least, the economic development of the Empire between the Severans and the end of the 3<sup>rd</sup> century AD. At this stage, the traditional ways of research blended well with the tools of Digital Humanities and contributed to the presentation of the chosen topic.

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<sup>55</sup> Estiot 2012, 545-6.

<sup>56</sup> Bowman, Garnsey, Cameron 2007, 349.

<sup>57</sup> Estiot 2012, 548.

<sup>58</sup> Metcalf 1987, 157-168.

<sup>59</sup> Găzdac, Alföldy-Găzdac 2008, 142-143.

<sup>60</sup> Estiot 2012, 541.

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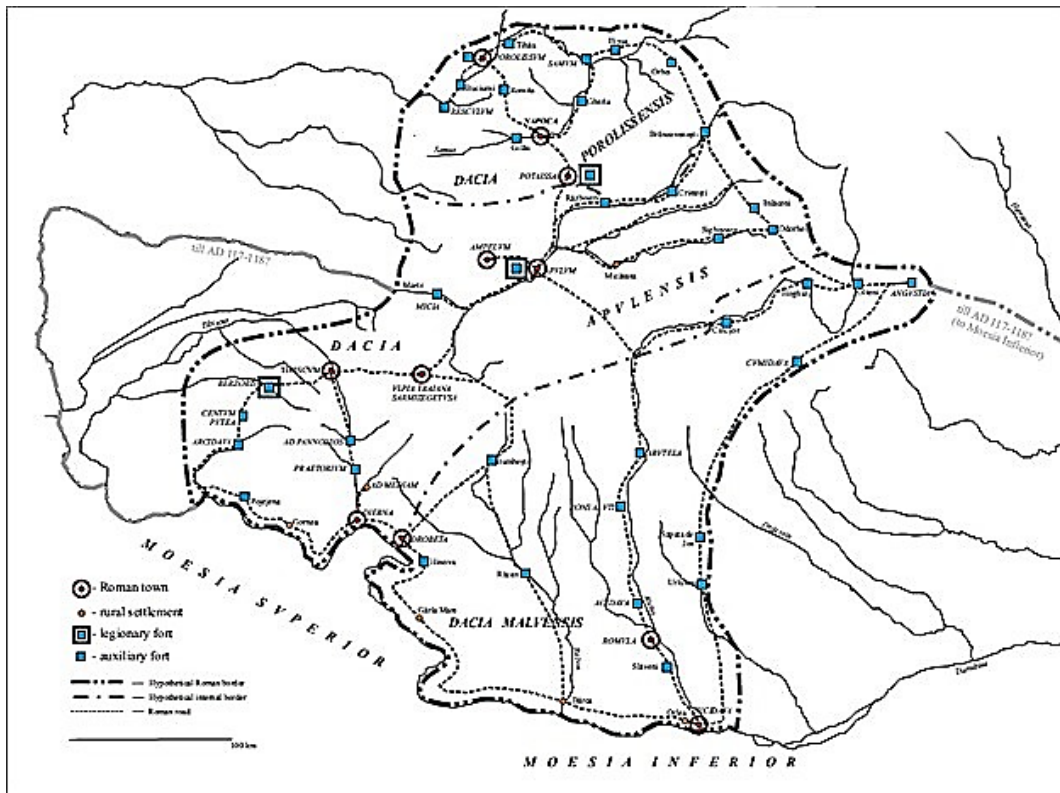


Fig. 1 – Map of Roman Dacia

Some preliminary conclusions regarding the end of the Roman Provincial Coinage in *Dacia*

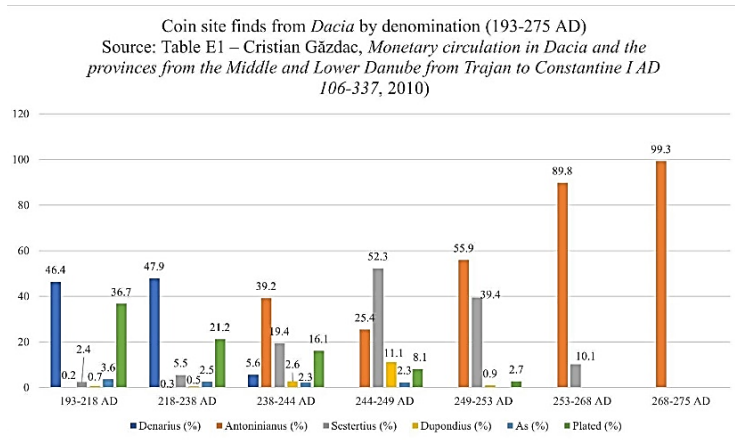


Fig. 2

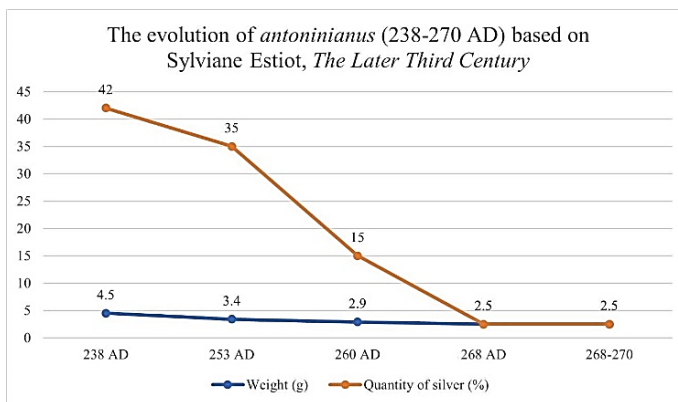


Fig. 3

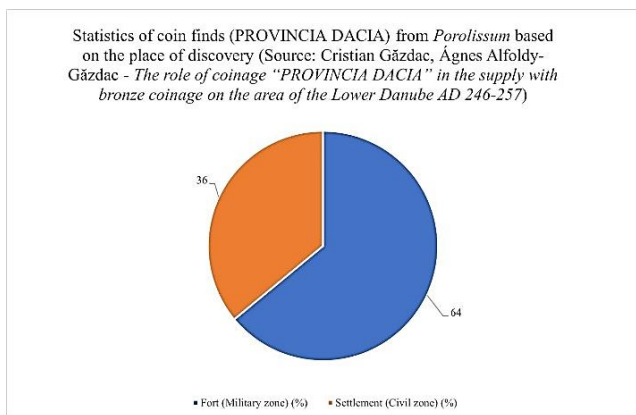


Fig. 4

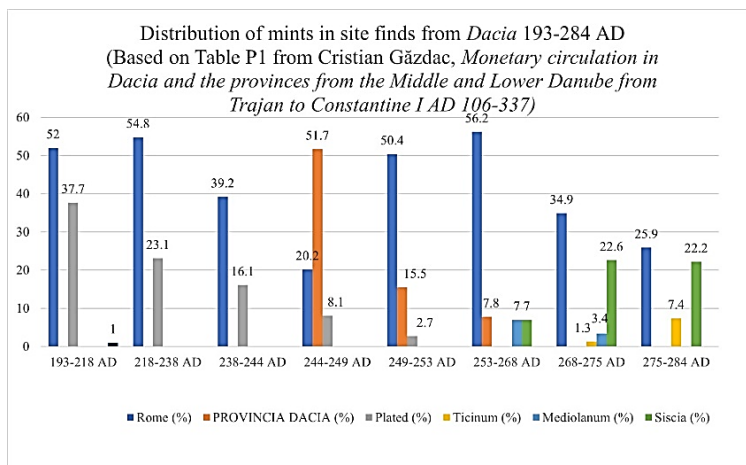


Fig. 5

The evolution of coin production of *Dacia* (246-257 AD)

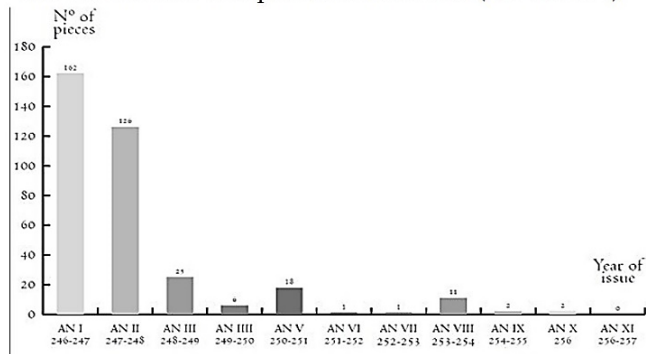


Fig. 6

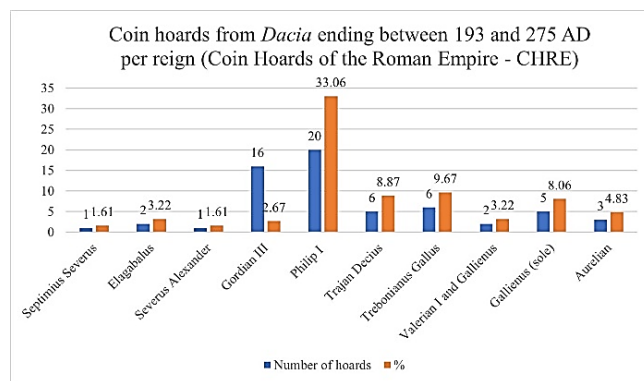


Fig. 7

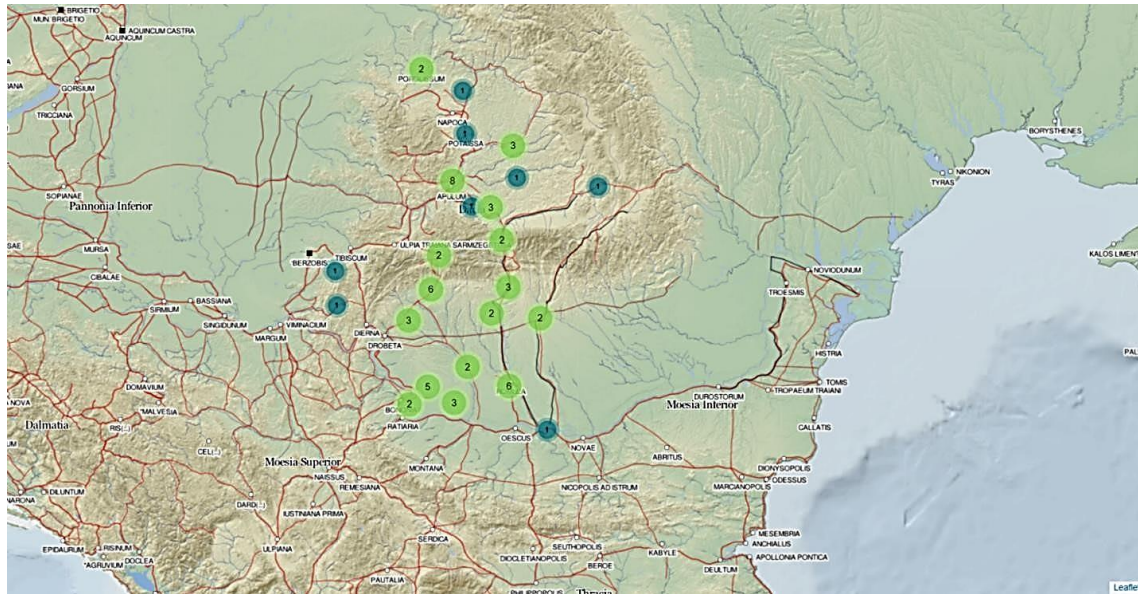


Fig. 8 – Map of the coin hoards ending between 193 and 275 AD from *Dacia* (generated through the online platform CHRE – Coin Hoards of the Roman Empire)

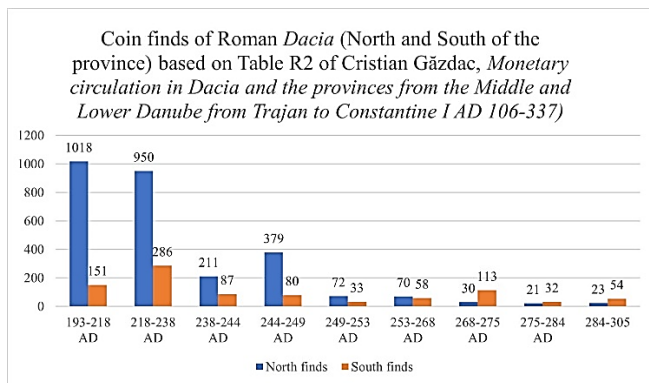


Fig. 9

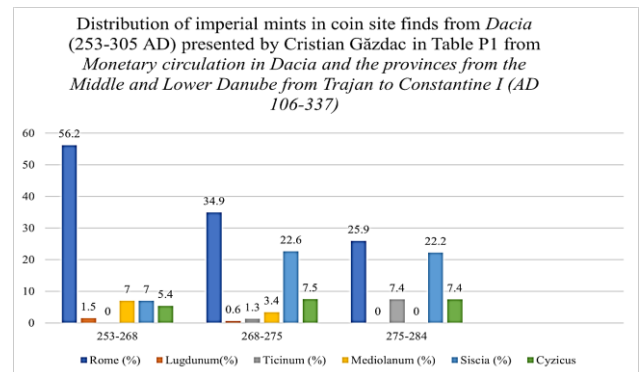


Fig. 10

# A brief discussion about the circulation of North-Italic *Firmalampen* marks found in Roman Dobrudja

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**Abstract:** Regarding ancient clay lamps, one can only be impressed by the variety and creativity involved in certain types. Out of the numerous types of lamps that have been discovered and catalogued during past centuries, one particular category sparks interest in those who research the activity of this industry, and that is *Firmalampen*. This paper aims to start a new discussion regarding some aspects around the presence of this special type of lamps in ancient Dobrudja, part of the province of *Moesia Inferior*, mainly about the circulation of the North-Italic marks in this region, the trade and the local production. By comparison with other parts of the Empire, we can acknowledge some potential regional particularities and preferences of the population towards a widely spread product.

**Keywords:** Firmalampen, Moesia Inferior, Roman trade, pottery workshops, stamps.

## Introduction

Known in the scientific literature as *Firmalampen*, the ancient lamps with producer's mark on them represent a special category of lighting tools. The engraving of potter's name on the base of the lamp is first recorded on second century BC Greek lamps,<sup>1</sup> but this phenomenon became increasingly more popular on the Roman lamps, especially in the first three centuries AD.<sup>2</sup> The Roman craftsmen used to mark their products in different ways, serving today as a good indicator for the place of origin of these goods.

*Firmalampen*, the name originally used by O. Fischbach to describe the lamps with the manufacturer's name,<sup>3</sup> are today generally associated with the lamps classified by S. Loeschcke in types IX and X, the typology developed for the discoveries from Vindonissa.<sup>4</sup> From the thicker walls of these two types of lamps that could prevent spillage<sup>5</sup> and the shape that enabled multiple

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<sup>1</sup> Howland 1958, 214-220.

<sup>2</sup> Aubert 1994, 303.

<sup>3</sup> Fischbach 1896, 10-11.

<sup>4</sup> For a detailed overview see Loeschcke 1919, 255-272.

<sup>5</sup> Frecer 2015, 109.

pieces to be stacked one on top of each other, we can assume that, in their production, the emphasis was put on functionality, so the utilitarian character was more representative for *Firmalampen* rather than the stylistic one. Nevertheless, the iconographic repertoire of the depictions on the discus is still fascinating and diverse, with religious, political, social, anthropomorphic, zoological and vegetal patterns.

The production of *Firmalampen* started in the first century AD, in *Regio VII Aemilia*, in the workshops near *Mutina* (nowadays Modena) in the north of Italian peninsula.<sup>6</sup> *Regio VII Aemilia* was an important production center, with a high crafting activity, being the Italic region with the most pottery kilns discovered, at this moment.<sup>7</sup> The North-Italic workshops are amongst the most successful Early Roman pottery workshops, producing a multitude of high-quality products, with a large diffusion of traded goods. As evidence for the reputation that *Mutina* had in the pottery domain, there are some special types of marks which, along the producer's name, refer to the production center of *Mutina*, by using the phrase *MVTINA FECIT* (made in *Mutina*) in different forms.<sup>8</sup>

Lamps of this type circulated between the first and the fourth centuries AD,<sup>9</sup> being produced in workshops (called *officinae*) in Northern Italy. Following that, the production has expanded through branches, operated by agents (called *institores*), or through copies made by potters who acknowledged and took advantage of the popularity of the original marks, which certifies the importance of the stamps in the commercial and social context. The peak of production and commercialization of these lamps coincides with a rapid expansion of the Roman Empire, precisely the first two centuries AD, thus the provinces formed by Roman conquests have represented a new market for pottery producers. At the same time, the annexation of new territories translates into a good opportunity for new *officinae*.

Another factor that has contributed to a facile spread of *Firmalampen* is the manufacturing technique. These were made in moulds, a process which permitted a fast, standardized and, most importantly, qualitative production, as well as a quantitative potential much greater than hand making or wheel-throwing. This technique of lamp making, alongside territorial expansion and development of commercial routes, resulted in an imperial scale industry, of which ramifications

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<sup>6</sup> Labate 2017a, 224-225.

<sup>7</sup> Cuomo di Caprio 1971, 443-457.

<sup>8</sup> For other variations of this expression see Labate 2017b, 235-236.

<sup>9</sup> Chrzanowski 2020, 216.

are now being reconstituted by archaeological research. Like other pottery products, oil lamps are part of a large and complex system of production, trade and usage, a concrete example of the concept of *chaîne opératoire*.<sup>10</sup>

In the case of Dobrudja, there are several published studies that approach this subject, the most notable ones being that of C. Iconomu,<sup>11</sup> F. Topoleanu<sup>12</sup> and D. Elefterescu,<sup>13</sup> that were of great help for this approach. Fortunately, the recent research brought to light new discoveries,<sup>14</sup> and with that new pieces that enrich the current situation. By including those new finds, we can proceed in an actualization of previous works.

In this study, it will be also taken into consideration the discoveries made in the archaeological excavations from Barboși, Galați, in the south of Moldova, because even though it is located outside of Dobrudja, the Roman *castrum* of Barboși is relevant for a better understanding of distribution and usage of *Firmalampen*. Therefore, in the following, we will present the marks of certified North-Italic lamp producers discovered in Dobrudja, in order to bring some considerations on the import and local production of *Firmalampen* in this region.

### **North-Italic marks found in Scythia Minor**

The territory between the Lower Danube and the Black Sea, *Scythia Minor* as described by Strabo, was an area of strategic interest for the Roman Empire. The Pontic cities came under Roman control in the 1<sup>st</sup> century BC through the campaign of Crassus, and the entire territory of *Scythia Minor* was integrated into the Empire during the reign of Vespasian, within the province of *Moesia*. Later, under emperor Domitian, the province of *Moesia* was divided into two, with Dobrudja becoming part of the newly created province of *Moesia Inferior*. After troops and colonists settled in the newly conquered region, military and civilian centers emerged and developed, laying the foundations for the new society. While initially imports of goods from the West of the empire could meet the needs of customers, especially those in the military, from the 2<sup>nd</sup> century AD onwards, local products began to dominate the market.

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<sup>10</sup> Poblome, Malfitana, Lund 2012, 1-2.

<sup>11</sup> For *Firmalampen* in Dobrudja see Iconomu 1986, 29-45.

<sup>12</sup> For *Firmalampen* in Dobrudja see Topoleanu 2010, 151-188.

<sup>13</sup> For *Firmalampen* from *Durostorum-Ostrov* (Ferma 4) see Elefterescu 2016, 159-182.

<sup>14</sup> Chrzanovski 2020, 215-262; Topoleanu 2016, 63-116.

Unfortunately, the marks of North-Italic manufacturers discovered so far in Dobrudja are not as numerous and diverse as those of the other provinces,<sup>15</sup> mainly due to the lack of published material, but they still represent a very important source of information at a general level and a reference for the circulation of lamps in one of the Empire's peripheries. For the enumeration of the stamps found in Dobrudja, it will be considered not only the imported ones, but also the local products that bare the mark of the North-Italic producers. By including the local products, of which the vast majority is categorised as imitations made by potters unrelated to their Italic counterparts, we can start a discussion revolved around the subject of counterfeit marks.

Based on the published finds of *Firmalampen* from Dobrudja, we have chosen a lot of 345 pieces based on which we can draw some conclusions about the most common types of North-Italic *officinae* stamps, as well as the contexts in which most finds took place. Before presenting the results obtained, it should be noted that the number chosen does not claim to be the total number of finds but constitutes the majority of published material. Thus, among the North-Italic *Firmalampen* stamps attested by archaeological research in Dobrudja, both on imported and locally made lamps, we present the following:

#### *APOLAVSI*

Lamps with his stamp are found in Dobrudja through discoveries made at *Durostorum-Ostrov* (Ferma 4).<sup>16</sup> Apolaustus' mark circulated between the first two centuries AD but did not enjoy a popularity similar to that of other North-Italic producers<sup>17</sup>.

#### *ATIMETI*

A lamp with the mark of Atimetus was discovered at Barboși, initially interpreted as a local imitation.<sup>18</sup> Possible workshops in Dacia<sup>19</sup> and Pannonia<sup>20</sup> are attributed to Atimetus. His stamp circulated between the 1<sup>st</sup> century and the first decades of the 2<sup>nd</sup> century AD.<sup>21</sup>

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<sup>15</sup> For example, the case of the Dacian provinces, where *Firmalampen* are far more numerous than in Dobrudja, see below.

<sup>16</sup> Elefterescu 2016, 164; from now on in the text it will be referred as *Durostorum-Ostrov*, to differentiate between the point from Ferma 4 and the *castrum* of *Durostorum*, now in Silistra, Bulgaria.

<sup>17</sup> Gostar 1961, 27-28. Notable examples of more popular producers are Fortis, Strobilius, Octavius, Cassius etc., see below.

<sup>18</sup> Sanie 1981, 164-165, no. 25; Tudor 1953, 479-481.

<sup>19</sup> Bocan, Neagu 2015, 126.

<sup>20</sup> Frecer 2015, 265.

<sup>21</sup> Gostar 1961, 28; Loeschcke 1919, 273-274.



### *CAMPILI*

*Firmalampen* with his name appear in Dobrudja at *Durostorum-Ostrov*.<sup>22</sup> The lamps produced in the workshops of Campilius have a low numerical diffusion in the West.<sup>23</sup> His mark circulated between the 2<sup>nd</sup> and the beginning of the 3<sup>rd</sup> century.<sup>24</sup>

### *CASSI*

Lamps with Cassius' stamp have been found at *Dinogetia*,<sup>25</sup> *Durostorum-Ostrov*,<sup>26</sup> *Noviodunum*,<sup>27</sup> *Tomis*,<sup>28</sup> and at *Troesmis*.<sup>29</sup> Lamps bearing his stamp circulated between the 2<sup>nd</sup> and 3<sup>rd</sup> centuries AD.<sup>30</sup>

### *C. DESSI*

Of the lamps with his stamp in Dobrudja, only a small number have been found in *Durostorum-Ostrov*,<sup>31</sup> unlike in the rest of the Empire, where they enjoyed a notable spread.<sup>32</sup> The production of lamps with his stamp began in the 2<sup>nd</sup> century AD and continued until the beginning of the 4<sup>th</sup> century, making it one of the longest-lived *Firmalampen* marks circulating throughout the Empire,<sup>33</sup> alongside Fortis.

### *DECIMI/DECIM*

His mark is present in Dobrudja through discoveries at *Durostorum-Ostrov*.<sup>34</sup> The location of Decimus' workshop is disputed (some researchers believe to originate from Northern Italy,<sup>35</sup> and some argue for a Pannonian origin<sup>36</sup>), the products seem to be more popular in the East of the empire than in the West.<sup>37</sup> Lamps with Decimus' stamp circulated between the late 2<sup>nd</sup> century and the 3<sup>rd</sup> century AD.<sup>38</sup>

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<sup>22</sup> Elefterescu 2016, 167.

<sup>23</sup> Gostar 1961, 177-178.

<sup>24</sup> Buchi 1975, 16-17; Loeschcke 1919, 296.

<sup>25</sup> Iconomu 1986, 33.

<sup>26</sup> Elefterescu 2016, 168-170.

<sup>27</sup> Baumann 2009, 220, cat. no. 2.

<sup>28</sup> Iconomu 1986, 33.

<sup>29</sup> Opaiț 1980, 342.

<sup>30</sup> Buchi 1975, 19-21.

<sup>31</sup> Elefterescu 2016, 170.

<sup>32</sup> Gostar 1961, 178.

<sup>33</sup> Gostar 1961, 178.

<sup>34</sup> Elefterescu 2016, 170-171.

<sup>35</sup> Loeschcke 1919, 296.

<sup>36</sup> Gostar 1960, 189; Iványi 1935, 33.

<sup>37</sup> Elefterescu 2016, 170.

<sup>38</sup> Roman 2006, 60.

### *FAVOR/FAOR*

Lamps with the stamp of Favorianus are known from *Durostorum-Ostrov*<sup>39</sup> and *Tomis*.<sup>40</sup> His mark is dated between the 2<sup>nd</sup> and 3<sup>rd</sup> centuries AD.<sup>41</sup>

### *FESTI*

The mark of Festus can be found on the lamps discovered at *Durostorum-Ostrov*.<sup>42</sup> It circulated between the second half of the 2<sup>nd</sup> century and the beginning of the 3<sup>rd</sup> century AD.<sup>43</sup>

### *FORTIS*

His stamp is the most common in Dobrudja, as it is in the rest of the empire.<sup>44</sup> Being the most prolific producer of stamped lamps, his workshop was located at Savignano sul Panaro,<sup>45</sup> where a tegula with the inscription L. AEMILIVS/FORTIS<sup>46</sup> was discovered. Fortis is also the manufacturer credited with the invention of the Loeschcke X type.<sup>47</sup> Lamps bearing his name have been discovered at *Arrubium*,<sup>48</sup> Barboși,<sup>49</sup> *Carsium*,<sup>50</sup> *Dinogetia*,<sup>51</sup> *Durostorum-Ostrov*<sup>52</sup> and *Troesmis*.<sup>53</sup> The mark appeared at the end of the first century AD, and copies bearing his stamp have been discovered even in the 4<sup>th</sup> century.<sup>54</sup>

### *IANVARI*

Lamps with the stamp of Ianuarius are found at Barboși,<sup>55</sup> *Durostorum-Ostrov*,<sup>56</sup> *Flaviana*,<sup>57</sup> *Noviodunum*,<sup>58</sup> and at *Tropaeum Traiani*.<sup>59</sup> After the discovery of several variants of the Ianuarius stamp in Dacia, and multiple pieces resembling the manufacture from the same

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<sup>39</sup> Elefterescu 2016, 171.

<sup>40</sup> Iconomu 1986, 35.

<sup>41</sup> Roman 2006, 61-62.

<sup>42</sup> Elefterescu 2016, 171.

<sup>43</sup> Roman 2006, 63.

<sup>44</sup> Iconomu 1986, 36-37.

<sup>45</sup> Loeschcke 1919, 496.

<sup>46</sup> Buchi 1975, 65; Topoleanu 2010, 161.

<sup>47</sup> Topoleanu 2015, 83.

<sup>48</sup> Paraschiv 1997, 324.

<sup>49</sup> Iconomu 1986, 36.

<sup>50</sup> Nicolae 1994, 199-203, cat. nos. 2-3.

<sup>51</sup> Petolescu 1971, 665.

<sup>52</sup> Elefterescu 2016, 173-175.

<sup>53</sup> Topoleanu 2015, 81-83, cat. nos. 37-43.

<sup>54</sup> Čičikova 1974, 158; Topoleanu 2015, 83.

<sup>55</sup> Sanie 1981, 166, cat. no. 35.

<sup>56</sup> Elefterescu 2016, 175-176.

<sup>57</sup> Iconomu 1986, 37-38.

<sup>58</sup> Baumann 2009, 222, cat. no. 4.

<sup>59</sup> Iconomu 1986, 37.

mould<sup>60</sup> it is quite probable that there were workshops producing lamps with his mark in the Dacian provinces<sup>61</sup>. His mark circulated between the 2<sup>nd</sup> and 3<sup>rd</sup> centuries AD.<sup>62</sup>

#### *IEGIDI*

*Firmalampen* signed with the mark of Iegidus have been found at Barboși<sup>63</sup> and *Durostorum-Ostrov*.<sup>64</sup> The circulation of the stamp dates between the 2<sup>nd</sup> and 3<sup>rd</sup> centuries AD<sup>65</sup>.

#### *LVCIVS*

His stamp is found on lamps from *Durostorum-Ostrov*<sup>66</sup> and *Sacidava*.<sup>67</sup> Lucius' mark circulates between the 2<sup>nd</sup> and 3<sup>rd</sup> centuries AD.<sup>68</sup>

#### *LVPATI*

Lamps with Lupatius' stamp are known from, and *Durostorum-Ostrov*,<sup>69</sup> *Noviodunum*<sup>70</sup> and *Sacidava*.<sup>71</sup> These circulated between the early 2<sup>nd</sup> and the 3<sup>rd</sup> centuries AD<sup>72</sup>.

#### *NERI*

The Nerius' lamps are found at *Durostorum-Ostrov*.<sup>73</sup> They were produced by Nerius' workshops and circulated between the beginning of the 2<sup>nd</sup> century and the 3<sup>rd</sup> centuries AD.<sup>74</sup>

#### *OCTAVI*

Lamps with the mark of Octavius have been found at *Arrubium*,<sup>75</sup> Barboși,<sup>76</sup> *Durostorum-Ostrov*,<sup>77</sup> *Noviodunum*,<sup>78</sup> *Tomis*,<sup>79</sup> *Troesmis*.<sup>80</sup> They've circulated between the 1<sup>st</sup> and 2<sup>nd</sup> centuries AD.<sup>81</sup>

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<sup>60</sup> Topoleanu 2010, 166; Alicu 1994, 26.

<sup>61</sup> Bocan, Neagu 2015, 131-132; Gostar 1961, 183.

<sup>62</sup> Baumann 2009, 222.

<sup>63</sup> Sanie 1981, 166, cat. nos. 37-38.

<sup>64</sup> Elefterescu 2016, 176.

<sup>65</sup> Iconomu 1986, 38.

<sup>66</sup> Elefterescu 2016, 176.

<sup>67</sup> Scorpan 1973, 228.

<sup>68</sup> Roman 2006, 65-66.

<sup>69</sup> Elefterescu 2016, 176.

<sup>70</sup> Baumann 2009, 223, cat. no. 6.

<sup>71</sup> Scorpan 1973, 228.

<sup>72</sup> Gostar 1961, 184.

<sup>73</sup> Elefterescu 2016, 176-177.

<sup>74</sup> Gostar 1961, 184-185.

<sup>75</sup> Paraschiv 1997, 324.

<sup>76</sup> Sanie 1981, 166-167, cat. nos. 39-40.

<sup>77</sup> Elefterescu 2016, 177.

<sup>78</sup> Baumann 2009, 223, cat. no. 7.

<sup>79</sup> Iconomu 1986, 39.

<sup>80</sup> Topoleanu 2015, 84, cat. no. 43.

<sup>81</sup> Elefterescu 2016, 177.

*PROCLI*

In Dobrudja, this mark is found at Barboși,<sup>82</sup> *Carsium*<sup>83</sup> and *Durostorum-Ostrov*.<sup>84</sup> The *officina* of Proculus/Proculinus was active in the 2<sup>nd</sup> century AD.<sup>85</sup>

*SEXTI*

His stamp appears on lamps from *Arrubium*<sup>86</sup>, *Durostorum-Ostrov*<sup>87</sup>, *Noviodunum*<sup>88</sup> and Poșta.<sup>89</sup> Lamps with his mark were produced throughout the 2<sup>nd</sup> century AD.<sup>90</sup>

*STROBILI*

Lamps with his mark have been discovered at *Durostorum-Ostrov*,<sup>91</sup> *Flaviana*,<sup>92</sup> *Tomis*<sup>93</sup> and *Troesmis*.<sup>94</sup> Although Strobilus is one of the most popular and widespread producers in Northern Italy, his stamp is rarely found in Dobrudja.<sup>95</sup> It circulated between the 1<sup>st</sup> and 3<sup>rd</sup> centuries AD.<sup>96</sup>

*VETTI*

His mark is attested in Dobrudja by discoveries at *Axiopolis*,<sup>97</sup> Barboși,<sup>98</sup> *Durostorum-Ostrov*<sup>99</sup> and *Tomis*.<sup>100</sup> Lamps signed by Vettius circulated between the 2<sup>nd</sup> and 3<sup>rd</sup> centuries AD.<sup>101</sup>

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<sup>82</sup> Sanie 1981, 167, cat. no. 41.

<sup>83</sup> Nicolae 1994, 199, cat. no. 1.

<sup>84</sup> Elefterescu 2016, 178.

<sup>85</sup> Topoleanu 2010, 172.

<sup>86</sup> Iconomu 1986, 41.

<sup>87</sup> Elefterescu 2016, 179.

<sup>88</sup> Baumann 2009, 225, cat. no. 13a.

<sup>89</sup> Paraschiv, Nuțu 2012, 288, cat. no. 3.

<sup>90</sup> Gostar 1961, 186.

<sup>91</sup> Elefterescu 2016, 179-180.

<sup>92</sup> Iconomu 1967, cat. no. 188.

<sup>93</sup> Iconomu 1967, cat. no. 187.

<sup>94</sup> Topoleanu 2015, 84-85, cat. nos. 44-45.

<sup>95</sup> Iconomu 1986, 41.

<sup>96</sup> Gostar 1961, 186.

<sup>97</sup> Rădulescu 1975, 343.

<sup>98</sup> Sanie 1981, 167, cat. no. 43.

<sup>99</sup> Elefterescu 2016, 180.

<sup>100</sup> Iconomu 1986, 42.

<sup>101</sup> Gostar 1960, 187.

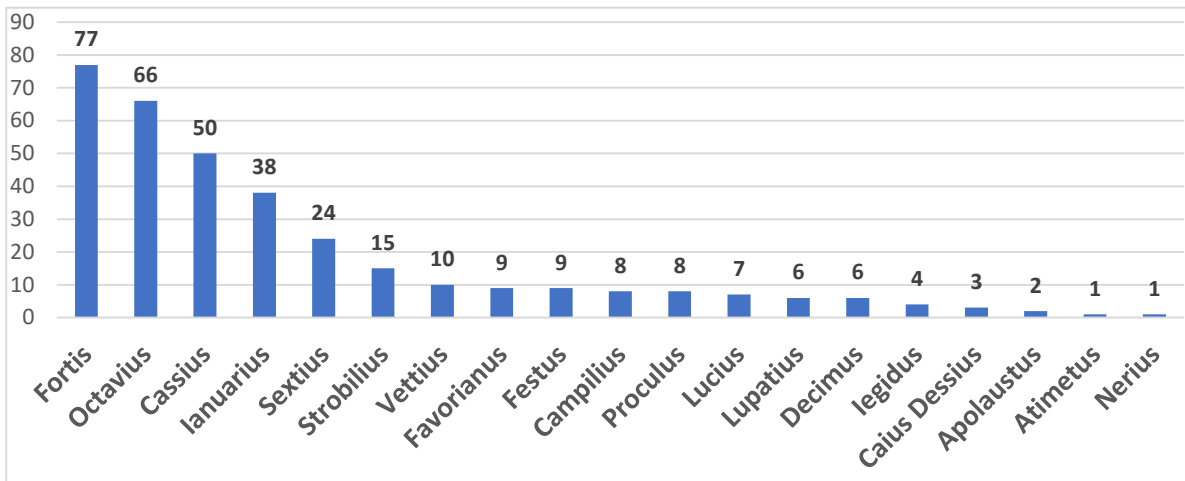


Table 1. The number of stamped lamps of each North-Italic *Firmalampen* producer found in Dobrudja.

### Considerations about the usage and trade of *Firmalampen*

H. Eckardt proposed a model for the contextual interpretation of lamps in Roman Britain as a manifestation of identity,<sup>102</sup> grouping the number of Loeschcke XI type oil lamps according to the spatial character in which they were used, establishing the following contextual categories: military sites, large urban centres, small urban centres and rural sites.<sup>103</sup> The model, as the author mentions, is intended to provide an overview of the cultural context in which they were used, but the attempt to compartmentalize these contexts entails some problems, such as a rigid analysis of a dynamic phenomenon, namely the interconnectedness of these categories. For example, the site of *Durostorum-Ostrov* (Ferma 4) is a civil settlement, but with a strong economic and social relationship to the military domain,<sup>104</sup> so we cannot fully dissociate the above-mentioned contexts from each other.

We will not use Eckardt's model of interpretation in the case of *Scythia Minor*, firstly because of the lack of a clear context for our pieces in question, and secondly, as we've already mentioned, this model has certain limitations in terms of understanding the circulation and usage of lamps. However, we will point out that the vast majority of *Firmalampen* oil lamps come from urban contexts.

<sup>102</sup> Eckardt 2000, 8-21.

<sup>103</sup> Eckardt 2000, 9-10.

<sup>104</sup> Băltăc 2018, 211-222; Elefterescu 2016, 161; Mușețeanu, Elefterescu 2004, 95-142.

Lamps are also a commonly found artefact category in ancient burials, as part of the grave goods. L. Chrzanovski presents in a study the popularity of *Firmalampen* in funerary contexts in the necropolises from south of France and from Slovenia, where they are found in varying proportions (between 45 and even 95%) of all lamps deposited in graves.<sup>105</sup> Compared to the situation in Dobrudja, the discrepancy is obvious. Of the 345 *Firmalampen* batch proposed for analysis, less than 3% come from burial contexts. They come from the graves of *Axiopolis*,<sup>106</sup> *Carsium*,<sup>107</sup> *Noviodunum*,<sup>108</sup> *Pošta*<sup>109</sup> and *Tomis*.<sup>110</sup>

Even if the actual number of *Firmalampen* in the *necropoleis* of Dobrudja must be higher, the difference compared to those in Western burials is still huge. Only the future research and the eventual publication of the results can give us a better picture of the real situation. This high contrast raises questions as to the nature of the reasons why we have such a low percentage of *Firmalampen* in funerary contexts for *Scythia Minor*. Is it possible that the Roman population of modern-day Slovenia perceived this type of lamp as grave goods with intrinsic value, unlike that of Dobrudja? Or perhaps the explanation has economic reasons behind it, namely that imported goods from the West would have cost more to transport, so that their usage was preferred rather than their deposition in graves?

A key element for the study of *Firmalampen* products is transport. Specifically, the way in which the oil lamps are traded over long distances, often in provinces far from the original production centre in Northern Italy. Since the lamps that bear the mark of the above-mentioned manufacturers were found throughout the Empire, determining the routes that made possible such a significant transport, in terms of distance and quantity of the products, it's a major aspect in the general understanding of the activity of this industry and its manifestation.

In many scholarly works, the term 'imports' is often used for products made in a specific area, and then commercialized in other provinces or regions of the Roman Empire.<sup>111</sup> This terminology is used mainly from a compartmentalized approach to the subject at provincial level. Even if this term, 'import', is not necessarily in line with the Roman perspective, as pointed out

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<sup>105</sup> Chrzanovski 2020, 246-247, Table 4.

<sup>106</sup> Rădulescu 1975, 343.

<sup>107</sup> Nicolae 1994, 199, cat. no. 3.

<sup>108</sup> Baumann 2009, 220-223, cat. nos. 2, 4 and 6.

<sup>109</sup> Paraschiv, Nuțu 2012, 286, cat. no. 3.

<sup>110</sup> Iconomu 1967, 62, cat. no. 187.

<sup>111</sup> Baumann 2009, 220; Chrzanovski 2020, 216; Elefterescu 2016, 178; Frecer 2015, 101; Topoleanu 2016, 64.

by W. Harris,<sup>112</sup> we will keep on using the notion of ‘import’ to refer to the lamps that are found in *Moesia Inferior* but are produced in other provinces.

Throughout time various opinions have been expressed about the nature of long-distance transport of lamps in the Empire, and it still remains a topic for future debates. W. Harris argues that such transports would not have been economically feasible for several reasons, including the abundance of resources needed for manufacture, the ease with which they could be made, the cost of transport, etc.<sup>113</sup> In his view, the export of large quantities of *Firmalampen* from Northern Italy to other provinces, especially more remote ones, would not have been profitable, so most lamps would have to be made near where they were discovered. On the other hand, D. Bailey considers Harris' argument to be somewhat flawed in terms of how he approaches the subject, regarding long-distance trade as a frequent phenomenon.<sup>114</sup>

As D. Bailey points out in his critique of W. Harris' study, long-distance transport was made possible by sea and river routes,<sup>115</sup> and as such, the Roman economy benefited from the Empire's waterway network. The maritime trade of pottery goods is clearly attested by wrecks that also carried lamps, such as the one sunk near the Balearic Islands and containing lamps signed by Caius Clodius,<sup>116</sup> or the wreck on the Rhine,<sup>117</sup> which also carried plenty of *Firmalampen*, signed by both Italic and local Gallic manufacturers.<sup>118</sup> From Pliny the Elder we also have a written mention of the maritime transport of ceramic products from the workshops of *Mutina*, saying that they were traded ‘on land and sea’.<sup>119</sup> In the case of Dobrudja, the Danube River is an ideal environment for imports from the West.

The main clientele of *Firmalampen*, especially when it comes to newly conquered territories, appears to be the military camps. A study based on the architecture and functionality of Roman military barracks indicates the use of artificial lighting instruments, as the natural light needed for the soldiers' daily activities would not have penetrated sufficiently into their rooms.<sup>120</sup> In order to procure a large quantity of lamps, there were two main ways of supplying the army:

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<sup>112</sup> Harris 1980, 126-145.

<sup>113</sup> Harris 1980, 133-136.

<sup>114</sup> Bailey 1987, 59-63.

<sup>115</sup> Bailey 1987, 61.

<sup>116</sup> Domergue 1966, 5-40.

<sup>117</sup> Arles-Rhône 3.

<sup>118</sup> Chrzanowski, Djaoui 2018, 55-198.

<sup>119</sup> Pliny the Elder, Book XXV, 161, pg. 379.

<sup>120</sup> Petruț, Gui, Trîncă 2014, 66-88.

imports from the western market, or purchase from close, local manufacturers. At the same time, lamps imported into *Moesia Inferior* were also manufactured in the nearby provinces, mainly from the Dacian and Pannonian provinces, as well as *Moesia Superior*. In fact, the production of *Firmalampen* in the Dacian<sup>121</sup> and Pannonian<sup>122</sup> centres were much more active and well established than in *Moesia Inferior*.

In *Moesia Inferior*, during Early Roman period, were stationed the following legions: *Legio I Italica* (at *Novae*), *Legio V Macedonica* (at *Oescus* and *Troesmis*) and *Legio XI Claudia* (at *Durostorum*).<sup>123</sup> As there was no production to meet the needs in this region at the time of conquest, after the annexation of the territory in the middle of the 1<sup>st</sup> century, pottery from western imports was the majority until the end of the following century.<sup>124</sup> After the consolidation of Roman power in the region, provincial crafting workshops began to function and develop.<sup>125</sup>

A representative example is that of *Durostorum-Ostrov* (Ferma 4) point, which has by far the most specimens recorded in Dobrudja (see Table 2). In Ostrov, Constanța county, the *cannabae* of *Legio XI Claudia* have been identified and researched, a settlement with an intense craft activity, especially in the production of pottery. Among the products made in the workshops at *Durostorum-Ostrov* (Ferma 4) are also *Firmalampen* lamps stamped with the marks of the North-Italic manufacturers. Since the settlement operated in the vicinity of the legion's headquarters, the imitation of the marks by local artisans, who could therefore benefit financially from the presence of legionary troops, would have been an expected process, but the operation of branches should also be considered.

Also, along with the above-mentioned legions, the Roman fleet (*Classis Flavia Moesica*), whose main headquarters was at *Noviodunum*,<sup>126</sup> was active in Lower Moesia. In addition to its military role, the Roman fleet also played an economic role in supervising the trade on the Danube River.<sup>127</sup> Consequently, it is to be expected that the fleet would have played a role in managing imports from the West, especially those aimed at military centres.

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<sup>121</sup> For a detailed overview see Benea 2008, 301-340.

<sup>122</sup> For a detailed overview see Iványi 1935.

<sup>123</sup> For a detailed overview on the Roman army in Moesia Inferior see Matei-Popescu 2010, 35-163.

<sup>124</sup> Duch 2017, 189-195.

<sup>125</sup> For a detailed overview on the pottery workshops from *Moesia Inferior* see Nuțu 2019, 107-219.

<sup>126</sup> Bounegru, Zahariade 1996, 86-87; Matei 1991, 155; Matei-Popescu 2010, 245-257.

<sup>127</sup> Matei 1991, 146.



Table 2. *Firmalampen* discovered in Roman Dobruđja.

<b>Places of <i>Firmalampen</i> discoveries</b>	<b>Number of pieces</b>
<i>Durostorum</i> -Ostrov (Ferma 4)	294 pieces (85.22%)
Barboși	12 pieces (3.48%)
<i>Noviodunum</i>	8 pieces (2.32%)
<i>Troesmis</i>	7 pieces (2.02%)
<i>Tomis</i>	5 pieces (1.44%)
<i>Arrubium</i>	4 pieces (1.16%)
<i>Carsium</i>	4 pieces (1.16%)
<i>Dinogetia</i>	3 pieces (0.87%)
<i>Sacidava</i>	3 pieces (0.87%)
<i>Flaviana</i>	2 pieces (0.57%)
<i>Axiopolis</i>	1 piece (0.28%)
Poșta	1 piece (0.28%)
<i>Tropaeum Traiani</i>	1 piece (0.28%)

The fact that the vast majority of *Firmalampen* finds come from urban centers along or near the Danube River (Fig. 1) is another indicator of the likelihood of river transport. It is plausible to believe that, if not all of them, at least some of them also benefited from port facilities that would have facilitated the large transports of goods.<sup>128</sup> The wreck on the Rhine mentioned above is a significant example for the development of river trade, representing a small glimpse into the ancient trading routes. Chrzanovski is of the opinion that the imports of the lamps could have been concentrated in certain points and then redistributed in the area.<sup>129</sup> In this case, by having the headquarters of the fleet at *Noviodunum*, that was also a large commercial point, the transport and the eventual distribution to other centres could have been a possible scenario, considering the network of roads that connected the important urban settlements.

<sup>128</sup> Munteanu 2012, 213-218.

<sup>129</sup> Chrzanovski 2020, 242-246.

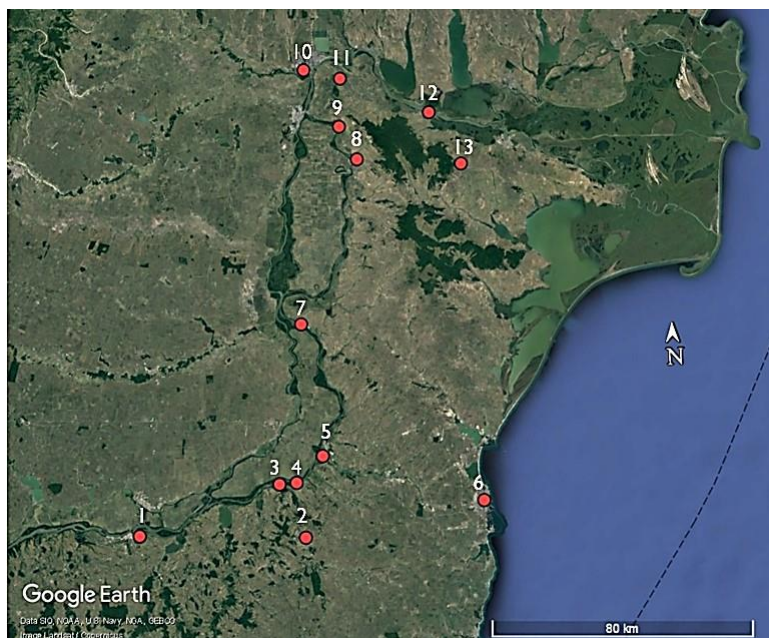


Fig. 1. Map with the approximate placement of *Firmalampen* discoveries in Dobruđja:

1- *Durostorum-Ostrov* (Ferma 4), 2- *Tropaeum Traiani*, 3- *Sacidava*, 4- *Flaviana*, 5- *Axiopolis*, 6- *Tomis*, 7- *Carsium*, 8- *Troesmis*, 9- *Arrubium*, 10- *Barboși castrum*, 11- *Dinogetia*, 12- *Noviodunum*, 13- *Poșta*

(Google Earth capture processed by the author).

Even under these favourable conditions, the number of *Firmalampen* in this area is still smaller than we would expect, especially compared to the other provinces. The lack of *Firmalampen* outside the Danube River line raises some question, mainly regarding the situation on the western shore of the Black Sea, in the Pontic cities. *Tomis* is the only city where *Firmalampen* have been published, at least now. Of course, the state of the research is, just as in the whole region, the main factor for our current knowledge. However, we cannot say the same for local producers, who seem to have a lot more success in this particular area.

Euctemon, a local lamp artisan, is the best example, being the most prolific local manufacturer. Having his *officina* at *Tomis*,<sup>130</sup> his lamps are spread all around Dobruđja, and he, as opposed to his western counterparts, enjoyed a lot of popularity amongst the western shore of the Black Sea<sup>131</sup>. Euctemon is believed to have had some branches in *Moesia Inferior*, which can help us better understand the diffusion of the specimens, which could take place, at some extent, thanks to the agents of the branches.

The activity of the agents (*institores*) is also an important factor in the spread of *Firmalampen* in the provinces, as well as in the time frame of the circulation of stamped lamps. The term *institor* itself seems to have had two meanings at the time, it could be a person charged

<sup>130</sup> Iconomu 2013, 91.

<sup>131</sup> For Euctemon's activity see Croitoru, Diaconu 2019, 57-63; Iconomu 1986, 34; Rusu-Bolindeț 2010, 402-408.

with the management of a business or land by an owner, especially his son or a freed slave, the other meaning being that of a peddler.<sup>132</sup> The management and functionality of the branches has also been regulated by laws, such as *actio institoria* and *actio exercitoria*.<sup>133</sup>

Determining the exact provenance of a lamp can be problematic for several reasons. Even if there are a number of criteria used to differentiate between imported and local products,<sup>134</sup> they are still likely to lead to erroneous conclusions. For example, one of the most widely used criteria for determining the western origin of *Firmalampen* lamps is the fabric quality, but C. Ionomu also points out that not all local products are of inferior quality, and not all original western products are of the best quality possible.<sup>135</sup> Thanks to modern technological advancements, new methods of differentiating between imported and local products are available, compositional analyses of the fabric can provide precise information, such as wavelength-dispersive X-ray fluorescence (WD-XRF) analyses.<sup>136</sup> However, in the absence of these types of analysis, the designation of a production centre can be somewhat problematic.

A possible landmark in this regard is the presence of possible indicators alongside the stamps of the original manufacturers. A good example is Fortis' mark which, being the most circulated both chronologically and spatially, it is logical to assume that both the originals and the imitations would have contributed to this statistic, as well as it being the stamp with the most variations out there. The way of spelling of Fortis' mark has several forms, and sometimes it is accompanied by particular letters.<sup>137</sup> The different letters associated with the manufacturer's mark can be interpreted as an initial of an *officina* location, as it is the case with *Mutina*, or could they represent the initial of an *institor*? Also, based on some stamped specimens there are some other distinct signs, such as bullseyes or other symbols (Fig. 2). The role of these letters and symbols can be interpreted in different ways, however the addition of such symbols suggests, in our opinion, a certain degree of individuality and associating them with the workshops of the provincial branches is a plausible hypothesis.

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<sup>132</sup> Brewster 1917, 22-23.

<sup>133</sup> Aubert 1994, 52-64.

<sup>134</sup> Ionomu 2013, 89-90.

<sup>135</sup> Ionomu 2013, 89.

<sup>136</sup> For a detailed overview on determination of the origin of lamps based on clay analysis see Schneider, Daszkiewicz 2011, 261-278.

<sup>137</sup> Bocan, Neagu 2015, 129; Buchi 1975, 65; Topoleanu 2010, 161.

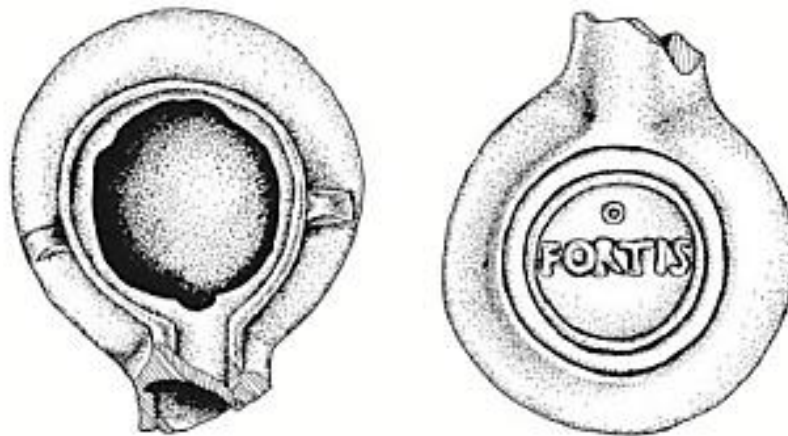


Fig. 2. *Firmalampen* from *Troesmis*, with a bullseye on top of Fortis' stamp  
(after Topoleanu 2016, 110, Pl. VI, no. 39).

The role that imitations have played in the propagation of stamps should not be overlooked. Even if it is a process that the original manufacturers probably would not have liked, imitations have made it possible for marks to circulate significantly more broadly. The phenomenon of imitations would not have been as widespread -if there were no economic, or at least social, motivation behind it. Thus, depending on the type and number of imitated marks in each area, we can only assume about products that would have been of economic interest in that specific place.

An example worth mentioning in our discussion is a lamp of Loeschcke VIII type<sup>138</sup> from Barboși, with the ATIMETI mark on the base and with two theatre masks on the discus, under which it can be seen the name COST (Fig. 3). S. Sanie is of the opinion that the lamp in question is made by a local craftsman, who used a mould with the mark of Atimetus, to which he added his name on the discus, suggesting an imitation.<sup>139</sup> I think that besides this explanation, we shouldn't completely rule out the possibility that the name COST (Costans, Costinus, Costans?<sup>140</sup>) is that of an *institor* who signed the copy with his own name, or perhaps we are dealing here with a custom product for a specific person, a special order? It is unlikely to come up with a definitive answer to this question, but by addressing different interpretation for this particular case we can open an interesting discussion about the characteristics of both imitation and „official,, branches.

<sup>138</sup> Even if the consensus is that the term *Firmalampen* is used for Loeschcke IX and X types, however this example of stamped lamp is relevant for the subject, and we've consider grouping it with the rest of the pieces.

<sup>139</sup> Sanie 1981, 165.

<sup>140</sup> Names suggested by D. Tudor, in Tudor 1953, 480, who also believes that this piece is an imitation.

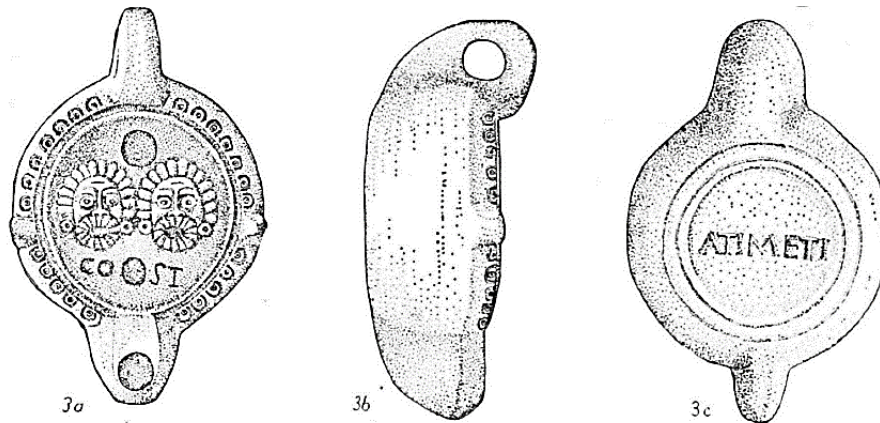


Fig. 3. Lamp from the Barboși castrum (after Sanie 1981, Pl. 45).

## Conclusions

The subject of *Firmalampen* continues to be an interesting chapter full of valuable information about various cultural and economic aspects of the Roman Empire. Certain details of their circulation and use are still unknown. For example, L. Chrzanovski develops the idea that these types of lamps, despite the numerous examples discovered and their fame in the literature, would not have been as popular as one might think, due to an apparent lack of use traces.<sup>141</sup> However, based on the analysis carried out in this study, we can make some considerations regarding their popularity.

Firstly, the wide chronological range over which the *Firmalampen* lamps are spread would be difficult to explain were it not for a certain degree of popularity, mainly due to their usefulness, all the more so as a considerable number of stamps are interpreted as imitations, which shows that the original product must have had some popularity amongst the military units and the civilian population.

Secondly, even if the lot of published *Firmalampen* is not as consistent as in other provinces of the Empire, the diversity of the marks in the centers mentioned above, as well as the above argument about their long circulation in the region (between the 1<sup>st</sup> and 4<sup>th</sup> centuries AD) are conclusive reasons to consider that *Firmalampen* were indeed popular.

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<sup>141</sup> Chrzanovski 2020, 221.

Lastly, as he also correctly points out, there lies large amounts of unpublished specimens, that can massively improve our current understanding.<sup>142</sup> Nevertheless, the same situation is happening in our case, that of Dobrudja. As for the gradual decline of this imperial industry, we must put in a historical context: the 2<sup>nd</sup> century AD, arguably the height of the *Firmalampen* production in terms of variety and quantity, it takes place in favorable conditions, a mainly prosperous time frame, especially the first half of century. As for the 4<sup>th</sup> century, the last chronological time frame in which the *Firmalampen* are present in the archaeological record, as it stands now, it is associated with political and military turmoil that could very likely affect the production and commercialization of these types of lamps, just as the crisis of the 3<sup>rd</sup> century almost definitely made some form of an impact in this regard.

Another interesting fact about the diffusion of *Firmalampen* in Dobrudja is the lack of specimens from the West Pontic coast, more precisely from the cities of *Histria*, *Tomis* and *Callatis*. In quite a high contrast compared to their Italic counterparts, the local producers seem to have had a lot more success in this area, especially in the case of Euctemon. The popularity of the lamps with the mark of Euctemon over those with the mark of the North-Italic producers may be due to a combination of factors, probably resulting from a favouring of local production and trade over western imports. Thus, drawing a parallel with the workings of the modern economy, we would not be far off the mark if we were to compare Euctemon's success with a certain degree of monopoly, at least in comparison with the North-Italic workshops.

Using an intuitive approach, we believe that the reasons for the popularity of this type of lamps should be sought in relation to the stamp, the defining feature of the *Firmalampen*. As the decoration is not as elaborate and spectacular as in other types, suffering limitations due to the morphology of the lamps, the extensive diffusion of lamps as a result of stylistic value is unlikely. The utilitarian feature, the channel with a hole for oxygen circulation, through which the wick could emit a larger flame, may have been a favourable factor in this respect. Also, by assigning a mark, the value of an object is expected to increase. This relationship between the object and the stamp would be recognized by manufacturers, traders, customers, and users. The large number of different marks, as well as the countless imitations, can be explained by a market with an increased demand.

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<sup>142</sup> Chrzanowski 2020, 250.

Even if the *Firmalampen* are not particularly known for their decoration, the decorative motifs and scenes on the lamps are a good means of identifying certain cultural, religious, or ideological particularities. Thus, by correlating the iconographic repertoire and the types of stamps with the producer's mark found on the decorated lamps, the results obtained may indicate a possible correlation.

There remain many questions about North-Italic imports and provincial production of *Firmalampen* that we hope future research will answer. One question that we think is worth asking is why some stamps, otherwise very popular in the West, are in short supply in Lower Moesia, as is the case with Strobilus. Could it be the preference of troops stationed in the area? Or the lack of branches in the area? Only the discovery and the publishing of new specimens, along with crafting indicators such as kilns and moulds may shed some light on the subject.

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# **Working animal's welfare in antiquity. An interdisciplinary comparison of ancient horse breeding and training methods, as well as historical equipment, with modern horse welfare research results**

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**Abstract:** Working animals, the method of their breeding, preparation for work and equipment related to their use, are inextricably linked with production and trade around the world from prehistoric times to the present day. Typically, archaeological research focus on analysing the effects of human-animal cooperation, not the breeding and training process itself. The article presents an interdisciplinary approach to the subject, combining the analysis of ancient texts, obtained through excavations, elements of the horse tack, as well as the effects of the work of reenactors with the approach to animals presented by modern animal psychologists and trainers and their research on the welfare of working horses. The first part focuses on the comparison of ancient texts with current guidelines regarding the handling of farm animals and the principles of natural training methods. The second part of the is devoted to the comparison of the construction of Scythian, Roman and Medieval saddles with modern saddles, as well as the results of a meta-analysis of research on the pressure exerted on the horse's back by various types of saddles. The presented analysis was performed using the ANOVA method. The indicators used in it were the pressure force of the saddle on the back, measured in kPa, by the mat system Novel GmbH, Novel Electronic and Pliance-X System, as well as the presence of sweat stains on the back under the saddle. The obtained values were compared with known pain scales in order to identify the saddle exerting the least harmful pressure on the horse's back.

**Keywords:** horses, saddle, animals, welfare, antiquity.

## **Introduction**

Working animals, defined as an animal which is kept mainly to do work, such as a draft animal or a service animal, not mainly as a pet nor for its animal products. Their use has played a major role in both human life and the development of civilization. Numerous archaeological studies prove on what a wide scale, our ancestors used working animals, especially horses. They were not only a valuable commodity in antiquity, but were also used as draft animals, war animals and a means of transport.<sup>1</sup> However, before a horse could pull a cart or chariot, it had to be properly trained. Today, based on the work of many trainers, veterinarians, biologists, zoologists, animal psychologists, the knowledge of those involved in preparing horses for work

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<sup>1</sup> Overgaauw, P. A., Vinke, C. M., van Hagen, M. A., & Lipman, L. J. 2020, 17 (11).

is expanding, and the conditions in which these animals work are trying to meet their species needs more and more. Much is being said about providing horses with psychological comfort, and legal conditions are also being created to protect them from excessive exploitation by humans. While the equestrian community often discusses how horsemanship has changed over the past 30 years, the roots of horsemanship are rarely discussed.<sup>2</sup> As part of this work, I would like to present historical and archaeological evidence of a highly advanced knowledge of the needs of horses during the Bronze and Iron Ages. I would also like to present contemporary research results on the effects of saddles on the horse's spine and analyse them in the context of ancient and medieval saddles.

In order to better understand what ancient horse trainers wrote about, it is useful to familiarize yourself with the latest concepts used in animal psychology. Animal welfare is actually a state of physical and mental health achieved by an animal in complete harmony with its environment. A proper breeding system that ensures welfare allows the animal to meet its basic needs.<sup>3</sup> In addition to various laws and conventions that protect animal welfare, one of the most important welfare concepts is the list of five freedoms.<sup>4</sup> This document, although it does not have the force of law, perfectly explains what a person should pay attention to in his relationship with an animal.

The five freedoms speak of freedom from hunger and thirst, freedom from discomfort, freedom from pain, injury or disease, freedom to express natural behaviours and freedom from fear and distress. These freedoms were to be ensured by adequately feeding the animals, allowing them to be in their natural habitat, resting evenly with their work, providing medical care, keeping the animals in the company of individuals of the same species and adjusting activities, at the advent of the train. The document was published in 1979, and was seen as a major breakthrough in the way animals were treated. Historically, the freedoms listed in it have appeared many times in the works of ancient authors.

### **The history of approaches to horse training over the centuries**

The first example of such a text is found on four clay tablets dating from the 15<sup>th</sup> - 14<sup>th</sup> century BC, wrote by *Kikkuli of Mitanni*. The author describes a 214-day horse training plan for pulling war chariots. *Kikkuli* begins his work by calling himself ‘*master of horse training of the land of Mitanni*’, land where the horse was domesticated around 3.5 thousand years BC.

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<sup>2</sup> Milewska 2021.

<sup>3</sup> Hughes 1976, 4-11; Manteca, Mainau, Temple 2012.

<sup>4</sup> <https://www.animalhumanesociety.org/health/five-freedoms-animals>

Advice found on the boards included tips such as putting a separate emphasis on working on muscle strength and a separate emphasis on working on condition.<sup>5</sup> Modern physiological science tells us that in the case of horses, these two things are trained completely differently and developing them in the same way reduces the effectiveness of training. The boards contain also instructions on the intensity of training, nutrition, training times, as well as caring for the hygiene of horses. *Kikkuli* follows three rules: taking care of the horse's psyche, pre-selection, gradually improving skills and endurance. Today we call that kind of training an aerobic training, and the whole approach presented by the author is part of modern horse training recommendations. *Kikkuli* recommended training young horses in a group and adjusting the pace of training to the individual's needs. He used interval training, gradually increasing the difficulty level of tasks, waiting until the horse was mentally and physically ready for the next stages. He attached great importance to nutrition and food portioning depending on the exercises performed on a given day, he emphasized the role of warm-up and described in detail the distances that horses should cover at subsequent stages of training. This approach is consistent with the so-called positive horsemanship, which assumes an individual approach to the individual, rewarding positive behaviour and not punishing negative behaviour or lack of progress. *Kikkuli's* instructions were so detailed that in the 20th century, it was decided to train Arabian horses according to them for 7 months. The experiment was conducted by Dr. Ann Nyland from the University of New England in Australia. According to the book she published describing the course of the experiment, the horses achieved results that are usually impossible to achieve without the use of doping substances.<sup>6</sup>

Other examples of ancient texts talking about horse training are the works of *Xenophon* of Athens. He was a 5<sup>th</sup> century Greek military leader, philosopher, and historian. He is the author of numerous texts, but for that discussion the most important of them are *Peri hippikes* and *Hippiarchikós*. According to *Xenophon*, a horse should be a friend of man, not a slave, and the trainer should devote as much time to it as to his own child. It is important to pay separate attention to mental and physical readiness to perform subsequent exercises. A horse should feel respect for a man, but it cannot result from fear, but from trust. Commands should be clear and correct behaviour should be rewarded.<sup>7</sup> We do not punish for mistakes. Everyday activities should also be part of your training. *Xenophon* notes that some dressage figures resemble the sexual behaviour of horses and suggests practicing them as part of the animals' natural needs.

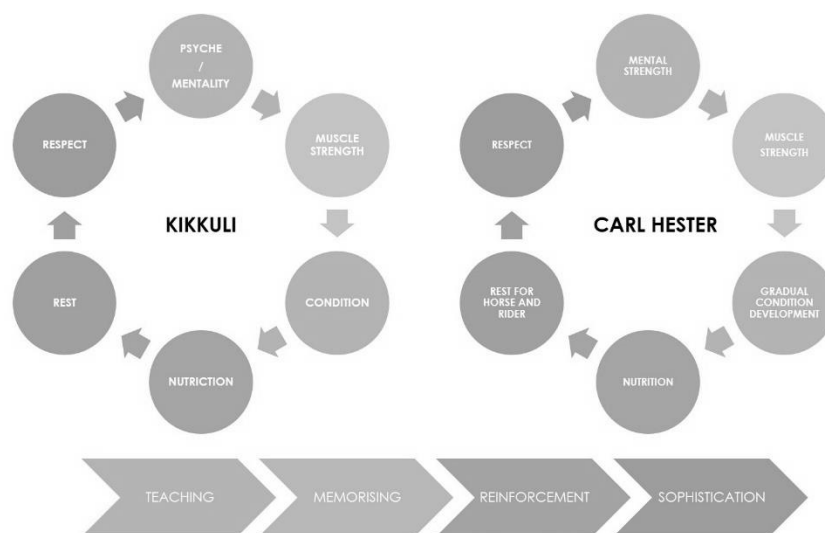
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<sup>5</sup> E.g. Nyland 2009.

<sup>6</sup> E.g. Nyland 2009.

<sup>7</sup> Głombiowski 1993.

According to the author, work should be a pleasure for the animal, and the trainer and the rider should work not only on the animal but also on themselves, on their own behaviour and character.<sup>8</sup> To summarize the ancient knowledge, horse training should emphasize the psyche, muscle strength, condition of the horse, and proper nutrition. Owner should allow horse to get rest and respect their needs. It's important to perpetuate, strengthen and improve each new behaviour. If we compare the theses propounded by ancient authors, with modern manuals of equestrian training, we can come to a surprising conclusion. Authors considered modern pioneers are repeating words written thousands of years ago. This is best illustrated by a chart showing the intrinsic elements of horse training according to Carl Hester, a 21<sup>st</sup> century horse trainer, juxtaposed with the elements whose importance was emphasized by *Kikkuli*.<sup>9</sup>



*Illustration 1: Comparison of the most important elements of horse training according to authors from different eras*

Why authors such as Carl Hester are now pioneers in their work if all of those techniques were used in ancient times? With the expansion of Rome, the Greek, almost philosophical approach to equestrianism was lost in favour of faster methods of working with the horse, which allowed to prepare the cavalry in a much shorter time. This was mainly due to the quality of the training effects, especially in terms of the approach to animals. This can be seen in the equipment, both Roman and medieval. This is particularly visible in the Renaissance approach of the equestrian fathers, who, although referring to ancient creators, used brutal training

<sup>8</sup> E.g. Widdra 2007.

<sup>9</sup> <https://www.horseandrideruk.com/expert-advice/articles/train-carl-hester-dressage-made-simple/>

methods, deliberately inflicted pain on horses to achieve better results, did not pay attention to the needs of animals and focused on the comfort of the rider.<sup>10</sup>

This is particularly visible in the Renaissance approach of the equestrian fathers, who, although referring to ancient creators, used brutal training methods, deliberately inflicted pain on horses to achieve better results, did not pay attention to the needs of animals and focused on the comfort of the rider. Fathers of equestrianism, who, although referring to ancient creators, used brutal training methods, including violence to achieve better results. For example, Frederico Grisone, author of *'Equestrian Rules'*, who developed sharp curbs, cruel and hurtful, talks in his work about a light bit, but at the same time he believes that in the event of resistance, the horse must be subordinated. He is also an author of two horrified advices for trainers: *'Put a lighted straw under the tail of a reluctant horse'* and *'To make a horse move, put a man with an angry cat, who, tied to a pole, will scratch his belly'*. Another renaissance author, Francois Robichon de Guerinière, believed that the aim of training a horse is to make it calm, efficient, obedient and comfortable for the rider.<sup>11</sup> Theses propounded from the Middle Ages, until the late 1920s, began to be replaced by a modern approach to animals, with the emergence of more acts protecting animal rights around the world. One of the earliest such documents was the Cruelty to Animals Act signed in 1876.<sup>12</sup> For centuries, the way we look at the welfare of animals has directly influenced the equipment created for them.

### **Evolution of saddle construction**

The basic element of equestrian art is saddles, the design and even function of which have changed over the centuries. Starting with the Greeks, who rode bareback or on what today we would call a rug,<sup>13</sup> through Scythian saddles without trees, consisting of two pads, then Scythian saddles with trees.<sup>14</sup> Next stage in saddle's development was Roman saddle, prepared for long distance travels with luggage and Huno-Sarmatian saddles, developed especially for a comfortable travel and battlefield. That type of saddles was created according to needs of a horse and warrior. Then the saddles became heavier and constructed more to the needs of a man, and prestigious image, as in the Middle Ages. This trend continued in the Renaissance

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<sup>10</sup> Jawna-Zbońska 2020, A series of lectures.

<sup>11</sup> Jawna-Zbońska 2020, A series of lectures.

<sup>12</sup> David Favre & Vivien Tsang 1993.

<sup>13</sup> <https://www.comitatus.net/greekcavalry.html>

<sup>14</sup> <https://exarc.net/issue-2021-1/ea/reconstruction-roman-cavalry-saddle> ; Mylnikov, Tishkin 2016, 47-55.

until the appearance of Ottoman saddles in Europe, whose aerodynamic shape influenced what modern saddles look like today.<sup>15</sup>

The heart of the saddle is what is under the outer pads, where the saddle directly attaches to the horse's back. This part is responsible for how the saddle sits on the horse, distributes the rider's weight and is responsible for the proper operation of the horse's entire musculoskeletal system. In many saddles, the tree plays a major role in this construction. The saddle tree is a frame that allows you to distribute the weight of the rider on the surface of the horse's back. It is located between the layer of leather that is in contact with the horse's back and the rider's seat.<sup>16</sup> Tree first time appeared in Scythian saddles. We do not know exactly when the Scythians introduced the tree. Archaeologists rarely come across well-preserved saddles that would allow the introduction of a tree in these areas to be placed in time. One of the best known examples of a Scythian saddle, is a saddle from the Yaloma II cemetery, on the basis of which a reconstruction was made of a saddle used between the 1st century BC and the 3rd century AD.<sup>17</sup> Scythian saddles at the beginning did not have a tree, gradually they were a better and better hardened piece of leather attached to the back. Gradually, however, they took on an increasingly aerodynamic shape, providing riders with high mobility while maintaining a good seat. The complete opposite of Scythian saddles, especially in terms of rider mobility, were Roman saddles. The Roman tree, on the other hand, is much more like a prototype of medieval tree, characterized by a very wide contact surface with the horse's back. Romans used much wider trees, and their saddles resembled more armchairs for covering long distances in the saddle than aerodynamic pads for the rider. Important for the Romans were massive bows that allowed them to hang luggage, which further destabilized the horse.<sup>18</sup> This trend developed later in the Middle Ages, until much lighter and more aerodynamic Ottoman saddles reached Europe, which were much closer to Huno-Sarmatian saddles, than European type saddles. The evolution of the shape of tree can be seen in the graph below.<sup>19</sup>

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<sup>15</sup> Piotrovsky, B. 1973; Simpson, & Pankova, 2021.

<sup>16</sup> <http://www.luczniactwokonne.pl/zurawiejki/kawaleryjskie/regul/instab/t1.html> 10.04.2023.

<sup>17</sup> Mylnikov, Tishkin. 2016, 47-55.

<sup>18</sup> Watson, Moria 2022.

<sup>19</sup> Mylnikov, Tishkin. 2016, 47-55 ; Piotrovsky, B. 1973 ; Simpson, Pankova 2021 ; Stepanova 2016; Dmitrievna, Tkačenko 2010; Watson, Moria 2022.



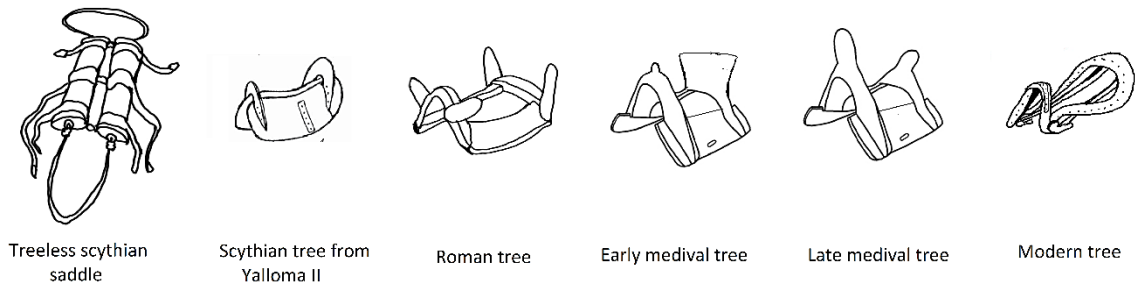


Illustration 2: The evolution of tree; authors: Hanna Milewska after Dario Wielec; Alexey Tishkin; Petter Connolly; and Irina Dmitrievna Tkačenko

It is impossible to analyse saddle construction without understanding the physiology of the horse. It is the specific structure of the horse's back, combined with the proper saddle design, that ensures the comfort of the rider and the proper work of the horse under saddle. Today, saddle fitters deal with the selection and fitting of the saddle. A well-fitting saddle should be between the shoulder blade and the last costal vertebra. This part of the horse's spine is best supported and best able to withstand pressure from above. If the saddle is too long, the girth is not properly fastened, or the whole thing shifts to one side, the horse's skeleton is not adapted to supporting it. The saddle moved forward rubs against the shoulder blade, which contributes to the horse's incorrect posture, discomfort and injury. Muscles also play an important role. It is on them, and not directly on the bones, that the weight of the saddle and the rider should rest. In the case of the horse, it is *latissimus doris* and *lumbo dorsal fasica*. The other muscles are involved in the movement of the horse and cannot be compressed while riding.<sup>20</sup> From the perspective of modern knowledge, tests conducted on both living and dead specimens, knowledge of x-ray and years of work by vets and physiologists, no one is surprised that 21<sup>st</sup> century saddles meet the physiological needs of horses. for archaeologists and historians, it may be surprising how many of these needs were also met by ancient saddles. Only Roman and medieval saddles, clearly impeded the natural movement of the horse. many times they rested on the shoulder, limiting its movement and with their weight caused pressure on the delicate muscles of the horse. Their front pad is constructed in such a way that there is no way that it would not overlap the horse's shoulder and cause discomfort. The space between the horse's pommel and spine is very important. The back must be able to work under the saddle and change its appearance as shown in the picture.<sup>21</sup>

<sup>20</sup> E.g. Kaleta 2017; Łojek and Łojek 2015; Milewska 2021.

<sup>21</sup> Watson, Moria 2022.

### **Which type of saddle is healthiest for the horse?**

However, is it possible to check how these saddles affected the welfare of horses? We know from *Kikkuli* that if something hurts a horse, the animal is stressed, and a stressed animal cannot be effectively trained.<sup>22</sup> It was the need to maximize the effects of training that pushed animal psychologists and veterinarians to study the pressure that the saddle exerts on the horse's back. In my diploma thesis on animal psychology, I conducted a meta-analysis of the research conducted so far to answer the question of which saddle is the most comfortable for horses. For this purpose, I compared the results of 11 studies and looked for differences between the treeless saddle, the tree saddle and the tree saddle with wider pads. These saddles have their counterparts in history, successively Scythian, Huno-Sarmatian and medieval saddles. Saddles with wide pads may also correspond to some Roman saddles, but their properties are definitely better illustrated by medieval saddles that adhere to the horse's back with a much larger surface.

For horses, the sensation of pain can be checked in a number of different ways. First, it is natural for a horse to sweat under a saddle, but, with a well-fitting saddle, sweat patches appear symmetrically, all over the back. Studies also show that horses with back pain exhibit an abnormal pattern of back movement that, when properly analysed, can pinpoint the source of the pain.<sup>23</sup> In 1999, Chang and Seigreg, studying the cause of gastric ulcers in humans, discovered that in a healthy individual, the average pressure in the capillaries of the skin is about 3.33 kPa. When the external pressure exceeds 4.26 kPa, the blood vessels become clogged. If this condition persists for a long time, tissues are deprived of essential nutrients. This effect is reversible, but it takes time before the tissues regenerate. If, on the other hand, the pressure persists for a period of 2 to 7 hours' pressure sores form. Although these studies focused on humans, later researchers, inspired by them, began to look for the pressure that causes pain in horses. Thus, in a series of studies, three pain scales were developed: Warner (2002), Nyikos (2005), and the overlapping scales of Byström and von Peinen (2010). It was these scales that served as the benchmark, when comparing the force of pressure of saddles on the horse's back. It was these scales that served as a benchmark, when comparing the force of the saddles' pressure on the horse's back. The limits set by the researchers were considered the pain threshold, i.e. the amount of pressure on the horse's back that unquestionably causes the horse to experience pain.<sup>24</sup>

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<sup>22</sup> Strzałkowska etc. 2014; Amin, Osma Shukiri Muhamed 2023.

<sup>23</sup> Wennerstrand et al., 2004.

<sup>24</sup> Milewska 2021.

Of the 11 studies reviewed, six were selected that contained figures relating to the pressure exerted by the saddle on the horse's back given in kilopascals (kPa). Pressure measurements were made using specialized pressure-sensing mats that acted as a chevron. Each result was then compared with the corresponding pain scale. The method of comparing the values was based on a zero-one system, since pain sensation, especially pain sensation analysed from the point of view of animal welfare, cannot be defined as less or more. If the cut-off value for a given scale was exceeded, this was a clear indication that the horse in a given situation was experiencing pain and thus increased suffering and decreased welfare. In the studies I analysed, a total of 69 horses were measured and 308 measurements were analysed. All studies are presented in the table below.

NUMBER	ARTICLE TITLE	AUTHORS	PUBLICATION DATE
1	Assessment of Saddle Fit in Racehorses Using Infrared Thermography	M. Soroko, P. Cwynar, K. Howell, K. Yarnell, K. Dudek i D. Zaborsk	2018
2	Comparison of pressure distribution under a conventional saddle and a treeless saddle at sitting trot	B. Belock, L.J. Kaiser, M. Lavagnino, H.M. Clayton	2011
3	Druckmessungen unter dem Sattel: Eine Studie mit einem elektronischen Sattel-Messsystem (Novel GmbH)	D. Werner, S. Nyikos, A. Kalpen, M. Geuder, C. Haas, H. D. Vontobel, J. A. Auer i B. von Rechenberg	2002
4	Effects of Large Saddle Panels on the Biomechanics of the Equine Back During Rising Trot: Preliminary Results	P. Martin, L. Cheze, P. Pourcelot, L. Desquilbet, L. Duray i H. Chateau	2016
5	Evaluation of pressure distribution under an English saddle at walk, trot and canter	B. Fruehwirth, C. Peham, M. Scheidl i H. Schobesberger	2004
6	Evaluation of the force acting on the back of the horse with an English saddle and a side saddle at walk, trot and canter	B. Winkelmayr, C. Peham, B. Fruhwirth, T. Licka i M. Scheidl	2006
7	Force and pressure distribution beneath a conventional dressage saddle and a treeless dressage saddle with panels	H. M. Clayton, K.A. O'Connor i L. J. Kaiser	2013
8	Relationship between saddle pressure measurements and clinical signs of saddle soreness at the withers	K. von Peinen, T. Wiestner, B. von Rechenberg i M. A. Weishaupt	2010
9	Saddle pressure measuring: Validity, reliability and power to discriminate between different saddle-fits	P. de Cocq, P.R. van Weeren i W. Back	2006
10	Saddle pressure patterns of three different training saddles (normal tree, flexible tree, treeless) in Thoroughbred racehorses at trot and gallop	S. N. Latif, K. von Peinen, T. Wiestner, C. Bitschnau, B. Renk i M. A. Weishaupt	2010
11	The Effect of Tree Width on Thoracolumbar and Limb Kinematics, Saddle Pressure Distribution, and Thoracolumbar Dimensions in Sports Horses in Trot and Canter	R. MacKechnie-Guire, E. MacKechnie-Guire, V. Fairfax, D. Fisher, M. Fisher i T. Pfau	2019

*Table 1: Research analysed as part of a thesis at the Department of Psychology at the University of Warsaw titled: The effect of the type of saddle on the occurrence of back pain and lowering the wellbeing of horses. Analysis of the results of research on the pressure exerted by the saddle on the horse's back*

For the pain scale of Byström et al, 2010 and von Peinen et al, 2010 (threshold value of average pressure under the entire saddle > 11kPa), out of 32 measurements, the pain threshold

was exceeded in 12 cases, which is 37.5% of the studied cases. Exceeding the threshold value for this scale is associated with the risk of ischemic damage below the saddle.

For the pain scale of Werner et al. 2002 (threshold value of average pressure under the whole saddle  $> 15$  kPa; threshold value of average maximum pressure under the whole saddle  $> 34.5$  kPa), out of 32 measurements of average pressure value, the pain threshold was exceeded in 12 cases (37.5%), and out of 19 measurements of average maximum pressure, the pain threshold was exceeded in 9 cases (47.37%). Exceeding the threshold value for this scale is associated with causing back pain across the horse's back.

For the Nyikos et al, 2005 pain scale, the pressure in the front, middle and back of the saddle was checked. In the front part of the saddle (threshold value of average pressure  $> 13.2$  kPa; threshold value of average maximum pressure  $> 34.5$  kPa), out of 12 measurements of the average pressure value, the pain threshold was not exceeded even once. Out of 9 measurements of mean maximum pressure, the pain threshold was exceeded in 4 cases (44.44%). In the middle saddle (threshold value of average pressure  $> 11.4$  kPa; threshold value of average maximum pressure  $> 30.3$  kPa), out of 13 measurements of average pressure value, the pain threshold was not exceeded even once. Out of 9 measurements of average maximum pressure, the pain threshold was exceeded in 2 cases (22.22%). Exceeding the threshold value for this scale is associated with causing back pain in the specific part of the horse's back where the value was exceeded. The results of the analysis are shown in the tables below.

Dependent variable	Tree less saddle (S1)	Tree saddle (S2)	Wide pad saddle (S3)	ANOVA analysis result	post hoc analysis result
Mean value of the average pressure exerted by the saddle, obtained in different gaits, in all compared tests (kPa and SD)	7.24 ± 1.39	10.54 ± 4.42	14.54 ± 3.42	F = 5.872 p = 0.005 p < 0.01 F(2,58)	S1:S2 p = 0.293 S1:S3 p = 0.002 S2:S3 p = 0.089
Mean value of the average pressure exerted by the saddle, obtained in various gaits, in the compared studies, excluding study no. 4 from the group of saddles with a tree (kPa and SD)	7.24 ± 1.39	10.64 ± 4.66	14.54 ± 3.42	F = 7.96976 p = 0.001 p < 0.01 F(2,54)	S1:S2 p = 0.421 S1:S3 p = 0.001 S2:S3 p = 0.022
Mean value of the average pressure exerted by the saddle, obtained in the trot in all compared tests (kPa and SD)	6.9 ± 1.7	9.32 ± 3.89	13.38 ± 4.30	F = 3.332 p = 0.051 p > 0.05 F(2,27)	S1:S2 p = 0.378 S1:S3 p = 0.022 S2:S3 p = 0.313
Mean value of the average pressure exerted by the saddle, obtained at the trot, in the compared tests, excluding test no. 4 from the group of saddles with a tree (kPa and SD)	6.9 ± 1.7	9.24 ± 4.45	13.38 ± 4.30	F = 6.096 p = 0.006 p < 0.01 F(2,23)	S1:S2 p = 0.646 S1:S3 p = 0.006 S2:S3 p = 0.044

Table 2: The average pressure exerted on the horse's back by each type of saddle in a given gait

Working animal's welfare in antiquity. An interdisciplinary comparison of ancient horse breeding and training methods, as well as historical equipment, with modern horse welfare research results

Research number	Saddle type	Gait type	Pain Scale Byström et al., 2010; von Peinen et al., 2010	Werner pain scale et al. . (2002)		Nykos Pain Scale et al., 2005					
			The force of pressure on the entire area, the exceeding of which is associated with the risk of ischemic damage below the saddle	Pressure force on the entire surface of the saddle causing back pain		The force of pressure required to induce back pain - the front part of the saddle		The pressure force required to induce back pain - the middle part of the saddle		The force of pressure required to induce back pain - the back of the saddle	
			Wartość średnia > 11 kPa	M > 15 kPa	Maximum > 35 kPa	M > 13,2 kPa	Maximum > 34,5 kPa	M > 11,4 kPa	Maximum > 30,3 kPa	M > 10,0 kPa	Maximum > 31,0 kPa
4	Tree - standard pad	Standing trot	10.56	10.56		12.67		9.44		10.37	
		Sitting trot	8.71	8.71		4.78		8.33		11.22	
	Tree - wide pad	Sitting trot	10.67	10.67				10.37		11.11	
		Standing trot	8.62	8.62		4.07		8.22		11.56	
10	Wooden tree	Trot	5.8	5.8		6.3	25.7	4.5	19.9	5.8	3.9
		Gallop	7.5	7.5		8.5	33.7	3.2	13.3	1.2	1.7
		Full gallop	8.8	8.8		10.1	37.7	3.8	15.2	2	6
	Elastic tree	Trot	5	5		4.9	26.1	4.4	23.2	6.3	6.4
		Gallop	6.3	6.3		7.5	33.5	4	20	1.7	2.6
		Full gallop	7.5	7.5		8.7	37	5.4	25.8	3	12.2
	Treeless	Trot	5.2	5.2		5.1	26.9	5.1	32.7	6.1	30.1
		Gallop	7	7		7.4	36.3	3.1	15.8	1	32.6
		Full gallop	8.5	8.5		9.1	39	4	21.1	1.3	31.8
2	Tree	Sitting trot	6.3	6.3	20.7						
	Treeless	Standing trot	6.9	6.9	29.4						
3	Tree - standard pad	Stop	15.61	15.61	18.57						
		Walk	15.06	15.06	25.87						
		Sitting trot	15.33	15.33	37.29						
		Standing Trot	15.42	15.42	39.13						
		Left gallop	18.39	18.39	51.59						
	Tree - wide pad	Right gallop	18.41	18.41	53.08						
		Stop	15.42	15.42	20.92						
		Walk	12.92	12.92	23.5						
		Sitting	16.45	16.45	45.17						
		Standing Trot	17.38	17.38	37.75						
7	Treeless	Left gallop	17.5	17.5	47.04						
		Right gallop	17.38	17.38	41.79						
8	Tree	Sitting trot	7	7	29.4						
		Standing trot	8.6	8.6	42.8						
		Walk	7.8	7.8	13.4						
		Trot	9.8	9.8	21						
		Full gallop	10.9	10.9	24.7						

Table 3: Average pressure exerted on the horse's back by each type of saddle in a given gait, compared with pain scales. The painted boxes represent measurements where the pain threshold was crossed

Although the analysis did not show a statistically significant difference between a saddle containing a terra cotta and a saddle without one, the negative effect of wider pads on the horse's comfort under both a saddle with and without a terra cotta was shown. These pads are often used for the comfort of the rider, which immediately brings to mind the evolution of the saddle over the years. It is important to remember that a saddle that causes the horse pain, discomfort, mental suffering, restricts its mobility or contributes to other types of injury is an inappropriate saddle, preventing the well-being of the animal being trained.

The conducted meta-analysis showed that saddles with wide pads are always a worse choice than standard tree and treeless saddles. By far the smallest pressure on the horse's back was exerted by the indefinite saddle in each of the tested gaits, although the tree saddle also achieved good results. Knowing that these two types of saddles correspond to Scythian saddles, we can imagine how much more comfortable the horses used in antiquity compared to medieval horses. However, after comparing the obtained pressure forces with the pain scales known to us, we can see that in fact all saddles exceed the permissible values of pressure exerted on the horse's back, especially in gaits such as four-beat gallop and three-beat gallop. It should be remembered, however, that while a treeless saddle is actually lighter, the pressure is not evenly

distributed on it. Taking into account the fact that in ancient times saddles served for years, they were compacted and put on various horses, it is difficult to assume that they were comfortable for animals. That is why it is worth looking at saddles with a standard tree, which, although they exceed the permissible values, better distribute the rider's weight and are more resistant to distortions resulting from use.

## **Conclusions**

The results of the study clearly show that saddles whose design is most similar to the Scythian terrestrial saddles best distribute the rider's weight over the horse's back. Taking into account both the design of ancient saddles and the texts written by horse trainers of the time, it is clear how much knowledge about horses was possessed in antiquity. An analysis of later saddles and texts shows that much of this knowledge has been lost, and it is only in modern times, thanks to the popularity of animal rights movements, that traditional horse training methods are being revived.

The study conducted provides a starting point for researchers of many professions, including archaeologists. Deepening our knowledge of what saddle design, is best for the welfare of horses, shows us both the state of knowledge and the approach to these animals that guided saddle designers in a given era. Researchers of the past, seeing the similarity of given types of saddles to saddles tested with pressure measuring mats, can shed new light on the knowledge of our ancestors about anatomy and animal welfare. Such an interdisciplinary comparison, can allow us to understand what the relationship between man and horse looked like, in ancient times. In the future, it is possible to reuse pressure measuring mats to measure the actual pressure exerted on the horse's back, by saddles from specific eras prepared by reenactors.

By combining many research methods, many approaches, and interdisciplinary analysis of the attitudes of the ancients towards productive animals, we learned not only that animal welfare was important to our ancestors, but also that the training methods they proposed were much more focused on animal welfare than methods still used in some equestrian circles. In addition, we learned that by combining the work of archaeologists, reconstructors and animal psychologists, we can assess to what extent the saddles used in ancient times were designed with the comfort of horses in mind.

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## Between archaic and modern: σκύθαι and πατζινάκοι in *The Alexiad* of Anna Komnene

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**Abstract:** Since the emergence of Byzantine culture, the influences of Ancient Greece stood out due to the authors' desire to be inspired by the erudition of classical works. For this reason, medieval Greek literature is the product of a classicizing style that intertwines with modern tendencies. This practice had the merit of increasing the artistic quality of the chronicles but simultaneously caused numerous confusions. Frequently, authors borrow classical terminology to name contemporary ideas or concepts, but sometimes they even use ancient and modern terminology in the same phrase. The reasons behind the writers' intention to alternately use a common and a scholarly language are challenging to discern, especially since the complexity of some works such as *The Alexiad* makes the terminology used highly open to interpretation. The situation becomes much more complicated when, for three Eurasian nomadic peoples (Pechenegs, Uzes, and Cumans) different naming techniques are applied.

**Keywords:** Scythians, Pechenegs, *The Alexiad*, Turkic, Greek influences.

Medieval Byzantine literature, especially from the height of Greek civilization, is profoundly influenced by classicizing ideas taken from ancient Greek culture, whose presence was seen as a sign of knowledge mastered by authors, frequently resorting to stylistic procedures based on imitation of the writing style of the ancients. This manner of veneration brings a manifold of methods used by byzantine writers to reveal their cultural heritage, which means that occasionally the chroniclers preserve some words or phrases in their works from ancient Greek literature or even whole sequences that were revived in a new context. Indeed, the aforementioned characteristics are applicable to numerous Byzantine chronicles mostly because their authors were concerned with building and strengthening a comprehensive culture based on philosophical and historical lection from classical antiquity. The cultural burden kept by Byzantine authors after reading the famous works of the classics appears prominently in their style, outlining a phenomenon of *imitatio* through which ideas, concepts, and terms are reconsidered and updated in order to have a conceptual charge in a completely new context.

This praxis is widely used by authors in accordance with the cultural level reached by every one of them. In medieval Byzantine culture, Classical and Hellenistic models become a standard and benchmark of artistic creation, the highest standard which must be attained, and when this was too difficult, they try at least to imitate their model. The devotion to the culture

of the ancients is demonstrated above all by the frequent references to works of rhetoric, philosophy, or history from classical antiquity, sometimes collected in volumes that were supposed to serve this purpose: a guide for writing to the highest cultural standards.<sup>1</sup>

An interesting and puzzling aspect arises when the authors approach actual and contemporary events in their writings which are transposed and presented from an archaizing and classicizing perspective. In this regard, the numerous works in which the contemporary events described by the authors are exposed in a form greatly influenced by similar events that happened in Antiquity are revealing. The phenomenon is also found at a much lower level when terms or concepts that were used to describe realities of Classical Antiquity are revived and used by Byzantine authors who give them a new consistency to represent and depict coeval concepts. In the Byzantine literature, the aforementioned practice appears frequently in that kind of chronicles that discuss the emergence of Turkic migrants with Eurasian origins, who made their presence felt in the North Pontic steppes starting with the 10th century, a moment when they also came under the purview of Byzantine sources. In the next three centuries, Byzantium dealt with the new ethnic groups that would cross the Danube River, a fact that left a deep mark not only in the political, military, and social evolution of the state but also in the historiography of the Comnenian era. Here we have in mind a historiography characterized by a profound affinity towards ancient literature, which pushes the Byzantine authors to continuously strive to reach standards of literary purity in their own works, even at the cost of marginalizing the common reader.<sup>2</sup>

The particular case which is the subject of this paper begins with the *Alexiad* of Anna Komnene, a comprehensive chronicle whose purpose was, among many others, to present the reign of her father, the emperor Alexios I Komnenos.<sup>3</sup> The Byzantine princess reveals in her chronicle a lovely passion for Greek classical culture since *Alexiad* recalls Homer's famous *Iliad*. But the classical inspiration is not only found in the title but also at the level of the form, content, and phraseological construction because the authors managed to understand the meanings found in the works of the ancients and could no longer wriggle from their influence.<sup>4</sup>

Among the numerous wars and political actions undertaken by the founder of the Komnenian dynasty and preserved in *Alexiad*, special attention was paid to the description of the presence of Eurasian nomads who were part of the Pechenegs ethnic group and who, during

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<sup>1</sup> Dölger 1971, 145-146.

<sup>2</sup> Knös 1971, 142-143.

<sup>3</sup> Viliimonović 2015, 207-235.

<sup>4</sup> Moravcsik 1971, 156-157.

the reign of Emperor Alexios, found their end following the battle of Levunion.<sup>5</sup> Far from aiming for an approach to the military or political aspects regarding the presence of the Pechenegs at the boundaries of the empire,<sup>6</sup> this paper is meant to highlight another part of this subject: a conceptual approach regarding the way in which Anna Komnene prefers to name the members of the Pecheneg ethnic group. Dominant, in the present case, is the use of the archaic term ‘Scythians’ (Σκῦθης / Σκῦθαι), a term that is found throughout the work and which refers exclusively to the ethnic group of the Pechenegs. However, there are some very particular situations where the modern term ‘Pechenegs’ (Πατζινάκοι) is also used, but only in a few cases, within books 7<sup>th</sup> and 8<sup>th</sup>.

In the work of Anna Komnene, the accounts of the Pechenegs represent a uniform amalgamation of events that are as current as possible but seen and described from an archaizing perspective. Moreover, from a conceptual point of view, the described episodes tend to make the presence of the Pecheneg ethnic group in the political spectrum of Byzantium ambiguous through an uneven use of the terminology by which this Eurasian ethnic group was nominated. In this sense, the dichotomies between the author's archaic and contemporary concepts deepen and lead to a difficult understanding of the reasons that were the basis of Anna Komnene's preference for one term or another. More precisely, it can be said that the terminological approach of the Byzantine princess is uneven because it frequently alternates archaic-type names for certain ethnic groups with modern ones, in the sense of the author's contemporary modernity, for other groups.

In order to understand the reasons why Anna Komnene use sometimes the term *Πατζινάκοι* rather than the archaizing term that seems to be preferable to her, it is necessary to identify the precise context of the appearance of these terms and observe the particularities of the phrases. Upon careful analysis of the text of the *Alexiad*, the term *Πατζινάκοι* appears exclusively in books 7<sup>th</sup> and 8<sup>th</sup>, in some accounts of the battles of 1087 between the generals of Alexios I Komnenos and the Pechenegs who arrived south of the Danube<sup>7</sup> or in these accounts of the conflicts between Byzantines and Pechenegs in which the Cumans are also involved<sup>8</sup>. From a quantitative point of view, the term *Σκῦθαι* appears approximately 248 times, being distributed throughout the work,<sup>9</sup> while the term *Πατζινάκοι* is found only 10 times,

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<sup>5</sup> Diaconu 1970, 133. Curta 2006, 301-302.

<sup>6</sup> Meško 2014, 53-70.

<sup>7</sup> Comnenae 2001, 210, 214, 216, 219, 221.

<sup>8</sup> Comnenae 2001, 222, 243, 245, 246.

<sup>9</sup> More precisely in the books I, II, V, VI, VII, VIII, IX and XII.

exclusively in books seven and eight.<sup>10</sup> The particularities of the construction of *Alexiad* are clear from this perspective and it can be said that Anna Komnene has a preference for the archaizing term, but the question that arises in the present case is related to the reasons why, on 10 particular occasions, she resorted to the use of another term to define the same ethnic group. The fact that the term *Πατζινάκοι* appears in the same sentences in alternation with the term *Σκύθαι*<sup>11</sup> should not be omitted, so it is not completely missing and the two appellatives complement each other.<sup>12</sup>

The term *Σκύθαι* was not at all foreign to the Byzantine world, being already known through the writings of classical Greek authors such as Herodotus, Thucydides, or Hippocrates<sup>13</sup> to whom Anna Komnene had an intellectual affinity, being familiar including with works such as the *Iliad* or the *Odyssey* of Homer,<sup>14</sup> from which he sought to be inspired in the creation of his own work. The use of this term in medieval Byzantine literature can be considered more than common practice, representing a statement of Hellenism in a cultural context deeply labeled by the literary influences of classical Greece. But the proclivity of the authors to enhance the modern concepts with a Hellenic heritage does not respond to the uncertainty that arises from the alternation of these two different formulae in the designation of the Pechenegs, one with classicizing values, and the second with a modern conceptual load. Throughout his book, Anna Komnene leans towards the use of a classicizing style not only in terms of the vocabulary used but also from the perspective of grammar,<sup>15</sup> which represents an essential characteristic of the *Alexiad*.

It often happens in the works of Byzantine authors to use an archaizing terminology to denominate allogeneic ethnic groups, a practice that was attributed to the common belief of the writers that there must be a direct connection between the ethnic groups that came from or lived in the same regions, even if there are some centuries between the contemporary invaders and the ancient ones. This belief is demonstrable by the very references that the same authors used when they said that a certain ethnic group had a different name in ancient times. The archaizing influences even led to a reconfiguration of the historical information obtained through direct observation and disguised in forms that represented manifestations of classicism.<sup>16</sup> It must also be borne in mind that the frequent use of archaic terminology has another effect on the writing

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<sup>10</sup> Kozlov 2014, 92.

<sup>11</sup> Comnenae 2001, 214.

<sup>12</sup> Durak 2009, 74.

<sup>13</sup> Minns 2011, 35.

<sup>14</sup> Cooper 2013, 269.

<sup>15</sup> Comnène 1937, 162. Knös 1971, 145. Kriaras 1971, 261. Kaldellis 2007, 187.

<sup>16</sup> Moravcsik 1971, 159-161.

style, more precisely that of outlining and portraying an archetype. Thus, the appellative *Σκύθαι* did not only have the role of designating an ethnic group but also went further and introduced a series of preliminary characteristics, turning those designated by this term into ‘barbarians’ in essence.<sup>17</sup>

The term *Πατζινάκοι* appears in medieval Byzantine literature with Emperor Constantine VII Porphyrogenitus' *De administrando imperio*, a guide for leading the state written by the emperor for his son, a work which represents a broad description of the political realities seen from Constantinople. The use of this term can be considered an excellent proof of the knowledge of contemporary political realities and in the following centuries, it will represent the concept in the common language by which references to the Pecheneg ethnic group were made. In the chronicles, its appearance takes place when it manages to overcome the archaizing tendencies of the writers or when the work is intended to be very close to contemporary realities. Thus, Anna Komnene was in the position where she knew the conceptual heritage of each term: she meets the word *Σκύθαι* during the readings of the historical and mythological books from Classic Greek,<sup>18</sup> while the term *Πατζινάκοι* must have become familiar during the discussions heard between Alexios I Komnenos and his soldiers at court.

On the other hand, it is absolutely necessary to clarify the natural inclination of Anne Komnene toward an archaic style of writing. In general, Byzantine literature from the 11th-12th centuries has this proclivity to imitate ancient models via quotations or archaic-terms usage, a fact that diminishes the access of the common reader to this type of writing. However, it is a matter of choice that depends on the writer's preference to select a style of writing, a problem solved decisively by authors such as Michael Psellos or Anna Komnene who embrace the characteristics attributed to classical Greek scholarship. To bring these features into the debated terminological discussion, the archaizing directions of Anna Komnene are very clear and demonstrable, first of all, by the quantitative argument of the presence of the term *Σκύθαι* in the *Alexiad*, which appears with a frequency about 25 times more often than the term *Πατζινάκοι*. Besides this, there are two particular ways to transpose the presence of Eurasian nomads from the north of the Danube into a conceptual approach used in Byzantine chronicles. One of them demonstrates the congeniality of the author for archaic and ancient writing styles and considers the use of the term *Σαυρομάται* to portray the members of the ethnic group of the Uzes. Moreover, throughout the work, Anna Komnene exclusively uses this archaic term to

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<sup>17</sup> Buckley 2014, 151.

<sup>18</sup> Diehl 1971, 80.

denominate the Uzes, although she also knew the modern/contemporary name of this ethnic group. This can be demonstrated by a mention she makes about one of the Uzes who entered the service of the emperor Alexios I Komnenos, namely Uzas, about whom he says *δὲ τὴν κλησὶν φερώνυμον ἐκ τοῦ γένους λαχών*.<sup>19</sup> From this phrase, it can be easily understood that Anna Komnene knew the actual name of the Uzes tribe but in the *Alexiad* she chooses to not employ it at all yet prefers to designate them by the archaizing term of ‘Sauromates’. The second instance is bound to the name given by Anna Komnene to the race of the Cumans. For them, she exclusively uses the modern term of *Κόμανος*, a fact that can be explained by the relatively recent presence of this Turkic group in the political sphere of Byzantium, compared to the Pechenegs and the Uzes with whom the Greeks had become acquainted during the previous decades.

Indeed, it can be said about Anna Komnene that she has a common acquaintance with these Eurasian ethnic groups, as she has the ability to distinguish them from one another in very rigorous conditions. However, there is a gap when we talk about precise and extensive information about the subdivisions of Turkic tribes, and that is the reason why she gathers beneath an archaic word like *Σκύθαι* or *Σαυρομάται* all the individuals who were part of that ethnic group, without taking into consideration the numerous tribal subdivisions, which were very rarely identified by the name of the chieftain.<sup>20</sup> Therewith, she sometimes has little trouble placing certain individuals in their proper ethnic group, such was the case of Charatzas, whom she says at various times is either a ‘Scythian’<sup>21</sup> or a ‘Sauromat’.<sup>22</sup>

The mechanism used to describe the barbarians via archaizing concepts is a very precise one, since the author, as long as he can distinguish the different ethnic groups, must allow the reader to make the same distinctions. For that, it is necessary to rationally use the archaizing words and avoid designating a couple of different ethnic groups under the same concept. Therefore, in this way, can be enlightened the reasons which urge Anna Komnene to denominate the Turkic populations from the North Pontic steppes in order to avoid any confusion. Although theoretically, the Pechenegs, Uzes, and Cumans could be defined with the common word ‘Scythians’, respecting the criteria of the definition mechanism<sup>23</sup> (they were barbarian groups, nomadic populations, located in the North-Pontic steppes, having a nomadic lifestyle), the Byzantine princess is very careful in differentiating these populations, which is

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<sup>19</sup> Comnenae 2001, 160: ‘*who was named after his race*’.

<sup>20</sup> Meško 2014, 57.

<sup>21</sup> Comnenae 2001, 294-295.

<sup>22</sup> Comnenae 2001, 211.

<sup>23</sup> Kozlov 2014, 92.

why she interchanged archaic names with modern ones and tried to maintain clear boundaries between these three ethnic groups.

The preference for archaic names was explained in the past by the idea that those would have a pejorative burden transferred by the author to the newcomers who were seen as hostiles and frequently begin conflicts with the Byzantine administration. This is a common explication applicable for the archaization of the name used for Pechenegs with whom, indeed, the Byzantines have conflictual and warlike contact during the youth of Anna Komnene. But the argument becomes invalid when we consider the race of the Uzes, with whom the empire had already managed the problems in the seven-eighth decades of the eleventh century. Furthermore, as the author also states, the members of the Uzes ethnic group were, at that time, in the service of the empire, so the tendency to call them by an archaizing name with a pejorative load becomes incomprehensible. The same argument loses its credibility when we bring into discussion the relations between Byzantium and the Cumans, relations that had a conflictual-warlike nature during the Komnenian era,<sup>24</sup> a fact that should exhort Anna Komnene to use an ancient word to designate them, rather than the actual one. Therefore, it can be said that the historicity of the presence of the Cumans was recorded in this way by Anna Komnene due to their recent appearance on the political radar of Byzantium. More than that, the relations between Cumans and the empire are overlapping with the life of the Byzantine princess, which transforms this ethnic group into an element of topicality and contemporaneity, unlike the Uzes and the Pechenegs who were already a part of Byzantine history.

We reach the point where the oscillation between *Σκύθαι* and *Πατζινάκοι*, a phenomenon found in books seven and eight of the *Alexiad*, could only be explained by a triumph of the contemporary influence would have had over the archaizing style of Anna Komnene. In the current situation, small alternations could be identified between the different sources of information used by the princess. Naturally, throughout the work, Anna Komnene's archaistic style is imposed, with numerous Hellenistic-classicizing influences, a fact that explains the predominance of the use of the term *Σκύθαι* to the detriment of the modern one of *Πατζινάκοι*. Nevertheless, in books seven and eight, where the term *Πατζινάκοι* appears sporadically, one can observe a flow of details that is characterized by precision and especially numerous quotations of lines belonging to characters who were directly involved in the events. In contrast to these particular aspects, throughout the *Alexiad*, the descriptions of the Scythians are quite plastic and impartial, seen with a critical eye from an objective narrative perspective.

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<sup>24</sup> Năsturel 1969, 167-186. Kovács 2014, 174-189.

The way the passages relating to the Pechenegs in books seven and eight are constructed could suggest that Anna Komnene accessed some information from a source directly involved or familiar with the political realities of the time, a source that would have left an imprint much deeper on the mechanism of the construction of the stories, significantly diminishing the author's archaizing tendencies.

As we have established previously, from the perspective of Byzantine literature, there are two ways to denominate the Eurasian barbarian populations: an archaizing and classicizing one, deeply influenced by the values of Hellenistic literature, respectively a modern one that denotes substantial knowledge of contemporary realities. Thus, the appearance of the term 'Pecheneg' in the mentioned places could be attributed to the direct influence of the source of information used by the author, a source who was participating in the events or was very close to them, who can give an extensive account of the events that took place and can also reproduce fine details like the replicas of those involved, which Anna Komnene would later quote in her own writing. Due to these direct contacts, there is also a disposition to usher the modern term 'Pecheneg' into the discussion, which comes to equiponderate the presence of the term 'Scythians'.

We have to lead our attention toward the source that could possibly be considered culpable for this terminological fluctuation which represents the subject of this paper. Anna Komnene states in his writings that the sources she used in making the *Alexiad* represent her own observations that were made and gathered at the Byzantine court, and sometimes even witnessing conversations between Alexios I Komnenos and different members of the army. In addition to these, she used several writings or chronicles accessible to her.<sup>25</sup> Basically, Anna Komnene is writing her *Alexiad* in a manner borrowed from Thucydides, which means that his writings are the result of direct observation of the events. She proposes a very careful exegesis of the written sources and seeks to verify the information obtained with at least one other source. Thus, Anna Komnene displayed a critical attitude towards the materials she collected and constantly sought to compare the information she possessed with other contemporary works she could access.<sup>26</sup>

One of the sources that represent the base of Anna Komnene's writing is the materials collected and compiled by her husband, Nikephoros Bryennios. Historians have advanced the hypothesis that Anna Komnene not only turned and used the work of Bryennios<sup>27</sup> but also

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<sup>25</sup> Comnenae 2001, 451-453.

<sup>26</sup> Sinclair 2014, 151.

<sup>27</sup> Kriaras 1971, 261.



sought to improve his style by rearranging the material and by raising the quality of the writing, capitalizing on the classic elements.<sup>28</sup> However, the *History* of Bryennios cannot be held responsible for the terminological variation in the *Alexiad*, as the author exclusively uses the archaizing designation of "Σκούθαι" to name the Pechenegs.<sup>29</sup>

In the warlike events between the Pechenegs and the Byzantines described in books seven and eight of *Alexiad*, a key character who was directly involved in confrontations was Georgios Palaeologus, an important dignitary from the court of Alexios I Komnenos.<sup>30</sup> In the confession that Anna Komnene makes regarding the sources used in the construction of the *Alexiad*, the Byzantine princess remember the conversations held frequently by his father with Georgios Palaeologus.<sup>31</sup> It happens that she heard often what Alexios I Komnenos discusses with his subjects and the information collected constituted the essence of her writings. Coincidentally, Anna Komnene listens to the conversations between Alexios I and Georgios Palaeologus, which is the same character who confronts the Pechenegs in the events described in books seven and eight, the only ones in which could be identified the terminological variation in question.

Indeed, it is difficult to believe that Anna Komnene gathered her information from witnesses who participated in the events, at least in the vicinity of the time when she wrote her work, a time when already many of those who were part of the administrative and military system of Byzantium under the reign of Alexios I Komnenos had probably already been dead. The historiographical literature advanced the idea that Anna Komnene would have collected the materials for her work even before the death of Emperor Alexios I (1118) or that she would have written down information from the conversations held by her father and the Byzantine dignitaries.<sup>32</sup>

If we take these assumptions into account, then the argumentation can be directed in a much clearer direction: the history of relations between the Byzantines and the Pechenegs is recorded in the *Alexiad*, and the mechanisms for constructing the presentation was based on pieces of information gathered by the princess, starting from the unwritten accounts and continuing with other types of sources accessible for her. Hence, from here comes the detachment shown by Anna Komnene along with her inclination to leave a clear and deeply archaic presentation, a fact observable in most books of *Alexiad*. The exception, in the present

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<sup>28</sup> Sinclair 2014, 177.

<sup>29</sup> Bryennio 1975, 144, 208, 236; Neville 2012, 84-85.

<sup>30</sup> Skoulatos 1980, 99-105.

<sup>31</sup> Comnenae 2001, 451-453.

<sup>32</sup> Sinclair 2014, 157-159; Kambylis 2020, 480-483.

case, comes from books seven and eight, where the introductions are much more extensive, and the details include quotations of the lines of the characters involved. Also, in this part of *Alexiad*, the archaic style of the author was a little tempered, which allows the appearance of a modern, contemporary word, to designate the Pecheneg ethnic group. Apparently, Anna Komnene's uncle, Georgios Palaeologos, an important figure at the court of Alexios I Komnenos, was involved in the events described. In this story, he had a double role: on the one hand, he directly participated in the conflicts waged against the Pechenegs who reached the Byzantine territories south of the Danube and, on the other hand, he was the messenger who reported the course of events to Alexios I Komnenos. The Byzantine princess must also have attended the discussions between the two, as she herself reports, which may explain the extent of the details to which she had access and which she was able to reproduce. Now the only aspect shrouded in uncertainty is related to the mechanism of preserving the information. But whether Anna Komnene relied on her own memory or wrote down that information, it is certain that the final product of her writing is enhanced with that variation in the sources used to describe the relations with the Pechenegs in books seven and eight, compared to the rest of the *Alexiad*. The usage of various sources, maybe even the stories of Georgios Palaeologos, for books seven and eight could explain the quantitative differences between these two and the rest of the work, and can also justify the terminological inconsistency identified.

Therefore, it can be considered that the descriptions of the Pechenegs, which we find in the work *Alexiad*, and here we consider exclusively those in which the nomads are nominated by the archaizing term *Σκόθαι*, represent a deep manifestation of the classicizing and impregnated style with elements of the Hellenistic culture of the author, who processed the information obtained through direct observation using an archaizing perspective, which also led to the transformation of nominal concepts. Coming back to the way of obtaining information, direct observation (consultation of information sources and processing of overheard discussions) allowed Anna Komnene to intervene on the information and pass it, when it was used in the construction of the *Alexiad*, through her own archaizing filters. On the contrary, the descriptions of the Pechenegs found in books seven and eight must be substantiated on the basis of sources that show a much greater degree of involvement in the events described, a fact demonstrated by the accuracy of the information and even the numerous quotations belonging to the characters present. Due to this involvement, familiarization with the direct political reality succeeds in blurring Anna Komnene's archaizing tendencies by introducing modern terminology as a way of referring to the Pecheneg ethnic group.

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Volumul pe care îl discutăm reprezintă o zonă de frontieră, în care psihologia evoluționistă se intersectează cu arheologia cognitivă, pentru a răspunde împreună la întrebări fundamentale legate de apariția și evoluția omului. Ambele discipline s-au definit în domenii cu limbaj teoretic propriu, cu toate că cercetează adesea aspecte comune ale umanității. Arheologia generează explicații legate de artefacte (din preistorie până în perioada medievală), iar psihologia formulează ipoteze legate de psihicul uman (reprezentat de genul *Homo Sapiens*).

Edward P. Kardas și Tracy B. Henley justifică în introducere motivele pentru care au ales ca prezentarea cărții să fie făcută sub umbrela teoriei evoluționiste, o posibilă punte de legătură între aceste două discipline. Chiar dacă știința psihologiei are la bază abordarea clinică și experimentală, originară în gândirea lui Wilhelm Wundt (1832-1920), ambii editori sunt istorici ai psihologiei, așadar nu sunt considerați psihologi primari. Au fost influențați de autori precum Jacques Cauvin, care propune în anul 1994 teoria Revoluției Neolitice<sup>1</sup>, ce presupune că sedentarizarea, domesticirea și urbanizarea nu au fost cauzele, ci efectele unor schimbări fundamentale în procesele socio-cognitive ale oamenilor preistorici.

Autorii punctează limitările teoriei evoluționiste în explicarea complexității mentalului uman și contributorii nu impun o singură direcție de cercetare, dar așa cum precizează și editorii cărții, psihologii primari cu o abordare evoluționistă a disciplinei par interesați de aplicabilitatea psihologiei în studiul speciilor arhaice de hominizi.

Lucrarea de față propune o anchetă axată pe modul de interacțiune dintre cogniție și contextul cultural, care conduce la un tip diferit de arheologie cognitivă. Acest mod de abordare provine din întrebarea de bază: Ce diferențiază primii oameni de cele mai apropiate rude biologice, maimuțele mari?

Volumul de față prezintă preistoria cuprinsă de la primii hominizi, care preced genul *Homo Sapiens*, până la originile agriculturii. Lucrarea a fost publicată la editura Routledge, New

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<sup>1</sup> Cauvin, J. 1994, *Naissance des divinités, naissance de l'agriculture : La révolution des symboles au Néolithique*.

York, în anul 2020, fiind editată de Tracy B. Henley, Matt J. Rossano și Edward P. Kardas. Volumul reprezintă efortul de colaborare a 39 de contribuitori, prezentat în 28 de capitole, iar editorii au împărțit cele 545 de pagini ale cărții în 4 secțiuni, cu 7 capitole fiecare. Acestea se concentrează pe elemente specifice ale studiului cogniției în perioada preistorică:

- Partea I: „*Prehistory from the perspective of physiological and developmental psychology*”
- Partea II: „*Prehistory from the perspective of cognitive psychology*”
- Partea III: „*Prehistory from the perspective of social psychology*”
- Partea IV: „*Prehistory from the perspective of personality and clinical psychology*”.

Prima secțiune analizează din punct de vedere biologic evoluția fiziologică și socio-cognitivă. Aceasta începe cu lucrarea lui Melvin Konner, antropolog american, care a adus contribuții substanțiale în dezvoltarea conceptului de dietă paleolitică. Autorul leagă psihologia evoluționistă de arheologia cognitivă, prin coroborarea studiilor despre dieta grupurilor recente de vânători culegători cu descoperiri arheologice. Explorează aspecte legate de dietă, evoluția copilăriei, rudenii sau dezvoltarea comparativă a creierului și conchide că, în timp ce rezultatele săpăturilor arheologice își vor păstra întotdeauna importanța în studiul preistoriei, teoria evoluționistă oferă modalități noi și interesante de interpretare a trecutului.

În continuare, psihologii Jon Oxford și David Geary oferă o imagine de ansamblu fundamentală și examinează variabilele specifice speciei, cum ar fi relațiile de timp și energie dintre mortalitate, fertilitate și creștere. Așa cum explică autorii, dezvoltarea rapidă a creierului a facilitat pentru specia *Homo Sapiens* apariția unor caracteristici unice precum altricialitatea, copilăria sau menopauza<sup>2</sup>.

Următoarele două capitole se concentrează asupra relațiilor de rudenie și a substraturilor hormonale, care ar putea să justifice crearea unor comunități complexe, bazate pe cooperarea dintre indivizi. Specialist în psihologia evoluționistă, interesat de subiecte precum altruismul sau moralitatea, Dennis Krebs explică cum răspund ele la probleme legate de supraviețuire și observă că respectivele concepte sunt folosite exclusiv de specia umană. Această secțiune se încheie cu un capitolul care prezintă o viziune amplă a legăturii dintre psihologia evoluționistă și arheologia cognitivă. Darcia Narvaez sugerează că psihologia trebuie să renunțe la atitudinile negative față de natura umană din preistorie și să adopte o linie cronologică de bază mult mai cuprinzătoare. Ca un element tranzitoriu către secțiunea

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<sup>2</sup> Henley, T. B., Rossano, M. J., Kardas, E. P. (ed.). 2020, *Handbook of cognitive archaeology. Psychology in Prehistory*, 40.

următoare, Gordon M. Burghardt, prin prisma specializării lui în domenii precum originile și evoluția jocului, propune în articolul final prezentarea teoriei surplusului resurselor.

În a doua parte se exemplifică aplicarea psihologiei cognitive în preistorie și debutează cu teme cuprinzătoare, precum originile limbajului și evoluția memoriei. Folosind studii care demonstrează că hipocampusul oferă posibilitatea de a construi o hartă mentală pentru a naviga în mediu și în timpul mental, Michael Corballis sugerează că generativitatea nu este un fenomen lingvistic exclusiv uman<sup>3</sup>. Rolul capacității de a călători în timpul mental este dezbătut de Mark Krause și Crickette Sanz, care consideră călătoria mintală în timp ca fiind o componentă flexibilă a memoriei episodice ce permite anticiparea viitorului. În evoluția complexă a procesului de învățare și memorare, Liane Gabora și Cameron M. Smith disting două perioade principale de tranziție observate prin descoperiri arheologice. Prima, între 2,8 și 0,3 milioane de ani, caracterizată de mărirea creierului și a acurateții memoriei, facilitând gândirea abstractă și a doua, acum 100.000 de ani, caracterizată de ritualurile noi funerare, ornamentele personale și arta rupestră<sup>4</sup>.

Prezentând o perspectivă particulară, concentrată pe evoluția și forma toporului Acheulean de la un instrument funcțional la un obiect valoros și estetic, Derek Hodgson propune un model neurologic complex, care încearcă să explice de ce s-a schimbat estetica și producția toporului de acest tip. Partea a doua se încheie cu o analiză în detaliu a cunoștințelor tehnice necesare hominizilor pentru fabricarea obiectelor, care depind în mare parte de control cognitiv, memorie și continuitate transculturală, dar nu depind de limbaj<sup>5</sup>.

Ca un contra-argument la concluzia propusă anterior legată de limbaj, a treia secțiune începe cu studiul lui Merlin Donald despre evoluția limbajului ca răspuns la cerințele de cooperare din mediul social, apariția acestuia fiind condiționată de abilități cognitive mai rafinate, precum mimetica, metacogniția și autocontrolul, prezente încă de acum 3,5 milioane de ani<sup>6</sup>. În general, această secțiune este dedicată aspectelor care tratează ritualuri și norme sociale. Pe parcursul capitolelor autorii explorează teme variate, precum comportamentele mimetice care ar fi putut să ducă la apariția ritualurilor, a religiei, iar ulterior a științei și cum sunt ele conectate de apariția inovațiilor tehnologice. Matt J. Rossano se concentrează, în mod special, pe rolul *ritualurilor costisitoare* în apariția și dezvoltarea comunităților extrem de

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<sup>3</sup> *Ibidem*, 141.

<sup>4</sup> *Ibidem*, 223-226.

<sup>5</sup> *Ibidem*, 280.

<sup>6</sup> *Ibidem*, 288.

cooperante<sup>7</sup>. Camilla Power, Kim Sterelny și Timothy Taylor examinează în ultimele trei capitole ritualurile și normele apărute în jurul comportamentelor de reproducere. Autorii dezbate problemele legate de accesul la parteneri, incertitudinea paternă, alegerea femeii, selecția rudelor și fidelitatea, care sunt supuse unor norme diferențiate încă din Paleoliticul Superior. Ultima parte a cărții aduce în atenție problematica apariției și gestionării emoțiilor, dezvoltarea psihopatologiilor și înțelegerea practicilor funerare. O cauză a dezvoltării mecanismelor de gestionare a emoțiilor ar putea fi faptul că alianțele de grup au devenit critice pentru supraviețuirea hominizilor din Paleoliticul Inferior. Brian Hayden punctează că, pentru a crea legături emoționale puternice între indivizi, evoluția a produs tehnici cognitive, precum ritmul, dansul, drama, umorul, actul de a oferi cadouri și relațiile de rudenie<sup>8</sup>, iar selecția naturală a jucat un rol cheie în eficientizarea schimburilor genetice necesare pentru practicarea acestor tehnici.

Capitolele următoare prezintă dovezile arheologice legate de aspectele psihopatologice ale minții umane, precum: temele abordate în picturile rupestre, apariția schizofreniei și a depresiei acute ca urmare a hibridizării cu omul de Neanderthal, consumul de substanțe psihoactive, considerat până recent un fenomen caracteristic omului modern, problematica sinuciderii, apărută ca fenomen social acum 100.000 de ani<sup>9</sup>. Secțiunea se încheie cu investigarea tendințelor obiceiurilor funerare specifice diferitelor etape istorice, unde arheologul Paul Pettitt, specialist în Paleolitic, concludă că Neanderthalienii aveau o capacitate cognitivă simbolică de procesare a actului funerar.

Conchizând, volumul exemplifică într-o manieră inovatoare provocările și complexitatea studiului arheologiei cognitive, care poate fi o disciplină de sine stătătoare. Punctul forte al acestuia este modul în care se reflectă colaborarea unei game atât de variate de științe academice, precum arheologia, psihologia, antropologia, biologia, psihiatria, neurologia, istoria și filozofia. Din investigații bazate pe comportamentul primatelor, etnografie și chiar psihopatologie, editorii volumului reușesc să-și îndeplinească obiectivul și produc un exemplu remarcabil despre necesitatea abordării interdisciplinare în producerea cercetării de calitate privind cunoașterea umană și istoria sa evolutivă. Această carte deschide domeniul arheologiei cognitive și este o resursă importantă pentru studenții și cercetătorii din științele comportamentale, socio-umaniste și psiho-medicale.

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<sup>7</sup> *Ibidem*, 341.

<sup>8</sup> *Ibidem*, 432.

<sup>9</sup> *Ibidem*, 501.



**LLYOD LLEWELLYN-JONES, *Persians: The Age of the Great Kings*,  
New York, Hachette Book Group, 2022, 448 p., ISBN: 978-1-5416-0034-8**

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*Persians: The Age of the Great King* de Llyod Llewellyn-Jones oferă o privire fascinantă asupra culturii persane, autorul însuși Lloyd Llewellyn-Jones fiind cunoscut ca un entuziast cunoscător al tuturor aspectelor acestei civilizații. Lucrarea explorează detaliat istoria, religia, arta, arhitectura, literatura și modul de viață al acestei culturi într-un stil accesibil și interesant. Una dintre marile calități ale cărții este modul în care autorul prezintă sursele, evidențele și interpretările lor, astfel încât cititorul să-și poată face o idee clară despre subiect. De asemenea, se oferă o mulțime de informații interesante despre obiceiurile și tradițiile perșilor, precum și despre impactul lor asupra altor culturi și regiuni. Un alt aspect pozitiv al cărții este utilizarea imaginilor și a diagramelor, care ajută la vizualizarea și înțelegerea mai bună a subiectelor abordate. În plus, autorul reușește să explice concepte și idei complexe într-un mod simplu și accesibil, fără a-și pierde rigoarea științifică.

Cartea începe prin a situa cititorul în contextul istoric și politic al Imperiului Persan, înainte de a intra în detaliile perioadei regilor Darius I și Xerxes I (p. 19). Llewellyn-Jones analizează modul în care acești regi au administrat imperiul și cum au abordat problemele economice, militare și culturale. De asemenea, autorul examinează și impactul pe care aceste abordări le-au avut asupra istoriei ulterioare a Persiei. O altă temă importantă abordată în cartea este religia persană. O atenție aparte este oferită modului în care religia a influențat cultura și societatea persană, precum și mecanismelor prin care persanii au adoptat și au adaptat religiile altor culturi și națiuni cu care au intrat în contact. De asemenea, Llewellyn-Jones analizează și modul în care persanii au gestionat relațiile cu popoarele din afara imperiului, precum grecii, sau cu egiptenii înainte de anexare (cap. , p. 109).

Astfel, se prezintă o cronologie narativă pe dinastii, întreruptă de o secțiune cu o tematică extinsă – probabil cea mai puternică parte a cărții – intitulată „A fi persan”. Sunt explorate aici subiecte precum rolul femeilor, eticheta curții, natura regalității și rolul sclaviei în Imperiul Persan. Titlurile capitolelor au uneori o sonoritate poate prea evident orientată spre atragerea

publicului – de exemplu, „birocrății” deja „stăpâneau lumea” – iar textul însuși este adeseori puțin excesiv în utilizarea aluziilor și analogiilor anacronice (cap. 6, p. 149). Llewellyn-Jones nu ezită să critice Imperiul Persan – în special cu privire la sclavie – dar scopul clar al cărții este să îl descrie ca pe un „lucru bun”, un imperiu multicultural, de la care Occidentul ar putea învăța, contrastând favorabil atât cu imperiul roman, cât și cu imperiile coloniale moderne, mai ales cel britanic.

La baza acestui argument se află punctul de vedere conform căruia realitățile Imperiului Persan au fost denaturate în sursele vremii respective, dintre care multe sunt în greacă și, prin urmare, reprezintă punctul de vedere al inamicilor săi (p. 26). Bazându-se pe critica lui Edward Said la adresa orientalismului, Llewellyn-Jones susține că istoricii europeni s-au bazat pe aceste surse pentru a picta o imagine necruțătoare a Imperiului Persan. Cu toate acestea, într-adevăr, dintre toate imperiile persane, Imperiul Ahemenid al lui Cyrus și Darius a fost cel care s-a bucurat de o apreciere mai nuanțată în imaginarul occidental. La urma urmei, Cyrus a fost *Unsul Domnului în Biblie* (Cyrus rămâne un nume popular în rândul anumitor comunități protestante, în special în America de Nord), în timp ce Hegel a pronunțat celebrul citat potrivit căruia: „În Persia se naște mai întâi acea lumină care strălucește ea însăși și luminează ceea ce este în jur. ... Principiul dezvoltării începe cu istoria Persiei; acesta constituie, prin urmare, începutul istoriei.” (cap. 3, p. 106) Această perspectivă poate fi apreciată, la un moment dat, ca fiind mai optimistă decât cea exprimată de memoria istorică a iranienilor înșiși, pentru care ahemenizii se retrăseseră atât de mult în mit, încât fuseseră uitați în mare măsură până când arheologia modernă (europeană) a început să-i readucă în atenție în secolul al XIX-lea.

Prin urmare, cu nu puțină ironie, pentru a remedia dezechilibrul surselor grecești, Llewellyn-Jones susține că va apela la aceste surse arheologice pentru a oferi o contra-narațiune clar persană. Sursele grecești sunt însă greu de ignorat. Llewellyn-Jones recunoaște acest lucru și, în în poftida intențiilor declarate, se întoarce frecvent la sursele grecești, inclusiv la Herodot. Anumite secțiuni se bazează aproape în întregime pe relatarea istoricului grec, precum, descrierea răzvrătirii lui Intaphrenes, deși, în scopul asigurării accesibilității pentru publicul larg, textul evită cu totul citările din sursele primare sau secundare. Așa se face că, deși ni se precizează că „spune Herodot”, nu ni se indică unde anume a spus-o și câte detalii a inclus. În schimb, cititorului i se oferă periodic referințe la inscripțiile descoperite arheologic.

Printre alți scriitori antici la care s-a apelat este Ctesias, care, în calitate de medic la curtea lui Artaxerxes al II-lea, oferă o relație alternativă și utilă a revoltei lui Cyrus cel Tânăr, care este cunoscut în mare parte posterității prin opera lui Xenofon (p. 32). Lui Xenofon i se acordă în

mod bizar destul de puțină atenție, în ciuda sau poate datorită faptului că este un autor grec cu afinități persane. *Cyropaedia* sa – educația lui Cyrus – este, după cum notează Llewellyn-Jones, una dintre marile opere ale literaturii care a supraviețuit din acea perioadă, fiind opera favorită a multor gânditori ai Renașterii și Iluminismului. Textul este, în general, privit cu nostalgie de către Cyrus cel Tânăr, ca o reflecție asupra lui Cyrus cel Mare, însă, cel mai probabil (după opinia istoricilor moderni) Xenofon utilizează această „formă de expresie literară” pentru a introduce, de fapt, ideologia persană contemporane, mitologia politică în curs de constituire în jurul fondatorului imperiului.

Una dintre cele mai importante teme ale cărții este modul în care Imperiul Persan a fost administrat în timpul domniilor lui Darius I și Xerxes I. Autorul analizează modul în care acești regi au gestionat problemele economice, politice și culturale ale imperiului, și cum aceste decizii au influențat istoria ulterioară a Persiei.

Capitolele dedicate contribuției culturale ahemenide la civilizația mondială sunt compuse într-o manieră ușor subiectivă, cu o evidentă tendință de a-i pune pe perși în prim-plan, procedeul obișnuit al autorului fiind acela de a dezvolta relatarea în stili elegiac, pentru a o încheia într-o înflorire finală cu o critică deschisă împotriva „amenințărilor internaționale la adresa libertății Iranului”. Dincolo de aceste ecouri ale subiectivismului autorului, lucrarea rămâne o istorie generală interesantă a Persiei ahemenide, privită din perspectiva unei multitudini de surse. Fără a înnoi cu adevărat teoriile istoriografice din domeniu, Llyod Llewellyn-Jones reușește să ofere publicului larg o sinteză informată și utilă.

**BRUNO CURRIE, *Herodotus as Homeric Critic*, HISTOS Supplement 13, Oxford, HISTOS, 2021, 109 p., ISSN (Online): 2046-5963; (Print):2046-5955**

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Această lucrare își propune să exploreze felul în care se raportează Herodot la Homer, în speță la criticile aduse poetului. Bruno Currie este lingvist și profesor de limbi clasice, lucru care se vede pe tot parcursul lucrării, prin modul în care navighează printre pasajele autorilor antici și prin felul în care analizează sistematic structurile gramaticale. Discuția pe care o inițiază are drept nucleu două pasaje faimoase din *Istorie*, din capitolul al 2-lea (117-116), respectiv, din capitolul 53. Autorul argumentează faptul că Herodot anticipează diverse poziții pe care autori precum Aristotel, Eratosthenes, Aristarchus sau Strabo le iau în domeniul criticii homerice.

În primul capitol autorul modern expune textul de bază, pasajele 2.116-pe baza cărora discută povestea întâlnirii dintre Elena și Proteus, Bătrânul Mării. Despre întâlnire se spune că ar fi fost cunoscută de preoți și poate chiar de Homer. Autorul identifică mai multe probleme de natură textuală. Clarificarea problematicilor în cauză nu reprezintă doar o necesitate rezultată dintr-o mai generală rigurozitate filologică, ci pune într-o nouă lumină întrebarea referitoare la considerarea lui Herodot drept un critic homeric în antichitate. Dacă răspundem la întrebarea despre felul în care trebuie să citim cuvântul grec *παρεποίησε*, vom descoperi totodată răspunsul la întrebarea dacă autorul antic al secolului al V-lea î.Hr. dispunea de un vocabular critic literar quasi-tehnic. *Παρεποίησε* ar putea fi tradus drept „a face o greșală în compoziția [literară]”.

În continuare, autorul propune să luăm în considerare declarația lui Herodot, „[Homer] nu s-a întors nicăieri altundeva” (*οὐδαμῆ ἄλλη ἀνεπόδισε ἑωυτόν*, 2.116.2). Sensul lui *ἀνεπόδισε ἑωυτόν* este dificil de stabilit. Verbul tranzitiv *ἀναποδίζειν τινά* ar trebui să însemne „să facă pe cineva să-și pună piciorul înapoi, să se întoarcă, să meargă din nou pe același teren”. Cu toate acestea, în cazul autorilor din secolele V și IV î.Hr., inclusiv al lui Herodot însuși, indică mai degrabă un sens de a „interoga” sau „examina” pe cineva. Analizând anumite pasaje din Herodot, Antiphon și Aeschines, autorul modern își propune să elucideze sensul verbului *ἀναποδίζειν*. Dacă sensul său de bază este de „a face pe cineva să meargă din nou pe același teren”, atunci ar putea fi înțeles și drept „a interoga pe cineva” (atunci când este folosit tranzitiv

în imperfect) și „a se contrazice” (atunci când este folosit reflexiv în aorist). O implicare importantă a pasajelor citate din Herodot, Antiphon și Aeschines este că ἀναποδίξειν este folosit în contexte în care obținerea adevărului este problematică. Astfel, în utilizarea ἀναποδίξειν în 2.116.2, Herodot sugerează că există un adevăr în joc pe care Homer îl urmărește fidel.

În următorul capitol, Brunp Currie își propune să clarifice viziunea lui Herodot asupra relației lui Homer cu adevărul, deoarece se pare că există pasaje aparent contradictorii în opera istoricului antic. Pe de o parte, Herodot este clar în privința faptului că Homer perpetuează ficțiuni. Acest lucru este evident din 2.116, dar devine și mai clar dintr-un pasaj anterior din Cartea 2, anume capitolul 23. Aici Herodot spune că persoana care a vorbit despre Okeanos și-a relaționat discursul (fictiv) – întrebuințează cuvântul grec μῦθον – la lumea invizibilă și de aceea nu poate fi refutat. După cunoștințele sale, nu există vreun râu Okeanos, iar Homer a inventat numele și l-a introdus în poezie. Herodot folosește aici numeroase cuvinte și concepte care, după cum vom vedea în curând, se regăsesc în întreaga discuție critică ulterioară: μῦθον, „mit” (al unui discurs care nu există în lumea reală); εἶντα, „există” (în lumea reală; sinonime sunt τὰ γενόμενα, ἀλήθεια); și εὐρόντα εἰς ποίησιν ἐσενεῖκασθαι, pentru „invenția” poetică.

Pe de altă parte, în alte pasaje vedem o perspectivă diferită a lui Herodot asupra relației dintre Homer și adevăr. Herodot pare să creadă că Homer a prezentat fapte reale în poemele sale. De exemplu, în cartea 7, capitolul 152, Herodot susține că Homer a prezentat corect evenimentele care au avut loc în timpul războiului troian. De asemenea, în cartea 4, capitolul 32, Herodot afirmă că Homer a scris adevărul despre regele Candaules și soția sa Gyges. Astfel, istoricul antic pare să aibă o perspectivă complexă asupra relației dintre Homer și adevăr. În unele pasaje, el sugerează că Homer a prezentat povești fictive, în timp ce în altele el pare să creadă că Homer a prezentat fapte reale. Aceste perspective contradictorii ar putea fi rezultatul faptului că Herodot considera poezia homeriană ca fiind o adevărată combinație de fapte istorice și povești fictive.

Autorul observă o atitudine complexă pe care o are Herodot față de Homer – critica și totodată înțelegerea detașată asupra aedului sunt impresionante. Dornic să-i atribuie lui Homer cunoașterea unui adevăr, recunoaște faptul că el este angajat în ficțiune de prea multe ori.

Bruno Currie analizează pe larg alte opinii critice antice despre poezie și adevăr, cum ar fi cele ale lui Platon, Aristotel sau Xenophan, pentru a putea înțelege mai bine poziția ambiguă a lui Herodot. El împarte criticii lui Homer în patru categorii. Primii sunt cei care consideră că poeții vor să transmită „instrucțiuni” reale pentru viață, dar nu fac o treabă bună în această privință.

Aceștia sunt criticați pentru că nu oferă o descriere precisă a lumii, iar aparențele pe care le perpetuează nu pot și nu trebuie să fie apărate, indiferent dacă acestea sunt falsuri întâmplătoare sau ficțiuni voite. În această categorie se regăsesc autori precum Platon și Xenofan. Există apoi autori care consideră că în spatele vorbelor aezilor se găsește un adevăr ascuns despre lume. Această poziție este asociată cu Theagenes of Rhegium, Metrodorus of Lampracus și autorul papirusului Derveni din secolul al V-lea. În al treilea rând, există opinia conform căreia poezii nu își propun să instruiască, ci să distreze. Discursul lor este unul fictiv, *mythoi*. Această opinie este cel mai bine ilustrată de declarația explicită a lui Eratostene din secolul al III-lea î. Hr. Acestei opinii, i se alătură și Aristarchus. Cea de-a patra perspectivă afirmă că poezii sunt interesați atât de perspectiva recreațională, cât și de învățare: cu toate că întrebuințează un limbaj poetic, nu li se poate nega contribuția la un discurs instructiv și real. Această perspectivă se regăsește în pozițiile lui Antistenes și Aristotel (ambele deja citate), care afirmă că poezii vorbesc cu referire atât la felul în care lucrurile „sunt/erau cu adevărat” (Antistene: ἀλήθεια; Aristotel: οἷα ἦν ἢ ἔστιν), cât și la felul în care lucrurile sunt „spuse a fi” în mod convențional (Antistene: δόξα; Aristotel: οἷά φασιν καὶ δοκεῖ).

Fiecare dintre aceste patru poziții poate fi înțeleasă ca definindu-se în opoziție cu cel puțin una dintre celelalte. Cu toate acestea, autorul ne atrage atenția asupra faptului că este important să recunoaștem că granițele sunt poroase și că una poate să treacă în alta în funcție de aspectul particular al imaginii care este accentuat.

Bruno Currie consideră că Herodot se detașează de toate aceste poziții, având o perspectivă mai complexă asupra lui Homer. Atât Herodot cât și Strabo vorbesc despre aed ca fiind un fel de proto-istoric. Cei doi îl plasează pe Homer într-o altă categorie decât pe alți poeți. Conform spuselor lui Herodot, Homer, poetul Iliadei și Odiseei, poate fi considerat de încredere atunci când indică adevărata localizare a Elenei în timpul războiului troian, în timp ce poetul opereii *Cypria* nu poate. Similar, comentariul lui Polybius-Strabo cum că „nu este stilul lui Homer” să se angajeze în a inventa *ex nihilo*, fără a ține cont de fapte, implică faptul că acesta este stilul altor poeți. Autorul sugerează că interpretarea ideii lui Herodot cu privire la poezie și adevăr poate fi îmbunătățită prin utilizarea comentariilor făcute de Strabo. Deși această metodă poate fi considerată circulară, adică implică utilizarea unei surse pentru a interpreta alta care se bazează pe prima, ea este o veritabilă utilizare a cercului hermeneutic.

Cea mai importantă concluzie pe care o subliniază Bruno Currie în urma analizei sale se referă la faptul că întreaga operațiune de critică literară trebuie inclusă printre preocupările intelectuale ale lui Herodot, mai ales ținând cont că aceasta, în speță critica literară a lui Homer,

era deja o disciplină bine stabilită în secolul al V-lea î.Hr., practică mai ales de sofiști și rapsozi. Totuși, a recunoaște că pasajul din Herodot (2.116-17) este o incursiune în critica literară nu înseamnă că pasajul nu își propune să atingă alte obiective. Dimpotrivă, el promovează clar scopurile istoriografice ale lui Herodot. Istoricii antic este, fără îndoială, interesat și de a face o observație, atât în 2.116-17, cât și în 2.23, despre metoda istoriografică, mai cu seamă despre diferențele fundamentale dintre istoric și poetul epic: Homer și Herodot au atitudini diferite față de adevăr și ficțiune, legate de cerințele determinate de scopul scrierii lor.

**ANDREW G. SCOTT, *An Age of Iron and Rust. Cassius Dio and the History of His Time*, Leiden, Boston, Ed. Brill, 2023, 258 p.,**

**ISBN: 978-90-04-54111-5**

**Nicolae-Vlad CIORICARU,**

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Lucrarea *An Age of Iron and Rust. Cassius Dio and the History of His Time*, redactată de către Andrew G. Scott, este dedicată imaginii lui Cassius Dio ca istoric, ca un cronicar al evenimentelor epocii sale și creator al unor vivace portrete ale contemporanilor săi pentru posteritate. Acest volum face parte dintr-o serie mai largă de lucrări, numită *Historiography of Rome and Its Empire*, coordonată de către istoricii Carsten Hjort Lange și Jesper Majbom Madsen și publicată la editura Brill. Scopul acestei serii este acela de a favoriza cunoașterea istoriografiei Romei antice, de la perioada Republicii până la cea a Imperiului Roman Târziu. Lucrarea pe care o comentăm aici este volumul cu numărul 18, fiind cea mai recentă apariție din serie. Autorul, Andrew G. Scott, este profesor de Studii Clasice la Universitatea Villanova din Pennsylvania.

Volumul reprezintă o analiză a personalității lui Cassius Dio, studiat atât din punctul de vedere al vieții cât și carierei sale, dar mai ales din prisma activității sale istoriografice și de comentator al propriei contemporaneității. Titlul cărții, *An Age of Iron and Rust*, utilizează metafora pe care Cassius Dio însuși a ales să o folosească pentru a descrie o mare parte din perioada pe care acesta a trăit-o. Sintagma face referire la discrepanța dintre perioada în care Marcus Aurelius a fost împărat și cea dominată de Commodus, succesorul său<sup>10</sup>. Astfel, perioada celui din urmă este în mod clar reprezentată ca fiind începutul unui declin drastic al statului Roman<sup>11</sup>. Epoca tratată în cuprinsul acestei lucrări este cuprinsă între anii 180 și 229 î. Hr. Tocmai de aceea, este crucială menționarea următorului aspect: autorul acestui volum redă diagnosticul pe care Cassius Dio îl oferă perioadei de după monarhia lui Marcus Aurelius, și anume ca o decădere continuă a Romei în ansamblu.

De altfel, sunt analizate scrierile lui Cassius Dio din perspectiva evenimentelor majore cu care acesta a fost contemporan, a ascensiunii împăraților, a războaielor, a schimbărilor sociale și

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<sup>10</sup> Noe, Chr. 2020, „The `Age of Iron and Rust` in Cassius Dio`s *Roman History*: Influences from Stoic Philosophy”, în ed. Christopher Burden-Streven, Jesper Majborn Madsen, Antonio Pistelatto, *Cassius Dio and the Principate*, Venezia, Edizioni Ca` Foscari, 151.

<sup>11</sup> *Ibidem*.



chiar a intrigilor politice. Autorul menționează încă din introducere metoda pe care acesta a folosit-o în cuprinsul acestor scrieri. Este vorba despre faptul că valoarea aspectelor istorice rediate de acesta rezidă din abilitatea sa de a înțelege și a interpreta evenimentele cu care acesta a fost contemporan<sup>12</sup>.

Pentru analiza de față și mai ales pentru a putea reda aspectele menționate anterior, metodologia de lucru a autorului s-a bazat mai ales pe studierea surselor primare, a scrierilor lui Cassius Dio, cea mai importantă operă fiind „Istoria Romană”. Autorul însuși este un rafinat cunoscător al istoriografiei subiectului, ceea ce-i permite realizarea unei analize succinte, dar sugestive a principalelor lucrări care au tratat anterior biografia și opera istoricului antic, punând accent pe faptul că studiul personalității lui Cassius Dio și mai ales a scrierilor sale se află într-o continuă dezvoltare.

Lucrarea este structurată în opt capitole, la care se adaugă introducerea și concluziile. În cuprinsul primului capitol, *Cassius Dio's Literary Career*, este prezentată activitatea lui Cassius Dio ca autor, având un important subcapitol cu privire la *Istoria Romană*. Al doilea capitol, numit *Cassius Dio and the Historiographic Tradition* expune felul în care Dio s-a raportat la scrierea și mai ales la istoria romană, fiind continuat de cel de-al treilea, *Cassius Dio and the Roman Monarchy*, ca o analiză a monarhiei romane. Acest capitol aduce cu sine o idee extrem de importantă a lucrării de față, și anume, înțelegerea războiului civil de către Cassius Dio ca un fenomen recurent, ciclic. Această idee a fost împrumutată de la Tucydide, însă noutatea pe care istoricul contemporan al dinastiei Severilor o aduce este reprezentată de faptul că, în viziunea sa, războiul civil nu a reprezentat doar o formă distructivă, ci mai ales ca un mijloc necesar prin care Roma a reușit, în primă instanță, să instituie o monarhie adecvată care a putut să fie recreată ulterior, după perioadele de criză<sup>13</sup>.

Al patrulea capitol aduce o abordare nouă în cuprinsul acestei lucrări, fiind vorba despre metodologia istorică pe care Cassius Dio a folosit-o în scrierile sale. Astfel, acest capitol se numește *Marcus Aurelius, Commodus, and Historical Method in Cassius Dio's Contemporary History* și pune accentul pe cei doi împărați menționați anterior, Marcus Aurelius și Commodus. Mai mult, realizează o analiză comparativă a felului în care cei doi au fost caracterizați de către Cassius Dio.

Analiza caracterizării împăraților romani continuă și în capitolele următoare, acestea numindu-se succesiv: *The Depiction of Septimius Severus: Content and Structure; Mixed Depictions:*

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<sup>12</sup> Scott, A. G. 2023, *An Age of Iron and Rust. Cassius Dio and the History of His Time*, Leiden, Boston, Brill, 4.

<sup>13</sup> *Ibidem*, 16.

*Pertinax, Septimius Severus, and Macrinus; Caracalla and the Limits of Dynastic Seccession; The Re-creation of the Severan Dynasty: From Macrinus to Severus Alexander.*

Sunt evidente, astfel, principalele traiectorii urmărite de autorului în tratarea subiectului. Este vorba despre cele două mari direcții. Pe de o parte, este abordată opera literară, istorică a lui Cassius Dio, cu precădere *Istoria Romană*. Pe de alta, autorul pune accent pe imaginea următorilor împărați romani, Marcus Aurelius, Commodus, Septimius Severus, Pertinax, Macrinus, Caracalla și Alexandru Severus, tocmai pentru a evidenția felul în care Cassius Dio a analizat și descris monarhia romană și evoluția acesteia sau, după caz, decăderea sa.

Pentru a conchide, trebuie să remarcăm alături de autor faptul că studierea istoriei romane din perspectiva analizării scrierilor lui Cassius Dio are provocările și limitările sale. De altfel, pentru a susține această teză, Andrew G. Scott a subliniat lacunele literaturii moderne, mai ales lipsa unei analize obiective sau măcar comparative în urma studierii unui ansamblu suficient de ample surse antice istoriografice și de alte tipuri. Poate cel mai important aspect legat de scrierile lui Cassius Dio este acela că a oferit o înțelegere mai clară asupra felului în care ar fi trebuit să arate o monarhie ideală. Cariera lui de senator l-a ajutat să înțeleagă aceste lucruri. De altfel, acest istoric implicat în politica Principatului a descris atât de bine modul de funcționare al unei monarhii, mai cu seamă perpetuarea erorilor care au condus la începutul declinului Imperiului Roman, ceea ce în opinia lui Andrew G. Scott reprezintă unul dintre meritele fundamentale ale istoricului roman, rezultat al fericitei alianțe între simțul său politic și talentul scriitoricesc.

**ANDREI OPAIȚ, ALEXANDRU BARNEA, BIANCA GRIGORAȘ, ADRIANA  
PANAITE, DRAGOȘ HĂLMAGI, *Dinogetia II. Amforele romane*,  
Editura Mega, Cluj-Napoca, 2022, Biblioteca Istro-Pontica, Seria Arheologie 22, 180 p +  
105 pl. + 18 figuri incluse în text, ISBN: 978-606-020-549-4**

**Florentina GHEMUȚ,**  
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În urmă cu peste 55 de ani era publicat primul volum monografic dedicat cetății romano-bizantine Dinogetia. Cercetările arheologice au continuat și o serie de articole au rezumat temele principale de cercetare, totuși cetatea nu a mai beneficiat de un volum monografic. Apărut la finalul anului 2022 la Editura Mega, al doilea volum monografic al Dinogetiei vine astfel la mai bine de o jumătate secol după primul volum și, din păcate, apare după moartea celui care a fost în ultimele decenii conducătorul științific al șantierului arheologic de aici, Alexandru Barnea. Dacă volumul apărut în 1967 era dedicat așezării medievale timpurii, perioadă căreia i-au fost dedicați primii ani de cercetare, acest al doilea volum se oprește asupra descoperirilor de epocă romană, mai precis a descoperirilor ceramice. După cum declară autorii, amforele romane – subiectul acestui volum, vor fi urmate și de celelalte descoperiri.

Capitolul introductiv este dedicat expunerii descoperirilor arheologice de epocă romană. Capitolul, scris de Alexandru Barnea și Adriana Panaite, rezumă o istorie a cetății așa cum apare ea în izvoare scrise și în urma descoperirilor arheologice de până acum. Autorii menționează că deși majoritatea datelor sunt în cea mai mare parte publicate în rapoartele de săpături și articolele care au urmat cercetărilor arheologice de la Dinogetia înainte și mai ales după 1944, este pentru prima dată acum când se încearcă o grupare a lor completă, împreună cu observațiile și cercetările recente, în intenția unui rezultat valabil și eficient.

Dinogetia, denumire atribuită descoperirilor arheologice din punctul Bisericuța lângă satul Garvăn, este o cetate romană întemeiată, asemenea multor altele din Dobrogea, într-o zonă deja locuită de geți. O fortificație va fi existat probabil încă din secolul I p. Chr., și, deși ea nu a fost încă depistată, se consideră că fortificația din secolul III reia traseul celei timpurii (p. 17). Având 14 turnuri amplasate pe un zid de incintă ce închidea 1,2 ha, beneficiind și de apărarea naturală a insulei, fortificația este cel mai impresionant element păstrat din perioada Dominatului, perioadă căreia îi aparțin de altfel cele mai monumentale și mai îngrijit lucrate

edificii (p. 22). Sunt descrise astfel *praetorium*-ul, *domus*-ul, basilica paleocreștină și termele. Urmează mai multe pagini dedicate stratigrafiei, iar un subcapitol special este dedicat și așezării și altor puncte *extra-muros*. În încheierea capitolului, se face o trecere în revistă a principalelor faze prin care așezarea a trecut de la cucerirea romană până la căderea *limes*-ului romano-bizantin în acest punct. Desenele din acest capitol, planuri, schițe sau reconstituiri, preluate din publicațiile mai vechi, sunt prelucrate de Iuliana Barnea satisfăcând pretențiile grafice ale publicațiilor actuale.

Capitolele care cuprind descrierea amforele romane timpurii și târzii de la Dinogetia sunt scrise de Andrei Opaț și Bianca Grigoraș. În deschidere, se accentuează importanța pe care studiul ceramicii și al amforelor în particular îl au în identificarea unei identități etnice, în evaluarea naturii și intensității comerțului antic, reprezentând astfel un instrument prețios pentru identificarea modelelor de cerere și aprovizionare, dar și a stratificării sociale, precum și a integrării economice a respectivului sit în cadrul Imperiului Roman (p. 45). Grupate în capitole mari în funcție de utilizarea lor, respectiv pe criterii funcționale, amforele sunt apoi împărțite în tipurile ceramice identificate, la rândul lor grupate în ordinea cronologică.

Primul și cel mai mare capitol este dedicat amforelor pentru vin, grupate în amfore din perioada timpurie și amforele din perioada târzie. În primul grup sunt prezentate amforele de masă, ulcioarele amforoidale, amforele pentru vin pontice (nord și sud-pontice), amforele egeene, amfore tip Troesmis X - un tip de amforă căreia nu i se cunoaște zona de producție precum și tipuri necunoscute care nu pot fi încadrate. Iar în cele din perioada târzie au fost identificate și analizate următoarele tipuri: amfore de masă locale, amfore sud pontice, amfore egeene, tipuri de amfore cretane, amfore tip LRA, dintre care tipul LRA 1 este cel mai numeros între tipurile de amfore pentru vin ce ajung pe acest sit, fiind prezent de la sfârșitul secolului al IV-lea și până la începutul secolului al VII-lea (p. 85), amfore tip Antonova 8, amfore nord africane, amfore vest pontice și câteva amfore de origine necunoscută. O împărțire similară, în funcție de perioada timpurie sau târzie, se face și pentru capitolul dedicat amforelor pentru ulei, iar un ultim mic capitol este dedicat amforelor pentru pește, a căror prezență într-o zonă cu posibilități generoase de pescuit este surprinzătoare.

Catalogul de descoperiri ceramice este pus în valoare de paginile de concluzii, care includ considerații tipologice, economice și sociale. Este accentuată importanța pe care o are tipologia pe criterii funcționale, respectiv identificarea rolului care i-a fost destinat respectivul vas. „Se uită adesea că amforele erau recipiente create special pentru anumite produse, având un anume design care să faciliteze introducerea și extragerea produsului din amforă, precum și un

transport cât mai optim al acelui produs”, punctează autorii. Sunt expuse corelațiile care se pot face între utilizarea frecventă a unui tip de vas și producția locală de vin. Spre exemplu, datarea amforelor de masă cu precădere în secolele IV-V, mai puțin în secolul al VI-lea, arată un consum consistent al vinului local, probabil de către o populație preponderent militară. Amforele de import în schimb atestă și sursele producătoare de vin, astfel spre exemplu, pe baza preponderenței amforelor heracleene se poate evidenția faptul că vinul de Heraclea era cel mai cel mai frecvent importat, de altfel atât la Dunărea de Jos, cât și la est de Carpați, încă din perioada preromană și până în secolul al IV-lea d.Chr. Autorii comentează asupra fiecărei surse de import de vin, așa cum este atestată de descoperirile ceramice: sursele pontice, egeene, levantine și altele. În mod similar se analizează și sursele de import pentru ulei, dominate de zonele egeeană insulară și vest anatoliană dar și cu o bună reprezentare a zonei nord-africane. Desigur, toate aceste ipoteze rămân, după cum precizează și autorii, influențate de amploarea săpăturilor arheologice.

Concluziile finale comentează asupra modului de viață în cetate, asupra ocupațiilor și organizării sociale. Mai multe grafice vin să ilustreze teoriile formulate pe parcursul studiului. Lucrarea, după cum precizează și autorii, este un de studiu de caz care se va dovedi util pentru înțelegerea și comparația cu alte situri similare de la Dunărea de Jos (p. 116).

Un capitol special, semnat de Dragoș Hălmagi, este dedicat ștampilelor și marcajelor de tip dipinti și graffiti. 88 de astfel de inscripții au fost selectate în catalogul epigrafic din cele peste 110 amfore întregi sau fragmentare care aveau inscripții. Ele sunt prezentate în aceeași ordine ca și cea generală, a tipurilor de amfore, urmând ipoteza expusă de autor că o mare parte din inscripțiile pictate sunt legate de procesele de producție și distribuție, astfel că înțelegerea lor devine legată de tipologia amforelor.

Capitolele beneficiază și de un binevenit rezumat în engleză. Cele peste 100 de planșe cu vasele identificate se află în ultima parte a cărții. Ele urmează ordinea expusă mai sus a tipurilor de amfore și cuprind desene și fotografii – de ștampile și dipinti și fotografii de pastă ceramică, de o calitate excelentă. Fragmentele ceramice ajută, astfel, la creionarea unei istorii a cetății romane Dinogetia, în care vedem, dincolo de edificii și stratigrafie, o civilizație vie, creată de oamenii care foloseau și tranzacționau mărfurile vehiculate de aceste vase.

Prin excelentul catalog de descoperiri ceramice și prin descrierea traseelor comerciale pe care acestea le certifică, cartea reprezintă un instrument util nu numai pentru specialiștii ceramiști, dar și pentru orice arheolog sau iubitor al antichității romane dobrogene, dornic să navigheze în vasta cantitate de informații pe care cel mai numeros tip de artefact antic ne-o transmite.

RECENZII ȘI PREZENTĂRI DE CARTE  
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## Cronica activității Centrului de Istorie Comparată a Societăților Antice, anul 2023

Dr. Florica (Bohîlța) MIHUȚ, dir. i al Centrului

### Ședințe lunare:

26 ianuarie 2023 – *In memoriam Cristian Olariu (1968-2013)* – în colaborare cu Societatea de Științe Istorice *Istros* și American Institute for South Eastern European Studies, conferințe susținute de:

- Prof. univ. dr. Ecaterina Lung, DIAAIA, Facultatea de Istorie a Universității din București: *626 – The last war of the Antiquity?*
- Dr. Anca Cezarina Fulger, CICSA, Facultatea de Istorie a Universității din București: *The Art of Tropaeum Traiani*
- Drd. Sterling Wright, doctorand al Departamentului de Antropologie al Universității de Stat Pennsylvania: *Talking to the dead in new ways: How biomolecular archaeology is changing our understanding of the past*

11 decembrie 2023 – Dr. Lauren Curtis, Bard College, New York: *History in Ovid? Towards a New Approach to the Exile Poetry's Black Sea Context*

12 decembrie 2023 – seria de conferințe a Laboratorului de Arheologie „Dinu Theodorescu” (CICSA, DIAAIA):

a. Histria – sectorul acropole centru-sud:

- dr. Franceska Știrbu, stud. Cosmin Vasile, stud. Claudia Radu – prezentarea campaniei arheologice
- dr. Alexandra Clara Țârlea – analize interdisciplinare asupra materialului vitric
- drd. Iulia Iliescu – raport preliminar asupra materialului ceramic

b. Beidaud:

- dr. Valentin Bottez – prezentarea campaniei arheologice și atelierul de arheoethanologie
- drd. Adrian Șerbănescu – campania de cercetări geofizice
- drd. Radu O. Stănescu (ICEM, Tulcea) – evaluarea de teren în UAT Baia, Ceamurlia de Sus

**Sesiunea anuală:**

– 12-13 Mai 2023 – sesiunea internațională cu tema: *Production and exchange from Prehistory to the Early Middle Age*

- Keynote speaker: dr. Viorel Emanuel Petac (Cabinetul Numismatic al Bibliotecii Academiei Române) – *Ancient Black Sea gold coins and geopolitics – from the Syrian wars to the Mithridatic wars*;
- 41 de participanți;
- Moderatori: dr. Carol Căpiță, dr. Cristian Ștefan, dr. Florica (Bohîlțea) Mihuț, dr. Alexandra-Clara Țârlea, dr. Diana Pavel, dr. Vladimir Crețulescu.