

**STUDIA UNIVERSITATIS
BABEŞ-BOLYAI**

Historia

Volume 67, Number 2, December 2022

**Semestrial Review edited by
The Babeş-Bolyai University
Cluj-Napoca, Romania**

Studia Universitatis Babeş-Bolyai

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Studia Universitatis Babeş-Bolyai, Historia is published biannually in June and December by Babeş-Bolyai University.

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Babeş-Bolyai University, Faculty of History and Philosophy,
1 Mihail Kogălniceanu Street, Cluj-Napoca, Romania.

This Number is coordinated by Gelu A. Florea, Ligia Ruscu, Ștefan Vasilache and Nica Ciubotaru.

ISSN 1220-0492

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ARGONAUT PUBLISHING

Desktop Publishing, Print and Distribution

Studia Universitatis Babeş-Bolyai, Historia

Volume 67, Number 2, December 2022

Edited by GELU A. FLOREA, LIGIA RUSCU, ŞTEFAN VASILACHE and NICA CIUBOTARU.

doi:10.24193/subbhist.2022.2

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The Middle Bronze Age in the Banat. Old Controversies on the Vatina Culture*

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Article: archeology; Received: 15.03.2023; Revised: 17.03.2023

Accepted: 18.03.2023; Available online: 28.04.2023.

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Abstract: Nearly 20 years ago I presented a brief historiographical overview of the so-called Vatina culture. Being published in Romanian, the article had a limited distribution. My concluding remarks on the so-called Corneşti-Crvenka group were the only ones noticed, probably because they were included in the English summary. Now I found it useful to publish in English this historiographical work concerning the Vatina culture, because it is still relevant today and can be the basis for future discussions concerning the Middle Bronze Age in the historical Banat.

Keywords: Banat region, Middle Bronze Age, Vatina culture, historiographical overview

Rezumat: Cu aproape 20 de ani în urmă prezentam o schiță istoriografică privind așa numita cultură Vatina. Fiind publicat în limba română, articolul a avut o circulație restrânsă. Au fost remarcate doar concluziile mele referitoare la așa numitul grup Corneşti-Crvenka, care se regăseau în rezumatul în limba engleză. Am considerat utilă publicarea în limba engleză a acestui demers istoriografic privind cultura Vatina, care este încă actual, pe care se pot clădi viitoare discuții privind bronzul mijlociu în Banatul istoric.

Cuvinte-cheie: Banat, bronz mijlociu, cultura Vatina, perspectivă istoriografică

* This article has been completed during my Alexander von Humboldt scholarship at the Freie Universität Berlin, Institut für Prähistorische Archäologie, under the supervision of the late Professor B. Hänsel (2000-2001). I must once again express my thanks to colleagues T. Soroceanu, N. Boroffka, V. Sava, A. Stăvilă, L. Ruscu and G. Florea for their helpful comments on this study.

Almost 20 years ago I presented a historiographical overview of the so-called Vatina culture¹. The article, being published in Romanian, had limited circulation. Only my conclusions concerning the so-called Cornești-Crvenka group, included in the English abstract, have been remarked². Those who are interested in the Vatina culture cannot use C. Ihde's PhD thesis because it remains unpublished³. Another history of research was published in Hungarian by K. P. Fischl and V. Kiss⁴. M. Ljuština's recent synthesis of this archaeological phenomenon can only be read by those who know Serbian⁵. For that reason, I found it useful to publish in English this historiographical approach on the Vatina culture, which I believe it is still relevant today, on which future debates on the Middle Bronze Age in the historical Banat can be built.

*

When I started investigating the Bronze Age in the Banat, I was surprised by the fact that for the same artifacts there are different chronological classifications and cultural designations in the literature. In 1992, at a symposium gathering archaeologists from the Romanian Banat organized by F. Medeleş in Buziaş, becoming familiar with the older⁶ and newer⁷ scientific contributions of Serbian colleagues and processing a good

¹ Gogăltan 2004.

² See especially the citations made by M. Ljuština (Ljuština 2012; Ljuština 2013; Ljuština 2014; Ljuština 2015; Ljuština 2019; Ljuština 2022) or more recently Molloy et al. 2023.

³ Ihde 2001a; Ihde 2001b.

⁴ Fischl, Kiss 2002, 125-129.

⁵ Ljuština 2022.

⁶ The general former Yugoslavian literature consulted for this issue is: Vulić, Grbić 1937, Pl. 19-27; Grbić 1939, 57-58; Mano-Zisi et al. 1948; M. Garašanin, D. Garašanin 1951, 64-105; Gavala 1952a, 24-26; Gavala 1952b, 53, Fig. 6; Grbić 1953; Rašajski, Šulman 1953; Gavala 1953, 60-66, Tab. I, III; M. Garašanin 1954; D. Garašanin 1954b; Gavala 1955; Grbić 1956, 19-27; Grbić 1958; M. Garašanin 1959, 75-82; Trbuhović 1961; Jovanović 1961; Tasić 1961; Tasić 1962; Jovanović 1963, 21-26; Medović 1963; Tasić 1963; Tasić 1964; Medović 1964, 30; Gavala 1964, 44, Tab. X-XI; Tasić 1967a; Trbuhović 1968a; Trbuhović 1968b, 62-69; Gavala 1971, 200; Tasić 1972; Kolarić 1972; D. Garašanin 1972; M. Garašanin 1973, 319-352; Tasić 1973, 22-37; Tasić 1974a, 212-224; Tasić 1974b; Uzelac 1975; Tasić 1976, 11; Tasić 1977; Balen-Letunić 1978, 104-108; Jevtić 1981, 31, Tab. IV-VI; Tasić 1981; Tasić 1982; M. Garašanin 1983, 504-519; Tasić 1983, 58-75; Majnarić-Pandžić 1984; Tasić 1984c; Tasić 1984e; Zotović 1985, 35-48; Bogdanović 1986; Vukmanović, Popović 1986; Stojić 1986, 148, Fig. 26-32; Petrović 1986; Gačić 1987; Tasić 1988b, 64-70; Tasić 1989; Tasić 1991.

⁷ Among the publications on the Vatina culture after 1992, I would mention the following: Stojić 1992, 217-218; Majnarić-Pandžić 1994, 66-70; Stojić 1995, 21-22; Uzelac 1996; Grčki-Stanimirov 1996, 75-76; Bogdanović 1996; Stojić 1996, 249-251; Jevtić, Vukmanović 1996; Medović 1996b; Stojić, Nikitović 1996, 207-212; Tasić 1997a, 82-83; Tasić 1997b, 49-51; Stojić 1997; Srejević, Lazić 1997, 233-247; Uzelac et al. 1997; Majnarić-Pandžić 1998, 179-181; Medović 1998b, 149-151; M. Garašanin 1998, 12-13; Tasić 1998, 34-35; Stojić 1998; Babović 2001. For investigations in and around Feudvar or for links to other cultural circles in the area see also

part of the materials from the Cornești settlement⁸, I affirmed for the first time that there cannot be a Vatina culture in the Romanian Banat⁹.

Such a remark attracted a lot of criticism from my colleagues. I tried to explain that there is no Vatina culture in the Romanian Banat as it was defined by some archaeologists from former Yugoslavia. At the same time I suggested that the presence of the Verbicioara culture in the historical Banat cannot be accepted.

A basic point that confused me from the very beginning was the fact that the emergence of the Vatina culture was placed by some Serbian colleagues in the Early Bronze Age¹⁰, while other specialists, and I mention only those from the Carpathian Basin, saw in this cultural manifestation an expression of the Middle Bronze Age¹¹.

Even if I intended to elaborate, through my PhD thesis, a synthesis of the Early and Middle Bronze Age in the Banat, because of the outbreak of the war in former Yugoslavia¹², the modest financial funds I received, but especially because of the need to have a broad discussion on the chronology of this period in south-eastern Central Europe, I had to limit my study only to chronology and metallurgy problems in the Romanian Banat and on the lower Mureș River¹³. The conclusions I reached have already been published, so there is no need to repeat them.

I consider that Middle Bronze Age period begins after 2100 BC and is marked by the development of tell settlements in the lowland area of the Banat and a flourishing bronze and gold metallurgy. The end of the Middle Bronze Age is marked by the emergence of two cultural manifestations

the literature cited below. Serbian literature was also checked with the help of colleagues Marija Ljuština and Valentin Cedica, whom I thank here again.

⁸ Radu 1972a; Radu 1972b; Soroceanu, Radu 1974; Medeleț 1993, 119-122; Gogâltan 1999b, Fig. 9-11; Gogâltan 2004, Pl. III-V.

⁹ In the following I will use the cultural term "Vatina", as it has become established among specialists in Romania and beyond, with the same meaning as "Vatin" or "Vattina=Wattina=Watin" sometimes found in Serbian or German literature.

¹⁰ Grbić 1958, 38; Tasić 1967a; Tasić 1973, 25; Tasić 1974a, 207-224; Tasić 1974b, 199; Tasić 1977, 17; Tasić 1981, 205; Tasić 1983, 73-74, 152; Tasić 1984b, 12-13; Tasić 1984c, 74; Bogdanović 1986, 69-70; Tasić 1988b, 64, Fig. 3 (the second phase of the Early Bronze Age); Tasić 1989, 92; Tasić 1991, 14; Vasić 1994, 3; Tasić 1995; Uzelac 1996; Stojić 1996, 249-250, 254; Tasić 1997a, 82-83; Tasić 1997b, 49-51; Uzelac et al. 1997; Srejšović, Lazić 1997, 233-247; Tasić 1998, 34-35.

¹¹ Grbić 1939, 58; Nestor 1960, 108; Berciu 1966, 176-178; Popescu 1966, 560-562; D.Garašanin 1967, 205-206; D.Garašanin 1972, 36-37; M.Garašanin 1973, 334-335; Soroceanu, Radu 1974, 33; Bóna 1975, 179-186; Petrescu-Dîmbovița 1978, 83; Lazarovici 1977, 90-93; Morintz 1978, 17-22; Lazarovici, Săcărîn 1979, 76-81; Dumitrescu et al. 1983, 192-193; M.Garašanin 1983, 506; Majnarić-Pandžić 1984; Zotović 1985, 46-48; Dumitrescu, Vulpe 1988, 67; Soroceanu 1991, 77-78, 120-121; Bóna 1992, 32; Majnarić-Pandžić 1994, 66-70; Gumă 1997, 42-54; etc.

¹² The invitation made in the summer of 1991 by Professor B. Hänsel to participate in the entire research campaign at Feudvar could not be complied with.

¹³ Gogâltan 1999a.

whose origins can be found to the west of my area of interest: the Cruceni-Belegiș culture situated in the central area of the Romanian Banat and the *Hügelgräberkultur* on the lower Mureș River. The phenomenon takes place some time before 1500 BC and is associated with the end of tell settlements and the emergence of the urnfield graves in the Banat plain. I consider that the Late Bronze Age begins in the Banat along with the emergence of the two already mentioned cultures. Considering the Central European chronology, the Middle Bronze in the area covers the period from the end of stage A1 - up to and including stage B1¹⁴ (Fig. 1).

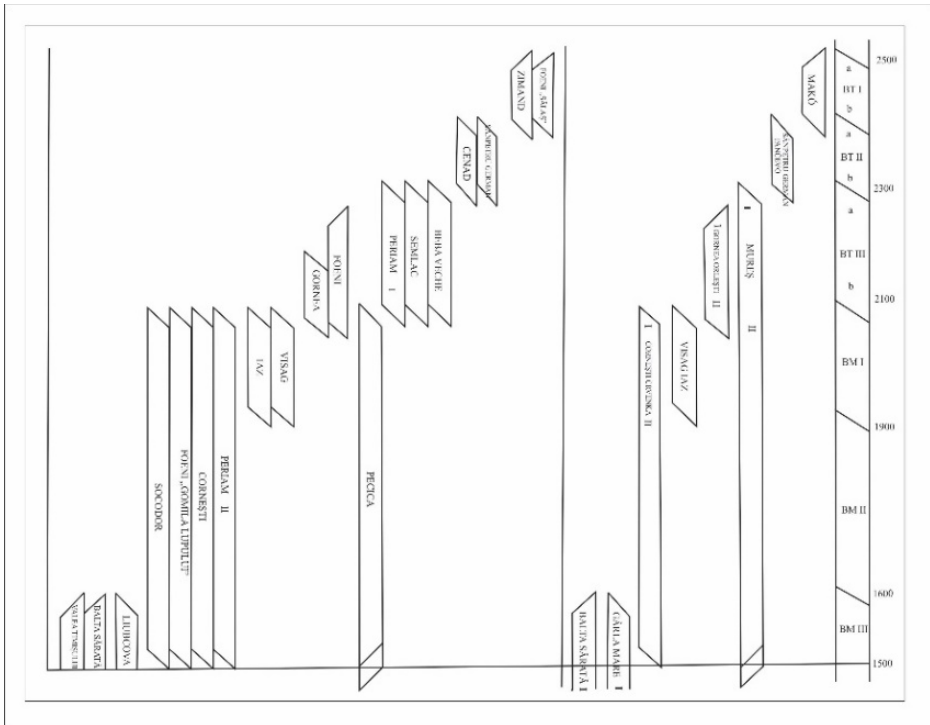


Fig. 1. The Early and the Middle Bronze Age of the Romanian Banat. The chronological and cultural evolution.

*

In the following, discussing terminology issues, I will focus on the most important moments that led to the identification of the cultural realities belonging to the Middle Bronze Age in the Banat, specifying my position towards them.

¹⁴ Gogâltan 1998a, 197-200; Gogâltan 1999a, 205-209; Gogâltan 2001, 292-293 ; Gogâltan 2004, Fig. 1.

The first step is marked by the work of B. Milleker¹⁵. At the end of the 19th century and the beginning of the following one he discovered at Vatin (Vatina, Vattina) a series of artifacts of great importance for the prehistory of the Banat¹⁶. Until now specialists from the former Yugoslavia and Romania have avoided a thorough analysis of them. This is due both to the fact that they were relatively different from what was published from other sites in 1937 by N. Vulić and M. Grbić¹⁷, and to the unsystematic and non-stratigraphic nature of the excavations, as the archaeological material discovered could only be used from a typological point of view¹⁸.

Things became clearer with N. Tasić's outlining of the characteristics of the urnfield graves¹⁹. In my opinion, and not only mine, I consider that in the eponymous settlement of the Vatina culture there is a lot of material coming from a settlement, with slightly different pottery from what was known before the Second World War from Pančevo²⁰, Omoljca²¹, Čoka²², Ljuljaci²³ or Vinča²⁴ and different assemblage constituting the inventory of a necropolis or necropolises²⁵. It is certainly a Cruceni-Belegiš necropolis (with numerous imports of the Dubovac-Žuto Brdo-Gârla Mare culture), composed of about 400 cremation graves in urns²⁶. At least one burial grave²⁷ can be added, whose ritual and funerary inventory link it to the manifestations of the *Hügelgräberkultur* of Bačka²⁸, the south-eastern Alföld²⁹ and the lower Mureş valley³⁰. It should be noted that the finds made by B. Milleker

¹⁵ Scherer 1983.

¹⁶ Milleker 1894; Milleker 1896a; Milleker 1897a, 122-144; Milleker 1897b, 52-62; Milleker 1899; Milleker 1902; Milleker 1903; Milleker 1905; Milleker 1906, 181; Milleker 1907, 93; Milleker 1908, 187-188; Milleker 1909, 382.

¹⁷ Vulić, Grbić 1937, Pl. 19-27.

¹⁸ M.Garašanin 1973, 319.

¹⁹ Tasić 1964; Tasić 1967b.

²⁰ Milleker 1925, 6 "Bachmanischen Zieglei"; Vulić, Grbić 1937, Pl. 24-27; Grbić 1939, Tab. III/8-10, 13.

²¹ Vulić, Grbić 1937, Pl. 20-22; 23/1-8; Grbić 1939, Tab. III/7, 11-12.

²² Vulić, Grbić 1937, Pl. 19/11.

²³ Vulić, Grbić 1937, Pl. 23/9-14.

²⁴ Vasić 1936a, 135, Tab. LXXVII/290-291; Vasić 1936b, Tab. LXXIV/228-229; LXXV-LXXVI/233-236; Vulić, Grbić 1937, Pl. 19/4-10.

²⁵ Tasić 1974a, 213; Tasić 1977, 17; Tasić 1984c, 62, 68.

²⁶ Milleker 1905, 60-67, Pl. XIV, XV/1a-b, 3, XVI/5, XVIII/2, etc. Hänsel 1968, 239 (Vatina group); M.Garašanin 1973, 321-322 (Vatina group); Tasić 1983, 88-99 (Belegiš culture).

²⁷ Milleker 1894, 3-4; Milleker 1897a, 122-123; Milleker 1905, 12-13, 63, Pl. I.

²⁸ Trogmayer, Szekeres 1968; Tasić 1972.

²⁹ Foltiny 1957; Trogmayer 1975.

³⁰ Gogáltan 1999a, 210, n. 127 with the bibliography.

have led Bronze Age researchers to use the term *Vatina culture/group/type* in the literature³¹.

M. Grbić, in his *Prehistory of Vojvodina*, discusses three cultures in the Bronze Age: Mokrin, Vatin and Vršac³². He thus made a distinction between the finds from Vatin and Vršac. Without giving too many details, Grbić placed discoveries such as those at Pančevo and Omoljca in the Vatin culture, and discoveries near Vršac in a culture with the same name³³. In the 1950s, his articles covered the whole issue of the Vatina culture: origin, area, chronology³⁴. On the basis of the results of the new investigations at Ilandža³⁵, he revives the earlier idea of the existence of two consecutive groups Vatina and Vršac, the former characterized by the finds from Pančevo and Omoljca, and the latter by the use of white encrusted vessels³⁶. Considering that the area of distribution of the Vatina culture included the Banat, part of Serbia, Slavonia and Bosnia, Grbić came to the conclusion that this manifestation of the Early Bronze Age is not a "Pannonian" culture, but an Illyrian one. Its origin must therefore be sought in the Balkans (Armenochori horizon) and not in the Middle Danube area³⁷. As we shall see below, some of these theories can still be supported today. Grbić's separation of the artifacts from the Pančevo and Omoljca settlements from those of the encrusted pottery necropolis also remains important.

In over 50 years of investigating ancient history, M. Garašanin has not been able to avoid tackling one of the most spectacular European

³¹ I mention only specialists up to the beginning of the Second World War: Miske 1909, 135-136, 143-144; Miske 1910, 150 ("versecz-vattinai"); Borovszky 1911, 304; Franz 1922, 98 ("Wattina-Kultur"); Schmidt 1924, 88 ("Vattina Kultur"); Childe 1929, 287-290 ("The Vattina Culture"); Dunăreanu-Vulpe 1930, 22-26; Nestor 1933, 100 ("Vattina-Vârșeț-Gruppe"), 102-103 ("Vattina-Gruppe"), 110 ("Die späte Vattina Kultur"); Tompa 1937, 83 ("Vattinaer Typ"); Holste 1939, 5, 20 ("Vattina-Art"). In his famous, at the time, summary of prehistoric art in Europe, M. Hoernes placed the finds from Vatin and Vršac in a so-called "Pannonian" pottery group of the Bronze Age (Hoernes, Menghin 1925, 404-412), probably influenced by M. Wosinsky (Wosinsky 1904, 63-65, Pl. LXXXI-LXXXIX). O. Menghin discusses a "Werschetzer Kultur" (Hoernes, Menghin 1925, 825-826). Later O. Menghin used this term for the settlements and necropolises of Vatin, Vršac, Tolvädia (today Livezile), Dubovac, Satu Mare etc. (Menghin 1928, 27). After WW II, it is surprising that V. Trbuhović, in his doctoral thesis published in 1968, still uses the term "Vojvođansko-panonska grupa" for these findings (Trbuhović 1968b, 62-69)!

³² Grbić 1939, 56-58.

³³ Grbić 1939, Tab. III/7-13 (Vatina culture) and Tab. III/14-16 (Vršac culture).

³⁴ Grbić 1953; Grbić 1956, 19-23; Grbić 1958.

³⁵ Marijanski 1957.

³⁶ Grbić 1953.

³⁷ Grbić 1958, 37-38.

civilizations of the Bronze Age: the Vatina culture³⁸. Discussing the chronology of the Bronze Age in the Banat, Garašanin established two stages of development for the Vatina culture: an earlier one called Pančevo-Omoljca and a later one called Vatin-Vršac³⁹. This inner chronology is used to this day by some colleagues in Serbia. Through the publications of B. Milleker from Vatin, the culture also includes material that would later be defined as the Cruceni-Belegiš culture⁴⁰. They will be classified in a "late phase" of the Vatina culture⁴¹, later called "Belegiš-Ilandža"⁴². At the same time, M. Garašanin is the first to mention a local group (phase) of the Vatina culture in western Serbia based on finds from Ljuljaci - in the Belotić - Bela Crkva and Dobrača area⁴³. It should be noted that the settlements at Foeni and Cornești in the Romanian Banat are included among the manifestations of the Vatina culture⁴⁴.

When we refer to what M. Garašanin wrote about the Vatina culture, we must take into account the state of research at the time. Today it is clear that the Banat and Srem urnfield graves belong to another cultural phenomenon: Cruceni-Belegiš. Moreover, even M. Garašanin has given up these old opinions, accepting the results of new research⁴⁵. As will be seen later on, I am inclined to believe that the two evolutionary phases of the Vatina culture, proposed by M. Garašanin in 1954, are in fact regional developments of the same civilization. As for accepting the existence of a western variant of the Vatina culture, as defined by M. Garašanin, N. Tasić⁴⁶ or M. Bogdanović⁴⁷, I express strong reservations. Obviously these "Dobrača-type" materials cannot be neglected. In addition to the older finds mentioned above, I would add those published by M. Zotović from the Jančići, Krstac and Kriva Reka burial mounds⁴⁸, or the Lugovi-Bent

³⁸ M.Garašanin, D.Garašanin 1951, 64-105; M.Garašanin 1954; M.Garašanin 1959, 75-82; M.Garašanin 1973, 319-336, 353, 392; M.Garašanin 1983.

³⁹ M.Garašanin 1954, 59-61.

⁴⁰ M.Garašanin 1959, 77, 79, Pl. 16/4; M.Garašanin 1973, 321-336, Tab. 59. In the same way it also discusses in Alexander 1972, 71, 78-79.

⁴¹ M.Garašanin 1973, 324.

⁴² M.Garašanin 1983, 506-507.

⁴³ M.Garašanin 1959, 95103; M.Garašanin 1973, 320-321, 359-361. For materials from Bela Crkva and Dobrača see: D.Garašanin 1954b; M.Garašanin, D.Garašanin 1956, 11-12, Fig. 5-8. Further Zotović 1985, 35-48, with the resumption of the discussion.

⁴⁴ M.Garašanin 1983, 511. It is about the Foeni "Gomila lupului" site, some material from here ending up in the museum in Zrenjanin (Marinković 1996: Verbicioara culture - Tab. I, Sl. 1-2, 4; but also Vatina culture: Sl. 3, 5).

⁴⁵ M.Garašanin 1998, 12-13.

⁴⁶ Tasić 1977, 24; Tasić 1981, 201.

⁴⁷ Bogdanović 1996, 97.

⁴⁸ Zotović 1985, 39, 44, T. VII/3-5.

necropolis in Mojsinje⁴⁹. All these discoveries are enlightening in the shaping of a self-contained cultural reality in the late Middle Bronze Age – early Late Bronze Age period in central and western Serbia. It certainly has links with the Vatina world, but the investigation of necropolises alone cannot give us a complete picture of this manifestation.

D. Garašanin will accept the scenario advanced by M. Garašanin for the internal evolution and general chronology of Vatina culture⁵⁰.

Another important moment in shaping the notion of the Vatina culture was marked by the work of N. Tasić⁵¹. In publishing a series of artifacts from the Serbian Banat, N. Tasić distinguished between some sites belonging to the Vatina culture and others characteristic of the Verbicioara culture⁵². This distinction, at the time, seemed evident and was accepted by the vast majority of specialists in former Yugoslavia⁵³. Sites such as Vršac "Crvenka", Cornești, Vršac "Ludoš", Lepen, etc., were considered to belong to the Verbicioara Culture⁵⁴. The demarcation line between the two cultures was established on the alignment of the Vatin-Vršac-Židovar settlements⁵⁵. Such a cultural classification was based on the fact that there were pottery materials, especially around Vršac, slightly different from those found in southern Serbian Banat (Omoljica "Zlatica"⁵⁶, Pančevo "Donje Varoška/Najeva ciglana – Tamiška Industrija cigle i crepa"⁵⁷, Židovar near Orešac⁵⁸, etc.), in the south of Bačka (Popov Salaš near Novi Sad⁵⁹, Feudvar near Mošorin⁶⁰), south of the Danube in Srem and Šumadija

⁴⁹ Nikitović et al. 1997.

⁵⁰ D.Garašanin 1972, 37.

⁵¹ Tasić 1973; Tasić 1974a, 212-224; Tasić 1977; Tasić 1981; Tasić 1982; Tasić 1983, 58-63 (151-153); Tasić 1984c; Tasić 1988b, 64-70; Tasić 1991.

⁵² Tasić 1968, 19; Tasić 1974a, 209, 457; Tasić 1983, 67-69.

⁵³ Vukmanović, Popović 1986 (Mala Vrbica "Livade"); Gačić 1987 (Barice "Bugarska Humka", Vršac "Crvenka", Vršac "At"); Uzelac 1996, Map 2; Jevtić, Vukmanović 1996, Map 1.

⁵⁴ Tasić 1984d.

⁵⁵ Tasić 1974a, T. XXI.

⁵⁶ Trbuhović 1968a, 177-180, Fig. 9-11; Kolarić 1972, cat. no. 69; M.Garašanin 1973, T. 58; M.Garašanin 1983, Tab. LXXVII/1-4, 6-7; Tasić 1983, Tab. IX/2.

⁵⁷ M.Garašanin, D.Garašanin 1951, 92-93, Tab. IV/b, d; Kolarić 1972, cat. no. 70, 72-73; Tasić 1982, Fig. 1/4-6; Tasić 1983, Tab. VIII/3, 5-6. On the excavations here see Mano-Zisi et al. 1948.

⁵⁸ M.Garašanin, D.Garašanin 1951, 75; Gavela 1952a, 24-26, Sl. 23/3, 5; 24 (some ceramic fragments), 26, 28-29 (some ceramic fragments); Gavela 1952b, 53, Fig. 6; Gavela 1953, 60-65, Tab. III/9-12; Gavela 1964, 44, Tab. X-XI; Gavela 1965; Gavela 1966; Gavela 1971, 200; Gavela 1972, 41, T. VI/11-14. More data at Uzelac et al. 1997.

⁵⁹ Medović 1963, 25-26, T. 3-5; Medović 1964, 30; Tasić 1965a, 52-53; Majnarić-Pandžić 1971, 15, 21, Tab. II/5; Vilotijević 1971, 34; Balen-Letunić 1978, 100, 104-105, Tab. III/1; Tasić 1982, Fig. 1/1-3; Tasić 1983, 60-61, 64, Sl. 22, 24; Tab. VI.

⁶⁰ Rašajski, Šulman 1953, Tab. II/10; III/10. See also Medović 1998d.

(Belegiš "Šančine"⁶¹, Gomolava on the Sava near Hrtkovci⁶², Vinča near Belgrade⁶³, Gradina on the Bosut river – near Šid⁶⁴, Ljuljaci "Milića Gradina" near Kragujevac⁶⁵). These discoveries had some analogies in what D. Berciu defined, otherwise rather vaguely, in the early 1960s as the Verbicioara culture⁶⁶.

For these considerations, N. Tasić talks about of *finds of the Cornești-Crvenka type*, as a group of materials that did not belong to the Vatina culture and in which the Verbicioara elements are present⁶⁷. This group was considered as a local manifestation, an evolved aspect of the Verbicioara culture, which was placed at the end of its evolution (characteristic of the 3rd phase)⁶⁸ and strongly influenced by the "Vatina style". The finds from southern Banat could thus be described as "Verbicioara-Vatin Keramik"⁶⁹. However, what Tasić avoided taking into consideration was precisely the Vatin "Bela Bara" settlement⁷⁰. In line with N. Tasić's argument that channels, volutes, spirals and their derivatives are characteristic of the Vatina culture, and that ornaments made of lines suggesting triangles, garlands, semilunar segments, etc. belong to the Verbicioara motif⁷¹, the Vatin "Bela Bara" site would belong to the last-mentioned ceramic style. The illustration published by B. Milleker

⁶¹ Trbuhović 1961, 163-164; Tasić 1961; Tasić 1962; Tasić 1963; Tasić 1964; Tasić 1971, 19; M.Garašanin 1973, 320; Tasić 1977, 22; Tasić 1983, 63.

⁶² Level IVa: Tasić 1965b, 196-198; Tasić 1976, 11; Tasić 1977, 20-21; Tasić 1983, 61, 64, Sl. 23; Petrović 1986; Tasić 1988a, 48-51.

⁶³ Gavella 1953, Tab. I/1-4; Gavella 1955; Jovanović 1961; M.Garašanin 1973, T. 57; Tasić 1977, 19-20, Pl. I-IV; Tasić 1983, 61, Sl. 21, 26-27; Tasić 1984c, Pl. XIII-XV; Tasić 1984e.

⁶⁴ Tasić 1968, 26, Fig. 8; Tasić 1973, 25; Tasić 1977, 22; Tasić 1983, 64; Medović 1996a, 167-168; Popović, Radojčić 1996, 26-27.

⁶⁵ M.Garašanin, D.Garašanin 1951, 32; Srejović 1965, 54-55; Kolarić 1972, cat. no. 33; Tasić 1977, 22, 24.

⁶⁶ Berciu 1961a; Berciu 1961b; Berciu 1966, 176-178.

⁶⁷ Tasić 1983, 67, 153.

⁶⁸ I would mention that in the opinion of N. Tasić the Verbicioara culture in former Yugoslavia has, like B. Hänsel surmised (Hänsel 1976, 57-61), only three phases: the first phase corresponds to stages I-II of D. Berciu, the second phase is identical to Verbicioara III at Berciu, and the third phase is characteristic of "Crvenka-Cornești type" ceramics (Tasić 1983, 67-68; Tasić 1984d, 87).

⁶⁹ Tasić 1984d, 85. See also Tasić 1983, 58 (Vatin-Verbicioara cultural complex).

⁷⁰ In the *Prehistory of Vojvodina* or in other publications of N. Tasić, there is no exact toponym for the Vatin site. The finds from "Selo" and "Bele vode" are sometimes mentioned (Tasić 1974a, 215) or "Zamsko Polje" (Tasić 1982, 258). At Uzelac 1996, 37, in the area of Vatin, the sites "Bela Bara", "Zamsko Polje" and "Zeljeznička starica" are mentioned. I used the toponym "Bele Voda" (Gogăltan 1999a, 207, n. 101). J. Uzelac informed me that the current correct toponym for the former Szimics, Naschitz and Kory parcels of land, where the published material by B. Milleker (Milleker 1905, 3) comes from, is "Bela Bara".

⁷¹ Tasić 1984d, 85.

convincingly demonstrates this⁷². We would thus have a Vatina civilisation in which the eponymous settlement belongs to another culture!⁷³.

Such a conclusion could be reached because at the time N. Tasić examined the finds in Banat there was actually no available monograph of any Vatina or Verbicioara site. Systematic excavations were just at the beginning, as there were practically no discoveries from the Romanian Banat, apart from the settlements of Periam (Pl. VII)⁷⁴ and Cornești⁷⁵. It was reasonable to link this to what was already published: a few plates with Verbicioara artifacts. Today, however, we are faced with a different body of evidence, which I think demands that we revisit some older theories. It is obvious that without the previous efforts of a generation of specialists from former Yugoslavia and from Romania, it would not have been possible to take the steps forward. In my opinion, the Vatin "Bela Bara" settlement is a representative site of the Vatina culture, being located not on the periphery of this cultural manifestation⁷⁶, but at its very epicentre.

Moreover, I cannot agree with the suggestion that "Cornești-Crvenka-type finds" are characteristic only of a relatively short period of time, as long as the Verbicioara III phase continues. The stratigraphy at Cornești "Dealul Cornet"⁷⁷ and Foeni "Gomila lupului"⁷⁸ shows a somewhat a longer evolution of the Vatina communities that settled at these sites. The published pottery belonging to the lower levels of these sites suggests obvious links with the Gornea-Orlești group of the late Early Bronze Age⁷⁹. The import, probably Szeremle-Bijelo Brdo⁸⁰, found in the last level at Foeni "Gomila lupului" demonstrates that the settlement here was in use until the end of the Middle Bronze Age (Pl. IV/3). It is thus clear,

⁷² Milleker 1905, Pl. XII-XIII, XIV/2, XV/4, XVI/1-3, 4, 6-9, XVII/1-2, XVIII/6, etc. In fact, even N. Tasić, when discussing the ceramic forms of the Verbicioara culture, often refers to the Vatin settlement (Tasić 1974a, 210, V. 114-115, 119, Fig. 140, 142-142; Tasić 1984d, 86-87, Pl. XIX/1, 7). This has also been criticised by S. Morintz (Morintz 1978, 26, n. 45).

⁷³ Equally surprising is P. Medović's remark that the most significant site of the Banat Verbicioara culture is the settlement at Vatin (Medović 1997a, 46)!

⁷⁴ Roska 1911; Roska 1913; Roska 1914; Roska 1923. Also from the materials published by T. Soroceanu, at Periam "Movila Șanțului" there is a clear Vatina level that overlaps the early Mureș type settlement (Soroceanu 1991, 96-122, Taf. 41-84).

⁷⁵ Radu 1972a; Radu 1972b; Soroceanu, Radu 1974.

⁷⁶ Tasić 1974a, 213.

⁷⁷ O. Radu described ceramic fragments found at a depth of 130 cm, without being archaeological features (Radu 1972a, 279).

⁷⁸ In the test excavation I carried out in 1993 in the tell settlement from here, the base of the culture layer was reached at a depth of 170 cm.

⁷⁹ Gogâltan 1999b, Fig. 9, 12.

⁸⁰ I mention that I have not found a satisfactory analogy for this ceramic fragment. From the most recent bibliography on ceramics with white inlaid decoration on the middle Danube I quote Medović 1996a; Tasić 1996b; Šimić 2000.

at least to me, that the "Cornești-Crvenka type finds", in N. Tasić's understanding, cover the entire Middle Bronze Age period.

For I. Bóna the Vatina group, together with the Verbicioara group, is part of the so-called "Kultur der Kantharos-Keramik"⁸¹. Considering the time when his monograph was actually written (1958), compared to M. Garašanin, I. Bóna did not include in the Vatina group the urn field graves. Thus the most important settlements of this cultures are Vatin, Satu Mare, Vinča, Pančevo, Židovar, etc. Using the data provided by B. Milleker and probably having studied the unpublished material in the museum in Vršac, the Hungarian researcher rightly attributed the settlement at Satu Mare⁸², located in northern Romanian Banat, to the Vatina culture. From a chronological point of view, by proposing in 1998 the use of the system employed for the Early and Middle Bronze Age in Hungary for the Banat and Transylvania, I fully agree with the hypotheses put forward by I. Bóna. In the light of the material available to us today, I believe that it was not the Balkan background that was the direct origin of the Vatina culture⁸³, but the cultural realities of south-eastern Central Europe.

V. Boroneanț assigned to the Verbicioara culture several cave sites located on the Romanian banks of the Danube, in the area of the Iron Gates: Dubova (Climente's Cave I, Climente's Shelter/Potcapina) or the settlement of Gornea "Păzăriște" (Pl. VI)⁸⁴. This cultural classification has not been accepted by all archaeologists in Romania⁸⁵. Two significant observations by V. Boroneanț: the existence of several differences between the pottery from Gornea and that of the Dubova caves, as well as the occurrence of various elements borrowed in the Verbicioara culture from early Bronze finds such as those from Gornea and Orlești⁸⁶.

Publishing in 1977 the monograph *Gornea prehistory*⁸⁷ and later in 1979 together with C. Săcărin a synthesis on the Bronze Age of the Iron Gates area⁸⁸, G. Lazarovici attributed to the Vatina culture findings identical to those considered by N. Tasić to be Verbicioara. This cultural

⁸¹ Bóna 1975, 179-186.

⁸² Gogăltan 2004, Pl. XI.

⁸³ Bóna 1975, 189.

⁸⁴ Boroneanț 1976; Boroneanț, Miu 1998, 106.

⁸⁵ Critical comments at Lazarovici 1977, 92, n. 23. See also Lazarovici, Săcărin 1979, 76-77, 80; Gumă 1997, 43 (it cannot be excluded that it is part of the Cornești-Crvenka series of finds), 45 (difficult to attribute culturally), 47 (possible Verbicioara); Rogozea 1998, 140. Same opinions as V. Boroneanț at S. Morintz (Morintz 1978, 22, 26 - some analogies with the Vatina culture, but also with the Otomani culture) or G. Crăciunescu (Crăciunescu 1998, 115).

⁸⁶ Boroneanț 1976, 29.

⁸⁷ Lazarovici 1977, 90-93.

⁸⁸ Lazarovici, Săcărin 1979.

classification was based on a comparison of the pottery found in central and northern Romanian Banat with that of Oltenia⁸⁹. The arguments put forward by Lazarovici still stand today, and I agree with him that the area of the Verbicioara culture cannot be pushed westwards. If we are to accept that the finds from the Danube Gap belong to the Verbicioara culture then we would find ourselves in the following scenario: "there is no Verbicioara I-III culture, but this is about the penetration of an early Vatina group up to Oltenia..."⁹⁰. To this I must add that it is hard to explain why the Židovar tell, with its 3 m stratigraphy, belongs to the Vatina culture⁹¹, as we notice that it is located on the most natural access route of the Verbicioara communities in the Serbian Banat: the Danube – Caraș rivers.

According to S. Morintz, the most characteristic findings of the Vatina culture are: Vatin, Vršac, Gomolava (level IVA), Popov Salaš, Pančevo, Omoljca, Židovar, Cornești and those on the Ostrov of Moldova Veche⁹². Pottery from the first three phases of the Verbicioara culture has been identified in the Banat area at Vršac "Crvenka", Vatina, Kladovo, Visag, Gornea "Păzăriște" (here Sichevița), Băile Herculane and Dubova (here Ogradena)⁹³. The answer to the question why the two contemporary cultures are spread over the same territory cannot be found in Morintz's book!

While discussing the westernmost area of the Vatina culture, N. Majnarić-Pandžić rightly argues that this typical Middle Bronze Age phenomenon developed differently in eastern Slavonia and Sirmium⁹⁴. Its early phase is not identical to the Pančevo-Omoljca group of southern Banat, but, due to the connections with the "Perjamoš-Mokrin group", one can speak, starting with the Reinecke A2 stage in Central Europe, of a Slavonic-Sirmian variant of the early Vatina culture. Later, in the Reinecke B1 period, the so-called "Lovas type" amphorae would evolve, defined that way in 1958 by Z. Vinski⁹⁵. During the same evolutionary phase, but later (Reinecke B2 - C1), the Vatina culture of eastern Slavonia enters into contact with those who developed pottery decorated with "pseudo-schnur". This led N. Majnarić-Pandžić to name the phase as "Vatin-Belegiš". In her latest

⁸⁹ Lazarovici, Săcărin 1979, 77-81.

⁹⁰ Lazarovici, Săcărin 1979, 77.

⁹¹ Lazić 1997b.

⁹² Morintz 1978, 17.

⁹³ Morintz 1978, 22.

⁹⁴ Majnarić-Pandžić 1984; Majnarić-Pandžić 1998, 177-181.

⁹⁵ Vinski 1958, 20-34.

contributions she abandons the "Vatin-Belegiš" phase theory, aligning with the results of new research⁹⁶.

In a series of articles presenting the results of the Yugoslav-German mission to investigate the Feudvar tell and its surroundings, B. Hänsel and P. Medović, as well as other members of the team, provide important information on the Vatina culture⁹⁷. It should be noted that in the 2.50 m of the tell's stratigraphy, as far as they were investigated until 1990, several levels of constructions attributed to an early Vatina culture, a classical phase, a sequence in which there is a so-called "Pančevo-Omoljca Stils" and a late Vatina horizon were identified⁹⁸. Systematic research of the complete Titel plateau allowed the reconstruction of the prehistoric habitat of the area, as well as the links between a main settlement and secondary ones⁹⁹.

Trying to avoid any confusion between the Vatina and Verbicioara cultures, I have initially used the name of Cornești or Socodor type materials for some of the Middle Bronze finds in the Banat¹⁰⁰. After studying a number of unpublished finds of the collections belonging to the museums of the Banat, I carried out a test trench on the Foeni "Gomila lupului" tell settlement¹⁰¹. This small excavation provided me with a reliable stratigraphy. Thanks to the courtesy of my colleagues J. Uzelac and P. Medović, I was able to compare the pottery with the finds from the Serbian Banat stored in the museum in Vršac and with the results of the Yugoslav-German mission to Feudvar in the museum in Novi Sad. On the basis of this analysis I proposed in 1995, for what some Serbian colleagues called the Verbicioara culture ("Cornești-Crvenka finds"), others the Vatin-Vršac stage of the Vatina culture, and Romanian specialists the Vatina culture, the name of the *Cornești-Crvenka group*. This term was based on two sites that I considered representative: Cornești "Dealul Cornet" in Romania and Vršac "Crvenka" in former Yugoslavia¹⁰². Subsequently, I

⁹⁶ Majnarić-Pandžić 1985; Majnarić-Pandžić 1989; Majnarić-Pandžić 1994, 66-70.

⁹⁷ Medović, Hänsel 1989a; Medović, Hänsel 1989b; Hänsel, Medović 1991a; Hänsel, Medović 1991b; Hänsel 1991; Urban 1991; Grčki-Stanimirov 1991; Trajković 1991; Bukvić 1991; Gačić 1991; Becker 1991; Hänsel, Medović 1992; Görsdorf 1992; Hänsel, Medović 1994; Becker 1994; Hänsel, Medović 1995; Hänsel 1996, 246-249; Medović 1996b, 118, Sl. 3; Falkenstein 1997; Medović 1997a, 48, 53-55; Medović 1997b; Hänsel 1998; Medović 1998d; Borić 1998; Becker 1998; Kroll 1998; Falkenstein 1998.

⁹⁸ Hänsel, Medović 1991b, Fig. 4; Urban 1991.

⁹⁹ Medović 1998a, 53-58; Medović 1998c; Falkenstein 1998, 264-268.

¹⁰⁰ Gogăltan 1993a, 63.

¹⁰¹ Gogăltan 1999b, Fig. 12-14.

¹⁰² Gogăltan 1996, 46. I have advanced this designation after those "Funde vom Typ Crvenka-Cornesti" considered by Tasić to be characteristic of the third phase of the Verbicioara culture (Tasić 1984d, 87, Pl. XIX/ 2-6, 8). F. Medeleş reproached me, in private, the fact that for the material from the Serbian Banat I used a toponym "Crvenka" and not

included the space between the rivers Mureş and Crişul Alb in the area of spread of this regional group of the Vatina culture¹⁰³, an area considered to be inhabited by communities of the Otomani culture¹⁰⁴ (Pl. IX).

Among other contributions, I would like to mention J. Uzelac's synthesis of the Bronze Age in the southern Serbian Banat¹⁰⁵. Concerning the subject of this article, I notice both from the distribution maps and the catalogue of finds that the eastern Serbian Banat belongs to the Vatina and Verbicioara cultures. Vatin "Bela Bara" and Vršac "Crvenka" as representative sites are classified in both cultures¹⁰⁶, stating later that among the six Vatina finds in southern Yugoslav Banat "...Vatin Bela Bara and Vršac-Crvenka being the most important"¹⁰⁷!

M. Gumă, being familiar with all my findings and arguments, took this name and based on what was already published, tried to define it in his book concerning the Bronze Age in the Banat¹⁰⁸. The Corneşti-Crvenka group was regarded as an independent cultural manifestation of the Vatina culture, which covered the eastern part of the Serbian Banat, the Romanian Banat and the territory north of the Mureş as far as Socodor. On the Danube there would have been a mixture aspect with Vatina I-II type manifestations. Taking only a "critical" look at this important contribution to the clarification of the Bronze Age realities of the historical Banat, apart from some issues related to the internal chronology of this group that I will not discuss further, I must say that I cannot agree with the separation of this group from the Vatina civilization.

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the name of Vršac. This observation should be clarified. The use of toponyms for the names of cultures, cultural groups, stages in the evolution of cultural manifestations is common in the literature of Romania or the rest of Europe (see for example the Noua culture, Wietenberg, etc.) and there has been no problem in introducing them into the scientific circuit. I have used the toponym "Crvenka" and not Vršac, as it would have seemed more logical, for several reasons: firstly, to respect the notion first introduced by N. Tasić; secondly, because under such a name this site is most often mentioned (Milleker 1896b, 91; Rašajski 1962; Tasić 1984d) and not least to distinguish the material here from other finds around Vršac, such as those at "At" (Rašajski 1975a; Rašajski 1975b; Majnarić-Pandžić 1985; Rašajski 1989, 13-14, Sl. 2; Tasić 1996b, 147; Medović 1996a, 169-170), Ludoş (Milleker 1897a, 161-183; Milleker 1897b, 40-52, Tab. I-V; Wosinsky 1904, 63-64; M.Garašanin, D.Garašanin 1951, 71-73; Kolarić 1972, cat. no. 77-81 (Vršac-Vatin culture); Tasić 1981, 205 (Cruceni-Belegiš culture); Tasić 1983, Tab. XIV/4; XIX/1-2) or "Strmoglovnica" (Medović 1996a, 167. This site is not mentioned by J. Uzelac (Uzelac 1996, 37-38).

¹⁰³ Gogăltan 1999b.

¹⁰⁴ Pădureanu 1973; Pădureanu 1988; Bader 1998, 47, Fig. 1

¹⁰⁵ Uzelac 1996.

¹⁰⁶ Uzelac 1996, 37, Map 1-2.

¹⁰⁷ Uzelac 1996, 27.

¹⁰⁸ Gumă 1997, 43-54.

Considering the multitude of opinions on the Banat Bronze Age, it is reasonable to ask to which culture these finds actually belong? Is it necessary to introduce a new name in the literature? Is it appropriate? Does it respond to the cultural realities?

There are two basic arguments for proposing the term Cornești-Crvenka group. Firstly, I hope it will avoid future terminological confusion. The Cornești-Crvenka group is a part of a culture for which, by virtue of tradition, the name Vatina culture can be retained. However, the Verbicioara culture is representative of the Middle and Late Bronze Age in Oltenia¹⁰⁹. The contact region of the two cultures lies in the Danube Iron Gates area. On both sides of the Danube there are sites that are difficult to separate culturally. They have been classified as either Vatina or Verbicioara. In this respect, in addition to the finds from the Dubova caves mentioned above, the settlements at Ljubcova "Stenca" (Pl. V)¹¹⁰, Lepen near Boljetin (Boljetin I)¹¹¹, Manastir "Gospodin vir"¹¹², Gornea "Păzăriște" (Pl. VI)¹¹³, Mala Vrbica "Livade"¹¹⁴, Moldova Veche "Ostrov" (Pl. I-II)¹¹⁵, Klisura¹¹⁶ etc., or those in the Timoc Valley area (Timočka Krajina)¹¹⁷ should be mentioned. Such a reality is quite natural at the "border" between two cultures, where, due to more intense exchanges and population movements, specific phenomena arise. The same situation can also be seen on the northern edge of the Vatina territory¹¹⁸.

In addition to the fact that the two cultures: Vatina (through the Cornești-Crvenka group) and Verbicioara are neighbouring and contemporary during the Middle Bronze Age, I consider that they

¹⁰⁹ From the bibliography on this cultural manifestation I mention: Crăciunescu 1996; Bogdanović 1996; Jevtić, Vukmanović 1996; Crăciunescu 1998, 115-116, Pl. I-X; Nica 1998; Crăciunescu 1999.

¹¹⁰ Gumă 1977, 79-86, Pl. VIII, X/3 (Vatina culture); Petrovszky, Gumă 1979, 54, n. 5 (Vatina culture); Gumă 1997, 47-49 (Vatina culture).

¹¹¹ Jevtić 1982; Tasić 1983, 84 (Verbicioara culture); Jevtić, Vukmanović 1996, 285 (Verbicioara culture); Tasić 1998, 34 (Verbicioara culture). For N. Tasić, the entire Iron Gates area belongs to the Verbicioara culture (Tasić 1998, 35)

¹¹² Brukner 1969, 137, T. XXXVI/4; XXXVII/1-4 (Vatina culture).

¹¹³ Boroneanț 1976, 26-28, Pl. VII/1-16 (Verbicioara culture); Lazarovici 1977, 90-93 (Vatina culture); Morintz 1978, 22, n. 33 (Verbicioara culture); Lazarovici, Săcărin 1979, 87, Fig. 4-5, 8-14 (Vatina culture). Noile cercetări la Lazarovici et al. 1993, Fig. 10/10-13, 15-22; 11-12 (Vatina culture).

¹¹⁴ Vukmanović, Popović 1986 (Verbicioara culture).

¹¹⁵ Berciu 1961a, 125 (Verbicioara culture); Morintz 1978, 17, 21 (Vatina culture); Lazarovici, Săcărin 1979, 79, 85, Fig. 6/1-3; 15 (Vatina culture); M. Garašanin 1983, 511 (Vatina culture); Oprinescu 1989, 242-243 (Vatina culture); Roman 1998b, 21 (Vatina culture).

¹¹⁶ Letica 1984, 193-194.

¹¹⁷ Srejović, Lazić 1997, 247 (Vatina culture or "cultura Gamzigrad").

¹¹⁸ Gogăltan 1999b, 53-55.

originated on a common background, represented by the Gornea-Orlești group (ceramics decorated with textile ornaments, tree bark-like incisions or made with brooms or combs)¹¹⁹. This explains once again the many common characteristics found in the early stages of these cultural manifestations¹²⁰.

The second argument in favor of using a new name is the need to separate the communities that inhabited the plain east of the Deliblât desert (Deliblatska peščara) to the north of the Mureș River (the eastern extremity of the Serbian Banat, the Romanian Banat, southern Crișana) from those who lived in the settlements of Feudvar, Gomolava, Pančevo, Omoljca, Vinča, Ljuljaci, Židovar, etc. in Serbia, or Liubcova¹²¹ (Pl. V), Moldova Veche (Pl. I-II) in the southern Romanian Banat (Iron Gates of the Danube)¹²². Although the whole area can be integrated into the Vatina civilisation, this 'northern' group produced pottery containing different elements. What makes the "Danube" group distinctive are: the cultural background on which it was formed, the stronger links with the Mureș culture, or the so-called "Pančevo-Omoljca style".

Compared to the elements underlying the formation of the Cornești-Crvenka group of the Vatina culture and the Verbicioara culture, the genetic background of the "Danube" group of the Vatina culture seems to have been partly different. Thus, for the settlements of the southern Bačka, Srem, Šumadija, it is considered that the so-called "proto-Vatina" materials were the origin of this culture¹²³. This is what M. Garašanin has more convincingly defined as the "Pančevo-Donja Varoš, Bubanj-Hum IIIb, Vecina Mala-Majur

¹¹⁹ Basic literature on the origin of the Vatina culture in Bóna 1975, 187-190; M.Garašanin 1983, 519; Tasić 1984c, 73-74; Gumă 1997, 46.

¹²⁰ I refer to coarse pottery decorated with broom or comb: Gogâltan 1999b, Fig. 9, 12; this can be compared to Popilian et al. 1980, 255-256, Fig. 3; Crăciunescu 1996, Pl. I/4-9, II, III, etc.; Crăciunescu 1998, Pl. VIII/3, IX/2-3, X/1, 5; Nica 1998, Fig. 4/1-3, 13; 8/9; Crăciunescu 1999, Pl. V/2-3; VI/4-5; as well as the survival of textile ornaments: Crăciunescu 1998, Pl. X/2; Nica 1998, Fig. 6/8; Crăciunescu 1999, Pl. IV/3; VI/5.

¹²¹ Gumă 1977.

¹²² At the beginning of 1997, when I wrote the article on the southern area of the Otomani culture, I was only familiar with what was published on the Moldova Veche-Ostrov (Morintz 1978, Fig. 5-6). Suspecting a situation similar to that at Vatin "Bela Bara" and regarding the Cornești-Crvenka site at Gornea "Păzăriște" (Boroneanț 1976, Pl. VII; Lazarovici 1977, Pl. LXVIII-LXXIV; Lazarovici, Săcărin 1979, Fig. 4-5, 8-14), I have included among the Cornești-Crvenka discoveries also the sites of Liubcova and Moldova Veche (Gogâltan 1999b, Fig. 15). New clarifications made by M. Gumă (Gumă 1997, 47-49) and P. Roman (Roman 1998b, 21, Fig. 9), as well as studying the material here, has led me to revise my opinion (Gogâltan 1999a, 206, n. 98).

¹²³ Bogdanović 1986, 59-61; Bogdanović 1996, 101-102. The term "proto-Vatina", used for a number of materials from Ljuljaci, Pančevo, Omoljca, Feudvar, is not fully clarified. It is difficult to understand whether they have an organic connection with what is Vatina culture or precede it.

Grube 2" horizon¹²⁴. In addition to the Pančevo "Donja Varoš" settlement¹²⁵ and Vecina Mala near Svetozarevo¹²⁶, similar finds have also been identified after the later level of the Baden-Kostolac stage at Omoljca¹²⁷, or in what is Ljuljaci I¹²⁸. Unornamented vessels with globular bodies and two handles have also appeared at Ostrovul Corbului¹²⁹, proving a wide spread of the phenomenon. This also prompted L. Nikolova to include them in a so-called "horizon of two-handled beakers" or the Bubanj III-Pernik culture and Pančevo-Donja Varoš type¹³⁰.

From a stratigraphic point of view at Ljuljaci or Omoljca these materials would be directly superimposed on the "Pančevo-Omoljca phase"¹³¹. However, at Ostrovul Corbului a different stratigraphic situation occurs. There, subsequent to some discoveries with "...gute Analogien mit dem Bubanj III, Vecina und Armenochori – Funden"¹³², a Gornea-Orlești settlement has been identified. Also from Ostrovul Corbului we know that later there is a level whose "Materialien an die Otomani II-Periode von Vărșand erinnerten"¹³³. They demonstrate the sense of evolution of the Gornea-Orlești group towards the Middle Bronze Age. Pottery decorated with broom and comb has also been identified in the lowest levels at Židovar¹³⁴. From the above, one may ask the following question: are these discoveries, which belong to the "horizon of two-handled beakers", the only ones that contribute to the formation of the Vatina culture in the Danube region? I think not, although we cannot give a definite answer to this question at the moment, but future research will provide further clarification.

Strong connections between the pottery from Feudvar and that of the Mureș culture have also been noted in a detailed report of the

¹²⁴ M.Garašanin 1998, 12. See also Stojić, Nikitović 1996, 207-212. The first researcher who looked for the Vatina culture's origins within the Armenochori horizon was M. Grbić (Grbić 1958, 37-38).

¹²⁵ Grčki-Stanimirov 1996. I also quote the preliminary report in which the site appears under the toponym "Vatrogasni dom" (Rašajski, Gačić 1985, 16, T. VII).

¹²⁶ Stojić 1986.

¹²⁷ Trbuhović 1968a, 177; Trbuhović 1968b, 61 (misclassified in the Mokrin-Periam group); Tasić 1974a, 212.

¹²⁸ Bogdanović 1986, 59-61, T. I-II; Bogdanović 1996, 97.

¹²⁹ Roman 1998b, 18, Fig. 5.

¹³⁰ Nikolova et al. 1999, 233-234.

¹³¹ Tasić 1973, 25; Tasić 1974a, 212; Tasić 1981, 201; Tasić 1984c, 63; Bogdanović 1996, 97.

¹³² Roman 1998b, 18, Fig. 5. I prefer to continue citing in quotation marks what P. Roman said to avoid being accused, unjustly in fact (see Gogâltan 1999a, 204, n. 74), that I did not respect the meaning of some conclusions put forward by the Bucharest professor.

¹³³ Roman 1998b, 19.

¹³⁴ Friendly information M. Jevtić and J. Uzelac. I was also able to see this during a visit to the site in September 2000.

excavations at Feudvar¹³⁵. We no longer know what Vatina and Mureş ceramic styles really mean. This fact also led I. Bóna, 30 years earlier, to propose the existence of a Gerjen group of what he defined as "Die Perjámos-Kultur"¹³⁶.

What can explain this reality? First, we cannot exclude that the two cultures have the same background, as discussed above. The regional differences are unknown at this point, but there were other factors besides the environment of the Lower Mureş. Secondly, coexistence of the two cultures in the lowland led to intense exchanges, as we saw it happen on the eastern and northern periphery of the Vatina culture. The Danube provided an easier route for the movement of these goods and allowed their rapid spread throughout its basin. The discovery of a Mureş culture grave at Starčevo "Kod Krsta" or certain artifacts from Pančevo "Okolina", about 100 km south of Bočar near Kikinda¹³⁷, indicates that such communities may have reached the southern Banat before the Vatina culture¹³⁸.

Regarding the so-called "Pančevo-Omoljica style", the stratigraphic findings from Feudvar are to be taken in consideration¹³⁹. Though more than 50 years have passed since extensive excavations were carried out at Pančevo and Omoljica, the finds and the stratigraphy here remained unpublished. The pottery assemblages from Vatin "Bela Bara"¹⁴⁰, some from Moldova Veche – Ostrov "Humca"¹⁴¹ or Corneşti (Pl. III/1-2)¹⁴² are also of little stratigraphic value. According to the available evidence, the pottery fragments of the "Pančevo-Omoljica style" discovered in the Moldova Veche-Ostrov "Spitz" (Pl. II) settlement point to a similar reality to that of Feudvar. They were found within 40 cm of the stratigraphy here, alongside pottery from the so-called "Vatin-Vršac" phase¹⁴³. In this case we have to accept that this type of pottery decoration is characteristic of a shorter period of time, covering the end of the Middle Bronze II – beginning of the Middle Bronze III in the southern Romanian Banat¹⁴⁴.

¹³⁵ Hänsel 1991, 79. See for example the vessels published by Medović, Hänsel 1989b, Tab. VII.

¹³⁶ Bóna 1975, 111-119. The Feudvar site was one of the discoveries of this group (Bóna 1975, 113).

¹³⁷ Girić 1987, Fig. 1.

¹³⁸ Jocić 1991. J. Uzelac considers this to be an isolated phenomenon (Uzelac 1996, 29, Map. 2).

¹³⁹ Hänsel, Medović 1991a; Hänsel, Medović 1991b, 66; Hänsel 1991, 80; Urban 1991, 106.

¹⁴⁰ Milleker 1905, Pl. XIV/4-6, XVI/10, XVIII/1, etc; Bóna 1975, Pl. 201; Kolarić 1972, cat. no. 83; Tasić 1982, Fig. 2.

¹⁴¹ Gogăltan 2004, 96, Pl. I-II. Roman 1998b, Fig. 1, 6 "zwischen den Dünen".

¹⁴² Both fragments belong to the same vessel.

¹⁴³ Morintz 1978, 21, Fig. 5-6; Roman 1998, 21.

¹⁴⁴ As long as there are no relevant stratigraphic finds in the area (we are waiting for the publication of the Židovar tell) it is very difficult to date these materials exactly. Now we can only work with indirect evidence: the end of the Corneşti-Crvenka settlement at Gornea

Therefore, it has great chronological value and represents at the same time a characteristic element of the "Danube" variant of the Vatina culture. As the links with this area become more and more disconnected, the number of imports decreases in the Romanian Banat and southern Crişana. While there are still numerous imports from Vatin, there are currently no finds from Foeni "Gomila lupului", and only one vessel currently found at Corneşti. Moreover, no pottery fragments with such decoration are reported from the Lower Mureş area (Periam, Satu Mare, Sânpetru German, Arad, Cicir, etc.)¹⁴⁵ to the Crişul Alb at Socodor¹⁴⁶.

Regarding the two phases of the Vatina culture with which Serbian colleagues operate: Pančevo-Omoljica and Vatin-Vršac or Vatin I and Vatin II, I consider them to be in fact regionalizations of the same phenomenon, each with a distinct evolution¹⁴⁷. As we have already seen, the Pančevo-Omoljica group corresponds to the "Danube" variant of the Vatina culture. The so-called Vatin-Vršac phase is, by and large, characteristic of the Corneşti-Crvenka group.

Even though N. Tasić has attempted to organise the available data, I do not consider that any significant chronological differences between these assemblages can be proved on a clear stratigraphic basis or by comparing artifacts (metal pieces, ceramics, etc.)¹⁴⁸. In any case the assemblages published so far cannot support such a hypothesis. The known bronze and gold artifacts from sites such as Gomolava¹⁴⁹, Popov Salaš¹⁵⁰, Vinča¹⁵¹, Židovar¹⁵² or Feudvar¹⁵³ on the one hand and Vatin¹⁵⁴,

"Păzărişte" (it is possible that the pressure of Pančevo-Omoljica communities led to the fortification of this site) and the formation of the Dubovac-Žuto Brdo-Gârla Mare culture in the Danube Plain. Needles with conical head, decorated sickle-shaped shafts from Feudvar (Hänsel 1991, 66, 68, Fig. 6/1) and Ostrovul Corbului (Hänsel, Roman 1984, 196, Fig. 6/2-3) also provide us with a good chronological reference for the Pančevo-Omoljica "style", *i.e.*, the first phase of the Dubovac-Žuto Brdo-Gârla Mare culture: Middle Bronze Age III (MD II=Bz. B 1).

¹⁴⁵ Pădureanu 1973; Pădureanu 1988; Soroceanu 1991; Gogâltan 2004.

¹⁴⁶ Popescu 1956; Gogâltan 1999b.

¹⁴⁷ See also Tasić 1974a, 212; Tasić 1984c, 64.

¹⁴⁸ Tasić 1983, 64-67; Tasić 1984c, 63, 68-70.

¹⁴⁹ Tasić 1984c, 68, Fig. 5, 70; Tasić 1988a, Fig. 2.

¹⁵⁰ Tasić 1984c, 68, Fig. 6-8.

¹⁵¹ Vasić 1936, T. XXXIX/95; D.Garašanin 1954a, Pl. 46/1; Mozsolics 1968, 56.

¹⁵² Lazić 1997b, 25-26, Fig. 21.

¹⁵³ Hänsel, Medović 1991a, 116-117, Fig. 5; Hänsel 1991, 66, 68, Fig. 6/1.

¹⁵⁴ v. Márton 1912, 189, Fig. 9; Vinski 1959, Tab. V/Sl. 42-57; VI/Sl. 58-67; Mozsolics 1968, 28, 56, Pl. 26/1-8; M.Garašanin 1973, 328; Tasić 1974a, 220; Tasić 1984c, 70, Fig. 4.

Vršac¹⁵⁵, Pecica-Rovine¹⁵⁶, Satu Mare¹⁵⁷ or Cornești¹⁵⁸ on the other hand are demonstrating a parallel evolution of these cultural groups during the 2nd and 3rd phases of the Middle Bronze Age (Apa-Hajdúsámson and Koszider horizon)¹⁵⁹. In addition, there are other finds of high chronological value, such as harness fittings and bone ornaments¹⁶⁰. As for ceramics, to the numerous imports of trans-Danubian encrusted pottery from the Vatina settlements in former Yugoslavia¹⁶¹, we can add the above-mentioned ceramic fragment found in the last level of the tell at Foeni "Gomila lupului" (Pl. IV/3). Other imports, such as Wietenberg¹⁶², may also be included in the discussion, which may prove the existence at the same time at Socodor¹⁶³, Cornești¹⁶⁴ or Židovar¹⁶⁵ of ornaments foreign to the Vatina culture. To these we can add the connections with the Mureș¹⁶⁶ or Otomani-Füzesabony¹⁶⁷ cultural circles.

Whether or not the name Cornești-Crvenka was well chosen, the publication of the materials from Cornești, Foeni (which actually began) and that from Vršac "Crvenca"¹⁶⁸ will, I think, answer that question convincingly. Currently, the largest ceramic assemblage originates from these sites.

By publishing the findings of these two settlements as soon as possible, the third question concerning the individuality of the two groups of the Vatina culture would also be answered. Furthermore, besides Eastern Slavonia and Sarmatia, Pančevo-Omoljica and Cornești-Crvenka, another regional group may emerge in the future, south of the Danube in Šumadija and especially on the Morava, where thanks to the efforts of M. Stojić we are aware of several assemblages¹⁶⁹.

¹⁵⁵ M.Garašanin 1973, 328 (Noppenring).

¹⁵⁶ Gogăltan 1999a, 101, Fig. 42.

¹⁵⁷ Gogăltan 1999a, 104-106 (with older bibliography).

¹⁵⁸ Gogăltan 1999a, 93, 134, Fig. 9/2; 47/6.

¹⁵⁹ See also Falkenstein 1998, 39; Fischl, Kiss 2002, 131-137.

¹⁶⁰ For bone harness pieces I quote the works of H.-G. Hüttel (Hüttel 1981; Hüttel 1982) or N. Boroffka's paper, where you can also find the whole bibliography of the problem (Boroffka 1998). For other bone pieces see in particular Hänsel, Medović 1991b, Fig. 6/2-3; Hänsel 1997 or David 1997 with the complete literature and catalogue of findings.

¹⁶¹ The general framework of the problem at Tasić 1965a; Tasić 1972; Kovács 1988. The more recent bibliography can be found at Gogăltan 1999a, 208, n. 117.

¹⁶² Boroffka 1994, Karte 5.

¹⁶³ Popescu 1956, Fig. 33/2-3.

¹⁶⁴ Soroceanu, Radu 1975, 38.

¹⁶⁵ Lazić 1997b, 33-34, Fig. 16.

¹⁶⁶ Soroceanu 1991, 120-121, with the bibliography.

¹⁶⁷ Tasić 1974a, 221-222, Fig. 157b (Vatin); Banner, Bóna 1974, 53, 153; Bóna 1975, 186.

¹⁶⁸ See also Kolarić 1972, cat. no. 82; Tasić 1983, Tab. XII/4-5; XIII/1-3; M.Garašanin 1983, Tab. LXXVIII/7-7a, 10, 12; Gačić 1987, T. V/6; VI/1-3; VII/1,3.

¹⁶⁹ Stojić 1986, 148, Fig. 26-32; Stojić 1992, 217-218; Stojić 1995, 21-22; Stojić 1996, 249-251; Stojić 1997, 54-55, Pl. I/1-3; Stojić 1998. See also Uzelac 1996, 24, n. 9.

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Summing up this complex debate, I believe that when discussing the Vatina culture, the following realities must be considered:

1. Suggestive for absolute dating are the ¹⁴C samples from Feudvar, Ljuljaci and Omoljica or those from other sites in our area of interest, which actually belong to other cultures: Mureş, Otomani-Füzesabony, Wietenberg (cultures for which connections with the Vatina have already been confirmed). These dates roughly places the Vatina culture in the first half of the 2nd millennium BC¹⁷⁰.
2. The use of tripartite relative chronology is based on the stratigraphy documented in several sites (the situation at Foeni "Gomila lupului", Feudvar, Ljuljaci), but also supported by the metal artefacts. Accepting these two basic premises will make it possible to establish a common chronological language for the whole of south-eastern Central Europe and further west, as well as for the Balkan and Helladic world in the south.
3. By placing the Vatina culture only in the Middle Bronze Age, we are responding to the realities of communities adapting to a relatively different environment than in the previous or subsequent period. The Early Bronze Age in the Romanian Banat is marked by the Makó-Koshi-Čaka culture¹⁷¹, Somogyvár-Vinkovci¹⁷², Sânpetru-German-Pančevo finds¹⁷³, the Mureş I culture¹⁷⁴ and the Gornea-Orleşti group¹⁷⁵ (Fig. 1; Pl. VIII). If at the beginning of the sub-Boreal the rainy climate gradually changes, making the transition to a colder¹⁷⁶ and, in the opinion of some, drier period¹⁷⁷, around 2000 BC the temperature gradually increased. Compared to the previous Late Eneolithic period, we are witnessing an increase in climate warming and rainfall¹⁷⁸. These climatic factors are accompanied by the control of an abundant natural resource area and an advantageous geographical

¹⁷⁰ Gogâltan 1999a, 62-67, Pl. 8-9, 13-14, 16-17.

¹⁷¹ Kulcsár 1998. See also Gogâltan 1999a, 200-202.

¹⁷² A useful summary at Bondár 1995, 220-254.

¹⁷³ Gogâltan 1995, 57, Fig. 2-3; Gogâltan 1996, 45, T. II-III; Grčki-Stanimirov 1996; Gumá 1997, 22, 37, Pl. III.

¹⁷⁴ Soroceanu 1991, Fig. 1; Girić 1996; O'Shea 1996, Fig. 3.1.

¹⁷⁵ The bibliography on this late Early Bronze Age – possibly early Middle Bronze Age cultural horizon can be found in Gogâltan 1999a, 204, n. 71-81.

¹⁷⁶ Čurčić 1998, 272.

¹⁷⁷ Vadász 1969, 90; Gyulai 1993, 18. A. Choyke believes that the sub-Boreal is characterised by a warm and humid climate (Choyke 1984, 25).

¹⁷⁸ Kordos 1987, Fig. 2-3; Járαι-Komlódi 1987, 44-46; Gyulai 1993, 18.

position, to which other interdependent primary factors should be added, such as: a predominantly surface dwelling architecture made of wood and clay; a population concentration determined by insecurity, religion, housing tradition and social evolution; an economy showing a more pronounced sedentarisation of the communities compared to the Late Eneolithic and Early Bronze Age period and, last but not least, subjective factors, almost impossible to prove archaeologically, led to the formation of the first Bronze Age tells¹⁷⁹. During the Middle Bronze Age, this phenomenon becomes widespread, as this way of life becomes distinctive of this period¹⁸⁰. Other climatic changes are supposed to occur around 1500 BC¹⁸¹. To a great extent, the geographical distribution of the Cruceni-Belegiš culture is overlapping on the previous area of the Cornești-Crvenka group¹⁸². With the beginning of the Late Bronze Age, the tells are abandoned, new metal artefacts are developed, and a new burial rite and ritual is adopted – the urnfields graves¹⁸³.

The abandonment of the Vatina tells and flat settlements is a long process. Their end should not necessarily be seen as sudden and violent¹⁸⁴, but gradual, as living conditions worsen and different groups of allogenic populations appear in the Pannonian Plain. The following examples are suggestive. Take the case of the settlement of Vršac "Crvenka"¹⁸⁵. If the Szeremle pottery discovered in several Vatina settlements suggests a possible coexistence with those buried at Vršac "At", the Cruceni-Belegiš necropolis (with numerous Dubovac-Žuto Brdo-Gârla Mare imports) at Vršac "Ludoš" is certainly later, bringing the evolution of this site to an end¹⁸⁶. The same situation occurs at Vatin "Bela Bara". However, it is difficult to say whether "tumulus" communities (*Hügelgräberkultur*), as suggested by the well-known warrior

¹⁷⁹ Gogâltan 2002.

¹⁸⁰ Gyulai 1992, 66-67; Ecsedy 1994, 21; Kovács 1994b, 23-24.

¹⁸¹ Kovács 1977, 21; Ingram et al. 1981, 17; Gyulai 1993, 18; Kovács 1994b, 26; Cârciumar 1996, 20-23.

¹⁸² Tasić 1972, Fig. 1-2; Gogâltan 1998b, Pl. X; Gogâltan 1999a, Fig. 53.

¹⁸³ Gumă 1993, 150-152, with older bibliography; Gogâltan 1993b, with bibliographical additions. For the so-called Cruceni-Belegiš culture see also: Gačić 1995, 57, Pl. V-VI; Anđelić 1995, 80, Pl. II/7-13; III; Dizdar 1996; Medeleț 1996; Gumă 1997, 55-57; Perić 1997; Gogâltan 1998b; Medović 1998b, 153-154; Medović 1998e; Szentmiklósi 1998.

¹⁸⁴ Mozsolics 1957. Recently the discussion is taken up by W. David (David 1998).

¹⁸⁵ Katalog. Sto godina rada i razvoja Narodnog Muzeja u Vršcu 1882-1982, Vršac, 1982, Fig. 2; Gačić 1987.

¹⁸⁶ See also Tasić 1972, 101; Tasić 1996b, 150-151.

grave¹⁸⁷, reached the area before the Cruceni-Belegiš culture. In southern Serbian Banat, the end of the Vatina tell at Židovar is due, I believe, to a population that used a baroque pottery decorated and encrusted with white. This may explain the presence of graves in the vicinity, under the present-day village in Orešac, in which there are elements of Szeremle-Bijelo Brdo, Dubovac-Žuto Brdo-Gârla Mare and Cruceni-Belegiš¹⁸⁸. A similar situation occurs at Omoljica, where graves that can be linked to the populations that uses encrusted ornaments have been found¹⁸⁹. In the Danube Gorge, the Vatina communities were replaced by the Dubovac-Žuto Brdo-Gârla Mare culture¹⁹⁰. Taken into account the finds in the key settlement of Ostrovul Corbului¹⁹¹, this new type of pottery started to be used in the late Middle Bronze Age¹⁹².

4. A comparison of ceramic assemblages published by G. Crăciunescu¹⁹³ and M. Nica¹⁹⁴ from southern Oltenia with those from the Banat clearly shows that we cannot speak of a presence of the Verbicioara culture here, just of common elements surviving from the same Gornea-Orlești background. Initially numerous, these elements gradually disappear, eventually resulting in a totally different development during the last phase of the Middle Bronze Age¹⁹⁵. While there are possible Verbicioara imports in the historical southern Banat¹⁹⁶, their number remains within the range of typical intercultural connections. Moreover,

¹⁸⁷ This does not belong to the Vatina culture (M.Garašanin 1959, 77; M.Garašanin 1983, 508, 515), but is obviously a "tumulus" discovery. The discussion at Tasić 1972, 108-115; Uzelac 1996, 32-33.

¹⁸⁸ Krstić 1962; Majnarić-Pandžić 1989.

¹⁸⁹ Rašajsky 1985.

¹⁹⁰ Lazarovici, Săcărin 1979, 80-81.

¹⁹¹ Hänsel, Roman 1984.

¹⁹² Gogăltan 1999a, 208.

¹⁹³ Crăciunescu 1996, Pl. I-VII; Crăciunescu 1998, Pl. I-X.

¹⁹⁴ Nica 1998, Fig. 2-16.

¹⁹⁵ Morintz 1978, 21-27, Fig. 9/8; 10; Nica 1998, Fig. 13-16.

¹⁹⁶ Tasić 1974a, Fig. 143; Bóna 1975, 186, Pl. 202/14; Tasić 1983, Fig. 31a (Vatin); Simu 1943, Fig. 7 (Moldova Veche); Gumă 1977, Pl. VIII/1 (Liubcova) Lazarovici, Săcărin 1979, Fig. 15/1 (Moldova Veche). For the time being it is a fact that the most numerous specimens of this type are in the Verbicioara culture: Berciu 1961a, Fig. 5/1-5; Morintz 1978, Fig. 10. See also Lazić 1997b, 33. For G. Lazarovici, this type of vessel may be a common element of both cultures (Lazarovici, Săcărin 1979, 78). As an argument in support of this idea I could bring two cups from Vatin, whose shapes and ornaments are found in the repertoire of the Vatina culture, and the handles in that of the Verbicioara culture (Kolarić 1972, cat. no. 86, 119). The two-handles cup from Vršac-Crvenka, considered by M. Garašanin as Verbicioara (M.Garašanin 1983, 510, T. LXXVIII/12), also appears in the Cornești-Crvenka sites in the Romanian Banat.

if there had been an effective presence of Verbicioara in the south of historical Banat, there would be no explanation for the existence of clear Vatina settlements, such as those on the "Stenca" at Liubcova (Pl. V), Gornea "Păzăriște" (Pl. VI) or Ostrovul Mare at Moldova Veche (Pl. I-II), in the region of the Danube Plain (Đerdap)¹⁹⁷. The discoveries at Visag¹⁹⁸ and the settlement at Iaz "Damb"¹⁹⁹ do not belong to the Verbicioara area²⁰⁰ and even less to the Balta Sărată group²⁰¹. P. Roman saw in these finds (Visag-Iaz type) a distinct cultural manifestation²⁰², which I have classified as early Middle Bronze Age²⁰³. The hypothesis of their inclusion in the complex process of formation of the Cornesti-Crvenka group cannot be excluded; however, this requires a more detailed analysis that exceeds the framework of this paper²⁰⁴.

The existence of at least two groups within the Vatina culture is an older idea, proposed by M. Garašanin as early as the late 1950s²⁰⁵. This idea was adopted by N. Tasić who, however, saw the Pančevo-Omoljica group as a western variant of the Vatina culture²⁰⁶. Later it was called "westliche Variante der Vatin-Kultur" or "Sremer Variante der Vatina-Kultur"²⁰⁷. Based on the strong links in Eastern Slavonia and Syrmium between the early phase of the Vatina culture and the Mureș culture, N. Majnarić-Pandžić believes that it is possible to speak of a Slavonic-Syrmian variant of the Vatina culture at this time²⁰⁸. Such a remark, as I tried to argue above, seems to be correct. As a further argument, I would add the comparison between the

¹⁹⁷ A large number of specialists agree that these sites belong to the Vatina culture: Lazarovici, Săcărin 1979, 77-81; Morintz 1978, 21; M.Garašanin 1983, 511; Gumă 1997, 43-47; etc. According to Serbian researchers they are found in the area of the Verbicioara culture (Tasić 1984d, 85; Jevtić, Vukmanović 1996, Map 1; etc.).

¹⁹⁸ Dumitrescu, Stratan 1967.

¹⁹⁹ Petrovszky, Guma 1979, 58-61.

²⁰⁰ Berciu 1961a, 125, 154; Tasić 1984d, 84, 87-88 (with some reservations).

²⁰¹ Petrovszky, Gumă 1979, 66-71; Rogozea 1994, Pl. I (a "pre"-stage of the Balta Sărată group); Boroffka 1994, 265, n. 31, 269, n. 40; Guma 1997, 49-50.

²⁰² Roman 1988, 221-222.

²⁰³ Gogăltan 1999a, 206-207, Fig. 54. I. Bóna also disagrees with the assignment of the Visag necropolis to the Verbicioara culture. He rightly sees links with the "Hatvan-Ottomány" circle, placing it chronologically no later than the end of the Early Bronze Age - the beginning of the Middle Bronze Age (Bóna 1975, 192, n. 15).

²⁰⁴ G. Lazarovici also expressed the same opinion (Lazarovici 1977, 92).

²⁰⁵ M.Garašanin 1959, 95-103.

²⁰⁶ Tasić 1974a, 212, 457-458.

²⁰⁷ Tasić 1988a, 48; Tasić 1991, 14.

²⁰⁸ Majnarić-Pandžić 1984, 88.

pottery shapes and ornaments discovered in Cornești or Foeni on the one hand and Feudvar on the other. Compared to this group, the finds from western Serbia (outlined by M. Garašanin) from Dobrača, Jančići, Krstac and Kriva Reka²⁰⁹ or Lugovi-Bent²¹⁰ are clearly different, suggesting the existence of a regional group. Although the archaeological material published by M. Stojić is in small amount²¹¹, it is possible that a new group is emerging in the Morava Valley. In this case the Cornesti-Crvenka group may not be the only regional expression of Vatina culture, adding to those of Eastern Slavonia and Sirmium, the Danube (Pančevo-Omoljiaca) or the Moravian area.

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The above remarks, together with the pottery assemblage processed to date from the old excavations: Cornești "Dealul Cornet"²¹², Ciuta "Cornul dealului"²¹³, Satu Mare "Weingarten"²¹⁴, Sânpetru German "Mânăstirea Bezdin"²¹⁵, Moldova Veche "Insula Ostrovul Mare"²¹⁶ etc., or from more recent research: Foeni "Gomila lupului"²¹⁷, Dinaș "Gomilă"²¹⁸, Peciu Nou "In irigat"²¹⁹ or Cruceni "La sondă"²²⁰, may constitute a basis for further debate on the Vatina culture and, implicitly, on the Middle Bronze Age in the historical Banat (Pl. IX). As I have already noted, in M. Garašanin's article published in the volume of the second Roman-Yugoslav colloquium in Drobeta Turnu-Severin²²¹, or in M. Jevtić's contribution on several Bronze Age and Early Iron Age materials from the Romanian Banat stored in the museum in Vršac²²², there is already a willingness to discuss and include what was considered by Serbian colleagues to be Verbicioara

²⁰⁹ Zotović 1985, 39, 44, T. VII/3-5.

²¹⁰ Nikitović et al. 1997.

²¹¹ See footnote 164.

²¹² See footnote 8.

²¹³ Petrescu 1988; Petrescu 1995. See also Gogâltan 2004, Pl. X.

²¹⁴ Bibliography at Gogâltan 1999a, 104. See also Gogâltan 2004, Pl. XI.

²¹⁵ Gogâltan 2004, Pl. XII. Excavations M. Moga 1948. Materials in the collections of the Banat Museum in Timișoara.

²¹⁶ Bibliography in Gogâltan 1999a, 96-97. See also Gogâltan 2004, Pl. I-II. These materials could be drawn courtesy of P. Roman.

²¹⁷ El Susi 1993; Gogâltan 1999b, Fig. 12-14; Gogâltan 2004, Pl. VI-IX.

²¹⁸ Milleker 1897a, 34-33; Medeleț, Bugilan 1987, 12; Gogâltan 2004, Pl. XIII. Survey F. Drașovean și D. Ciobotaru - 1997. I thank them once again for the opportunity to study these materials.

²¹⁹ The research at the point "In irigat=Stiezel", about 800 m south-west of the commune, will be published by F. Marțiș, who also informed me about the settlement here. See also Gogâltan 2004, Pl. XIV, XV/1-2.

²²⁰ Survey carried out with A. Szentmiklosi, in the summer of 2000, at the point "La sondă". See also Gogâltan 2004, Pl. XV/3-7.

²²¹ M. Garašanin 1998, 13.

²²² Jevtić 1998, 55, n. 13.

among what I consider to be the Cornești-Crvenka finds, as part of the Vatina culture²²³. N. Tasić continues to consider the Cornești-Crvenka group as part of the Verbicioara culture²²⁴. However, at present it is classified as an early phase of the Verbicioara culture. During my conversations with C. Ihde, I was surprised to find that independently of me (analysing the Vatina settlement at Feudvar) he came to the same conclusions about the existence of regional groups within the Vatina culture. This opinion was presented in his PhD thesis²²⁵. Concerning the Romanian scholars, some immediately adopted the new terminology, using it in the sense suggested by myself or M. Gumă²²⁶, while others were more reserved, regarding with suspicion this new classification of the Middle Bronze Age finds in the Banat, awaiting, understandably, new data on the Cornești-Crvenka group²²⁷.

Even though almost 300 years have passed since Luigi Ferdinando Marsigli published in his *Danubius Pannonico-Mysicus*²²⁸ the first Vatina artifacts and thus made the Feudvar site known²²⁹, issues raised by this culture remain far from being addressed. However, taking the example of the great Enlightenment scholar, we should collect all the available data to reconstruct the daily life of those we identify today as the 'Vatina culture'.

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²²³ See also Jevtić, Vukmanović 2000; Fischl, Kiss 2002, 130-131.

²²⁴ Tasić 1998, 34-35.

²²⁵ Ihde 2001a; Ihde 2001b.

²²⁶ Ciugudean 1997, cat. no. 145-155; Crăciunescu 1998, 115; Rogozea 1998, 140; Barbu et al. 1999; Petrescu 2000, 67.

²²⁷ Roman 1998b, 21; Șandor-Chicideanu 2003, 194-197.

²²⁸ The full title of the paper, quoted from Nebhay 1981, is *Danubius Pannonico-Mysicus, Observationibus geographicis, astronomicis, hydrographicis, historicis, physicis perlustratus Et in sex Tomos digestus ab Aloysio Ferd. Com. Marsili Socio Regiarum Societatum Parisiensis, Londinensis, Monspeliensis, Hagae Comitum, Apud P. Gosse, R. Chr. Alberts, de Hondt, Amstelodami, Apud Herm. Uytwer & Franç. Changuion, M.D.CC.XXVI.*

²²⁹ Nebhay 1981, 79-85, Fig. 4-7; Falkenstein 1998, 20.

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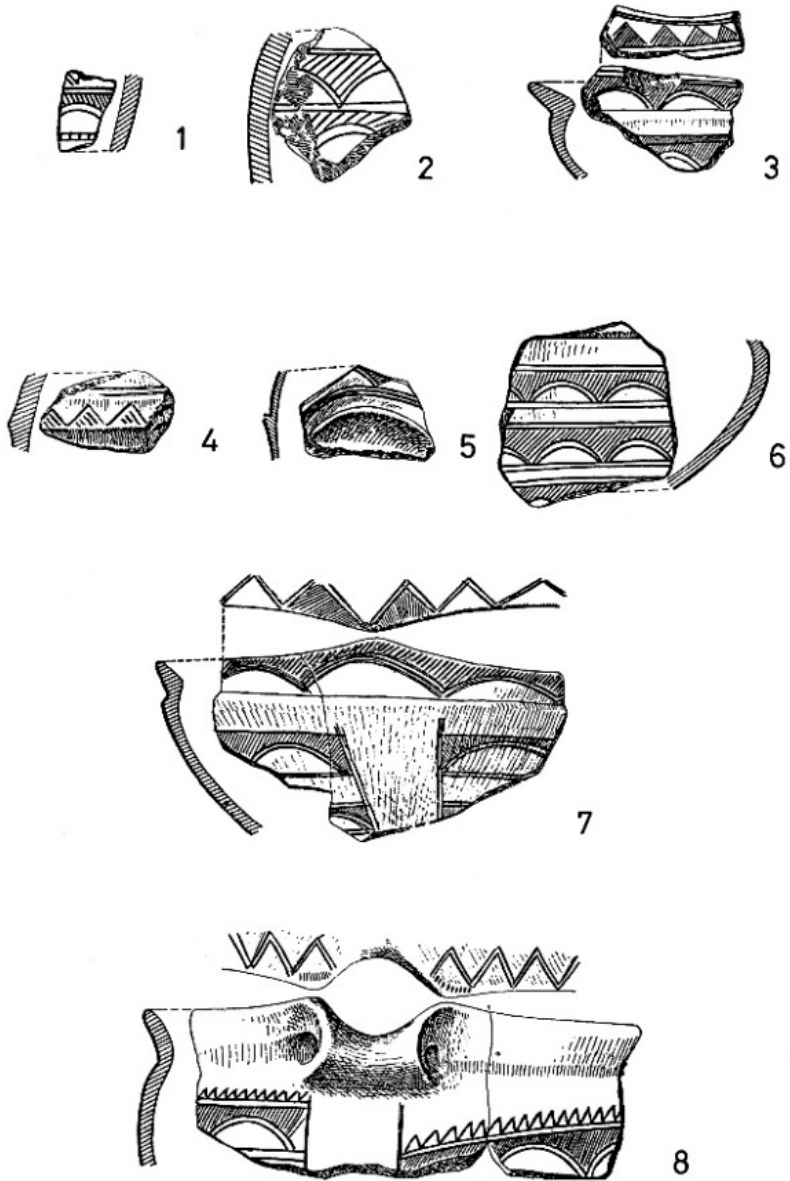
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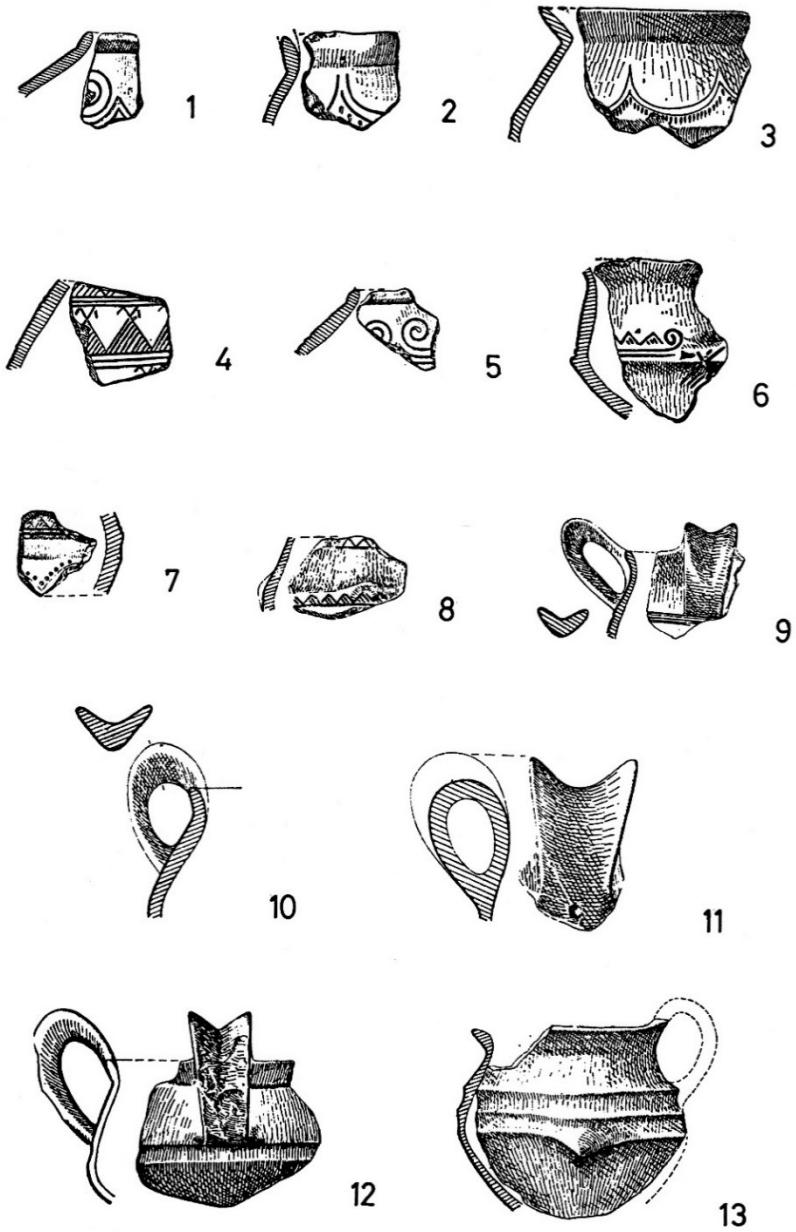
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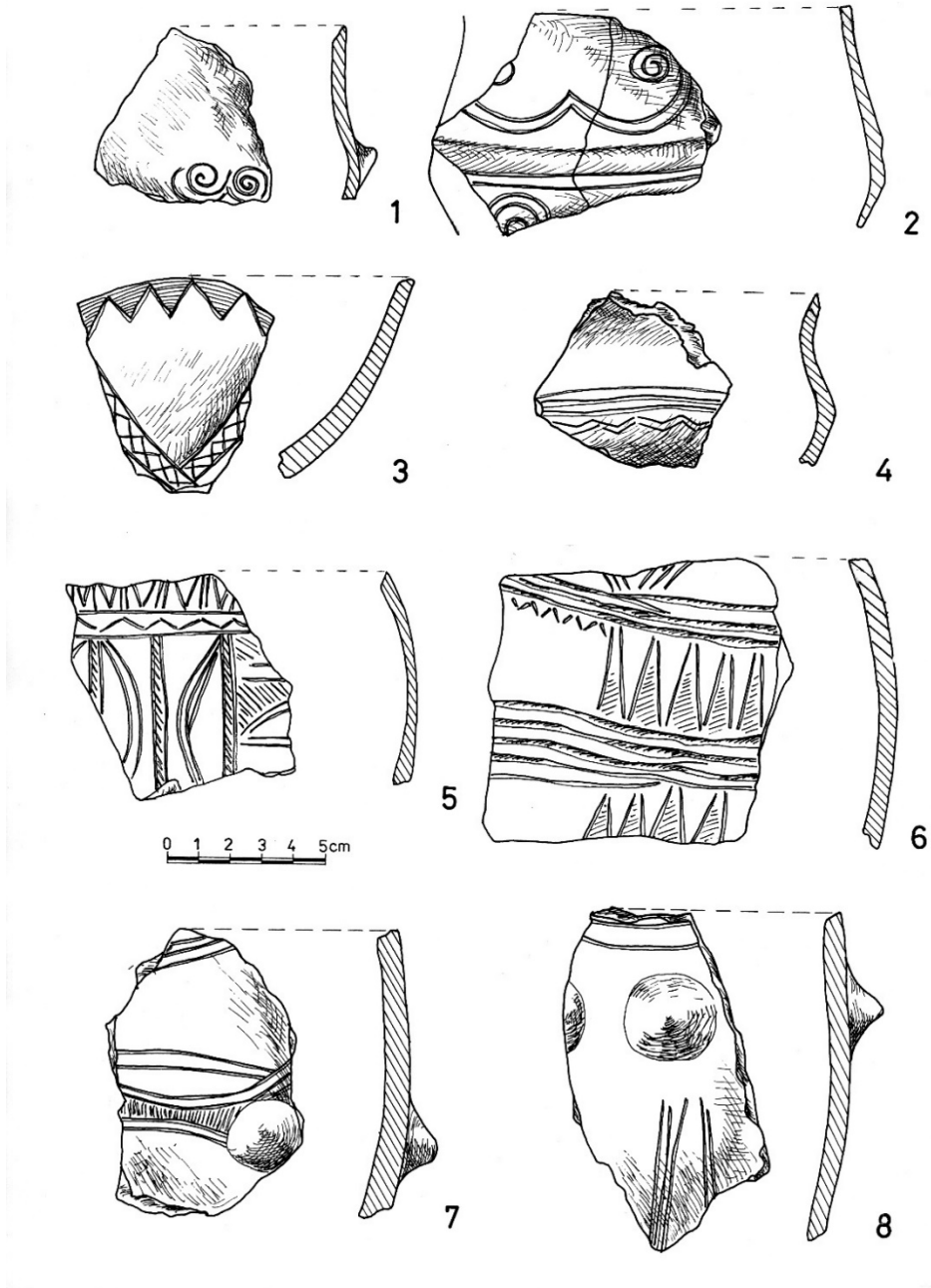
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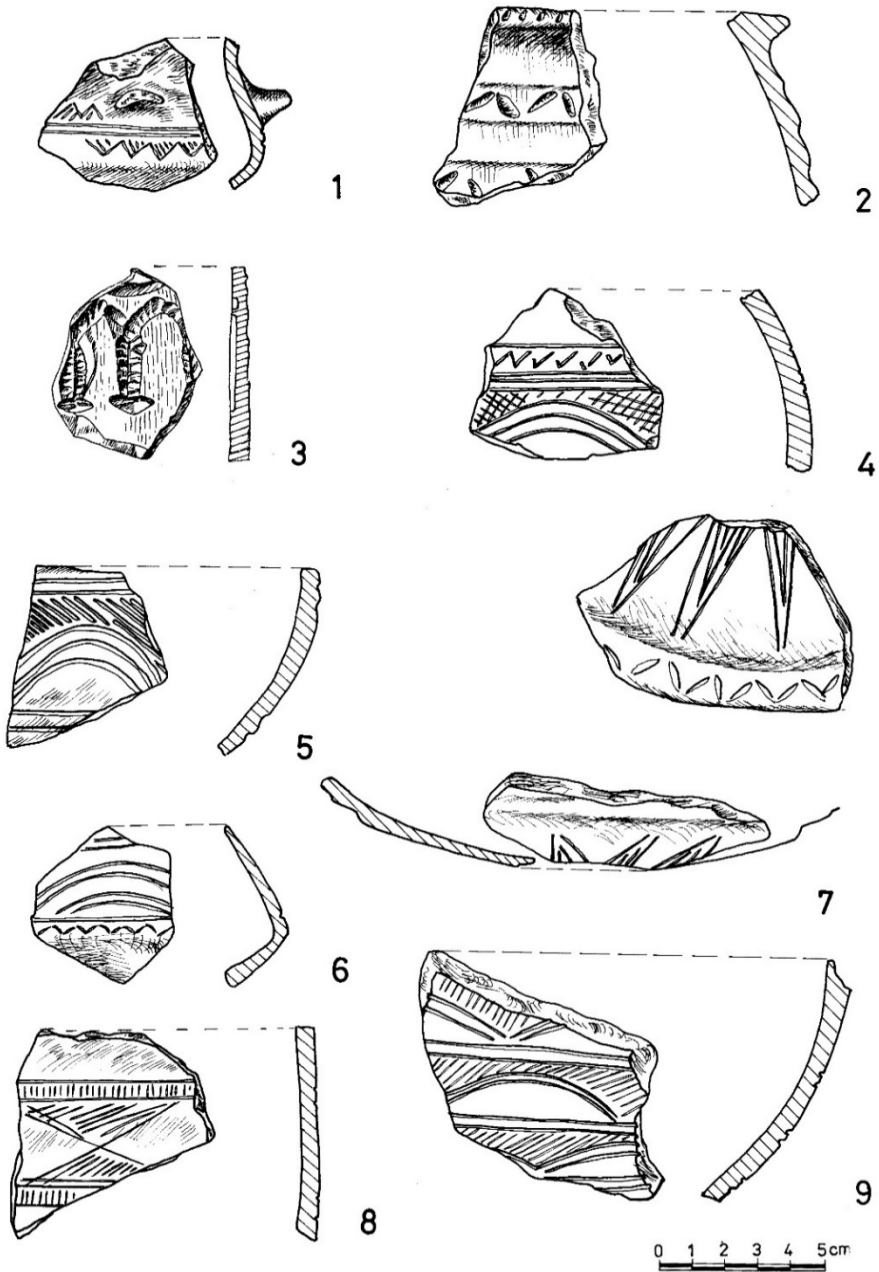
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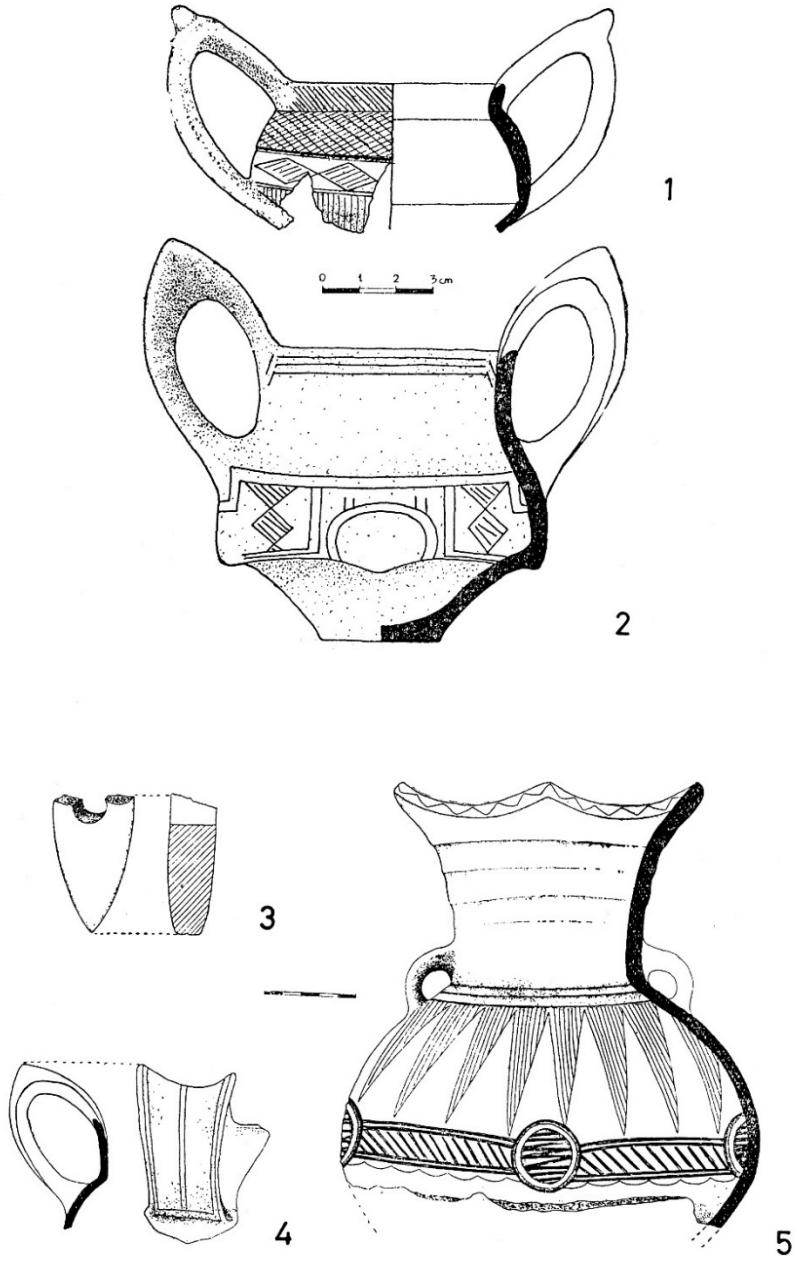
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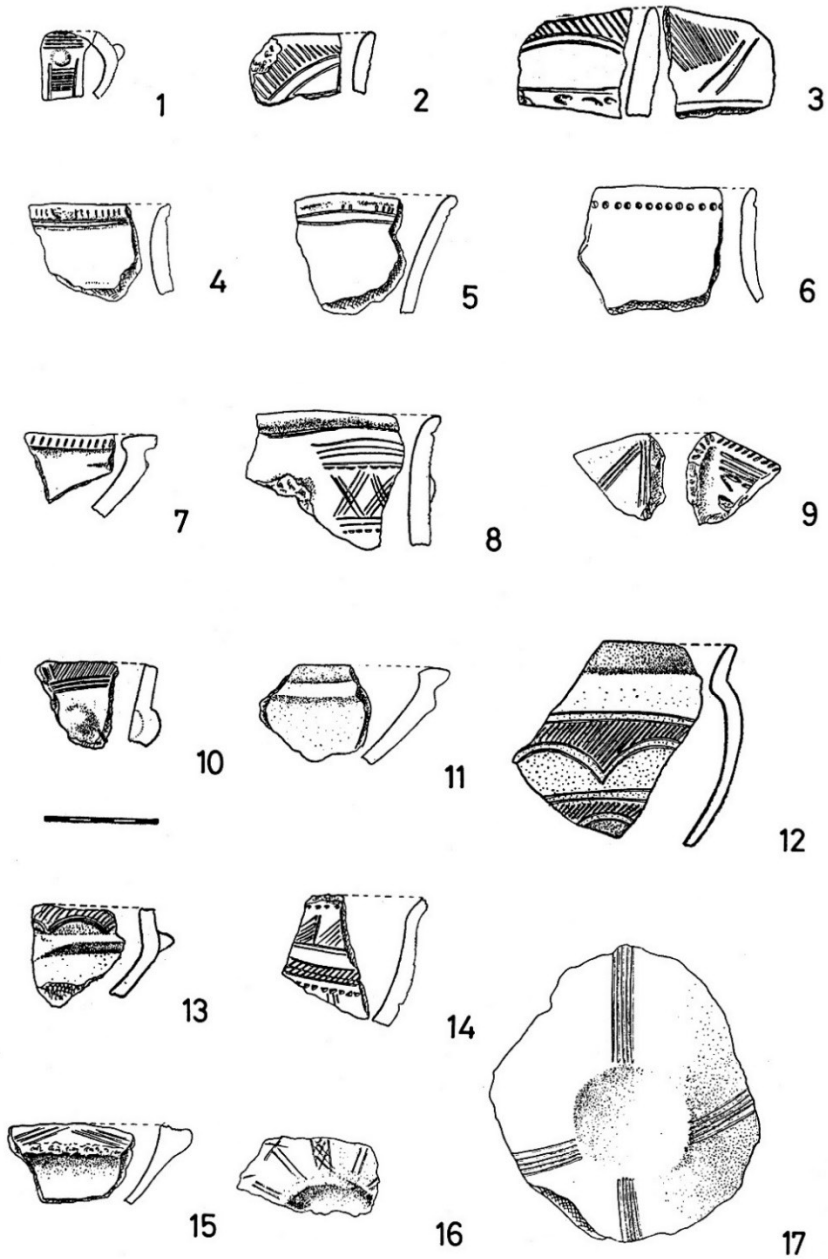
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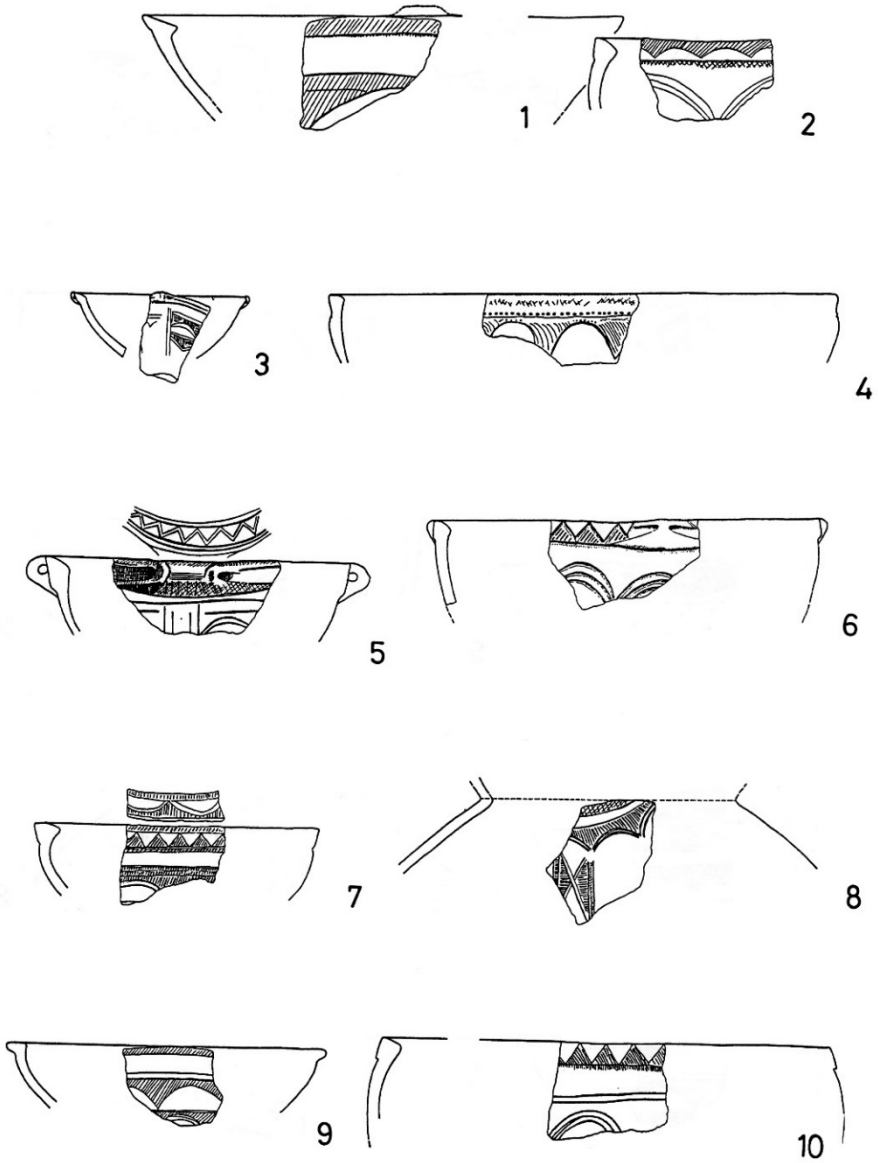
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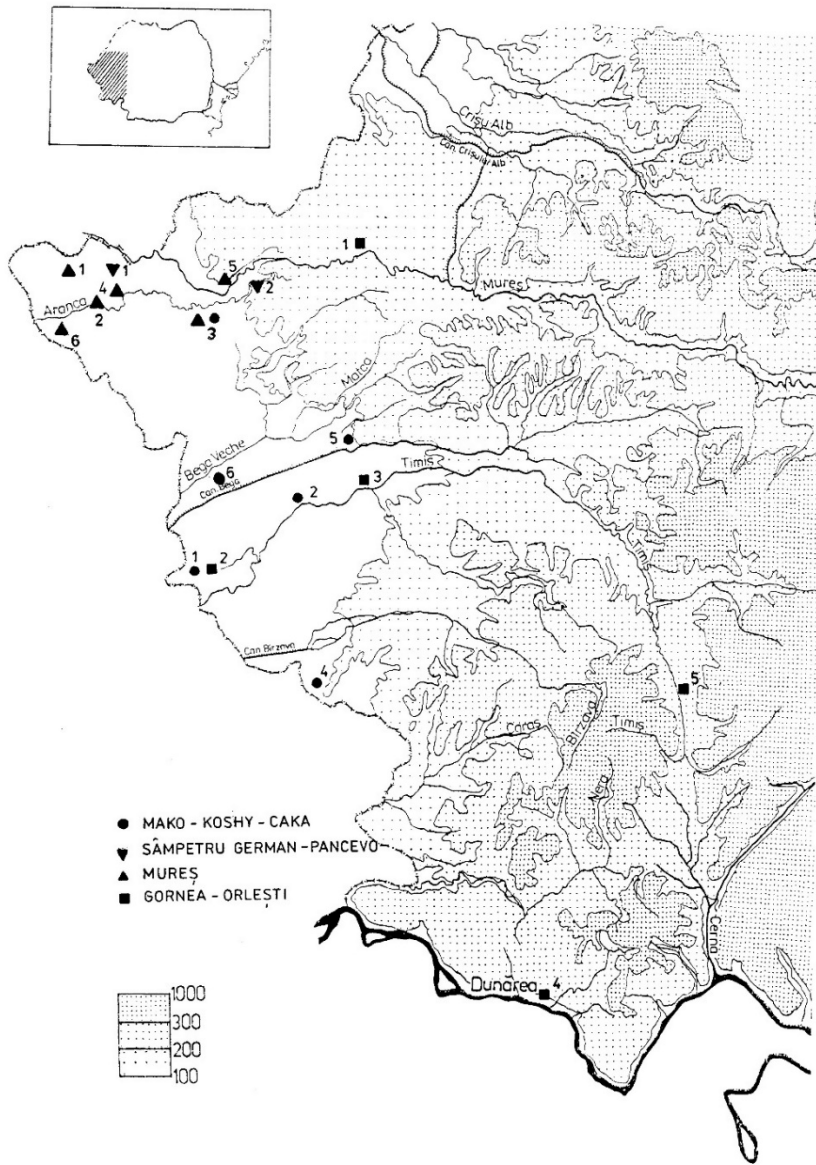
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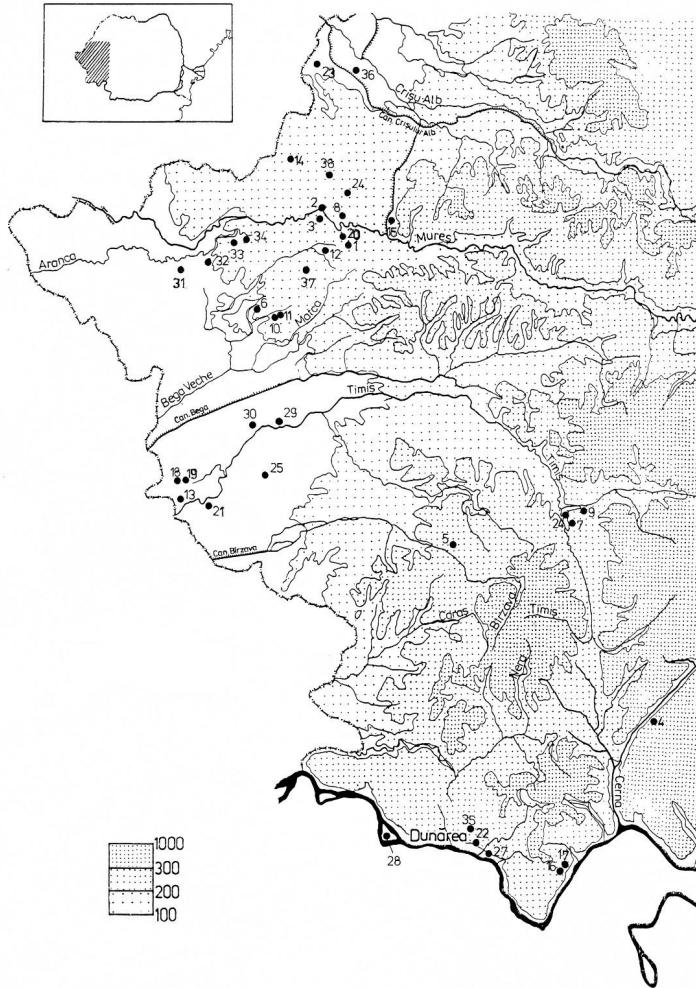
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BCOSPE als ein möglicher Weg der Zusammenarbeit zwischen West und Ost bei der Untersuchung der Griechen und ihrer Nachbarn am Rande der Steppe

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Article: *archeology*; Received: 10.02.2022; Revised: 06.03.2023

Accepted: 18.03.2023; Available online: 28.04.2023.

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Zusammenfassung: Im Rahmen dieses Beitrages geht es insbesondere um den zweiten Teil (BCOSPE II. *Archaeologica*) einer auf mehrere Bände angelegten Bibliographie, die die Literatur zum nördlichen Schwarzmeerraum in griechisch-römischer Zeit möglichst vollständig erfasst. Systematische archäologische Ausgrabungen wurden in Chersonesos, Olbia, Kertsch (Pantikapaion) und auf Berezan (Borysthenes) schon in den letzten Jahrzehnten des 19. und am Anfang des 20. Jahrhunderts durchgeführt. Der Übergang von der alten russischen zur neuen sowjetischen Schule, unter Berücksichtigung der nordpontischen Archäologie, ist einerseits mit der Abgrenzung vom Mittelmeerraum und von der abendländischen Historiographie und andererseits mit der dogmatischen Übernahme des Primates des Ökonomischen verbunden. Folglich wurden die Ausgrabungen im nördlichen Schwarzmeerraum mehrere Jahrzehnte fast ausschließlich von sowjetischen Fachleuten geführt, die immer ausdrücklicher die nördliche Schwarzmeerküste als eine besondere antike Welt betrachteten. Man konzentrierte sich auf die intensiven archäologischen Grabungen der griechischen Städte mit ihren ländlichen Siedlungen. Im Rahmen eines Erfahrungsaustauschs zwischen verschiedenen archäologischen Schulen in den letzten Jahrzehnten wurde man im postsowjetischen Raum mit den neuesten Entwicklungen im Bereich sowie mit dem interdisziplinären Studium mehr vertraut. Die abendländischen Kollegen brachten neue Impulse zur Entwicklung einer komplexeren Forschungsmethode, die mehr auf Konzepte und Problematisierung als auf die bloße Beschreibung des archäologischen Materials orientiert ist. Die Daten, die jetzt BCOSPE II anbietet (mit 11.018 Einträgen), sind äußerst relevant in dieser Hinsicht. So hofft der Autor, dass die 'Bibliographia classica

orae septentrionalis Ponti Euxini' eine Forschungslücke schließt, den neuen Geist des wissenschaftlichen Austausches zwischen Ost und West fördert und ein Arbeitsinstrument bereitstellt, das die internationale Zusammenarbeit zur Erforschung der Schwarzmeerküste weiter vorantreiben soll.

Schlüsselwörter: nördlicher Schwarzmeerraum, griechisch-römische Zeit, archäologische Ausgrabungen, Bibliographie, internationale Zusammenarbeit

Rezumat: Acest articol se referă în special la partea a doua (BCOSPE II. *Archaeologica*) a unei bibliografii în mai multe volume care sistematizează pe cât posibil exhaustiv literatura despre regiunea nordică a Mării Negre în perioada greco-romană. Săpături arheologice sistematice au fost efectuate la Chersones, Olbia, Kerci (Pantikapaion) și Berezan (Borysthenes) deja în ultimele decenii ale secolului al XIX-lea și începutul secolului al XX-lea. Trecerea de la vechea școală rusă la noua școală sovietică, ținând cont de arheologia antichităților nord-pontice, este legată, pe de o parte, de izolarea de regiunea mediteraneană și de istoriografia occidentală și, pe de altă parte, de asumarea dogmatică a primatului economic. În consecință, timp de mai multe decenii, săpăturile în regiunea de nord a Mării Negre au fost efectuate aproape exclusiv de specialiști sovietici, care au tratat din ce în ce mai explicit coasta de nord a Mării Negre ca o lume antică aparte. Atenția a fost concentrată pe săpăturile arheologice intensive ale orașelor grecești cu așezările lor rurale. Ca parte a unui schimb de experiență între diferite școli arheologice din ultimele decenii, specialiști din spațiul post-sovietic au obținut posibilitatea de a se familiariza cu cele mai recente evoluții în domeniu și cu studiile interdisciplinare. Colegii occidentali au adus un nou impuls dezvoltării unei metode de cercetare mai complexe, care este orientată mai mult spre concepte și problematizare decât spre simpla descriere a materialului arheologic. Datele pe care BCOSPE II le oferă acum (cu 11.018 titluri catalogate) sunt destul de relevante în acest sens. Autorul speră că "Bibliographia classica orae septentrionalis Ponti Euxini" va contribui la depășirea unui decalaj în cercetare, va promova noul spirit de schimb științific între Est și Vest și va oferi un instrument de lucru care va promova în continuare cooperarea internațională la studierea antichităților nord-pontice.

Cuvinte-cheie: regiunea nordică a Mării Negre, perioada greco-romană, săpături arheologice, bibliografie, cooperare internațională

Die Ereignisse, die in den Ländern des Schwarzen Meeres seit den 1990er Jahren stattfanden, ermöglichten eine zunehmende Zusammenarbeit bei der Wiederherstellung von Verbindungen, die die Trennlinien zwischen der klassischen Wissenschaft in der westlichen und östlichen Welt überbrücken. Auf beiden Seiten des ehemaligen "Eisernen Vorhangs" wurden zahlreiche internationale Konferenzen organisiert, Forschungsergebnisse wurden immer häufiger ausgetauscht, und im Laufe der Zeit begannen die osteuropäische Forscher intensiver in westlichen Zeitschriften und Buchreihen zu publizieren¹. Durch den Erfahrungsaustausch der archäologischen Schulen wurde man in Russland und in der Ukraine mit den neuesten Entwicklungen im Bereich des Faches sowie mit interdisziplinären Methoden zunehmend vertrauter, so dass die Forschungsergebnisse der letzten drei Jahrzehnte teilweise auf einem sehr hohen wissenschaftlichen Niveau veröffentlicht worden sind².

Angesichts der Tatsache, dass ich mich seit ca. 25 Jahren selbst aktiv an der internationalen Zusammenarbeit an der Schwarzmeerküste beteilige, ist mir im Laufe der Zeit immer stärker bewusst geworden, dass eine allgemeine Bibliographie der altertumswissenschaftlichen Veröffentlichungen zum nördlichen Schwarzmeerraum in der Antike ein wirkliches Desiderat darstellt. Die "Bibliographia classica" soll hier Abhilfe schaffen und künftig als Arbeitsinstrument diese Kooperationen weiter fördern³.

Schon mit der Veröffentlichung des ersten Bandes (Cojocarú 2014) wurde klar, dass die Bedeutung von BCOSPE, ihr Umfang, ihre Originalität und die Sorgfalt ihrer Umsetzung keinen Zweifel daran lassen, dass diese Buchreihe zu einem Standardwerkzeug für alle werden wird, die sich mit den Altertümern im Schwarzmeerraum (mit Schwerpunkt auf dem nördlichen Schwarzmeergebiet) beschäftigen. Diese Aussage wird durch mehr als 100 E-Mails bestätigt, die der Autor von Spezialisten weltweit erhalten hat⁴, und durch bisher zwölf sehr anerkennende Rezensionen und Besprechungen⁵.

¹ Vgl. früher Cojocarú 2014, 7–8.

² Unter den zahlreichen Beispielen, die bei Cojocarú 2014 und Cojocarú 2018 aufgelistet sind, sei hier gestattet, nur folgende zu erwähnen: Hannestad u.a. 2002, Lejpunskaja u.a. 2010, Posamentir 2011, Stolba, Rogov 2012, Schlotzhauer, Žuravlev 2013, Fornasier 2016, Braund 2018.

³ Bezüglich der Begründung für das Bibliographieprojekt siehe ausführlicher Cojocarú 2014, 7–9.

⁴ Mehrere Zitate aus diesen Briefen finden sich bei Cojocarú, Grumeza 2017, 508–509.

⁵ Vgl. Cojocarú 2018, 9–10, Anm. 4–5. Es sei hier gestattet, nur einige Zitate einzuführen: "This publication will be an indispensable tool for anyone working on the Northern Black Sea and adjacent regions in antiquity, and every serious research library should get it and

In der Einleitung zum ersten Band machte ich darauf aufmerksam, dass die Reihe "Bibliographia classica orae septentrionalis Ponti Euxini" voraussichtlich die folgenden Bände enthalten wird: I. Epigraphica, numismatica, onomastica & prosopographica; II. Archaeologica; III. Ars, res sacrae & mythologica; IV. Historica & historiographica; V. Varia. Addenda & corrigenda⁶.

Im bescheidenen Rahmen dieses Beitrages möchte ich weiterhin auf den Inhalt des 2. erschienenen Bandes (Cojocaru 2018) aufmerksam machen, mit dem Akzent auf einigen wichtigeren Fragestellungen bei der Untersuchung der Griechen und ihrer Nachbarn am Rande der Steppe. Den Kern der Arbeit bildet der bibliographische Katalog mit mehr als 11.000 Einträgen, die auf acht Kapitel verteilt sind. Mit Ausnahme der kimmerischen Problematik, die im Zusammenhang mit der nordpontischen Archäologie eher belanglos ist, folgt der Aufbau des Bandes die gleiche Verteilung wie im Fall von BCOSPE I⁷. In Rahmen jedes Kapitels wurde das bibliographische Material mehr oder weniger detailliert systematisiert: A.1. Archäologische Berichte und Notizen; A.2. Analysen, Methoden, Fragestellungen; A.3. *Varia archaeologica*; B.1. Gebrauchskeramik; B.2. Feinkeramik; B.3. Amphoren; B.4. Lampen; B.5. *Varia ceramica*; C.1. Teile von Tracht und Bekleidung; C.2. Metallgefäße;

Cojocaru's subsequent volumes. As a member of the *SEG* editorial team working on this region I shall be using it constantly" – Kantor 2015; "Cette bibliographie guidera désormais de manière indubitable les pas de quiconque travaille dans ce domaine, internationalement reconnu à la fois pour la dispersion de l'information et les difficultés insurmontables d'accès aux publications, parfois des plus confidentielles" – Avram 2015, 549, Nr. 471; "Èto cennejšee posobie dlja rossijskich i zarubežnych specialistov – u nas bibliografičeskogo svoda podobnogo roda ešče ne bylo (Diese ist eine sehr wertvolle Unterstützung für russische und ausländische Wissenschaftler – bisher hatten wir keine solche bibliografische Sammlung)" – Jajlenko 2016, 526; "This is a monumental work, well and attractively produced, and a significant project. The CD-ROM of the book is a valuable search tool, not least for inveterate reference-chasers like me" – Tsetschladze 2017, 333.

⁶ Siehe Cojocaru 2014, 9, Anm. 7. Die ersten drei Bände sind inzwischen erschienen – Cojocaru 2014, Cojocaru 2018, Cojocaru 2019. In einem separaten, möglicherweise in mehrere Teile gegliederten Band, werden Veröffentlichungen über epichorische Bevölkerungen im Kontakt mit den Küstenstädten von der griechischen Kolonisation bis zum Beginn der byzantinischen Zeit katalogisiert.

⁷ Vgl. Cojocaru 2018, 12: "Die ersten sechs Abschnitte (I-VI) sind geographisch von Westen nach Osten (das heißt vom Donaudelta bis zu den nördlichen Ausläufern des Kaukasus) angeordnet. Diese Struktur wurde nicht willkürlich gewählt, sondern folgt der bewährten und etablierten Einteilung des Corpus der antiken Inschriften des nördlichen Schwarzmeerraums (IOSPE) durch Wassili Latyschew (1855-1921), den Vater der antiken Epigraphik Südrusslands. Es folgen Titel zu größeren Themenkomplexen (VII Generalia) und Untersuchungen zum nichtgriechischen Substrat der Region (VIII Iranica)". Gegen diese mit BCOSPE I etablierte Gliederung des Werkes wurden seitens der Rezensenten keine Einwände erhoben.

C.3. Glasgefäße; C.4. Militärwesen, Waffen/militärische Ausrüstungen; C.5. Werkzeuge und Gerät; C.6. Sonstige Funde; D. Werkstätten, Gewerbe, Wirtschaft und Handel⁸.

Systematische archäologische Ausgrabungen wurden in Chersonesos, Olbia, Berezan, und in verschiedenen Städten des Bosporianischen Reiches schon in den letzten Jahrzehnten des 19. und am Anfang des 20. Jahrhunderts durchgeführt⁹. Bei der Veröffentlichung der Arbeitsergebnisse bemerkt man als wichtigsten Unterschied zur nächsten Epoche die zyklische Geschichtsauffassung und die Ablehnung des Primats des Ökonomischen¹⁰. Dabei spielten eine besondere Rolle auch die gründliche Ausbildung der klassischen Philologie, sowie die stetigen und intensiven Kontakte zu den antiken Denkmälern des Mittelmeerraumes und zu der abendländischen Antikenwissenschaft¹¹.

Der Übergang von der alten russischen zur neuen sowjetischen Schule, unter Berücksichtigung der nordpontischen Archäologie, ist einerseits mit der Abgrenzung vom Mittelmeerraum und von der abendländischen Historiographie und andererseits mit der dogmatischen Übernahme des Primates des Ökonomischen verbunden. Folglich wurden die Ausgrabungen im nördlichen Schwarzmeerraum mehrere Jahrzehnte fast ausschließlich von den sowjetischen Fachleuten geführt, die immer ausdrücklicher die nördliche Schwarzmeerküste als eine besondere antike Welt betrachteten. Man konzentrierte sich auf die intensiven archäologischen Grabungen in den griechischen Städten mit ihren ländlichen Siedlungen.

⁸ Vgl. am Ende dieses Beitrages die Tabelle mit den statistischen Daten.

⁹ Siehe bei Musin u.a. 2009 ein exzellenter Ausblick zu den in den letzten Jahrzehnten des 19. und am Anfang des 20. Jahrhunderts im nördlichen Schwarzmeerraum durchgeführten Ausgrabungen. Dort findet man ausführliche Beiträge zur Rolle der Kaiserlichen Archäologischen Kommission bei der Erforschung von Olbia (Vinogradov, Musin 2009), Chersonesos (Stojanov 2009), dem Kimmerischen Bosporos (Vinogradov 2009), sowie zum Studium der skythischen Altertümer des Südens des Russischen Reiches (Vachtina 2009).

¹⁰ Vgl. die scharfsinnigen Bemerkungen zur Geschichtsauffassung im Denken Rostovtzeffs bei Heinen 1993, besonders 242: "Doch trotz aller Berührungen mit einzelnen marxistischen Begriffen und Vorstellungen muß man festhalten, daß Rostovtzeff stets eine zyklische Geschichtsauffassung vertreten und den Primat des Ökonomischen abgelehnt hat".

¹¹ Um nur zwei Beispiele in diesem Sinn aufzurufen, erwähne ich die beispielhaften Ausgrabungen von B.W. Pharmakowsky in Olbia, mit der Veröffentlichung der Ergebnisse in den Berichten der Kaiserlichen Archäologischen Kommission in St. Petersburg und im Archäologischen Anzeiger in Berlin (eine ausführliche Liste dieser Veröffentlichungen findet man bei Cojocar 2018, Nr. 633–643 & 943–957) sowie zwei prächtige Bände von M.I. Rostovtzeff zur antiken dekorativen Malerei in Südrußland (Rostovcev 1913/14; vgl. Rostovtzeff 2004), bei deren Veröffentlichung eine besondere Rolle die vorherige Teilnahme des Autors an den Ausgrabungen in Pompeji spielte.

Positiv war der spektakuläre Zuwachs der archäologischen Funde, was immer neue wichtige Belege auch für das Studium verschiedener historischer Fragestellungen brachte¹². Trotz einem stark geprägten ideologischen Milieu, entwickelte man im Bereich der klassischen Archäologie eine eigene Schule, die mit ihren Schwächen und Stärken bis zu einem Punkt mit den abendländischen Schulen vergleichbar ist¹³.

Obwohl nach 1917 – als die sowjetische Historiographie ihren eigenen Weg ging – das Interesse der abendländischen Fachleute an der nördlichen Schwarzmeerküste in der Antike nicht ganz verloren ging, bekamen sie erst nach der Wende wieder die Möglichkeit, sich viel eingehender mit dieser zuvor unzugänglichen Region der griechisch-römischen Welt zu beschäftigen. So entstanden gemeinsame Expeditionen, die, mehr oder weniger erfolgreich, jahrelang in Tyras, Nikonion, Košary, Olbia, Panskoe, Chersonesos, Tanais und in mehreren Siedlungen des Bosporianischen Reiches Bodenforschungen führten. Im Rahmen eines Erfahrungsaustauschs zwischen verschiedenen archäologischen Schulen wurde man im postsowjetischen Raum mit den neuesten Entwicklungen im Bereich sowie mit dem interdisziplinären Studium mehr vertraut, was z. B. die gemeinsamen russisch-dänischen Forschungen in Panskoe oder die amerikanisch-ukrainischen Forschungen in Chersonesos (mit Territorium) ganz überzeugend gezeigt haben.

Zu guter Letzt brachten die abendländischen Kollegen neue Impulse zur Entwicklung einer komplexeren Forschungsmethode, die mehr auf Konzepte und Problematisierung als auf die bloße Beschreibung des archäologischen Materials orientiert ist¹⁴. Um einige konkrete wichtigere Fragestellungen bei der Untersuchung der Griechen und ihren Nachbarn am Rande der Steppe zu nennen, erwähne ich mit dieser Gelegenheit nur den Fall von Chersonesos und Olbia, zwei vergleichbare griechische Städte unter dem Blickwinkel der archäologischen Fachliteratur¹⁵.

Unter zahlreichen mehr oder wenigen wichtigen Fragestellungen im Fall von Chersonesos sei hier gestattet, nur folgende zu erwähnen: 1) Die Gründungszeit von Chersonesos; 2) Die Raumorganisation von Chersonesos und seiner Nekropole; 3) Die Entstehung des chersonesischen Territorialstaates; Prozeß und Charakter der territorialen Expansion von

¹² Vgl. früher Cojocaru 2014a, 78–83.

¹³ Überzeugende Beweise dafür könnten zumindest Maksimova 1956, Gajdukevič 1971 sowie Košelenko u.a. 1984 sein.

¹⁴ Vgl. früher Cojocaru 2014a, 83–87.

¹⁵ Relevant in dieser Hinsicht sind die statistischen Daten in der Tabelle am Ende dieses Beitrages.

Chersonesos; 4) Die *Kleroi* von Chersonesos Taurike in der Geschichte der antiken Landwirtschaft; 5) Die römische Militärpräsenz in Chersonesos; 6) Die Bevölkerung des antiken Chersonesos nach den Angaben der Anthropologie; 7) Die Rolle von Chersonesos im System der griechisch-skythischen Wechselbeziehungen an der Peripherie der hellenistischen Welt; 8) Die Nekropole von Chersonesos als Quelle für die Erforschung der ethnischen und sozialen Zusammensetzung der Stadtbevölkerung; 9) Naturwissenschaftliche Methoden in der Archäologie der nordwestlichen Krim und bei der Bearbeitung des archäologischen Materials in Chersonesos¹⁶.

Im Vergleich bietet die archäologische Untersuchung Olbias viele ebenso wichtige Fragestellungen, die an dieser Stelle nur beispielsweise aufgelistet sind: 1) Zum Problem der Gründung und Festigung der Polis Olbia; 2) Die Chora von Olbia Pontike als Referenzdenkmal der Epoche der großen griechischen Kolonisation sowie die Hauptetappen ihrer räumlich-strukturellen Entwicklung; 3) Das Hinterland als eine wirtschaftliche Komponente des archaischen Borysthene und Olbias; 4) Zur Frage des demographischen Potentials Olbias im 6.-5. Jh. v. Chr. sowie zur Bestimmung der Bevölkerungszahl in einer Griechenstadt der hellenistischen Zeit; 5) Olbia in den Wechselbeziehungen mit der Außenwelt [Fragen der Periodisierung]; 6) Zur Entwicklung des Stadtterritoriums von Olbia im 1. Jahrtausend v. Chr. und zum Problem der Typologie ländlicher Gehöfte in der Chora von Olbia; 7) Historische Topographie der Nekropole Olbias; 8) Das Verteidigungssystem des olbischen Staates in den ersten Jahrhunderten n. Chr., sowie die Bedeutung und die Stellung Olbias an der Peripherie der römischen Welt; 9) Olbia und die Barbaren oder griechisch-barbarische Kontakte im unteren Buggebiet¹⁷.

Diese und viele andere Fragestellungen, auch im Fall von Tyras, Nikonion (Cojocar 2018, bes. 71–78), des Bosporanischen Reiches (Cojocar 2018, bes. 538–652) oder des nördlichen Schwarzmeerraumes insgesamt (Cojocar 2018, bes. 799–853), sind gleichzeitig relevant für einige aktuelle Forschungsrichtungen der nordpontischen Antikenwissenschaft, mit den Beziehungen zwischen Griechen und Nichtgriechen im Vordergrund.

In den letzten Jahrzehnten hat das Interesse zum Studium der Griechen *versus* Nichtgriechen im nördlichen Schwarzmeergebiet

¹⁶ Die sehr umfangreiche Literatur zu den erwähnten Fragestellungen kann ich hier aus Raumgründen nicht näher erklären; diese findet man jetzt bei Cojocar 2018, bes. 316–351.

¹⁷ Siehe die ausführliche Bibliographie bei Cojocar 2018, bes. 140–177.

zugenommen¹⁸. Die Diskussionen waren vielfältig: von einschränkenden Identitäten (eine Einordnung durch statische Kategorien) bis hin zu Fusionstendenzen (die sogenannte *Koinè*). In diesem Kontext spricht man über freundschaftliche Beziehungen, Handelsbeziehungen, gegenseitige Beeinflussung, Fusion, Integration oder umgekehrt – über Konflikte, Feindseligkeiten, das sogenannte skythische Protektorat bis zu zwei parallelen Welten. Offensichtlich schwankten alle diese Typen von Verbindungen und Phänomenen in Verbindung mit der einen oder der anderen Epoche.

Wie Caspar Meyer bemerkt, ist die zentrale Idee der Michail Rostovtzeff-Studien immer noch in der zeitgenössischen historischen Interpretation enthalten (Mayer 2011, 76): "Rostovtzeff conceived the historical development of the northern Black Sea area in terms of the meetings and interactions between two clearly distinguished culture groups, the eponymous Iranians and Greeks".

Eigentlich war M.I. Rostovtzeff selbst weniger kategorisch, wenn wir einige seine Beobachtungen aus "Skythien und der Bosphorus" berücksichtigen (Rostowzew 1931, 273): "Unter diesen Umständen fällt es doppelt schwer, aus dem Bestande der Mischkultur von Südrußland das heraus zu schälen, was weder lokal noch griechisch ist, sondern mit dem Kulturleben des Orients in Verbindung gebracht werden muß. Nirgends finden wir reine Bildungen, überall nur Produkte einer Mischkultur, wobei die Schaffenskraft von Kleinasien gerade in dieser Zeit eine bedeutende Rolle spielt". Und an anderer Stelle weiter (Rostowzew 1931, 329): "Die bezeichnende Eigentümlichkeit der skythische Kurgane auf der Halbinsel Taman, welche sie von ebensolchen Gräbern aus anderen Gegenden des Skythenreiches unterscheiden, bildet die außerordentlich starke Hellenisierung ihres ganzen Wesens, die viel stärker ist in den übrigen skythischen Gräbergruppen. Daher ist bisweilen die Entscheidung schwer, ob wir es mit einem hellenisierten Skythen oder mit einem Sinder, der sich die skythische Bewaffnung angelegt hat, oder mit einem iranisierten Griechen zu tun haben".

Die Daten, die jetzt BCOSPE II anbietet (mit mehr als 11.000 Einträgen), sind ganz relevant für die oben angedeutete historiographische Debatte bei der Untersuchung der Griechen und ihrer Nachbarn am Rande der Steppe. Deshalb hoffe ich nach wie vor, dass die "Bibliographia classica orae septentrionalis Ponti Euxini" eine Forschungslücke schließt, den

¹⁸ Hunderte von Titel findet man bei Cojocaru 2018, *passim*. An dieser Stelle sei gestattet, nur einige wichtigere Beiträge zu erwähnen: Heinen 2001, Hupe 2005, Posamentir 2007, Stolba 2007, Tochtas'ev 2017.

neuen Geist des wissenschaftlichen Austausches zwischen Ost und West fördert und ein Arbeitsinstrument bereitstellt, das die internationale Zusammenarbeit zur Erforschung der Schwarzmeerküste weiter vorantreiben soll. Wohl möglich wird in wenigen Jahren der 4. Band dieses Bibliographieprojektes neben dem Titel "Historica et historiographica" auch den Untertitel "Der nördliche Schwarzmeerraum als Kontaktzone in griechisch-römischer Zeit" tragen.

Stadt/Gebiet → Bereich↓	Ἀχαιῶς Νῆσος	Tyras & Nikonion	Borysthene & Olbia	Karkinitis & Chersonesos	Neapolis Scythica	Regnum Bosporanum	Generalia	Iranica
A.1. Archäologische Berichte und Notizen	12	169	583	834	39	1439	172	48
A.2. Analysen, Methoden, Fragestellungen	2	91	422	396	19	1262	603	93
A.3. Varia archaeologica	15	72	211	271	17	479	182	58
B.1. Gebrauchskeramik	-	25	59	27	2	70	19	10
B.2. Feinkeramik	3	25	226	111	5	262	171	19
B.3. Amphoren	1	10	53	47	1	104	112	16
B.4. Lampen	-	4	22	26	-	35	18	1
B.5. Varia ceramica	-	3	13	17	1	18	9	2
C.1. Teile von Tracht und Bekleidung	1	20	57	54	6	168	110	39
C.2. Metallgefäße	-	4	9	4	2	22	19	10
C.3. Glasgefäße	-	8	22	13	-	54	41	3
C.4. Militärwesen, Waffen / militärische Ausrüstungen	2	8	21	30	2	133	51	29

<i>C.5. Werkzeuge und Gerät</i>	2	7	20	16	-	39	13	1
<i>C.6. Sonstige Funde</i>	1	6	25	9	-	20	38	-
<i>D. Werkstätten, Gewerbe, Wirtschaft und Handel</i>	-	25	151	179	3	296	170	19
Total [11018]	39	477	1894	2034	97	4401	1728	348

Tab. 1. BCOSPE II: Die Systematisierung des bibliographischen Materials (statistische Daten)

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Maioten und Maiotische archäologische Kultur: Zum Zusammenhang von Begriffen

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Article: *archeology*; Received: 18.11.2022; Revised: 27.02.2023

Accepted: 18.03.2023; Available online: 28.04.2023.

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Rezumat: Termenul "meoți" a rezultat în urma localizării de către autorii antici a diferitor triburi de pe coastele Mării Azov (Maiotis). Identificarea culturii arheologice a început în anii 1930, datorită descoperirii așezărilor și necropolelor de-a lungul Kubanului inferior și mijlociu, studiarea cărora a permis reconstituirea modului sedentar de viață al populației locale. Date fiind principalele caracteristici ale acestor situri (cum ar fi, de exemplu, forme particulare ale riturilor funerare: tipurile specifice de ceramică), aria de distribuție a culturii arheologice meotice a fost extinsă până la Kubanul mijlociu și la poalele Caucazului de Nord. Acest teritoriu depășește cu mult aria delimitată de sursele scrise. "Specificul cultural" se poate datora particularităților geografice și potențialului economic al regiunii. În acest sens, „cultura meotă” ar putea fi numită, mai degrabă, "cultura arheologică Kuban".

Cuvinte-cheie: meoți, cultură arheologică, regiunea Kuban, istoricul cercetărilor

Zusammenfassung. Der Begriff „Maioten" ergibt sich aus der Lokalisierung verschiedener Völkerschaften an den Ufern des Asowschen Meeres (Maiotis) durch antike Autoren. Die Identifizierung der archäologischen Kultur begann in den 1930er Jahren mit der Entdeckung von Siedlungen und Nekropolen entlang des unteren und mittleren Kubanflusses; deren Untersuchung ermöglichte die Rekonstruktion der sesshaften Lebensweise der lokalen Bevölkerung. In Anbetracht der Hauptzüge dieser Siedlungen (so z. B. besondere Formen von Grabritualen oder spezifische Töpfereigattungen) umfasst das Verbreitungsareal der maiotischen archäologischen Kultur den mittleren Lauf des Kuban und die Vorberge des nördlichen Kaukasus. Dieses Gebiet ist viel

größer als der Bereich, der von den schriftlichen Quellen beschrieben wird. Seine „kulturellen Eigenheiten“ sind auf die geographischen Besonderheiten und das wirtschaftliche Potential der Gegend zurückzuführen. In diesem Sinne sollte die „maiotische Kultur“ eher „archäologische Kultur des Kuban“ benannt werden.

Schlüsselworte: Maioten, archäologische Kultur, Kubangebiet, Forschungsgeschichte

Die antiken Schriftquellen beschreiben alle barbarischen Völker des nördlichen Schwarzmeeres etwa ähnlich: Sie sind kriegerische Stämme, die die zivilisierte Bevölkerung der griechischen Städte stören, Räuberei und Söldnerei betreiben, und sie standen auf einer mehr oder weniger gleichen Ebene der sozioökonomischen und sozio-politischen Entwicklung. In den schriftlichen Quellen finden sich wenige ethnographische Details. Sie erlauben es nicht, Grenzen zwischen den lokalen politischen Subjekten zu markieren, es gibt fast keine Daten über ihre Ideologie und Formen der Selbstidentifikation. Dennoch wurde in der Fachliteratur einem der in den schriftlichen Quellen erwähnten Volk, nämlich den Sarmaten¹, eine aktive politische Rolle zugeschrieben, während die anderen eine passive Rolle spielten. Dies drückte sich u. a. im Begriff "Sarmatisierung" und der Nominierung der chronologischen Perioden archäologischer Kulturen aus, die mit den nordpontischen Barbaren in Verbindung gebracht wurden. Dazu gehört auch die maiotische archäologische Kultur.

Maioten in den schriftlichen Quellen

Als Maioten bezeichneten die antiken Autoren die Völker, die an der östlichen und südöstlichen Küste der Maiotis-See (des heutigen Asowschen Meeres) lebten. Unter einzelnen maiotischen Stämmen werden Sinden, Toreten, Dandarien, Tarpeten, Aspurgianen, Achäer, Sigen, Geniochen, Kerketen, Makropogonen usw. erwähnt².

Die um die Maiotis lebenden Völker züchteten Vieh (Rinder, Pferde, Schafe), beschäftigten sich mit Landwirtschaft, Fischfang³, Weinbau⁴. Einige von ihnen führten offenbar ein nomadisches Leben⁵. Strabo stellt fest, dass die maiotischen Stämme, die in der Nähe von Tanais

¹ Mordvintseva 2021.

² Strabo, XI, 2; 1.11.12.

³ Strabo, XI, 2, 4.

⁴ Strabo, VII, 3, 18.

⁵ Strabo, II, 5, 26.31; XI, 2, 1.

lebten, mehr Wildheit aufweisen und diejenigen, die an den Bosphorus grenzen, zivilisierter sind⁶, und sie sind nicht weniger kriegerisch als die Nomaden. Einige maiotischen Stämme (wie die Achäer, Sigen, Geniochen) beschäftigten sich professionell und gezielt mit Menschenraub, um Gelder von den Verwandten zu bekommen oder sie in die Sklaverei zu verkaufen. Zudem betrieben sie Seepiraterie. Die auf diese Weise erhaltene Beute wurde dann mit Hilfe bosphoranischer Bewohner auf den Märkten verkauft⁷.

Strabo erwähnt weiterhin, dass alle asiatischen Maioten zum Teil den Herrschern der Handelsstadt Tanais, zum Teil den Bosphoranern unterworfen waren⁸. Zumindest für einige maiotischen Stämme ist innerliche vertikale Hierarchie notiert. Strabo berichtet über die diese Völker regierenden "Skeptuchoi", die selber den "Tyrannen und Könige" unterstanden und unter denen es keine Einheit gab. Es hatten z. B. die Geniochen vier Könige, als Mithridates Eupator durch ihr Land kam⁹. Es gibt jedoch keinen Grund, diese Information auf alle Maiotenvölker zu übertragen. Die Einbeziehung einiger Stämme ins Bosphoranische Reich hat unter ihnen offensichtlich zentrifugale Tendenzen hervorgebracht, was sich in den Nachrichten über ihre Aufstände widerspiegelt¹⁰.

In dieser Hinsicht kann die Geschichte von Tirgatao, Königin der Maioten, die von Polyaen übertragen wird¹¹, ein Echo der Volksfolklore sein, der den Separatismus der lokalen Stämme ausdrückt. Offenbar war ein Teil der Maioten dem Bosphoranischen Reich unterworfen, der andere Teil schien unabhängig gewesen zu sein. Es gibt keine schriftlichen Nachrichten über die Ideologie der maiotischen Stämme.

Maiotische archäologische Kultur

Die archäologischen Stätten der "Barbaren" des Kubangebiets und des Nordkaukasus wurden relativ spät untersucht, da diese Region erst im Jahre 1854, nach dem Kaukasischen Krieg, in das russische Reich kam. Bald begann die Beraubung der Grabhügel, die zuvor die lokale Bevölkerung wegen ihrer Glauben, einschließlich der Vorstellungen, dass sie von ihren Vorfahren hinterlassen wurden, nicht berührt hatte¹². Das Plündern der Gräber führte dazu, dass auf dem Markt eine große Zahl von Antiquitäten erschien, von denen die meisten von der lokalen Bevölkerung, die den

⁶ Strabo, XI, 2, 4.

⁷ Strabo, XI, 2, 12.

⁸ Strabo, XI, 2, 11.

⁹ Strabo, XI, 2, 13.

¹⁰ Strabo, XI, 2, 11.

¹¹ Polyaen., Strat., VIII, 55.

¹² Kamenetskiy 2000; 2011.

Edelmetall insbesondere für die Dekoration von Waffen benutzte, einfach eingeschmolzen wurden.

Ein Teil der Gegenstände wurde von Privatsammlern aus der Region, der Hauptstadt sowie aus dem Ausland erworben. Sie wurden von Mitgliedern der Kaiserlichen Archäologischen Kommission begutachtet. Um das Ausmaß der Zerstörung zu verringern, kauften sie den Sammlern die Funde für einen höheren Preis als den eigentlichen Marktpreis ab. In der Region des Kuban begannen großflächige Ausgrabungen der Grabhügel, die als skythisch interpretiert wurden. Das Hauptziel der Ausgrabungen, die in der Regel von Nikolay Veselovskiy¹³ durchgeführt wurden, war die Vergrößerung der Sammlungen der wichtigsten russischen Museen, vor allem der kaiserlichen Eremitage¹⁴. Veselovskiy hat große Kurgane (Grabhügel) auf dem linken Ufer des Kuban, in der Gegend von Zubovskaya und Vozdvizhenskaya Stanisa, sowie entlang des rechten Ufers des mittleren Kuban (sog. "Goldener Friedhof")¹⁵, die er als römische Bestattungen interpretierte¹⁶, ausgegraben. Andere Arten von archäologischen Stätten (befestigte und nicht befestigte Siedlungen, Grabstätten), obwohl bereits bekannt, wurden nicht mit den Funden in den Grabhügeln verglichen und dementsprechend nicht in den wissenschaftlichen Verkehr eingeführt¹⁷. Es kam vor, dass Veselovskiy eine Siedlung für einen Kurgan hielt und mit Ausgrabungen begann. Wenn er feststellte, dass es sich nicht um eine Grabstätte handelte, stellte er die Arbeiten ein¹⁸. 1918 stellte Alexander Spitsyn, Mitarbeiter der Kaiserlichen Archäologischen Kommission, fest, dass bisher "keine Aschehügel oder irgendwelche Überreste von antiken Siedlungen im Kuban-Gebiet gefunden wurden"¹⁹.

Infolgedessen waren Siedlungen und Flachgräberfelder vor den 1920er Jahren kaum bekannt. Sie wurden erst in den Orten von Freistellungen der kulturellen Schicht während der Bauarbeiten geöffnet, die in der Nähe von Krasnodar auf dem rechten Ufer des Kuban eingesetzt wurden. An den Grabungen nahmen lokale Archäologen teil. Die Frage nach der ethnischen Zugehörigkeit dieser Denkmäler stand zunächst nicht im Fokus. Es wurden neutrale Begrifflichkeiten verwendet, die einen chronologischen Inhalt reflektierten ("römische Epoche", "das erste

¹³ Nikolay Veselovskiy (1848–1918): Professor an der St. Petersburger Universität (1890), korrespondierendes Mitglied der Kaiserlichen AW (1914).

¹⁴ Kamenetskiy 2011, 128.

¹⁵ Gushchina, Zasetskaya 1989; 1993.

¹⁶ Veselovskiy 1905, 350–370.

¹⁷ Anfimov 1949, 241.

¹⁸ Kamenetskiy 2011, 88.

¹⁹ Spitsyn 1918, 143.

Jahrhundert n. Chr." usw.)²⁰. Es wurde angenommen, dass Siedlungen in der Region nicht früher als mit dem Beginn der hellenistischen Periode erschienen²¹.

Von 1927–1935 wurden intensive Untersuchungen in archäologischen Stätten entlang des mittleren Kuban und der unteren Läufe der Flüsse, die in die Kuban einfließen, durchgeführt: Zelenchuk, Laba, Belaja, Psekups, Sups, Afips, Il' und Kirpili. In diesen Gegenden wurden die zuvor unbekannt besetzten und offenen Siedlungen sowie ihre Nekropolen entdeckt²². Diese Stätten interpretierte man als die der alten Stämme, die in den antiken schriftlichen Quellen erwähnt wurden²³. Die materiellen Überreste, die auf diesen Denkmälern gefunden wurden (Ackerwerkzeuge, Mühlen, Wirtschaftsgruben, Reste von Töpfen, eine große Anzahl von Tonschlacken, Fehlbrände, Knochen von Rindern und Schweinen, Abdrücke von Hufen der Haustiere im Lehmboden usw.), ermöglichten es, auf die sesshafte Natur der entdeckten materiellen Kultur und auf die aktiven Handelsverbindungen der dort lebenden Bevölkerung mit den nordpontischen griechischen Kolonien zu schließen²⁴. Diese Denkmäler hat Nikita Anfimov²⁵ aktiv erforscht, der bereits in den Vorkriegsjahren das Konzept ihrer Periodisierung und kulturellen Interpretation entwickelt hatte.

Nach dem Ende des 2. Weltkrieges rückten die archäologischen Stätten im Kubangebiet bei den hauptstädtischen Forschern Konstantin Smirnov²⁶ und Valentin Shilov²⁷ in den wissenschaftlichen Fokus²⁸. Dies

²⁰ Miller 1925; Gorodtsov 1940.

²¹ Anfimov 1949, 241–242.

²² Pokrovskiy, Anfimov 1937.

²³ Pokrovskiy, Anfimov 1937, 265.

²⁴ Pokrovskiy, Anfimov 1937, 273–274.

²⁵ Nikita Anfimov (1909–1998) war adeliger Herkunft väterlicher- und mütterlicherseits. Seit 1925 Mitarbeiter des Wissenschaftsmuseums des Kuban (heute E. D. Felicin Krasnodar Staatliches Historisches und Archäologisches Museum-Schutzgebiet). 1934–1936 Studium am Krasnodar Pädagogischen Institut. Seit 1937 Lehrer, Dozent, später Professor am Krasnodar Pädagogischen Institut (heute: Kuban Staatliche Universität).

²⁶ Konstantin Smirnov (1917–1980) begann 1935 das Studium an der historischen Fakultät des Moskauer Instituts für Geschichte, Philosophie und Literatur. Im Jahr 1940, nach Abschluss des Instituts, wurde er in eine Graduiertenschule aufgenommen, die er 1944 an der Abteilung für Archäologie der historischen Fakultät der Moskauer Staatlichen Universität absolvierte. In 1946 verteidigte er die Doktorarbeit "Sarmatische Kurgangräber in den Steppen des Wolga- und des südlichen Uralgebiets".

²⁷ Valentin Shilov (1917–1995): Kandidat der historischen Wissenschaften (1951). Junior wiss. Mitarbeiter (1949), Senior wiss. Mitarbeiter (1963), Leiter des Sektors (1970), Direktor (1971–1976) der Leningrader Abteilung des Archäologischen Instituts der Akademie der Wiss. UdSSR. Senior wiss. Mitarbeiter am Archäologischen Institut der Akademie der Wiss. UdSSR, Moskau.

²⁸ Shilov 1950; 1951; Smirnov 1951; 1952.

brach das unausgesprochene "Eigentumsrecht" auf die bestimmten Forschungsgebiete, das bis dahin in der sowjetischen Archäologie hingenommen wurde²⁹ und sich weitgehend auf zukünftige Feldarbeiten und konzeptionelle Meinungsunterschiede von Forschern verschiedener Wissenschaftszentren auswirkte. In den frühen 1950er Jahren wurden einige Werke gleichzeitig veröffentlicht, die das archäologische Material des Kubangebiets, hauptsächlich auf Basis der Gräberfelder, zusammenfassten.

Valentin Shilov teilte die Denkmäler der "Maioten" des Kubangebiets in zwei chronologische Gruppen ein: 1) vom späten 7. bis zum Anfang 4. Jh. v. Chr., und 2) vom 4.-1. Jh. v. Chr. Die Argumente für die Einteilung waren die Beziehungen zu dem Bosporanischen Reich, dessen Einfluss auf die Kultur der Maioten allmählich stärker wurde³⁰. Das Eindringen der "nomadischen Elemente" in die Kultur der Maioten indizierte, nach Shilovs Meinung, "das Vorhandensein von Pferdebestattungen und neuen keramischen Formen in Gräbern"³¹. Die gemeinsamen Grenzen der Verbreitung von maiotischen Stämmen sind bereits durch Anfimov definiert worden³². Shilov versuchte, einzelne maiotische Stämme aufgrund einer umfassenden Analyse der verschiedenen Quellen zu lokalisieren, wie: 1) Inschriften der bosporanischen Bürger, einschließlich der Titel der bosporanischen Könige, die an verschiedenen Orten der Kertsch- und Tamanhalbinsel gefunden wurden; 2) Nachrichten der griechischen und lateinischen Schriftsteller; 3) archäologische Daten; 4) Toponymik des betrachteten Gebiets; 5) ethnographische Daten³³. Gleichzeitig stellte Shilov fest, dass diese archäologischen Daten nicht ausreichten, um lokale Gruppen zu identifizieren, die sich auf die bestimmten Stämme beziehen.

Konstantin Smirnov postulierte den hypothetischen Prozess der "Sarmatisierung der kubanischen Bevölkerung" als Grundlage seiner Periodisierung³⁴. Er sonderte folgende Perioden ab: frühschythisch (6.-5. Jh. v. Chr.)³⁵; maiotisch-sarmatisch (4.-2. v. Chr.); sarmatisch-maiotisch (1. Jh. v. Chr. – 3. Jh. n. Chr.) und spätsarmatisch oder alanisch (4.-5. Jh. n. Chr.)³⁶. Der Forscher behauptete, dass seit dem 4. Jh. v. Chr. "die allmähliche Penetration der Sarmaten in die maiotische Umgebung beginnt, wo sie

²⁹ Kamenetskiy 2011, 134.

³⁰ Shilov 1951.

³¹ Shilov 1950, 112.

³² Shilov 1950, 110.

³³ Shilov 1950, 105.

³⁴ Smirnov 1952, 3.

³⁵ Smirnov 1950.

³⁶ Smirnov 1952; Pogrebova 1954, 33–34.

schnell die höhere Kultur der kubanischen Stämme angenommen haben³⁷. Die Grabhügel der Region verband Smirnow mit Nomaden (Skythen und Sarmaten), während er die Flachgräberfelder den Maioten zuschrieb³⁸.

Trotz der offensichtlichen Konkurrenz mit den Archäologen aus den Hauptstädten³⁹ verteidigte Nikita Anfimov 1954 seine Doktorarbeit "Die wichtigsten Phasen der Entwicklung der Kultur von maiotisch-sarmatischen Stämmen des Kubangebiets" am Archäologischen Institut der Akademie der Wissenschaften der UdSSR⁴⁰. Er glaubte, dass in den Werken von Smirnov der Einfluss von Sarmaten auf die maiotische Kultur übertrieben sei. Insbesondere merkte er an, dass die Grabhügel des Kubangebiets direkt mit den ansässigen Leuten verbunden sind, und zusammen mit den Siedlungen und Flachnekropolen stellen sie einen einzigen „Kultur“-Komplex dar. Wenn die Gräber der Flachnekropole die gewöhnlichen Bevölkerung repräsentieren, dann "[stellen] die Grabhügel, die sich neben den Siedlungen befinden, [...] die Bestattungen der reichen Oberschichten der kubanischen Stämme [dar]"⁴¹. So erklärte er verschiedene Formen der Grabstätten in der Region nicht durch ethnische, sondern durch soziale Unterschiede, was mit der Position von Smirnov kontrastierte. Die Periodisierung Anfimovs enthielt Verweise auf die "schrittweise Sarmatisierung" der Bewohner des Kubangebiets.

Nach den Ausgrabungen einiger neuer Gräberfelder⁴², differenzierte Anfimov eine weitere Periode, die der frühskythischen Stufe vorausging. Er nannte sie "proto-maiotisch" und datierte sie ins 8.-erste Hälfte des 7. Jh. v. Chr.⁴³. So wurde die Periode vor der Bildung der "eigentlichen maiotischen Kultur" bezeichnet. Anfimov hat die kontinuierliche Entwicklung der autochthonen Landwirtschaftskultur in der gesamten frühen Eisenzeit postuliert, ähnlich wie es bei anderen Kulturen im Süden Osteuropas dargestellt war, zum Beispiel der sauromatisch-sarmatischen Kultur des Wolga-Ural-Gebietes⁴⁴ sowie der taurischen Kultur der Krim.

In den 1970er Jahren begannen große archäologische Ausgrabungen am Kuban aufgrund des Baus von Bewässerungssystemen.

³⁷ Smirnov 1952, 13.

³⁸ Smirnov 1952, 7.

³⁹ Igor Kamenetskiy weist darauf hin, dass Anfimov an Smirnov und Shilow appelliert hat, um das Studium der maiotischen Denkmäler aufzugeben (Kamenetskiy 2011, 135).

⁴⁰ Kamenetskiy 2011, 133.

⁴¹ Anfimov 1958, 67.

⁴² Anfimov 1961.

⁴³ Anfimov 1961. Moderne Daten dieser Periode: 2. Hälfte des 9. bis zur Mitte des 7. Jhs. v. Chr. (Erlikh, Kozhukhov 1992; Erlikh 2007).

⁴⁴ Siehe Mordvintseva 2020.

In der Region arbeiteten archäologische Teams (Gruppen) aus verschiedenen Zentren der Metropolen (das Archäologische Institut AW der UdSSR, die Leningrader Abteilung desselben, das Staatliche Museum der Orientalischen Kunst usw.), was zu einem umfangreichen Zuwachs des Materials, vor allem aus den Kurgangrabfeldern führte, die nach den Ausgrabungen von Veselovskiy am Ende des 19.–Anfang des 20. Jhs. kaum untersucht wurden⁴⁵.

Im Zusammenhang mit der zunehmenden Forschungsgrundlage und dem Aufkommen des neuen Materials der Kurgannekropolen wurde die Frage nach der Beziehung der maiotischen Kultur einerseits, zu den skythischen und sarmatischen Kulturen andererseits, und ihren jeweiligen Grenzen im Kubangebiet aufgeworfen. Die Antwort auf diese Frage fällt je nach Fachrichtung der Forscher unterschiedlich aus. Die "Skythologen" und "Sarmatologen" betrachteten alle Kurgane, einschließlich entlang des Flusses Kuban, als skythisch und sarmatisch (Siraken)⁴⁶, während andere Forscher dieselben Hügel der maiotischen Kultur zuschrieben⁴⁷. Auf verschiedene Weise wurde die Frage nach der "Sarmatisierung" der Maioten gelöst, die schon in den Werken der 1950er Jahre postuliert wurde, was sich auch in der Periodisierung der maiotischen archäologischen Kultur widerspiegelte. Unter dem Begriff der Sarmatisierung verstand Konstantin Smirnov *a priori* (d. h. ohne entsprechende Analyse) "das Auftreten von Tracht, Waffen, Kunststil sowie Elemente des Grabritus der Sarmaten bei nicht-sarmatischen Bevölkerung"⁴⁸. Zu den "sarmatischen Merkmalen" gehörten "die Katakomben-Grabform"⁴⁹, die "gekreuzten Beine des Begrabenen"⁵⁰ sowie die "Position der Hände des Verstorbenen auf dem Becken"⁵¹ usw. Die Forscher der maiotischen Kultur verstehen den Begriff "Sarmatisierung" anders. Ihrer Meinung nach ist die "Sarmatisierung" das allmähliche Eindringen der Nomaden in die landwirtschaftliche Umgebung sowie ihre Assimilation durch die maiotische Bevölkerung⁵². Die Anhänger dieser Idee, insbesondere Igor Kamenetskij,⁵³ unterschieden weiterhin den Prozess der "Maiotisierung"

⁴⁵ Marchenko 1996, 7.

⁴⁶ Zhdanovskiy, Marchenko 1998; Makhortykh 1991; Galanina 1997.

⁴⁷ Kamenetskij 2000; 2011; Erlikh 2007.

⁴⁸ Smirnov 1954, 195.

⁴⁹ Nechaeva 1956, 18; Kuznetsov 1962. Alternative Sicht: Abramova 1978, 78–82; 1982, 10–18.

⁵⁰ Vinogradov 1963, 81, 83.

⁵¹ Kamenetskij 2011: 243.

⁵² Anfimov 1951; 1954, 14; Kamenetskij 2011, 338.

⁵³ Igor Kamenetskij (1930–2014): Kandidat der historischen Wissenschaften, Professor. Leiter der Abteilung für Theorie und Methodik am Archäologischen Institut der Russischen AW, Moskau.

der bosporanischen Bevölkerung, und schlugen vor, eine gemeinsame Vorstellung von der "Sarmatisierung" dieses griechischen Staates durch den neuen Begriff zu ersetzen⁵⁴.

Eine weitere Forschungsrichtung im Kubangebiet war die Zuteilung lokaler Varianten der maiotischen archäologischen Kultur und die Lokalisierung verschiedener Stämme, die in schriftlichen Quellen zu den "Maioten" gezählt wurden. Igor Kamenetskij analysierte die Besonderheiten der Lokalisierung "maiotischer" Siedlungen und aufgrund ihrer Kartierung und Berücksichtigung der topographischen Merkmale ordnete er dreizehn Gruppen zu⁵⁵, von denen zwei nach dem ethnischen Prinzip ("Toretan-Kerketen" und "Synden") benannt wurden, der Rest nach den eponymen Denkmälern. Aufgrund des Materials von Denkmälern am unteren und mittleren Lauf des Flusses Laba wurde eine weitere "Tenginskaja-Kultur" definiert⁵⁶. Einige dieser eponymen Gruppen verband er auch mit einem bestimmten Stamm (die Kirpili-Gruppe mit den Jazamaten; die Asowsche Gruppe mit den Dandarien). Laut seiner Werke ist auszuschließen, dass die Grenzen der lokalen Variantenarchäologischen Kulturen gleichzeitig die Grenzen bestimmter ethnischer Gruppen sind.

Derzeit konzentriert sich die Forschung der maiotischen Kultur auf die Fragen nach der Entstehung und Entwicklung der Kultur⁵⁷, der Zuteilung ihrer lokalen Varianten⁵⁸, der Typologie der einzelnen Kategorien der Objekte⁵⁹ sowie nach der Veröffentlichung einzelner Gruppen von Denkmälern⁶⁰. Es gibt jedoch noch keine Studien, die die Fragen aufwerfen würden, welche Merkmale die Denkmäler des Kubangebietes aus verschiedenen chronologischen Epochen vereinen und welche Phänomene hinter einzelnen lokalen oder chronologischen Varianten der maiotischen Kultur stehen. Um diese Fragen zu beantworten, ist es vielversprechend, bei der Untersuchung der kubanischen Denkmäler das Netzwerkmodell der archäologischen Kultur anzuwenden. Es gibt jedoch noch keine Studien, die die Fragen aufwerfen würden, welche Merkmale die Denkmäler des Kubangebietes aus verschiedenen chronologischen Epochen vereinen und welche Phänomene hinter einzelnen lokalen oder chronologischen Varianten der maiotischen

⁵⁴ Kamenetskij 2011, 323.

⁵⁵ Kamenetskij 2000, 74–107; 2011, 202–208.

⁵⁶ Gey, Kamenetskij 1986, 47.

⁵⁷ Erlikh 2007; Limberis, Marchenko 2012.

⁵⁸ Ivanov, Sudarev 2012; Ivanov, Kononov 2013.

⁵⁹ Marchenko 2013; Mordvintseva 2010.

⁶⁰ Erlikh 2011; Ivanov 2013.

Kultur stehen. Um diese Fragen zu beantworten, ist es vielversprechend, bei der Untersuchung der Denkmäler des Kuban das Netzwerkmodell der archäologischen Kultur anzuwenden⁶¹, dem entsprechend hinter der Verteilung bestimmter materieller Merkmale die Netzwerkbeziehungen bestimmter sozialer Gruppen stehen, die in einem Zeitraum sowie in einem begrenzten Gebiet funktionierten. Wenn es überhaupt die Merkmale gibt, die durch die ganze riesige Zeitspanne der maiotischen Kultur, vom 9. Jh. v. Chr. bis zum 3. Jh. n. Chr., anzutreffen sind, spricht es wohl von den geographischen Besonderheiten des Kubangebietes, die zu bestimmten Wirtschaftstätigkeiten führten. In diesem Sinne, sollte diese archäologische Kultur nicht ethnisch verstanden werden, sondern eher geographisch, und kann auch als Kultur des Kuban benannt werden.

⁶¹ Ausführlicher siehe Mordvintseva 2020.

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Layer by Layer: A Mortar with Charcoal from the Costești-Blidaru Cistern

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Article: archeology; Received: 27.02.2023; Revised: 06.03.2023

Accepted: 18.03.2023; Available online: 28.04.2023.

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Abstract: The aim of this article is to present the characteristics of a mortar layer from the floor of the cistern discovered by C. Daicoviciu and his team underneath Costești-Blidaru fortress. This investigation is based on the published information, on data from the excavation records and on the results of a recent mineralogic analysis of a sample from the layer in question. I compared the layer and the cistern with water related features and structures from the Mediterranean area, in an effort to identify the origins of the techniques that were used during the cistern's construction. Additionally, the recourse to ancient literary sources allowed me to discuss the practices of hydraulic engineers in classical times, in order to assess the validity of C. Daicoviciu's appreciation, according to which the cistern was built by following "Vitruvian recipes". The final part of the paper contains some observations regarding the chronology of the cistern, based on the techniques that were used and on the chronology of the fortress and its related structures.

Keywords: mortar, charcoal, undercoat, cistern, Vitruvius

Rezumat: Scopul acestui articol este prezentarea caracteristicilor unui strat de mortar din podeaua cisternei de sub cetatea de la Costești-Blidaru, descoperită de C. Daicoviciu și de echipa sa. Această investigație se bazează pe informațiile publicate, pe datele extrase din rapoartele de săpătură și pe rezultatele unei analize mineralogice recente a unei probe prelevate din stratul

respectiv. Am comparat stratul și cisterna cu alte elemente și structuri legate de apă din zona mediteraneeană, pentru a încerca să identific originile tehnicilor folosite la construcția cisternei. Pe lângă aceasta, recursul la sursele literare antice mi-a permis să discut despre practicile hidraulicienilor din perioada clasică, pentru a determina validitatea părerii lui C. Daicovicu, conform căreia cisterna a fost construită prin respectarea "rețetelor vitruviene". Ultima parte a articolului conține observații privind cronologia cisternei, pornind de la tehnicile folosite și de la cronologia cetății și a structurilor asociate.

Cuvinte-cheie: mortar, cărbune, substrat, cisternă, Vitruvius

The location

The many examples of water-related structures found in the Orăștie Mountains stand out from those found in other regions of Dacia, this specificity being caused mainly by the local geographical features¹. Besides this, other structures from this micro-region indicate the employment of classical techniques of construction², which were evidently "imported" long before the Roman conquest. This is the case of the cistern at Costești-Blidaru as well.

The cistern in question was found underneath the plateau of the Costești-Blidaru fortress (690 m height), namely on its north-western side (Fig. 1, 12)³. On one hand, its horizontal position could be related to the orientation of the main access way towards the fortress. The terrain was modified in order to restrict the access to a narrow saddle on the southern side of the fortress (Fig. 1). As such, the fortress could be seen as protecting the cistern from possible threats coming from the south. This side of the fortress was the most exposed, as it faced the higher ground of the Târșia plateau to the south. On the opposite side of the Blidaru hillock, where the cistern was placed, the slope is steep and it descends towards the Grădiște valley.

On the other hand, the vertical position of the cistern outside the walls of the fortress, and at a lower level, was related to the possible tapping of a spring, which is to be found underneath the same southern saddle. This was based on the fact that, if the spring was tapped, a certain

¹ For the geographical description of the area in relation to water-management systems see Vasilache 2021a.

² For a discussion regarding classical influences and water management structures in the same area see Vasilache 2021b.

³ Pescaru et al. 2014, 4–5.

difference of level was needed between the source and the cistern in order for the water to flow (Fig. 1) ⁴. However, direct evidence, such as a tapping installation of the spring or a conduit that should have been found between them were not identified. The only direct proof as to how the cistern was supplied is represented by a terracotta tube fragment that was found on the western side of the cistern, facing the direction of the spring⁵. Unfortunately, this alone cannot precisely indicate the source of the water, since both runoff and spring water could have been transported through the aforementioned terracotta pipe. This detail is important, because if the cistern was supplied directly from the spring, it could have served as a redistribution basin, given the expected surplus of water that could have been transported to locations further down. An indirect argument for the use of spring water could be that, in the case runoff water was the source, then why not construct the cistern inside the walls and supply it through the roofs and platforms of the fortress itself? The exact location of the spring eludes us today, as it is probably clogged, while the area is still swampy. Only the identification of *in situ* remains would indicate the ancient position of the spring, which could have changed since then.

Therefore, it appears that there was a certain reasoning behind the placement of the cistern *vis-a-vis* the defensive elements around this protruded hillock. Its position indicates that it was set up in order to supply the fortress, especially if the latter was threatened from the south. Although it may seem that this spot is too exposed (as it lays outside the walls), this vulnerability is ameliorated by the fact that the fortress on the Blidaru hillock is at the center of a much larger network of defensive elements. Many isolated towers were identified in strategic positions, covering the main ridges that descend from the Târsa plateau to the Grădiște valley, thus blocking the access ways towards the fortress from both the lower and the upper level (Fig. 2)⁶. The fact that the cistern was placed "behind" the fortress makes sense, because the slopes that descend towards the Grădiște valley from this side of the hill (Muchia Chiștoarei and Muchia lui Todirici) were steep and dominated by towers, the last of them reaching the first terrace of the valley itself (Fig. 2). Another bigger tower was placed closer to the cistern, at Poiana Perții, and it is oriented towards the Chiștoarei valley, which starts from underneath the same saddle of the Blidaru fortress.

⁴ Glodariu 1983, 37.

⁵ Daicoviciu et al. 1954, 141-142.

⁶ Pescaru et al. 2014, 5-8.

To resume, setting up the cistern outside the walls of the fortress does not seem to be necessarily problematic, since the defensive system around Blidaru was based on a "vertical", in-depth setup of its composing elements. From this perspective the cistern is clearly related to the fortress, as it is the first large structure that appears underneath it, on the side of the hill that was naturally protected by steep slopes and additional towers. At the same time, the "horizontal" setup of the defensive structures around the Blidaru hillock, denotes that the main threat was expected to come from the south. If the spring underneath the southern saddle was, indeed, the source tapped for the cistern, this would mean that, if the fortress was besieged and the water supply was cut off by the enemy from the south, the cistern would have remained accessible from the fortress.

As such, it is most probable that this cistern was built for a strategic purpose – to serve the fortress during a possible siege. Besides the arguments expressed above, another argument can be provided by comparing the cistern underneath Blidaru with a similar discovery from the same area. At the base of the above-mentioned ridges that reach the Grădiște valley, a wooden cistern was identified on a small terrace near the Chiștoarei stream, close to one of the towers that reached the valley (Fig. 2). Besides the fact that it was located at a lower level, this structure is different from the first as other materials and techniques of construction were employed. It can be described as a quadrilateral structure made out of wooden posts, beams and planks, with a shingle roof and fencing⁷ (its dimensions were 2,95 x 3,05 x 2 m, indicating a capacity of around 18 m³). Supplied through a terracotta pipe from the close stream, it worked as a kind of a fountain-basin, which is typical in this mountainous area for spring tapping⁸. Its open structure might suggest that it could have supplied a greater number of people, and that it was not necessarily under a direct military control (although its closeness to the tower might not exclude a direct relation with this sphere as well). No (preserved) watertight measures were documented for this structure. As such, this structure is different from the cistern underneath the fortress, since the latter had many types of hydraulic mortars, which denotes a different approach towards water conservation.

Although both cisterns described above are more or less related to the defensive system around Blidaru fortress, they differ through their location, nature and possible function. The low-lying wooden cistern tapped the rich water resources available in this area, facilitating the collection and access to a constant amount of water. The upper cistern was

⁷ Daicoviciu, Ferenczi 1951, 24.

⁸ Vasilache 2021a, 24.

larger but the resources of water present in this area were scarcer. The use of hydraulic mortars in order to waterproof this structure is a clear indicator of its main function – to conserve water as long as possible. The complexity of the latter structure is indicative for its relation with the fortress, and it shows that much more effort and interest was put into its construction. Such aspects indicate that the two cisterns were located and built in different ways because they served partly different purposes, that can be related to the intended use of the collected water. For the upper cistern, it is quite probable that the access was restricted, especially if only low levels of water were available, while the low-lying installation was probably much easier to access, as water availability was less of a problem in this area.

The role of both cisterns can also be related to the access roads used in the area. These access ways were usually presumed based on the distribution of the towers that were placed in strategic points, their aim being to watch over and possibly block these paths. A few segments of these roads were identified near some of the towers⁹. The main road identified in the area climbed the Faeragului ridge and passed near the fortress (its saddle) on its way to the upper Târsa plateau¹⁰. C. Daicoviciu supposed that another path could have started from the lower ridges (Todorici and Chiștoarei), somewhere around the intersection with the valley, where the lowest-lying towers were identified. He preferred the Chiștoarei ridge, as it was more accessible¹¹. On the opposite slope of the Chiștoarei valley, underneath the Faeragului ridge, a number of anthropogenic terraces were identified, where no stone towers were found. Although no specific structures were identified, the archaeologists found spread ceramic fragments, a charcoal hearth and shards of small vessels¹². On one of these terraces, four limestone blocks were identified. It was presumed that they may represent the foundation of a house or of a wooden watchtower¹³. This might indicate that the basin of the Chiștoarei valley was more diversely inhabited, at least in its lower part, while a possible access way followed the Chiștoarei basin upstream. Further up this valley, closer to the fortress, the bigger terrace and the tower at Poiana Pertii blocked any possible access from this valley towards the terrace with the cistern and further up to the fortress¹⁴. This tower also blocked a

⁹ Pescaru et al. 2014, 6.

¹⁰ Daicoviciu, Ferenczi, Glodariu 1989, 184.

¹¹ Daicoviciu et al. 1955, 227-228; Daicoviciu, Ferenczi, Glodariu 1989, 185; Pescaru et al. 2014, 6.

¹² Daicoviciu, Ferenczi, Glodariu 1989, 186 (nos. 20, 27.5-27.7).

¹³ Daicoviciu et al. 1966, 83.

¹⁴ Daicoviciu et al. 1955, 227.

possible access way over the Chiștoarei valley that splits from the upper main road that followed the Faeragului ridge¹⁵. From Poiana Perții, a quite steep slope of 30-40 m separates it from another terrace, located underneath the one with the cistern¹⁶. D. Teodorescu mentioned, at the beginning of the 20th c., that a steep road dug in the slope of the hill was connecting the first terrace underneath the fortress with the cistern. Two rows of stones holding the slope were still visible on some of its part¹⁷.

In conclusion, it seems that the roads in this area have a circular symmetry, with defensive structures controlling the roads and the essential choke points at their intersections. While both cisterns are integrated in this well-organized system, they fulfill different functions. In the lower part of the Chiștoarei valley it is possible that the wooden cistern was placed intentionally near a pathway to facilitate an easy access. On the other hand, in the upper area of the same water basin, near the fortress, much more emphasis was put on the conservation of a larger amount of water while the access ways were evidently better controlled.

The cistern underneath the fortress

The recorded measurements of the cistern's interior are 8 x 6,2 m (Fig. 3/b). It was constructed inside a cavity dug in the hill slope for about 5 m depth from the modern level recorded during the excavation¹⁸. However, it functioned as a basin up to 4 m, a fact indicated by the height of the secondary walls (Walls B and C - Fig. 4/a), which were attached to the interior of wall A (so it had a 198,4 m³ capacity - Fig. 3)¹⁹. The first of these walls (Wall B), composed of local stones bound with mortar, had the role of sustaining the barrel-vault made with limestone blocks of local origin. As such, it was constructed only on the longer sides of the structure (Fig. 3). Wall B was covered in different plasters of *opus signinum*, similarly to the other two visible faces of wall A (on the short sides of the structure), indicating a first functional phase of the cistern. A second wall (C) was added later on all four sides of the cistern's interior. It had a wider stone base and *opus signinum* mortar as binder, while its exterior was also plastered²⁰.

In order for the cistern to be constructed, the terrain was levelled, and this can be seen in the structure of the cistern itself (Fig. 3/a-b). Its first, exterior wall, was made out of local stones and mortar, and encompassed

¹⁵ Daicovicu et al. 1954, 145.

¹⁶ Daicovicu et al. 1954, 144.

¹⁷ Teodorescu 1923, 11.

¹⁸ Daicovicu et al. 1954, 141.

¹⁹ And on the fact that the latest wall, C, was 30 cm lower than wall B, the interstice being filled with a fine hydraulic plaster.

²⁰ Daicovicu et al. 1954, 140-142.

the structure on all four sides. The southern side is much wider than the others (approx. 2 m), as it was also meant to hold the slope²¹. This wall extended towards west as well, where the above-mentioned pipe fragment was found, a fact explained by the same structural necessity. This is one of the reasons why this wall was preserved (in height) to a greater extent than the others. It is also obvious that its height was greater than the probable maximum height of the vault (Fig. 3/a).

On the other three sides, wall A was not preserved to a similar height, and it is possible that it was shorter on these sides. Nonetheless, according to the plan, it can be observed that, on the longer sides of the structure, this wall reached at least the level of the vault's spring (Fig. 3/a). Thus, it is probable that the cistern had a partly elevated structure, and at least the vault and the southern side of wall A were above the ground. The extension of the southern wall towards west could indicate, besides the need to retain the slope, a possible access way towards the cistern from the upper area of the fortification.

The structure was archaeologically documented in the early 1950's, but it was identified some time before that. Initially, C. Daicoviciu considered it to be of Roman origin, based on the presence of *opus caementicium*, which was not documented in other Dacian structures from the area²². After starting the excavation, he soon realized that it represented a cistern which functioned in the Dacian period, and that it was constructed by using classical techniques that were "following Vitruvian recipes". However, he was unsure whether it was constructed by a Greek engineer (because he related the charcoal-mortar in the floor to the so-called Greek technique mentioned by Vitruvius - *infra* n. 85), or by a Roman one²³. I. Glodariu argued without hesitation in favor of a Roman engineer²⁴. The interval during which the cistern was in use could not be clearly delimited, because few artifacts were found inside the structure (a couple of Dacian ceramic fragments). One explanation for this may be that it was looted by treasure hunters, which is also indicated by the big hole they left in wall A of the structure (that was documented by the archaeologists - Fig. 3/a.d)²⁵.

Therefore, the chronology of the cistern could not be established by itself, but only by correlation with the phases of the fortress. Both C. Daicoviciu and I. Glodariu related the structure with the second phase of the fortress' development, thus dating it in the 1st c. AD, or maybe only in

²¹ Daicoviciu et al. 1954, 140-142.

²² Daicoviciu, Ferenczi 1951, 26.

²³ Daicoviciu et al. 1954, 140-142.

²⁴ Glodariu 1983, 38.

²⁵ Daicoviciu et al. 1954, 140-142.

its second half²⁶. This was based on the proximity of the cistern to the north-western tower (tower no. V – Fig. 12) and to the walls, which belong to the second (phase and) enceinte of the fortress, the latter presenting certain particularities. On the inner side of these walls, there are rooms of different sizes, which probably served as storage spaces, and it is believed that their roof was used as a platform (Fig. 12)²⁷. In many of these rooms, remains of *dolia* vessels were found in corners, while a number of 8 large *dolia*, arranged in rows, were discovered in the interior of tower V. Most of the *dolia* from the tower had small openings (which were cut before burning) at the base, that were sealed with stoppers made out of an unburnt, waterproof clay plaster. These storage vessels were linked by the authors of the research with the storage of water coming from the nearby cistern²⁸, although this can't be certain. Even so, it is quite probable that the cistern was used during this second phase of the fortress, but it is much harder to pinpoint the exact moment of its construction, as the chronology of tower V is itself open for debate.

The mortars

In the initial archaeological report, the mortars and plasters identified on the walls and on the floor of the cistern were not described in detail. C. Daicoviciu preferred to use the terms *opus signinum* or *cocciopesto* when describing only some of the layers²⁹, even though other ones also contained crushed ceramic in one way or another. To resume a longer discussion, it can be safely assumed that the exterior, structural walls (A and B – Fig. 3/a-b) of the cistern were made in an *opus caementicium* technique, while the interior wall (C) was made in an *opus signinum* technique (Fig. 3/a-b). The faces of walls A and B, respectively C, were covered with different types of plasters, ranging from coarser or finer types of *opus signinum* to pure lime interfaces. It is possible that some of these plasters were also polished or had special additives added to the mix. The ordering of these layers is not accidental, since the finer plasters were used at the exterior while the coarser, but still thin layers, acted as support for the first. In wall C, an even coarser *opus signinum* mortar was used³⁰.

The types of mortars used for the structure, as well as their order, are similar to Vitruvius' precepts, who recommended using a *signine* technique when building cisterns³¹. Although he mentions, in the same note, that a

²⁶ Daicoviciu et al. 1954, 145; Glodariu 1983, 38.

²⁷ Glodariu 1983, 92.

²⁸ Daicoviciu et al. 1957, 264-270.

²⁹ Daicoviciu et al. 1954, 142.

³⁰ For a complete discussion see Vasilache 2022, 62-71.

³¹ Vitruvius, VII, 6.14.

mortar made with flint aggregate should be employed, the common aggregate used in Roman hydraulic mortars were volcanic ones. Their presence in the mix determined a so-called *pozzolanic* reaction. This material and the reaction are described by Vitruvius in the chapter with the same name³². Regarding the re-use of ceramics as aggregate, in his chapter about lime mortars he mentions the possibility of adding burnt brick in mortars, in order to strengthen them³³, and he discusses their use in coating layers in the chapter regarding the application of *stucco* in damp areas³⁴, while data about the succession of plasters and mortars can be found in the two chapters about *stucco*³⁵. Recent studies have shown that crushed ceramics has a similar *pozzolanic* effect in mortars, strengthening the bind, and the Romans applied this method very often, especially when creating coatings for water related structures, although sometimes such mortars were also used in structural walls, or in foundations, floors, or to protect inner wall surfaces from external humidity³⁶. In conclusion, mortars with volcanic compounds are true *pozzolanic* hydraulic binders, while the ones that contain ceramic aggregates, commonly referred to as *opus signinum*, generate a milder *pozzolanic* reaction of the mix³⁷. This difference is evidenced by the fact that true *pozzolanic* mortars were not commonly used by the Romans for small-scale, terrestrial structures³⁸, but more commonly in special structures, such as port embankments, to quote an example provided by Vitruvius³⁹. In contrast, *opus signinum* was employed on a larger scale, both for hydraulic and structural reasons, especially in areas where volcanic compounds were hard to obtain⁴⁰. Lastly, *cocciopesto* is a term used since the Renaissance to describe a similar mortar containing ceramic aggregate⁴¹.

The floor of the structure was succinctly described in the initial report. According to the authors, the cistern's floor was built, like the walls, during two phases. The overlying stratum was described as a thick layer made out of a mortar with broken tiles (*opus signinum*), while the one beneath it was composed of stones, mortar and tile fragments. The second floor (from the first phase) was described as being composed of mortar, ash and charcoal, and that it was particularly hard, since it could be chipped only in its upper part⁴².

³² Vitruvius, II, 6.

³³ Vitruvius, II,7.5, 8.15.

³⁴ Vitruvius, VII, 4.

³⁵ Vitruvius, VII, 3.

³⁶ Siddall 2011, 153-154.

³⁷ Siddall 2011, 153.

³⁸ Siddall 2011, 153.

³⁹ Vitruvius, VI, 12.2.

⁴⁰ Nikolić et al. 2015, 80.

⁴¹ Siddall 2011, 153.

⁴² Daicovicu et al. 1954, 142.

The plan attached to the report contained a more detailed stratigraphy and description of the layers, that I have represented separately (Fig. 3/c). The following description and the observations about the layers are based on the corroboration of the information from the plan with the data from the documentation (the layers are described in reversed order, *i.e.* from top to bottom):

1. Floor with lime and sand – A first, thin layer (5-6 cm), made out of a mortar which had a lot of sand and little lime in its composition; it had a fine, reddish surface, that was degraded by the time it was discovered.
 - The reddish surface indicates that brick powder was either added to the mortar or, more probably, that it was used to plaster the layer's surface.
2. Lime, sand and small rock fragments – A second layer (6-10 cm) made of tightly arranged stones of local origin, bound with little mortar.
 - The mortar that binds this layer seems to be similar to the one described above, since both contained much sand. I believe that we are dealing with one and the same mortar, that was poured over a base of tightly arranged stones. As such, it appears that the second floor of the cistern was constructed on a bedrock of stones, that was covered with a sandish mortar, which was then was finished with an *opus signinum* plaster. In the published report, it is said that both layers contain tile fragments, but that does not seem to be reinforced by the description from the plan or the documentation. Nevertheless, at least the interpretation of the plaster as an *opus signinum* remains valid.
3. Lime mixed with small fragments of tiles – A second floor with a fine, red surface, similar to the first one, but better conserved and with a more intense color. The layer (6-7 cm) was composed of a mortar rich in lime and tile fragments (1-3 cm). It is described as an *opus signinum* with a "good strength".
 - This seems to be a hydraulic mortar used for coating, the surface of which was finished with a finer plaster of *opus signinum*. This can be related to the situation of the first layer, that certainly had an *opus signinum* plaster, while the mortar used was sandier and did not (?) contain ceramic aggregate.
4. Lime mixed with charcoal fragments – A base for the third layer, to which it was organically bound. It was 6-7 cm wide, its color was brown, and it appears to have been composed of a mortar (called "cement", because it was harder than the previous one) that contained charcoal fragments, ashes and white stones (?).

5. Very hard flooring – A white-greyish layer, with a fine surface. Its width is unknown since it was impossible to section. Samples were not taken for the same reason and its composition could not be determined.

As we can see, the first floor of the cistern had a much more complex stratigraphy than initially described (Fig. 3/c). While the undercoat layer (2) of the second phase was built using simpler techniques, the base of the first floor was carefully set by adding at least two layers (4 and 5), described as particularly strong mortars, and which did not contain ceramic fragments, but other aggregates, such as charcoal. A third layer (3) of *opus signinum* mortar was added on top of this base, being plastered afterwards with another, finer layer of *opus signinum*. In consequence, different types of *opus signinum* were used to plaster the exterior of the floors from both phases, while coarser *opus signinum* mortar (3) was definitely used as a support for these plasters in the first phase of the floor. None of the plasters that were applied on the exterior of the floors in both phases were recorded separately in the plans (Fig. 3/c). As such, both layers 1 and 3 should have an extra subdivision, 1A and 3A, representing the *opus signinum* plasters and the interfaces of the two main phases of the entire floor (Fig. 3/c).

The charcoal mortar

The focus of this study is on the fourth layer, that was described in the initial publication as the first "floor" of the structure. As shown above, it is evident that this layer with charcoal was positioned in between the recorded layers of the first floor (Fig. 3/c). At the same time, it is clear that the two undercoat mortars at the base of the first floor were different from the others used in the structure, and that they were working in tandem. This was suggested in the initial publication, where this "floor" was interpreted as a single layer made out of two parts⁴³.

The general characteristics of the mortar in layer 4 were described in a more recent analysis (Fig. 4-5)⁴⁴. The study shows that it was constituted by a mineral aggregate of sand type, together with charred vegetal remains, that were bound in a fine cristalized mass that resulted after the recrystalization of a mineral binder. The ratios are: 10% sand, 10% charred vegetal remains and 80% finely crystallized, fissured and porous

⁴³ Daicovicu et al. 1954, 142.

⁴⁴ A sample of this mortar was included in a bulletin made by the Department of Geology of the Babeş-Bolyai University (no. 14 in the Buletin de Analiză Mineralogică și Petrografică nr. 9/2018) for the National Museum of Transylvanian History in Cluj-Napoca. The analysis had the purpose of describing the mineral and petrographic characteristics of the samples, through polarized light microscopy and X-ray diffraction.

mineral mass. The sand is constituted by lithic fragments of crystalline schists (gneiss) and quartzites, together with minerals of quartz, muscovite, and biotite. The vegetal inclusions are about 1 cm, and they represent charred fragments from deciduous trees, since annual growth rings were identified (Fig. 4/d-e). The mass of the mortar contained agglomerations of calcium carbonate (calcite), sometimes mixed with chlorites and/or portlandite (calcium hydroxide), together with crystallized compounds like para-aluminohydrocalcite, calcium hydrated oxide, aluminium and/or gypsum (Fig. 5). Sometimes, calcium was associated with lamellar chlorites or depositions of neoformation calcium enveloped muscovite minerals (Fig. 4/f), that represented the support for the recrystallization of these neoformation minerals during the hydration and strengthening of the mineral bind. This composition could suggest the use of natural materials like volcanic ash or tuff, mixed with natural gypsum and lime⁴⁵.

The sample is of a greyish colour when finely crushed (Fig. 4/a-b). The apparent strength of the mortar was determined by its highly reactive compounds, with few and carefully selected aggregates (sand and charcoal), mixed in an 80% lime-based matrix. The presence of gypsum as trace element (Fig. 5) indicates that the mortar functioned as an undercoat, because of its water solubility. Usually, after being burnt, gypsum was used as plaster for interiors, or to facilitate setting in floor undercoats – this was attested in the Roman cisterns of Carthage, where gypsum was included in base coats, while the older Phoenician cisterns were using ash-mortar as undercoats⁴⁶. Apart from charcoal, it was suggested in the archaeological documentation and in the report that this mortar also contained organic ash, but the latter was not mentioned in the analysis. Smaller fragments of wooden charcoal can be observed in some of the microscopic images (Fig. 4/e). Even smaller ashes could have been added to the mix, but these are hard to identify because the calcium carbonate mass of the binder is very similar to the fine ash component, which is mostly calcium carbonate⁴⁷. These smaller charcoal fragments and possible ashes most likely resulted from the same process of wood burning. This can be asserted because when charcoal is found in mortars, it is usually associated with ashes⁴⁸, and also because no other types of organic remains were identified in this mortar.

⁴⁵ Buletin de Analiză Mineralogică și Petrografică nr. 9/2018.

⁴⁶ Goodman 1998, 14, n. 27.

⁴⁷ Goodman 1998, 34.

⁴⁸ Lancaster 2019, 35.

The use of volcanic compounds, although suggested in the analysis bulletin, was not documented directly (obvious volcanic tuff fragments were not identified), even though it is mentioned that some of the minerals contained in the sand aggregate could have had volcanic origins. But these minerals could have been of local origin as well, as sand aggregate with similar constituents is used in the local ceramic material (quartz, muscovite, biotite etc.)⁴⁹. As such, if volcanic compounds were used, they had to be smaller ash-sized volcanic particles. Such grains are altered during the *pozzolanic* reaction, which makes them harder to identify⁵⁰. Recent investigations on Roman revetment works in Italy have demonstrated that this special mortar used a calcium, silicon and aluminium hydrated fundamental binder⁵¹. The *pozzolanic* reaction in these mortars was determined by the use of silica rich volcanic ash (*pulvis*), while tuff was used as aggregate (*caementa*)⁵². In general, a hydraulic mortar is defined by its calcium silicate hydrate phases (determined by the use of *pozzolana* or other similar substances, such as burnt clay)⁵³. Similar elements appear in the diffraction pattern of the sample from Blidaru (Fig. 5), thus possibly indicating a hydraulic property of the mortar. Burnt clay determines a hydraulic reaction as well, because it contains very high levels of silica⁵⁴. The mortar sample from Blidaru contained no tuff *caementa*, but a silica rich sand, which could have conferred some hydraulic properties to this mortar, although they represent only 10% of the mass.

The proper identification of possible traces of volcanic ash in this mix needs to be investigated through specific analysis. As such, for the moment it is safer to assume that the mortar was based on a mass rich in lime and other binding substances, that, when mixed with sand aggregate, had a low or non-hydraulic character. This would not be uncommon, as even Vitruvius recommended, in his discussion related to revetment works, the use of a concrete made of lime and silica sand when *pozzolanic* mortar was not available⁵⁵.

The other aggregate used in this mortar was not discussed until now, namely the charcoal fragments. However, as will be shown below, these do not contribute to a possible *pozzolanic* reaction, as they are not silica-, but carbon-based⁵⁶ (the calcium carbonate trace in the diffraction

⁴⁹ Vasilache 2022, 184.

⁵⁰ Jackson et al. 2013, 1677.

⁵¹ Jackson et al. 2014, 141.

⁵² Oleson, Jackson 2014, 4.

⁵³ Lancaster 2012, 146.

⁵⁴ Lancaster 2012, 146.

⁵⁵ Oleson 2014, 22.

⁵⁶ Goodman 1998, 40.

could have come from ash and charcoal, besides lime). The presence of wood charcoal, as larger aggregate, and the probable use of wood ash as well, determined other qualities in this mortar.

A more recent study focused on the different types of inclusion present in mortars from Greece, based on 1302 samples ranging from the Hellenistic to the early modern period. Charcoal was present in samples from all eras, mostly in structural mortars (more than 20% of the samples – many of which are dated in the Ottoman period), but in low quantities (0,5-1%), with random shapes, and with sizes varying between 0,5-2 cm⁵⁷. In the Hellenistic period, charcoal was present in less than 1% of the samples and these were of a round shape. Charcoal was present in 0,5-1% of the samples of Roman mortars; these fragments were sensibly larger (1-1,5 cm) and in good adhesion with the binder⁵⁸. The proportions were similar in samples taken from mortars from other periods. This sporadic presence of charcoal was explained through its accidental inclusion in the composition following the burning of lime⁵⁹.

When analyzing pozzolans, L. Lancaster observed that a difference should be made between plant ashes and wooden charcoal. The first ones can contain a high level of silica that reacted with lime and were converted into calcium silica hydrate (the fact that this specific element was not identified in the diffraction of the sample from Blidaru could suggest that this mortar did not contain plant ashes). On the other hand, since wood charcoal is carbon-based, it does not react with lime as some plant-based ashes do⁶⁰. The author observed that most ash mortars were found in Levant, North Africa, southern Spain and on the Mediterranean islands such as Pantelleria and Sardinia, all being regions that were connected in one way or another to a Phoenician/Punic presence at some point (Fig. 7). She relates this to a late 4th c. BC mention belonging to Theophrastus (On Stones, 69), which says that in Phoenicia and Syria, *gypsos* was made by regularly burning the ordinary kinds of stones, while the harder stones, like marble, had to be combined with cow manure to burn better and more quickly⁶¹. Based on this, Lancaster supposes that this practice led to the understanding that some ashes can, indeed, help to create a hydraulic binder⁶². This was further emphasized by the fact that most examples of plant ash-based mortars (Fig. 7) were used as linings of baths and basins, while only a few

⁵⁷ Stefanidou et al. 2012, 747.

⁵⁸ Stefanidou et al. 2012, 747.

⁵⁹ Stefanidou et al. 2012, 747; Lancaster 2019, 35.

⁶⁰ Lancaster 2019, 35.

⁶¹ Lancaster 2019, 37.

⁶² Lancaster 2019, 37.

were found in structural mortars⁶³. Some examples are the cistern underneath the "House of the Greek Charioteers" in Carthage, where a coating with 5-10% burnt organic material (undetermined) was used in a first phase, being covered afterwards by a coating layer that contained no ashes, but 30-40% volcanic material. Other similar cisterns from Byrsa in Carthage were using small amounts of ash. In the same "House of the Charioteers", another mortar used in a structural wall contained many types of charred plant remains (olive pits are the most common, but other plant remains like wheat, barley, rye, canary grass and figs were also found, all indicating a high-silica type of ash)⁶⁴. In a study that compared cistern linings from the Phoenician to the Roman period in Carthage, it is shown that the Phoenician plasters contained at least 3-5% burnt organical material, 30-40% shell fragments and sand, in a 50% lime matrix, with one particularly hard mortar that contained 10-15 % organic ash⁶⁵.

The use of ash mortar in this area is interesting, since the Romans usually employed *opus signinum* mortar for waterproofing. Particular archaeological contexts from this area attest the use of *opus signinum* coatings that are overlapping older ash-based coatings. However, the use of such mortars in the area persisted in the Roman time as well, and the aqueducts and cisterns at Meninx in the 2nd and 3rd c. AD show that it was used together with *opus signinum*⁶⁶. As such, the mortars that contained ashes, especially of burnt plants, were purposefully used as hydraulic coatings in North Africa, especially when their proportions are higher than what can be considered accidental.

Other similar ash mortars have been documented in the Levant and have been connected to a similar, although older, Phoenician tradition. Well-dated hydraulic ash mortars were documented starting with the 1st c. BC, and they were usually employed as undercoats in water-related structures (Fig. 8)⁶⁷. A specific kind of these mortars was found in the channel C of Caesarea's Roman aqueduct, which was built sometime in the late 4th c. AD and functioned until the 10th or 11th c.⁶⁸. Here, the channel of the aqueduct was coated starting with a porous ash layer that contained relatively few, coarse aggregates (sand, shells and ceramic fragments – the fact that no finer aggregate was found was related to the complementary use of ash) and charred remains of both plant ash (from animal dung) and

⁶³ Lancaster 2019, 37.

⁶⁴ Lancaster 2019, 37.

⁶⁵ Goodman 1998, 10.

⁶⁶ Lancaster 2012, 149.

⁶⁷ Goodman 1998, 11.

⁶⁸ Goodman 1998, 17.

wood charcoal for approximately 10-20% of the mix (Fig. 9/c-d)⁶⁹. This layer was covered by a reddish, hydraulic mortar (of *opus signinum* type), that was coated with a reddish plaster on top (Fig. 9/a-b). The grey undercoat was applied directly on the masonry (it was suggested that the ash and the few coarse aggregates contained in this mortar may have had the role of increasing adhesion of the mortar to the masonry base)⁷⁰, providing the appropriate gradient for the channel. The next, hydraulic layer was placed upon the undercoat when the latter was only stiffening so the two had a diffuse interface. In contrast, the finishing plaster on top of the hydraulic support was applied on the latter after it had already stiffened⁷¹.

The latter observations from Caesarea can be related to the apparent "organic" bound observed between the charcoal undercoat (4) and *opus signinum* uppercoat (3) in the Blidaru cistern, indicating a similar manner of setting for these layers.

The three-layered coating of the channel at Caesarea was, soon after building, covered by another similar set of layers (the only difference is that smaller aggregate was used in the base layer for a smoother application), probably because this segment of the aqueduct was prone to water stagnation and needed to have its gradient remodeled⁷².

Although the situation from Caesarea is similar to the one from Blidaru (because of the similar succession of strata and their characteristics), there are some differences. Firstly, the organic fraction in the mortar at Caesarea was of both plant and wood origin, which gave the mortar a somewhat hydraulic property, while the one from Blidaru was represented only by non-reactive charcoal and ash. Secondly, the aggregates included in the Caesarean mortar were more diverse than the ones from the Blidaru cistern, although in both cases they represented a relatively small fraction of the whole composition. Thirdly, it is evident that the wooden charcoal was used at Blidaru as aggregate because of its proportion, while at Caesarea the charcoal fragments were fewer in number, and a part of a more diverse range of inclusions.

The results of Goodman's analysis of the effects of adding ash in mortars might be helpful for our case study. He experimented with some mortar samples which had a lime and sand aggregate, and he added to this mix a quantity (0%, 10%, 20%, and 30% respectively) of sieved, non-reactive wooden ash. He observed that the ideal quantity of ash in mortars

⁶⁹ Goodman 1998, 34.

⁷⁰ Goodman 1998, 34.

⁷¹ Goodman 1998, 29.

⁷² Goodman 1998, 29.

is 10-20%, as it enhances the workability, adhesion, flexural strength, porosity and brute density, speed of setting and contraction, crack resistance, water retention, absorption and vapor transmission increase (Fig. 10). One major problem was identified: wood ash lowers the resistance of lime plasters to crystallization stresses determined by soluble salts and ice formation during freeze/thaw cycles⁷³. The author considered that this susceptibility to frost would limit its use in colder climates like that of North America and Europe⁷⁴.

The latter aspect is evident in the conserved state of the sample from Blidaru, as its mass is fissured. This does not necessarily indicate that the ash could not have had a positive contribution to this binder, at least for a time, because the layer in question has deteriorated especially after the cistern went out of use. However, there is a big difference between these mortars, as the samples studied by Goodman were based mainly on ash-sized particles of wood charcoal, while the Blidaru sample contains mostly charcoal fragments, while ashes may have also been included. With regard to the external soluble salts that could affect ash mortars, it has to be noted that this problem is most likely to arise in the Mediterranean coastal regions, and that the mortars will not necessarily degrade if they are covered/protected by an additional layer⁷⁵. Such a solution may have been considered by those who constructed the Blidaru cistern, since the layer with charcoal and ash from the first floor was applied between an undercoat and an upper, hydraulic layer, but for a different reason.

Fine ash determines the creation of small pores and microcracks that are more susceptible to freezing, although in normal circumstances these increase the flexural strength or the adhesion of the mortar⁷⁶. Both charcoal and fine ash components absorb water during the process of mixing of the mortar, and release highly soluble potassium salts that could have a similarly negative effect on mortars affected by frost⁷⁷. Although this was not the purpose of his analysis, Goodman observed that larger charcoal fragments could have a significant role in improving the performance of lime plasters for base coats. This was exemplified through the increased water retention capacity of charcoal in comparison to that of the finer ashes, that reduced cracking due to rapid shrinkage and improved workability and adhesion to porous substrates⁷⁸. He also considered that

⁷³ Goodman 1998, 119.

⁷⁴ Goodman 1998, 131.

⁷⁵ Goodman 1998, 131, n. 118.

⁷⁶ Goodman 1998, 133.

⁷⁷ Goodman 1998, 40-43, 62, 113, 132.

⁷⁸ Goodman 1998, 131.

the increase in flexural strength and adhesion of the mortar could be attributed to the effects of the charcoal, that was acting as a flexible aggregate, intended to accommodate shrinkage⁷⁹. In samples from both Caesarea and Blidaru good binding between the wooden charcoal fragments and the mass can be observed, as the fragments present microcrystalline calcite that is interspersed in their structure (Fig. 5/d-e; Fig. 7/d). As such, the apparent preference for charcoal instead of finer ash in the mortar from Blidaru could have been intentional, in an effort to minimise the cracking of the mortar affected by frost, as this was especially determined by the ash fraction. In any case, if the proportion of charcoal fragments in the mix from Blidaru was estimated at 10%, the unknown proportion of ash probably did not exceed, together with the charcoal, the maximum 20% proportion of organic additives suggested to be used in ash-mortars by Goodman. Nevertheless, the use of mortars with ash in this climate seems to have been problematic, and this may explain the predominance of the charcoal fraction in the mortar from Blidaru, together with the fact that it was employed as an intermediate layer.

Specific studies on this mortar would prove useful for the assessment of its particularities and, more importantly, for determining the effects of charcoal as aggregate in mortars. More data about the role of this layer could come from the analysis of the other complementary and even harder undercoat (layer 5 – Fig. 3/c). This mortar without any apparent aggregate had a lighter color than that of the overlying layer. It could be possible that this colour was determined by an ash component, as charcoal is definitely absent in layer 5. The fact that this layer is mentioned to have had a fine surface could be related to its apparent lack of aggregate (perhaps the latter was concentrated only in its lower side), but also to the probability that the mortar was levelled (which would imply a faster stiffening rate, as in the case of the overlying layer). It is also unclear if another layer followed this one and in what way was the contact with the soil managed.

The floor of the first phase of the cistern can be thus described as being composed of at least two complementary undercoat layers (the upper one containing charcoal), that were covered by a hydraulic *opus signinum* layer, which was in turn plastered with a finer *opus signinum*. The use of charcoal in the middle layer cannot be related to the need for imprinting a hydraulic property to this mortar (which was achieved, eventually, through the use of other compounds). Therefore, the use of charcoal as aggregate probably enhanced other properties, such as

⁷⁹ Goodman 1998, 134.

porosity, water absorption, flexibility, reduced cracking due to shrinkage, adhesion etc., that were more important in undercoats. The ash mortars from Caesarea, even if they were somewhat hydraulic (thanks to the inclusion of plant ash and other aggregates), they were also more porous and permeable than their upper hydraulic linings⁸⁰. As such, it seems that during the Roman times, in Levant and North Africa, the ash mortar became a typical undercoat for *opus signinum* hydraulic uppercoats.

The use of non-reactive charcoal was employed in revetment works from the classical world⁸¹, and its benefits were known by ancient authors. While describing the casting of concrete blocks for port embankments, Vitruvius mentions (V/12.6) that if the soil was soft, it had to be treated with charred alder or olive wood pillings filled with charcoal, which is similar to the method he recommended for preparing the foundations of theatres and city walls⁸². This brings to mind Plinius the Elder's remarks on the architect Chersiphron, who treated the marshy soil underneath the foundations of Diana's temple in Ephesos by applying layers of trodden charcoal that were covered by wool⁸³. Additionally, some of the *pozzolanic* mortars that were used in embankments contained charcoal, as shown by a sample from Portus, which contained numerous fragments of charcoal, besides pieces of basketry, rope and lumps of relict lime⁸⁴.

More information regarding the use of charcoal and ash in the mortar can be found, once again, in Vitruvius' *De Architectura*, namely in the passage about the simple, yet effective Greek technique of paving floors in winter rooms⁸⁵. According to him, the first step would be to excavate the ground until a depth of about two feet is reached. Then, a mass of broken stones or burnt brick has to be arranged in such a way, that its inclination would allow the formation of vents in the drain. This first layer had to be covered with compact, trodden charcoal. Afterwards, a mortar made of gravel, lime and ashes had to be poured over to a depth of half a foot. The last step was the levelling the surface of the mortar layer. In this way, a meritorious pavement was obtained: 'hence, at their dinner parties, whatever is poured out of the cups, or spirted from the mouth, no sooner falls than it dries up, and the servants who wait there do not catch cold from that kind of floor, although they may go barefoot'⁸⁶.

⁸⁰ Goodman 1998, 18.

⁸¹ Lancaster 2019, 35.

⁸² Oleson 2014, 22.

⁸³ Pliny, XXXVI, 21.

⁸⁴ Hohlfelder, Branson 2014, 58.

⁸⁵ Vitruvius, VII, 4.5.

⁸⁶ Vitruvius, VII, 4.5.

As such, it appears that in the classical world, the non-reactive charcoal could have been used as a specific layer when preparing different foundations. Sometimes, it was included in *pozzolanic* mortars of revetment works. The Greek technique described by Vitruvius is different, since in this case ash mortars were applied at the surface of floors and not as undercoats, while charcoal was basically used as in the foundation preparations. In the Phoenician environment, non-reactive charcoal was always associated with plant ash in undercoats of cistern linings. Additionally, mixes that contained charcoal and other aggregates (e.g. ceramic fragments) are attested in cistern linings such as those from Pentelleria island⁸⁷ or Petra⁸⁸. Until now, I was able to find only one case where charcoal was used as a main aggregate, namely in a cistern render from the Roman town of La Rioja in Spain. There, the mortar was used as a base coat in a large pool belonging to a thermal complex, that is loosely dated from the 1st to the 4th c. AD⁸⁹. Although other samples of mortar from the same town contained sporadic charcoal, only in the case of the coat from the pool base is the inclusion of charcoal fragments considered to be deliberate, because they were abundant and evenly distributed⁹⁰.

To conclude, non-reactive charcoal seems to have been used in the classical world for preparing foundations on wet ground. Such a tradition could have determined the use of charcoal in undercoat mortars of water-related structures. One might think, when dealing with large structures, of structural matters as well. The cistern from Blidaru was erected on a rough terrain and in an area with heavy precipitations, which may suggest that it required a strong and adhesive undercoat that could also combat moisture.

Conclusion

The aforementioned archaeological discoveries show that cistern linings made with ash and charcoal had a long tradition in the Phoenician-influenced southern and eastern mediterranean areas. After these regions were integrated in the Roman Empire, ash mortars remained in use, but as undercoats and in association with *opus signinum* hydraulic uppercoats (e.g. at Carthage, Caesarea, Pentelleria etc.). A similar association is seen in the layers of the first floor from the Blidaru cistern. In this case, however, the situation is slightly different, because the wood charcoal was used as main aggregate in the mortar of the first undercoat, an aspect that was not common in the southern and eastern Mediterranean ash-based mortars.

⁸⁷ Schön 2014, 105.

⁸⁸ Bonazza et al. 2013, 466.

⁸⁹ Pavia, Caro 2008, 1810.

⁹⁰ Pavia, Caro 2008, 1810.

Additionally, in the classical world, charcoal was included in mortars used for the foundations and structures that were built on soft and marshy ground for a very long time. As such, it is unclear if the Roman practice of including charcoal fragments in *pozzolanic* revetment mortars or as aggregate in undercoat mortars of water related structures can be only related to a Punic influence. The use of charcoal as an aggregate in undercoat mortars (that was documented only at Blidaru and La Rioja) seems to represent a partly different "recipe" from the Phoenician ash-based one, in the sense that the latter was given a hydraulic property through the inclusion of plant ashes in the mix. For example, older ash-based mortars were sometimes used as single-layer linings in cisterns, so their hydraulic property was important (at "The House of the Charioteer in Carthage", or in the Levant during the Herodian period - Fig. 7). This is further demonstrated by the replastering of these initial coatings with *opus signinum* during the later Roman period (the cisterns from "The House of the Charioteer" in Carthage and El Makloub) ⁹¹. On the other hand, during the Roman period, new linings of cisterns employed ash mortars as undercoats in junction with *opus signinum* hydraulic uppercoats (at Meninx, Caesarea or at various Levantine sites - Fig. 7), indicating that this older technique was used now in a somewhat different purpose, for which the mortar did not had to be necessarily hydraulic. The fact that a similar association of mortars was employed in first floor of the cistern at Blidaru indicates that both types of organic mixed mortars (with plant ash/wooden charcoal) were used in a similar manner as undercoats, even though they had somewhat different properties. This could suggest that the Romans developed the model of organic mortar as undercoat/*opus signinum* as uppercoat in the southern and eastern Mediterranean areas, afterwards transferring it to other areas. Thus, the use of charcoal instead of ash in base coat mortars may be related to the actual adaptation of this type of mortar to colder conditions, while the ash-based mortar was used in parallel and for similar purposes in the areas where it had a long tradition and where the climate permitted. This does not exclude that the similarly old tradition of using charcoal at the base of foundations attested in the classical world did not contribute to the use of charcoal in undercoat mortars. However, given the arguments presented above, it is most likely that the association of organic mortar undercoats and *opus signinum* uppercoats appeared in the southern and eastern Mediterranean areas during the Roman period.

⁹¹ Lancaster 2012, 149.

As such, the model could have reached Blidaru only after its establishment in the above-mentioned areas and could have been transferred in Dacia mainly through the Romans. This must have happened (at least) before the end of the 1st c. AD, as the chronology of the cistern from Blidaru suggests.

The cistern from Costești-Blidaru presents other probable Roman technical influences. To the use of *opus signinum* hydraulic mortar (associated with a charcoal mortar undercoating), we could add the barrel-vault made out of *voussoir* limestone blocks and the *opus caementicium* exterior wall that were elevated above ground. The construction of barrel-vaulted cisterns partially or entirely elevated above ground was made possible once the mortared rubble building techniques appeared in the Roman period⁹². As such, the cistern from Blidaru was probably built by a Roman engineer or at least by someone who was familiar with Roman building techniques. Such characteristics of the structure and the materials that were used indicate that it could not have been built earlier, under a Hellenistic technical influence, as is the case of the fortress that it supplied. The building of the cistern would not have been possible if the people who designed it did not possess specific knowledge. The architectural features of the cistern and the use (of the correct proportion) of charcoal in the composition of the undercoat are direct proof of the constructors' know-how. Once this has been established, one other question remains: does the employment of Roman techniques indicate when was the cistern built?

As shown in the beginning, both C. Daicoviciu and I. Glodariu proposed a rather late date (given the general chronology of the fortress) for the construction of the cistern. According to the authors, the cistern was in use only during the second phase of the fortress in the 1st c. AD. Recent archaeological investigations showed that two towers which dominate Faeragului ridge and are part of the defensive system around Blidaru fortress (Fig. 2), had *opus signinum* floorings (Fig. 13). Their chronology suggests that the floors were set up during a later phase, when the towers were partly dismantled⁹³. These are the only two cases when *opus signinum* mortar was used in Dacian related structures in the Orăștie Mountains. This particularity is further evidenced by the fact that the Hellenistic construction techniques traditionally employed in the area did not use binders, as they relied heavily on ashlar masonry. As such, the *opus signinum* mortars attested in the structure of the cistern at Blidaru and in the second phase of the towers from Faeragului ridge seem to indicate

⁹² Wilson 2008, 289.

⁹³ Pescaru et al. 2014, 10.

another type of classical construction technique in the architecture of the Orăștie Mountains area, but this time of a Roman origin and quite possibly of a later date than that of its Hellenistic counterpart. The fact that in both cases the mortars were employed in the later phases of the structures they served (with the cistern related to the fortress) could suggest that they were used in temporal proximity. At the same time, this cannot be used as evidence for a singular constructive effort, as the refurbishment of the second phase of the cistern with *opus signinum* confirms that the technique could have been used at any time in the area after its initial employment.

Such observations seem to be in line with the chronology proposed for the cistern's construction by the archaeologists, namely sometime during the 1st c. AD and most likely in its second half. Literary sources also hint towards such a possible moment, as we know from Cassius Dio that Domitian '[...] had given large sums of money to Decebalus on the spot as well as artisans of every trade pertaining to both peace and war [...]', as part of their 89 AD truce⁹⁴. As such, it could be possible that the cistern was built by a Roman architect after 89 AD, as a result of this treaty. The construction of the cistern could not have been delayed much longer than this, since the structure was refurbished before the conquest of the area by the same Romans in 106 AD. However, even if this represents a possibility, one might not exclude other moments when this technique could have been imported, as the contact with the Romans is well attested in the area through other material evidence. I. Glodariu spoke about the gradual re-orientation of the Dacian trade from the Hellenistic towards the Roman world between the end of the 2nd c. BC and the 1st c. AD (in the latter century the Roman coin became dominant in the local environment)⁹⁵. Such a process could be paralleled by the apparition of new construction techniques in the Orăștie Mountains, this time of Roman origin. The fate of the cistern is suggestive for the relationship between the Dacian Kingdom and the Roman Empire during this period: it was built to enhance the defenses of the fortress at Blidaru, but symbolized at the same time the growing influence of the Romans in the area.

This cistern was, indeed, built using classical techniques, following many of Vitruvius' recommendations (such as the use of signine mortars for coating) and following certain recipes (like that of the charcoal mortar). The structure's technique of construction is out of the ordinary for the local environment, as no other mortar structures from the Dacian period are attested with certainty (with the exception of the above mentioned tower

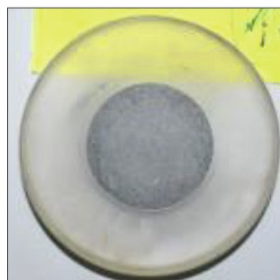
⁹⁴ Glodariu 1983, 125; Cassius Dio, LXVII, 7.

⁹⁵ Glodariu 1974, 174-178.

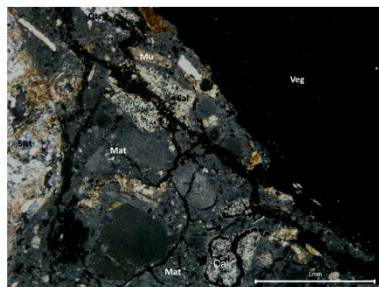
floorings), neither in the Orăștie Mountains area, nor in the rest of Dacia. This attests that the employed techniques were imported in the area, being at the same time different from other classical influenced techniques and structures attested well before this moment in time. From a macro-regional point of view, the presence of this type of structure in the humid and mountainous area of south-western Transylvania, together with special materials, like the charcoal mortar, is an exception to the general distribution of such materials and structures that are usually found around the Mediterranean basin (Fig. 7).



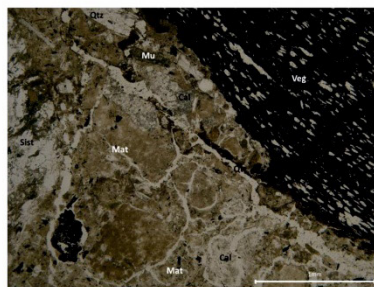
a. Macroscopic aspect of the sample



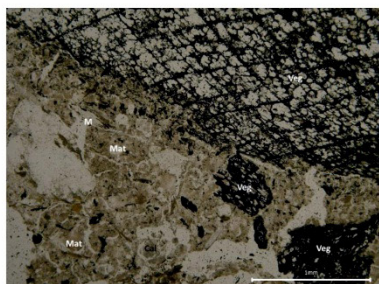
b. Finely crushed aspect of the sample.



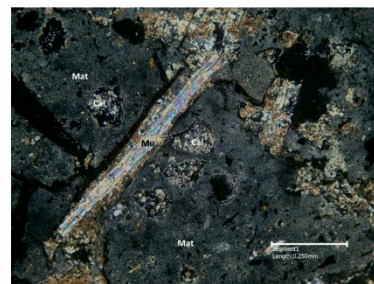
c. Structural-textural microscopic image (N+) of the sample, with lithoclasts (schists) and carbonized vegetal remains (Veg), bound in the matrix (Mat) with visible calcite granules (Cal).



d. Structural-textural microscopic image (1N) of the sample, with lithoclasts (schists) and carbonized vegetal remains (Veg), bound in the matrix (Mat), with visible calcite granules (Cal).



e. Structural-textural microscopic image (1+) of the sample, with carbonized vegetal remains (Veg), calcite (Cal), bound in the matrix (Mat).



f. Structural-textural microscopic image (N+) of the sample, with mineral (muscovite) with neoformation rim, pores with calcite in the matrix (Mat).

Fig. 4. Photos (a-b) and microscopic images (c-f), of the sample of mortar with charcoal from Costești-Blidaru cistern, after 'Buletin de analiză', Fig. 60-63.

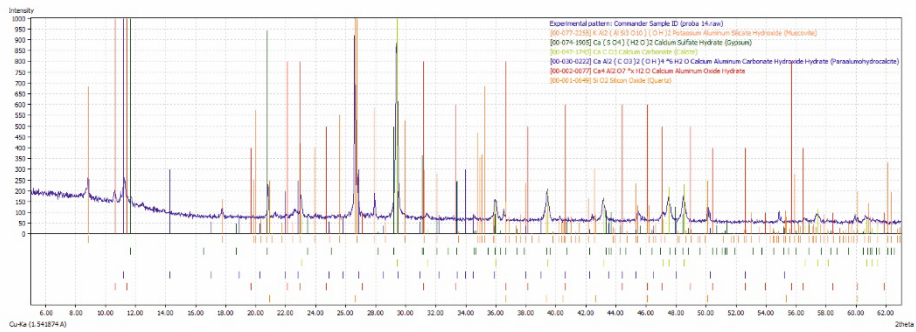


Fig. 5. X-ray diffraction pattern of the sample with lines characteristic to quartz, calcite, muscovite, para-aluminohydrocalcite, gypsum and calcium aluminium hydrated oxide, after 'Buletin de analiză', Fig. 64.

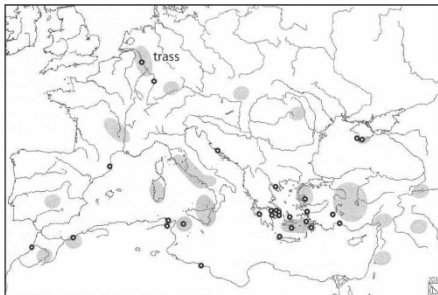


Fig. 6. Map showing locations of mortars containing volcanic ash (grey areas denote volcanic zones), after Lancaster 2019, Fig. 2.

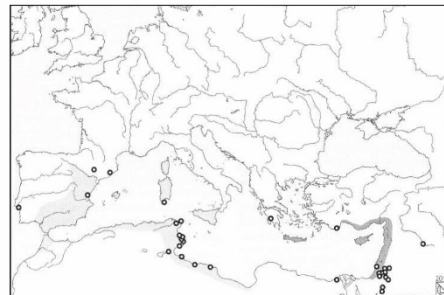


Fig. 7. Map showing locations of mortars containing ash (dark grey areas denote Phoenician influence and light grey areas of Punic influence), after Lancaster 2019, Fig. 6.

Context of plaster	Examples	Date
single layer hydraulic lining	Herodion, Northern Qilt B ₁ Southern Qilt (eastern section) Phasaelis B	Herodion Period 37-4 BC
undercoat in 2 layer hydraulic lining (covered by white exterior plaster)	Caesarea Aqueduct (HLA-A, B) Southern Duyuk 3 Northern and Southern Qilt (repairs) Phasaelis B ₃	Post-Herodion (c. 0 BC - AD)
undercoat in 2 layer hydraulic lining (covered by red exterior plaster)	Caesarea Aqueduct (HLA- A ₂) Northern Qilt B ₂ (western section) Boqq (repair)	Late Roman-Byzantine (3 rd - 4 th centuries AD)
undercoat in 3 layer hydraulic lining (covered by red and white exterior plasters)	Caesarea Aqueduct HLA-A ₃ , A ₄ , and C	Byzantine (4 th - 5 th centuries AD)
undercoat in 2 layer hydraulic lining (covered by red speckled plaster)	Kh. Mafjar, Northern Qilt C Phasaelis C	Early Arab (7 th century AD)

Fig. 8. Chronology of ash rich plasters found in Israel, dating from the 1st c. BC to the 7th c. AD, after Y. Porat, quoted in Goodman 1998, Table 1.

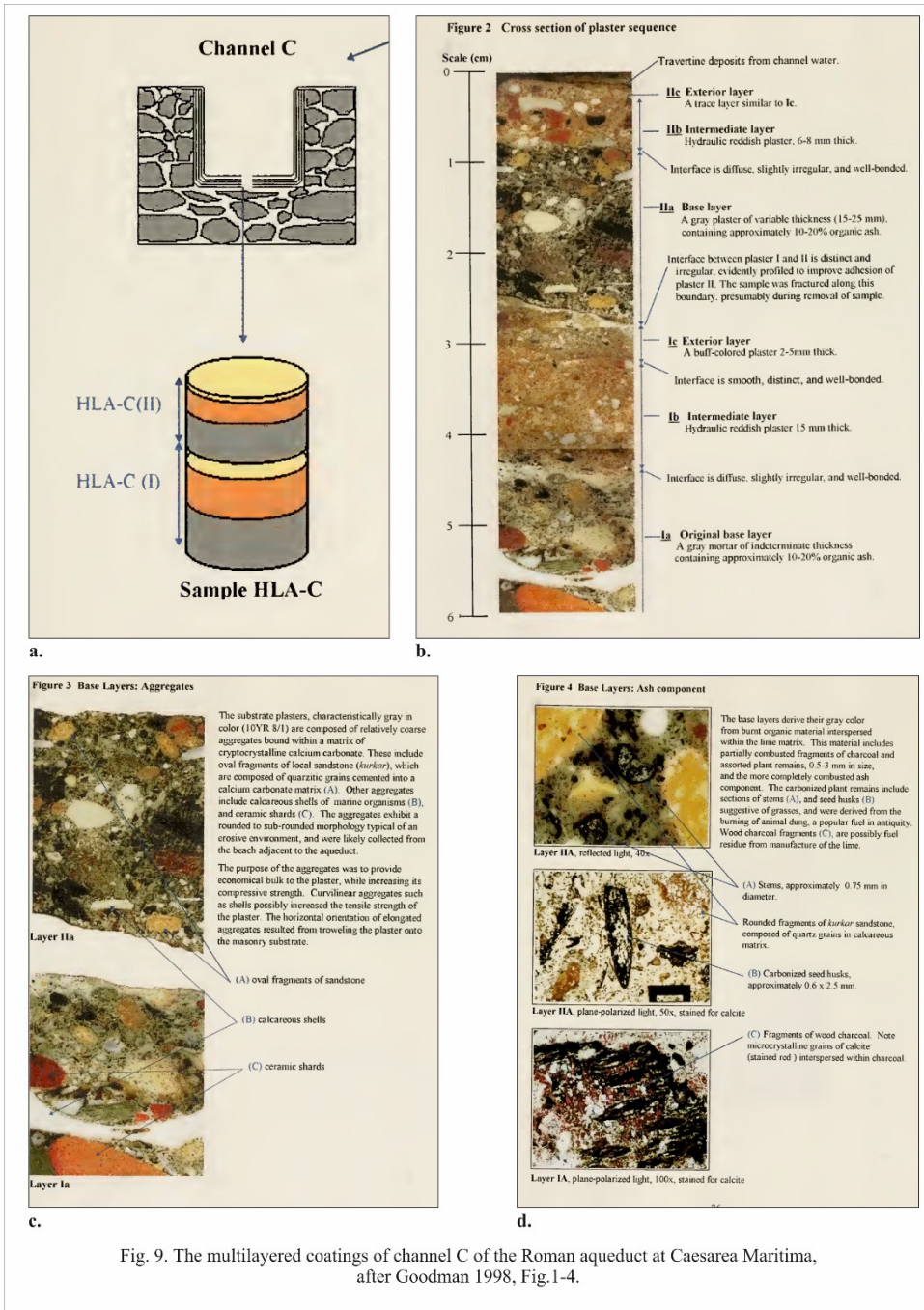


Fig. 9. The multilayered coatings of channel C of the Roman aqueduct at Caesarea Maritima, after Goodman 1998, Fig.1-4.

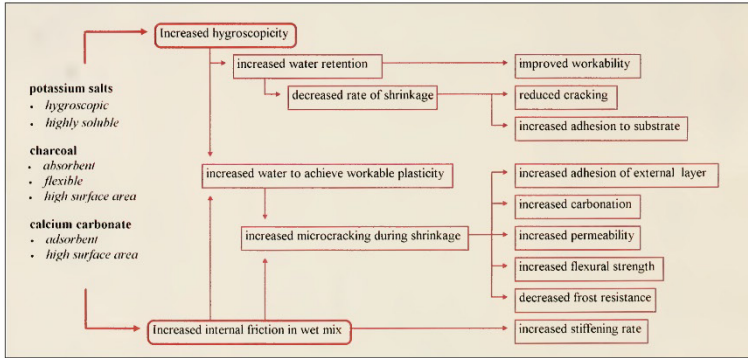


Fig. 10. The proposed mechanism by which wood ash improves lime plaster for base coat application, after Goodman 1998, Fig. 73.



Fig. 11. *Opus signinum* flooring in tower no. 1 on the Faeragului plateau, after Pescaru et al. 2014, Fig. 8.

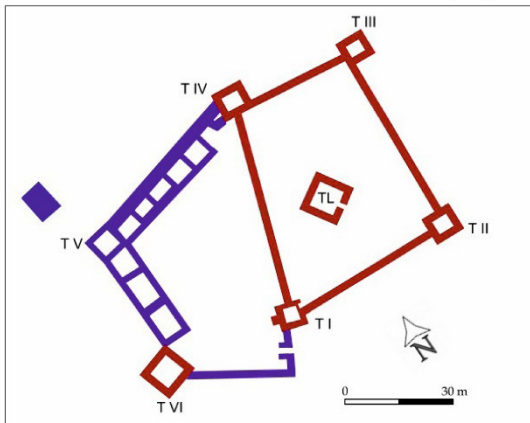


Fig. 12. Plan of the Costești-Blidaru fortress with main construction phases highlighted, after Pescaru et al. 2014, Fig. 2.

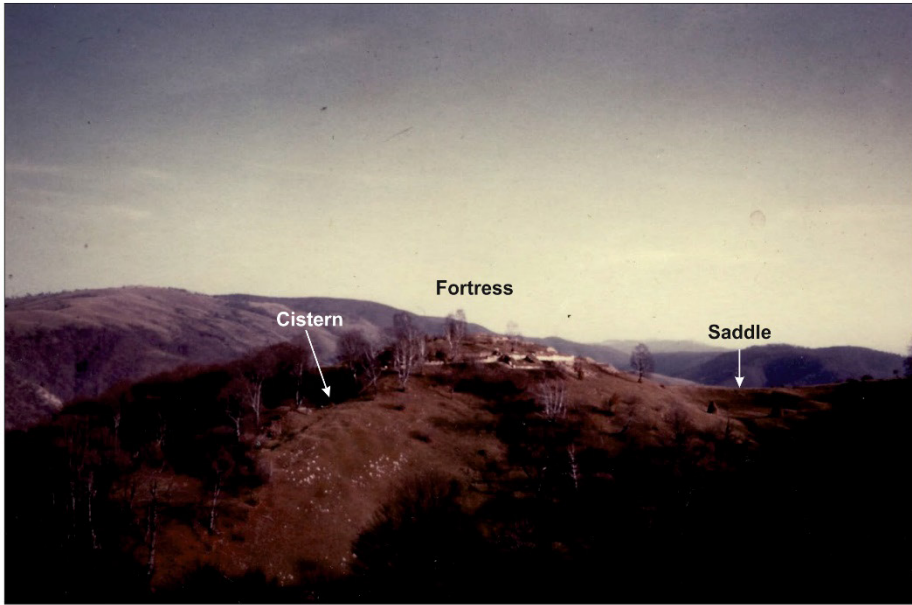


Fig. 1. The Blidaru hillock viewed from the East, after Pescaru et al. 2014, Fig.1.

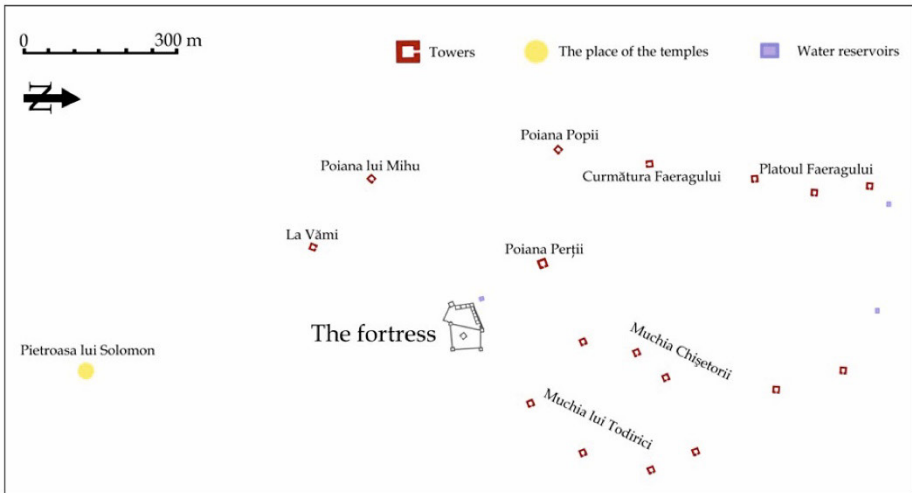


Fig. 2. The defensive network around Blidaru fortress, after Pescaru et al. 2014, Fig.4.

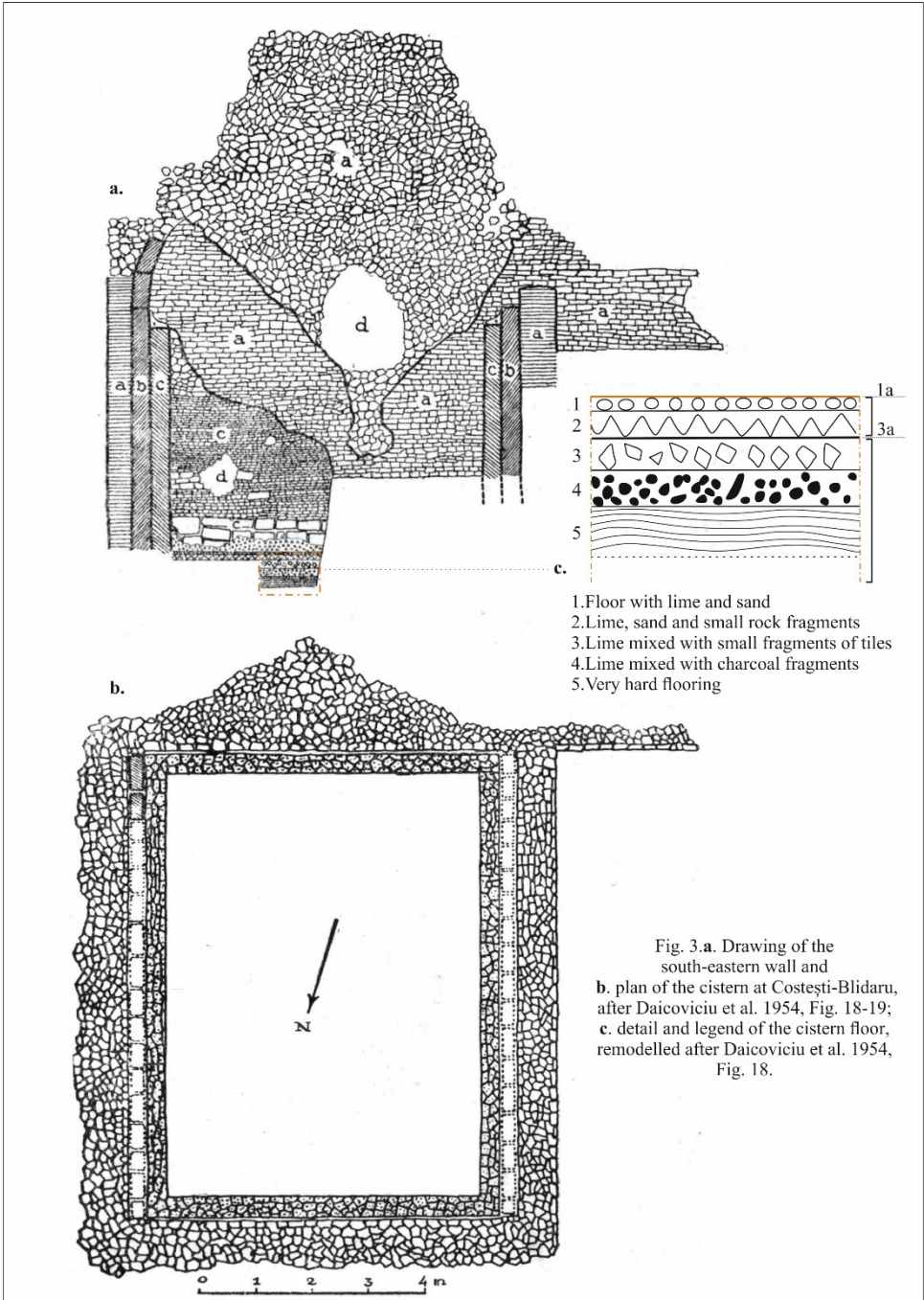


Fig. 3.a. Drawing of the south-eastern wall and
b. plan of the cistern at Costești-Blidaru, after Daicoviciu et al. 1954, Fig. 18-19;
c. detail and legend of the cistern floor, remodelled after Daicoviciu et al. 1954, Fig. 18.

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Observations on the Funerary Constructions at Potaissa (Turda, Cluj County)

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Article: archeology; Received: 13.02.2023; Revised: 06.03.2023

Accepted: 18.03.2023; Available online: 28.04.2023.

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Abstract: We are publishing here two fragmentary funerary monuments discovered during the archaeological monitoring for the development works in and around the fortress of the Legion *V Macedonica* at Potaissa in 2021. The two monuments discovered in and near the fortress probably come from a necropolis located nearby and document the existence of large funerary constructions in ancient Potaissa. The first monument, a fragment of a rectangular coping, belongs to the so-called "pilaster-type funerary constructions", while the second, the pediment fragment, must be linked to the *aedicula*-type funerary constructions. We have tried to identify other disparate elements in the sculptural production of Potaissa that document the existence of these types of monuments in order to complete the picture of the architectural-sculptural production for funerary purposes in this provincial city. The findspots of these monuments indicate the distribution of the funerary areas on Fortress Hill near the legionary fortress. Some large monuments that are found *in situ*, indicate two funerary areas on Fortress Hill pertaining to the *canabae* civilian settlement: the Szindivölgy-tető point and Fodor Domokos' vineyard (on Rákos utca) in the Közep-mál area.

Keywords: funerary monuments, pilaster, *aedicula*, necropolis, Potaissa

Rezumat: Prin acest studiu publicăm două monumente funerare fragmentare descoperite în timpul supravegherii arheologice în castrul legiunii *V Macedonica* în anul 2021. Cele două monumente descoperite în și lângă castru provin, probabil, dintr-o necropolă localizată în vecinătate și documentează existența unor mari construcții funerare în antica Potaissa. Primul monument, un fragment de coronament rectangular, aparține așa-numitelor construcții funerare de tip pilastru, în timp ce al doilea, un fragment

de fronton, trebuie pus în legătură cu construcțiile funerare de tip *aedicula*. Am încercat să identificăm alte elemente disparate în producția sculpturală din Potaissa care documentează existența acestor tipuri de monumente, pentru a completa tabloul producției sculptural-architecturale cu destinație funerară din acest oraș provincial. Locurile de descoperire ale acestor monumente indică distribuția zonelor funerare pe Dealul Cetății, lângă castrul legionar. Unele monumente de mari dimensiuni care sunt găsite *in situ* indică existența a două zone funerare pe Dealul Cetății aparținând așezării civile de tip *canabae*: punctul Szindivölgy-tető și via lui Fodor Domokos (de pe Rákos utca) în zona Közep-mál.

Cuvinte-cheie: monumente funerare, pilastru, *aedicula*, necropolă, Potaissa

During the archaeological monitoring for the development works in and around the fortress of the Legion *V Macedonica* at Potaissa in 2021, two fragmentary funerary monuments were discovered. The monitoring was carried out in the context of the development interventions on the archaeological site, foreseen by the "Restoration, Valorization and Introduction into the Touristic Circuit of the Fortress of the Legion *V Macedonica*, Potaissa-Turda" project. One of the monuments was discovered in November 2021, during the monitoring for the excavation of the ditch destined for the relocation of the water main on the south side¹. Along the route of the pipeline ditch, a previously known area with a cluster of reused Roman funerary monuments was also identified, from where other fragmentary monuments had been recovered by the staff of the Turda History Museum in previous years.

The two monuments discovered in and near the fortress probably come from a necropolis located nearby and document the existence of large funerary constructions in ancient Potaissa. The first monument, a fragment of a rectangular coping, belongs to the so-called "pilaster-type funerary constructions", while the pediment fragment must be linked to the *aedicula*-type funerary constructions. We will try to identify other disparate elements in the sculptural production of Potaissa that document the existence of these types of monuments in order to complete the picture of the architectural-sculptural production for funerary purposes in this provincial city.

1. Fragmentary funerary monument (**Pl. I/1**), limestone; a fragment of the right half, measuring 0.73 x 0.33 x 0.30 m, is still preserved. Discovered south of the fortress, outside the enclosure, along the route of the relocated

¹ S. Nemeti, *Raport de supraveghere arheologică (III)*, mss.

water main. The lower part has a 0.11 m wide border. The monument was carved on three sides, and only the body of a lion holding a *bucranium* between its front paws remains of the iconographic composition. On the side of the monument, the body of the lion can be seen with its back paw well represented anatomically and the front paw partially destroyed. On the corner of the monument, a *bucranium* can be seen, as well as the front leg of the bull with a bent knee. Above this, on the main side of the monument, a part of the lion's left paw with well-defined claws is preserved. The fragment can be identified as belonging to a so-called "rectangular funerary coping" ("rechteckige Bekrönung").

Such monuments are especially common in the central area of Dacia Superior, in the centers of Apulum and Sarmizegetusa. From here, the funerary monument type spreads to neighboring areas, several examples being known at Micia, Ampelum and Alburnus Maior, Cigmău, Drobeta². S. Ferri, in his first synthesis of the provincial Roman art of Dacia, correctly interprets their function as copings ("fastigio di tomba") decorating the upper part of some composite funerary monuments³. Gr. Florescu is the one who introduces in 1930 the erroneous idea that they are in fact bases, pedestals ("basamento") of composite funerary monuments⁴. Within the analysis of these pieces in Romanian specialized literature in the 1980s, this idea was imposed, this funerary monument element being considered a base or pedestal for funerary altars⁵ or for pilaster-type monuments⁶. A correction, based on analogies from northern Italy, Pannonia and Noricum, is made by C. Ciongradi in 2004, who identifies them as copings and believes that they were part of composite monuments along with the funerary altars⁷. L. Bianchi partially accepts this interpretation which places these elements at the top of an altar or a small pilaster-shaped monument built of several elements, but notes that most of them have a flat upper surface and attachment points. Thus, he concludes that their function as independent copings is excluded, and that they were, in fact, supporting blocks for another element⁸. In her later work, C. Ciongradi interprets them as copings (with three types, depending on the

² Florescu 1930, 119-123, no. 71-77, fig. 61-69; Țeposu Marinescu 1982, 176-182, no. P1-34; Ciongradi 2007, 89-91, 243-249, Taf. 103-109; Ciongradi 2009, 33, no. 134-137, taf. 57-59; Pescaru, Pescaru 2010, 261-266.

³ Ferri 1933, 263, fig. 322, 261-262, 265, fig. 327-328, 330-331, 336.

⁴ Florescu 1930, 119-123, fig. 59-65.

⁵ Țeposu Marinescu 1982, 29-30.

⁶ Gramatopol 1982, 153-154.

⁷ Ciongradi 2004, 169, fig. 6.6; Ciongradi 2009, 33, Taf. 57-58.

⁸ Bianchi 2006, 283, n. 86: "la superficie superior piana, e talvolta un incasso per l'imperniatura, escludono però la funzione di fastigio indipendente; sono blocchi d'imposta per un altro elemento, che può anche essere un coronamento à piramide".

number of decorated sides) and assumes that the upper part also had pine cones or funerary sphinxes⁹. The interpretation is later accepted and the pieces are considered copings¹⁰, but other times the old interpretation is maintained¹¹ or no judgement is passed on the functionality of the piece¹².

The recently discovered fragmentary piece typologically belongs to this well-known category of decorated blocks pertaining to an ensemble that can be called a "pilaster-type monument", made of a montage of blocks. M. Gramatopol observes that there was no clear concept of the funerary pilaster in the 1980s, but that the monument of the Secundini family from Igel should be considered the general prototype¹³. C. Ciongradi classifies the component pieces as belonging to a funerary monument called "pfeilerförmiger Grabbau"¹⁴. G. Kremer uses the generic term "Pfeilertypus" (for "Pfeilergrabmal"), under which she classifies pilaster-type monuments assembled from several blocks¹⁵. Since some of the funerary monuments known as "pilaster-shaped altars" ("pfeilerförmige Grabaltäre") found in Dacia and in other provinces have the altar and pyramidal coping carved from monolithic blocks¹⁶, we can guess how the reconstructed form of this type of composite monument would look. We have to assume the existence of a base (made of stone blocks or masonry), a stylobate over which the parallelepipedal inscribed block is placed. The block called "a rectangular coping" is placed on top of the latter, and then the coping itself, essentially shaped like a pyramid base with arched edges. The pine cones or funerary sphinxes are then placed upon the coping. Since both the rectangular blocks and the pyramidal copings contain mainly symbolic scenes or secondary figures from the main funerary scene, the possibility of the existence of another parallelepipedal block between them with portraits of the deceased should be considered. However, this is not mandatory, as there may have been simplified versions with only an inscribed block and a coping, as shown by a small monument recently discovered in the necropolis of Porolissum¹⁷.

What we call a rectangular coping is, in fact, an element of a composite coping made up of three or only two blocks. Its role is to reduce the attachment surface area to fit the smaller base of the pyramidal coping,

⁹ Ciongradi 2007, 91-92.

¹⁰ Deac, Zăgreanu 2011, 161-172; Gaiu, Zăgreanu 2011, 98, II.2.7, pl. XIII/II.2.7.

¹¹ Pescaru, Pescaru 2010, 261-266.

¹² Bărbulescu 2015, 261-262.

¹³ Gramatopol 1982, 153; Gramatopol 2000, 217-220.

¹⁴ Ciongradi 2007, 84-92.

¹⁵ Kremer 2001, 25, 148-153, no. 134-139.

¹⁶ Ciongradi 2007, 68-72, Taf. 67-70.

¹⁷ Petruț et al. 2010, 81-87, pl. 10-11.

funerary sphinxes or pine cone. It is certain, however, that it stood on top of a parallelepipedal inscribed block, made without a base or capital.

Several elements of such a monument type are known at Potaissa. They have been discovered by chance in various parts of the modern city over the last two centuries and come from different monuments. Thus, we were able to identify five parallelepipedal inscribed blocks (cat. no. 1-5) (Pl. II/1-3), two rectangular copings (cat. no. 6-7) (Pl. I/2-3), a pyramid base-shaped coping with arched edges (cat. no. 8) (Pl. III/1) and five pine cones (cat. no. 9-13) (Pl. III/2-4).

The analogy for the funerary coping element found south of the fortress is the three-sided rectangular block (Pl. I/3), once embedded in the post of the gate on Avram Iancu street no. 3. It is slightly larger, with a side of 0.93 m, compared to the 0.73 m of the coping on Fortress Hill. Drawn by M. J. Ackner in 1847 and published by K. Horedt as a "Christian" monument, the monument was rediscovered by I. I. Russu in 1958 and published in 1976. The eight-spoked wheel drawn by M. J. Ackner (the so-called *crux Jacobi*) is no longer visible, as the monument was broken in that area. On the main side, in the triangular pediment flanked by dolphins, it is not the face of a bearded man with long hair as in Ackner's drawing, but a Gorgon-Medusa¹⁸. On the left side, a *kantharos*-like vessel is sculpted between the acroteria¹⁹. The other side was not visible, as the monument was embedded, but presently it can be noted that it was decorated with a carved palm tree between the acroteria. The monument was probably produced in a local workshop, as suggested by the six-petalled flower found on other monuments from Potaissa²⁰. As for the functionality of the monument, I. I. Russu rather considers it as the "roof of an *aedicula*"²¹.

The *Lupa Capitolina* monument drawn by Téglás István (Pl. I/2) is probably also the lateral side of such a rectangular coping element. The sculptural field only measures 0.26 x 0.21 m and is too small to be the register of a funerary stele. The fragmentary monument from Aiud, where there is a similar decoration on one of the lateral sides, can be used as an analogy²².

The three pieces that were discussed document the presence of this rectangular funerary coping element and implicitly of pilaster-type funerary constructions in Potaissa.

¹⁸ Russu 1976, 408-409, fig. 2a-b, 3a-b.

¹⁹ Rusu-Bolindeț 1994, 115-119, pl. I, V.

²⁰ Jude, Pop 1972, 22, no. C3, pl. XXI/3.

²¹ Russu 1976, 410.

²² Florescu 1930, 122-123, no. 77; Țeposu-Marinescu 1982, 180, P21 (Aiud); Pop 1971, 179-180, no. 6, fig. 6; for the symbol, Bărbulescu 2009, 183-188.

2. Fragmentary funerary monument (**Pl. IV/1**), limestone; a small fragment of a pediment measuring 0.31 x 0.28 x 0.13 m is preserved. Discovered in the central area of the fortress during the monitoring of works for the insertion of cables for the electrical installations foreseen in the rehabilitation project. Only the anguiform end of a leg of mythological theriomorph character Scylla²³ or the tail of a *hippocampus*, a common decoration for the pediments of *aedicula*-type constructions, remains. In the upper part of the fragment, a carved edge is preserved, that confirms the triangular shape of the monument.

This small fragment found in secondary position in the legionary fortress documents the presence of another type of funerary construction in the necropolises of Potaissa. Based on the massive pediments found in Dacia, M. Gramatopol assumes the existence of funerary monuments "with canopy" or *aedicula*-type funerary constructions in Dacia as well. For funerary *aediculae* with a gable roof, the existence of an angular pediment is obligatory and such large pediments were known at Micia, Porolissum or Apulum²⁴. The male and female funerary statues found in large numbers in provincial cities were also located in such constructions, and M. Gramatopol and Al. Diaconescu find archaeological arguments for the existence of these funerary constructions²⁵, imagined according to those preserved in other areas of the Empire (the monuments of C. Spectatius Priscianus and of the Ennius family at Šempeter, the "Tomb of the Garlands" at Pompeii, the monuments of Aefionius Rufus at Sarsina or of L. Poblicius at Cologne)²⁶.

Large angular *tympana* have been identified in several cities in the province, at Sarmizegetusa, Micia, Porolissum²⁷ and have been attributed to *aedicula*-type constructions of an unspecified type²⁸. The decoration of these angular pediments contains various symbols (Neptune associated with a fish and dolphin, two peacocks drinking from a vessel), but aquatic theriomorphic figures with anguiform tails or legs predominate: two tritons holding a crown, hippocampi or Scylla²⁹. Several pediment fragments with similar decorations come from Porolissum³⁰.

²³ Jentel 1997, 1137-1145.

²⁴ Gramatopol 1982, 150, pl. V/3, 6, 7, 9, 10, 16; Gramatopol 2000, 209-214.

²⁵ Gramatopol 1982, 151; Diaconescu 2005, 305-320, fig. 160-173.

²⁶ Gabelmann 1979, 7-30, Abb. 4, 14, 16, 18-19, 33-36, 41-44; Kremer 2001, 57-134.

²⁷ Ciongradi 2007, 249-250, Te/S2, Taf. 112 (Sarmizegetusa), 252, Te/M1, M2, Taf. 112 (Micia), Gudea, Lucăcel 1975, 36, no. 107, fig. 107 (Porolissum).

²⁸ Gramatopol 1982, 151; Ciongradi 2007, 79-81.

²⁹ Chiş 2014, 187-188 (Tritons, hippocampi), 174 (Scylla).

³⁰ Gudea, Lucăcel 1975, 48, no. 173, fig. 173 a-c.

The fragment from Potaissa only preserves a segment of the tail of a triton or, rather, of an anguiform leg of a Scylla and belonged to an angular pediment. The preserved ones vary between 1.75 and 2 m in size, and are too large for the type of *aedicula in antis*, common in Dacia³¹. The central walls of these *aediculae* have smaller widths and, in general, the *aediculae in antis* are more modest monuments, copying in relief the tiered *aediculae* with columns and funerary statues. Recently, such an edifice has been reconstructed on the territory of ancient Napoca starting from some architectural and sculptural fragments³².

Such large funerary constructions also existed in the necropolises of Potaissa, although simpler monument types, stele and *aedicula in antis*, predominate. Evidence for this is provided by older monuments, such as a relief and an angular pediment decorated with hippocampi (cat. no. 14, 15) (Pl. IV/2-3), a large base decorated with funerary lions next to a Gorgon – Medusa head (cat. no. 16), perhaps a colonnette decorated with grapevines (cat. no. 17) and five matron funerary statues (cat. no. 18-22) (Pl. IV/4) belonging to a hybrid type (*Grande Hercolanese* and *palliată*) produced in the Potaissa workshop³³.

*

The findspots of these monuments indicate the distribution of the funerary areas on Fortress Hill near the legionary fortress (Pl. V). The fragmentary monuments discovered in the fortress or in the immediate vicinity are, of course, found in a secondary context, being reused as building materials (the rectangular coping fragment with lion and *bucranium*, the pediment fragment with Scylla, pieces no. 7 and 19 from south of the fortress, piece no. 22 from Furduluşeni). However, some large monuments are found *in situ*, indicating two funerary areas on Fortress Hill pertaining to the *canabae* civilian settlement: the Szindivölgy-tető point (the ridge of the Sând Valley), where the block of the monument of Valeria Maximilla and a large pine cone (cat. no. 2, 12), as well as the inscribed blocks from the monuments of Ulpia Claudia and Aelius Iustinus (cat. no. 3, 4) from Fodor Domokos' vineyard (on Rákos utca) in the Közep-mál area³⁴ on the northern slopes of Fortress Hill were found (and from where other funerary monuments, including the female funerary statue no. 18, also originate)³⁵. Note that in all three inscriptions, the deceased and the

³¹ Floca, Wolski 1973.

³² Ciongradi, Cociş, Ilovan, Găzdac 2009, 285-317, pl. III-IV.

³³ Diaconescu 2012, 172-173

³⁴ *In vineis aedium domini Fodor Domokos Torda, Rakos utca rep.*

³⁵ CIL III 13766+13767; Münsterberg, Oehler 1902, 107, no. 1, fig. 22 (stele, *miles*); Cumont 1894, 18-19, no. 5; CIL III 13763 (stele, *signifer*); Cumont 1894, 18, no. 3; CIL III 13761 (inscribed block?, Iulius Scenobarbus); Cumont 1894, 18, no. 4; CIL III 13762 (inscribed

dedicants are soldiers and members of their families. The other funerary monuments found on the northern slopes of Fortress Hill also belong to soldiers, and most of them are parallelepipedal blocks, indicating that this type of pilaster-shaped monument was typical for the necropolis in the *canabae* area. At the Szindivölgy-tető point, south-west of the inhabited area of the *canabae*, there was probably a burial enclosure as indicated by Téglás István's notes (Pl. III/4)³⁶, as well as by the presence of the inscribed block of Valeria Maximilla and the large pine cone.

Catalogue:

Parallelepipedal blocks (Schaffblöcke)

1. Parallelepipedal inscribed block³⁷ (Pl. II/2); limestone; 1.45 x 0.80 x 0.60 m. Seen by Neigebaur on May 6th in a private house in Turda (CIL in *aedibus Fleischmann*). Inscription: *D(is) M(anibus) / Aur(elius) Celsus / vixit an(nos) LX / Aur(elius) Bassus / vix(it) an(nos) L Aur(elius) / Celsinian[us] / mil(es) c(o)h(ortis) I (centuriae) p(rimi) p(ili) / pat(ri) et av(u)nc(ulo) pient(issimis) / ob merita / p(osuit)*.
2. Parallelepipedal inscribed block³⁸ (Pl. II/1), tuff; 1.35 x 0.95 x 0.68 m; it is decorated on one side with a *kantharos* from which two grapevines spring, and on the other with a standing woman, wearing the *tunica* and *stola*, holding a cloth in her left hand. Discovered at Szind (Szindivölgy-tető) in 1904 by Csetri Károly. MNIT, inv. no. V 15875 (IN 8241). Inscription: *D(is) M(anibus) / Valeria Maximilla vix(it) an(nos) XXIX m(enses) VII, / Val(erius) Maximus vet(eranus) / ex [centurio] pater et Valer(i)a/ Marcellina mater/ filiae pie(n)tissimae/ et P. Aelius Tertius vet(eranus) ex dec(urione)/ coniugi optimae/ et pie(n)tissimae/ et Terentius et Valeria/ Maximianus fil(ius)/ matri carissimae/ fec(it)*.
3. Parallelepipedal inscribed block³⁹; limestone; 1 x 0.56 m; *In vineis aedium domini Fodor Domokos Torda, Rakos utcza rep.* Found in the vineyard behind the house of Fodor Domokos, on Rákos utcza, in 1889-1890. Inscription: *D(is) M(anibus) / Ulpia Claudia vix(it) an(nos) XXXV / Ulp(ius) Festus / vix(it) an(nos) XVIII / Ael(ius) Certus / sig(nifer) coh(ortis) I Bat(avorum) / coni(ugi) pient(issimae) / f(aciendum) c(uravit)*.

block?, Aelius Ferox); Cumont 1894, 19, no. 7; CIL III 13765 (inscribed block, Iulius Claudius).

³⁶ Bajusz 2005, 655, fig. 33/85.

³⁷ Sestini 1815, 111-112 (nel cortile della casa d'un certo sig. Fleisman); Neigebaur 1851, 204, no. 25; Ackner, Müller 1865, 672; CIL III 908; Cupcea, Zăgreanu 2018, 141-150.

³⁸ Téglás 1904, 411; Téglás 1911, 501, no. 1a; Ţeposu Marinescu 1982, 169, no. 36; Bajusz 2005, 689, fig. 32-183; ILD 511

³⁹ Cumont 1894, 17, no. 2 (Kalksteinblock); Téglás 1899, 283, no. 1; CIL III 13760 = AE 1894, 100.

4. Parallelepipedal inscribed block⁴⁰; sandstone; 1.04 x 0.53 x 0.40 m; *In vineis aedium domini Fodor Domokos Torda, Rakos utcza rep.* Inscription: [D(is)] M(anibus) / [...Aeli]us Iusti[nus...] / [vix(it) an(nos)...]VIII p(rimi) p(ilaris) / [...]MI[...] / [...] VIBI vix(it) / [an(nos)] LXXX V/[...]II[...]VO / [...]AN[...] / [...] fecit Va(leria?) / Iustina XXXV.
5. Parallelepipedal inscribed block (Pl. II/3), fragment⁴¹; limestone; 0.78 x 0.37 m; embedded into the Unitarian church of Moldovenesti (Cluj County). Inscription: D(is) M(anibus) / M(arco) Antonio / [...].

Rectangular copings (rechteckige Bekrönungen)

6. Rectangular coping⁴² (Pl. I/3), limestone; 0.93 x 0.64 x 0.34 m; it was embedded into the house on Avram Iancu str. no. 3; now it is to be found in the collections of the Turda History Museum. Two sides were visible and it was drawn and described by M. J. Ackner: "Turda, 1847, October; built into the wall of a beautiful new house, the third on the left, after the Reformed church on the road to Cluj". M. J. Ackner sees on the central side the face of a bearded man with bushy hair in a pediment. Two six-petalled flowers appear in the field, and towards the edges – two dolphins. On the lower left border, Ackner draws an eight-spoked wheel, which he interprets as an early Christian sign.
7. Rectangular coping⁴³ (Pl. I/2), fragmentary; 0.26 x 0.21 m; discovered in 1912 on the southern slopes of Fortress Hill. Téglás I. draws it as a relief, but considering its size and analogies⁴⁴, it is probably a fragment from the lateral side of a rectangular coping.

Copings in the shape of a pyramid base with arched edges

8. Coping in the shape of an arched pyramid base⁴⁵ (Pl. III/1); limestone; 1.35 x 0.51 x 0.36 m; MIT inv. no. 3140 (2780); discovered on Aroneanu street no. 10 in 1970, upon planting the vineyard (presently Ana Ipătescu street). Three sides of the monument are decorated. The main side has a stylised Corinthian capital and a dolphin with a trident. On the left side there is a vine with leaves and bunches of grapes, and on the right side a *kantharos* with a grapevine stem emerging from it.

⁴⁰ Cumont 1894, 19, no. 6 (Grosser Block); CIL III 13764; Bajusz 2005, 790, fig. 24/56.

⁴¹ Nemeti, Cupcea, Csok 2022, 174-175, no. 1, pl. I/1.

⁴² Russu 1976, 405-410, fig. 2-3; Wollmann 1978, 53-54, fig. 18; Bărbulescu 1994, 85.

⁴³ Bajusz 1980, 390, no. 962; Bărbulescu 1994, 159; Bărbulescu 2003, 166, no. 9; Bajusz 2005, 543, fig. 49/29.

⁴⁴ Florescu 1930, 122-123, no. 77; Țeposu-Marinescu 1982, 180, P21 (Aiud); Pop 1971, 179-180, no. 6, fig. 6.

⁴⁵ Milea 1973, 539-540, fig. 1a-c; Jude, Pop 1972, 16, no. 23, pl. XIII/1-3; Wollmann 1978, 46, no. 13; Bărbulescu 2015, 281, no. 44, fig. 87-88, 352-353.

Pine cones

9. Pine cone⁴⁶ (**Pl. III/2**); 0.33 m; Discovered on Șuia Hill.
10. Pine cone⁴⁷. On a plate from the Bótar collection.
11. Pine cone⁴⁸. On a plate from the Bótar collection.
12. Pine cone⁴⁹ (**Pl. III/3-4**); 0.57 m; found in the Sând Valley (Szindivölgytető); part of the Téglás I. collection;
13. Pine cone⁵⁰; two fragments; found in the southern necropolis of the city, in 2006.

Roof pediment fragments

14. Funerary relief⁵¹ (**Pl. IV/3**), belonging to a funerary construction. A young man is depicted astride a *hippocampus*.
15. Fragment of a funerary relief from a triangular pediment (**Pl. IV/2**)⁵². The right half, where a *hippocampus* is represented, is preserved. The piece is in the Reformed church of Old Turda and was brought from one of the fortress gates by Harkányi M.

Other elements of *aedicula*-type constructions

16. Funerary monument base⁵³, marble?; 1.8 x 0.9 x 0.72 m; discovered near a fortress gate around 1770-1780; it comes into the collection of Jósika Moise from Luna, from where it is bought by Kemény J. from Luncani in 1845. Two sides are drawn by Lugosi Fodor A. The central side was decorated with two lions adjoined to a Medusa head, and the two short sides with dolphins.
17. Colonnade, limestone⁵⁴; fragment; 0.55 x 0.21 m; found in Turda, on Ioan Rațiu street. It presents a decoration of a grapevine stem with leaves and bunches of grapes.

Funerary statues

18. Female funerary statue⁵⁵ (**Pl. IV/4**); 1.66 x 0.60 x 0.40 m; bought from Turda (according to the MNIT inventory register; discovered, according to Orbán Balázs, in 1886, in the Közep-mál area, on the northern slopes of Fortress Hill); MNIT, inv. no. 6634 (v 1545).

46 Bajusz 1980, 392, no. 1032; Bajusz 2005, 782, fig. 52/16.

47 Ardevan, Rusu 1979, 391.

48 Ardevan, Rusu 1979, 391.

49 Bajusz 2005, 655, fig. 33/84/1.

50 Pislaru 2007, 342, pl. 6D.

51 Wollmann 1978, 52, no. 24, fig. 15 (drawing M. J. Ackner); Lugosi Fodor András kézirat (BCUCLUJ_FCS_MS754VII), Taf. VII t.

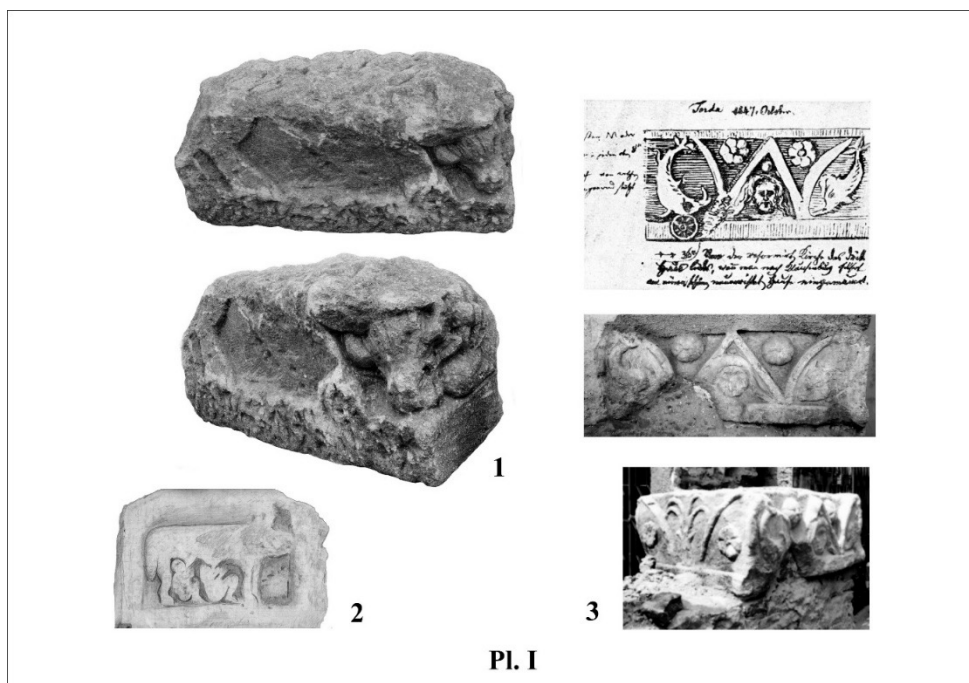
52 Bajusz 2005, 876, fig. 39/114.

53 Neugebauer 1851, 214, no. 186; Wollmann 1978, 42-43, no. 8, fig. 4a-b.

54 Jude, Pop 1972, 21, no. C1, pl. XX/1.

55 Orbán 1889, 57; Hekler 1910, 14, no. 35, fig. 1; Ferri 1933, 298, fig. 386; Diaconescu 2005, 128-129, no. 36, pl. XLVIII.3; Diaconescu 2012, 196, no. 37, fig. 51b.

19. Female funerary statue⁵⁶; limestone; fragmentary (head missing); 1.24 x 0.50 x 0.27 m; found in 1960 in the Sând Valley. MIT, inv. no. 2042.
20. Female funerary statue⁵⁷; limestone; fragmentary (head missing); 0.70 x 0.24 x 0.15 m. From Turda. MIT, inv. no. 13.
21. Female funerary statue⁵⁸; drawn by M. J. Ackner.
22. Female funerary statue⁵⁹; fragmentary; 0.50 x 0.33 m; found in the vineyard of Incze Lajos from the Furduluşeni area.

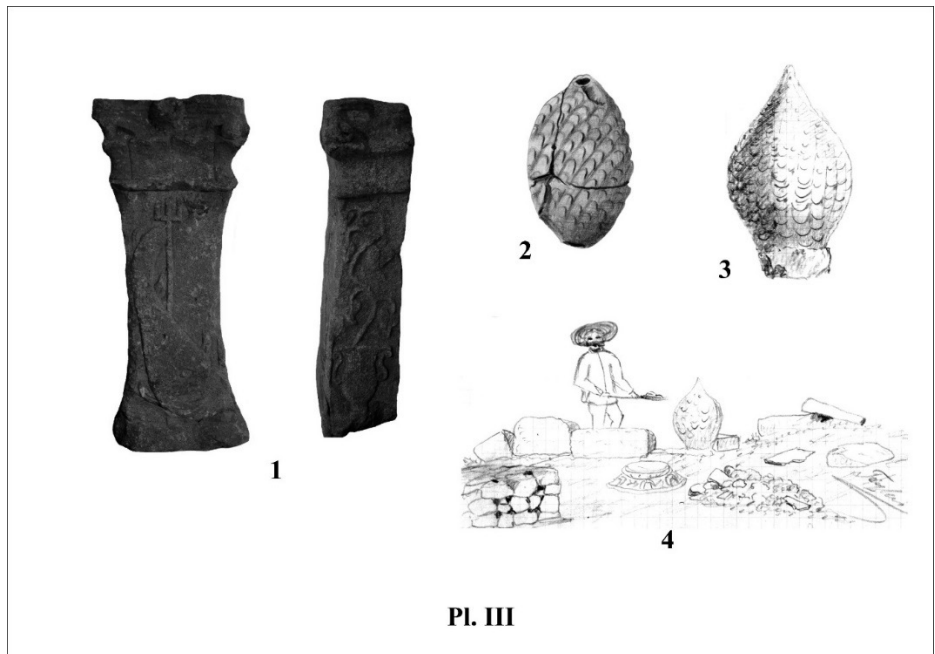
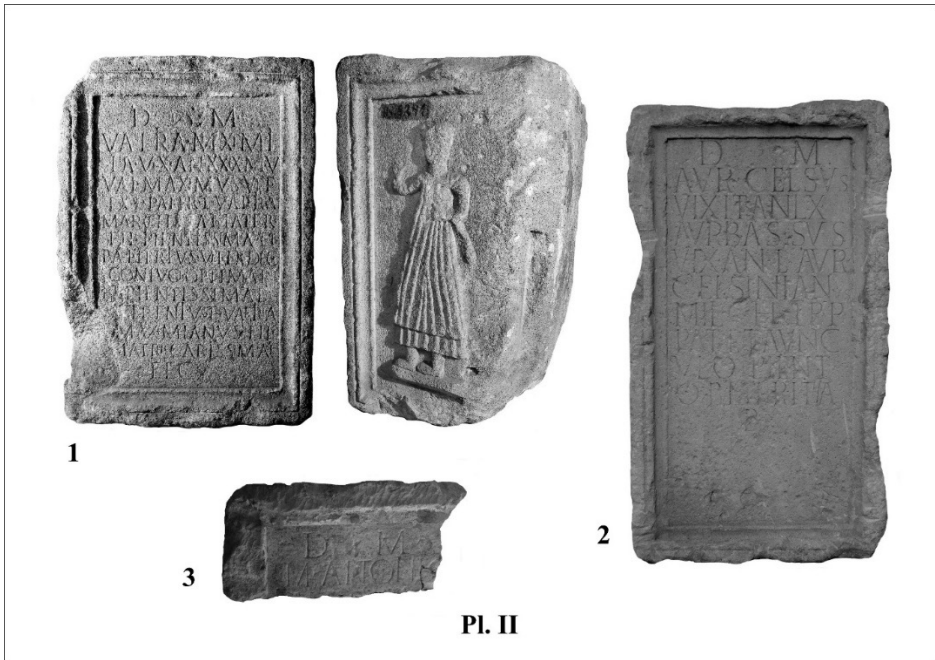


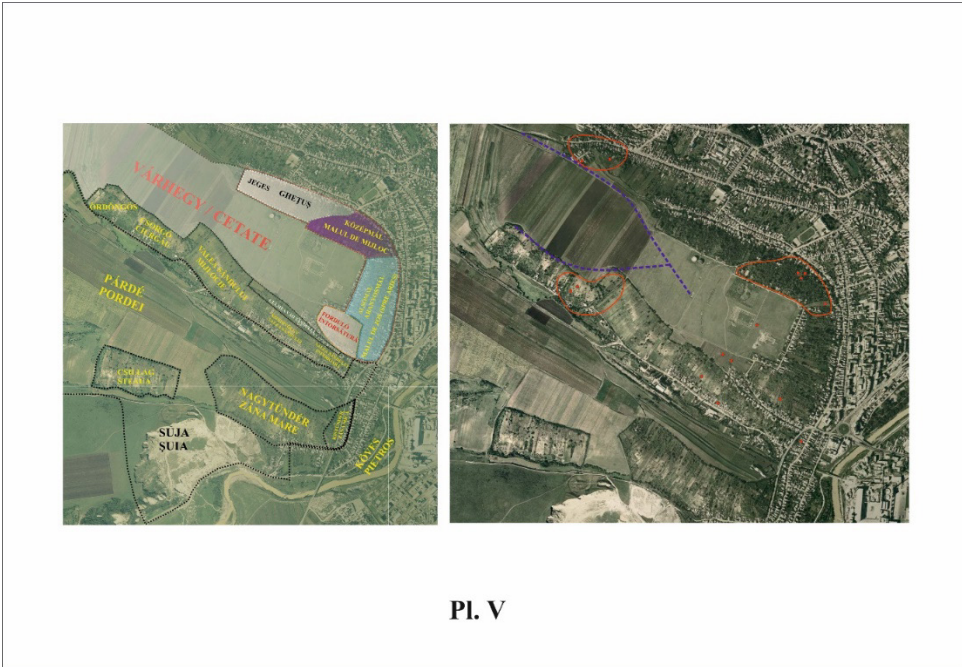
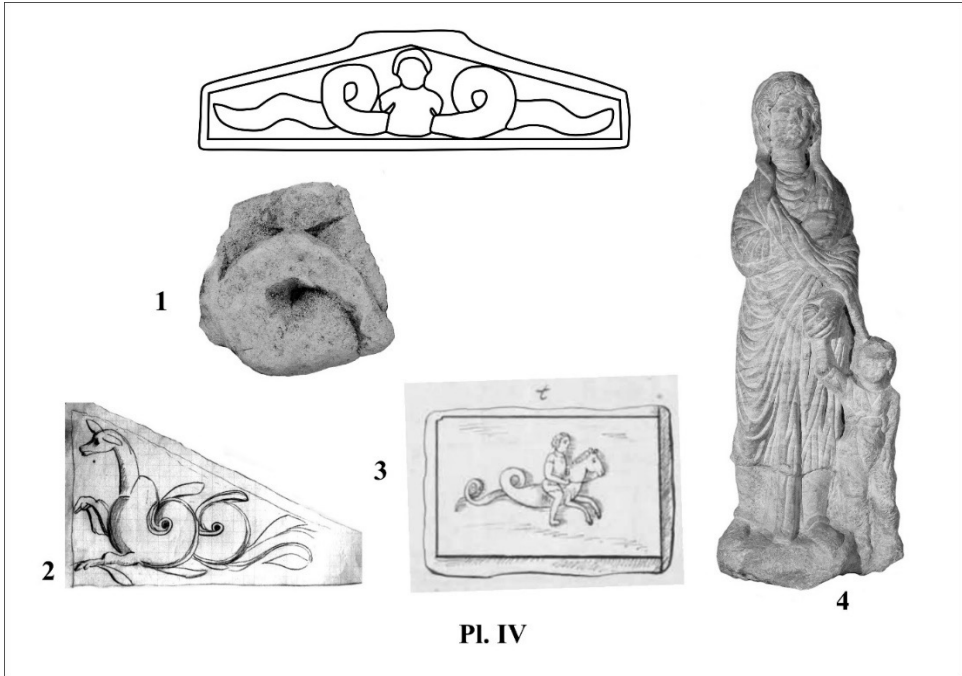
⁵⁶ Russu, Milea 1964, 27, no. 14; Jude, Pop 1972, 18, no. 31, p. XVII/1; Diaconescu 2005, 127-128, no. 35; Diaconescu 2012, 196, no. 38, fig. c.

⁵⁷ Russu, Milea 1964, 27, no. 15, fig. 15; Jude, Pop 1972, 18, no. 32, pl. XVII/2; Diaconescu 2005, 127, no. 34; Diaconescu 2012, 196, no. 37, fig. 51a.

⁵⁸ Wollmann 1978, 51, fig. 13; Diaconescu 2005, 136, no. 36a; Diaconescu 2012, 196, no. 40.

⁵⁹ Bajusz 2005, 744, fig. 44/116.





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Recruitment and family networks in Moesia Inferior

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Article: archeology; Received: 12.03.2023; Revised: 16.03.2023

Accepted: 18.03.2023; Available online: 28.04.2023.

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Abstract: The goal of this paper is to bring under scrutiny the cases of connections between civilian families and the Roman army in Moesia Inferior, in order to map the recruitment pattern of the military. For this purpose, I shall first examine the family networks, which point to recruitment and sometimes social mobility over generations; and secondly, I shall also look at those families whose members do not seem to be all active (of the attested sample) in the army.

Keywords: Roman army, Moesia Inferior, recruitment, family networks.

Rezumat: Scopul acestui studiu este să aducă în atenție relația dintre familiile civile și armata romană din Moesia Inferior pentru a identifica modelele de recrutare ale militarilor. Vor fi examinate rețelele familiale care indică modul de recrutare și, uneori, mobilitatea socială de-a lungul generațiilor; în al doilea rând, vor fi discutate cazurile acelor familii ale căror membri nu par să fie cu toții implicați în armată.

Cuvinte cheie: armata romană, Moesia Inferior, recrutare, rețele familiale.

The Roman army in Moesia Inferior has been intensely discussed by specialists, from a multitude of perspectives¹, the intention of this work being that of continuing the debate. In the following lines I shall narrow the discussion and I will focus on the identifiable relations between the

¹ We mention here only some of the representative works: Aricescu 1977; Mrozewicz 1982; Królczyk 1994; Królczyk 1999; Królczyk 2003; Tacheva 2004; Królczyk 2005; Mihailescu-Bîrliba, Piftor 2005-2006; Mihailescu-Bîrliba 2006; Boyanov 2008; Królczyk 2009; Matei-Popescu 2010; Boyanov 2012; Mihailescu-Bîrliba 2014; Ferjančić 2015; Duch 2017; Martemyanov 2017; Tomas 2017; Mihailescu-Bîrliba 2019 etc.

family members² that are part of the Roman army, in order to provide an overview on the recruitment inside families in Moesia Inferior.

The epigraphic evidence concerning the active/retired members of the Roman army attested in Moesia Inferior is rich, and higher, numerically speaking, than the evidence from the nearby provinces of Dacia and Moesia Superior³. Given the figures, and the previously written papers⁴, here we will not cover all the instances, but we will bring forward representative examples. The local and external recruitment has been discussed by specialists, some of the military being recruited locally⁵, while some came from other provinces, various origin markers (be they geographic – *natione, domo, natus, ex provincia, vico* –, or onomastic) being used to indicate their provenance⁶. Exceptional is the mention of an *origo castrensis*⁷, and in Moesia Inferior, there is such evidence⁸ at Troesmis⁹, in a votive inscription¹⁰ dated after AD 170. The inscription is dedicated by Titus Valerius Marcianus, *castris*¹¹, who was a veteran of the *legio V Macedonica*, former *beneficiarius consularis*, and it mentions also his wife Marcia Basilissa, *mater dendrophorum*, and his sister Valeria Longa.

As the recruitment of the army in Moesia Inferior has been previously addressed¹², we will focus here only on the recruitment of family members. Not surprisingly, in most cases the members of the Roman army that are related are: brothers, fathers and sons, and sons/fathers-in-laws. These are either active or retired members of the Roman army¹³; however, as previously discussed¹⁴, some of the attested male family members are also civilians (most instances), and in some cases

² For a discussion on the Roman military families in Moesia Inferior (with evidence from Oescus, Novae, Durostorum, Troesmis), see: Tomas 2017. For a more general discussion on the family links in Moesia Inferior see Pázsint 2019b.

³ See Varga et al. 2018.

⁴ Pázsint 2019a; Pázsint 2019b; Pázsint 2022.

⁵ On the soldiers originating from the rural territory of Moesia Inferior see Mihailescu-Bîrlibă 2018, 329-337. On the rural territory as source of recruitment for the fleet Mihailescu-Bîrliba, Răileanu 2014, 193-205.

⁶ On the identification of foreigners see, for example: Mihailescu-Bîrliba 2009, 153-160. On the mentioning of origin among Roman soldiers see: Speidel 2017, 35-189.

⁷ Speidel 2017

⁸ Sölek 2015, 112.

⁹ On the population of Troesmis, see: Mihailescu-Bîrliba 2008-2009; Mihailescu-Bîrliba 2012; Mihailescu-Bîrliba 2015; Mihailescu-Bîrliba, Piftor 2017.

¹⁰ CIL III 7505 = AE 1888, 11 = ILS 2311 = IDRE II 340 = ISM V 160; Matei-Popescu 2010, 73.

¹¹ Mihailescu-Bîrliba, Dumitrache 2012, 31-34; Mihailescu-Bîrliba 2018, 302.

¹² Ferjančić 2008; Mihailescu-Bîrliba 2013; Mihailescu-Bîrliba, Răileanu 2014; Mihailescu-Bîrliba, Dumitrache 2015; Mihailescu-Bîrliba 2016; Sölek 2015; Speidel 2017.

¹³ For a discussion and examples see, Pázsint 2019a, 12-14.

¹⁴ Pázsint 2019a, 14-15.

they even held positions in the local administration, a fact which is telling with regards to social mobility over generations and to their local role, because of their pertaining to the Roman army¹⁵.

While these examples are not exhaustive¹⁶, they cover the relationship types between the members of the Roman army and their close networks, be they civilian or not. Often, the family members part of the Roman army are present in the same military unit, but sometimes they are attested also in different units.

I. Recruitment of family members

The recruitment of family members is identifiable among members of the nuclear family, and the examples are either explicitly stated, or they can sometimes be indirectly assumed based on onomastic and the mentioning of origin markers. The type of inscription represents the filter through which the information on the family networks is passed. As expected, such information is especially revealed by funerary inscriptions, family members being usually the ones who place the tombstones for their loved ones, but not exclusively (sometimes going beyond the nuclear and extended networks), revealing the familial connections and histories. The votive inscriptions reflect personal choices and sometimes go beyond familial networks (*i.e.*: the case of associative membership), while the military diplomas offer a narrower view on the respective persons.

1. Brothers

While certainly not all the brothers have been identified, as the mentioning of such connection might not always be specified, and the onomastic criterion might sometimes be misleading, some examples do explicitly state the involvement of several brothers in the army. Such a case is that of two brothers, one of whom was active at a certain point of his career (2nd c. AD) in Moesia Inferior. Iulius Proculus was a *centurio legionis V Macedonicae et III Gallicae et XXII Primigeniae*, while his brother was C. Iulius Valerianus, a *centurio legionis III Augustae XVI Flaviae Felicis bis IIII Scythicae bis*. The latter set up a dedication to Iupiter Optimus Maximus Heliopolitanus¹⁷ at Lambaesis in Numidia for him, his brother, his wife (Licinia Aquilina), his sister-in-law (Varia Aquilina) and his niece (Iulia Aquilina).

¹⁵ Mihăilescu-Bîrliba, V. Piftor 2005-2006; Tomas 2017, 245.

¹⁶ Some examples of veterans have been discussed in Pázsint 2019a, 12-15 (only some of these being included in this paper).

¹⁷ CIL VIII 2627; Matei-Popescu 2010, 62.

Another well-known example of the 2nd c. AD (AD 131-170) is that of Iulius Ponticus¹⁸, a native of Amastris and a *miles* of the *legio V Macedonica*, who died at 32 years while on duty (some inscriptions mention this aspect), after serving for 14 years. His funerary monument found at Troesmis was dedicated by his brothers (Iulius Ponticus, Sentius Ponticus, Sentius Ponticus), one of whom was also a *miles* in the same legion (Sentius Ponticus), while the other was a veteran (Sentius Ponticus) of an unspecified unit (most likely the same). The three brothers were also his heirs and, given the fact that two of them bear a different *nomen*, but all the four bear the same *cognomen*, it is not excluded for them to have been his brothers-in-arms, not his blood relatives.

In the same unit also served the *miles* L. Valerius Valens and his brother, L. Memmius Aquila, a veteran of the unit, who died at 52 years¹⁹. His tombstone was found at Transmarisca and it dates in the first half of the 2nd c. AD, and it was placed by L. Valerius Valens with another brother of his, Valerius Rusticus²⁰. Out of the three brothers, Valerius Rusticus most probably did not join the army, given the fact that such information on his brothers was mentioned.

Later (AD 171-250), two more brothers seem to have been active in the army of Moesia Inferior, more precisely in the *legio I Italica*. Antonius Florianus, an *optio* of the legion²¹, commemorated at Capidava his brother Antonius Florus, who was *beneficiarius consularis* in an unmentioned unit (but most likely the same as his brother) and who died at 40 years, after fighting for 23 years.

In the first half of the third century, in the same legion were most likely active at least two other brothers, namely: M. Aurelius Mucianus, a *veteranus ex beneficiario legati legionis I Italicae* and Aurelius Dizze²², a veteran himself. We find of their existence through the funerary monument placed by M. Aurelius Mucianus for his daughter (Muciana) and his brother, in the rural²³ territory of Nicopolis ad Istrum, where they probably settled after their dismissal.

The evidence of brothers active in the *legio XI Claudia* is scantier. In the second half of the third century, at Tropaeum Traiani, a tombstone for several family members mentions four brothers, three of whom, however, fought in this unit. These were Castus (*centurio*), Marcus (*miles*), Celsus

¹⁸ CIL III 7502 = ISM V 186; Conrad 2004, 186, no. 228; Matei-Popescu 2010, 68.

¹⁹ AE 2004, 1265; Conrad 2004, 209, no. 307; Matei-Popescu 2010, 69.

²⁰ Matei-Popescu 2010, 72.

²¹ CIL III 14214.19 = ISM V 41; Matei-Popescu 2010, 107.

²² CIL III 12408 = ILBulg 430.

²³ On the settlement of veterans (from Moesia Inferior, or from other provinces) in the rural territory of Moesia Inferior, see: Mihailescu-Birliba 2018, 299-328.

(*miles*), Valens (not part of the military)²⁴. They placed a tombstone for their parents: Atticus Cecitatis, who lived for LXX years and Sarbis Celsi, who lived for LX years.

Even though not all of the examples have been mentioned, as expected, they do show a significant involvement of brothers in the military, be they active in the same unit or not, be they active or veterans, which is frequent not only among those recruited locally, but also those recruited from other areas.

2. Fathers and sons

From this category, the most numerous are the inscriptions that record fathers and sons as part of the army, which is not surprising. Besides being an expected recruitment pattern, the evidence is once again filtered through the type of inscription that predominates, namely the funerary one (as children frequently placed the tombstones for their parents, or vice-versa when the former died at a young age, or without a family of their own). As expected, in some of the following examples we will be able to trace fathers who joined the army as part of the auxiliary units, and then sons joining the legions.

Among the earliest (1st-2nd c. AD) evidence comes an inscription from the territory of Montana, through which commemorated was a veteran of the *legio II Claudia*, C. Iulius Aemilianus, who lived for LX years, X months and IIII days²⁵. The tombstone was placed by his sons, Aemilianus Vitalis (a *miles praetorianus*), Victor, Iulius, Aelius and his brother Dudis. Given the personal name of his brother, L. Mihailescu-Birliba does not exclude the possibility of the veteran to have been from the area where he was buried²⁶. According to the inscription, it seems that only one of the other family members (Aemilianus Vitalis) was part of the army.

Two 2nd c. AD inscriptions, one from Tropaeum Traiani and one from Durostorum, most likely identify a father and son. The funerary monument from Tropaeum Traiani is dedicated to C. Iulius Valens, *centurio legionis V Macedonicae domo Amasia*²⁷, who lived for L years and fought for XXX years. The monument was dedicated by his family: Valeria Frontina (his spouse), Iulia Hadriana, Iulius Iulianus and C. Iulius Valentinus (his children). The tombstone from Durostorum was placed for a certain Iulius Iulianus, a *veteranus ex equite legionis XI Claudia*²⁸, who was

²⁴ ISM IV 67 = AE 2004, 1272; Conrad 2004, 199-200, no. 274; Matei-Popescu 2010, 148.

²⁵ CIL III 7421 = Montana II 121.

²⁶ Mihailescu-Birliba 2018, 303.

²⁷ CIL III 14214.10 = ISM IV 55; Conrad 2004, 197, no. 265; Matei-Popescu 2010, 62.

²⁸ AE 2004, 1268; Conrad 2004, 207, no. 301; Matei-Popescu 2010, 62.

likely the son of C. Iulius Valens. He lived for LX, his wife and heir, Valeria Crispina, placing the monument. He was probably either young when his father died, or he was in his early military years.

From the same period and from the same *V Macedonica* legion come two other examples of veterans who settled at Oescus. One of them is P. Scribonius Varus, from Ephesus, who fought for XXVI years and lived for LV years²⁹. His tombstone was dedicated to him by his wife (Arellia Celerina) and his son Scribonius Celer, a *miles* of the same legion. The other veteran was C. Iulius Celer³⁰, whose tombstone was placed by his wife (and possibly freedwoman) Iulia Tyche, and his son, C. Iulius Crescens, a *centurio*, but of the *legio I Italica*.

From the second half of the 2nd c. AD Histria comes another example. M. Vettius Felix was an *ex decurione alae*, while his son Ulpius Felix was a *strator consularis* of the *legio XI Claudia*³¹. The tombstone was placed by the son for his father (who died at the age of LX) and mother (Aurelia Faustina).

At Noviodunum, Iulius Valens, an *ex signifero legionis XI Claudiae*³², placed a funerary monument for four of his family members, probably his parents and grandparents³³. P. Aelius Celsus was a veteran, or a descendant of a veteran³⁴, as well as P. Alexander, who was probably not part of the army. D. Tudor³⁵ believes that Iulius Valens is the same with the one mentioned on the list of members of a *vexillatio* from AD 155 discovered at Montana³⁶, being most probably locally recruited.

Other cases tell us also the age of enrolment of the sons. For example, a 2nd-3rd c. AD tombstone discovered near Abrittus was dedicated to Aurelius Mica, *centurio legionis XI Claudiae* and his son³⁷. The inscription mentions the fact that the son had died at the age of XX, after fighting in the army for IIII years, being therefore recruited at the age of XVI, probably in the same unit as his father.

In the first half of the 3rd c. AD at Vălcițrăn, a tombstone was dedicated to a father and a son by their spouse/mother. Both men were

²⁹ ILBulg 58 = AE 1912, 189 = AE 1920, 108; Conrad 2004, 242-243, no. 436; Matei-Popescu 2010, 68.

³⁰ CIL III 7428 = ILBulg 56; Conrad 2004, 249-250, no. 463; Matei-Popescu 2010, 103.

³¹ ISM I 278; Matei-Popescu 2010, 156.

³² AE 1956, 213 = ISM V 276; Conrad 2004, 184, no. 223; Matei-Popescu 2010, 162.

³³ Matei-Popescu 2010, 162.

³⁴ Matei-Popescu 2010, 162.

³⁵ Tudor 1953, 468-471 *apud* ISM V (1980), 288.

³⁶ CIL III 7449 = Montana II 1 = AE 2010, 1449.

³⁷ CIL III 12440; Matei-Popescu 2010, 147.

part of the army, as follows: Valerius Valens was a veteran *ex beneficiario* (and died at L years), while his son Valerius Valentinus was a *beneficiarius legati* of the *legio I Italica* (and died at XXXV years)³⁸. As no mention is made, they most likely fought in the same legion.

Besides the explicit evidence, there is also indirect and sometimes incomplete proof of fathers being also involved in the military. For example, Ti. Claudios Zenodotos³⁹, a *signifer centuriae Iunii Pacati legionis I Italicae*, who set up an altar in the first half of the 2nd c. AD to Invictus at Iatrus, was (based on his *nomen*) probably the relative of "a member of a former auxiliary troop, discharged under Claudius-Nero"⁴⁰. Indirect evidence from the first half of the 2nd c. AD concerns also C. Veturius Verus⁴¹, a *miles* of the *legio V Macedonica*. His tombstone was located at Sacidava where, according to Fl. Matei-Popescu, his father might have settled as a veteran after his dismissal⁴². Just like the above mentioned Iulius Ponticus, he died while on duty, at the young age of XIX years, VIII months, and XXIII days, during his first year in service. Another indirect example, this time from the second half of the 2nd c. AD, is that of a certain [---] Severus. He was a veteran of the *legio I Italica*⁴³ who originated from Oescus, and who placed a funerary monument for him and his wife (Marcia Marcella) at Novae. In this case as well, the proof is indirect, but according to Fl. Matei-Popescu, he was most probably "the son of another veteran that Trajan settled there"⁴⁴. Still from the second half of the 2nd c. AD, P. Aelius Gerrius an *ex duplicario veteranus*⁴⁵ is attested on his funerary monument discovered near Novae, and, considering his former appurtenance to a legion, as well as his *nomen*, he was probably "the descendant of a former member of an auxiliary troop, who received citizenship under Hadrian"⁴⁶. The inscription is fragmentary, therefore we have no information on who placed the tombstone for him, nor any direct information on his family members. Another indirect case might be that of Ulpian Eptezenus, a *duplicarius*⁴⁷, who, in the 2nd-3rd c. AD, made a dedication to Silvanus and Silvester in the territory of Montana. As his *cognomen* is of Thracian origin, he was "probably the descendant of a

³⁸ ILBulg 236; Conrad 2004, 252, no. 473; Matei-Popescu 2010, 121; Tomas 2016, 187.

³⁹ AE 1985, 762 = AE 1993, 1365; Matei-Popescu 2010, 111.

⁴⁰ Matei-Popescu 2010, 111.

⁴¹ AE 1977, 748 = ISM IV 175; Conrad 2004, 202, no. 283.

⁴² Matei-Popescu 2010, 69.

⁴³ AE 1932, 51 = ILBulg 306 = IGLN 89; Conrad 2004, 235-236, no. 408; Matei-Popescu 2010, 121.

⁴⁴ Matei-Popescu 2010, 121.

⁴⁵ ILBulg 351; Conrad 2004, 221, no. 353; Matei-Popescu 2010, 118; Tomas 2016, 171.

⁴⁶ Matei-Popescu 2010, 118.

⁴⁷ Montana II 91 = AE 1932, 29 = AE 1955, 67 = AE 2007, 13; Matei-Popescu 2010, 112.

Thracian origin soldier, who had served in auxiliary troops and received citizenship from Trajan⁴⁸.

In addition to these examples attested in Moesia Inferior, outside the province there is also evidence of persons who fought for a while here, mostly as part of the *legio V Macedonica*. Such an example is that of A. Laberius Camerinus⁴⁹ who, together with his son, Laberius Camerinus, a *centurio legionis*, dedicated in the first half of the 2nd c. AD an honorific inscription to Q. Roscius Coelius Pompeius Falco at Hierapolis Castabala. According to Hicks, A. Laberius Camerinus "had served under Falco in the tenth legion when Falco was legate of Judea. Camerinus had probably settled in Syria or Cilicia"⁵⁰. If Camerinus had settled in Cilicia, this might explain the location of the inscription. While the first part, comprising the *cursus honorum* of the honoree is written in Latin, the second part, mentioning the honorands, is written in Greek. Another hypothesis that might explain the location of this inscription set up to honour Falco is given by A.R. Birley, who suggests that Falco himself might have originate from Hierapolis Castabala⁵¹. Similar is an example of an inscription dated between AD 132-135 and found at Scythopolis, mentioning P. Aelius Capito, *natione Macedo*⁵², a *miles* of the *legio XI Claudia*, who lived for XXXIV years and fought for X years. According to Fl. Matei-Popescu, he was most likely a "descendant of a member of the auxiliary troops, discharged by Hadrian and retired somewhere in the territory of the province of Macedonia"⁵³. The tombstone was elevated by Dolanus, his heir. Another deductive example attested through an inscription outside the province is that of M. Valerius Flavianus, *domo Cirta*⁵⁴, a *primus pilus* of the *legio I Italica ex equite Romano* who makes a dedication to Mars Victor at Novae. Based on the Thracian *cognomen*⁵⁵ of his father, it was justifiably assumed that he was the son of a veteran who settled in Cirta. Moreover, his father has been potentially identified by the specialists as the son of Spinus son of Mucacensus, *eques* of the *ala I Pannoniorum*⁵⁶. The latter was the heir of Quintus son of Mucatralis *natione Thracus*, also an *eques* of the *ala I Pannoniorum* who lived for XXXV years. Similarly, an inscription found outside the province (end of the 3rd-

⁴⁸ Matei-Popescu 2010, 112.

⁴⁹ CIL III 12117 = ILS 1036 = IGR III.902 = AE 1891, 31 = AE 2014, 1365; Matei-Popescu 2010, 62.

⁵⁰ Hicks 1890, 254.

⁵¹ Birley 1977, 361.

⁵² AE 1939, 158 = AE 2016, 1777; Matei-Popescu 2010, 154.

⁵³ Matei-Popescu 2010, 158.

⁵⁴ ILNovae 18 = IGLNovae 33 = AE 1988, 984 = AE 2018, 23; Matei-Popescu 2010, 100; Mihailescu-Bîrliba 2013, 531.

⁵⁵ Detschew 1957, 314; Dana 2014, 229.

⁵⁶ AE 1930, 133.

beginning of the 4th c. AD), more precisely at Aquileia, attests a former *optio* and *centurio* of the *legio XI Claudia* who was *natus in Mensia inferiore castello Abritanorum* and who lived for XLV years and fought for XV years⁵⁷. According to Fl. Matei-Popescu, Valerius Longinianus "was most likely the son of a soldier since at Abrittus are recorded epigraphically veterans, together with other *cives Romani consistentes*"⁵⁸.

3. In-laws

Some isolated cases also indicate more extended familial connections inside the army, respectively through the mentioning of in-laws, who did not necessarily come from the same unit. Yet again, these are only some examples, those that are specifically stated in the inscriptions, but certainly their actual number was higher.

First, we mention two members of the *legio V Macedonica* who previously fought in Moesia Inferior, and who seem to have been related⁵⁹. More precisely, Iulius Candidus was a *centurio*, and was the son-in-law of Cn. Iulius Rufus (*centurio legionis II Adiutricis, centurio legionis V Macedonicae, centurio legionis XIII Geminae, centurio legionis XI Claudiae Piaae Fidelis, centurio legionis VI Ferrata*, as well as *primus pilus legionis I Italicae*), for whom a statue base was set up at Berytus, to honour the career of his father-in-law. The *primus pilus* seems to have been granted the *dona militaria and albata decursio*. Another inscription⁶⁰, this time that of his tombstone, records his death in the province of Syria, at the age of LXXXIV, stating only his position of *primus pilus*.

Even though the following example is not completely certain, it has been included as it is an example of "integration of a «Roman» of high standing into the Greek elites"⁶¹. In the 2nd/3rd c. AD Tomis, there is a veteran named [---]νός Κυήτος⁶² who was an ἀγορανόμος. His wife, [Ιουλιὰ] Σωσοῖα Ἀφρικανή, was a priestess of Cybele, as well as a benefactress, while his father-in-law was a certain Γάιος Ἰούλιος Ἀφρικανός. In the two inscriptions from Tomis there is no information on the appurtenance of the latter to the army, but it is not excluded for him to have been part of it. A certain C. Iulius Africanus⁶³ is attested in a votive Latin inscription (dedicated to Diana Regina and Apollo) from 2nd c. AD

⁵⁷ CIL V 942 = ILS 2670 = AE 2014, 484; Matei-Popescu 2010, 151.

⁵⁸ Matei-Popescu 2010, 151.

⁵⁹ AE 1998, 1435 = AE 2004, 1578 = AE 2018, 1387; Matei-Popescu 2010, 62.

⁶⁰ CIL III 13606 = CIL III 14162 = IGLS VI 2955; Matei-Popescu 2010, 99.

⁶¹ Ruscu 2014, 475.

⁶² ISM II 71; ISM II 72.

⁶³ Montana II 47 = AE 1985, 751 = AE 2003, 156; Matei-Popescu 2010, 149.

Montana, as *centurio* of the *legio XI Claudia*⁶⁴, therefore it is not excluded for him to have been the father of Σωσσία Ἀφρικανή from Tomis.

Still sometime in the 2nd-3rd c. AD, but this time at Dimum (Belene), Aurelius Aelianus, a *custos armorum* of the *legio XVI Flavia Firma*, died at the age of XXX, after XI years of service⁶⁵. His tombstone was placed by his father-in-law, Iulius Mar[---], a *miles* probably of the same unit, the succinct funerary inscription not mentioning anything else on them.

From the same timeframe comes another complex example, that of the family of Ulpus Balimber, *princeps legionis I Italicae*⁶⁶. His wife was Cocceia Hortensia, daughter of Cocceius Hortensius, *centurio legionis XI Claudiae*. The couple had at least two sons, Ulpus Hortensius and Ulpus Balimber, who died at XX and XVIII years old, and on whose funerary monument (placed by Cocceia Hortensia) the family is recorded. Given their young age, as well as the lack of an explicit mentioning, the sons do not seem to have been active in the army.

Later, at the end of the 3rd- beginning of the 4th c., a tombstone from Carsium attests another example of a son and a father-in-law. Valerius Castus, a *centurio ordinarius legionis I Ioviae Scythicae*, and Valerius Valerianus, a *centenarius*⁶⁷, placed the tombstone for his daughters/nieces (Casta, who lived for I year and V days; and Regina, who lived for VII years, V months and XVIII days). No mention is made of the other close family members; therefore, it is not excluded for them to have been already dead. The unit of the *centenarius* is not mentioned, but it was probably the same as the one of his son-in-law.

II. Civilian family members

The available evidence points to more cases of civilian family members, than family members active in the Roman army. Given the number of examples, we will bring into focus only some of them. The attested male civilian family members of soldiers, or veterans are, as expected due to the type of evidence, mostly brothers, or sons.

1. Brothers

Some examples point out not only to geographical mobility, but also to different occupational paths of family members. In this sense, we have the well-known example of two brothers from Nicomedia: M.

⁶⁴ Pázsint 2022, *in print*.

⁶⁵ AE 1957, 283.

⁶⁶ ISM II 260 = AE 1988, 1003 = ISM VI. 2 260; Matei-Popescu 2010, 106.

⁶⁷ AE 1989, 641 = AE 1990, 866.

Octavius Domitius, veteran of the *legio V Macedonica*⁶⁸, and M. Octavius Aper, a *medicus*. The inscription does not mention it, but it is not excluded for him to have been a military *medicus*. The two brothers seem, therefore, to have moved from Nicomedia to the area of Pliska for professional reasons. They are mentioned, together with their mother (Lisame Polla), on a common tombstone, M. Octavius Aper dying presumably at XLIX, while their mother – at LXV⁶⁹.

The evidence from the 2nd-3rd c. AD is rich and comes from many of the units present in Moesia Inferior. The funerary inscriptions are the ones that usually inform us on the status of the family members, but there are also some votive inscriptions. For example, while Valerius Paetus was a *miles legionis I Italicae*⁷⁰, his brother Valerius Charito does not seem to have been part of the military. They both made a dedication to Jupiter Optimus Maximus near Storgosia sometimes between the 2nd-3rd c. AD. From the same legion comes another example, that of C. Albius Severus, a *miles*⁷¹. His tombstone (and that of his mother, Maria Quarta, and brother, P. Albius Secundus) is attested at Augusta Bagiennorum. His brother placed the monument during his lifetime and, as no mention is made, he was most likely a civilian.

It is also possible for one of the brothers to be a civilian, but of local importance, while the other – a member of the army. This is the case of C. Iulius Primus, a *decurio*, whose brother, C. Iulius Primus, was a *beneficiarius procuratoris*. The inscription mentioning them is on the funerary monument of their father⁷², that they erected at Arrubium sometimes between AD 133-170⁷³.

Some funerary inscriptions are fragmentary and mention several family members, some of which are civilian. This is the case of Lupus, veteran of the *ala II Aravacorum*⁷⁴, who elevated, together with one of his civilian brothers, a tombstone for their mother, sister, and their father⁷⁵. Similar is a 2nd c. AD example from the territory of Histria. Titinius Severinus, *sescupliciarius alae II Aravacorum* and Titinius Iamuaris, his brother, placed a tombstone for their father, whose name and age are missing due to the fragmentary state of the inscription⁷⁶.

⁶⁸ AE 1935, 70 = AE 1938, 7 = AE 2010, 1449; Conrad 2004, 211-212; no. 316; Matei-Popescu 2010, 72.

⁶⁹ Pázsint 2019a, 7.

⁷⁰ ILBulg 226; Matei-Popescu 2010, 116.

⁷¹ CIL V 7667; Matei-Popescu 2010, 113.

⁷² Matei-Popescu 2010, 190.

⁷³ CIL III 6218 = ISM V 253; Matei-Popescu 2010, 190.

⁷⁴ CIL III 14214.29 = ISM II 225 = ISM VI.2 225.

⁷⁵ Matei-Popescu 2010, 190.

⁷⁶ ISM I 273.

Despite local recruitments, there are only some Greek inscriptions, such as a funerary one from the area of Oescus⁷⁷. Αὐρήλιος Οὐαλεριανός, son of Δαέζερις and husband of Ῥοδόπη, was a στρατιώτης in the *Cohors I Bracarorum*, and his tombstone was placed by his brother, Αὐρήλιος Μάξιμος. According to the inscription, he died violently in the war. Another funerary inscription in Greek, discovered at Tomis, was dedicated in the 2nd-3rd c. AD to a certain Οὐίβιος Σευήρος who was a "Pontic speculator" and who died at the age of XXVI⁷⁸. The tombstone was dedicated by his brothers Ἀλέξανδρος and Ἴπαρχος, who were most likely civilians, as no mention is made of their status and as the onomastic tends to indicate.

Another example comes from 3rd c. AD Emporium Piretensium⁷⁹. Here, several members of a family commemorate another one. Vipsanius Clemens was a *miles legionis VII*, son of Lucius and Visentia Modesta, and, together with his mother and brothers (Vipsanius Valens, Vipsanius Martialis, Vipsanius Modestus and Vipsanius Fronto), he commemorates his sister, Vipsania Maxima. As the monument was not dedicated to him, and as he was the sole member of the family to mention it, he was probably the only one to be part of the Roman army. Considering the fact that his father is not mentioned among the dedicators, he was very likely already dead by the time of his daughter's death.

2. Fathers and sons

In other instances, the sons were civilians. Some can be identified as such either through an early death, or through their local involvement, or indirectly. At an early age died T. Flavius Acceptus, the son of T. Flavius Carantinus, a *centurio* of the *legio I Italica*⁸⁰; he lived for only I year, II months and XIII days, his tombstone being elevated at Novae by his father and mother (Catonina Ingenua). Similarly, given the age of death (VI years), L. Cornelius Mampsalachanus was the civilian son of L. Cornelius Fronto, a *veteranus ex signifero* of the *legio I Italica*, and of Vibia Marcia⁸¹.

Additionally, some family members of the active military, or veterans, became involved in the local administration, a clear sign of upward mobility for the family. This is the case of the family of an *ignotus*, veteran of

⁷⁷ IGBulg V 5180 = SEG 24, 952 = AE 1969/1970, 572.

⁷⁸ ISM II 327 = SEG 18, 301.

⁷⁹ CIL III 12416 = ILBulg 398.

⁸⁰ AE 1999, 1335 = AE 2002, 1245 = AE 2006, 1203 = Conrad 2004, 232, no. 393; Matei-Popescu 2010, 103.

⁸¹ CIL III 756 = ILBulg 302 = IGLNovae 80 = AE 2006, 1203 = AE 2010, 1410; Conrad 2004, 229-230, no. 384; Matei-Popescu 2010, 119; Mihailescu-Birliba 2013, 532.

the *legio V Macedonica*⁸², who was the father of C. Arrius Quintianus, a *bis duumviralis et augur municipii Troesmensium*. The tombstone of C. Arrius Quintianus and his wife, Claudia Servata, mentions that he was *veterani filius*; the tombstone was elevated by his son Arrius Quintianus, and his freedman, Arrius Ianuarius. As such, we see first that the son could obtain an important local position and that the status of veteran held by his father was appreciated, reason for which it was acknowledged even on his funerary monument. Still at Troesmis, Aelius Antoninus Firmus was a *duumvir municipii Tropaensium*, while one of his sons (Aelius Antonius Sabinus) was also *duumvir* there, and the other was a *signifer* of the *legio XI Claudia* (Aelius Antoninus Aeternalis)⁸³. Such an example comes also from Durostorum, where Aelius Victor was a *beneficiarius consularis legionis I Italicae*⁸⁴, and the bilingual funerary inscription was dedicated to him by his brother Aelius Severianus who was *decurio municipi* at Durostorum. The tombstone of Aelius Victor is attested at Histria, which shows the local mobility of the militaries inside the province⁸⁵.

Indirect proof for civilian family members is given by the lack of explicit mentioning. These examples are numerous: at Ad Putea, Aurelius Silvanus, a veteran of the *legio XI Claudia*⁸⁶ placed a funerary monument for himself and for several of his family members, including his wife (Valeria Marcia), his wife's son (Aurelius Sabinus – who lived XXX years), their daughter (Aurelia – who lived XV years) and nephew (Silvanus – who lived III years). Similarly, Valerius Marcus, a *miles legionis XI Claudiae*⁸⁷ buried at Durostorum, had five children, two of whom were male, but no other further information on them is provided. The same applies to Valerius Rufus, the son of C. Valerius Rufus (*veteranus legionis I Italicae*) and of Iulia Verecunda, who seems to have been a civilian, as no information on his military career is mentioned⁸⁸. Indirect evidence could also apply in the case of Aulus Antonius Valens from Oescus, who died at XL years. His tombstone was dedicated at Troesmis in the 2nd c. AD by his freedwoman and heir, Antonia Tyrannis⁸⁹. While he is attested as a civilian, according to L. Mihailescu-Bîrliba, the deceased might have been "the son of a military in the 5th legion, who accompanied his father to Troesmis. Consequently, his father is military"⁹⁰.

⁸² CIL III 7560 = ISM II 244 = ISM VI.2 244; Matei-Popescu 2010, 73.

⁸³ CIL III 14214.06 = ISM IV 61; Matei-Popescu 2010, 155.

⁸⁴ ISM I 302 = AE 1984, 799; Matei-Popescu 2010, 109.

⁸⁵ Mihailescu-Bîrliba 2016, 75.

⁸⁶ ILBulg 216; Conrad 2004, no. 466; Matei-Popescu 2010, 161.

⁸⁷ CIL III 7477 = IDRE II 332 = ISM IV 116; Matei-Popescu 2010, 160.

⁸⁸ CIL III 12354 = ILBulg 130; Conrad 2004, 241, no. 430; Matei-Popescu 2010, 121.

⁸⁹ CIL III 6201 = ISM V 177.

⁹⁰ Mihailescu-Bîrliba 2016, 71.

3. Grandsons

This category of family members is underrepresented by the sources, but this is certainly due to the type of evidence and to the mentioning of only some of the family members in the inscription. One example is that of L. Licinius Clemens, a veteran from Nicopolis ad Istrum⁹¹, who, after his *honesta missio*, was a *quinquennalis canabensium et decurio Troesmensium*. Besides him, mentioned are his wife (Licinia Veneria), his daughter (Lucia Licinia), as well as his grandsons who do not seem to be active in the army: Iulius Clemens, Octavius Clementianus, Licinia Clementina, Octavius Clemens, Licinius Clemens and Octavius Licinius. As the *nomina* of these brothers differ (Iulius, Licinius/Licinia, Octavius), it is probably due to them having different fathers⁹². Regarding the family of the veteran L. Licinius Clemens, L. Mihailescu-Bîrliba⁹³ believes that it might be related to the family of Octavius Domitius from Nicomedia⁹⁴, who was also a veteran in the same legion.

Except for these cases, there are several inscriptions that record family members who may or may not have been civilians. This is especially the case when the family members of a military personnel are mentioned only through the relation type (brother, son of), therefore without mentioning other information, not even the name. Such examples are numerous, we will include only some: the tombstone of G. Ersidius, a *centurio legionis I Italicae*⁹⁵, was placed by his family (wife, son, and daughter), but as their names are not mentioned, it is not sure whether his son was a civilian, or whether he himself might have joined the Roman army. Civilian was most likely also the son (Martialis), but not the brother (Aurelius Disdosi – *miles* of an unmentioned unit⁹⁶) of Aurelius Martialis⁹⁷ (*miles legionis I Italicae*, who died at Salona). The series of examples can continue with a *beneficiarius consularis* of the *legio XI Claudia*, C. Iulius Rogatus⁹⁸, whose homonymous son was probably not part of the military, as (contrary to his father) this is not mentioned on the votive monument they dedicate to Iupiter Optimus Maximus at Municipium Salvium in Dalmatia. Similarly, at Montana, Ulpius Longinianus placed a tombstone

⁹¹ ISM V 158 = AE 1960, 337; Mihailescu-Bîrliba, Piftor 2005-2006, 212; Matei-Popescu 2010, 71; Mihailescu-Bîrliba 2016, 73.

⁹² Mihailescu-Bîrliba 2016, 73.

⁹³ Mihailescu-Bîrliba 2016, 73.

⁹⁴ AE 1935, 70 = AE 1938, 7 = AE 2010, 1449; Conrad 2004, 211-212, no. 316.

⁹⁵ ILBulg 170; Matei-Popescu 2010, 115.

⁹⁶ AE 1927, 47.

⁹⁷ CIL III 2008; Matei-Popescu 2010, 114.

⁹⁸ CIL III 9862 = CIL III 13231; Matei-Popescu 2010, 153.

for his son (unnamed) and his brother, Ulpius Dometianus, a *miles* of the *legio III Flavia*, who fought for VII years and lived for XXVII years⁹⁹.

As expected, besides these examples which render familial connections inside or related to the military, there is also evidence of soldiers or veterans who are attested without family members, be they on funerary inscriptions dedicated by/for them, or on votive inscriptions (the military diplomas were not considered). These examples mention brothers-in-arms, freedmen, *amici*, or heirs (the same comrades or freedmen). Some types of relations cannot be precisely identified, but we might be dealing with comrades from the same military unit, or from other units. For example, Valerius Pudens *miles* of the *legio I Italica* was the heir of Decimus from Savaria, who was a *centurio* not in the *legio I Italica*, but in the *legio V Macedonica*¹⁰⁰. On the other way around, L. Attius Maximus¹⁰¹ was a *centurio* of the *legio V Macedonica* and heir of Donatus, who lived for XXXII years and served for XIV years and was a *miles* of the *legio I Italica*. From different units were also L. Sextilius Fuscus¹⁰², a *centurio* of the *cohors I Augusta Thracum* and heir of Lucius Domitius and of C. Numerius Valens, the latter being a *miles* of the *legio XI Claudia*. The former, namely Lucius Domitius, does not seem to have been part of the military. According to I. Stoian, L. Sextilius Fuscus was probably only on a mission, or was attested as a veteran at Tomis, where the tombstone was found¹⁰³. Another example comes from 1st century AD Oescus, where a *signifer* of the *legio V Macedonica*, Q. Philippicus, was commemorated by an unspecified number of *heredes*¹⁰⁴. The *signifer* died at the age of XXXX and was active for XX years, originating from Edessa. The inscription informs us that a certain Antonius, an *architectus*, and a certain Titus, a *coriarius*, were named as arbiters, respectively they ensured the fulfilment of the will¹⁰⁵. Additionally, in rare instances, some veterans are attested as members of associations¹⁰⁶.

⁹⁹ AE 1985, 745 = Montana II 109; Conrad 2004, 258, no. 497.

¹⁰⁰ CIL III 6187 = CIL III 6193 = ISM V 201 = AE 1983, 879; Matei-Popescu 2010, 61.

¹⁰¹ CIL III 6232 = ILBulg 311 = IGLN 87 = AE 1966, 354 = AE 1969/1970, 565 = AE 2006, 1203; Conrad 2004, 234-235, no. 403; Matei-Popescu 2010, 113.

¹⁰² ISM II 263 = AE 1988, 1004 = ISM VI.2 263; Matei-Popescu 2010, 160, 234-235.

¹⁰³ Stoian 1987, 261 (ISM II).

¹⁰⁴ CIL III 14492 = ILBulg 49 = IDR II 203 = AE 1901, 47 = AE 1949, 198 = AE 1977, 742; Conrad 2004, 248, no. 458; Matei-Popescu 2010, 37-38.

¹⁰⁵ Tomas 2017, 240.

¹⁰⁶ Pázsint 2019a, 16.

Conclusions

While the examples did not intend to be exhaustive, and were focused mostly on the direct evidence, they attest, on the one hand, the recruitment process among the family members (brothers, fathers and sons), and on the other hand (in the case of some civilian members of the family), they attest the involvement in the local administration, this being especially the case of the sons of veterans. Nevertheless, the type of relations is reflected by the type of inscription, therefore showing only who is more prone to be recorded from the family, and which member was active or not in the army.

Acknowledgements: This work was supported by a grant of the Ministry of Research and Innovation, CNCS UEFISCDI, project number PN-III-P4-ID-PCE2020-0383.

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Book Reviews

Victor Cojocaru, Annamária-Izabella Pázsint (eds.), *Migration and Identity in Eurasia: from Ancient Times to the Middle Ages*, Cluj-Napoca: Mega Publishing House, 2021.

The collective volume reviewed below comprises twelve articles that revolve around the concepts of "migration" and "identity". Most of the papers have been presented at the international conference entitled *Migrations and Identity in European History: Communities, Connections, Conflicts*, held in 2019 within the framework of a larger research project coordinated by the Romanian Academy branch from Iași. The conference had three panels, the presentations being grouped thematically and ordered chronologically. Thus, this book comprises studies connected to the subject of the first panel, which makes it the inaugural volume of a tripartite series.

Let's start from the beginning: the *Preface* (p. 7-12). The editors commence by enumerating the various recent directions chosen by researchers when approaching the "topical concepts" of migration and identity from Antiquity to the Middle Ages. The terms and concepts are not defined, a discussion on the relevance of these directions is not proposed, an overview of these approaches is not given. The reader is simply being redirected towards the appropriate bibliography, a choice blamed by the editors on the "requested space limits". As such, the book lacks an appropriate introduction.

The very brief contextualization of the book is followed by the description of the project within which the conference and the editing of the volume took place. After providing the reader this information, the editors continued by pinpointing the aims and results of this collaboration. According to V. Cojocaru and A. I. Pázsint, the goal of the contributors was to bring to the table the most recent approaches and debates that concern migration and the impact it had on the communities their research revolves around. By focusing on various sources, be they literary, epigraphical, numismatic, iconographical or archaeological, and by underlining the nature of the interpretations these sources were subjected to during years, the authors managed to exchange ideas and propose new ways (*i.e.* "methods and frameworks") of looking at the peoples of the past. Or, nowhere in the book is the reader provided with an overview of the conclusions that were reached by the contributors. As such, the book lacks an appropriate ending.

It may seem as if this conclusion was drawn too hastily. However, once the reader gets to this part of the *Preface*, he expects to see what was the ultimate common goal of such a collaboration. Were there no commonalities found between the methods of approaching certain types of sources from different periods and areas studied by the authors? Did the exchange of the various perspectives, theories and methods that were proposed, applied and discussed by one researcher, not prove to be helpful to other scholars specialized in other periods and cultures who participated at the conference? Was the conference a simple medium where various unconnected situations were presented, or did it help each of the participants to gain new insight on the issues of migration of individuals and groups, or on the exchange of ideas and products inherent to this type of mobility?

A real (and necessary) analysis of the outcomes of the conference was replaced by the editors with a "systematic overview" of the studies that comprise the volume. However, if the "requested space limits" were so restrictive, why did the authors waste the few pages they had to summarize the contributions (in some cases, by simply paraphrasing the conclusions of authors)? This synopsis is especially redundant since every paper from this book is provided with an abstract in both English and German.

Therefore, it becomes clear that the reader should look for the novelty brought by the various new approaches regarding mobility and its implications for past identities in each separate article. Here lies the good part of the volume: although no real collective effort to define a framework within which to examine migration is apparent, and the fact that the contributions are connected by a very thin thread – in the sense that they revolve around the common concepts of migration, mobility, exchange, and the identities which permeate the analyses of such phenomena –, almost all of these individual studies represent original and relevant contributions.

Before proceeding with the description of the contributions, one other problem has to be pinpointed. The articles were arranged according to the chronological criterion, but this has no relevance in the economy of the book. If the editors would have chosen to group them based on the nature and chronology of the main types of data used by the authors, it would have been easier for the reader to notice that specific sources (*e.g.* literary, epigraphical, archaeological and historiographical ones) from a given chronological interval pose similar problems and require certain methodological approaches. This being the case, the contributions will be presented below by disregarding the order proposed by the editors.

Both David Braund (p. 21-42) and Marta Oller Guzmán (p. 43-53) analyzed ancient literary Greek sources, but from very different perspectives. In the first case, Braund explored the ideas of Herodotus and other authors regarding the origin and ethnicity of peoples from the Pontic coastlands, mainly the Colchians and Thracians. It is a very complicated and multilayered examination of how the Greeks understood and integrated the history of neighboring populations, the result of which is an intricate portrait of the interplay between various traditions, mythical tales of migration, preconceptions of the ancient authors and the information (be it factual or fictitious) of ethnographic nature they obtained during their interactions with the members of non-Greek communities.

On the other hand, M. Oller Guzmán brought together various accounts of the fears, anxieties and other feelings such as compassion, pity or envy, of both the Greek colonists and the natives from the lands the Greeks wished (or badly needed) to settle. The author provided the reader with an immersive experience, allowing him to understand the feelings and attitudes that were triggered by mobility, and the interactions between people during the waves of Greek colonization.

Therefore, both authors showed how much information about the mentality and perceptions (sometimes of a very personal, intimate nature) can be extracted from ancient texts, if one looks critically and carefully at these sources and correlates those accounts with other types of data.

On the other hand, Mustafa H. Sayar (p. 75-85), who also looked at ancient texts to talk about migration, did not manage to immerse the reader into the microcosms he described in a similar manner. M. H. Sayar set out to examine mass deportations during Antiquity from the perspective of their legal and social consequences. He provided various examples of such practices, but discussed them unequally, as he did not comment on the outcomes of forced migration in all the cases. The author focused exceedingly on elements of political history and on the legal consequences, which allowed him to see that this practice is connected with the "exercise of power", but this observation was clearly expressed only in the abstract, the latter even containing some information that is not to be found in the text. Additionally, the conclusive paragraph comprises some general ideas regarding the consequences of migration in Antiquity that could not have been directly inferred by the reader from the text itself. As such, when reading M. H. Sayar's article, one feels as if he is looking at a puzzle only half done, while the rest of the pieces are still in the box.

A study similar to that of M. H. Sayar is the one of Sergei G. Bocharov (p. 269-284), as they both focus on political history, even though the latter does not include data from primary written sources, and is

preoccupied with the history of the Crimean Peninsula during the Middle Ages. As such, Bocharov offered a detailed account of the stages of the inclusion of the said region in the Golden Horde state, including some interesting considerations regarding the ways through which various outsiders (the Byzantine Empire, the Mongols or the Genoese and Venetian traders, etc.) either imposed their political control and administrative system, or tried to forge relations with the local political institutions based on economic and commercial needs. The author also mentioned some of the consequences such events had on the local population during several centuries of interactions (both peaceful and violent in nature), such as the influence of various cultures ("Byzantine", "Latin", Islamic) on architecture, art, technology or religion. However, the latter are discussed at a smaller degree. Therefore, both M. H. Sayar and S. G. Bocharov's papers have interesting premises and are very rich in what is mostly factual data. However, too little attention has been paid to the actual impact of movement and interrelations of ancient and medieval populations, given the scope of this volume.

Other ancient written sources, namely the epigraphical ones, were subjected to analysis by Victor Cojocaru (p. 55-73) and Rada Varga, in collaboration with Annamária-Izabella Pázsint (p. 115-138). Based on both previous and ongoing research projects, V. Cojocaru's article revolves around the civic, regional, Greek and non-Greek identities conveyed by the honorary decrees found in the Greek *poleis* from the North-Western Pontic area. The author focused specifically on the evolution of the institution of *proxenia* in the Pontic region during several centuries, to reveal various (and sometimes overlapping) types of interactions, such as those between Greeks and foreigners, or those among the citizen body and its benefactors, but also the interrelationships of the Pontic *poleis*. As a result, V. Cojocaru showed that even though Pontic institutions are deeply rooted in the traditions from the area of origin of the Greek colonists, they evolved differently from the rest of the Greek world, which can be explained by the regional differences and the economic networks of the Black Sea cities.

On the other hand, R. Varga and A.-I. Pázsint focused on a common phenomenon in the Roman world, namely "labor migration". They selected, from a very large corpus of inscriptions from the Western provinces, but also from Moesia Inferior, since it is from the Greek speaking area and is integrated in different networks, the inscriptions that mention the craftsmen, for which they proposed "prosopographical reconstructions". Besides the various remarks regarding Roman occupational epigraphy in general, the identification of regional specificities, or the prosopographical commentaries dedicated to

individuals who moved to other places to practice their craft, the authors pinpointed a very important identity characteristic of the artisans, that is revealed by their inscriptions: they insisted on showing their affiliation to a professional network, school, or area of origin which is known for practicing their craft, to indicate their competences and legitimacy.

Both papers described above are excellent examples of how local, regional, ethnic, professional and other identities can be distinguished in inscriptions, and how much can be understood about the individual and community histories through comprehensive examination on both micro- and macroregional level. The authors also showed that the study of epigraphy is useful when analyzing mobility and identity, their articles responding harmoniously to the desiderata of the book.

Although the archaeological sources are just as fragmented and incomplete as the epigraphical ones, much can be said about ancient individuals or groups and about their movements when the analysis of archaeological finds is correlated with other data. The volume comprises three different case studies that focus on different categories of archaeological features or artifacts, thus providing distinct types of historical information.

In his study, which is a shorter version of a previous article published in the Russian language, Mikhail Treister (p. 87-114) put to test the hypothesis stating that a series of burials from "Asian Sarmatia" dated between the 2nd and the 1st c. BC contained objects that migrated, together with their owners from the East, since many of the artifacts seem to have counterparts in Central Asia. The author kept an open mind and included all the arguments that either support or invalidate the theory. As such, by studying the objects in question based on their shape, decoration and manufacturing technique, and by rechecking every suggested analogy, he disproved the theory, showing that only some of the objects indicate Eastern influences, while it is also possible that a small number of nomads from Central Asia migrated or interacted with the Sarmatians from this region.

Lucian Munteanu, Ștefan Honcu, and Dan Aparaschivei (p. 139-165) examined five coins they found during the excavation of a so-called "Free Dacian" settlement from Western Moldavia, dated in the 2nd-3rd c. AD. Since they were discovered in closed contexts, their dating is rather clearer than that of their counterparts from contemporary settlements. Therefore, the authors took the opportunity to discuss the distribution of Roman Imperial coins from all similar settlements east of Roman Dacia, which makes this study very useful. The interpretation of the plated or pierced coins from this area of *Barbaricum* is interesting, and it shows that

an in-depth analysis of the role of coins at this periphery of Dacia may prove to be an promising line of inquiry. Unfortunately, the authors did not elaborate on the issues of migration or identity, which constitute the topics of this volume.

The last type of archaeological sources subjected to analysis are the burials. Lavinia Grumeza (p. 167-200) investigated ten burials from a Sarmatian cemetery from Botoșani county, six of them having been published before, but in an unsatisfactory manner. Although the first part is more like an excavation report, it is useful since the author added new information, including available bioarchaeological data. The second part of the article is very inciting, because L. Grumeza discussed the female (and ethnic) identities expressed by their grave goods – namely the elements of dress, but also their skeletal remains, which showed that some women had their skull intentionally deformed. As such, the author emphasized the identities conveyed by burials of the Roxolani that migrated from the East, and who have preserved some of the traditions from their place of origin.

The article of Dobos Alpár (p. 201-227) stands out from the studies reviewed above, because it is historiographical and it revolves around the concept of migration in post-Roman Transylvania. The author provided a critical overview of the narratives regarding this subject, placed them in context and analyzed the faults in the reasoning of Hungarian and Romanian archaeologists. Although no solutions to the problem are provided, this investigation responds to a very poignant need of debating this subject, since new theoretical and methodological frameworks have to be introduced in the study of the archaeology of Transylvania during Late Antiquity and Early Middle Ages.

Up until now, we have seen what the analysis of various types of primary or secondary written sources and of archaeological materials can tell about the identities related more or less to the migration of people and objects. Additionally, the book contains two papers that focus on these issues by combining more types of sources. Gleb V. Kubarev (p. 229-249) concerned himself with the origin of the European Avars. As such, he showed that by combining written and archaeological information, but also anthropological, genetic and linguistic data with various results of palaeoclimatic, dendrochronological and radiocarbon analyses, the supposed Inner Asian (Rouran) origin of the Avars from Europe can be confirmed and even nuanced, since the corroboration of the data can even suggest some of the motives for their migration to the West.

On the other hand, Dilnoza Duturaeva (p. 251-267), who also combined a variety of sources, including archaeometric studies, took the reader on a journey through time and space, by following the routes and

the traders that brought Baltic (but not exclusively) amber to China in the pre-Modern times. The author discussed in length how migration of people and commodities can influence other cultures and create new identities, while indicating the various routes and connections between very distant peoples. This contribution is one of the best from this book, since D. Duturaeva managed to use an enormous amount of data to create an elaborate image of how migration contributes to the appearance of new ideas.

In conclusion, most papers comprised in the book represent remarkable contributions. However, as shown above, some of the authors used the concepts of "migration" and "identity" as a pretext for different types of studies, although that does not necessarily minimize their relevance. Overall, the contributors have fulfilled the desiderata expressed by the editors in the *Preface*, including one omitted until now: the conference and, thus, the book was meant to bridge the gap between researchers from the West and the East. And that, it did, not only because the contributions are written in an accessible language, namely English, but also because the authors tried to analyze various types of data (historical, archaeological, etc.) from the micro- and macroregional perspective, while the amount of information included and discussed in every article is impressive.

As stated in the first pages of this review, the book lacks cohesion in the sense that there is neither an introductory, nor a concluding chapter, which would elaborate on the ultimate common goals and the outcome of this collaboration. For this reason, the book is heterogenous and the articles are connected only by the concepts proposed for analysis and meditation. Since similar collective projects usually result in volumes that comprise disparate articles connected only by a common topic, it appears that this practice is considered normal. However, one might be right in thinking that the scope of such collaborations is to contour one or more theoretical and methodological framework(s) that would make it easier for researchers from different countries to work together when studying migration and its relation to identities from a specific time period and/or a vaster area. Nevertheless, this should not be taken as criticism, but as a reflection on the relevance of collaborations at a such large scale, since the importance of each individual contribution from this book cannot be refuted.

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Rada Varga, *Microistorii din Dacia romană*, (Micro-histories from Roman Dacia), Cluj-Napoca: Editura Mega, 2022.

Le sujet principal de cet ouvrage est la recherche et l'exposition de plusieurs thèmes concernant la vie sociale dans la Dacie romaine. Récemment publié, l'ouvrage est le résultat de plusieurs études menées par la chercheuse scientifique de l'Université Babeş-Bolyai de Cluj-Napoca, Rada Varga, qui tout au long de sa vie s'est occupée de la recherche sur certaines catégories de personnes de l'Empire romain. Il convient de noter que cet ouvrage n'est pas scientifique, mais s'adresse au grand public, ayant ainsi pour objectif principal l'exposition de la recherche scientifique dans un langage accessible à tous, faisant connaître une partie de la vie sociale des personnes qui vivaient à l'époque romaine.

D'un point de vue structurel, ce livre est composé de 11 chapitres, à savoir: I. Introduction. Dacie romaine (p. 12-19); L'intégration de la Dacie à l'Empire romain ou les limites du multiculturalisme (p. 20-31); Qui étaient les habitants de la Dacie romaine? (p. 32-39); À la recherche des personnes derrière les noms (p. 40-49); Les Daces après la conquête, en Dacie et dans l'Empire (p. 50-60); Exploitation de l'or: les Illyriens d'Alburnus Maior (p. 61-69); L'élite de l'armée romaine: *ala I Batavorum Milliaria* (p. 70-81); Femmes romaines de Dacie (p. 82-89); La religion de Dacie, entre magie et réalité sociale (p. 90-101); Marginalité et criminalité (p. 102-110); Mini-biographies de la Dacie romaine: Aurelius Aquila et Herculanius (p. 111-120). Suivent un court épilogue (p. 121) et quatre annexes: un glossaire qui comprend l'explication de plusieurs termes latins (p. 123-125), le système monétaire romain et les principales monnaies (p. 126), la liste des empereurs romains (p. 127-128) et médaillons biographiques des auteurs anciens cités dans le texte (p. 129-131). Le livre contient diverses illustrations, cartes ou images de bonne qualité qui aident un lecteur non-spécialiste à mieux comprendre les informations contenues dans chaque chapitre. Quant à la bibliographie, elle ne se trouve pas à la fin du livre, mais à la fin de chaque chapitre de cet ouvrage, car elle indique une série d'ouvrages et d'articles scientifiques de référence.

Le premier chapitre est une courte introduction, où l'auteure présente brièvement différents aspects qui ne sont pas liés à la vie sociale des habitants de la Dacie romaine, mais les aspects nécessaires à la compréhension du cadre général et des sources primaires (archéologie, épigraphie, textes littéraires) à travers lesquels nous pouvons rechercher de tels thèmes. L'exposition de ces informations est extrêmement pertinente compte tenu du fait que le grand public ne cerne souvent pas comment une telle subtilité peut être recherchée, dans les conditions où toutes ces sources doivent se corroborer. Par la suite, une brève introduction à l'histoire

politique et administrative, avec des informations sur la structure des sociétés romaines, l'armée romaine et de la province de Dacie.

Le chapitre II se concentre sur la mise en évidence des deux processus: de romanisation et de latinisation. Sachant que ce sujet a été beaucoup abordé en historiographie, étant parfois difficile à appréhender pour le public non averti. Ce processus était différent pour chaque province, en tenant compte du fait qu'en Dacie, il n'y a pas de structures préromaines connues qui furent pendant l'existence de la province. Ce processus s'est déroulé assez rapidement, étant amené ici différentes catégories de colons, l'armée, l'administration. Cependant, le phénomène d'acculturation est présent, la société étant très complexe, avec diverses catégories de personnes. Dans la deuxième partie de ce chapitre, en analysant les bases épigraphiques nécessaires à l'étude des personnes, l'auteur expose le fait que le nombre de Daces est rarement attesté. Pour la province de Dacie, nous pouvons soutenir le fait qu'il y a eu un processus d'acculturation, qui s'observe principalement à partir des découvertes archéologiques. En ce qui concerne l'épigraphie et l'écriture, comme l'a dit à juste titre l'auteur, presque toutes les inscriptions sont écrites en latin, ce qui indique l'adoption des coutumes romaines.

Dans le troisième chapitre, nous abordons la population de la Dacie et de sa démographie, ainsi que les coutumes de commémoration mortuaire. Pour connaître ces informations, l'épigraphie est encore le principal moyen d'analyse des personnes décédées, qu'elles soient femmes ou hommes, ces derniers pouvant faire partie de l'élite locale. Chaque inscription donne parfois des détails sur la mort d'un individu ou d'une famille, auquel cas elle est due à des épidémies ou à des guerres. A ces informations s'ajoute le chapitre suivant, dont le thème principal est l'onomastique et l'étude des noms. On sait qu'il existait dans la province de Dacie une multitude de catégories de personnes, regroupées selon le droit romain en citoyens ou non-citoyens. Le statut d'une personne peut le plus souvent être révélé sur la base de l'étude du nom, ainsi un citoyen a un nom différent (*nomen, praenomen, cognomen*) qu'un pérégrin (nom + gentilice du père). Le chapitre comporte également une section consacrée aux soi-disant *cognomina* et *supernomina*.

Dans les quatre chapitres suivants, plusieurs catégories de personnes présentes dans la province de Dacie, à savoir les Daces, les Illyriens, les Bataves et les femmes, sont analysées en particulier, chacune ayant un statut juridique distinct, étant soit des militaires de carrière, soit des colons, soit des indigènes. Concernant les femmes et leurs statuts, pour les non-spécialistes, l'image de la femme peut souvent leur sembler inférieure aux autres catégories. L'auteur parvient dans le chapitre suivant à exposer une petite

partie de la vie des femmes, prouvant en fait le contraire. Les femmes, du moins certaines d'entre elles, ont certains droits, étant indépendantes et capables de conclure certains contrats, contrairement au droit romain, comme on le voit dans une tablette d'Alburnus Maior. Aussi, certaines de ces femmes pouvaient élever diverses épitaphes ou laisser un héritage, par l'intermédiaire d'un tuteur. L'un des exemples pertinents est celui de Tuticia Adrastilla, morte à 19 ans, sa fille érigeant une inscription en l'honneur de sa mère. Il s'agit d'un cas particulier compte tenu du fait que la fille pouvait avoir au maximum six ans au décès de la mère, avec un tuteur qui s'occupe de l'héritage, compte tenu du fait que d'un point de vue juridique, il s'agit d'une pupille. Le chapitre est pertinent car il note qu'une femme avait en fait plus de droits que nous ne le supposons aujourd'hui, parfois même le mariage étant illégal.

Le chapitre IX a pour sujet un petit aspect de la religion romaine en corrélation avec la médecine et les dieux guérisseurs. Ils évoquent également les eaux thermales et les soi-disant divinités qui s'occupaient de ces lieux, les nymphes. Suit un petit sous-chapitre sur Mithra, le dieu arrivé en Dacie, par les soldats, auquel seuls les hommes avaient accès, étant un culte des mystères. L'avant-dernier chapitre traite d'un autre groupe de personnes, cette fois les marginaux. La sécurité à l'époque romaine n'est pas comparable à celle d'aujourd'hui, c'est pourquoi, comme indiqué dans le chapitre, nous voyons comment une multitude de voleurs ont assassiné diverses personnes, qu'elles appartenaient ou non à l'élite locale. On mentionne généralement si la personne tuée a été vengée, étant donné que c'est un acte que les familles souhaitaient généralement accomplir.

Le dernier chapitre présente deux mini-biographies: celle d'un commerçant, Aurelius Aquila et celle d'un esclave impérial, Herculanus. Considérant le thème, il peut être considéré comme particulièrement important, illustration ainsi dans une certaine mesure comment on peut faire une recherche sur un sujet, une personne, plus précisément une partie de la vie de ces personnes sur des bases épigraphiques. La paternité de deux personnes ayant un statut juridique différent, un fait pertinent pour l'exposition, puisque chacune des provinces a sa propre histoire. Dans ce qui identifie l'esclave impérial, Herculanus, en corroborant plusieurs sources et en analysant correctement plusieurs inscriptions, il a été constaté qu'Herculanus s'est marié deux fois, et du second mariage est né un enfant, qui a repris son statut juridique d'esclave, mais pas celui de sa mère, qui était citoyenne romaine. En gardant cela à l'esprit, on devrait affirmer qu'en vertu du droit romain, un enfant né hors mariage hérite du statut juridique de la mère. Dans le cas présent il s'agit d'une exception ou comme l'affirme l'auteure, la qualité d'esclave impérial était plus bénéfique que celle d'être

un simple citoyen. Chaque personne, citoyen, non-citoyen, esclave ou libre avait sa propre vie, et ainsi dans certains cas en corroborant plusieurs sources on peut reconstituer la vie d'un homme vivant en Dacie romaine.

A noter que quelques informations complémentaires liées au retrait par l'empereur romain Aurélien auraient pu être apportées. Ce fait historique est mentionné dans le troisième chapitre. Malgré le fait qu'il ne s'agisse pas du sujet principal, nous estimons qu'il aurait fallu débattre de ce sujet, assez controversé encore aujourd'hui. L'auteure affirme que le retrait d'Aurélien a eu lieu en 273, mais c'est toujours un sujet controversé, la plupart des chercheurs affirmant que 271 est l'année généralement valide, tandis que d'autres mettent en discussion les diverses découvertes monétaires, affirmant que le retrait d'Aurélien a eu lieu en 274-275. Étant donné que ce sujet est assez controversé, il pourrait être mis en lumière, d'autant plus que c'est un débat qui représente une curiosité chez les gens.

En somme, il faut révéler l'importance de ces livres, qui doivent avoir une place de choix et représenter un premier pas dans la connaissance du monde antique pour les non-spécialistes, et ainsi en dédier au grand public. C'est un ouvrage qui vise à faire connaître la population de la Dacie, plus précisément la diversité catégorielle des personnes. En même temps, la manière de présenter et d'exposer les informations doit être soulignée, étant un travail accessible. De tels ouvrages doivent être conçus pour l'avenir, car en ce qui concerne le monde antique, le grand public n'est souvent pas informé. La bibliographie n'est pas très riche, mais elle est suffisante pour un livre de vulgarisation qui se veut accessible à tous. A noter également l'introduction d'illustrations bien conçues et d'annexes en fin d'ouvrage, nécessaires pour ce type de livre.

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Ana Honcu, *Aedes ad Danuvium. Inițiative publice și private în fenomenul edilitar din provinciile Dacia și Moesia Inferior (secolele I-III p. Chr.)*, (*Aedes ad Danuvium. Public and Private Building Initiatives in the Provinces of Dacia and Moesia Inferior, 1st - 3rd c. AD*), Iași: Editura Universității "Alexandru Ioan Cuza", 2022.

The question of Romanization and the degree to which it took place within the Roman frontier provinces has attracted the interest of several researchers over time. One of the great challenges of such a research direction is the identification of the diffusion level of the Roman culture and values within the newly annexed provinces. The researcher's effort is channeled towards identifying the cultural and social aspects that could indicate the degree to which the population of a certain province has appropriated the Roman lifestyle, adopting, at the same time, that *forma mentis* characteristic of Roman culture and civilization. There are several means by which such aspects can be identified in the provincial world. Among these, the most suggestive ones can be inferred from the study of the urban planning initiatives carried out within the various settlements in the provinces, and of the phenomenon of euergetism, which is the basis of such initiatives. Within the Lower Danube provinces, several studies were carried out regarding the urban planning initiatives and the aspects of urbanism in these provinces. The most recent work that addresses the issue of these phenomena belongs to the researcher Ana Honcu and we will present it below.

Ana Honcu is a postdoctoral researcher in the field of ancient history, member of the project *State politics and personal destinies. Recruitment and leaving the hearth in the Daco-Moesian provinces* and museographer at the National Museum of Romanian Literature in Iași. Ms. Honcu's book, *Aedes ad Danuvium. Inițiative publice și private în fenomenul edilitar din provinciile Dacia și Moesia Inferior (secolele I-III p. Chr.)*, published in 2022, is an enriched version of her doctoral thesis with the same title, defended in March 2019. This analysis proposes a synchronic and diachronic approach to the public and private building initiative in two neighboring provinces (Dacia and Moesia Inferior), by comparing the euergetic phenomenon in the two provinces with the building programs initiated with public money in the same regions. The approach of the work is based on the analysis of the epigraphic material that attests to the public and private building initiatives in the two provinces, which consist in the construction or repair of some public buildings. In order to carry out the proposed analysis, the work is structured in five chapters that deal with different aspects of the building initiatives.

In order to understand the building phenomenon in the two provinces, it is essential to know its general characteristics at the level of the entire Empire. That is why, in the first chapter of the work, the author provides an overview of the construction policy within the entire Roman Empire, reviewing, at the same time, the main monuments of the urban landscape. The symbolic meaning and role of these constructions is presented, starting with the forum, temples, baths, theaters and amphitheaters, and continuing with larger infrastructure projects including water supply installations, porticos, harbors or city walls and gates. The framework, the context and the reasons that determined the intervention of the municipal administration, the imperial power or private individuals in the construction of the edifices are then described. The author attempts, at the same time, to determine the role played by the various political bodies (the city, the representatives of the imperial authority in the province or the emperor himself) in the respective building projects. The ambiguities of the expressions *ob liberalitatem*, *ob honorem* and *summa honoraria* are highlighted and analyzed, noting the juridical differences between them. The chapter ends with general information about the vocabulary of the inscriptions, which is mostly sparing and sometimes ambivalent.

The next two chapters run in parallel, having a common structure. Within these chapters, the building phenomenon in the province of Dacia is presented in chapter II, respectively in the province of Moesia Inferior in chapter III. In both chapters, the way in which the city policy was manifested through the *Public Initiative* and the *Private Initiative* was examined. The plan of the two subchapters covers the geographical distribution of the inscriptions from each provincial center separately, allowing a functional approach. In the third subunit of the two chapters, the profile of private donors for each province is analyzed and their ethnic origin, legal and social status were emphasized.

The fourth chapter - *Between public and private. The building phenomenon in the Lower Danube* - represents an overview of the building phenomenon in both provinces. A parallel is made between the building processes, and the common elements and the particularities of the two provinces were identified. The chapter is structured in several parts, analyzing the geographical distribution of the inscriptions, which accumulate mainly in the large centers of both provinces. The constructions thus seem to be in close connection with the road network, with the commercial areas where the financial means were concentrated, or with the legionary or auxiliary camps. Next, the chronological distribution of the inscriptions is examined, followed by an analysis of the patrons, tracing

the main characteristics of public and private initiatives. In the last part of the chapter, the edifices are presented. The latter indicate a preference of individuals for religious constructions, while the emperor and the local administration took care of extensive works, such as the construction of aqueducts, terms, walls, and roads.

In the last chapter, titled *Between East and West. The public and private initiative in the building phenomenon in Dacia and Moesia Inferior - overview and comparative perspective*, the problem of the acculturation process within the Eastern provinces of the Empire is briefly discussed. The theories regarding the existence or loss of political autonomy of cities, and the ones regarding the application of a general imperial policy in the building phenomenon are debated.

In *The final considerations*, the conclusions drawn throughout the work are presented briefly. The main differences between the two provinces are highlighted once again. It was found that the private initiative in Dacia is much better represented, comprising a percentage of 75% of the epigraphic attestations, while in Moesia Inferior we have a percentage of only 34%. This can be attributed to the social structures in the two provinces. While in Dacia we are dealing with the founding and development of new cities, characterized by a new local elite eager to assert itself, in Moesia Inferior the urban environment is mainly represented by the old Greek *poleis*, which already had a stable social structure. Therefore, one can see the need of the elites in the cities of Dacia to assert their own superiority through acts of euergetism, while the aristocracy in the Greek cities of Moesia Inferior already had an established hereditary order and did not need to legitimize themselves through public benefactions.

At the end of the work, a *supplementum epigraphicum* is added, which includes the catalog of epigraphic sources used in the creation of the work, grouped by province and presented in a concise and clear manner. This epigraphic catalog is thus an excellent working tool in the study of social and especially urban development phenomena in the two provinces. In addition to this, there is a series of tables, graphs and distribution maps that facilitate the comparative analysis between the two Danube provinces.

The main merit of the work is that it managed to illustrate how the two types of building initiative (public and private) progressively contribute to the gradual urbanization of the provinces. We see, therefore, how the two provinces exemplify the adoption of practices found throughout the Roman Empire, both in the urban and rural areas. Through the systematic and thorough analysis of the available sources, combined with the review of a substantial bibliography, Ana Honcu manages to trace

the main urban development characteristics of the two provinces, highlighting the similarities and differences between them.

In conclusion, we believe that Ana Honcu achieves her proposed objectives, managing to create an overview of the building phenomenon, through the prism of public and private initiatives, which shaped the urban evolution of the two provinces. The connection of the local elites to the Roman lifestyle is highlighted by their involvement in the development of their own cities, thus highlighting an essential aspect of the provincial romanization process. Therefore, we can consider Ana Honcu's book an important scientific contribution, both to the knowledge of urban planning initiatives through the prism of the euergetic phenomenon, and to the knowledge of the social strata that participate in public life in the analyzed provinces, and that gradually acquire the Roman mentality and lifestyle, with which they come to identify.

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