## BABEȘ-BOLYAI UNIVERSITY CLUJ-NAPOCA FACULTY OF HISTORY AND PHILOSOPHY THE DOCTORAL SCHOOL "HISTORY. CIVILIZATION. CULTURE"

# The Roman and post-Roman Period in the Catchement Basin of Arieş River Summary

coordinator: ASSOCIATE PROFESSOR, DR. HABIL. FLORIN-GHEORGHE FODOREAN

> PhD candidate: ANDREI-CĂTĂLIN DÎSCĂ

### CLUJ-NAPOCA

#### 2022

## Content:

INTRODUCTION	5
CHAPTER I. THE NATURAL LANDSCAPE	6
CHAPTER II. METHODOLOGICAL CONSIDERATIONS	19
CHAPTER III. HISTORY OF RESEARCH	24
1. The beginnings of the modern age	24
2. The Age of Enlightenment	26
3. The Age of Romantic Archeology	27
4. The age of scientific archeology	28
CHAPTER IV. REPERTORY OF THE SPOTS WITH DISCOVERIES	36
1. The Roman period	37
2. The post-Roman period	237
CHAPTER V. THE CATCHMENT BASIN OF ARIEŞ RIVER DURING THE ROMAN	
PERIOD	256
1. The historical context	256
2. The material culture	259
3. The archaeological sites	261
A. Classification in Ancient Literary Sources	261
B. Classifications in the bibliography	266
C. The classification proposed in this thesis	276
a. Civil settlements	276
Farms	277
Villas	278
Settlements with traditional architecture	280
Settlements with Mediterranean architecture	280
Suburban settlements	281
Urban settlements	284
b. Necropolises and funerary discoveries	285
c. Objectives of military interest	288
Watch towers	
Small fortifications	
Auxiliary forts	
The camp of legio V Macedonica	

d. Infrastructure works and spatial planning	
Roads	
Aqueducts	
e. Service centers	
Road centers	
Socio-administrative centers	
Sacred sites	
Temples	
Baths	
f. Production centres	
Mining centres	
Craft centres	
Agricultural centres	
g. Traces of habitation (other discoveries)	
h. Typological distribution of settlements	
i. Settlements density	
4. The economiy	
CHAPTER VI. THE CATCHMENT BASIN OF ARIEŞ RIVER AFTER TH	HE ROMAN
ABANDONMENT OF DACIA	
1. The historical context	
2. The material culture	
3. The archaeological sites	
FINAL REMARKS	
ABBREVIATIONS	
BIBLIOGRAPHY	
APPENDIX	
List of Figures	
List of Plates	
Tables	
Plates	

**Keywords:** Roman Empire, the province of Dacia, the catchment basin of Arieş river, *Potaissa, Alburnus Maior*, Roman period, post-Roman period, chronological framework, archaeological sites, topographic data, archaeological cartography, material culture, repertory of the spots with discoveries, sites classification, data interpretation.

#### Summary

The main goal of this PhD thesis was to determine the transformations that shaped the area belonging to catchment basin of Arieş river during the Roman and post-Roman periods, in terms of the density and territorial distribution of the spots with discoveries on the one hand, and, on the other hand, in respect with the material culture characteristics of each of the two mentioned periods.

In connection with the main goal of this PhD thesis other three secondary objectives were outlined: 1. the synthesis of data on the sites in the researched area; 2. framing these sites in the general context of the time; 3. establishing a general chronological framework.

In order to fulfil the objectives presented above, the data from the ancient literary sources and those from the specialized literature were used, together with the data obtained during some field investigations carried out during the last years. The field investigations were absolutely necessary to achieve the proposed objective as the information available in the other sources mentioned was not accurate enough to be able to make a series of analyses on the environmental conditions, size, inventory and chronology of the sites. As a result of the investigations more than 50 archaeological sites were identified and analysed. In addition to those identified in the field, for a few dozen other sites one can now specify the area where they are with an accuracy that varies, on average, from a few hundred meters up to 2 km. Together with the approximately 25 spots for which such data were already available in the literature, these archaeological sites constitute now a representative sample for analyses.

The data presented in this thesis can also be useful for a better understanding of the archaeological heritage from a scientific, cultural and administrative perspective, being relevant both for the local history of Dacia and for the protection and conservation of the sites.

Scientifically and culturally, the data presented contribute to create a much more detailed picture of the catchment basin of Arieş river in the Roman and post-Roman period, both as part of the Roman Empire in general and the province of Dacia in particular.

From an administrative point of view, the work can be useful in drawing up the general topographic urban plans of settlements in the area, in order to protect and preserve the archaeological heritage, whose existence is endangered in the context of dynamics in real estate and industrial construction and transport infrastructure.

The present research makes a consistent contribution to the repertoire of archaeological sites in the studied area during the mentioned chronological framework. This contribution is based on extensive surface research structured in three major phases, as follows: 1) in a first phase the information from the literature was synthesized; 2) in the second phase field investigations were carried out; 3) while in the third and last phase the data was processed and the sites were mapped.

During the phase of synthesizing the data existing in the literature in respect with the spots with discoveries was made an effort to use of all sources likely to provide new data, from historical-archaeological literature and studies of local toponymy, up to the topographic surveys of the last centuries and contemporary orthophoto plans.

During the field investigations, the tracks followed were completely recorded and stored on GPS devices in order to have a very clear record of the covered areas and to delimitate precisely the spots with discoveries. The aim was to identify both the sites mentioned in the literature as well as possible new sites. From a technical point of view, the investigations were performed by two complementary methods, described in the lines below, respectively A) the grid method and B) the method of areas with potential.

After completing the field research, the spatial data and archaeological information obtained were processed using software programs such as QGIS, Google Earth and Microsoft Excel in order to map the identified sites.

As can be observed from the table of contents presented in the above pages, this thesis has been structured in six major chapters. The first of these, chapter I. *The natural landscape*, aims to present the representative geographical characteristics of the area investigated in terms of location, relief, climate, natural resources and environmental conditions.

Chapter II, *Methodological Considerations*, deals basically with: 1. the indication of the main sources; 2. specifying the criteria for synthesizing information; 3. defining the methods of interpreting the data in order to achieve the proposed objectives.

The presentation of primary data and the interpretation of those data were carried out in separate chapters in order to clearly differentiate between technical data and alternative interpretations that can be built on them. The methods frequently used in this PhD thesis for interpreting data are: the analogies, comparisons, statistical measurements, quantitative and qualitative analysis.

Analogies and comparisons have been employed to contextualize in the historical framework of the province of Dacia, the Roman Empire and the period, both individual

discoveries (meaning in this case a single item) as well as ensembles and structures (which in this case may refer for e.g. to a whole class of artifacts, to a site or a whole group of sites).

Statistical measurements have been applied on a very large scale, from the inventory of discoveries on each site, to the circulation of various types of products across the region, up to the quantification of characteristics for each site.

Quantitative and qualitative analyses were carried out to highlight both the frequency of some phenomena, materials and types of sites, as well as their valences in the historical context of the period.

Chapter III, *History of Research*, gives a brief overview of the main trends and approaches that have existed over the centuries in researches connected with the topic, it also presents a sketch overview of the current state of research as well as some of the prospects for future research.

The most consistent chapter is the one with number IV, *Repertory of the spots with discoveries*. In this chapter are presented the main information regarding the spots with discoveries known in the investigated, special attention being paid to the data related to their location, inventory and chronology. Given the topic of this thesis, the points under discussion will be grouped into two subgroups, as follows: 1) The Roman era; 2) The post-Roman era. The presentation will be made by settlements, in alphabetical order, each new point being marked with an Arabic number. For each of the points are going to be indicated the literature, the RAN code and the LMI code insofar as they exist. Where appropriate materials are available the sites will be accompanied by maps, plans and illustrations. When the presentation of discoveries in the territory of a new settlements begins, its name will be indicated on a separate line, also specifying the administrative unit and the county to which it belongs. If the administrative unit has the same name as the settlement referred to, only its rank (commune, city, municipality) will be specified. In parentheses will be indicated the later the name of the settlement in Hungarian, but also in German when it exists, and obviously the Latin toponym where it is known, always following this order.

In the present repertoire were interpreted as points with discoveries those sites for which there are available data on the context of the discoveries (either from the literature or from the field investigations carried out for this thesis), and for which at least two categories of artefacts are recorded in a high number (for e.g., pottery and building materials). In exceptional cases, sites with a single category of archaeological material have been interpreted as points of discovery, insofar as there are clear indications that these materials are not in a secondary position. Points for which a limited number of materials are known or for which the context is unknown have been interpreted as isolated discoveries.

On the topographic maps presented in this study, the spots with discoveries and the areas with mineral resources for which there are clear indications that they were in use in ancient times are going to be indicated with Arabic numerals, numbering being done individually for each map. The agglomerations of archaeological materials, where known, are going to be indicated in letters, in alphabetical order, for each spot with discoveries individually. Isolated discoveries and spots referred to for various reasons are going to be indicated with Roman numerals, in ascending order on each map.

Between the spots with discoveries and the agglomerations of archaeological materials, a differentiation will be made according to the quality of the topographic data, both in the text and on the maps. Thus, it will be specified for each case if the findings in question are only mentioned, if they were mapped in the literature, or if they were identified during the field investigations carried out as part of this thesis. For those sites identified on the field, the geographical coordinates will be indicated, both in the universal transversal Mercator coordinate system (UTM) and in the 1970 Stereographic Projection (Stereo 70), used in the national administration and planning system in Romania.

In Chapter V, *The catchment basin of Arieş river during the Roman period*, are outlined the main features of this area as part of the Roman world, between the beginning of the second century AD and the last part of the third century. The historical aspects characteristic for the whole province and the empire in general, discussed in detail in numerous specialized works, are not going to be presented in detailed, the emphasis being placed especially on the data regarding the archaeological sites and their inventory.

Starting from the data available in the ancient literary sources and general discussions from the specialized literature, as well as from the current stage of the research in the studied area, the spots with discoveries were grouped in seven big categories of sites as follows: a) civil settlements; b) necropolises and funerary discoveries; c) objectives of military interest; d) infrastructure works and spatial planning; e) service centres; f) production centres; g) traces of habitation (other discoveries).

For the sites in the category of civil settlements, a classification system was proposed that aimed to be in agreement both with the archaeological realities of the investigated area, and with the data from the literary sources and the scientific literature. This system differentiates between six types of settlements as follows: 1) farms; 2) villas; 3) settlements with traditional architecture; 4) settlements with Mediterranean architecture; 5) suburban settlements; 6) urban settlements.

Starting from the defining characteristics of the sites and the geographical specificities of area in which they are located, relating these data to those of other areas of the empire better documented and to what is generally known about the Roman economy from the literary ancient sources, a series of conclusions can be drawn regarding the economy of the settlements within the catchment basin of Arieş river during the investigated time span.

Chapter VI, *The catchment basin of Arieş river after the Roman abandonment of Dacia* analyses the situation of this territory after the Roman army and administration were withdrawn from Dacia and moved south of the Danube at the end of the 3rd century AD. The archaeological discoveries indicate that the area continued to be settled even after this moment, but from a political point of view the situation of this territory is uncertain.

The volume of data in relation with this period is quite small in the investigated area. Discoveries are reported at several spots but more consistent information is only available for archaeological sites from Soporu de Câmpie and *Potaissa*. In the case of the latter, there are data indicating both a continuation of habitation in the town and of the burials in the southern necropolis of the settlement. A series of monetary discoveries covering much of the 4th century are also reported.

Of the 22 spots with discoveries known in this area, except for the legionary camp from *Potaissa*, in the other cases the investigations were on a small scale, being quite difficult to make assessments regarding the typology of the sites. In this situation one can only differentiate with a certain degree of certainty between the following 3 categories of sites: 1) settlements, 2) necropolises (funerary discoveries) and 3) traces of habitation.

From a statistical point of view, it can be stated that the total number of spots with discoveries reported in the post-Roman period represents only 25% of that reported in Roman times, but this report is misleading in the sense that the volume of materials and data, although difficult to quantify, is actually well below this value.

The *Final remarks* section emphasizes the idea that the creation of the Roman province of Dacia had left an unmistakable mark on the history of the catchment basin of Arieş river, the most obvious transformations being related to the material and spiritual culture of the area, its economy and the settlements density and characteristics. These transformations are mentioned by the ancient literary sources, but are also visible based on archaeological discoveries whose number is constantly increasing.

One of the most significant characteristics of the landscape of the investigated area during the Roman period is the sensible increase in the density of settlements, with a value at least four times higher than the previous period. In addition to that the sites dating from the Roman period have, on the one hand, a much larger extent, and on the other hand, a much higher volume of discoveries.

Alongside the changes related with the settlements and the accumulations related to the material culture, a radical transformation of the economy of the area took also place during the Roman period, the efforts being oriented towards a much more efficient capitalization of the agricultural potential and of the mineral resources.

The development of the province north of the Danube was stopped by the decision of the Roman authorities to withdraw from Dacia. At the current stage of research, many of the implications of this action rather only hypothesis, but a number of issues are quite clear.

It is thus obvious that the evacuation of the Roman administration and army from Dacia meant for this area a critical decrease of the number of settlements, led to an uncertain situation regarding the material culture and an obvious decline of the economy. In other words, a plausible interpretation is that the low volume of discoveries dating from the post-Roman period is the result of the Aurelian abandonment of Dacia (with the general meaning of withdrawal of the Roman authorities from the province north of the Danube River), a large number of the settlements being evacuated alongside the administration and the army.

From a chronological point of view based on the archaeological discoveries the transition period, as the post-Roman period in the catchment basin of Arieş river can be interpreted, extends over almost two centuries, from the withdrawal of the Roman authorities from the north of the Danube in the second half of the 3rd century, until the appearance in the second half of the 5th century, but especially from the 6th century of new settlements and necropolises with a consistent volume of discoveries, such as those from the Luna – Câmpia Turzii, Vlaha, Stejăriş or those in the area of the city and the camp from Turda.

The last part of the thesis includes: a list of *Abbreviations*, *Bibliography* and a series of *Appendix*, among the latter being the *List of Figures*, the *List of Plates*, *Tables* and *Plates*.

### Selective Bibliography:

Ackner 1856	- M. J. Ackner, Die römischen Alterthümer und deutschen Burgen in Siebenbürgen, JKKCC, 1, 1856, p. 3-50.
Ardevan 1998	- R. Ardevan, Viața municipală în Dacia romană; Timișoara, 1998.
Bajusz 2005a	- I. Bajusz (ed.), Téglás István jegyzetei. I. Régészeti feljegyzések, I/1, Kolozsvár, 2005.
Bajusz 2005b	- I. Bajusz (ed.), <i>Téglás István jegyzetei. I. Régészeti feljegyzések</i> , I/2, Kolozsvár, 2005.
Bărbulescu 1980	- Bărbulescu 1980, <i>Potaissa după mijlocul secolului al III- lea,</i> Potaissa, 2, 1980, p. 161-187.
Bărbulescu 1987	<ul> <li>M. Bărbulescu, Din istoria militară a Daciei romane. Vol. 1. Legiunea V Macedonica și castrul de la Potaissa, Cluj-Napoca, 1987.</li> </ul>
Bărbulescu 1994	- M. Bărbulescu, Potaissa. Studiu monographic, Turda, 1994.
Bărbulescu 1997	- M. Bărbulescu, Das Legionslager von Potaissa (Turda) - Castrul legionar de la Potaissa (Turda), Zalău, 1997.
Bărbulescu 2009	<ul> <li>M. Bărbulescu, De la romani până la sfârșitul mileniului I, în I.</li> <li>A. Pop, T. Nägler (ed.), <i>Istoria Transilvaniei. Vol. I (până la 1541)</i>, Cluj-Napoca, 2009, p. 137-198.</li> </ul>
Bărbulescu 2020	- M. Bărbulescu, <i>Castrul legionar de la Potaissa (Turda). 45 de ani de cercetări arheologice</i> , CA, 27, 2020, p. 421-439
Bărbulescu <i>et al.</i> 2019	<ul> <li>M. Bărbulescu (ed.), M. Bărbulescu, M. Andone-Rotaru, C. Bărbulescu, T. Bărbulescu, A. Cătinaş, I. Fábián, F. G. Fodorean, P. Huszarik, M. Munteanu, L. Nedelea, I. Nemeti, S. Nemeti, <i>Termele din castrul legionar de la Potaissa</i>, Cluj-Napoca, 2019.</li> </ul>

Branga 1986 - N. Branga, Italicii și veteranii din Dacia, Timișoara, 1986. Brindle 2016 - T. Brindle, The Central West, în A. Smith, M. Allen, T. Brindle, M. Fulford (ed.), New Visions of the Countryside of Roman Britain. 1. The Rural Settlement of Roman Britain, London, 2016, p. 282-307. Christescu 1929 - V. Christescu, Viața economică a Daciei romane (Contribuții la o reconstituire istorică), Pitești, 1929. Christescu 1937 - V. Christescu, Istoria militară a Daciei romane, București, 1937. Ciongradi 2009 - C. Ciongradi, Die römischen Steindenkmäler aus Alburnus Maior, Cluj-Napoca, 2009. Cociș et al. 2003a - S. Cociș, F. Marcu, O. Țentea, Bibliografia Daciei Romane (1919-2000), Cluj-Napoca, 2003. Cociș et al. 2003b - S. Cociș, A. Ursuțiu, C. Cosma, R. Ardevan, Area Sacra de la Hăbad, în P. Damian (ed.), Alburnus Maior I. Rezultatele cercetărilor arheologice preventive din anii 2000-2001, București, 2003, p. 149-192. Courbot 2000 - C. Courbot, De la ferme indigène à la villa gallo-romaine. Facteurs d'évolution et acculturation des établissements ruraux du Nord-Ouest de la Gaule, Hypothèses, 1, 3, 2000, p. 141-149 Cserny 1901 - B. Cserny, Alsófehér vármegye története a római korban, în J. Csató, B. Cserni, J. Gáspár, K. Herepei, I. Lázár (ed.), Alsófehér vármegye monográfiája II. kötet. Első rész, Nagy-Enyed, 1901, p. 107 - 561. Czysz 2013 - W. Czysz, Zwischen Stadt und Land - Gestalt und Wesen römischer Vici in der Provinz Raetien, în A. Heising (ed.), Neue Forschungen zu zivilen Kleinsiedlungen (vici) in den römischen Nordwest-Provinzen. Akten der Tagung Lahr 21. -

23.10.2010, Bonn, 2013, p. 261-377.

Damian, Borș 2008	<ul> <li>P. Damian, C. Borş Considerații privind managementul arheologic în contextul proiectului minier Roşia Montană. Programul național de cercetare "Alburnus Maior" (2001– 2006), CA, 14-15, 2007-2008, p. 481-555</li> </ul>
Fodorean 2006	- F. Fodorean, Drumurile din Dacia romană, Cluj-Napoca, 2006.
Fodorean 2013	- F. Fodorean, <i>The Topography and the Landscape of Roman Dacia</i> , Oxford, 2013.
Gooss 1876	- C. Gooss, Chronik der archäologischen Funde Siebenbürgens, AVSL, 1876.
Horedt 1958	- K. Horedt, <i>Contribuții la istoria Transilvaniei în secolele IV-</i> <i>XIII</i> , București, 1958.
Horedt 1982	- K. Horedt, Siebenbürgen in spätrömischer Zeit, Bukarest, 1982.
IDR I	- Inscriptiones Daciae Romanae. Inscripțiile Daciei Romane, I. I. Russu (ed.), vol. I, București, 1975.
ILD	- C. C. Petolescu, <i>Inscripții latine din Dacia</i> , vol. 1, București, 2005.
Király 1893	- P. Király, <i>Dacia Provincia Augusti</i> , Vol. 1, Nagybecskerek, 1893.
Király 1894	- P. Király, <i>Dacia Provincia Augusti</i> , Vol. 2, Nagybecskerek, 1894.
LIMES Proiect UNESCO	- Frontiers of the Roman Empire - Dacia. Tentative lists - <u>https://whc.unesco.org/en/tentativelists/6447/</u> .
LMI-Cj	- Lista monumentelor istorice 2015. Județul Cluj, https://patrimoniu.gov.ro/images/lmi-2015/LMI-CJ.pdf
Loșonți, Vlad 2006	- D. Loșonți, S. Vlad, Tezaurul toponimic al României:

Transilvania (TTRT). Valea Hăşdății, București, 2006.

Losonți, Vlad 2010 - D. Losonți, S. Vlad, Tezaurul toponimic al României. Transilvania (TTRT). Valea Ierii, București, 2010. Marcu 2009 - F. Marcu, The Internal Planning of Roman Forts of Dacia, Cluj-Napoca, 2009. Neigebaur 1851 - J. F. Neigebaur, Dacien aus den Überresten des Klassischen Alterthums, mit besonderer Rücksicht auf Siebenbürgen, Kronstadt, 1851 Nemeti 2005 - S. Nemeti, Sincretismul religios în Dacia romană, Cluj-Napoca, 2005. Nemeti et al. 2003, - S. Nemeti, I Nemeti, F. Fodorean, Territorium Potaissae. Revista Bistriței, 17, 2003, p. 69-75. Nemeti, Nemeti 2014 - S. Nemeti, I. Nemeti, Civic Space and Municipal Statutes in Potaissa, în S. Cociș (ed.), Archäologische Beiträge. Gedenkschrift zum hundersten Geburtstag von Kurt Horedt, Cluj-Napoca, 2014, p. 85-98. Oltean 2006 - I. Landscape, A. Oltean. Dacia. Colonization and Romanization, London and New York, 2007. Opreanu 2003 - C. H. Opreanu, Transilvania la sfârșitul antichității și în perioada migrațiilor. Schiță de istorie culturală, Cluj-Napoca, 2003. Orbán 1871 - B. Orbán, A Székelyföld leírása. Történelmi, Régészeti, Természetrajzi S Népismei Szempontból. Vol. V. Aranyosszék. Radnóth, Gyéres, M.-Ujvár és Toroczkó vidéke, Pest, 1871. Orbán 1889 - B. Orbán, Torda város és környéke. 33 nagy és 12 szövegképpel, Budapest, 1889. Petolescu 2010 - C. C. Petolescu, Dacia. Un mileniu de istorie, București, 2010.

Pîslaru 2009	- M. Pîslaru, <i>The roman coins from Potaissa. Legionary fortress and ancient town</i> , Cluj-Napoca, 2009.
Protase 1976	<ul> <li>D. Protase, Un cimitir dacic din epoca română la Soporu de Cîmpie. Contribuție la problema continuității în Dacia, București, 1976.</li> </ul>
Protase 1980	- D. Protase, Autohtonii în Dacia, vol. 1, București, 1980.
Protase 2000	- D. Protase, Autohtonii în Dacia. Vol. 2, Dacia postromană până la slavi, Cluj-Napoca, 2000.
RAN	- Repertoriul Arheologic Național, <u>http://ran.cimec.ro/</u> .
RepAb	- V. Moga, H. Ciugudean (ed.), <i>Repertoriul arheologic al Județului Alba</i> , Alba Iulia, 1995.
RepCj	<ul> <li>I. H. Crişan, M. Bărbulescu, E. Chirilă, V. Vasiliev, I. Winkler (ed.), <i>Repertoriul arheologic al județului Cluj</i>, Cluj-Napoca (1992).</li> </ul>
Rorison 2001	- M. Rorison, Vici in Roman Gaul, BAR 933, Oxford, 2001.
Téglás 1889b	<ul> <li>G. Téglás, <i>Tanulmányok a rómaiak daciai aranybányászatáról</i>. ÉTTK 14, 1889.</li> </ul>
Téglás 1906	<ul> <li>I. Téglás, Pusztaszentmártoni és röödi épületmaradványokról, ArchÉrt, 26, 1906, p. 361-362.</li> </ul>
Téglás 1910	<ul> <li>I. Téglás, A detrehemi és klapai vicusokról, ArchÉrt, 30, 1910, p. 276-278.</li> </ul>
Torma 1880a	- K. Torma, A Limes Dacicus felső része, Budapest, 1880.
Ujvári 1972	- I. Ujvári, Geografia apelor României, București, 1972.
Wollmann 1996	- V. Wollman, Mineritul metalifer, extragerea sării și carierele de piatră în Dacia Romană, Cluj, 1996