

ZIRIDAVA
STUDIA ARCHAEOLOGICA

26/1

2012

MUSEUM ARAD



ZIRIDAVA
STUDIA ARCHAEOLOGICA

26/1
2012

Editura MEGA
Cluj-Napoca
2012

MUSEUM ARAD

EDITORIAL BOARD

Editor-in-chief: Peter Hgel.

Editorial Assistants: Florin Mrginean, Victor Sava, George P. Hurezan.

EDITORIAL ADVISORY BOARD

M. Crciumaru (Trgovite, Romania), S. Coci (Cluj-Napoca, Romania), F. Gogltan (Cluj-Napoca, Romania), S. A. Luca (Sibiu, Romania), V. Kulcsr (Szeged, Hungary), J. O'Shea (Michigan, USA), K. Z. Pinter (Sibiu, Romania), I. Stanciu (Cluj-Napoca, Romania), I. Szatmri (Bkcsaba, Hungary).

In Romania, the periodical can be obtained through subscription or exchange, sent as post shipment, from Museum Arad, Arad, Piata G. Enescu 1, 310131, Romania.
Tel. 0040-257-281847.

ZIRIDAVA STUDIA ARCHAEOLOGICA

Any correspondence will be sent to the editor:
Museum Arad
Piata George Enescu 1, 310131 Arad, RO
e-mail: ziridava2012@gmail.com

The content of the papers totally involve the responsibility of the authors.

Layout: Francisc Baja, Florin Mrginean, Victor Sava

ISSN: 1224-7316



EDITURA MEGA | www.edituramega.ro
e-mail: mega@edituramega.ro

Contents

Peter Hügél, George Pascu Hurezan, Florin Mărginean, Victor Sava One and a Half Century of Archaeology on the Lower Mureş.....	7
Tibor-Tamás Daróczi Environmental Changes in the Upper and Middle Tisza/Tisa Lowland during the Holocene.....	35
Florin Gogâltan, Victor Sava War and Warriors during the Late Bronze Age within the Lower Mureş Valley.....	61
Victor Sava, George Pascu Hurezan, Florin Mărginean Late Bronze Age Metal Artifacts Discovered in Şagu, Site “A1_1”, Arad – Timișoara Highway (km 0+19.900 –0+20.620).....	83
Dan Matei Abandoned Forts and their Civilian Reuse in Roman <i>Dacia</i>	109
Silviu Oța Tombs with Jewels in the Byzantine Tradition Discovered on the Present-Day Territory of Romania, North of the Danube (End of the 11 th Century–the 14 th Century).....	123
Luminița Andreica Dental Indicators of Stress and Diet Habits of Individuals Discovered in the Ossuary of the Medieval Church in Tauț (Arad County).....	143
Anca Nițoi, Florin Mărginean, George P. Hurezan Medieval and Early Modern Military Items Discovered in the Village of Tauț (Arad County, Western Romania).....	151
Zsuzsanna Kopeczny, Remus Dincă Tobacco Clay Pipes Discovered in the Historical Center of Timișoara.....	167
Călin Ghemiș, Constantin Iosif Zgardan The Siege of the Fortification in Oradea (1692) reflected on Baroque Medals.....	191
Ana-Maria Gruia Depictions of Smokers on Stove Tiles (17 th –19 th centuries).....	201
Adrian Stoia Graffiti Discovered in the Western Tower of the Church in Cincu.....	209
Abbreviations	219

Abandoned Forts and their Civilian Reuse in Roman *Dacia**

Dan Matei

Abstract: Through its generally well located position – both geographically and for logistics –, through its form and internal planning resembling that one of a city, and through its well made inner constructions, one deserted fort could be attractive for reusing by civilians. Before showing the situation for the *castra* in *Dacia*, we presented some historiographical approaches, some general aspects related to the issue and discussed the legal regime of the deserted forts.

Keywords: *Dacia*, abandoned Roman forts, civilian reuse.

For the beginning

The planimetry and architecture of a Roman permanent fort were mainly aimed at fulfilling practical needs: a rapid mobilization and exit of the troop, its optimal encampment, and, in general, good conditions of soldierly life with everything it involved. These military planimetry and architecture, nevertheless, never developed independently of the civilian ones. Even at the time the province of *Dacia* was founded, Polybios's statements from the 2nd century B.C.: “*the whole camp thus forms a square, and the way in which the streets are laid out and its general arrangement give it the appearance of a town*”¹, were still partially valid. And the ones of L. Aemilius Paulus from the speech he gave before the battle of Pydna (168 B.C.), were no less significant or current in their essence, despite the different times and despite envisaging short-term *castra* and not permanent ones: “*Camp... this abode is a second home for the soldier, its rampart takes the place of city walls and his own tent is the soldier's dwelling and hearthside*”².

Generally placed in areas sheltered from flooding, with easy access to water sources and mandatorily connected to the network of roads, an abandoned Roman fort could continue to ensure good living conditions to civilians that might have used its inner buildings, defensive parts, or open areas. The forts did not lack sacred and aesthetically elements: there were no actual temples³, but they included other types of religious areas; there were no grand works of art, but art was to be found applied on parts of inner architecture. Multiple aspects thus competed in rendering former Roman forts attractive to civilian reuse, no matter how this reuse resulted.

In the following lines we intend to discuss the civilian reuse of forts abandoned by the army in the province of *Dacia*, focusing especially on the reuse of their inner buildings.

Historiographical issues

No special work focusing on the civilian reuse of abandoned forts in *Dacia* is available. The topic has been touched, more or less directly, in synthesis works⁴. On a particular level, the case of the *Colonia Ulpia Traiana Sarmizegetusa* has raised the most interest under this respect, generating an abundant literature (see *infra*).

We have already approached the topic twice, without analyzing it *in extenso*, since in both cases the territory under discussion and the size and balance of those works did not allow it. Both in 2007⁵

* English translation: Ana M. Gruia, Dan Matei.

¹ Polybios, *The histories*, VI, 31.10 (p. 377).

² Livy, *From the founding of the city*, XLIV, xxxix. 3–5 (p. 221, 223).

³ An overview of the issue in Marcu 2007, 83, 98 *sq.*, 101.

⁴ Opreanu 2000; Ardevan 2000.

⁵ Matei 2007, 502, 507 *sq.*

and 2011⁶ we have limited our analysis to certain situations and to formulating certain considerations. Readdressing the topic now, we naturally focused our attention on the results obtained by other historiographies as well. The topic has already made a career in British historiography in particular⁷, where it was tackled with professionalism and deep investigative means. So, the advance of knowledge for the forts in *Britannia* is proportional in this matter.

The development of forts abandoned in the very Roman period and reused in the same interval in various ways has also been knowledgeably tackled in the German literature. In his 1988 famous work on the *vici militares* in *Germania Superior* and *Raetia*, through the case study of the vicus in Zugmantel, C. S. Sommer also approached, and not necessarily in a marginal fashion, the issue of abandoned forts, wondering: “*Wie und wann wurde ein Kastellareal vom Militär freigegeben und eventuell ziviler Nutzung überlassen?*”⁸. A discussion extending over three pages and the year 1988⁹ thus mark the size and year when the topic became consecrated in the German historiography. It became obvious that the author maintained a high level of interest in the matter, as several years later happily “recidivated” in a work entitled *Vom Kastell zur Stadt – Aspekte des Übergangs in Lopodunum/Ladenburg und Arae Flaviae/Rottweil*¹⁰. The subsequent “Roman” development of certain fortifications abandoned by the army has also led to the only synthesis work dedicated so far to the fate of certain forts after they lost their military function. We envisage a focused work signed by M. Luik who discussed cases from the trans-fluvial areas of *Germania Superior* and *Raetia: Kastell Königen und das Ende des Neckarlimes. Zur Frage der nachkastellzeitlichen Nutzung von Kastellen des rechtsrheinischen Limesgebiets*¹¹.

A perspective about the issue

Leaving aside abandoned forts which after a certain time got back their military destination¹² or which, although without a garrisoning troop, further remained in the use of the army as supply bases¹³, there are numerous cases in the Empire in which abandoned forts were reused by the civilians.

The foundation of *colonia* on the surface of some ex-fortifications is attested since 4th–3rd centuries B.C.: about of 340 *Ostia*, in 295 *Minturnae*. Octavianus will found two victory-cities *Nicopolis* (but which will not become *colonia*): one on the surface of a camp near *Actium*, the other on the surface of another camp from *Alexandria* of Egypt – this one in the year 30 B.C.¹⁴.

Temporally advancing in the Principat period, we are informed by ancient literature about the founding of the *Colonia Augusta Praetoria Salassorum* (today Aosta), on the place of an former camp used in the year 25 B.C. in the war against Salassi¹⁵. Also *Colonia Iulia Augusta Taurinorum* (the modern Turin), founded about the same time like the one mentioned before (*i.e.* several years after 25 B.C.), was brought in discussion as originating in a former camp¹⁶. But their military origin is doubted¹⁷, although is the case of the *Colonia Salassorum* the testimony of Strabo is clear.

⁶ See our contribution in Nemeth *et al.* 2011, 44, 46–48, 87.

⁷ Crummy 1977, esp. 90 *sq.*; Crummy 1982; Webster 1988, with contributions. We could not yet consult other studies we are aware of – of which some we suspect to be fundamental – dedicated to the issue by British specialists.

⁸ Sommer 1988, 632.

⁹ Sommer 1988, 632–635, see also 640.

¹⁰ Sommer 1997. We would also like to mention the exhibition and catalogue appropriately entitled: *LOPODVNUM 98. Vom Kastell zur Stadt* (Ausstellung des Landesdenkmalamtes Baden-Württemberg vom 11. Juni bis 27. September 1998 in Ladenburg; B. Rabold/C.S. Sommer, mit Beitr. von H. Galsterer/M. Scholz; Hrsg. von der Stadt Ladenburg und dem Landesdenkmalamtes Baden-Württemberg; Ladenburg/Stuttgart 1998).

¹¹ Luik 2002.

¹² Nuber 1997, 67; Mirković 2002, esp. 757; see also Mócsy 1972, 166 with n. 97 = Mócsy 1992, 158 with n. 97.

¹³ Sommer 1988, 629 and n. 822 with lit.; 634 *sq.* with n. 848 and 852; v. Petrikovits 1979, 242 = v. Petrikovits 1991, 70; Luik 2004, 108, 110; also see Mehl 1986, 266, n. 24.

¹⁴ Keeple 2000, 302 *sq.* with lit.

¹⁵ Strabo, *Geography*, 4.6.7: „and Caesar sent three thousand Romans and founded the city of Augusta in the place where Varro had pitched his camp” (p. 281); see also Cassius Dio, *Roman history*, LIII.25.5 (p. 259); according to Keeple 2000, 303 with n. 18. On the passage of Dio *cf.* Rich 1990, 55, 160.

¹⁶ Keeple 2000, 303 with n. 17 wherer he cites Wheeler 1964, 43. But these one is mentioning there that “...a Roman colony such as Aosta or Turin or Verona was primarily a copybook War Office fortress ameliorated by an urban content” and while for certainly knew the military origin reported by Strabo for *Colonia Salassorum*, he is discussing about them as civilian creations (43 *sq.*, 46) – albeit about the aforesaid colony is specified that “its situation, 50 miles north of Turin near the foot of Mont Blanc, was of a tactical importance reflected in its severe military outline” (43).

¹⁷ Keeple 2000, 303 and n. 19 *sq.* with lit.

There are a few colonies founded under the first emperors on the surface of some legionary abandoned fortress; among them, Colchester, Lincoln or Gloucester¹⁸. Enough of the veterans' colonies of Traianus have been founded in this way. Cited can be *Poetovio*, *Oescus*, *Theveste*, *Ratiaria*, *Thelepte*, maybe *Sarmizegetusa*. "The urban site itself" was in this way assured. With the allotments is another matter. This ones were given from the ex-subsistence territory of the legion (*prata legionis*¹⁹ or the modern largely used term "military territory"²⁰), but, as it could happen not to be always enough, some more was needed to be purchased. As a corollary, the founding of some *colonia* in the perimeter of the former forts meant above all financial saving for the state²¹. And if the more or less from the ex-military structures were reused by the new inhabitants, these could save considerable effort and time in erecting their own dwellings and annexes. L. Keepie thought that the former military barracks would have been reused just temporarily, by the next residents of the city as far the erecting of some appropriate dwellings for a civilian habitation but possible also for the veterans while they erected their farms outside the city²².

Not much time was needed for civilians – including not only the soldiers' families, but also craftsmen/merchants and other people attracted by the military presence – to set around a newly built/still in construction fort, even if it was to have only a short period of use²³. If that fort was located in a province, some of the civilians might have remained after the departure of the troop and thus the existence of the civilian settlement continued; naturally, on a smaller scale in the beginning²⁴. And from here to the extension of that settlement inside the former fort, reusing its buildings or not, was just one step away.

An abandoned fort and the attached civilian settlement were able to optimally perform a future administrative function. It has been noted in the case of centers of *civitates* in *Germania Superior* and *Raetia* established on sites with abandoned forts that the most significant edifices of such centers were built inside the former forts. Thus, it is possible that it was intended to maintain the initial setting of the inhabited area²⁵. Just as it is "...wahrscheinlich, daß im Falle einer Übergabe an eine zivile Siedlung nach Abzug der Truppen das aufgelassene Kastellareal mit geringstmöglichen Veränderungen aufgeteilt und der weiteren Verwendung zugeführt wurde. Vermutlich erstellte man davor eine Art «Flächennutzungsplan»"²⁶.

In *Arae Flaviae*-Rottweil (*Germania Superior*), a former barn of the IIIrd fort was turned into a commercial area after the civilians started to use the area inside the fort²⁷. In the case of *Lopodunum-Ladenburg* (*Germania Superior*), several military buildings inside the fort, if not most or all of them, were pulled down and leveled, but civilian buildings that reused the former precinct wall were revived. Most of the former roads inside the fortification were also kept in use²⁸.

One can cite enough cases of settlements developed inside the perimeter of former forts and that did not become centers of a *civitas*. E.g., in *Grinario-Köngen* (*Germania Superior*), where the former *aedes principiorum* in the *principia* is documented as a place where the imperial cult was celebrated²⁹ and at least one part of the edifice was to probably fulfill an official public function which implied that religious activity. The possibility that the former headquarters' building to function as the local administration seat was taken into consideration³⁰. A space added to *principia* and the introduction of channel heating system in one of the buildings' rooms were highlighted³¹.

¹⁸ For these, Keepie 2000, 302 and n. 8 with lit.; 304–306.

¹⁹ For now, *territorium legionis* is a term with a later occurrence and maybe is not having the same meaning as *prata*; see Mócsy 1972, 133 sq., 155 sq., 165 = Mócsy 1992, 125 sq., 147 sq., 157; Mócsy 1980, 370 sq. = Mócsy 1992, 167 sq.; Mason 1988, 165 sq; cf. MacMullen 1963, 8, n. 21, with the older lit. there.

²⁰ On this very term („Militärterritorium") and its meaning, Wiegels 1989, 71, n. 30; 80–85 with n. 58–63, 66 sq., 71–73, 75; 80 sq. with n. 58 sq; 83, n. 71; 84 sq. with n. 75; all with lit.

²¹ For these, Mann 1983, 60 sq., see also 65.

²² Keepie 2000, 306.

²³ Sommer 1988, 490–493, see also 498, 500, 640.

²⁴ Sommer 1988, 630–632, see also 638 sq.

²⁵ Sommer 1988, 630 sq.; 634 with n. 849. On the latter assertion, a stand in opposition to Luik 2002, 79.

²⁶ Sommer 1997, 516.

²⁷ Sommer 1997, 514, 516.

²⁸ Sommer 1997, 511–514.

²⁹ Luik 2002, 75 sq.

³⁰ Luik 2002, 75.

³¹ Luik 2004, 104; Luik 2002, 75 sq.

In Heidenheim, after the fort was abandoned around 160, its north-western area (*praetentura sinistra*) was leveled, the wooden buildings there were dismantled and the precinct wall and the western gate were also pulled down to varying degrees. Nevertheless, no new constructions were built in this north-western area of the fortification, probably with the exception of a well. This happened though in the south-eastern area of the fort (*retentura dextra*), where the *vicus* extended as well. Research has identified a stone house of the *Striphouse* type, probably a well, and a wooden building whose function remains uncertain, probably part of the above-mentioned *Striphouse* complex³². Civilians used some of the barracks as barns³³.

Few enough appear for now the sure attested cases in which the internal constructions of the abandoned forts were reused by the civilians. More frequently, *Striphouses* were erected, and these had nothing to do with the former military structures³⁴.

In many cases, just the timber from military buildings must have been reused and not the very constructions themselves, which were demolished. It is believed that this was the case in *Lopodunum*³⁵. And in at least some cases, when civilians took over the structures of an abandoned fort, the line of the roads was kept and they remained in use, to varying degrees³⁶.

If in the case of stone buildings, the potential of valorizing the heritage left behind by the military seems very high due to the strength of the building material and the quality of the execution³⁷, buildings made of timber and adobe show obvious limitations under this respect³⁸. So, it must have been impossible to use them for more than several decades without significant repairs³⁹.

On the juridical status of abandoned forts

Ancient authors made no explicit reference to the juridical *status* of abandoned forts that remained inside the Roman territory. Archaeological research seems to clearly document the fact that such fortifications were generally not dismantled/destroyed.⁴⁰ But what was their *status* after being abandoned?

According to A. Mócsy, the area of a former fort could not be bought by private persons, but only employed for public use by civilians. The named specialist invoked the case of the *coloniae* of *Poetovio* and *Oescus*, created on the sites of former legionary fortress, and the erection of an altar for the imperial cult in the province of *Pannonia Inferior* inside the former auxiliary fort in *Gorsium-Tác*. Starting from these examples alone, in 1971, the named author rejected the possibility that private persons might have bought the former surface of forts since such areas must have become private property inside municipal territories⁴¹. Thus, civilian reuse was possible as long as it addressed a community (such as the inhabitants of the two above mentioned *coloniae*) or of state institutions (as was the altar for the imperial cult in the province).

Research performed during the decades since that significant work brought many more examples of known cases inside former forts – and even of inner fort buildings – reused by civilians as a community⁴². It also seems that in several cases they were used by private persons. In connection to this

³² Scholz 2009, 39, 112–114; Scholz 2004, 109, 112–116, Abb. 2, 5, 12 sq.; Scholz 2005, 850–852.

³³ Cichy 1971, 56 sq. *apud* Sommer 1988, 635 with n. 851.

³⁴ Suggestive in this sense is the image depicted from Luik 2002, *passim*, with lit.

³⁵ Sommer 1997, 511.

³⁶ Sommer 1997, 515 sq.

³⁷ Enlightening for the building technique, Shirley 2001, *passim*.

³⁸ On their possible building methods, see informatively, Weber 2002; a complex analysis in Shirley 2001, *passim*.

³⁹ In a certain case, the life period of such a building, but of the Late Roman period, was approximated at around five decades: Wilmott 2005, 133.

⁴⁰ In this sense, *cf.* Sommer 1988, 632–634; Sommer 1997, 511. Unlike this, we are told about fortifications during campaigns, that: “*When the camp is to be broken up...they then set fire to the encampment, both because they can easily construct another [on the spot] and to prevent the enemy from ever making use of it*”: Josephus, *History of the Jewish war against the Romans*, III, v.4 (p. 603); according to H. Schönberger cited by Mócsy 1972, 158, n. 96 = Mócsy 1992, 166, n. 96; see also Sommer 1988, 632 with n. 840.

⁴¹ Mócsy 1972, 166 sq. = Mócsy 1992, 158 sq.; see also Mócsy 1974, 355; related to these, Wiegels 1989, 88, n. 88; see also 74, n. 40. For the problem *cf.* v. Petrikovits 1979, 242 = v. Petrikovits 1991, 70; Mehl 1986, 265, to be consulted in parallel with Wiegels 1989, 77, n. 48; 87, 98.

⁴² See the works indicated at n. 7; Luik 2002. C.S. Sommer’s assertion is of special relevance: “...für praktisch alle Siedlungen rechts des Rheins und nördlich der Alpen einen militärischen Stützpunkt als Ursprung anzunehmen”: Sommer 1988, 489 sq., see also 630, n. 825; 630 sq., 639.

private use, it have been suggested that from a juridical perspective, the issue of “military territory” must be regarded less strictly⁴³. Besides, it was drawn attention that no ancient source is indicating some special juridical regulations for these lands⁴⁴.

A *villa rustica* was built inside the *numerus* fortlet in Neckarburken after it was abandoned around 160 (extending over 0.64 ha. and belonging to the so-called *Odenwaldlimes*, in the trans-Rhenan territory of *Germania Superior*). The main building of the farm reused the former *principia* and extended beyond the precinct of the fortification⁴⁵. Cases in which *villae rusticae* were established inside former forts can additionally be mentioned for *Germania Superior* and *Raetia*⁴⁶, as for example in Seckmauern⁴⁷.

At *Burnum (Dalmatia)*, the *prata*⁴⁸ of *IV Flavia* legion stationed here became after the troops’ departure imperial estate (*saltus*)⁴⁹, being under the supervision of the *procurator Augusti*⁵⁰. Through a *conductor*, the procurator could lease parts from the former *prata legionis* to private persons⁵¹, but these cannot buy them⁵². What happened with the perimeter of the now abandoned fortress? Did it shared the same juridical condition as *prata*? Missing some additional data, we can only speculate.

A case which for now seems to be special is recorded at Walheim (*Germania Superior*). Here, the perimeter of a settlement born in the perimeter of the former fort II appears in one inscription as *solum Caesaris*⁵³. A pregnant reserve was manifested by the equalization of these *solum Caesaris* with an imperial estate⁵⁴, being in exchange regarded as a land excluded from the private use or from the use and administration of some autonomous/quasi-autonomous communities. It would have been under the supervision of a central authority, maybe the provincial administration or the one of the imperial’s estates, maybe through the army⁵⁵. It was considered that in the *vicus* under discussion, craftsmen have been settled, possibly who come from other areas⁵⁶.

As we can see, the few direct evidence we dispose at the moment appear as partially contradictory. The inscriptions seem to indicate that after the troops’ departure, their ex-forts (Walheim) or at least their ex-*prata* (*Burnum*), became *solum Caesaris* respectively *saltus*; in both cases the emperor appear as a “owner”. On the other hand, archaeological researches attested *villae rusticae* developed in some forts’ perimeters, which seems to belong to some private individuals. Of course, terrain from imperial estates could be leased to private persons, but could these one also built their farms on the leased surface?

⁴³ Sommer 1988, 634 sq.

⁴⁴ Vittinghoff 1974, 112 sq., 124 = Vittinghoff 1994, 127, 138; on the issue see also Wiegels 1989, 74 sq. and n. 39–41 (with supplementary lit.); who is pronouncing without reserves for the idea advanced by F. Vittinghoff (76, see also sq. with n. 49).

⁴⁵ Reutti 1980, 149, Abb. 95 sq.; Schallmayer 2010, 136 sq., with a figure showing how it may have looked on the bottom of p. 57; Baatz 2000, 205 and Abb. 110.

⁴⁶ Sommer 1988, 629 and n. 820 sq. with lit.; Luik 2002, 79.

⁴⁷ Schallmayer 2010, 77.

⁴⁸ CIL III 13250 = ILS 5968 (Vedro Polje, today in Sisačko-moslavačka county, Croatia): [TERMINI P]O[S(iti) INTER P]RA / TA LEG(ionis) [E]T FINES / ROBORETI FLA(vi) / MARC(iani) PER AUGU / STIANUM BELLI / C(i?)UM PROC(uratorem) / AUG(usti). The inscription is to be dated according to the *cursus honorum* of the procurator towards the reign of Traianus or in its first years: Devijver 1976, C 122 (after year 88 another procuratorial mission is next and then the one mentioned in our text); Mason 1988, 164, is dating it about the year 100.

⁴⁹ Already Schulten 1894, 491; esp. Vittinghoff 1974, 114 sq. = Vittinghoff 1994, 128 sq.; followed by Wiegels 1989, 82 sq. with n. 69; 90 with n. 92; but with reticence, Bérard 1992, 83: “...mais on connaît trop mal le sort dévolu aux camps légionnaires après leur évacuation pour être totalement affirmatif, notamment sur ce dernier point : rien n’empêche après tout que la IIII Flavia ait conservé, après son transfert en Mésie, un dépôt, ou du moins la responsabilité du camp de Burnum”.

⁵⁰ Wilkes 1969, 99, 105, 218, 392, 459.

⁵¹ Wilkes 1969, 392.

⁵² Mócsy 1972, 154 = Mócsy 1992, 146.

⁵³ Mehl 1986, 264 = AÉ 1987, 783; text revised by Wiegels 1989, 62–70: – – – / [SUL]PICIUS VE[PA / NUS ?] vel VE[IA / NUS ?] vel VE[RI / NUS ?] ET SULPICIA / PERVINC[A] COIUX / TES(stamento) AEDE[M I]N SOLO / CAESARIS POSU / ERUNT FUSC[I]ANO / ET [SI]LANO II CO(n)S(ulibus) / (ante diem tertium) K(alendas) APRILES / L(aeti) L(ibens) M(erito); subsequently, in the first three kept lines, changes have been operated, resulting: [SULP]ICIA VEPA / [NA ?] ET SULPICIA / PERVINC[A] F(ilia ?) D(e) S(uo) / etc.

After *consules*, the monument is precisely datable: March 30 of the year 188. On the discovery point and its position within the ancient Walheim settlement: Mehl 1986, 259 with n. 1, 3; 261; Wiegels 1989, 85 sq. with n. 79–84; 99 with n. 121.

⁵⁴ Wiegels 1989, 90–97, esp. 97; for a *saltus*, Körtum, Lauber 1999, 359.

⁵⁵ Wiegels 1989, 97 sq.

⁵⁶ Wiegels 1989, 99 sq., 102 with lit.; see also 85 sq. with n. 80–82.

Civilian reuses of abandoned forts in Dacia

In *Dacia*, there is little documentation on civilian reuses of abandoned forts. The following cases have been documented:

The briefly researched fort near the city of Sighișoara, on the site called “Podmoale”/“Burgstadl”, provides for *Dacia* at the present state of research the most consistent proof of civilian re-inhabitation of the perimeter of an abandoned fort. Civilian beneficiaries could reuse an area of ca. (~)140 × (+)178 × (~)130 × (+)182 m⁵⁷, thus more than 2.43 ha. The civilian settlement there seems to have been significant since – despite the fact that just a few archaeological trenches were excavated there – traces of the settlement seem to extend over most of the area of the former fortification, except for its northern corner⁵⁸. Buildings, pits, and leveling works belonging to the civilian settlement were identified in the area of the *via sagularis* and the area of the defensive elements of the former fort: *vallum*, berma, and the two *fossa*⁵⁹, since the fort was not provided with a stone surrounding wall⁶⁰. Only a few details are available on these evidences of habitation. One knows that a dwelling was located over a section of the rampart that was leveled for the purpose on the south-western side and that a coin minted in 200 was discovered there⁶¹. A complex, identified as probably a pottery kiln, was discovered on the same side and it included a little-used coin minted in 161⁶². On the basis of the results of excavations performed on the site, specialists have hypothesized that the civilian settlement was denser in the southern and eastern areas of the fortification⁶³, but this observation might be only due to the limited research available. It is very probable that some of the building uncovered during 19th-century researches belonged to the civilian settlement developed inside the fort. Those buildings, (also) of stone, might have been given domestic use, while a larger building – since a column base, measuring almost 1 m in diameter, made of local sandstone, was discovered inside – was deemed as a possible temple⁶⁴.

The above mentioned coin of 161 can be a good *terminus post quem* for the civilians settling inside the former fortification⁶⁵, though this might have happened somehow earlier than this unique numismatic proof indicates. Further on, life seems to have continued there until late in the 3rd century⁶⁶ and probably during the subsequent century as well.

Older and more recent excavations make no reference to former military buildings reused by civilians. Even if such buildings were made of wood and brick and roof tiles seem to have been used just in a few cases⁶⁷ – and thus the buildings were short-lived – this fort provides real possibilities for future research to identify how this took place. Because it seems impossible that at least in some cases, buildings in good state were not taken over by civilians.

The issue of whether the future *Colonia Ulpia Traiana Sarmizegetusa* developed or not from the structures of a camp of the *IV Flavia Felix* legion has gained obsessive accents in archaeological literature, continued and developed even to hilarity⁶⁸. The discussion yet lacks strong arguments that would settle the issue one way or another.

⁵⁷ Mitrofan, Moldovan 1968, 104, fig. 1.

⁵⁸ Mitrofan, Moldovan 1968, 100 and n. 10, 104, 106. One regrets that in their brief contribution, the authors made little reference to the civilian settlement (see Mitrofan, Moldovan 1968, 100 and n. 11; 106, n. 39), since the issue was never taken up again. We are not aware of the current location of the documentation prepared on that occasion; a more recently published work only include a few mentions of a single building. It was – as one can deduce – a stone building, completely uncovered, located on top of one of the fortification’s ditches on the north-eastern side and it included two rooms: one rectangular in shape, measuring 10–12 × 6.5 m; and an apse towards the east-north-east, measuring 6.5 × 4 m (Baltag 2000, 116 sq. fig. 33; according to data provided by I. Mitrofan).

⁵⁹ Mitrofan, Moldovan 1968, 100, n. 16; 103; 105, n. 35.

⁶⁰ Mitrofan, Moldovan 1968, 104.

⁶¹ Mitrofan, Moldovan 1968, 103 with n. 25.

⁶² Mitrofan, Moldovan 1968, 103 with n. 23 sq.; 106 with n. 41.

⁶³ Mitrofan, Moldovan 1968, 106, n. 43.

⁶⁴ For such issues, Baltag 2000, 116, see also 114.

⁶⁵ Like this, in Mitrofan, Moldovan 1968, 106, 108 with n. 52 sq. The authors considered the possibility that the fortification was abandoned during the interval of 167–170 when the defense of the province proved difficult, or shortly before.

⁶⁶ Horedt 1958, 38, n. 41.

⁶⁷ As modern excavations seem to indicate: Mitrofan, Moldovan 1968, 106 and n. 38, though they did not touch the inner surface of the fort too much.

⁶⁸ An overview of the debates until then: Piso 2006, 37–39; henceforth Piso 2008, 319–322; see also Ardevan 2000, 97–99 (among the *pro* stands, significant exemplifications in Löbuscher 2002, 91, 98 sq.; Strobel 2006, 107, n. 9; 108 sq.; and Opreanu 2006, 61–69); subsequent interventions on the discussion in Opreanu 2008, 228–232; Opreanu 2010, 40–55.

On the wooden phase of the first forum of the *colonia* (the so-called *forum vetus*), it has been argued that it initially functioned as the *principia* of the presumed camp. Though accredited by solid archaeological arguments and complementarily supported by a historical logical argumentation that nobody can dispute, the idea of a *principia* was regarded with caution by the very archaeologists who performed the most modern and intense excavations that the site ever knew⁶⁹. They admit the possible existence of a camp only after the end of the second Dacian-Roman War (106) and believe it might have functioned until the *colonia* was established in 109 or soon afterwards⁷⁰. On the other hand, it has been realistically noted that “it may well be to much to ask from an archeological excavation to identify such a change of ownership, especially if there were no major alterations to the original plan of public buildings. If on the next day colonists took over military headquarters which could be re-used as a forum, such a change would be extremely difficult to identify through excavation”⁷¹.

Convergent evidence is thus required in support of the existence of a camp. On a complex of buildings contemporary to the wooden phase of the *forum vetus* and identified south of that construction, it has been initially believed that it might have also been the *praetorium* of the camp, even if more credit was given to an *insula*⁷². Later on, only the civilian version was retained⁷³. The statement was nevertheless disputed on the basis of a planimetric analogy from the British legionary fortress in Inchtuthill; a residential edifice for the use of the tribune being compared to some of the buildings part of the complex in *Sarmizegetusa*⁷⁴. Despite this analogy, the issue of this complex remains unsettled as well; at this point, it cannot offer the required strong proofs.

It seems that the fort in Vărădia “Pustă”/“Rovină” ceased to function after a general fire⁷⁵, either a willful act of the Roman soldiers or the consequence of an enemy siege⁷⁶. The only stone structures of the fort identified so far are the precinct wall and some of the headquarters’ building (without *armamentaria*). Considering the fact that the wooden structures researched so far: those belonging to the curtain wall, gates, towers, and military barracks (*contubernia*) or the *principia* were affected by the fire⁷⁷, it may well be that all wooden structures burned down.

In these conditions, it was possible to reuse the fort’s inner buildings only to a lesser degree. But until now, the few archaeological researches did not lead to the identification of any certain case. One coin, believed to have been minted in the 3rd century⁷⁸, if this determination is correct, represent too untrustworthy an argument⁷⁹ even for emitting preliminary statements on the issue.

After the fortress in *Bersobis-Berzovia* was very probably abandoned at the beginning of Hadrianus’s reign, its surface seems to have been reused by the civilians⁸⁰. For the time being, one does not know to what degree they reused the very former military buildings, since archaeological excavations on the site were rather restricted and discontinuous, and do not provide relevant data. Civilians must have favored stone buildings: the edifice of the headquarters and other buildings, just

⁶⁹ Étienne *et al.* 2004, 70, 72–94; Diaconescu 2004, 89–103; Piso 2006, 37–39, 318 *sq.*; Étienne *et al.* 2006, 65–79.

⁷⁰ Étienne *et al.* 2004, 87 *sq.*; Diaconescu 2004, 97; Piso 2006, 39, 318 *sq.*; Étienne *et al.* 2006, 73 *sq.*; see also before Piso/Diaconescu 1997. This possibility no longer features in Diaconescu 2010; *cf.* Diaconescu 2008, 61 *sq.*, 67 *sq.*, 71.

⁷¹ Diaconescu 2004, 97.

⁷² Piso, Roman 2001, 215.

⁷³ Étienne *et al.* 2004, 64 with n. 13; 90 *sq.* with n. 64; Diaconescu 2004, 97–99, fig. 4.6; Étienne *et al.* 2006, 48 with n. 7; 75 *sq.* with n. 62.

⁷⁴ Opreanu 2006, 67; Opreanu 2008, 228 *sq.*

⁷⁵ Florescu 1934, 72.

⁷⁶ In this sense and suggesting a possible burning of the fort during the Roman-Yazig war of 117–118: Nemeth, Bozu 2005, 206; Nemeth 2005a, 691.

⁷⁷ Milleker 1906, 258, 261 *sq.* (also here we would like to thank our colleague Al. Berzovan, for making this work available to us, together with one translation); Nemeth, Bozu 2005, 202–204, 206; Nemeth 2005a, 689–691.

⁷⁸ The coin was discovered in the north-western corner of the fortification during B. Milleker’s research of 1901 and 1902; it seems not to have been found inside the very fort, but inside the *fossa*: “De a sântesteben, 2 mnyre az árok északnyugati végéhez egy 2 m. vastag sávot kereszteltünk, mely vörösrre égetett földből állott. Itt, és pedig 0.4 mnyre a falrészlet felett, fordult elő egy nagy, világos bronzból vert érem a harmadik századból (o.u.: one third-century light-color bronze coin)”: Milleker 1906, 257 *sq.* The lack of a more precise identification made specialists caution in accepting its historical value: Nemeth, Bozu 2005, 206; Nemeth 2006, 478, n. 8.

⁷⁹ Other two coins dated to the IIIrd century are mentioned as discoveries during the recent research: Bozu 1999, 128 (or at <http://www.cimec.ro/scripts/arh/cronica/detaliu.asp?k=1735>). About them, the author of the discoveries kindly informed us – and we thank him for it – that initially they were erroneously identified.

⁸⁰ Protase 1967, 50 = Protase 1995, 99; Protase 2010, 42 = Protase 2011, 228.

partially identified so far⁸¹. At least some of these stone buildings were affected by the fire, with their perishable components burning down⁸², but maybe the entire fortress was affected by a general fire. In such conditions, civilians had to perform certain repair and adaptation works if they wanted to use the military buildings.

One knows for certain that at least the open areas of the former fortress were envisaged by civilians. A dug-out dwelling was set in the inner part of the *vallum* on the northern side of the fortress, in its eastern third. The filling of this dwelling revealed pottery fragments, two iron keys, and a bronze coin minted under the rule of emperor Nero, but no other details have been published⁸³.

A large wooden fortification is located between Turnu-Severin and the village of Schela Cladovei: 650 × 576 m⁸⁴. Though specialists have presumed that it was only a temporary one, possibly erected in the time of Trajan's wars⁸⁵, or even during Domitian's wars,⁸⁶ we believe that it might have been in use for a longer period. The numerous traces of Roman walls and a water tank supplied through a subterranean pipe⁸⁷ might be indicators for such a prolonged use. The civilian settlement identified in the vicinity⁸⁸ seems to support this hypothesis as well. It is nevertheless believed that this civilian settlement was only established after the fortification was abandoned and might have extended inside the fort, as was the case in *Bersobis*⁸⁹. Thus, it might well be that the stone structures identified on this site rather belong to the civilian settlement. No matter when the civilian settlement was established (during the time the fortification was still in use or after it was abandoned), we believe it is very probable that civilians reused the buildings inside the fortification.

At *Samum*-Cășeiu, one early fort was flooded at some time by the river Someș and abandoned. On its site, the *vicus* of the other fort erected near by is attested⁹⁰, but we ignore if the former military constructions here were in a condition permitting their reuse by the *vicani*.

The timber-and-earth fort located in the place called "Rovină"/ "Progadie" near Surducul Mare (*Centum Putea* ?), is measuring 132 × 128 m (almost 1,7 ha) and was also very probably abandoned at the beginning of Hadrianus' reign⁹¹. It was scarcely researched. One wood (and probably adobe) barrack was documented as being burnt, another barrack and a construction with unknown functionality, these one too of wood (and adobe), showed signs of sharing the same destiny. The fact that these constructions were situated at a longer or short distance each other, and the fact that also in other parts of the fort, burnt adobe and coal was highlighted by the researches⁹², allow us to suggest with caution that a generalised fire affected the fort. Taking into consideration that no stone structure was revealed till now, the possibility of reusing the ex-military structures must have been quite reduced. Any clue is missing so far.

Archaeological research on the area of the *municipium Aurelium Apulense*, later on *colonia Aurelia Apulense*, in the area of "Partoș", is only at its beginning, with proportional results⁹³. It has been argued that the colonist *vicus* from which the future *municipium* developed might have reused a former timber-and-earth fortification of the *I Adiutrix* legion that was supposed to have stationed here between 105/106 and 114/119⁹⁴. The hypothetical existence of the fortification was approved⁹⁵, received with

⁸¹ Bozu, Rancu 2003, 161–163; Medeleț, Petrovsky 1974, 134. At the present state of research, we do not know how many of the noted stone structure still stood at the time the soldiers left the fortress; some of them, located on the eastern third and *latera praetorii*, had been demolished before: Moga 1971, 54, 57; see also Medeleț, Petrovsky 1974, 135.

⁸² Protase 2010, 42, also 37–40 = Protase 2011, 228 and 218, 220 *sq.*, 222; Moga 1971, 57; Medeleț, Petrovsky 1974, 134 *sq.* and n. 5.

⁸³ Protase 2010, 35 *sq.*, pl. 5 (with an erroneous numbering of the profile's meters) = Protase 2011, 214.

⁸⁴ Tudor 1978, 300 *sq.*, n. 44, fig. 39.1, 2; Petolescu 2007, fig. 1–3.

⁸⁵ Tudor 1978, 301.

⁸⁶ During Cornelius Fuscus's north-Danubian campaign in 87: Petolescu 2000, 77, see also 125; Petolescu 2007, 39 (*addendum*); Petolescu 2010, 103, see also 137.

⁸⁷ Tudor 1978, 301.

⁸⁸ According to a piece of information provided by M. Davidescu, Tudor 1978, 301.

⁸⁹ Petolescu 1980, 106; Petolescu 2007, 37.

⁹⁰ Esp.: <http://www.cimec.ro/scripts/ARH/Cronica/detalii.asp?k=922>; Isac 2003, 40, see also 32.

⁹¹ Protase 1967, 67 = Protase 1995, 107, 114 *sq.*; Protase 1975, 348 = Protase 1995, 243.

⁹² Protase 1975, 347 *sq.* = Protase 1995, 241 *sq.*

⁹³ Diaconescu, Piso 1993, 67–70; Diaconescu *et al.* 1997, 1; Bogdan-Cătănicu 2000, 119.

⁹⁴ Opreanu 1999, esp. 573–575; Opreanu 1998, esp. 124–127, 132; Opreanu 2000b, esp. 82.

⁹⁵ Benea 1999, 40–48 (with the hypothesis that *legio XIII Gemina* was camped simultaneously in the fort until 107/108; this was done for tactical reasons, but also because the fortified surface seems to large for a single legion; subsequently, the *XIII* legion was to built her own fortress on the site called "Cetate"); Strobel 2006, 109 *sq.*

caution⁹⁶, or fully rejected⁹⁷. If this will prove correct, one still has to clarify if, how much, and in what way did the colonists reuse the old military buildings.

Some final words now, depicted from the general image we illustrated on the civilian reusing of the abandoned *castra* in Dacia. A legionary camp in *Sarmizegetusa* on the site of the future *colonia* is not yet clear proved and one fortification on the site of the future *Municipium Aurelium Apulense* remains a hypothesis. So, for now they cannot be invoked in the discussion. Then, leaving aside the march-camps from the Dacian-Roman Wars which were of a short life, we observe that forts which were abandoned still in provinces' time are not quite few: Sighișoara, Schela Cladovei, Vărădia, Surducul Mare, *Bersobis*, *Samum* (early fort). Of their number, the surface of more than half was further inhabited by a civilian population. But the amount of archaeological information on these forts is so reduced, that any reusing of their former military inner constructions remains a probability or just a possibility (in some cases), to be confirmed. Concerning Vărădia, Surducul Mare and *Bersobis*, abandoned very probably sometime at the beginning of Hadrianus' reign⁹⁸, we don't know yet if the territory in which they were situated was still a provincial one, *stricto sensu*, after this date. Of course, this territory continued to be supervised, but it is questionable if *provincial* population continued to live there.

Dan Matei

Babeș-Bolyai" University Cluj-Napoca
Cluj-Napoca, RO
danmatei_mail@yahoo.com

BIBLIOGRAPHY

- Dio Cassius, *Roman history* Dio Cassius, *Dio's Roman history*, with an English translation by E. Cary on the basis of the version of H. B. Foster, in nine volumes. The Loeb Classical Library, vol. VI. London/New York 1917.
- Josephus, *History of the Jewish* Josephus, *History of the Jewish war against the Romans: Josephus* (with an English translation in nine volumes), *History of the Jewish war against the Romans*; vol. II, books I-III, with an English translation by H. St. J. Thackeray. The Loeb Classical Library. Cambridge, Massachusetts/London 1956; first printed 1927.
- Livy, *From the founding of the city* Livy, *From the founding of the city: T. Livi* (with an English translation in fourteen volumes), *Ab Urbe condita/From the founding of the city*; vol. XIII, books XLIII-XLV, translated by A. C. Schlesinger. The Loeb Classical Library. London/Cambridge, Massachusetts 1952.
- Polybius, *The histories* Polybius, *The histories: Polybius, The histories*; vol. III, Books 5–8 (2nd ed.), translated by W. R. Patton, revised by F. W. Walbank/C. Habicht. Loeb Classical Library 138, Harvard University Press. Cambridge, Massachusetts/London 2011.
- Strabo, *Geography* Strabo, *The Geography of Strabo* (in eight volumes); vol. II, with an English translation by H. L. Jones. The Loeb Classical Library. London/New York 1923.

⁹⁶ Bogdan-Cătănicu 2000, 116–121, 127 (the author also advanced the supposition that this fortification was located near the site called "Izvorul Împăratului" ("The Emperor's Spring": Bogdan-Cătănicu 2000, 1209)); Bogdan-Cătănicu 2007, 89 sq., 75; Ardevan 2000, 99–101.

⁹⁷ Piso 2000, 205 sq. = Piso 2005, 402 sq.; Diaconescu 2004, 109–113; Piso 2008, 304, 306; also invoking the passage from Suetonius, *The lives of the Caesars*, VIII, Domitian, 7.3: "*Geminari legionum castra prohibuit...*" ("*He prohibited the joining of the camps of separate legions...*") (p. 165). The excerpt in question might also refer to actual double *castra* – in this sense, Strobel 2006, 109, n. 20 – such as the one in *Castra Vetera* – Xanten; on the issue see also Benea 1999, 42 sq.).

⁹⁸ Protase 1967, 67 sq. = Protase 1995, 114–116. The hypothesis was until recently regarded with caution, last time by Nemeth 2001, 415; today being accepted: Nemeth 2005b, 49 sq., 81, 88; Nemeth 2006; Nemeth 2009, 882, 886; Visy 2009, 115 sq., 121, 123.

- Suetonius, *The lives of the Caesars* Suetonius, *The lives of the Caesars*: C. Suetoni Tranquilli, *The lives of the Caesars / De vita Caesarum, libri VII-VIII. Galba. Otho. Vitellius. Divus Vespasianus. Divus Titus. Domitianus*; with introduction, translation and commentary by G. W. Mooney. London/New York/Toronto/Dublin 1930.
- Ardevan 2000 R. Ardevan, *Römisches Heer und Städtegründung – der Fall Dakien*. In: H. Ciugudean, V. Moga (Eds.), *Army and urban development in the Danubian provinces of the Roman Empire. Proceedings of the international symposium – Alba Iulia, 8th–10th October 1999*. Bibliotheca Musei Apulensis XV. Alba Iulia 2000, 91–108.
- Baatz 2000 D. Baatz, *Der römische Limes. Archäologische Ausflüge zwischen Rhein und Donau*⁴. Berlin 2000.
- Baltag 2000 Gh. Baltag, *Sighișoara înainte de Sighișoara. Elemente de demografie și habitat în bazinul mijlociu al Târnavei Mari din preistorie până în sec. al XIII-lea, cu privire specială asupra zonei municipiului Sighișoara*. București 2000.
- Benea 1999 D. Benea, *Evoluția istorică a așezării civile de la Apulum*. In: D. Protase, D. Brudașcu (coord.), *Napoca. 1880 de ani de la începutul vieții urbane*. Cluj-Napoca 1999, 40–54.
- Bérard 1992 F. Bérard, *Territorium legionis: camps militaires et agglomérations civiles aux premiers siècles de l'empire*. Cahiers du Centre Gustave Glotz 3, 1992, 75–105.
- Bogdan-Cătăniciu 2000 I. Bogdan-Cătăniciu, *Territoire civil et militaire a Apulum*. In: H. Ciugudean, V. Moga (Eds.), *Army and urban development in the Danubian provinces of the Roman Empire. Proceedings of the international symposium – Alba Iulia, 8th–10th October 1999*. Bibliotheca Musei Apulensis XV. Alba Iulia 2000, 109–139.
- Bogdan-Cătăniciu 2007 I. Bogdan-Cătăniciu, *Daci și romani. Aculturație în Dacia* Cluj-Napoca 2007.
- Bozu 1999 O. Bozu, No. 160. Vărădia – „Pustă” și „Dealul Chilii”, jud. Caraș-Severin. In: C. Stoica (red.), *Cronica cercetărilor arheologice din România. Campania 1998. A XXXIII-a sesiune națională de rapoarte arheologice (Vaslui, 30 iunie – 4 iulie 1999)*. București, 1999, 127 sq.
- Bozu, Rancu 2003 O. Bozu, D. Rancu, Săpăturile arheologice de salvare din cadrul proiectului „Alimentare cu apă Berzovia”, comuna Berzovia, județul Caraș-Severin. *Banatica* 17, 2003, 159–200.
- Cichy 1971 B. Cichy, *Das römische Heidenheim*, Heidenheim 1971.
- Ciugudean, Moga 2000 H. Ciugudean, V. Moga (Eds.), *Army and urban development in the Danubian provinces of the Roman Empire. Proceedings of the international symposium – Alba Iulia, 8th–10th October 1999*. Bibliotheca Musei Apulensis XV. Alba Iulia 2000.
- Crummy 1977 P. Crummy, Colchester: The Roman fortress and the development of the colonia. *Britannia* 8, 1977, 65–105.
- Crummy 1982 P. Crummy, The origins of some major Romano-British towns. *Britannia* 13, 1982, 125–134.
- Devijver 1976, 1977 H. Devijver, *Prosopographia militiarum equestrium quae fuerunt ab Augusto ad Gallienum. Pars prima. Litterae A-I* (1976); *Pars secunda. Litterae L-V. Ignoti-Incerti* (1977). Symbolae Facultatis Litterarum et Philosophiae Lovaniensis, Series A/Vol. 3. Leuven, 1976, 1976.
- Diaconescu 2004 Al. Diaconescu, *The towns of Roman Dacia: an overview of recent archeological research*. In: W.S. Hanson, I.P. Haynes (Eds.), *Roman Dacia. The making of a provincial society*. Journal of Roman Archeology, Supplementary Series, 56. Portsmouth, Rhode Island 2004, 87–141.
- Diaconescu 2008 Al. Diaconescu, *A case of Hellenistic influence on Roman architecture. Military headquarters and civilian forums*. EN 18, 2008, 57–73.
- Diaconescu 2010 Al. Diaconescu, *Forurile Sarmizegetusei. O plimbare imaginară prin centrul politico-administrativ al micii Rome de la poalele Retezatului*. Cluj-Napoca 2010.
- Diaconescu, Piso 1993 Al. Diaconescu, I. Piso, Apulum. In: D. Alicu, H. Boegli, en. coll. avec C. Ardos, M. Bărbulescu, A. Paki, A. Rusu, V. Rey-Vodoz (Eds.), *La politique éditiale dans les provinces de l'Empire Romain (II^{ème} – IV^{ème} siècles après J.C.)*. Actes du 1^{er} colloque roumano-suisse, Deva 21–26 Octobre 1991. Cluj-Napoca 1993, 67–82.

- Diaconescu *et al.* 1997 Al. Diaconescu, I. Piso, V. Bolindeț Rusu, V. Bărbuță, No. 1. Alba Iulia, jud. Alba; „Partoș”. In: C. Stoica (ed.), *Cronica cercetărilor arheologice 1983–1992. A XXXI-a sesiune națională de rapoarte arheologice, București, 12–15 iunie 1997*. București 1997, 1 sq.
- Étienne *et al.* 2004 R. Étienne, I. Piso, A. Diaconescu, *Les fouilles du forum vetus de Sarmizegetusa. Rapport général*. AMN 39–40/1, 2002–2003 (2004), 59–154.
- Étienne *et al.* 2006 R. Étienne, I. Piso, A. Diaconescu, *Cap. „Rapport archéologique”*. In: I. Piso (sous la direction), *Le forum vetus de Sarmizegetusa*. I (l'archéologie par R. Étienne, I. Piso, A. Diaconescu; l'épigraphie par I. Piso). Colonia Dacica Sarmizegetusa I. București 2006, 41–210.
- Florescu 1934 Gr. Florescu, *Le camp romain de Arcidava (Vărădia). Fouilles de 1932*. Istros 1, 1934, 60–72.
- Horedt 1958 K. Horedt, *Circulația monetară din Transilvania între 276–450 e. n.* In: K. Horedt, *Contribuții la istoria Transilvaniei în secolele IV–XIII*. Biblioteca istorică VII. București 1958.
- I diritti *Atti del convegno internazionale sul tema: I diritti locali nelle province romane con particolare riguardo alle condizioni giuridiche del suolo (Roma, 26–28 ottobre 1971)*. Roma = *Accademia nazionale dei lincei*, anno 371, 1974, Q. 194.
- Isac 2003 D. Isac, *Castrul roman de la Samum-Cășeu/The Roman auxiliary fort Samum-Cășeu*. Handbook of archeological monuments from Dacia Porolissensis 9. Cluj-Napoca 2003.
- Keepie 2000 L. Keepie, *From legionary fortress to military colony: veterans on the Roman frontiers*. In: *Legions and veterans. Roman army papers, 1971–2000*. Mavors, Roman army researches, vol. 12. Stuttgart 2000, 301–316.
- Körtum, Lauber 1999 K. Körtum, J. Lauber, *Das Kastell II von Walheim, Kr. Ludwigsburg (Baden-Württemberg). Zur Innenbebauung und Funktion umwehrter Lagerareale*. Limes 17 Zalău 1997. Zalău 1999, 353–364.
- Limes 18 Amman 2000 (2002) P. Freeman, J. Bennett, Z. T. Fiema, B. Hoffmann (Eds.), *Limes XVIII. Proceedings of the XVIIIth International Congress of Roman Frontier Studies held in Amman, Jordan (September 2000)*. BAR I. S. 1084, 1085 (I, II). Oxford 2002.
- Limes 19 Pécs 2003 (2005) Zs. Visy (Eds.), *Limes XIX. Proceedings of the XIXth International Congress of Roman Frontier Studies held in Pécs, Hungary, September 2003*. Pécs 2005.
- Löbuscher 2002 Th. Löbuscher, *Neue Untersuchungen zur Umwehrung und Stadtentwicklung von Sarmizegetusa*. Arch. Korrb. 32, 2002, 91–100.
- Luik 2002 M. Luik, *Kastell Köngen und das Ende des Neckarlimes. Zur Frage der nachkastellzeitlichen Nutzung von Kastellen des rechtsrheinischen Limesgebiets*. In: L. Wamser, B. Steidl (Hrsg.), *Neue Forschungen zur römischen Besiedlung zwischen Oberrhein und Enns. Kolloquium Rosenheim 14.–16. Juni 2000*. Schriftenreihe der Archäologischen Staatssammlung München, Bd. 3. Stuttgart 2002, 75–82.
- Luik 2004 M. Luik, *Köngen-Grinario II. Grabungen des Landesdenkmalamtes Baden-Württemberg. Historisch-archäologische Auswertung*. Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Württemberg, Bd. 82. Stuttgart 2004.
- MacMullen 1963 R. MacMullen, *Soldier and civilian in the Later Roman Empire*. Harvard Historical Monographs LII. Cambridge, Massachusetts 1963.
- Mann 1983 J. C. Mann, *Legionary recruitment and veteran settlement during the Principate*. Occasional Publication No. 7. London 1983.
- Marcu 2007 F. Marcu, *Places of worships in forts*. AMN 41–42/I, 2004–2005 (2007), 75–105.
- Mason 1988 D. J. P. Mason, „Prata legionis“ in Britain. *Britannia* 19, 1988, 163–189.
- Matei 2007 D. Matei, *Considerații asupra vieții în castrele Daciei intracarpatică după părăsirea lor de către trupe*. In: S. Nemeti, F. Fodorean, E. Nemeth, S. Cociș, I. Nemeti, M. Pișlaru (Eds.), *Dacia Felix. Studia Michaeli Bărbulescu oblata*. Cluj-Napoca 2007, 500–509.
- Medeleț, Petrovszky 1974 F. Medeleț, R. Petrovszky, *Cercetări arheologice în castrul de la Berzovia (jud. Caraș-Severin)*. *Tibiscus* 3, 1974, 133–136.

- Mehl 1986 A. Mehl, *Eine private Weihung auf kaiserlichem Boden in Walheim am Neckar*. FBW 11, 1986, 259–267.
- Milleker 1906 B. Milleker, *Délmagyarország régiségleletei a honfoglalás előtti időkből*. III. Temesvár (Timișoara) 1906.
- Mirković 2002 M. Mirković, *Deserted forts – the Moesian limes after the conquest of Dacia*. In: *Limes 18 Amman 2000* (2002), vol. II, 757–763.
- Mitrofan, Moldovan 1968 I. Mitrofan, Gh. Moldovan, *Castrul roman de la Sighișoara*. AMN 5, 1968, 99–109.
- Mócsy 1972 A. Mócsy, *Das Problem der militärischen Territorien im Donauraum*. Acta Archaeologica Academiae Scientiarum Hungaricae 20, 1972, 133–168.
- Mócsy 1974 A. Mócsy, *Il problema delle condizioni del suolo attribuito alle unità militari nelle province danubiane*. In: *I diritti*, 345–355.
- Mócsy 1980 A. Mócsy, *Zu den Auxiliarvici in Pannonien*. In: W. Eck, H. Galsterer, H. Wolff (Hrsg.), *Studien zur antiken Sozialgeschichte*. Festschrift Friedrich Vittinghoff. Kölner historische Abhandlungen, Bd. 28. Köln/Wien 1980, 365–376.
- Mócsy 1992 A. Mócsy, *Pannonien und das römische Heer*. *Ausgewählte Aufsätze*. MAVORS. Roman Army Researches, vol. VII. Stuttgart 1992.
- Moga 1971 M. Moga, *Castrul Tibiscum*. Tibiscus 1, 1970 (1971), 51–58.
- Nemeth 2001 E. Nemeth, *Granița de sud-vest a Daciei romane. Probleme actuale*. In: E. Iaroslavschi, V. Crișan, G. Florea, G. Gheorghiu, L. Suciuc (Eds.), *Studii de istorie antică*. Omagiu profesorului Ioan Glodariu. Bibliotheca Musei Napocensis XX. Cluj-Napoca 2001, 411–418.
- Nemeth 2005a E. Nemeth, *Die neuen Ausgrabungen im römischen Kastell von Vărădia – „Pustă”*. In: *Limes 19 Pécs 2003* (2005), 689–696.
- Nemeth 2005b E. Nemeth, *Armata în sud-vestul Daciei romane/Die Armee im Südwesten des Römischen Dakien*. Bibliotheca Historica et Archaeologica Banatica XXXVII Timișoara 2005.
- Nemeth 2006 E. Nemeth, *Änderungen an der Westgrenze des römischen Dakien am Anfang des Regierungszeit Hadrians*. In: C. Gaiu, C. Găzdac (Eds.), *Fontes historiae*. Studia in honorem Demetrii Protase. Historica 12. Bistrița/Cluj-Napoca 2006, 477–481.
- Nemeth 2009 E. Nemeth, *Änderungen und Truppenversetzungen an der westgrenze Dakiens von Trajan bis Antoninus Pius*. In: Á. Morillo, N. Hanel, E. Martín (Eds.), *Limes XX*. XX congreso internacional de estudios sobre la frontera romana, León (España), Septiembre, 2006. *Anejos de Gladius* 13, Bd. 2. Madrid 2009, 879–888.
- Nemeth, Bozu 2005 E. Nemeth, O. Bozu, *Noile săpături din castrul roman de la Vărădia-„Pustă” (jud. Caraș-Severin)*. Banatica 17, 2005, 201–210.
- Nemeth et al. 2011 E. Nemeth, F. Fodorean, D. Matei, D. Blaga, mit einem Beitrag von D. Micle, L. Măruia, A. Cîntar, M. Török-Oance, *Der südwestliche Limes des römischen Dakien. Strukturen und Landschaft*. Speculum Antiquitatis. The publications of the Department of ancient history and archeology. Cluj-Napoca 2011.
- Opreanu 1998 C. Opreanu, *Castrul legiunii I Adiutrix de la Apulum în timpul lui Traian. Consecințe asupra urbanismului roman la Apulum*. Apulum 35, 1998, 121–134.
- Opreanu 1999 C. Opreanu, *Legio I Adiutrix in Dacia. Military action and its place of garrison during Trajan's reign*. In: *Limes 17 Zalău 1997* (1999), 571–584.
- Opreanu 2000 C. Opreanu, *Relationship of forts to town origins in Roman Dacia*. In: H. Ciugudean, V. Moga (Eds.), *Army and urban development in the Danubian provinces of the Roman Empire. Proceedings of the international symposium – Alba Iulia, 8th–10th October 1999*. Bibliotheca Musei Apulensis XV. Alba Iulia 2000, 79–89.
- Opreanu 2006 C. H. Opreanu, *Activitatea constructivă a legiunii IIII Flavia Felix la nordul Dunării, în anii 101–117 d. Chr.* In: E.S. Teodor, O. Țentea (Eds.), *DACIA AVGUSTI PROVINCIA*. Crearea provinciei. Actele simpozionului desfășurat în 13–14 octombrie 2006 la Muzeul Național de Istorie a României, București. Publicațiile Centrului de studii militare romane 1. București 2006, 51–74.

- Opreanu 2008 C. H. Opreanu, *review of Piso (sous la dir.) 2006*. EN 18, 2008, 227–232.
- Opreanu 2010 C. H. Opreanu, *Interferences dans l'architecture militaire et civile romaine au debut du II^e siecle apres J.-Chr. Le probleme des „villes militaires”*. EN 20, 2010, 39–59.
- Petolescu 1980 C. C. Petolescu, *Castrele de pământ din nord-vestul Olteniei*. Oltenia 2, 1980, 103–108.
- Petolescu 2000 C. C. Petolescu, *Dacia și Imperiul Roman. De la Burebista până la sfârșitul Antichității*. București 2000.
- Petolescu 2007 C. C. Petolescu, *Contribuții la istoria Daciei romane. I*. București 2007.
- Petolescu 2010 C. C. Petolescu, *Dacia. Un mileniu de istorie*. București 2010.
- v. Petrikovits 1979 H. v. Petrikovits, *Militärisches Nutzland in den Grenzprovinzen des römischen Reiches*. In: D. M. Pippidi (Ed.), *Actes du VII^e Congrès International d'épigraphie grecque et latine*, Constantza, 9–15 septembre 1977. București/Paris 1979, 229–242.
- v. Petrikovits 1991 H. v. Petrikovits, *Beiträge zur römischen Geschichte und Archäologie II (1976–1991)*. Beihefte der Bonner Jahrbücher, Bd. 49. Köln 1991.
- Piso 2000 I. Piso, *Les légions dans la province de Dacie*. In: Y. Le Bohec, C. Wolf (avec la coll.) (Ed.), *Les légions de Rome sous le Haut-Empire*. Actes du Congrès de Lyon (17–19 septembre 1998). Collection du Centre d'Études Romaines et Gallo-Romaines, Nouvelle série, N° 20. Tome II. Lyon 2000, 205–225.
- Piso 2005 I. Piso, *An der Nordgrenze des Römischen Reiches: ausgewählte Studien (1972–2003)*. Heidelberger althistorische Beiträge und epigraphische Studien, Bd. 41. Stuttgart 2005.
- Piso (sous la dir.) 2006 I. Piso (sous la direction), *Le forum vetus de Sarmizegetusa. I (l'archéologie par R. Étienne, I. Piso, A. Diaconescu; l'épigraphie par I. Piso)*. Colonia Dacica Sarmizegetusa I. București 2006.
- Piso 2006 I. Piso, *Cap. „Les devanciers”; „Appendice I. – Corpus epigraphicum”*. In: Piso 2006 (sous la dir.), 23–40; 211–339.
- Piso 2008 I. Piso, *Les débuts de la province de Dacie*. In: I. Piso (Hrsg.), *Die römischen Provinzen. Begriff und Gründung (colloquium Cluj-Napoca, 28. September–1. Oktober 2006)*. Cluj-Napoca 2008, 297–331.
- Piso, Diaconescu 1997 I. Piso, Al. Diaconescu, *La legio IV Flavia Felix à Sarmizegetusa*. In: 17th international congress of Roman frontier studies, Zalău – Romania, 1–9 September 1997. Lectures summaires, 127–129.
- Piso, Roman 2001 I. Piso, C. Roman, No. 177. *Sarmizegetusa, com. Sarmizegetusa, jud. Hunedoara [Colonia Ulpia Traiana Sarmizegetusa]*. In: M. V. Angelescu, C. Borș, I. Oberländer-Târnoaveanu (Eds.), *Cronica cercetărilor arheologice. Campania 2000. A XXXV-a sesiune națională de rapoarte arheologice, Suceava, 23–27 mai 2002*. București 2001, 214–217.
- Protase 1967 D. Protase, *Legiunea IIII Flavia la nordul Dunării și apartenența Banatului și Olteniei de vest la provincia Dacia*. AMN 4, 1967, 47–72.
- Protase 1975 D. Protase, *Castrul roman de la Surducul Mare (jud. Caraș-Severin)*. Banatica 3, 1975, 345–348.
- Protase 1995 D. Protase, *Orizonturi daco-romane. 1*. Cluj-Napoca 1995.
- Protase 2000 D. Protase, *Autohtonii în Dacia. II. Dacia postromană până la slavi*. Cluj-Napoca 2000.
- Protase 2010 D. Protase, *Castrul legiunii IIII Flavia de la Berzovia. Săpăturile arheologice din anii 1965–1968*. AnB S.N. 18, 2010, 33–62.
- Protase 2011 D. Protase, *Orizonturi daco-romane. 3*. Cluj-Napoca 2011.
- Reutti 1980 F. Reutti, *Römische Zeit: Elztal Neckarburken (Neckar-Odenwald-Kreis)*. FBW 5, 1980, 142–150.
- Rich 1990 J. W. Rich, *Cassius Dio. The Augustan settlement (Roman history 53–55.9)*; edited with translation and commentary. Warminster 1990.
- Schallmayer 2010 E. Schallmayer, *Der Odenwaldlimes. Entlang der römischen Grenze zwischen Main und Neckar²*. Stuttgart 2010.

- Scholz 2004 M. Scholz, *Das Reiterkastell Heidenheim und die vor- und frühgeschichtlichen Siedlungen auf seinem Areal – Vorbericht der Ausgrabungen 2002–2003*. Heidenheimer Jahrbuch 10, 2003–2004 (2004), 96–130.
- Scholz 2005 M. Scholz, *Militärische Architektur und ihre gezielte Demontage im Alenkastell Heidenheim/Brenz*. In: *Limes 19 Pécs 2003* (2005), 847–855.
- Scholz 2009 M. Scholz, *Das römische Reiterkastell Aquilea/Heidenheim. Die Ergebnisse der Ausgrabungen 2000–2004*. Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Württemberg, Bd. 110. Stuttgart 2009.
- Schulten 1894 A. Schulten, *Das territorium legionis*. *Hermes* 29, 1894 481–516.
- Shirley 2001 E. Shirley, *Building a Roman Legionary Fortress*. Gloucestershire 2001.
- Sommer 1988 C. S. Sommer, *Kastellvicus und Kastell. Untersuchungen zum Zugmantel in Taunus und zu den Kastellvici in Obergermanien und Rätien*. *FBW* 13, 1988, 457–707.
- Sommer 1997 C. S. Sommer, *Vom Kastell zur Stadt – Aspekte des Übergangs in Lopodunum/Ladenburg und Arae Flaviae/Rottweil*. In: W. Groenman-van Waateringe, B. L. van Beek, W. J. H. Willems, S. L. Wynia (Eds.), *Roman Frontier Studies 1995. Proceedings of the XVIth International Congress of Roman Frontier Studies*. Oxbow Monograph 91. Oxford 1997, 511–516.
- Sommer 1999 C. S. Sommer, *The Roman army in SW Germany as an instrument of colonisation: the relationship of forts to military and civilian vici*. In: A. Goldsworthy, I. Haynes (Eds.), *The Roman army as a community. Including papers of a conference held at Birkbeck College, University of London on 11–12 January, 1997*. Portsmouth, Rhode Island 1999, 81–93.
- Strobel 2006 K. Strobel, *Die Eroberung Dakiens – ein Resümee zum Forschungsstand der Dakerkriege Domitians und Traians*. *Dacia N.S.* 50, 2006, 105–114.
- Tudor 1978 D. Tudor, *Oltenia romană*⁴. București 1978.
- Visy 2009 Z. Visy, *Mapping the SW limes of Dacia*. In: W. S. Hanson (Ed.), *The army and frontiers of Rome. Papers offered to David J. Breeze on the occasion of his sixty-fifth birthday and his retirement from Historic Scotland*. *Journal of Roman Archaeology, Supplementary Series 74*. Portsmouth, Rhode Island) 2009 115–126.
- Vittinghoff 1974 F. Vittinghoff, *Das Problem des «Militärterritoriums» in der vorseverischen Kaiserzeit*. In: *I diritti*, 109–124.
- Vittinghoff 1994 W. Eck (Hrsg.), *F. Vittinghoff. Civitas Romana. Stadt und politisch-soziale Integration im Imperium Romanum der Kaiserzeit*. Stuttgart 1994, 124–139.
- Weber 2002 G. Weber, *Schnell gebaut und schnell in Flammen*. *Archäologie in Deutschland* 3, 2002, 30–35.
- Webster 1988 G. Webster (Ed.), *Fortress into city. The consolidation of Roman Britain first century A.D.*. London 1988.
- Wheeler 1964 M. Wheeler, *Roman art and architecture*. London 1964.
- Wiegels 1989 R. Wiegels, «*Solum Caesaris*» – *Zu einer Weihung im römischen Walheim*. *Chiron* 19, 1989, 61–102.
- Wilkes 1969 J. J. Wilkes, *Dalmatia*. History of the provinces of the Roman Empire 2. London 1969.
- Wilmott 2005 T. Wilmott, *The end of Hadrian's Wall*. In: *Limes 19 Pécs 2003* (2005), 131–137.