

IN SEARCH OF A HOLISTIC APPROACH: THE MARCOMANNIC WARS  
AND THE ANTONINE PLAGUE VIEWED FROM THE PERSPECTIVE  
OF THE NORTHERN FRONTIER AND BEYOND (A REVIEW ARTICLE)\*

**Michael ERDRICH, Balázs KOMORÓCZY, Paweł MADEJSKI, Marek VLACH (eds.), *Marcomannic Wars and Antonine Plague: Selected Essays on Two Disasters That Shook the Roman World (Die Markomannenkriege und die Antoninische Pest. Ausgewählte Essays zu zwei Desastern, die das Römische Reich erschütterten)***, Brno: Czech Academy of Sciences, Institute of Archaeology; Lublin: Instytut Archeologii, Uniwersytet Marii Curie-Skłodowskiej, 2020 (Spisy Archeologicznego ústavu AV ČR Brno 61; Lubelskie Materiały Archeologiczne, tom XVII), 298 pp., ISBN 978-80-7524-026-2; ISBN 978-83-227-9223-0.

In October 2016 an international conference entitled “The Impact of the Marcomannic Wars and the Antonine Plague on Roman and Barbarian Societies North of the Alps” took place in Brno. One of the outcomes of the conference was the eventual publication in 2020 of a collective monograph edited by Michael ERDRICH, Balázs KOMORÓCZY, Paweł MADEJSKI and Marek VLACH. The monograph is entitled *Marcomannic Wars and Antonine Plague: Selected Essays on Two Disasters That Shook the Roman World*<sup>1</sup> and it was jointly published by the archaeological institutes from the universities of Brno and Lublin. The long gap between the conference and the publication of the monograph was due to the occurrence of COVID-19 (p. 11), a more modern pandemic than the Antonine plague but, nonetheless, a specific *memento* of history repeating itself. However, it should be noted that the bibliographies of several contributing authors include publications that appeared between 2016 and 2020, which partly diminishes the impact that a four-year gap would usually have on such a publication. The subjects covered in the volume, i.e., the Antonine plague and the Marcomannic wars<sup>2</sup>, have both proven to be controversial in academic circles (which is readily noticeable in the individual contributions) and have been fervently discussed over the last couple of decades<sup>3</sup>. The aim of the conference (and, therefore, the monograph) was to “examine whether and what effects the Marcomannic wars and the pandemic that broke out almost simultaneously [...] had on the population of selected areas on either side of the Roman Rhine and Danube borders” (p. 11), although in some chapters the geographical (as well as the chronological) scope was expanded. The local “northern” perspective (especially in the case of the Antonine plague)

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<sup>1</sup> The title is bilingual; for the German version see the bibliographical notice above.

<sup>2</sup> I will consequently use both these terms; however, one should bear in mind that in antiquity the *bellum Marcomanicum* referred to only one campaign during the conflict we now call Marcomannic (as MADEJSKI points out, see p. 47), and some researchers question whether the term “Antonine plague” represented numerous diseases or just a single epidemic (see e.g. Ch. BRUUN, *The Antonine Plague in Rome and Ostia*, JRA XVI 2003, p. 426, n. 1).

<sup>3</sup> Two important post-conference publications should be mentioned here: H. FRIESINGER, J. TEJRAL, A. STUPPNER (eds.), *Markomannenkriege – Ursachen und Wirkungen. 6. Internationales Symposium “Grundprobleme der frühgeschichtlichen Entwicklung im nördlichen Mittelebengebiet”*, Wien, 23.–26. November 1993, Brno 1994; E. LO CASCIO (ed.), *L’impatto della “Peste Antonina”*, Bari 2012.

was particularly promising. The chapters were all published in either English or German and were written by specialists from the relevant field(s), i.e., archaeology, history, or epigraphy.

The book is divided into four parts that are preceded by a short “Editor’s Preface” (in English and in German; pp. 11–14) containing important information regarding the “technical” aspects of the publication. The first part – “Antonine Plague” (“Antoninische Pest”) consists of three chapters. The opening chapter was authored by Rupert BREITWIESER and is entitled “Pest und Provinz. Seuchen und ihre Auswirkungen auf das tägliche Leben” (pp. 17–22). The first section of the contribution is devoted to other historical epidemics, particularly the Athenian plague of 430 BCE which was described by Thucydides, whilst the Antonine plague is the main subject of the second section. BREITWIESER suggests that a bronze plaque from Virunum (most probably an *album* of Mithraists)<sup>4</sup>, which documents the sudden death of a number of individuals between 183 and 184 CE, is evidence that the city was affected by the Antonine plague. The second, much longer paper is entitled “The Antonine Plague and Impact Possibilities during the Marcomannic Wars” (pp. 23–36) and was written by Marek VLACH, who divided his text into six subchapters. VLACH begins with a slightly pessimistic question that was borrowed from the title of a paper by Richard R. PAINE: “If a population crashes in Prehistory, and there is no paleodemographer there to hear it, does it make a sound?” (p. 23)<sup>5</sup>. The paper briefly presents the history of discussion concerning the Antonine plague, the main sources (and the problems they generate), the identification of the disease (which, according to VLACH, was most probably smallpox; however, due to the advancement in the study of natural sciences he admits that further studies are necessary) and the consequences that climate change had on the epidemic. The core of the article is provided by the subchapter devoted to the “Antonine Plague and Possibilities of Impacts within the Marcomannic Wars”, in which VLACH “crosses” the border of the Roman Empire and looks at the impact the epidemic had on the territories of the Germanic tribes. The results, however, are unspectacular as traces of the epidemic are, as of today, almost invisible in the archaeological material. Perhaps, as VLACH concludes, despite the colder climate (in which smallpox thrives) and, e.g., the interactions between the locals and the Roman soldiers (who were the “spreaders” of the plague), the low population density of the Germanic lands enabled their inhabitants to avoid the full-scale consequences of the disease. The last contribution in this part, “Bemerkungen zur Bevölkerung Pannoniens im Zeitalter der Markomannenkriege” (pp. 37–42), was written by Péter KOVÁCS, who, like BREITWIESER, focuses mainly on the epigraphic evidence. After discussing several demographic processes that took place in Pannonia (e.g., the appearance of large numbers of new inhabitants from different parts of the Empire who replaced the previous inhabitants that had died during the Marcomannic wars or were perhaps victims of the Antonine plague), KOVÁCS highlights a specific and interesting phenomenon amongst Pannonian funerary monuments that occurred mainly in the city of Savaria, i.e., “blank spaces” after the word[s] *annorum* where the age of the deceased would normally appear. According to KOVÁCS, these inscriptions (the vast majority of which were dated by him to the second half of the 2<sup>nd</sup> c. CE) could be evidence that the Marcomannic wars, which resulted in the death, captivity, or flight of Savaria’s inhabitants, was not the only event that contributed to the depopulation of this part of the Roman world.

The papers in the three other parts of the monograph are mainly focused on the Marcomannic wars or some accompanying phenomena, and therefore references to the Antonine plague appear only incidentally.

Part two is entitled “Politics and Historiography” (“Politik und Geschichtsschreibung”) and begins with a chapter by Paweł MADEJSKI “Exercises in Loss or Absence? Ancient Historiography and the Marcomannic Wars” (pp. 45–50). MADEJSKI observes that the subject of the Marcomannic

<sup>4</sup> See R. GORDON, *Two Mithraic Albums from Virunum, Noricum*, JRA IX 1996, p. 424.

<sup>5</sup> R.R. PAINE, *If a Population Crashes in Prehistory, and There Is No Paleodemographer There to Hear It, Does It Make a Sound?*, *American Journal of Physical Anthropology* CXII 2000, pp. 181–190.

wars, although present in ancient historiography, was not popular amongst Greek and Roman historians due to their lack of interest in northern Europe (i.e., the *Barbaricum*). According to MADEJSKI, this was particularly true of Greek-speaking authors, since almost no great battles took place in the region and no cities were conquered; therefore, the Marcomannic wars could not be compared to heroic conflicts of the past. Moreover, the historians of the time were much more concerned with producing biographies of the emperors which resulted in the wars being overshadowed by the formidable presence of Marcus Aurelius. This is evidenced by the fact that ancient historians saw his death, and not the Marcomannic wars, as the turning point in Rome's history (this view remained unchanged until the 18<sup>th</sup> century and the appearance of Edward GIBBON's seminal work concerning the history of the Roman Empire). The next chapter, "Die Personalpolitik des Imperium Romanum in der Periode der Markomannenkriege" (pp. 51–58), focuses on the Roman army during and shortly after the Marcomannic wars and is, according to its author Peter HERZ, only a preliminary study. At the core of HERZ's discussion is an analysis of an inscription found in Viminacium and dated to 195 CE which contains a list of veterans from *legio VII Claudia*<sup>6</sup>. HERZ focuses most of all on the origins of the veterans (more than 30% of whom had imperial *nomina* and, therefore, their families had recently been granted citizenship – especially in the case of the Marcii Aurelii, the most numerously represented family amongst this group of veterans). According to HERZ, the number of veterans listed in this inscription reveals the enormous demand placed on recruitment in 169 CE (when perhaps up to 100,000 men were enlisted). The next chapter, "Die Außenpolitik des Kaisers Marcus Aurelius während der Markomannenkriege – ein Beispiel der *propagatio Imperii*?" by Krzysztof KRÓLCZYK (pp. 59–69), addresses a problem that has been around since the time of Theodor MOMMSEN – i.e., whether Marcus Aurelius planned to create new Roman provinces beyond the Danube and Rhine *limes*. After analysing both the narrative sources (which are inconsistent regarding this matter and sometimes of low credibility, as is the case with the *Historia Augusta*) and the archaeological evidence (which has been variously interpreted by modern researchers, sometimes in ways that are mutually exclusive), as well as an interesting medallion depicting the busts of Marcus Aurelius and Commodus accompanied by the inscription *propagatoribus Imperii* (published for the first time by Dorothy H. COX in 1959)<sup>7</sup>, KRÓLCZYK suggests that Marcus Aurelius did indeed plan to create the afore-mentioned new provinces. The last text in this part, "In Search of the *bellum desertorum*" by Michał N. FASZCZA (pp. 71–78), goes beyond the main thematic scope of the monograph and discusses Maternus and his actions during Commodus' reign. As FASZCZA clearly postulates at the beginning of his contribution, his main aim is not to discuss the historicity of Maternus (mentioned mainly by Herodian), but to confront the motive of the *bellum desertorum* with HOBBSAWM's "social banditry"<sup>8</sup> (according to FASZCZA, Maternus is definitely not a "social bandit") and with BOWERSOCK's "fiction as history"<sup>9</sup>. FASZCZA concludes that in the case of Maternus and the *bellum desertorum* "literary reality should not be strictly separated from the historical reality, because both were used for the same purpose: to write history understood primarily as a type of literature" (p. 77–78), a statement with which I fully agree.

The third part of the monograph is entitled "Germanic Threat of [*sic*, instead of "to"] the Provinces" ("Die Germanische Bedrohung der Provinzen") and each of its chapters focus on the traces the Marcomannic wars left in the Roman frontier provinces. The first contribution, "Vorboten und Auswirkungen der Markomannenkriege im Nordgrenzbereich. Das Beispiel Raetien" (pp.

<sup>6</sup> *CIL* III 14507 = *AE* 1901, 12 = *AE* 1901, 13 = *AE* 1901, 126 = *AE* 1969/1970, 500c = *AE* 2004, 1223 (all abbreviations of epigraphic sources after Epigraphik-Datenbank Clauss/Slaby).

<sup>7</sup> D.H. COX, *Coins from the Excavations at Curium 1932–1935*, New York 1953, p. 30, no. 230.

<sup>8</sup> E. HOBBSAWM, *Primitive Rebels: Studies in Archaic forms of Social Movement in the 19th and 20th Centuries*, Manchester 1959.

<sup>9</sup> G.W. BOWERSOCK, *Fiction as History: Nero to Julian*, Berkeley–London 1994.

81–88), was authored by Ragnar HUND, who analyses the newest archaeological sources from the *limes*. In his paper HUND criticises the work by Stefan PRIWITZER<sup>10</sup> and, like KRÓLCZYK, suggests that it was the Roman emperors who were responsible for the Marcomannic wars and not the Germanic tribes (although their initial plans were quickly ruined). A large section of the paper deals with the situation on the borders (not only in Raetia) during the reign of Antoninus Pius. According to HUND, this period should no longer be treated as uneventful, since the tribes beyond the borders were becoming increasingly restless which forced Pius to strengthen the *limes* by, for example, rebuilding the system of fortifications (which is readily noticeable in the archaeological material from Raetia) and by waging war on certain tribes. The next chapter, “Ein markomannenzeitlicher Schatzfundhorizont? Die norischen und pannonischen Münzdepots mit Schlussmünzen der Kaiser Antoninus Pius und Marcus Aurelius und ihr Bezug zu den Markomannenkriege” by Alexander RUSKE (pp. 89–97), is for the most part methodological in character. The author convincingly presents the dangers connected with narrow interpretations of coin hoards, which are too often seen as evidence of war and the fear it evokes, while the reason for “hiding” coins, especially with regards to small hoards, could be manifold and often trivial (e.g., losing money while travelling or hiding financial surpluses in safe places to prevent them from being stolen). The last subchapter is devoted to an analysis of the different types of coin hoards (of which there are 25 in total) found in Pannonia and Noricum that are dated to the period of the Marcomannic wars. In this case RUSKE, in accordance with his earlier postulates, does not limit his discussion to just the number of coins found (*Inhalt*), as he also, when possible, mentions the object in which the coins were hidden (*Fundgefäß*) and the exact location of the finds (*Fundort*) along with other useful snippets of information (*Sonstiges*). The chapter entitled “Raids of the Marcomanni and Quadi in the Southeast Alpine Region around 170 AD – The Case Study of Flavia Solva” (pp. 99–105) also concerns the problems associated with broad interpretations that are drawn from narrow samples. Its author, Christoph HINKER, writes that the Roman city of Flavia Solva was believed to have been destroyed and burnt to the ground during the Marcomannic wars (an idea that was pioneered by the early 20<sup>th</sup> c. archaeologist Walter SCHMID and later accepted by, for example, Géza ALFÖLDY<sup>11</sup>). In fact, the results from relatively new excavations (1989–1992) conducted at *insula XLI* reveal that the burnt layer dates to c. 170 CE; however, according to HINKER, there is no other evidence (except the chronology) that convincingly points to the fire being the result of war; moreover, other parts of the city (known from rescue excavations) do not bear traces of extensive conflagration. Therefore, as HINKER concludes, the idea that Flavia Solva was destroyed during the Marcomannic wars is unconvincing, or at the very least difficult to prove. The next chapter, “Römerzeitliche Brandschichten in St. Pölten” by Ronald RISY and Silvia ZENZ (pp. 107–111), also raises the issue of over-interpreting archaeological finds. The paper discusses the Roman city of Aelium Cetium (modern-day St. Pölten) which, since the publication of Peter SCHERRER’s paper in 1994, was also believed to have been destroyed during the Marcomannic wars<sup>12</sup>; however, more recent excavations (conducted since 2010) have complicated this view. Excavations in the city’s cathedral square revealed a burnt layer, but, according to the authors, this layer should be dated to the end of the 2<sup>nd</sup>/beginning of the 3<sup>rd</sup> c. CE. Although the chronology of this layer is based on finds that are scarce and at times difficult to date (RISY and ZENZ are aware of this and, thus, do not want to go too far with their conclusions), it casts a shadow on the broadly accepted

<sup>10</sup> S. PRIWITZER, *Marc Aurel und der Doppelprinzipat*, in: W. GRIEB (ed.), *Marc Aurel – Wege zu seiner Herrschaft*, Gutenberg 2017, pp. 1–22.

<sup>11</sup> See especially W. SCHMID, *Flavia Solva*, Graz <sup>2</sup>1917; G. ALFÖLDY, *Noricum*, London, p. 154 (*non vidi*, cited after HINKER).

<sup>12</sup> P. SCHERRER, *Der große Markomanneneinfall des Jahres 170 und seine Folgen im Lichte der neuen Ausgrabungen in Aelium Cetium/St. Pölten*, in: FRIESINGER, TEJRAL, STUPPNER, *op. cit.* (n. 3), pp. 447–455.

thesis by SCHERRER. Another Roman city, Vindobona, is the subject of Martin MOSSER's chapter "Vindobona während der Markomannenkriege" (pp. 113–120). Again, the city used to be treated as a victim of the Marcomannic wars, but archaeological excavations conducted since the end of the 20<sup>th</sup> c. reveal that such a scenario is probably unlikely. Moreover, according to MOSSER, Vindobona played an important role during the Marcomannic wars. This opinion is based on archaeological finds from the legionary fort of Vindobona which prove that some of its buildings were rebuilt in stone, perhaps during the time of the Marcomannic wars. The importance of the city as a military base is also emphasised by the discovery of brick stamps that were produced by *legio II Italica* (a *vexillatio* of which replaced *legio X Gemina* in Vindobona, according to MOSSER) and *legio X Gemina* (that were found in Mušov but were actually manufactured close to Vindobona, in the area of modern-day Hernals, a district of Vienna). Taking this assumption into consideration, the provocative suggestion MOSSER concludes with, which follows Aurelius Victor's testimony, i.e., that Marcus Aurelius died in Vindobona, does not sound so unrealistic. The last paper in this part, "Markomannenkriege, Antoninische Pest und die Folgen für die Provinz Germania Inferior – Eine archäologische Spurensuche" by Boris A.N. BURANDT (pp. 121–125), diverges from the narrow perspective present in the three previous chapters, as it concerns the whole province (and not an individual city) and discusses both the Marcomannic wars and the Antonine plague. Considerably more space is devoted to the Marcomannic wars; therefore, the decision by the editors to place the article in the third part is not surprising. However, according to BURANDT, no archaeological or epigraphic sources document the Marcomannic wars and the Antonine plague in Germania inferior (except for the relocation of *legio I Minervia* from Bonna to the Parthian and later the Danubian frontier). Moreover, it seems that during this period the province was relatively safe and became more prosperous and populous.

The fourth part of the monograph, "Archaeological Evidence of the Marcomannic Wars Beyond Empire's Borders" ("Der archäologische Niederschlag der Markomannenkriege jenseits der Reichsgrenzen [*sic!*]") not only has the longest title, but is also literally the longest section in the monograph (slightly longer than the other three parts combined). It starts (surprisingly) with a paper "Britain beyond Hadrian's Wall in the Late Second Century: Imperial Policies and Local Responses" by Fraser HUNTER (pp. 129–136) who informs the reader that there is no evidence for the Antonine plague beyond Hadrian's Wall and that the Marcomannic wars had no direct impact on this part of the *Barbaricum*. Nonetheless, HUNTER's analysis and interpretation of coin hoards found in Scotland brings promising results since, according to the author, they show the "changing patterns of contact" between the Romans and their neighbours. Many of these hoards are dated to the reign of Marcus Aurelius and Commodus and were found in lands belonging to the most troublesome tribes – the Maeatae and the Caledonii (whereas no such hoards have been found in these areas from the time of Antoninus Pius or Septimius Severus). Perhaps, as HUNTER states, this reflects Roman policy in this particular frontier region – when problems existed on the Danube *limes*, they preferred to ensure peace by offering the troublesome border tribes rich gifts. Coin hoards are also the main subject of the next contribution, "Der Münzhort von Kovaszinc (heute: Covăsint, Rumänien) – Bemerkungen zu den Münzhorten des 2. Jahrhunderts n. Chr. in der Ungarischen Tiefebene" by Péter PROHÁSZKA (pp. 137–143). He focuses on the Kovaszinc coin hoard (which consisted of ca. 300 Roman *denarii* dated from the period of Nero until 141 CE) and discusses whether it was somehow related to the Marcomannic wars. After comparing the treasure with several other similarly dated hoards that were found in the Hungarian plains, PROHÁSZKA concludes that the Kovaszinc hoard was more than likely connected to the conflict. Vladimír VARSÍK, the author of the next paper ("Die Markomannenkriege und die quadien Siedlungen in der Slowakei", pp. 145–157), focuses on the Quidian settlements in Vel'ký Meder, Branč, Štúrovo and Bratislava-Trnávka and attempts to connect them with the Marcomannic wars. However, as VARSÍK admits, the archaeological evidence (mostly *terra sigillata*) that allows for the chronology of these settlements to be established is scarce (and not as precise as one would wish) and the period of the Marcomannic wars was quite short; therefore, the results of such studies are, at least in the



current state of research, only hypothetical. According to VARSÍK, it is probable that the settlements of Vel'ký Meder and Branč were unaffected by the conflict while those of Štúrovo and Bratislava-Trnávka were temporarily abandoned by their inhabitants; however, in these instances new settlements appeared nearby during the Severan period. Similar problems with determining the exact chronology of the archaeological finds (as well as the lack of a good monograph concerning *terra sigillata* found in Moravia and the quality of older archaeological excavations in the region) were encountered by Jan JÍLEK, the author of the chapter entitled "Comparative Research on Roman Imports to Moravia before, during and after Marcomannic Wars, Based on Published Finds (State of Research until 2010)" (pp. 159–171). JÍLEK takes into consideration various types of objects (bronze vessels, *terra sigillata*, fibulas) and notes that these types of Roman goods were most numerous in Moravia during the period of the Marcomannic wars. The monograph's final chapter is entitled "A Companion to the Archaeological Sources of Roman Military Interventions into the Germanic Territory North of the Danube during the Marcomannic Wars" (pp. 173–254) and was co-written by Balázs KOMORÓCZY, Ján RAJTÁR, Marek VLACH and Claus-Michael HÜSSEN. This detailed study represents the current state of research concerning the movements of the Roman army in the territories of the Quadi and the Marcomanni (which is much better documented archaeologically) that is being conducted on a trilateral basis involving research centres in Germany, the Czech Republic, and Slovakia (the initial period of cooperation also included Austria). The authors focus on numerous temporary camps and permanent forts belonging to the Roman army, among which the largest number of pages, unsurprisingly, are devoted to Mušov-Burgstall (pp. 203–212).

The monograph concludes with a summary by Michael ERDRICH entitled "Summing Up and Looking Forward" (pp. 255–260, also in German) followed by a vast collection of "References" (pp. 261–298).

It is very noticeable that the Antonine plague is not as extensively discussed in the monograph as the Marcomannic wars. Discounting some notes in BURANDT's chapter and a few sporadic mentions here and there, only three papers directly relate to the disease. I will now discuss two of these in more detail. The first, KOVÁCS' contribution concerning the population of Pannonia during the Marcomannic wars, attempts to investigate the Antonine plague using evidence from funerary inscriptions. In one of his earlier papers, Christer BRUUN expressed scepticism towards the use of epitaphs when researching the plague, especially when they are used in quantitative studies<sup>13</sup>. However, his suspicion could be misplaced (as one may presume) since there are numerous Lydian epitaphs which allow the mortality rate during the Antonine plague to be estimated<sup>14</sup>. On the other hand, the Lydian epitaphs are quite precisely dated whilst those from Pannonia are not. KOVÁCS (p. 38) suggests that almost all his examples (16 from Savaria, four from its surrounding area and two from Pannonia inferior – Aquincum and Bátmonostor, see pp. 41–42) can be safely dated to the second half of the 2<sup>nd</sup> c. CE. All these inscriptions have "blank spaces" where the age of the relevant individuals (who were expected to be buried in the tomb after death) should have been added (after the formula *annorum*). KOVÁCS postulates that this could mean there were no living relatives or other heirs to bury the deceased and "finish" the inscription, or that they were buried in mass graves. If so, something unexpected had probably happened that caused mass death or forced their heirs to flee, which left no one to bury the dead in the familial tomb, or alternatively, the deceased was buried in the tomb, but nobody knew their age, so the space was left blank. When one takes into consideration the proposed chronology, the Antonine plague or military action during the Marcomannic wars could have been the reason behind such an unexpected event, the former being quite plausible in KOVÁCS' opinion. One cannot, therefore, measure the death rate (as in the case of Lydia); nonetheless, the epitaphs can be seen as evidence of the significant impact the Antonine plague had on the local demography. However, the thesis by KOVÁCS, although

<sup>13</sup> BRUUN, *op. cit.* (n. 2), p. 429.

<sup>14</sup> Following R.P. DUNCAN-JONES, *The Antonine Plague Revisited*, *Arctos* LII 2018, pp. 48–50.

undoubtedly interesting, has a few weaknesses besides those acknowledged by the author himself (i.e., war being the reason for the “blank spaces” or the burial of individuals mentioned in such inscriptions in other familial tombs; pp. 40–41). The first weakness concerns the chronology of the inscriptions, which is always problematic in the case of epitaphs. KOVÁCS thinks that the inscriptions are all quite similar in terms of palaeography, formulae and the *nomina* of the individuals. However, I am not convinced, as there are obvious differences amongst the epitaphs (e.g., the phrase *Dis manibus* appears in some of the inscriptions but not all, some contain *tria nomina* without abbreviation, others have abbreviated *nomina gentilicia*, whilst filiation [and/or *tribus*] appears only sporadically). Additionally, the relatively new corpus of inscriptions from Savaria published by Endre TÓTH dates some of the monuments mentioned by KOVÁCS differently, which casts doubt on at least 14 of the 20 inscriptions<sup>15</sup>. The acceptance of TÓTH’s chronology means that the distribution of the inscriptions with “blank spaces” is more balanced during the 2<sup>nd</sup> c. CE and the Severan period than KOVÁCS assumed. Moreover, several inscriptions taken into consideration by KOVÁCS do not in fact have a “blank space” after the word *annorum* (which suggests that the commissioners of these inscriptions never contemplated adding the deceased’s age)<sup>16</sup> and in some cases damage to the stone makes it difficult to tell if an age was added or not<sup>17</sup>. The former phenomenon is especially interesting since many of the inscriptions from Savaria mentioned by KOVÁCS contain the phrase *vivus fecit sibi* and the individuals who built the tomb and paid for the inscription whilst they were still alive added the phrase *annorum* in relation to themselves. Such a combination is almost completely absent not only in Pannonia, but in other cities throughout the Empire. Moreover, unsurprisingly the exact age of such individuals was rarely added in Savaria. Finally, one may ask (which KOVÁCS does, albeit without providing a convincing answer) why inscriptions with “blank spaces” appear much more frequently in Savaria than in other Pannonian cities, especially Aquincum which was the base of *legio II Adiutrix* (see VLACH, p. 29). In fact, a *vexillatio* from this legion was sent to Parthia with Lucius Verus and, therefore, should have spread the plague upon returning home<sup>18</sup>. All this suggests, in my opinion, that a specific kind of “epigraphic habit” existed in Savaria, which was perhaps even difficult for some inhabitants of the city and/or stonecutters to understand (as one might expect given the lack of space after the word *annorum*). This does not mean that KOVÁCS’ presumption should be disregarded and that Savaria

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<sup>15</sup> E. TÓTH, *Lapidarium Savariense. Savaria római feliratos köemlékei*, Szombathely 2011. According to TÓTH, these inscriptions (among those mentioned by KOVÁCS) should be dated differently (either less precisely or to another period): *CIL* III 4181 = *RIU* 49 = *LapSav* 94 (Severan period); *CIL* III 4194 = *RIU* 61 = *LapSav* 112 (2<sup>nd</sup> c. CE); *CIL* III 4196 = *RIU* 57 = *LapSav* 110 (KOVÁCS wrongly as *CIL* III 4195; second half of the 1<sup>st</sup> c. CE); *CIL* III 4202 = *RIU* 91 = *AE* 1995, 1252 = *LapSav* 103 (2<sup>nd</sup> c. CE); *CIL* III 4204 = *RIU* 55 = *LapSav* 105 (2<sup>nd</sup> c. CE); *CIL* III 4208 = *RIU* 93 = *LapSav* 109 (2<sup>nd</sup> c. CE or even first half of the 2<sup>nd</sup> c. CE); *CIL* III 4209 = *RIU* 62 = *LapSav* 114 (2<sup>nd</sup> c. CE); *CIL* III 4214 = *CIL* III 13421 = *RIU* 65 = *LapSav* 120 (Severan period); *CIL* III 14066 = *RIU* 67 = *LapSav* 124 (mid 2<sup>nd</sup> c. CE); *RIU* 52 = *AE* 1972, 397 = *LapSav* 97 (Severan period); *RIU* 54 = *AE* 1972, 401 = *AE* 1982, 802 = *LapSav* 104 (first half of the 3<sup>rd</sup> c. CE); *CIL* III 4224 = *LapSav* 232 (2<sup>nd</sup> c. CE); *CIL* III 4211 = *RIU* 126 = *AE* 1977, 633 = *AE* 1995, 1255 = *LapSav* 218 = (Severan period); *AE* 1988, 935 = *RIU* Suppl. 28 = *LapSav* 189 (Severan period).

<sup>16</sup> *CIL* III 4184 = *RIU* 89 = *LapSav* 99; *CIL* III 4202 = *RIU* 91 = *AE* 1995, 1252 = *LapSav* 103; perhaps *CIL* III 4224 = *LapSav* 232.

<sup>17</sup> *CIL* III 4202 = *RIU* 91 = *AE* 1995, 1252 = *LapSav* 103; *CIL* III 4204 = *RIU* 55 = *LapSav* 105.

<sup>18</sup> KOVÁCS mentions a single inscription from Aquincum (*CIL* III 3593 = *CIL* III 10544 = *TitAq* 576) but in this case one inscription proves nothing as there are examples from other Pannonian cities that contain a “blank space” and are not dated to the second half of the 2<sup>nd</sup> c. CE (e.g. Brigetio: *AE* 2010, 1259, or Ajka: *RIU* 367).

was not affected by the Antonine plague; however, at least in my opinion, the evidence provided by the inscriptions, as proposed by KOVÁCS, is not very convincing<sup>19</sup>.

KOVÁCS' paper, despite the above remarks, attempts to ask new questions regarding the long-known sources. The same cannot be said about BREITWIESER's contribution, since the section devoted to the Antonine plague is very similar to an article published by the same author in 1995<sup>20</sup>. An *album* containing the members of the *mithraeum* in Virunum shows that five of them (out of 34) died between the time the inscription was carved (estimated to be between the end of 182 CE and the late autumn of 183 CE) and the 26<sup>th</sup> of June 184 CE. From the time of its first publication by Gernot PICCOTTINI, the inscription was treated as evidence of the Antonine plague in this city<sup>21</sup>. The inclusion of information regarding the death of certain Mithraists is unusual, as this is not typical behaviour in the case of the *alba*; however, it might have something in common with their beliefs<sup>22</sup>. BREITWIESER tries to use this *album* to measure the death rate during the period of the Antonine plague (p. 22) and concludes that it was around 14.7%. The possibility that BREITWIESER's calculations are correct cannot be ignored; however, one question does come to mind – namely, what was the “typical” yearly death rate among Mithraists from this city during this period? Obviously, we cannot answer this question with any certainty, but we can estimate the rate by comparing this inscription with the fragments of another preserved *album* that concerns Mithraists from Virunum, which has been tentatively dated to 202 CE<sup>23</sup>. This *album* documents the construction of a new *mithraeum* (perhaps the old building was too small to accommodate the growing number of Mithraists)<sup>24</sup> and it includes numerous names that also feature in the older inscription (which, significantly, appear in the same order). We can compare the second column from the later *album* (this column is in the best state of preservation) with the first *album*. From Valerius Hermophilus (added to the first *album* most probably in 184 CE, whose name opens the second column in the later *album*) to Marcus Marius Zosimus (added in 192 CE[?], the last readable name in the second column of the later *album*) there are 19 Mithraists in the first and only ten in the later *album*. This means that between 184 and 202 CE almost half of the individuals disappeared for some reason. It is probable that they were already dead by 202 CE, and, therefore, the average yearly death rate among Mithraists could be estimated to be between 2.5–3%. Consequently, the death of one or two members in the first *album* between 183 and 184 CE could be treated as “natural”. Of course, there are too many “ifs” here to draw any conclusions (perhaps some Mithraists did not die, but left Virunum or the *collegium* [due to economic or religious reason] before the second *album* was carved, or maybe some of the members did not join the second

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<sup>19</sup> The problems associated with interpreting other evidence in the context of the narrative sources was discussed by Frank KOLB in his book about Homer, Troy, and excavations in Hisarlik (F. KOLB, *Tatort “Troia”. Geschichte, Mythen, Politik*, Paderborn 2010) and by RUSKE and PROHÁSZKA in this monograph (regarding coin hoards).

<sup>20</sup> R. BREITWIESER, *Virunum und die “Antoninische Pest”*, GB XXI 1995, pp. 149–156.

<sup>21</sup> G. PICCOTTINI, *Mithrastempel in Virunum*, Klagenfurt 1994, pp. 14–44 (see also: *AE* 1993, 1246 = *AE* 1994, 1334 = *AE* 1996, 1189 = *AE* 1998, 1016).

<sup>22</sup> Roger BECK discusses this interesting idea and proposes that the Antonine plague was the cause of this untypical phenomenon (R. BECK, “*Qui mortalitatis causa convenerunt*”: *The Meeting of the Virunum Mithraists on June 26, A. D. 184*, Phoenix LII 1998, pp. 335–344).

<sup>23</sup> *CIL* III 4816 = *ILLPRON* 15 = *ILLPRON* 16 = *ILLPRON* 748 = *ILLPRON* 773 = *ILLPRON* 774 = *AE* 1994, 1335. This chronology is uncertain, it was proposed by PICCOTTINI and later accepted by researchers, see GORDON, *op. cit.* (n. 4), p. 425.

<sup>24</sup> See *ibidem*.



*mithraeum*)<sup>25</sup>. However, when we take into consideration the Coale–Demeny Model Life Tables, especially Model West, Level 3 (which is, according to Richard SALLER, quite reliable in the case of the Roman Empire)<sup>26</sup>, the yearly death rate for Romans aged between 20 and 55 (we may presume that most Mithraists were in this age range) was between 1.6 and 3%<sup>27</sup>, which is quite close to the above-mentioned calculation. Therefore, the yearly death rate of 14.7% during the Antonine plague proposed by BREITWIESER should be treated as the maximum figure, while a rate of between 9–10% would be more reasonable. However, we are clearly treading on dangerous ground here due to the small numbers involved (which always produce uncertainty when applied to statistical or quasi-statistical models); thus, these proposed figures should be treated with caution.

There are a few other minor inaccuracies and debatable matters in the monograph, which do not diminish the value of the reviewed publication. For instance, VLACH is of the opinion that the Antonine plague was most probably smallpox (p. 26), while BREITWIESER sees this diagnosis as extremely doubtful (“äußerst zweifelhaft”; p. 20). The former scholar points out that the legions spread the disease and identifies *legio I Minervia* from Bonna as a good example of such a phenomenon (pp. 29–30), whilst BURANDT, despite being aware of the “epidemic potential” of this legion, thinks that it was unlikely that Germania inferior was badly affected by the plague (p. 124). VLACH also mistakenly calls the *collegium* of Mithraists from Virunum a “funerary collegium” (p. 25). While enumerating the sources which indirectly evidenced the impact of the Antonine plague, KOVÁCS accepts the opinion of Richard P. DUNCAN-JONES and includes the decreasing number of building inscriptions from Italy (p. 39), which in light of the research conducted by BRUUN is controversial to say the least<sup>28</sup>. MADEJSKI refers to the eruption of Taupo in the context of natural catastrophes that accompanied the Antonine plague (p. 47)<sup>29</sup>, but VLACH points out that this thesis should be rejected since the eruption of Taupo took place in 232 CE (p. 27, n. 62)<sup>30</sup>. HERZ, when quoting inscriptions, uses round brackets to explain the abbreviations and at the same time omits all the square brackets, which could be misleading as the readers might think they are looking at a perfectly preserved inscription (see, e.g., p. 52–53). Also, when he discusses the Roman legions that took part in the Marcomannic wars, he is of the opinion that there is no evidence for the participation of legions from Germany in the conflict (p. 57; however, he does not exclude such participation), which contradicts BURANDT (p. 123)<sup>31</sup>. JÍLEK, surprisingly, distinguishes between

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<sup>25</sup> See Ch. BRUUN, *Transfer of Property in an Ostian Professional Corpus: Sexti Sextilii and Lucii Iulii among the lenuncularii in CIL XIV 251, and a Possible Effect of the “Antonine Plague”*, *Arctos* LIV 2020, pp. 26–27 (with further references) for similar doubts in the case of other *collegia*.

<sup>26</sup> R. SALLER, *Patriarchy, Property and Death in the Roman Family*, Cambridge 1994, pp. 23–25. This subject is a matter of debate which goes beyond the scope of this short review.

<sup>27</sup> Depends on the age; one should remember that two of the five deceased individuals were called *patres* and this high position could correspond with an older age.

<sup>28</sup> R.P. DUNCAN-JONES, *The Impact of the Antonine Plague*, *JRA* IX 1996, p. 125–129; BRUUN, *op. cit.* (n. 2). This is surprising since KOVÁCS knows the publication of BRUUN (see p. 38, n. 20). The same situation applies to James GREENBERG (*Plagued by Doubt: Reconsidering the Impact of a Mortality Crisis in the 2nd C. A.D.*, *JRA* XVI 2003, pp. 413–425), who is mentioned by KOVÁCS in the same note; however, he should also be mentioned, at least briefly, in KOVÁCS’ catalogue of sources.

<sup>29</sup> Referring in this case to W. VETTERS, *Der Taupo und das Klima um 200 AD in Europa*, in: FRIESINGER, TEJRAL, STUPPNER, *op. cit.* (n. 3), pp. 457–461.

<sup>30</sup> Referring to A. HOGG *et al.*, *Revised Calendar Date for the Taupo Eruption Derived by 14C Wiggle-Matching Using a New Zealand Kauri 14C Calibration Data Set*, *The Holocene* XXII 2012, pp. 439–449.

<sup>31</sup> However, BURANDT bases his opinion on one building inscription of uncertain chronology (see *CIL* XIII 8078 = *AE* 1891, 21).

Germanic and “barbarian” when discussing the excavation of burials (p. 160), and when he refers to the retired centurion Quintus Atilius Primus (p. 161) he does not reveal the source of this information, which is slightly frustrating.

The richly illustrated monograph under review is a very important contribution to the history of the Marcomannic wars. New discoveries, especially in the field of archaeology, shed new light on the logistical aspects of the Roman legions and auxiliaries and the course of armed conflicts, information that is difficult to find in the narrative sources. These discoveries also corrected some older presumptions based on previous archaeological excavations. This monograph should be a starting point for fervent and hopefully fruitful debate among researchers, continuing in the vein that appears, for example, in the final article where KOMORÓCZY *et al.* “throw down the gauntlet” to several other scholars, i.e., Jaroslav TEJRAL (pp. 203–212, regarding Mušov-Burgstall) and Stefan GROH and Helga SEDLMAYER (pp. 216–218, regarding the temporary camp at Engelharstetten). This review does not intend to diminish the importance of the “non-archaeological” papers whose authors attempted, often convincingly, to reinterpret the narrative, epigraphic or numismatic sources and contribute to the ongoing debate. The texts devoted to the Antonine plague leave a certain dissatisfaction in this context. However, it is not easy to come up with new methods of interpretation (or models) that could help us better understand the scale of this phenomenon and the impact it had on local society. This was one of the reasons for ERDRICH’s pessimistic conviction in his “Summing Up and Looking Forward” (p. 257: “Archaeological research with her ambitions and tools seems to have met her limits here”). Nonetheless, research regarding this topic has not yet come to a dead-end, as the new publication of VLACH shows<sup>32</sup>.

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<sup>32</sup> M. VLACH, *The Antonine Plague: Evaluation of its Impact through Epidemiological Modelling*, in: T. BRUGHMANS, A. WILSON (eds.), *Simulating Roman Economies: Theories, Methods, and Computational Models*, Oxford–New York 2022, pp. 69–108.