M. P. García-Bellido / J. P. Bellón Ruiz / I. Montero Ruiz, La moneda de un campo de batalla: *Baecula* (S. 397–425) legen die Münzfunde vor. Den Autoren gelingt es, eine besondere Häufung von Münzen vom Ende des 3. Jahrhunderts v. Chr. nachzuweisen. Besonders auffällig sind die Münzprägungen, für die eine Herstellung in Cartagena vermutet wird.

Die Zusammenfassung der Ergebnisse bieten J. P. Bellón Ruiz / A. Ruiz Rodríguez / M. Molinos Molinos / C. Rueda Galán / F. Gómez Cabeza / F. Quesada Sanz, Conclusiones y propuestas sobre el desarrollo de la batalla de *Baecula* (S. 537–599). Die Autoren versuchen eine detaillierte Rekonstruktion des Kampfgeschehens; vgl. auch F. Quesada Sanz, La batalla de *Baecula* en el contexto de los ejércitos, la táctica y la estrategia de mediados de la Segunda Guerra Púnica: una acción de retaguardia reñida (S. 601–620). Am Beginn wird nochmals sehr ausführlich der Naturraum beschrieben, in dem sich die Ereignisse abgespielt haben sollen: das Oppidum von Turruñuelos, südöstlich davon, jenseits des Guadalquivir, der Cerro de las Albahacas, rund 5 km weiter südöstlich das postulierte erste Lager der Römer (vor der Schlacht). Die Rekonstruktion des Geschehens basiert entscheidend zum einen auf der räumlichen Verteilung der geborgenen Funde, zum anderen auf den Angaben in den schriftlichen Quellen. Wie weiter oben dargelegt, sind die daraus gezogenen Schlussfolgerungen jedoch mit großen Vorbehalten zu sehen.

Zusammenfassend ist festzuhalten, dass die Lektüre des vorliegenden Bandes sehr anregend wirkt. Auf methodische Vorbehalte wurde bereits fallweise hingewiesen. Auch liegen inhaltliche Wiederholungen vor, eine erhebliche Straffung der Texte, wenn nicht sogar die Zusammenlegung von Beiträgen wäre möglich gewesen. Angesichts des ambitionierten Anspruchs des Projekts wären außerdem englische Zusammenfassungen von großem Nutzen. Wie bereits erwähnt, ist die Abfolge der Teile 1 und 2 in der gewählten Form wenig geglückt. Mit dieser Vorgehensweise wird dem Leser die Meinung der Autoren geradezu aufgedrängt, auf dem Cerro de las Albahacas das Schlachtfeld von *Baecula* lokalisieren zu wollen.

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STEPHAN SEILER, Die Entwicklung der römischen Villenwirtschaft im Trierer Land. Agrarökonomische und infrastrukturelle Untersuchungen eines römischen Wirtschaftsgebietes. Philippika – Altertumswissenschaftliche Abhandlungen volume 81. Harrassowitz, Wiesbaden 2015. € 138.00. ISBN 978-3-447-10322-0. XII + 341 pages with 97 illustrations, 20 tables, 4 diagrams, 43 plates and 17 maps (three of which are inserts).

The "Trier region" which is the subject of the dissertation reviewed here comprises the modern administrative districts of Trier-Saarburg, Bernkastell-Wittlich, Bitburg-Prüm and Vulkaneifel-Daun, and the municipality of Trier. The area is not identical with the territory of the *Civitas Treverorum*, which included parts of today's neighbouring states of Belgium, Luxembourg, and France that are expressly excluded from the present work. The study area comprises 4089.29 km², within which 188 villas, or archaeological sites addressed as villas, are found. This is the first time they have been comprehensively recorded and described in an alphabetically-arranged catalogue (pp. 167–295), preceded by a detailed analysis and a general overview of the development of the Roman villa economy from the 1st century BC to the 5th century AD. The author's aim is to examine "the factors which underlay the settlement pattern of rural villas, what was produced by those villas, and the agricultural evolution which gave rise to this prosperous cultural landscape" (p. 1). In addition to summing up the research to date, he adopts an interdisciplinary approach by incorporating scientific sources, in particular geological and pedological information, in his study. To this end, he includes a relief map, a geological map, and a pedological map as inserts; unfortunately, however, no key for the geological map is included.

The analytical section of the work begins with a chapter on "Methodology", opening with a review of past research on Roman agriculture (pp. 4–7), Roman villas (pp. 7–11), and the Trier region (pp. 11–18). Following this are subsections entitled "Working hypothesis and questions for discussion" (pp. 19–28), "Geographical demarcation of the study area" (pp. 29–30) and "Sources" (pp. 31–38), with further sub-headings.

In the second chapter, "The Trier region and its local factors" (pp. 39–65), the author subdivides the study area into regions according to their particular geological and pedological characteristics: the Hunsrück mountain range, some parts of which are more suitable for agriculture than others; the central Moselle Valley, which forms the core of the study area; the Bitburg Gutland region, whose "extraordinarily favourable conditions, in terms of both natural landscape and transport routes" make it "the 'breadbasket' of the Trier region" (p. 45), and the Eifel area, with various sub-regions. In this chapter, he also discusses "Transitional ecotope areas", where villas could practise both crop cultivation and animal husbandry, and reviews the results of research on climatic conditions during the Iron Age and the Roman period.

Among the local factors considered in the second chapter are "Infrastructure and markets" (pp. 50–65). The first subsection, "Transport routes by land and water", begins by quoting Columella's advice on ensuring that villas have good transport links and provides a general description of the various categories of Roman road. In the next sub-section, the author links the villas with the courses of the most important roads in the study area. The majority of villas, 27 in total, were centred on the arterial road from Trier to Cologne. A further 17 were linked to the Trier-Mainz route and another 12 to the road between Trier and Strasbourg. This information is detailed in the entries for the respective villas in tables 4a, b, c, d and e (pp. 348–351).

Before turning to the city of Trier as the main market for the agricultural produce of the villa economy, the author discusses "research into the economic role of the city in Antiquity and its interactions with the countryside around it" (pp. 55–58). He then goes on to propose a "model of the catchment area of the city of Trier": within a 15 km radius of the city he is able to securely identify 15 villas in the second half of the 1st century, 32 in the first half of the 3rd century, and 30 by the middle of the 4th century, of which ten were still in use at the beginning of the 5th century (map 4 shows the sites of all the villas within this 15 km radius, but with no chronological differentiation). However, he does not develop this model further, in order to give an impression of "how densely settled with villas the landscape around Trier was and how intensively the country-side must have been cultivated, in order to supply this urban centre between the first half of the 1st century AD and the start of the 5th century AD" (p. 60).

As further markets of somewhat lesser importance for the villa economy, the author lists the surrounding *vici* and selects three as case studies: *Beda* (today's Bitburg), within whose 10 km catchment area 24 villa sites are known (tab. 7a; map 5), the *vicus* at Tawern to the east of Trier, with a total of 23 villa sites (tab. 7b; map 6), and *Belginum* (today's Wederath), situated in the Hunsrück region in an area that is rather unsuitable for agriculture, within whose 10 km catchment area only four villa sites are known (tab. 7c; map 7).

The author sees the villa economy as being "involved at least to some extent" in providing the army with agricultural products (p. 65). Even if there is no direct evidence, the landowners in the Trier region must have had to pay the usual dues in the form of taxes and contributions in kind, and military detachments passing through the area must likewise have had to be provisioned.

The third main chapter is entitled "Typology and chronology" (pp. 66–105). For his typological classification, the author mainly follows the criteria proposed by F. Reutti and D. Krausse, since, apart from a few exceptions, the "villa farmsteads in the district of Trier [...] are generally fairly standard" (p. 66). In his classification of farmsteads, he distinguishes between "Streubauhöfe" (farmsteads with dispersed individual buildings), the category to which he assigns most of the examples discussed, and "Axialhofvillen" (axial villa complexes), most of them fairly large. This category includes just a small number of so-called "queraxiale Höfe" (transversely-symmetrical farmyards), of which the best-known example cited is the villa at Newel "Im Kessel" (cat. no. 118). The typology of the farmhouses offers more opportunities for differentiation. Of the 188 villas in the study area, 67 can be classified by farmhouse type (map 8). Of these, the first discussed are the rectangular farmhouses (six examples; tab. 8). The most frequent farmhouse type in the Trier region is the "Risalitvilla" or villa with projecting towers, represented by 45 examples; the author differentiates between houses with a maximum area of 600 m² (12 in total), larger houses (17 examples), and houses whose size is unknown (19 examples) (tabs 9-11). The main building type, the "Portikusvilla mit Eckrisaliten" (villa with portico and corner towers), represents an extended form of the "Risalitvilla"; there are six examples, all in the Bitburg Gutland region (tab. 12). The "large villas", listed next, are not a typological category but are defined solely by the size of the main house: at least 3000 m². There are ten of these in the Trier region, more than in other Roman cultural landscapes (tab. 13). Within the section on "Typology", a subsection is devoted to architectural alterations and to the question of whether these should be taken as a sign of prosperity, a question generally answered in the affirmative, although in a few cases alterations can be seen as evidence of a preceding violent destruction.

The part of the chapter devoted to "Chronology" begins with a section on the evolution of the Roman villa economy from the rural settlements of the La Tène period. Previous settlement can be proved to have existed at eleven sites at least and is presumed to have existed at several more. It is difficult to make precise statements, since most farmsteads must initially have been built of wood *(aedificia)*. When they were rebuilt in stone at some point in the 1st century AD, the evidence of the earlier buildings was often destroyed. From the second half of the 1st century, it is possible to speak of a well-developed villa economy at 37 known sites. By the beginning of the 2nd century, this number had already increased to 54, and by the middle of the 3rd century it stood at 77.

Late Antiquity, which the author defines as the period from the Frankish and Alemannic incursions of 259/60 and 275/76, respectively, to the end of Roman rule at the close of the 5th century, represents a separate phase in the development of the villa economy. Following a description of the state of current research on the general political situation and the settlement history (pp. 90–94), the author investigates the consequences of the "crises of the 3rd century AD" for individual villa sites and comes to the conclusion that the Germanic attacks caused a decisive break in the development of the villa economy. In the 4th century there was a new upswing, directly linked to the promotion of the city of Trier to the status of imperial residence. However, Magnentius' attempt to usurp the imperial throne and the subsequent incursions by the Alemanni led to another crisis and to villas being abandoned, as evidenced, not least, by several coin hoards buried in the grounds of some of them (p. 98).

When the situation settled down, some villa sites were reoccupied in the second half of the 4th century, although it is not always clear from the archaeological evidence whether this was indeed a

continuation of occupation or the use of available buildings by new settlers. In the middle or the second half of the 4th century, Trier experienced a new hey-day as the seat of the Valentinian dynasty, but the only building activity which can be securely dated to this period is the erection of three large villas and of the so-called Langmauer fortification complex. However, the archaeological evidence indicates the increasing impoverishment of most villas during this period. It is true that settlement activities can still be traced at 13 villa sites during the first half of the 5th century, but it is questionable whether this can be interpreted as evidence of a still-viable villa economy.

Table 20 on pp. 362–363, again alphabetically ordered, offers an overview of the chronology of the villa economy from the 1st century BC to the 5th century AD. On maps 9–17, which supplement this chapter, it would have been helpful to have seen a distinction between the villa types; this would have made it easier, for example, to trace the enlargement of individual villas and the emergence of large villas.

Chapter 4 discusses "The villa as an economic unit". In the section on "The agrarian economy", the author has only a few finds from the villas themselves on which to base his discussion. To supplement these, he also analyses the archaeobotanical finds from Trier and the *vici* in the Trier region in order to draw conclusions about the type of cultivation practiced at agricultural production sites. It is only thanks to finds of tools at the villas and "on the basis of a few farm buildings and outbuildings which have been excavated at villa sites that statements can be formulated about the agricultural activities undertaken there" (p. 129). Wine-presses, in particular – for instance, the one found on the estate of the "Weilerbüsch" villa at Fliessem-Otrang (cat. no. 46) – can be analysed for this purpose thanks to their very specific features. Occasionally, drying kilns for grain, mills, and stables can be identified.

Overall, however, the author is unable to decide whether grain production or cattle rearing predominated at the villas in the Trier region, since the environmental conditions were suitable for both types of economy and there was demand for both plant-based and animal-derived products in the local markets.

The research results with respect to "Manufacturing and craft production" (in chapter 4, "The villa as an economic unit", pp. 140-155) are similarly indifferent. Visual sources, such as the Igel Column and the inscriptions of cloth merchants, provide more evidence of the importance of textile manufacture in the Trier region than any features actually discovered at the villas. No doubt all sorts of crafts were practised, such as leather working, wood-working, pottery and glass production, but this was probably only for home consumption; there is no evidence of market-oriented manufacture. In fact, from the evidence of tile stamps, it seems that architectural ceramics are more likely to have been imported from outside the Trier region. Overall, crafts and trades do not appear to have had any decisive economic importance for the villas in the area. Chapter 5 (pp. 156– 165) summarises the "Economic structures", "Typological and architectural aspects" and "Chronological aspects" of the villa economy in the Trier region. This is followed by an inventory of the 188 sites studied, in alphabetical order (pp. 167-295). The latter contains a comprehensive description of the archaeological features and the links to the Roman transport network, as well, where possible, as dates, and definitions of the farmhouse types. There are also details about the natural landscape, altitude, topographical situation, and geological features of the villa sites. Finally, the modern administrative district and a bibliography are also included. The inventory is supplemented by 97 illustrations on 43 plates, including villa ground-plans, farmhouse reconstructions, and photographs of features and surveys.

The technical appendix contains, firstly, a complete, alphabetically arranged list of 494 sites, together with the catalogue, which is also alphabetically arranged. An additional listing according

to geographical areas would have been helpful, to show more clearly the settlement density in the different landscapes. The catalogue is followed by a detailed bibliography and a list of sources (pp. 313-341). Next come four diagrams and 20 tables, followed by lists of maps and illustrations. Maps 1-3 are inserted as supplements, the particularly important "Geological map 2" being somewhat difficult to read, owing to an excess of symbols and the absence of a key. In contrast, more detail could have been given on maps 4-17, which are integrated in the volume; for example, these show only modern districts, but nowhere is there even a rough subdivision of the study area according to environmental conditions. Meanwhile, the Langmauer fortifications are not shown on map 16 and can only be found separately in figure 2.

Overall, the work contains a thorough summary of what is known about the Roman villa economy, together with some new information specific to the villas in the Trier region. For example, Seiler can prove that, because of its more fertile soils, the Bitburg region was more intensively occupied by villas than, for example, the Eifel area, with its poor soils. The presence of cultivated plant species imported from the south could also be proved by pollen and macrobotanical analyses. Since the study is mostly a reappraisal of earlier excavations, however, this type of investigation was only possible at very few locations and the work presented here opens up further possibilities for future excavations.

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SYLVIA FÜNFSCHILLING, Die römischen Gläser aus Augst und Kaiseraugst. Kommentierter Formenkatalog und ausgewählte Neufunde 1981–2010 aus Augusta Raurica. With contributions by Peter Cosyns, Florence Cattin, Patrick Degryse, Andreas Fischer, and Bernard Gratuze. Forschungen in Augst Volume 51. Museum Augusta Raurica, Augst 2015. € 160.00. ISBN 978-3-7151-0051-7. Two volumes with 708 pages, 644 illustrations, and 98 plates, many in colour.

This two-volume monograph is the sequel to Beat RÜTTI's Die römischen Gläser aus Augst und Kaiseraugst. Forsch. Augst 13,1.2 (Augst 1991), which had presented all glass vessels found in Augusta Raurica before 1980. In the introduction (pp. 11–12), Sylvia Fünfschilling outlines the starting point and aims of her monograph (cf. also the preface by Beat Rütti, p. 9). Her main interest is to publish the glass vessels excavated between 1981 and 2010 with the exception of the material from the large cemetery "Im Sager", which will be published by another author (cf. p. 175). Window glass, beads, bangles, and other glass objects are only of marginal interest to her (cf. pp. 207–212). The importance of the glass material from Augusta Raurica is given by the fact that, by 2010, nearly 30 000 glass fragments were recorded representing a large variety of different forms and covering – with the exception of purely Augustan contexts – the entire Roman Imperial period.

The two volumes are organised with continuous pagination as follows: "Text und Formenkatalog" (Text and Catalogue of Vessel Forms) and "Fundkatalog und Tafeln" (Catalogue of Objects and Plates). Although S. Fünfschilling bases her catalogue of vessels on the forms identified by B. Rütti, she extends this range of forms by adding new forms and new subdivisions. She also sets her own priorities; she is particularly interested in the identification of even the smallest fragments of the glass from Augusta Raurica and she focuses on the question to what extent this material can