HELGA SEDLMAYER, AD METALLA! Zum Militärplatz Strebersdorf in den pannonischen Eisenrevieren an der Bernsteinstraße. With contributions by Stefan Groh, Gaspard Pagès, Philippe Dillmann, Enrique Vega, and Eddy Foy. Monographies Instrumentum volume 68. Editions Mergoil, Drémil Lafage 2020. € 48.00. ISBN 978-2-35518-107-8. 210 pages with 42 figures and 62 plates.

The monograph "AD METALLA! Zum Militärplatz Strebersdorf in den pannonischen Eisenrevieren an der Bernsteinstraße", authored by Helga Sedlmayer, the principal contributor, and a team of collaborators, presents the results of the excavations and survey conducted at the site of Strebersdorf (AT), which may be identified as the ancient *Rhispia*, situated approximately halfway between *Savaria* (Szombathely, HU) and *Scarbantia* / *Scarabantia* (Sopron, HU), along the communication commonly known as the Amber Road. The site had a long history, mostly (but not exclusively) linked to military presence, thoroughly and authoritatively presented by the authors.

Structurally, the book is divided into seven main segments; one may even say eight since the fourth segment has a long separate chapter about ironwork and trade in Strebersdorf (AT), written from an interdisciplinary point of view by a group of authors.

H. Sedlmayer is the principal contributor, since she authored most of the manuscript, i.e. the first four segments. The monograph starts with an introduction entitled "Introduction: requirements and methods" (Einleitung: Voraussetzungen und Methoden, pp. 7-14), where she presents the research methodology, the area which was subjected to excavations and surveying as well as the larger geographic context. This useful preamble is followed by an extensive outline of the historical context in which the Strebersdorf area was evolving since the late Augustan times to the end of the Antonine period. This segment is entitled "A. An overview of the Roman military and iron districts along the Amber Road" (Römisches Militär und Eisenreviere entlang der Bernsteinstraße im Überblick, pp. 15–35); it is further divided into three chapters. I particularly appreciated this part of the book because monographs dealing with publication of archaeological research sadly often lack a thorough presentation of the historical context. Sedlmayer did an excellent overview and clearly put into perspective the Strebersdorf site using all the available sources and data. The third segment - entitled "B. The Strebersdorf military base in the Pannonian iron districts" (Der Militärplatz Strebersdorf in den pannonischen Eisenrevieren, pp. 36-68) - divided further into four chapters, provides a detailed presentation of the site itself and its different phases of occupation. The fourth segment - "C. The finds from the Strebersdorf military site in detail" (Die Funde des Militärplatzes Strebersdorf im Detail, pp. 69–120) – is in fact the catalogue of finds. It is divided into nine chapters, the first eight chapters (pp. 69-103) devoted to different categories of material (weapons and military equipment, horse harness and cart fittings, dress objects and personal adornments - brooches being the most significant group of items in this category –, writing implements, household and agricultural implements, building material and keys, tools, and finally waste material associated with metal working). This chapter is followed by a ninth chapter written by a group of authors (Gaspard Pagès, Philippe Dillmann, Enrique Vega and Eddy Foy), entitled "C.9 Questions about the working and trading of steel in the Roman camps of Strebersdorf in Pannonia (Burgenland, Austria). Interdisciplinary study of slag and semi-finished products" (Questions posées sur le travail et le commerce de l'acier dans les camps romains de Strebersdorf en Pannonie [Burgenland, Autriche]. Étude interdisciplinaire des scories et des demi-produits, pp. 104-120). It is an extremely enlightening and clearly interdisciplinary study of the metallurgical finds from Strebersdorf. It appears certain that iron ore reduction activity took place there although the work scale was probably not very extensive and there seem to be no traces of major activities related to ore purification or blacksmithing. However, the presence of numerous fragments of raw iron and a certain number of iron bars whose composition (highly carburised homogeneous steel) shows different, i.e. non-local origins might imply that the first fort in Strebersdorf was primarily a relay point for iron and steel supply. Stefan Groh, as already mentioned above, wrote the fifth segment entitled "D. Excursus: About the ancient name of the Strebersdorf / Frankenau site" (Exkurs: Zum antiken Namen des Fundplatzes Strebersdorf / Frankenau, pp. 121–123), in which he, using written and epigraphic sources, convincingly demonstrates that the site may have been called Rhispia in Roman times. A summary in German and French ("E. Resümee / Résumé", pp. 124–130) concludes the manuscript, followed by the bibliography and plates ("F. Anhang und Tafeln", pp. 131–210). It must be pointed out that all the figures, drawings, maps, and tables are of good quality and perfectly adequate for this type of publication.

The first traces of Roman presence in the area are linked to a military fort built most likely towards the end of the Augustan, or even more likely, at the very beginning of the Tiberian period. As pointed out above, the site may have been called *Rhispia*, as surmised by St. Groh, based on data provided by Claudius Ptolemaeus and one epigraphic find (pp. 121–123). This fort, called Camp I by the research team, covered an area of 2.2 hectares and was surrounded by a ditch and an earth and palisade rampart. Considering its size, it could have accommodated more than just one cohort and one may presume that a legionary vexillation might have been stationed there (pp. 45–50), an assumption corroborated by finds of early Corbridge type lorica segmentata fittings as well as boltheads and a ballista ball (pp. 69-72). Sedlmayer puts the camp in a larger geographical context and explains why the emplacement was strategically well situated (pp. 36–42), not only in relation to other military installations in this part of Pannonia and on the Amber Road but also within an iron mining area. The latter was presumably the main reason why the fort had been constructed there in the first place (pp. 26–29). In fact, iron ore exploitation must have started at the same time as the installation of the military at the Strebersdorf site (pp. 58–61). Actually, even at the site itself one finds metal working tools, ovens in the immediate vicinity of the fort as well as smelting slag dumped in the first ditch after the latter was disused. This is clear indication that soldiers were also tasked with iron working, besides purely military duties such as safeguarding the mining area (pp. 26–28; 31; 100–120). Sedlmayer presumes that the presence of soldiers in this first fort may be considered as a form of punishment after the mutiny of AD 14 (she uses the syntagm ad metalla in this context). It is not an unbelievable conjecture, far from that, but I would be more circumspect in this regard. It was after all common Roman practice to assign soldiers to duties which may hardly be described as military tasks. Considering, for instance, all the construction work performed by soldiers at that time, I do not find it particularly odd to have soldiers tasked, among other things, with iron ore processing and metal production. The army certainly had adequately trained specialists and it was certainly a big consumer of iron and steel for its weapons and tools. As a matter of fact, Sedlmayer provides an overview of army activities related to different kinds of ore mining during the 1st century AD. Those tasks did not only concern security matters, extraction and processing were also sometimes undertaken by soldiers (pp. 27–29). Having soldiers dealing locally with iron ore mining and processing could have been useful for troops stationed in Pannonia from a logistics point of view. Nonetheless, one may easily imagine that in the aftermath of the Pannonian legions' mutiny, the imperial authorities wanted to have the soldiers busy as much as possible and having them working in the mining district might have been considered as an appropriate measure for ordering and curbing legionaries.

The dating of the first camp occupation relies primarily on small finds, more precisely brooches remarkably typical for military sites of the early Tiberian period in Pannonia, especially for the Amber Road area, which incidentally points to the engagement of troops already stationed in Pannonia (pp. 82–86). It appears more than certain that the first camp had some manufacturing facilities, probably not on a large scale but they were unquestionably able to make brooches, i.e. the *Doppelknopf Fibel* type, as well as some other items of military purpose (pp. 101–102). The legionary occupation of Camp I, as well as activities related to iron processing and supply, were however

not meant to last for a longer period of time. Although the departure of legionaries may not be dated with absolute precision, it must have happened after just a few years, certainly during the early Tiberian period according to finds (militaria, brooches, ware, and coins), and probably not much later then AD 20. Thus, Camp I was certainly not occupied for more than ten years, five to six years being perhaps the most likely time span (pp. 47–50). Sedlmayer puts the abandonment of Camp I in a wider historical context and assumes that the reorganisation of Roman military presence in Pannonia must have taken place after Drusus successfully ended his mission of calming down matters there, both within the province itself and on its borders. Thus, according to the author, this reorganisation could likely have been implemented between AD 20 and AD 23. As far as the Strebersdorf camp is concerned, one may observe that the fort was actually not abandoned but rather reduced in size, i. e. to 1.5 ha, keeping nonetheless the axe defined by the *locus gromae* of the first military camp (pp. 50–56).

Obviously, the garrison must have changed and the new fort, called by the authors Camp II, had to be adapted to the needs of the new occupants. The latter were likely not legionaries but auxiliary cavalry troopers. The size of the second fort corresponds quite well to the ideal size for housing an ala, if one considers that most of the horses and pack animals were kept outside of the encampment in normal circumstances. The authors consider that the wide open area around the camp, which must have been covered by artillery pieces during the earlier stay of the legionary vexillation, came quite handy to the new occupants, exactly for the purpose of catering horses. The closeness of several water streams could also be put to good use by a cavalry unit. The assumption that the fort was garrisoned in this period by an ala is however not only based on these conjectures but also on horse harness equipment finds which may be dated to the Tiberian period as well as the internal planning of the housing facilities (pp. 50-57; 73-81). But which ala could have been stationed there? The author's answer is straightforward: it must have been the ala Pannoniorum (pp. 54–57). This hypothesis is not at all speculative since several tombstones belonging to troopers of the ala Pannoniorum have been found in close vicinity, reused as spolia during late antiquity (two explicitly mentioning equites of that ala and one just mentioning an eques, without precising the name of his unit). Those monuments can be dated to the 1st half of the 1st century AD and strongly point to the presence of this ala in the Strebersdorf Camp II. As far as we know, the ala Pannoniorum was stationed in Dalmatia during the late Augustan period (perhaps in Salona [HR] or in one of the camps in Salona's hinterland) and Strebersdorf could likely have been its first garrison in Pannonia after it had been transferred from Dalmatia during the early Tiberian period. Camp II must have been in function for a longer period of time than the first fort but its existence in all probability did not go much beyond two decades. Finds of coins and militaria as well as brooches corroborate a Tiberian dating of Camp II, which was likely vacated in the early Claudian period (pp. 56–57).

The site was nonetheless not abandoned by the army. A third fort was built within the area of the first and second forts, again reduced in size but still following the axe of the two previous camps. Camp III covered only a surface of 0.6 ha and was evidently not intended to accommodate a fully manned auxiliary unit. According to the authors, the size of the garrison could hardly exceed a century, i. e. 80 men (p. 57). The question remains to which unit could those men have belonged? The authors convincingly put forward the hypothesis that they were troopers of the *ala Pannoniorum*, at least in the beginning (pp. 24; 57–58). The unit was transferred to Arrabona (HU), a new fort built in the early Claudian period, but it appears that a detachment stayed in Strebersdorf for a while. It is difficult to assess how long this detachment garrisoned Camp III, but finds certainly indicate that cavalrymen were stationed there initially. The third camp may have been in use till the fifties of the 1st century AD, if not longer, but it seems that troopers of the *ala Pannoniorum* were not the last to be there. Camp III layers (as well as the surrounding area) contain a rather high number of typical Germanic brooches which may hardly be linked to the soldiers of the *ala Pannoniorum*. Sedlmayer,

taking into account the historical context of the mid-1st century AD in Pannonia, suggests that supporters of the exiled king Vannius could have been accommodated in Strebersdorf at that time, either together with the Roman soldiers or perhaps even on their own, as a small military unit, i. e. a *numerus* (pp. 23–24; 57–58). While their exact role (displaced refugees or warriors soldiering in a *numerus*) may be a matter of discussion, the presence of Germans at Strebersdorf towards the mid-1st century AD appears highly plausible. The use of Camp III quite certainly spanned the forties and the fifties of the 1st century AD, but it may have served as a *numerus*' garrison for even longer, till the Flavian period at the latest.

If not before, the army must have definitely abandoned the area at the beginning of the Trajanic period, when *Poetovio* (Ptuj, SI) ceased being a legionary garrison and when most military assets in Pannonia had been moved to the borders. In any case, the life in Strebersdorf and its vicinity continued without the army presence. A small civilian settlement, interpreted as a vicus and called the Frankenau site by the authors, was not overlaying the camp site but started developing south-east of the camps, along the Amber Road, and by the end of the 1st century AD stretched to the south of the road, south of the Stoober creek more precisely (pp. 31–32). The authors presume that the creek was actually the border between the territories of the colony of Savaria and the municipium of Scarabantia. The area of Strebersdorf would have thus belonged to the territory of Scarabantia, while the area of Frankenau would have been part of Savaria's territory. Interestingly (but not uncommonly), the former military site was not reused for construction purposes and we may assume that the area remained solum publicum. The Frankenau vicus must have suffered during the Marcomannic wars: a destruction layer was identified there, whose wooden constructions must have been built after AD 151/152 (according to one dupondius find). The Roman pottery finds may be safely dated to the second half of the 2nd century AD, while the radiocarbon dating of the charred grain from that layer corresponds precisely to the Marcomannic war period. Besides, Germanic pottery was also discovered in the destruction layer (pp. 33-35). It would seem that the destroyed area was not rebuilt and we may assume that the existence of the *vicus* was put to an end after this brutal event, or that the settlement was at best much reduced in size and had lost any importance since it is not mentioned at all in the Itinerarium Antonini. The devastation of the Frankenau vicus is quite likely related to the Germanic raids along the Amber Road in AD 170, when incursions reached as far as Aquileia.

While civilians must have fled the area, soldiers had to return. Military presence at Strebersdorf is again evident in the 2nd half of the 2nd century AD (pp. 32–35; 61–68). Not only is a military contingent again stationed there but watchtowers and palisades appear in the larger area as well, built following the model of contemporaneous field fortification in *Raetia*. Those were all wooden constructions and were not meant to last for a longer period of time. Their use is limited to the Marcomannic war period when the army appears to have retaken control of the mining area. According to finds, especially brooches, it would seem that Strebersdorf was again garrisoned by legionaries, presumably soldiers of the legio II Italica. This assumption is based on the fact that the same type of brooches appears subsequently in Lauriacum, where this legion was stationed after AD 180. Perhaps more anecdotally, Sedlmayer points out that dodecahedrons appear both in Lauriacum and in the area of Strebersdorf – actually only one was found in the vicinity of Strebersdorf (p. 68). I would not necessarily make the connection since the exact purpose of dodecahedrons remains uncertain, despite several more or less interesting hypotheses in recent publications. In any case, their use does not appear to be chiefly associated to the military, unless we accept the possibility that they might have been employed as measuring or surveying devices. Be that as it may, the army left the Strebersdorf area as soon as the war was over and it would appear that mining activities in the area also decreased to a large extent after the Marcomannic wars. Finds from the later period are sporadic and must be mostly related to the Amber Road traffic.

Helga Sedlmayer and her team of collaborators have produced a highly informative monograph which is an important contribution to the study of Roman Pannonia and provides remarkable data about the role played by the Roman army in the decades following the conquest of that territory.

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MATTHIAS FLÜCK, "Moenia Lata Vide". Die römische Stadtmauer von Aventicum / Avenches (Kanton Waadt, Schweiz). Mit Beiträgen von Michel Guélat, Jean-Pierre Hurni, Frank Jacobs, Isabella Liggi Asperoni, Fanny Puthod und Bertrand Yerly. Band 1: Synthese. Cahiers d'archéologie romande Band 186 = Aventicum Band 22. Cahiers d'archéologie romande, Lausanne 2020. € 95,—. ISBN 978-2-88028-186-1. 607 Seiten mit 580 Abbildungen und 87 Tafeln. Band 2: Grundlagen. Cahiers d'archéologie romande Band 187 = Aventicum Band 23. Cahiers d'archéologie romande, Lausanne 2020. ISBN 978-2-88028-187-8. Nur digital verfügbar unter: http://www.mcah.ch/publications/cahiers-darcheologie-romande/ oder https://www.aventicum.org/images/public/publications/documents/MLV2_def_23_02_2021.pdf (letzter Zugriff: 17.02.2023). 372 Seiten mit 994 Abbildungen.

"Moenia lata vide": Das Zitat im Titel geht auf einen Ausspruch von Heinrich Loriti ("Glareanus") um 1515 zurück und bezieht sich auf die weite Stadtmauer, die vom Glanze und Reichtum der antiken Stadt Aventicum / Avenches künden soll. Diese Mauer war der letzte Monumentalbau der antiken Stadt, dessen gesamthafte Bearbeitung noch ausstand, und seit kurzem liegt nun ein wahrhaft gewichtiges, zweibändiges Werk von Matthias Flück dazu vor. Die Publikation basiert auf seiner Dissertation am Institut de l'Archéologie et des siences de l'Antiquité an der Universität Lausanne. M. Flück hatte sich schon davor mit römischen Großbauten auseinandergesetzt, so z. B. in einer gemeinsam mit Jürgen Trumm verfassten Monographie zu den Steinbauten am Südtor des Legionslagers von Vindonissa (J. Trumm et al., Am Südtor von Vindonissa. Die Steinbauten der Grabungen Windisch-Spillmannwiese 2003–2006 [V.003.1] im Süden des Legionslagers. Veröff. Ges. Pro Vindonissa 22 [Brugg 2013]). Damit konnte er alle seine Erfahrungen in das Stadtmauerprojekt einbringen.

Das Publikationsformat ist ein interessanter Zwitter: Die in der Reihe "Cahiers d'archéologie romande" (CAR) erschienene Monographie ist auf zwei Bände aufgeteilt, von denen nur der erste mit der archäologisch-historischen Synthese gedruckt erscheint. Der zweite Band mit den archivalischen Grundlagen und ausführlichen Befundbeschreibungen wird dagegen ausschließlich online publiziert, dafür aber im Open Access. Die Grundlagen sind also frei einsehbar, während für die Synthese im gedruckten Band gezahlt werden muss. Angesichts der steigenden Druckkosten halte ich das für einen gangbaren Weg, gerade die Befunddokumentation mit einem großen Anteil an auch farbigen Abbildungen als PDF zur Verfügung zu stellen. Andererseits ist es für wissenschaftliche Präsenz-Bibliotheken natürlich schwierig, wenn nur ein Teil des Werkes als Hardcopy vorliegt. Hier wäre es eine gute und m. E. vertretbare Option gewesen, den zweiten Band wenigstens bei Bedarf auch im Print on Demand erwerben zu können. Und für private Anwender*innen bleibt die Bezahlhürde des ersten Bandes, was die Frage aufwirft, ob es dann nicht sinnvoll gewesen wäre, gleich beide Bände im Open Access erscheinen zu lassen, so wie es viele nationale und internationale Forschungsförderungsorganisationen zu ihrer Politik gemacht haben.