

Kamil Rabięga, Grzywny siekieropodobne jako fenomen społeczno-kulturowy w okresie wpływów rzymskich i we wczesnym średniowieczu. Uniwersytet Kardynała Stefana Wyszyńskiego w Warszawie 2022. 180 pages of text + 307 pages catalogue

PhD thesis opinion

Dissertation of mgr. Kamil Rabięga is devoted to the so-called *axe-shaped bars* (hereafter ASB), a category of artefacts that has been known to archaeologists for almost 200 years, yet no reliable explanation of their original function (or functions) has yet been found. These specific iron products, resembling long axes, have been recorded in several European regions from the Iron Age to the early High Middle Ages (mainly Norway, Sweden, Denmark, southern Poland, Moravia (CZ), Slovakia and a few finds in the Volga basin).

The text of the dissertation is divided into 13 chapters, starting from the terminology, through typology, analysis of the finding contexts to the final reflections on the possible functions of the objects under study. The second separate volume of the thesis is the heuristic corpus of the work: the vast catalogue is organized by regions and has a rich pictorial accompaniment. The author has recorded a total of 416 sites with finds of ASB from nine European countries. It should be emphasized that a large part of the finds were studied and documented by K. Rabięga personally in several museum institutions across Europe. This already represents an extraordinary achievement and deserves recognition.

In the introduction, the author presents a basic overview of the research on ASB. Naturally, interest in them has been greatest in the countries where they are found, i.e. Scandinavia, Central Europe, and eventually Russia. The vast majority of studies, however, relate only to a particular region. K. Rabięga is therefore the first to attempt a comprehensive mapping of this transregional phenomenon. He offers not only a (as far as possible complete) catalogue, but also a serious attempt at interregional comparison. Regarding the initial methodological paradigm, the author briefly advocates neoevolutionism in

the introduction (p. 6), which suggests the alternative of independent regional developmental trajectories. The chosen approach would thus probably be better called "multilinear evolutionism".

In Chapter 2, devoted to ASB terminology, K. Rabięga provides a qualified introduction to the various regional research traditions and their main representatives. He shows that their views and approaches sometimes differed quite significantly from each other. Some Scandinavian scholars, for example, derive the designation of an object not from an axe but from a blade, or from a weaving weight. Despite the inconsistency in terminology, the author continues to stick to the conventional and established ASB designation.

Chapter 3 presents the basic characteristics of the ASB finds base. The classification of the finding contexts of the objects under study, made separately for each region, is itself key. The author distinguishes three basic categories (single finds at a settlement, hoard finds - "depots", grave finds and objects without clear finding circumstances). Within the depots he arbitrarily distinguishes between small (up to 10 pieces) and large ones. Tables 1 and 2 summarize the basic statistical data. The former registers the individual numerical categories of finds within regions (individual finds, small and large depots), the latter the statistical representation of finding contexts in individual regions (on a hillfort, on a settlement, in a grave, on a heath...). It is therefore a great pity that, despite the fact that the author has collected a large ASB corpus, he has not attempted to subject it to more detailed statistical analyses (ideally factor, cluster and correspondence analyses). He has thus missed out on the opportunity to define correlations between factors, within each region, which could have made important arguments in the discussion of ASB functions.

More attention should also be paid to the formative processes of archaeological sources. As the author notes, ASBs tend to be the most common component of iron object depots. Iron depots are recorded in some regions of Europe, but not in others. The chances of ASB discoveries are therefore much greater where the custom of burying iron objects was practiced. Typical examples are Lesser Poland vs. other regions of Poland or

Moravia vs. Bohemia. Conversely, however, we know of regions - especially the region of early medieval Bulgaria - where, although we know of a large number of iron depots, ASBs are not found there (Henning 1987). Thus, I lack at least a basic statistical statement of what percentage of finds ASBs stand alone and where they are combined with other iron artifacts. The study by F. Curta (2011) would be worth knowing and citing here.

In this chapter, the author also attempts to characterize the information potential of grave and mass finds (hoards) in general. He refers only to a few Polish studies, but lacks a reflection on the current Anglo-Saxon debate (on mass finds/treasures, e.g. Bradley 2017 for inspiration).

Chapter 3.2 presents a small number of Scandinavian written sources that could theoretically be related to ASB. Chapter 4 then summarises succinctly the development of views on ASB in the different countries.

Chapter 5 deals generally with the topic of iron production in the Roman period and the early Middle Ages, but it is not clear what the author is actually driving at and how this relates to ASB. I do not think it is necessary to describe the basic processes of iron production in the dissertation. On the contrary, a much more thorough analysis of the geographical relationship of ironworking regions to the occurrence of ASB would have been necessary. The author mentions only a few production centres (mostly in Scandinavia) in a completely selective and unsystematic way. A reflection on iron metallurgy in Great Moravia is completely missing, although it is already relatively well elaborated (e.g. Souchopová 1995; Hlubek - Šlězár 2014). However, I see the biggest problem in the absence of a description of the production process of the ASB themselves. Meanwhile, a new experimental study has shown that the forging of ASBs was quite demanding and involved considerable material loss, which may be relevant for the interpretation of their function itself (cf. Hlavica - Bárta 2021). Technological aspects are discussed in more depth in Chapter 8. It may therefore have been better to link these parts of the text together.

Ch. 6 is devoted to the chronology and territorial distribution of ASB. These artefacts are usually dated only by their nearer or more distant site context, so I fully share the author's scepticism about the possibility of precise

dating of ASB. However, the basic chronological scheme outlined is certainly correct. ASBs are thought to be oldest in Scandinavia, where they were produced up to the 13th century. A much shorter occurrence is observed in Central Europe (late 8th-early 10th century). The dating of the finds from the Volga region (4th-5th century?) is very problematic.

Already mentioned in chapter 8, the most important studies devoted to chemical, metallographic and spectral analyses of the ASB are recapitulated (especially by J. Piakowski, R. Pleiner, Bialeková & Turčan). In any case, it would be worth trying to generalize what the analyses actually imply for the interpretation of ASB.

In Chapter 9 the author asks for potential antecedents of ASB. Forms with a tute have been known since the Bronze Age. For the most common forms with a hole, he mentions the hypothesis that their shape may have been inspired by wedge-shaped axes designed for splitting wood. Here he cites Scandinavian studies which refer to ethnographic analogies. In Scandinavia, this derivation is perhaps not excluded, but similar wedge-shaped axe types from the early Middle Ages are not known from Central Europe (the long axes would most closely resemble the shapes of the Piotrawin types). What, then, could have been the model here? Hypothetically, one can consider e.g. Avar long axes.

In chapter 10 the author firstly recapitulates the existing typological systems (esp. Pleiner, Dostál, Zaitz, Bialeková & Turčan). In the second part, K. Rabięga capitalizes on his supraregional perspective and proposes his own typological subdivision that synthesizes and modifies the existing systems (Fig. 46). The map in Fig. 45 then shows that in Central Europe the different types were strongly (though not exclusively) linked to certain regions.

In Chapter 11, K. Rabięga revisits the issue of the origin and distribution of ASB (again, Chapters 9 and 11 would be better joined together). The earliest occurrence of ASBs is clearly linked to Scandinavia, where they are subsequently registered in the Vendel period and their appearance peaks in the Viking period. Many scholars have already asked, however, how to explain the appearance of ASBs in (late?) 8th century in distant Great Moravia and its

periphery? There are basically only two interpretative options - diffusion through mutual contacts or independent invention (the author speaks of cultural convergence). It would therefore be good to give more space to evidence of potential contacts between Scandinavia and Great Moravia. The hypothesis of a transfer of the ASB idea, e.g. through the transport of iron from Scandinavia to the Central Danube (K. Wachowski), is not fully supported by anything and is in my view very unlikely. The transport costs of commonly available iron would exceed the potential gains many times over. Moreover, Great Moravia had a sufficient raw material base of its own. Archaeological evidence of mutual contacts (amber, Islamic coins, Scandinavian vs. Great Moravian imports...) is completely negligible until the 10th century. Therefore, the variant of independent development seems to me much more probable. The author should point out that ASB is practically unknown from 9th century Bohemia, which was immediately neighbouring Great Moravia, although there is a strong influence e.g. in jewellery production. This observation may, in my opinion, have important consequences for the functional interpretation of ASB.

The last part of the PhD thesis (chapter 12) was devoted to the key question of the interpretation of the ASB function. He gradually recapitulates the main interpretative directions that have appeared in the literature so far and tries to take a position on them.

1) Mainly in Scandinavia, he registers a tendency to attribute more practical significance to ASB than in other regions since the beginning of professional interest. On the basis of early modern analogies, ASBs have been interpreted here, for example, as weights for looms, 'weaver's swords' or tools for processing wicker. However, these loose analogies cannot be proven or disproven.

2) A second, much more frequent line of scholarship attributes the ASB to the function of non-monetary payment. It would be necessary for the author to point out that the functioning of archaic economies has itself been a topic of fierce debate for many decades, which has not yet reached a clear conclusion. The paradigm then necessarily influences the view of the functions of the ASB. Proponents of so-called economic "substantivism" (inspired by

economist K. Polanyi) assume that commercial exchange did not exist or played at most a marginal role in prehistoric and early medieval societies. For this reason, they diminish even the role of coins or precious metals in commercial exchange. Thus, it cannot be assumed that they would enthusiastically subscribe to the ASB theory as a form of currency. Other authors, on the other hand, assume a commercial exchange in Great Moravia for good reasons (Hlavica - Procházka 2020). In the case of ASBs, their functioning as so-called commodity money comes into question (on commodity money, e.g. Skre 2011). These were common commodities that, in a particular community, could also serve consensually as units in local exchange. The author cites as examples the scarves mentioned by Ibrahim ibn Yaqub in Prague, or furs in Kievan Rus. We may add that iron could serve as a medium of exchange even in societies where coins were available. This is evidenced, for example, by the writings of the important Frankish monastery of St. Gallen. In 818, a certain Majo received 80 pounds of iron for a field, which he handed over to a merchant. Another payment in iron is mentioned in 820, when a meadow is sold for 2 tremms of iron. In the same year another sale of land for 80 pounds of iron was recorded and another piece of land on the road to Berguna was paid for with one solid of iron, the so-called 'in ferro valiente'. Unfortunately, however, it is not stated in what form the iron was given, whether it was semi-finished or finished products (Pošvář 1959, 134-135). Iron in general seems to have been of particular importance in Great Moravia, as evidenced by the large number of depots of iron objects, which, in addition to ASB, usually contain whole series of common tools or even equestrian equipment. The main reason why K. Rabiega rejects the interpretation of ASB as standardized currency is their size and weight heterogeneity, which is of course a very serious argument. But we can recall here, for example, the Nordic weights, for which also a uniform weighting system has not yet been discovered.

3) K. Rabiega therefore considers the most likely hypothesis that ASBs could have served as semi-products - i.e. a form in which iron raw material was stored and transported from producers to smiths. The author thus leans towards the views of J. Piskowski or, more recently, his thesis supervisor P. Urbańczyk. At

this point, however, we can mention again the study by Michal Hlavica and Patrick Bárta, who concluded that "The present experiment shows that the processing of these bars is considerably loss-making, which means that in the case of their circulation as tokens, their withdrawal from circulation for the purpose of their practical utilization would be unlikely. [...] During the social and political changes of the Great Moravian period, this currency acquired the form of stylised semi-finished products and were probably also integrated in anonymous market transactions at least in part of Great Moravian territory" (Hlavica - Bárta 2021, 11). The theory of ASB as a regionally specific form of currency is, in my opinion, supported by their absence in neighbouring Bohemia, where the role may have been played by the scarves mentioned by Ibrahim ibn Yaqub.

4) A large sphere of the "political economy" in the early Middle Ages was gift-giving, as extensively attested by written sources. Thus, the author hypothesizes whether ASB might have circulated in this sphere as well. Methodologically flawed, is his argument that commercial exchange did not occur until after the mid-9th century, based on reference to a single study (Gustin 2004, 240). What about the prohibitions on the sale of arms to Slavs in Charlemagne's capitularies? Gifts usually had a socially representative role (weapons, equipment, horses, jewellery, precious clothing). And if ASBs were nevertheless gifted, this does not exclude that they could have been commodity money at the same time, or in some cases they could have been re-forged.

5, 6, 7) Other possible functions of ASBs that K. Rabiega analyses would be derived rather than primary. I agree with the author's sceptical assessment of grave finds of ASB, which are generally very rare, and often, moreover, cannot be shown to have been intentionally deposited as part of a funerary ritual. It is quite likely that ASB played some role in the religious system. In this context, I would like to highlight Mount Klášťov (Vysoké Pole), which is located in the peripheral and infertile mountainous region of Eastern Moravia. Dozens of depots containing hundreds of iron objects (including ASB) from the Great Moravian period have been found on the area of the former Iron Age hillfort.

The objects were most likely deposited here as offerings and Kláštiv is rightly interpreted as a "holy mountain". Iron evidently also had derived symbolic meanings in Great Moravia. However, economic and cultic functions (votive offerings) were obviously not mutually exclusive. Equally, they could also be deposited as building offerings, which the author has traced to Scandinavia.

In the final chapters, the author presents the main conclusions of his work in a clear and logical manner and, as is fitting and proper, encourages further research on this remarkable category of objects.

The clear positive of Kamil Rabiega's dissertation is its attempt to map the ASB phenomenon in a European context, in which he is a pioneer. I also greatly appreciate the imperative "ad fonts", which has resulted in a respectable catalogue that provides a solid starting point for the thesis. The author travelled to museums in Central Europe as well as in Scandinavia in search of his subjects and was able to get to know many of them first-hand and document them. Moreover, it cannot be overlooked that the work was written during the time of the covid pandemic. As far as the analytical and interpretative part is concerned, however, I believe that the author has not fully exhausted the explanatory potential of the rich collection of finds and their circumstances. The application of simple statistical analyses might have enabled him to capture certain patterns in the occurrence of ASB and to define general trends or, conversely, specificities. In the interpretative part, the author has affected all the main explicative variants that have appeared in the literature so far. However, I would have appreciated a stronger own opinion from the author. Certainly the paper would have benefited from more discussion to the general principles of the functioning of traditional economies. Overall, one cannot help feeling that the time-consuming and organizationally demanding heuristics have somewhat taken a toll on analysis and interpretation.

Overall, however, I consider the work to be a success and would recommend its publication after editing. In my opinion, Kamil Rabiega's thesis fulfils all the requirements set for a dissertation and I am happy to recommend it for further proceedings.



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