

# THE ‘LATE AVAR REFORM’ AND THE ‘LONG EIGHTH CENTURY’: A TALE OF THE HESITATION BETWEEN STRUCTURAL TRANSFORMATION AND THE PERSISTENT NOMADIC TRADITIONS (7<sup>TH</sup> TO 9<sup>TH</sup> CENTURY AD)

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**Abstract:** Research on late antique and early medieval economic and social processes during the past three decades called for, and enabled, a fresh look at the history of the ‘Late Avar period’ of the Carpathian Basin, corresponding exactly to the ‘long eighth century’ of the Mediterranean and European world. This paper offers a rather sketchy new model, alongside raising questions and framing a research programme focusing on social and economic historical processes. Therefore, using the archaeological evidence as a solid foundation, I have proposed a set of research hypotheses as starting points for regional and micro-regional studies.

**Keywords:** Early medieval archaeology, long eighth century, early medieval transformation, Avar archaeology, nomadic culture, social display, elite culture, social and economic structures

*This paper is dedicated to Éva Garam  
on the occasion of her eightieth birthday  
as a token of my appreciation of her guidance  
in all things Avar*

## INTRODUCTION

### *Heyday and decline of the Avars’ steppe power*

According to the Byzantine sources, the ‘runaway’ Avars ‘fleeing the Turks’ arrived to Europe in the 550s. After establishing themselves in the Carpathian Basin in 567–568, the Avar Khaganate survived for some two and a half centuries. On the testimony of the written sources, the age of the Avars can be divided into two main periods, with the boundary between the two roughly marked by the siege of Constantinople in 626.<sup>1</sup> These two periods can also be traced in the archaeological material, although in this case, the chronological boundary can be drawn in the middle third of or the later seventh century.<sup>2</sup>

<sup>1</sup> BÓNA 1988; POHL 2002, 282–284.

<sup>2</sup> Hungarian scholarship sets the chronological boundary between the two periods to the 670s using historical arguments (summarised by BÁLINT 2004b), but based also on the archaeological record through the latest coin-dated graves such as Ozora (solidus of Constantine IV, Constantinople, 669–674, SOMOGYI 1997, 71) and

Kiskőrös-Pohibuj-Mackó-dűlő, Grave 53 (an Avar imitation of a coin of Heraclius and Heraclius Constantine, 669–674, SOMOGYI 1997, 50–52). From the 1990s onward, several different interpretations were proposed: MARTIN 1990 dates the initial phase of the Late Avar transformation (the *Mittelawarische* period) to the 630s, while VIDA 1999 to the 650s, based on the ceramic evidence.

Lacking historical narratives of their own, our knowledge of Avar history comes from their contacts with neighbouring states with a tradition of literacy. The first phase of the Avar period was taken up with the wars against Byzantium, which seems to have ended with the aborted Sasanian-Avar siege of Constantinople. Around this time, the Avars disappeared from the written sources of the neighbouring world. From the 630s, the Carpathian Basin sank into virtual oblivion, as if prehistoric times had descended again – only from a few scattered references do we know that the Avars still lorded over the region prior to Charlemagne's campaigns in the 790s.

Traditionally, the defeat at Constantinople is pinpointed as the most important cause of the crisis of the Early Avar-period nomadic state and its economic structures, which led to its collapse by the later seventh century.<sup>3</sup> In fact, it was the cessation of the Byzantine gold tribute that resulted in the deconstruction of the Avar steppe power, leading to the loss of their Eastern European territories. Instead of a single crushing military defeat suffered by the Avars, the primary reason for the crisis can rather be sought in the decline of the early Byzantine state in the wake of an all-encompassing social and economic crisis<sup>4</sup> that was no longer able to produce the resources with which it had in fact sustained the polities on the steppe. The disintegration of the Early Avar nomadic state can thus in all likelihood be ascribed to the lack of resources which, as a self-destructive process, ultimately led to the collapse of power and an internal strife between the elites that had hitherto been united by the material advantages and the military efficiency demanded by the military campaigns. The latter also meant the end the Early Avar period from a structural point of view.

In order to judge the significance of the transformation process that began from the mid-seventh century, it is important to examine the nature of the preceding collapse. According to the written record, the Avar Khaganate became a regional polity whose political interests were restricted to the Carpathian Basin only after the Avars were ousted from the Eastern European territories during the 630s – whether by the Bulgars or in the wake of a civil war<sup>5</sup> (Fig. 2). Yet, curiously enough, the booty acquired by the Avars during their campaigns and the tribute extorted from Byzantium do not appear east of the Carpathians,<sup>6</sup> where the first burials containing Byzantine articles as well as coins appear exactly from the second third of the seventh century onward, in the 'Bulgarian era'. Most likely, this horizon of graves dated by Byzantine coins can be linked to the phenomenon of lavishly furnished elite burials emerging at the same time. However, the horizon of elite graves, a *Prunkgrabhorizont* as defined by Georg Kosack,<sup>7</sup> emerged simultaneously also in the Carpathian Basin, principally in its eastern half.<sup>8</sup> Before this period, burials richly furnished with valuable precious metal articles have a concentration in Transdanubia,<sup>9</sup> while articles of Byzantine origin, principally coins deposited in burials, occur in a much more restricted circle in the contemporaneous archaeological material of the Hungarian Plain.<sup>10</sup> Before the 630s, the burials east of the Danube were rather poor in precious metal objects, which were in any case mostly small sheet silver ornaments, the only exceptions being the gold coins.<sup>11</sup> Apart from the coins, these graves are much more similar to the steppean, than to the Transdanubian assemblages. Therefore, one may rightly ask whether this can be attributed to the cultural preferences and burial customs of the population of the Carpathian Basin that diverged from those of the steppe. All the more so, as in the light of the salient differences between the quality and value of grave assemblages from Transdanubia and the Hungarian Plain, booty and tribute are not directly reflected in the archaeological record. Very likely, aside from the lack of the custom of depositing *oboli* on the steppe, several other elements influenced the nature of the archaeological legacy, which raises various problems in treating the assemblages in question as a reliable source for reconstructing power relations. According to one model, the lack of elite burials on the vast territory between the Danube and the Eastern European steppe before the 630s can be explained by the cultural preferences of the population and by its social and/or funerary display, rather than by the fact that the redistribution system of the Avar

<sup>3</sup> POHL 2002, 282; VIDA 2016, 256–257.

<sup>4</sup> See below.

<sup>5</sup> *Gesta Dagoberti*, cap. 28; *Nikephoros, Breviarium* cap. 24, 9–15 (see also SZÁDECZKY-KARDOSS 1998, 212–213).

<sup>6</sup> On the Eastern European steppe, precious metal objects of Byzantine origin, including coins, were not deposited in burials before the same period (for the coins, see SOMOGYI 2005, 200–203; for the other finds and the chronology of the 'Sivashovka horizon', see CURTA 2008, 158–161).

<sup>7</sup> KOSSACK 1974, a term first adopted for Avar archaeology by VIDA 2016.

<sup>8</sup> Yet, the similarities between the Mala Pereshchepina assemblage and the Avar '*Prunkgräber*' of the Carpathian Basin (Bócsa

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and Kunbábony, see below) provide strong arguments for the very intensive communication between the elites in the Carpathian Basin and on the Eastern European steppe. These strong elite contacts can be easily fitted into a model of the power network of a single political formation.

<sup>9</sup> First noted by CSALLÁNY 1939, 31–32., GARAM 1993, GARAM 2001, SZENTHE 2015a, BÁLINT 2006, 148–149, reached a similar conclusion, although he pointed out that the differences could be traced to the divergences in the modes of social display as practiced by the population of the two regions.

<sup>10</sup> See SOMOGYI 2014, 248–249.

<sup>11</sup> GARAM 1992. A late date for the Kunágota grave fits nicely into this overall picture: see BOLLÓK–SZENTHE 2018.

Khaganate did not extend to this territory.<sup>12</sup> Nevertheless, as a structural link, the burials from the 630s feature both contemporaneous and earlier coins and various other articles of Byzantine origin in both regions, which indicates a common pattern in the archaeological record.<sup>13</sup> While the exact date of when these Byzantine articles reached the northern steppe region and the Carpathian Basin is a matter of conjecture, it can be reasonably assumed, as in the case of Tépe and Kunágota, that the earlier objects were at least partly among the goods arriving to the Avars in the sixth and the early seventh century.

Thus, while historical sources indicate the presence of the Avar power structure on the Eastern European steppe, there seem to be no decisive arguments against this in the archaeological record. If Avar power had indeed extended to the territory east of the Carpathian Basin, the vast territory extending eastward from the Carpathian Mountains in the west and from the Lower Danube in the south was vital to the early khaganate, although we do not know how far the Avar dominance extended on the Eastern European steppe (*Fig. 1*).<sup>14</sup> This steppe and forest-steppe area had probably been the *Lebenswelt* for most of the nomadic groups under Avar rule, which in this case naturally formed a solid foundation for the Avar social system as well as for the army.<sup>15</sup> The Avars' confinement to the Carpathian Basin must have meant a fatal blow to their military power by reducing the number of troops that could be trained in nomadic cavalry tactics, particularly regarding heavy cavalry.<sup>16</sup>

On the testimony of the archaeological record, the Carpathian Basin was inhabited relatively densely. The groups arriving from the steppe settled among the Gepids in its eastern half (the Great Plain and Transylvania)<sup>17</sup> and among the remnants of the Lombard<sup>18</sup> and the late antique population<sup>19</sup> in its western half (Transdanubia). Although the blending between different peoples probably began quite quickly as reflected by several newly opened row-grave cemeteries,<sup>20</sup> the cultural heterogeneity remained strong until the late seventh century due to internal migrations<sup>21</sup> and the possibly continuous infiltration of Eastern European groups.

It is uncertain, however, how the loss of the steppe territories affected the Carpathian Basin demographically. In all likelihood, some groups of the 'Avar' elites were ousted from the Eastern European steppe only at this time, from the lands that provided a far more ideal environment for the lifestyle of the nomadic aristocracy and their clans than the narrow environmental niches<sup>22</sup> suitable for nomadic pastoralism in the Carpathian Basin. The appearance of a new grave horizon of unrivalled richness of the nomadic elite in the 630s–670s in the Carpathian Basin (henceforth referred to as the Kunbábony-Kunágota-Ozora group) can perhaps be linked to the immigration of the privileged groups of Early Avar power to the plainland ringed by the Carpathians.

The social and administrative structures of the Avar Khaganate were doubtless determined by its nomadic traditions.<sup>23</sup> A model based on the distribution of booty and goods acquired during military campaigns or by diplomatic means through the threat of military actions<sup>24</sup> was the basic structure on which the social and cultural func-

<sup>12</sup> For a similar lack of Byzantine coins among Danube Bulgars, see SOMOGYI 2005, 188–189.

<sup>13</sup> For Eastern Europe, see CURTA 2008, 158–161; for the Carpathian Basin, see, e.g., the Byzantine bowl of the Tépe assemblage in GARAM 2001, 173; For a recent discussion of the Kunágota assemblage, see BOLLÓK–SZENTHE 2018. It must also be borne in mind that the material culture patterning calls for extreme caution when assessing the intensity of the relations with Byzantium and the amount of the tribute. It is quite feasible that the sudden increase in the number of the solidi of Heraclius deposited in burials in the Carpathian Basin (see, e.g., SOMOGYI 2014, 87) and on the Eastern European steppe (CURTA 2008, 158–159), generally attributed to the increase in the tribute at the onset of Heraclius' rule (BOLLÓK 2019), is merely an optical illusion caused by the change in the modes of funerary display rather than an actual reflection of the rise in the amount of the tribute reconstructed from the higher number of coins.

<sup>14</sup> For a critical analysis of the problem, see POHL 2002, 271–274. Nikephoros records that Kuvrat revolted successfully against the Avars in the 630s (*Nikephoros, Breviarium*, 22). Walter Pohl's contention that there is a total lack of archaeological evidence on Avar rule east of the Carpathians rests on shaky ground because the Early Avar Khaganate was a culturally heterogeneous formation, even in the Carpathian Basin (see below).

<sup>15</sup> From this perspective, it is of secondary relevance whether the elites of the eastern territories were under direct control of, or only dependent on, the khagan (for a discussion of the problem on a theoretical level, see SZABÓ–BOLLÓK 2018, 521–531).

<sup>16</sup> For Avar cavalry tactics, see POHL 2002; for a brief discussion, see CSIKY 2015, 61–64; for a more detailed one, see CURTA 2016; for heavy cavalry tactics in the Eastern European steppe zone, see GULYÁS 2018, 111.

<sup>17</sup> KISS 2015, 191–240.

<sup>18</sup> KONCZ 2015.

<sup>19</sup> VIDA 2009.

<sup>20</sup> Most clearly attested in the large cemeteries of Transdanubia (VIDA 2008, 15–17).

<sup>21</sup> Smaller population groups settling elsewhere during the later seventh century could be archaeologically identified in several cemeteries, which had already been in use earlier: e.g. at Alattyán (KOVRIK 1963, 188); Szarvas-Grexa-téglagyár (JUHÁSZ 2004); Vác-Kavicsbánya (SZENTHE 2014).

<sup>22</sup> See below.

<sup>23</sup> POHL 2002, 163ff.

<sup>24</sup> For the nomadic state and the nomadic economy, see, e.g. ECSEDY 1979, VÁSÁRY 1983, 202–210.

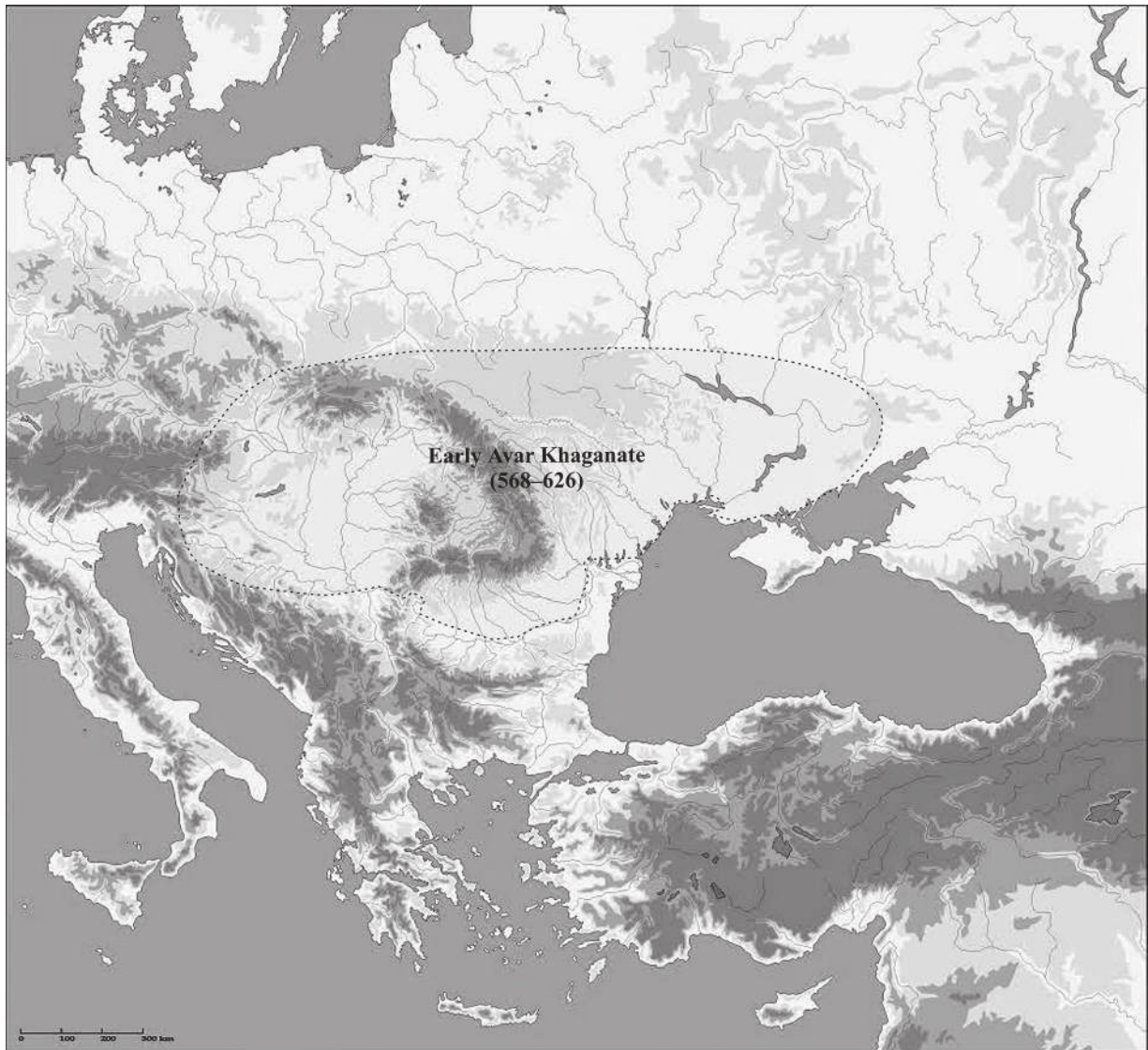


Fig. 1. The greatest probable extent of the Early Avar Khaganate (map by Erwin Gáll)

tions of the Avar Khaganate rested during its early period, until the resources acquired from the sedentary civilisation of the south were available for maintaining the interregional power system of the Early Avar-period khaganate. Quite clearly, the deconstruction/regionalisation of the (nomadic) power structures of the northern periphery occurred simultaneously with the complex crisis of the Byzantine Mediterranean, leading to the disappearance of the booty and gifts that had sustained the system under the khagan's rule. In this sense, the Avar polity can be considered to be a 'secondary' or 'shadow' empire,<sup>25</sup> whose cohesion was maintained as a response to the strength of the Byzantine Empire, given the immense demand for the military power necessary for acquiring the booty from the urban civilisation.

Until the late seventh century, precious metal articles, weaponry and special types of horse burials were the associated elements of the representative grave inventories of high-status men. Among these, the prominence of horses<sup>26</sup> and of certain types of weaponry,<sup>27</sup> and the outstanding importance of the ornate belts indicate the

<sup>25</sup> BARFIELD 2001.

<sup>26</sup> DAIM 2003a.

<sup>27</sup> CSIKY 2015, 8–20, with the relevant literature.

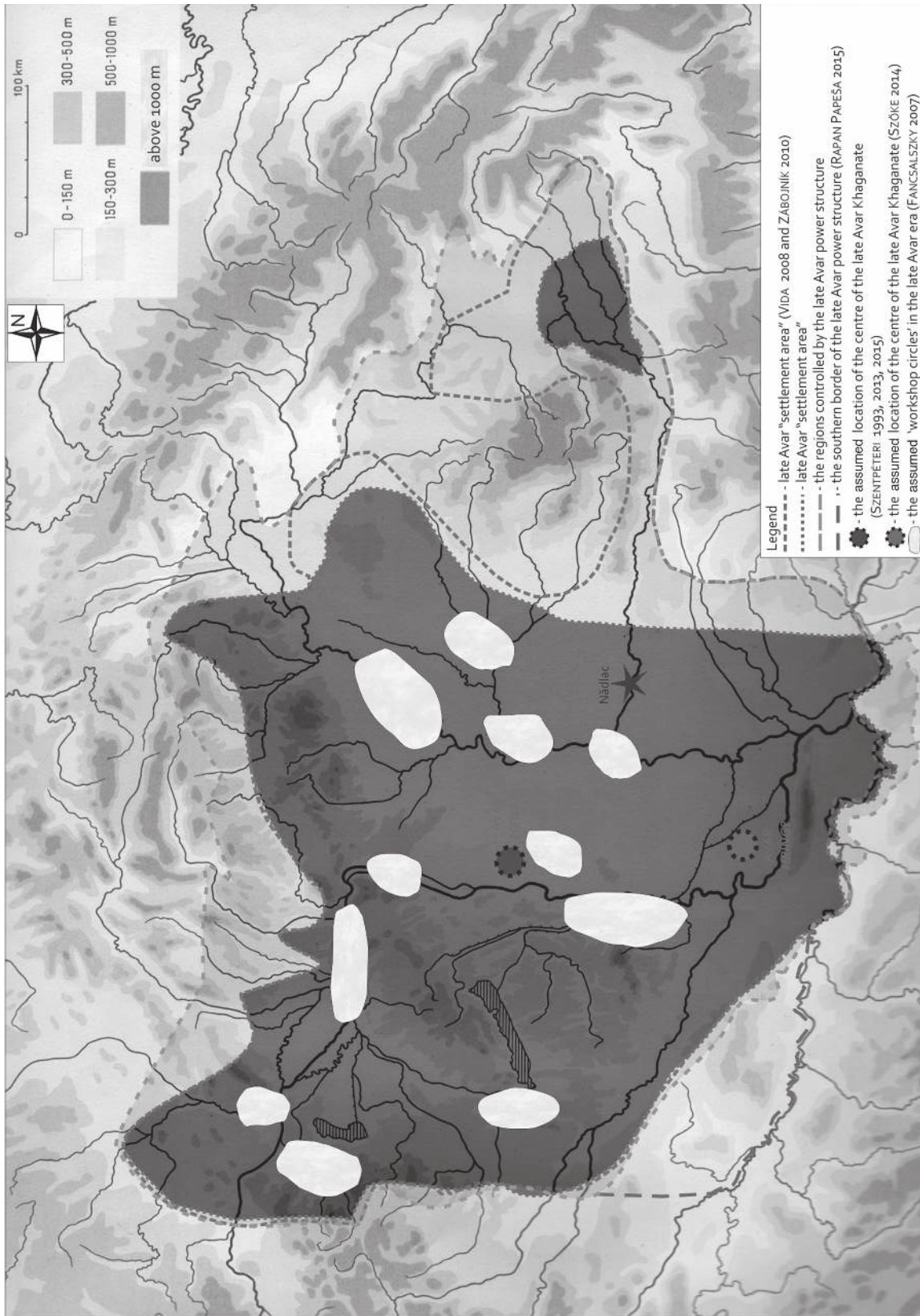


Fig. 2. The extent of the Late Avar Khaganate (after GÁLLI 2018)

dominance of the symbols of nomadic prestige. Unlike women's graves, the richest of which can be assigned to local communities living under Avar rule in the Transdanubia,<sup>28</sup> nomadic prestige radiates from all high-status male burials<sup>29</sup> – hardly a coincidence, given the patriarchal ancestor worship of nomadic cultures.<sup>30</sup> Some of the most lavishly furnished graves contained sets of steppe-type drinking vessels such as ewers, goblets and, in some cases, a rhyton<sup>31</sup> made of precious metals. The almost standard sets offer a glimpse into the world of the feasts/drinking rituals of 'high society'.<sup>32</sup> Interestingly enough, the richest 'Avar' elite graves in question – all solitary burials or small burial places – date from the period following the peak of Avar power, from the years between the 630s and 670s, which corresponds to the first period after the loss of the Eastern European territories and the cessation of the Byzantine gold tribute. Although traditionally divided into different groups based on various similarities<sup>33</sup> and assumptions resting on the dating of single objects taken out of their context,<sup>34</sup> the assemblages are in fact strongly related to each other.<sup>35</sup> All in all, the assemblages appear to have emerged from one and the same social and cultural process within a relatively short period. In terms of the grave goods and the ritual elements, the graves are part of an elite grave horizon. The *Prunkgrabhorizont*<sup>36</sup> can be seen as the last manifestation of the prestige economy of the Avar Khaganate's early period.

The analogous Mala Pereshchepina<sup>37</sup> assemblage indicates that this process was not restricted to the Carpathian Basin. The emergence of the grave horizon followed the loss of the resources. It is reflected by a phase-shift in the grave goods of outstanding value, both in the Carpathian Basin and in Eastern Europe. Most plausibly, the Mala Pereshchepina–Kunbábony–Kunágota–Ozora horizon is a reflection of the crisis permeating the nomadic prestige economy through the enormous wealth sacrificed for funerary deposition, as posited by G. Kossack.

Barely attested in the written records,<sup>38</sup> the communication between the Carpathian Basin and the Eastern European steppe is reflected primarily in the archaeological evidence. Several objects linking the material culture of the two regions such as metal vessels,<sup>39</sup> some costume accessories expressing social prestige or status such as the lunula-shaped ornament from Kunbábony,<sup>40</sup> weaponry<sup>41</sup> and a certain buckle type<sup>42</sup> attest to direct communication, but very probably without the oft-assumed intermediary role of Byzantium.<sup>43</sup> Thus, curiously enough, at the time of the Avar civil war (and/or the revolt of Kuvrat) and in the ensuing period, we witness a revival of the contacts between the Carpathian Basin and Eastern Europe in the material culture. During the first decades after the disintegration of Avar steppe power (*ca.* 630–670), the impact of these contacts shows a concentration in one particular region of the Carpathian Basin, specifically the Great Plain, and seems to be restricted to the military elite, unlike in the initial phase of the Avar era.<sup>44</sup> It is therefore uncertain whether the increasingly intense communication be-

<sup>28</sup> VIDA 2008, 18–31.

<sup>29</sup> The issue of the different traditions of prestige has been addressed by BÁLINT 2006, 148. For the presence of nomadic 'peoples' rather than mobile elites, see SNEATH 2007, 164ff. The nomadic groups migrating to the Carpathian Basin were probably no more than small elite groups, at least until the 630s. However, after the loss of the steppe territories, larger 'Avar' groups could have been forced to resettle there.

<sup>30</sup> For the importance of kinship and the cult of ancestors among nomadic peoples, see SNEATH 2007, 176–180; KHAZANOV 1994, 138ff.

<sup>31</sup> GARAM 2002, 82–92.

<sup>32</sup> For a critical analysis, see BÁLINT 2004b, 214–216.

<sup>33</sup> The Kunbábony and Bócsa assemblages are regarded as a separate group owing to the presence of belt sets with 'pseudo-buckles' (GARAM 2000, GARAM 2005, 420–426). The Ozora, Igar and Dunapentele assemblages became the hallmarks of 'middle Avar horizon' associated with new immigrants from the east, mostly with Bulgars (BÓNA 1988). The highly similar assemblage from Kunágota was interpreted as one of the earliest graves of the Avar period (BÁLINT 1993, 211, revised by Attila Kiss). Kiss argued for a late date for the Kunágota assemblage. Basing his arguments on the assumed Bulgarian immigration of the 670s, he dated the assemblage to the period after the 670s (KISS 1991, 71–72).

<sup>34</sup> Best illustrated by the different proposals for the date of the Kunágota grave, based either on the solidus of Justinian I (SOMOGYI

1997, 59–60), or on the (assumed) chronological position of the belt mounts (earlier seventh century, DAIM–RÁCZ 2001, 487). The qualitative difference between the hammered and chiselled Kunágota belt mounts and the similar pieces from Ozora made with the repoussé technique was often used as an argument in the dating of these assemblages, see DAIM–RÁCZ 2001, 487–488.

<sup>35</sup> KISS 1991, Tabelle 1.

<sup>36</sup> KOSSACK 1974.

<sup>37</sup> WERNER 1984.

<sup>38</sup> The migration of Kuber, the fourth son of Kuvrat to the Carpathian Basin is one of the few events relating to the region mentioned in the written sources. For a discussion, see BÁLINT 2004a, SOMOGYI 2008, 361ff and BÁLINT 2008.

<sup>39</sup> GARAM 2001.

<sup>40</sup> STARK 2009.

<sup>41</sup> CSIKY 2015.

<sup>42</sup> SZENTHE 2015a.

<sup>43</sup> SZENTHE 2015a, 357–358; GÁLL 2018, 152–159. See also note 5.

<sup>44</sup> É. Garam noted that the geographical distribution of the earlier group of high-quality Byzantine articles in the Avar lands shows a definite concentration in Transdanubia, while the later group (mid- and later seventh century) predominates east of the Danube (GARAM 2001, 178ff).

tween the Carpathian Basin and Eastern Europe is simply an indication of migrating groups that felt threatened by the growing power of Kuvrat (and/or, at a later date, possibly of the Khazars), or whether it is indeed proof of bilateral contacts. Nevertheless, as I would like to suggest below, the growing prominence of east–west communications as reflected in the archaeological record may be the sign of a new system emerging from the mid-seventh century onwards, following the decline of the Early Byzantine oikumene in the Mediterranean.

*The Late Avar period and the emergence of a regional structure*

The results of Avar studies during the past two decades call for a radically new theoretic frame for the ‘Late Avar period’, the second half of the Avar rule in the Carpathian Basin (*ca.* 650–800/820).<sup>45</sup> Chronologically, the time frame corresponds to the Dark Ages or the Transition Period<sup>46</sup> of the Mediterranean, lasting from roughly the later seventh to the onset of the ninth century, a period that is generally described as ‘the long eighth century’.<sup>47</sup>

It is probably no coincidence that the great era of Early Avar military activity – a disastrous period for Byzantium, indeed – can be roughly correlated with the late antique Little Ice Age,<sup>48</sup> whose end in the mid-seventh century may have affected the khaganate too.<sup>49</sup> The transformation in the later seventh century, as reflected in the archaeological record, was on a scale that would in itself justify the distinguishing of a new era, the ‘Late Avar period’. At this time, we witness the spread of a uniform culture across the entire Carpathian Basin, including a new material culture, which lacked the previous period’s massive influx of imports.

Quite obviously, not only global variables like climate had their impact on the Avar Khaganate as a complex system. Particular changes in the dominant subsystem, the Byzantine Empire, no doubt affected other subordinate subsystems, the Avar Khaganate among them.<sup>50</sup> At roughly this time, the early Byzantine system of Late Antiquity was succeeded by a less intensive one, in which exchange and communication were built up from a network of small-scale regional/interregional contacts.<sup>51</sup> As the Eastern Roman ‘superpower’ ceased to exist, a more balanced political and cultural structure emerged across Europe and in the Mediterranean, and, as Chris Wickham puts it, this network of local/regional entities was the antecedent of the later medieval European structures.<sup>52</sup> From an archaeological perspective, this involved a regionalisation of archaeological ‘cultures’.

For the Avars, this process led to the crisis of the ‘prestige economy’ because the influx of Byzantine luxury goods ceased and led to the inevitable transformation of the local network in its wake. The loss of power and the diminution of the wealth of the Avar aristocracy must have been a direct consequence; it would appear that the sources of wealth and power no longer depended on the position occupied in the distribution system,<sup>53</sup> but shifted towards a position based on the elite’s control or downright ownership of production structures. As I shall try to demonstrate below, the patterns in the structural transformation of Avar culture, economy and, possibly, society of the Carpathian Basin<sup>54</sup> indicate that early medieval European processes were in play in this region too. Nevertheless, this process was heavily affected by internal factors such as the loss of the eastern territories, immigration, internal migrations and the advanced state of the shift to sedentism among the nomads in the Carpathian Basin.

<sup>45</sup> For the chronological phases of the Avar period, see DAIM 2003b, with the relevant literature.

<sup>46</sup> For a recent discussion, see HALDON 2012.

<sup>47</sup> HANSEN–WICKHAM 2000.

<sup>48</sup> BÜNTGEN *et al.* 2016.

<sup>49</sup> For an overview of environmental research on the Avar-Period Carpathian Basin, see PREISER-KAPPELLER 2018.

<sup>50</sup> For the problem of centre–periphery relationships regarding the Avars and Byzantium, see GÁLL 2018, 152–154.

<sup>51</sup> For connectivity in the Mediterranean, see HORDEN–PURCELL 2000; for connectivity in the wider European context, see McCORMICK 2001, WICKHAM 2005.

<sup>52</sup> WICKHAM 2005, esp. 828ff.

<sup>53</sup> See in CLARKE 1978, 428–435.

<sup>54</sup> Interpreted exclusively within a regional framework, as symptoms of the internal crisis of the Avar Khaganate: BÓNA 1988.

## ASPECTS OF THE 'LATE AVAR' TRANSFORMATION

*Global agents and the climatic change*

The more favourable period in the wake of the Little Ice Age,<sup>55</sup> a period marking the consolidation of the early medieval world<sup>56</sup> recovering from the crisis and its fragmentation into a motley of regional units corresponds to the Late Avar period in the Carpathian Basin.

*Changing patterns in the connectivity of the Carpathian Basin and the surrounding world*

As the socio-economic and cultural context of the Late Avar Khaganate, the European and Mediterranean system can be perceived as a web of communications. In the case of the khaganate, we know next to nothing about the channels of these contacts; the nature of the interactions – long-distance or regional trade, diplomatic gifts, etc. – can only be categorised through a meticulous assessment of the relevant historical sources. Unfortunately, these only contain a few scattered references to supra-ethnic elites and diplomatic contacts.<sup>57</sup> The probably regular long-distance or at least inter-regional communication that shaped the broad spectrum of Avar material culture cannot be identified more closely.

The transformation of the internal cultural and social system can best be studied through material culture. The material presented and discussed here comes from the realm of so-called 'small finds'. However, knowing that personal utilitarian and other articles express socio-cultural relations,<sup>58</sup> their complexity can be taken as a reflection of the period's social structures.

In contrast to the preceding period, when most of the articles used by the elite were crafted using a wide array of sophisticated techniques,<sup>59</sup> the metal artefacts so relevant to any analysis of the Avars' archaeological legacy from the Transition period include many technologically simple pieces even among the articles originating from what is usually labelled 'Byzantine' culture.<sup>60</sup> Viewed from a broader perspective, a rapid change can be noted in prestige display from the late seventh century onward, even in the cultural contexts that can be identified as Byzantine. Besides cast gold buckles,<sup>61</sup> the belt mounts of the Vrap hoard and of several assemblages of the Balkan Peninsula are regarded as the products of a Byzantine cultural milieu.<sup>62</sup> However, the prestige value of these items was ultimately determined by their rough metal weight. From this time, the elite tended to display its wealth simply through the precious metal value of the given article,<sup>63</sup> while the importance of 'aesthetic labour'<sup>64</sup> and the number of articles with a high aesthetic-technological value seems to have declined. In Luke Lavan's words, we witness the emergence of a 'post-hierarchical society' in the Mediterranean at this time.<sup>65</sup>

The same is true also for the period's Avar material culture, which is extensively known from cemeteries. While in the case of the Early Avar period, it hardly seems an understatement to speak of the overwhelming formal dominance of Byzantine objects, most of them superb, high-quality articles,<sup>66</sup> the still existing contacts of the Late Avar period with the Byzantine world were considerably more indirect. At the same time, objects identified as original Byzantine pieces largely disappeared from the Avar archaeological material, or were restricted to a thin layer of elite culture.<sup>67</sup> In the late seventh century, a uniform material and – as far as this can be established from the funerary rituals – spiritual culture extending to virtually all wakes of life with minimal regional divergences emerged across the entire Carpathian Basin. No matter which Late Avar metal artefact we choose, whether the previously mentioned ornate belts or other articles, they outline an extremely dense communications network en-

<sup>55</sup> BÜNTGEN *et al.* 2016.

<sup>56</sup> The environmental studies on the Avar-period Carpathian Basin are summarised in PREISER-KAPPELLER 2018.

<sup>57</sup> At least for the Late Avar period: see SZÁDECZKY-KARDOSS 1998, 259–271.

<sup>58</sup> For more recent work on this issue, see, e.g., KRISTIANSEN 2004; MALDONADO-RUSSELL 2016.

<sup>59</sup> BÜHLER 1999; HEINRICH-TAMASKA 2008.

<sup>60</sup> SZENTHE 2016, 358–360.

<sup>61</sup> WERNER 1988.

<sup>62</sup> DAIM 2000, 94–107; SZENTHE 2014.

<sup>63</sup> See the golden belt sets in the Vrap hoard, usually identified as Byzantine products: DAIM 2000, 94–106.

<sup>64</sup> WENGROW 2001.

<sup>65</sup> LAVAN 2006, xxxiii.

<sup>66</sup> See esp. DAIM 2000, DAIM 2010, BÁLINT 2010.

<sup>67</sup> For the problems in the identification of 'Byzantine' objects, see DAIM 2010, GÁLL 2018, 152. Nevertheless, only a few Byzantine-type artefacts are known in the eighth-century Carpathian Basin: see the lists compiled by GARAM 2001, compared to SZENTHE 2015b.



meshing the entire Carpathian Basin.<sup>68</sup> Moreover, the artefact types conveying more sophisticated visual messages, ornate belt sets and horse gear, but also earrings with pendants and certain brooch and bracelet types among them, are typically restricted to the Carpathian Basin.<sup>69</sup>

Nevertheless, even if the dominant elements and particular forms are local, the major trends in the spatial patterning of the material culture and in the ornamentation of the objects are also encountered in the neighbouring world. The later seventh- and the eighth-century variants of the so-called ‘Byzantine buckles’, to remain in the field of the objects of daily use, that can be set in parallel with the Avar small finds have a more restricted geographic distribution and are fewer in number than the earlier pieces, whose use extended across the greater part of the Mediterranean or even its entire basin.<sup>70</sup> At the same time, the later buckles tend to be more profusely decorated. The trends in their figural, geometric and vegetal ornament, the decorative motifs are often identical to those on Avar objects<sup>71</sup> – the differences can be interpreted within the framework of interacting regional cultures.

Thus, in contrast to the Early Avar period, the small finds attest to a cultural partnership with Byzantium and the other European powers in the Late Avar period, the implication being that instead of prospering at their expense, the khaganate had by now become part of the European communications network and had created its own material culture that was intelligible to the neighbouring world. In the wake of an acculturation, Avar culture adopted elements of a shared visual imagery and adapted them to its own taste, adjusting them to its own needs.

### *Contacts between Late Avar and foreign elites*

A certain group of superb objects (no matter how relative their qualitative excellence<sup>72</sup>) embody direct Mediterranean contacts in the Late Avar ornamental style. In this case, morphological uniqueness may correlate with the need for social display of the upper echelons even within the elite.<sup>73</sup> I have chosen a leafy palmette with engraved dot-and-comma motifs to illustrate the impacts on the level of elite contacts since this motif links a series of different objects from various regions of Europe and the Mediterranean. The Warnebert and Nymwegen reliquaries were made in a late Merovingian milieu at the close of the seventh century.<sup>74</sup> The engraved palmettes adorning their sides represent a rare, well identifiable variant, whose counterparts on gold- and silverwork can be assigned to the later seventh–earlier eighth century. This variant of the geometric scroll ornament is a typically Byzantine-Mediterranean motif. Among others, it is attested in a similar form on Byzantine crescentic earrings (*Fig. 3*),<sup>75</sup> sheet metal crosses from Italy and south-western Germany,<sup>76</sup> belt fittings of the late Merovingian culture,<sup>77</sup> and on Avar belt sets from Mártély, Grave B<sup>78</sup> (*Fig. 4*), and Szentes-Nagyhegy, Grave 32 (*Fig. 5*).<sup>79</sup>

It must be highlighted that both belt sets are unique in the Avar milieu. The figural frieze on the obverse of the large strap-end from Mártély is the exact counterpart of two early Byzantine ivory carvings, themselves clumsy late antique renderings of Heracles and the Ceryneian hind (*Fig. 6*).<sup>80</sup> It seems quite certain that the image was transmitted to the Avars, who were unaware of its meaning, as part of this cultural communications network between elites. The elite contacts were either contemporaneous or, given the earlier date of the known analogies, they had possibly transmitted the impact of the Byzantine contacts from the Early Avar period through the treasuries of the Avar elite filled with Byzantine prestige goods during the seventh century. Objects such as carved ivory panels (as well as

<sup>68</sup> For numerous artefact types see FANCSALSZKY 2007.

<sup>69</sup> See SZENTHE 2016. Avar artefact types, occur but rarely beyond the boundaries of the Avar settlement territory (for Danube Bulgaria, see RAŠEV 2008, Tab. LXVIII–LXX; for a large strap-end in Perniö, Finland, see FETTICH 1930), the single exception being the emerging settlement centres in the Morava Valley: for the latter, see below.

<sup>70</sup> See the types in SCHULZE-DÖRRLAMM 2009.

<sup>71</sup> For griffins and four-legged predatory animals, see DAIM 1990; for several other object types, see DAIM 2000.

<sup>72</sup> High-quality precious metal objects such as the belt fitting (strap slide) from Tab (SZENTHE 2015b, Abb.3.3) and Ewer 2 from Nagyszentmiklós (GSCHWANTLER 2002, 15–17) represent a very small group of Late Avar-period material culture and are mostly stray finds (see more below). Prominent grave assemblages almost without ex-

ception contain cast gilt bronze objects which are simple pieces from a technological point of view, but have a relatively sophisticated iconography with richly detailed ornamental and figural designs, the latter an otherwise atypical trait in contemporaneous Avar ornament.

<sup>73</sup> For the demand of uniqueness on the highest level of elite culture, see NICOLAY 2014, 291–294.

<sup>74</sup> HASELOFF 1984, Figs 1–2. For the objects, see recently QUAST 2012, 65–67.

<sup>75</sup> TEMPLE 1990, Cat.no. 10.

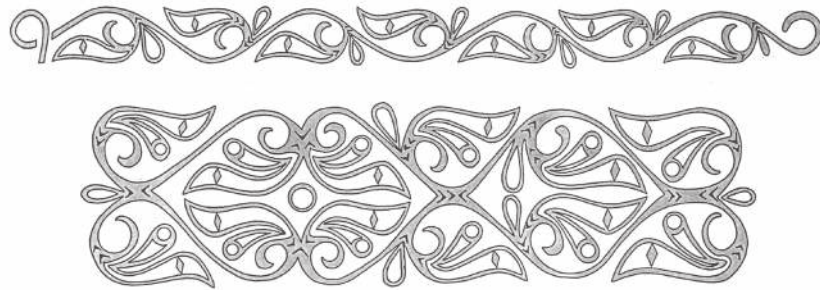
<sup>76</sup> HASELOFF 1975, 58–59, Fig. 27, a–b, Plate 26, 3; WERNER 1974, Fig. 14, a–b.

<sup>77</sup> Gurmels/Dürrenberg grave nr. 318, SCHWAB 2006, Fig. 8.

<sup>78</sup> HAMPEL 1905, Pl. 80–81.

<sup>79</sup> CSALLÁNYI 1962, 445–446, Pl. XV.

<sup>80</sup> SZENTHE 2013, 151–154.



1



2

Fig. 3. 1: The Warnebert reliquary (after HASELOFF 1984: Figs 1–2); 2: Byzantine gold earring with crescentic pendant (after TEMPLE 1990, Cat.no. 10)

magnificent goldwork and textiles) could have been revived as heirlooms of the ‘great forefathers’ and used as models for shaping the new material culture of the elites at the beginning of the new era, known to us as the Late Avar period.<sup>81</sup>

Nevertheless, the very existence of elite contacts can be deduced from the high quality of the known analogies and their fine iconography. In the cited examples it is perhaps in itself symbolic on what type of objects the stylistically identical scroll ornament appears, as the mount-decorated belts from the Avar milieu stands in sharp contrast to the articles of the Christian and Byzantine world.

#### *Connectivity on an interregional level*

Besides elite contacts, there is some evidence for a lower level of communication between neighbouring regions across the political and cultural border zones of Late Avar culture, particularly in Transdanubia.<sup>82</sup> Certain technical and morphological traits in the material culture of local population groups that are not attested in ‘main-

<sup>81</sup> For the role of luxury goods, and particularly for the role played by commodities of foreign origin in social display and in preserving the stability of the elite’s social position, see CANEPA 2010, 123–127. For the interpretation of Byzantine objects from a context-

tual, postprocessual perspective as ‘carriers of memories’ (SHALEM 2005), see SZENTHE 2013, 166–167.

<sup>82</sup> See SZENTHE 2015d, 223–236.



Fig. 4. Gilt copper-alloy belt set, Mártély-Csanyi-part, Grave B, earlier eighth century (Hungarian National Museum, author's photo)



Fig. 5. Gilt copper-alloy belt set, Szentes-Nagyhegy, Grave 32, earlier eighth century (Móra Ferenc Museum, Szeged; photo by Ádám Vágó)

stream' Avar material culture or are of regional significance in the Carpathian Basin – such as attachment loops on belt mounts, knop-terminalled buckles and strap-ends, certain types of geometric designs and dog-like figures – demonstrate that local groups had used a common ornamental vocabulary with the populations living in the adjacent Mediterranean contact zone of the Carpathian Basin (Northern Balkans, Eastern Alps, Istria), although they also drew from the ornament on other types of costume accessories. These 'foreign' morphological traits were adopted on the typical prestige items of Avar culture, namely in the decoration of ornate belts. Accordingly, although the population groups living in Transdanubia and in the peripheral regions of and around the khaganate – as far away as Carinthia – had Mediterranean elements in their culture, they expressed social prestige through the mediums commonly used in the Avar world.

*Local variables: internal structures of the Khaganate in the Carpathian Basin*

*'Proud to be an Avar'? An identity redefined. Material culture and decorative art of the Late Avar period*

The ornamented objects, predominantly belt mounts and strap-ends, reflect the richness and complexity of the decorative art of the Late Avar period that can be divided into four clearly distinguishable stylistic and chronological groups in the greater part of the material<sup>83</sup> and a small group of unique objects.

In view of their lavish ornamentation and the high number of morphological variations,<sup>84</sup> ornate belts and ornamented horse gear apparently played an important role in the prestige display of Avar society. Although the ornamental trends appearing in Late Avar decorative art can be generally noted in the broader area of the Carpathian Basin and in the Mediterranean too, a closer look clearly reveals that stylistic details and the distinctive regional group<sup>85</sup> are decidedly Avar creations, as are individual artefact types (*Fig. 7*), which therefore reflect the specific

<sup>83</sup> For these stylistic groups, see SZENTHE 2015c.

<sup>84</sup> For types and variations, see, e.g., ZÁBOJNÍK 1991; FANCSALSZKY 2007.

<sup>85</sup> For Late Avar decorative art, its chronology and ornamental styles, see DAIM 2003b; FANCSALSZKY 2007; SZENTHE 2012, SZENTHE 2013.



Fig. 6. Heracles and the Ceryneian hind in early medieval contexts. 1: Mártély, large strap-end, Hungarian National Museum; 2-3: Late antique ivory carvings with an identical composition (2: Metropolitan Museum of Art, after WEITZMANN 1971, Fig. 3; 3: Cathedra Petri, Rome, after WEITZMANN 1982, Fig. 1)

demands of Avar culture and society. It would appear that the geographical distribution of these objects correlates with the spatial extent of the Avar Khaganate, expressing the distribution system that maintained its social and power network. While the unique artefacts such as the above-mentioned ornate belt set from Mártély were decorated with Mediterranean ornamental forms bespeaking direct contacts, the average Late Avar belt mounts and strap-ends were covered with a profusion of figural and vegetal ornament, four-legged predatory creatures (griffins), animal combat scenes and a proliferation of tendril patterns.

The expression of a newly emerging group identity must have been of primary importance in the formative phase of Late Avar decorative art, as reflected by the many ‘creative’ and unique traits incorporated into the ‘Late Avar animal style’ (earlier eighth century AD).<sup>86</sup> Iconographic details such as the assumed visual narrative set in four medallions on Ewer 2 of the Nagyszentmiklós treasure<sup>87</sup> and the animal combat scenes which are otherwise atypical in the European cultural context,<sup>88</sup> as well as the widespread vegetal motifs (*Kreislappenranke*, a variant of the tendril ornament, and the *Blütenzier*,<sup>89</sup> a simple trefoil palmette)<sup>90</sup> suggest a consciously adapted visual programme, whose emergence is only conceivable at a time of profound social and cultural transformations.<sup>91</sup> The Late Avar animal style created elements independently<sup>92</sup> and/or selected motifs of steppe origin (motifs from old Turkic, or perhaps Early Avar, cultural contexts and possibly adoptions from Central Asia<sup>93</sup>). Motifs of Mediterranean origin which became widespread in the Avar animal style were compatible with this ornamental vocabulary (griffins,<sup>94</sup> a Mediterranean-type animal combat scenes,<sup>95</sup> and a profusion of different scroll ornaments such as those of the Mártély belt set, see above).

### *Changes in settlement patterns*

A substantial transformation can be noted in the Carpathian Basin from the later seventh century, the implications of which can be only interpreted within the context of the period’s cultural changes. The settlement network became denser and newly-settled areas appeared too (*Fig. 8*). In addition to the expansion of the settled territory, we witness the gradual northward shift of the hubs of the settlement and communications network,<sup>96</sup> in which one main tendency points towards the emerging settlement centres in Moravia that grew into regional centres during the ninth century.<sup>97</sup> The numerous Avar-type finds in the Morava Valley in the north-west, and the new cemeteries in the Hernád Valley and the Košice Basin<sup>98</sup> in the north-east indicate the increasing importance of the northern communication lines from the early eighth century onwards.

The population growth leading to the appearance of the extensive system of early rural villages with a dispersed layout<sup>99</sup> and the associated row-grave cemeteries can no doubt be linked to the more favourable climatic conditions after the end of the Late Antique Little Ice Age. Nevertheless, the population growth could also have been boosted from external sources. As mentioned before, communication between the Carpathian Basin and Eastern Europe, which was most probably followed by migrations of unknown scale, intensified after the mid-seventh century. Nevertheless, most of the archaeological evidence on communication – predominantly intra-regional (?) migrations of small population groups – comes from the Carpathian Basin.<sup>100</sup>

<sup>86</sup> The term was first used by BIERBRAUER 1997. For figural representations, see FANCSALSZKY 2007.

<sup>87</sup> BOLLÓK 2014, 217.

<sup>88</sup> The actual iconographic scheme is paralleled only by late Scythian animal combat scenes; moreover, its last attested occurrence (Tyllia Tepe, first century AD, *Afghanistan* 2010, 199) predates the Avar period by several centuries: for a discussion, see DAIM 2001; SZENTHE 2013.

<sup>89</sup> DAIM 2000, 130–136; SZÓKE 2001.

<sup>90</sup> SZENTHE 2013, 310–313.

<sup>91</sup> This is an obvious implication of the interpretation of style as an expression of cultural traits and of social display and as a medium of expressing group identity, see GELL 1998, 155–168.

<sup>92</sup> DAIM 2003b, 501.

<sup>93</sup> The *Blütenzier* is interpreted as a motif of Central Asiatic character: DAIM 2000, 132–136; SZÓKE 2001.

<sup>94</sup> DAIM 1990.

<sup>95</sup> SZENTHE 2013, 143–146.

<sup>96</sup> DAIM 1990.

<sup>97</sup> For the Avar influence, see the numerous Avar cast copper-alloy objects – belt and horse gear adornments – from ‘Moravian’ settlements: PROFANTOVÁ 1992. For the early dating of the settlements into the late seventh–early eighth-century, see KLANICA 1995 (Klanica’s dating, which essentially adopted the chronology of the securely datable Avar artefacts for settlement layers, was rejected by ZÁBOJNÍK 2005, however, Zábajník’s arguments were based on a dubious historical theory). Another Avar-type cemetery is known at Dolní Dunajovice in the Dunajovce Valley in Moravia: KLANICA 1972.

<sup>98</sup> Košice-Šebastovce (BUDINSKÝ-KRIČKA-TOČIK 1991), Valaliky-Všechsvätých (ZÁBOJNÍK-BÉREŠ 2016); Hranicná pri Hornáde (PÁSTOR 1971).

<sup>99</sup> Unfortunately, there is a lack of settlement publications from the Avar territory: for the problem, see e.g. VIDA 2016.

<sup>100</sup> Partly immigrant groups that began to use the cemeteries of existing local groups: see above, note 10. For the problem of newly populated areas, see LÓRINCZY-RÁCZ 2015, 169–171, 187–189.

The newly occupied regions are often characterised by soils with a high clay content,<sup>101</sup> which indicates changes in agrarian technology or, more probably, the growing importance of small-scale, ‘backyard’ animal breeding, as these environmental niches are not suitable for large-scale stockbreeding. In fact, the importance of breeding domestic fowl and pig grew on Late Avar-period settlements.<sup>102</sup>

At the same time, changes in the composition of pottery suggest a transformation of culinary habits.<sup>103</sup> New cooking vessel types such as clay cauldrons and baking lids characterise the eighth-century Avars, members of a dietary community that spread from Eastern Europe to the Balkans and the Carpathian Basin. The vessel types as well as the scarce archaeometric data<sup>104</sup> suggest that human diet was mostly based on cereals in the Late Avar period.

#### *Choices for nomadic lifeways in the eighth-century Carpathian Basin*

Although nomadism as a fundamental economic structure could hardly have persisted for long after the breakdown of the Avar power in the 630s, its social basis – the nomadic elites and warrior communities – remained present later on in the Carpathian Basin. The rural settlement network became more dense, suggesting that the majority of these mobile communities settled down and were integrated into the sedentary population sometime after the mid-seventh century.<sup>105</sup> They may have been the mediums transmitting nomadic cultural elements to the newly emerging ‘late avar’ culture. The warrior (elite) groups of steppe origin most probably strove to maintain their life ways and culture.<sup>106</sup> However, it is unclear to what extent the original lifeways and economic model of these mobile pastoralist groups had perhaps been maintained in certain environmental niches, or whether local variations developed, transmitting cultural and economic elements of nomadic lifestyles. There are indeed some indications in the archaeological record that nomadic structures survived the collapse of the Early Avar prestige economy. As Erwin Gáll has argued, the burial ground excavated at Nošlac (south-eastern Carpathian Basin) had perhaps been used by mobile (nomadic) communities that visited the area periodically and buried their dead in scattered clusters.<sup>107</sup> A clear pattern can be discerned in the spatial distribution of small cemeteries and burial places/solitary burials, all dominated by graves containing horse burials and weaponry: these characteristic burial places can be found in small, but geographically coherent zones in certain – mostly marginal – micro-regions of the Carpathian Basin (*Fig. 9*).

Various burial places<sup>108</sup> and small cemeteries containing burials furnished with relatively or considerably rich grave goods, horses and weaponry form a line from the middle reaches of the Tisza, across the river’s floodplain, to the modern town of Debrecen (i.e. across the Hortobágy region), which is flanked by the poor graves of small communities in the north and south (*Fig. 10*). As the greater part of the area was temporarily covered by water without runoff,<sup>109</sup> its population was most probably engaged in seasonal pastoralism as the dominant economic activity. The line of cemeteries possibly corresponds to a west–east route determined by the area’s hydrogeology; however, the line of similar cemeteries does not continue on the higher and dryer ground east- and westwards: larger ‘village cemeteries’<sup>110</sup> are typical on the high buffs along the Tisza. Therefore, the pattern emerging from the burials in the Hortobágy region in all likelihood reflects small high-status communities surrounded by the settlement area of more or less mobile groups of ‘servants’.

Theoretically, the burial places at Gyula and Socodor, and around Čelarevo and Bogojevo (Bačka Palanka and Sremská Mitrovica, and Ada on the opposite Danube bank, see *Fig. 9*)<sup>111</sup> can probably be interpreted along the same lines.

<sup>101</sup> No systematic research has yet been conducted on this issue.

<sup>102</sup> VIDA 2016, 264.

<sup>103</sup> For Late Avar-period pottery, see SZÓKE 1980, VIDA 2011. Summarised in VIDA 2016, 262–265.

<sup>104</sup> VIDAL-RONCHAS *et al.* 2018.

<sup>105</sup> For archaeological traces of this process in the settlement structures, see VIDA 2016, 259–262.

<sup>106</sup> For nomadic social and economic structures, see SCHOLZ 1995; HUMPREY–SNEATH 1999, 218ff.

<sup>107</sup> GÁLL 2018, 156–157.

<sup>108</sup> Egyek, Hortobágy–Árkus (52 graves); Balmazújváros-Sóshát, Debrecen-Tócsóskert, Debrecen-Bellelegelő, Debrecen-Haláp (for details, see the entries in ADAM).

<sup>109</sup> MESTERHÁZY 2005.

<sup>110</sup> Tiszafüred (GARAM 1995); Tiszaderzs (KOVRIK 1975); Újszentmargita (ADAM, 395); Görbeháza (unpublished excavation, the material is housed in the Déri Museum, Debrecen).

<sup>111</sup> Generally, a larger cemetery with 50–70 graves is accompanied by other burial places (solitary burials or small grave groups, sometimes indicated by stray finds), characterised by horse burials with richly decorated horse gear.

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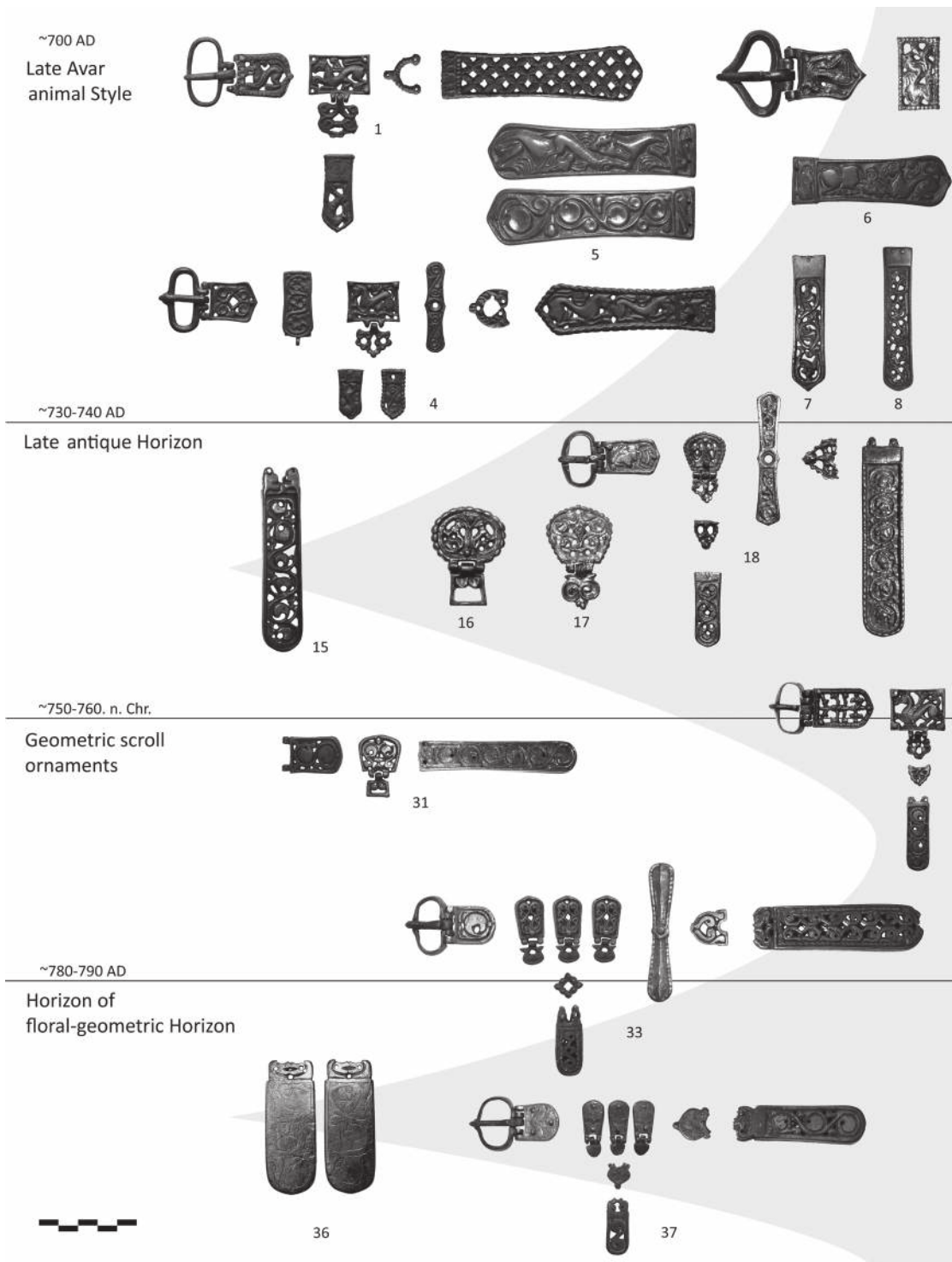
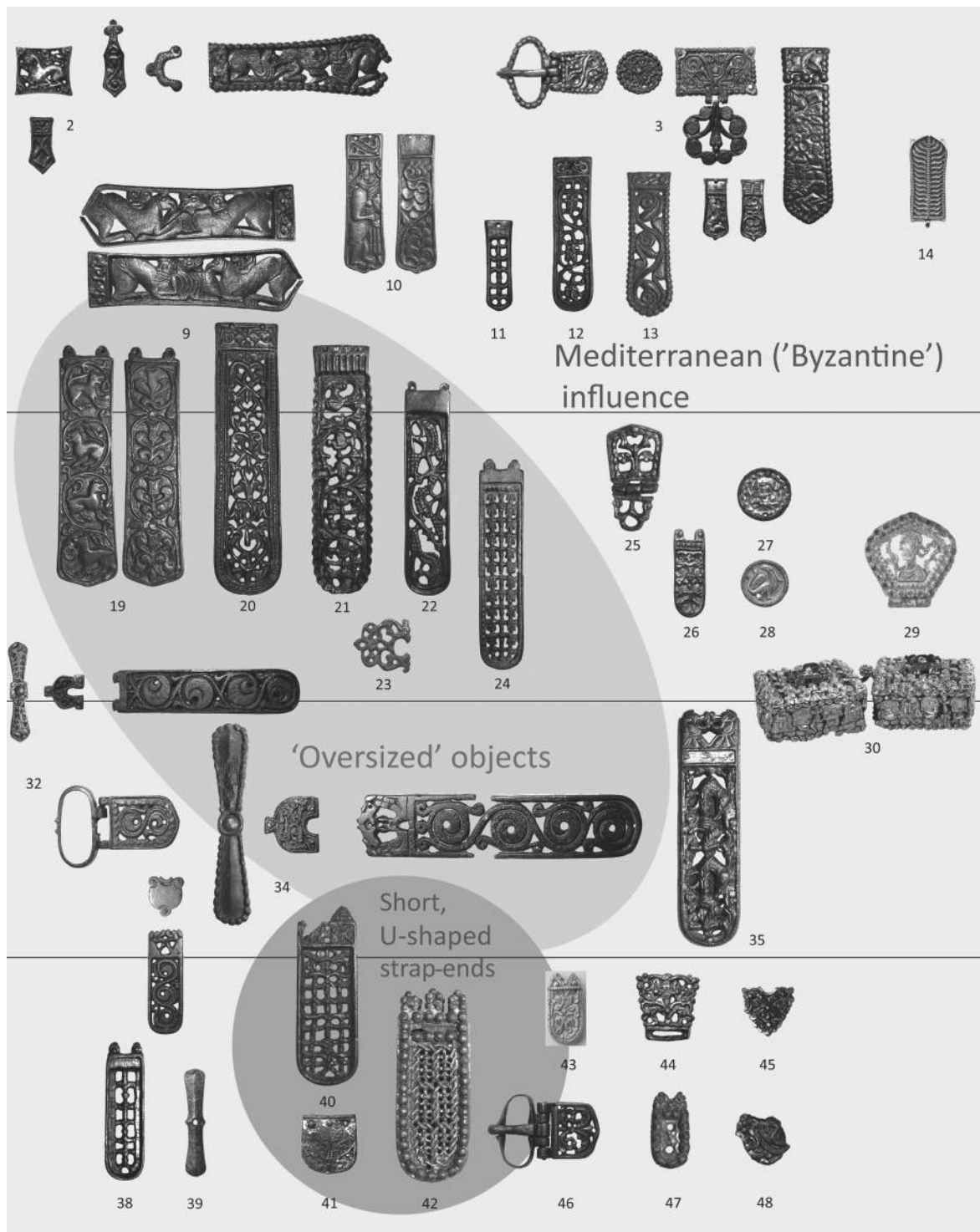


Fig. 7. Chronological and stylistic groups of Late Avar-period decorative art. 1: Tiszafüred-Majoros, grave 539; 2: Kecel-Harárdülő, grave 32; 3: Mártély, grave B; 4: Tiszafüred-Majoros, grave 330; 5: Unprovenanced; 6: Szentcs-Nagyhegy; 7: Visznek-Kecskehegy, grave 6; 8: Horvát-Szárfalva; 9: Tiszafüred-Majoros, grave 496; 10: Tiszafüred-Majoros, grave 1149; 11: Tiszafüred-Majoros, grave 33; 12: Hőgyész, grave 12; 13: Keszthely-Dobogó; 14: Tab, stray find; 15: Úlló I-Disznójárás, grave 168; 16: Bajna; 17: Kiskőrös-Városalatt, grave 156; 18: Szébény I, grave 100; 19: Tiszafüred-Majoros, grave 113; 20: Szébény I, grave 128; 21: Regöly; 22: Unprovenanced; 23: Kiskőrös-Városalatt, grave 156; 24: Tolna, Váralja; 25: Regöly, grave 62; 26: Bajna; 27: Hortobágy-Árkus;





28: Gátér-Vasútállomás, grave 141; 29: Kiskundorozsma-Kettőshatár út, grave 434; 30: Dunapataj; 31: Pusztahegy; 32: Szentés-Lapistó; 33: Alattyán-Tulát, grave 369; 34: Szeged-Fiumei vasútvonal; 35: Hortobágy-Árkus; 36: Szárazd, stray find; 37–38: Unprovenanced; 39: Szárazd, stray find; 40: Regöly; 41–42: Hortobágy-Árkus; 43: Mátészalka, stray find; 44: Keszthely-Dobogó; 45: Hortobágy-Árkus; 46: Kiskőrös-Városalatt, grave 156; 47: Kiskőrös-Városalatt, grave 155; 48: Hortobágy-Árkus. (with the exception of nos 27, 35, 41–42, 47 / DJM Debrecen/ and 28 /KJM Kecskemét/, all other pieces are from the collection of the Hungarian National Museum, Budapest)

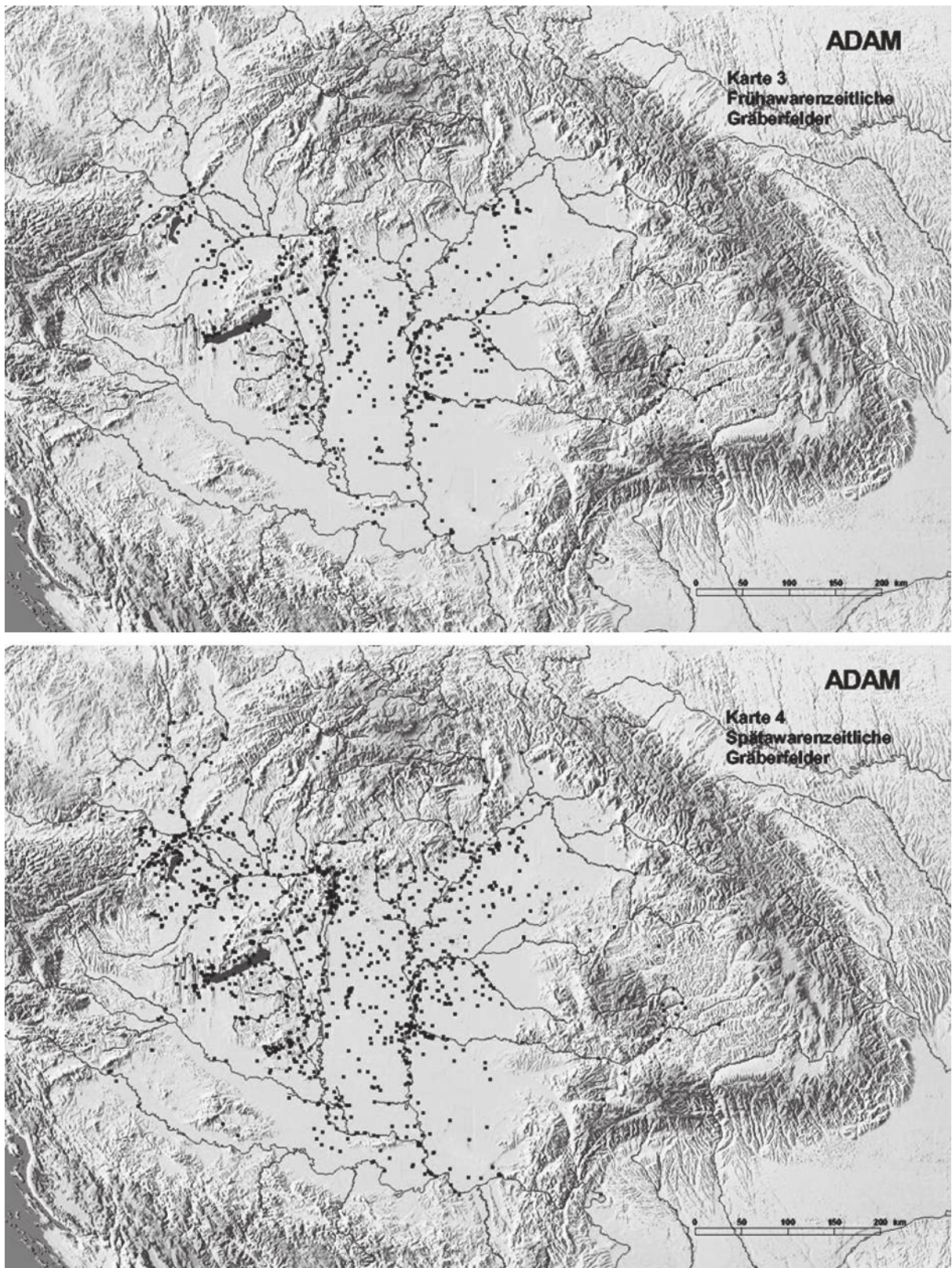


Fig. 8. Distribution of Early and Late Avar sites in the Carpathian Basin (after ADAM, Karte 3–4)

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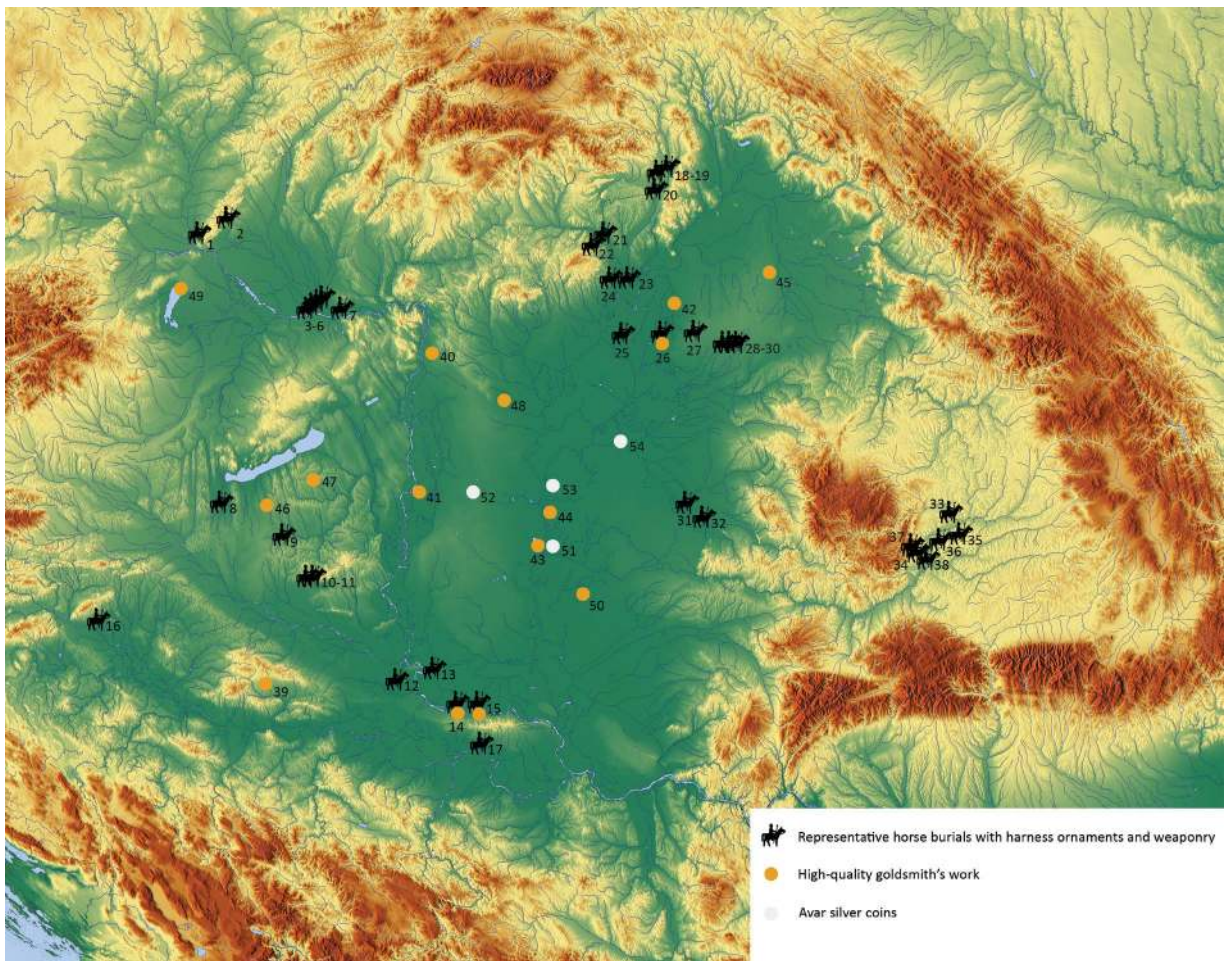


Fig. 9. Spatial patterns in the regional distributions of special traits in the archaeological record of the Late Avar period, reflecting the presence of a central power. 1: Representative horse burials with harness ornaments and/or weaponry; 2: High-quality gold metalwork; 3: Silver coins of the Avar period minted in the Carpathian Basin (1. Devínská nova Ves /EISNER 1952/, 2. Gajary /GARAM 1981, Fig. 10/, 3. Komárno-Lodenice /TRUGLY 1987, TRUGLY 1993/, 4. Komárno-Gombaiho/Františkánov /ADAM 206–207/, 5. Komárno-Váradího /ČILINSKÁ 1982/, 6. Komárno-Hadovce /ČILINSKÁ 1982/, 7. Radvan nad Dunajom, Žitavska Ton /BUDINSKY-KRIČKA 1956/, 8. Vörs-Papkert /ADAM 417–418/, 9. Kaposvár-Toponár, Fészerlakpuszta /BÁRDOS 1978; SZIMONOVA 1997/, 10. Kővágószőlős-Kece-völgy /NAGY 1982, 125–126/, 11. Kővágószőlős-Tüskési-dűlő /KISS 1977:66–67/, 12. Ada /BALINT–GARAM 2016/, 13. Bogojevo /ADAM 62/, 14. Bačka Palanka /GARAM 1981, Fig. 12/, 15. Čelarevo /BUNARDŽIĆ 1985/, 16. Zagreb-Kruga /VINSKI 1960, Sl. 27–35, SOKOL 1996, T. II–III/, 17. Sremská Mitrovica /Sirmium/ site 29 /TRBUHOVIĆ 1982/, 18. Košice-Šebastovce /BUDINSKÝ-KRIČKA–TOČIK 1991/, 19. Valaliky-Všechsvätých /ZÁBOJNÍK–BÉREŠ 2016/, 20. Hranica pri Hornáde /PÁSTOR 1971/, 21. Edelény /VÉGH 1968, 51, Taf. V, 1–3/, 22. Sajószentpéter /VÉGH 1964/, 23. Bócs /GARAM 1981/, 24. Sajópetri /MAKOLDI 2011/, 25. Egyek /ADAM 126/, 26. Balmazújváros, Hortobágy-Árkus /ADAM 42/, 27. Balmazújváros, Hortobágy-Sóshát /ADAM 42/, 28. Debrecen-Tócóskert /ADAM 108/, 29. Debrecen-Bellegelő /ADAM 106/, 30. Debrecen-Haláp /ADAM 106/, 31. Gyula-Lencsési út /FETTICH 1928; GÁLL 2018, Kat.nr. 19/, 32. Socodor /POPESCU 1956, 4/44, 38/81, Fig. 2, Fig. 39–40; GÁLL 2018, Kat.nr. 56/, 33. Câmpia Turzii /COSMA 2017, Pl. 11–12/, 34. Geoagriu de Sus /COSMA 2017, Pl.22/, 35. Heria /COSMA 2017, Pl. 23/, 36. Lopadea Nouă /COSMA 2017, Pl. 24/, 37. Măgina /COSMA 2017, Pl. 25/, 38. Aiudul de Sus /COSMA 2017, Pl. 3/, 39. Brestovac /DAIM 2000, 162–165; BÜHLER 2014/, 40. Budapest-Rákos /NAGY 1998, Taf. 57–59/, 41. Dunapataj /DAIM–BÜHLER 2010/, 42. Hajdúnánás /DANI 2015, fig. 21/, 43. Kiskundorozsma /SZALONTAI *et al.* 2014/, 44. Mártély /GARAM 1993, Taf. 70, 1–8/, 45. Mátészalka /GARAM 1993, Taf. 69, 8/, 46. Osztopán /GARAM 1993, 96/, 47. Tab /GARAM 1993, 106/, 48. Tápíósztele /GARAM 2001, 138, Taf. 101/, 49. Weiden am See /DAIM 2000, 166–167/, 50. Nagyszentmiklós /Sănicolau Mare/ /DAIM *et al.* 2018/, 51. Szeged, stray find, 52. Kiskőrös-Pohibuj, Mackó-dűlő, 53. Szegvár-Sápdal, 54. Endrőd-Öregszőlő /for 51–54, see SOMOGYI 1997/, 55. Brodski Drenovac /VINSKI-GASPARINI–ERCEGOVIĆ 1958/

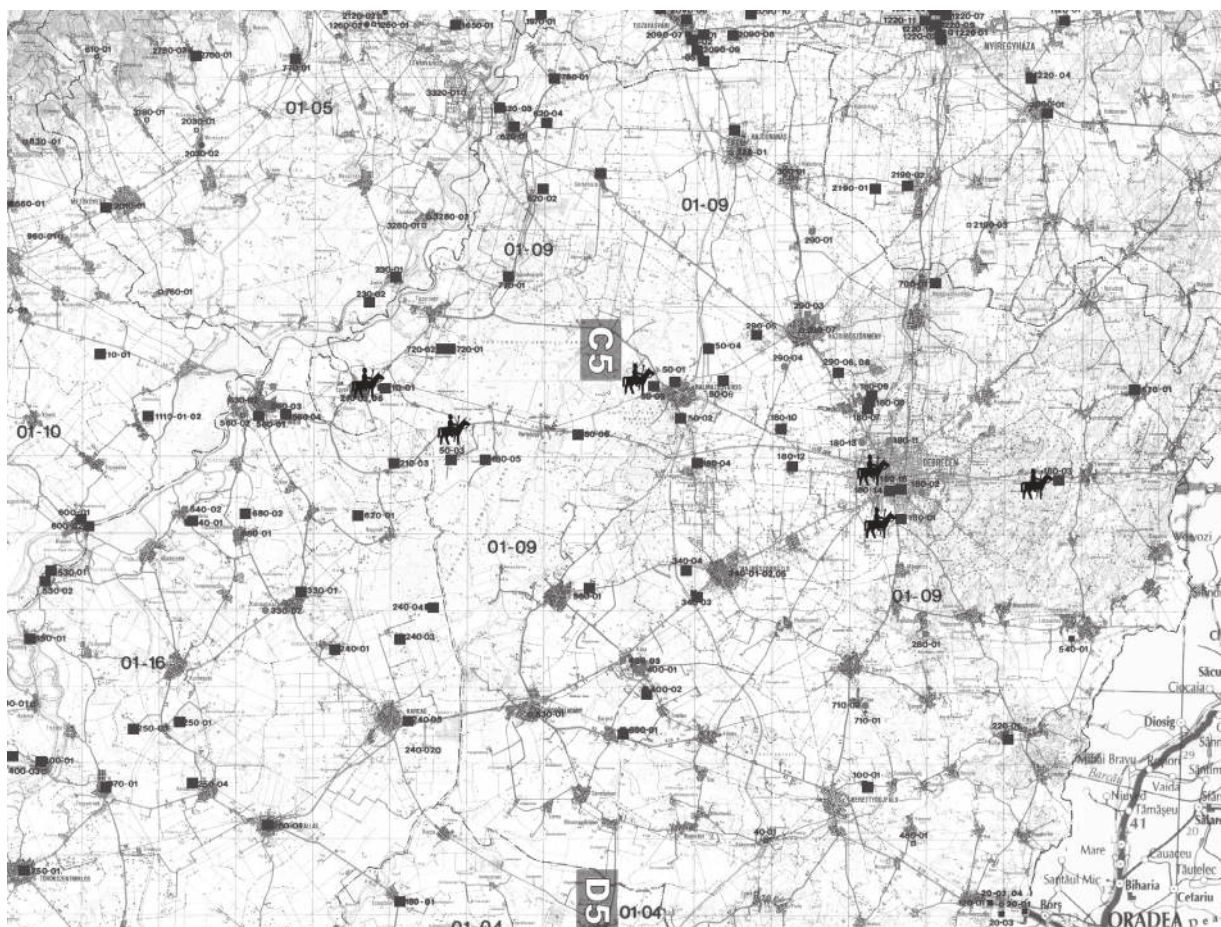


Fig. 10. The northern half of the trans-Tisza region in the Late Avar period: horse-weapon burials (burial locations and cemeteries) in the context of the period's burials

There is some evidence that animal husbandry was practiced in permanent structures also in regions that would have been suited to nomadism<sup>112</sup> – at least theoretically. The huge corrals/cattle pens uncovered at Kiskunfélegyháza<sup>113</sup> (Fig. 11) in the extensive plainland of the Danube–Tisza Interfluve are dated to the Late Avar period on the testimony of the ceramic material.<sup>114</sup> The corrals are enclosed by relatively deep ditches and most probably served for holding cattle (50 percent of the animal bones) and horses (30 percent of the animal bones). Interestingly enough, the analysis of the horse bones revealed that the horse stock was quite heterogeneous,<sup>115</sup> which is seemingly atypical of (modern?) nomadic herds.<sup>116</sup> Quite intriguingly, contemporaneous burials were found inside the ditches of the corrals in two cases; one directly in the north-eastern corner of the rectangular corral, aligned to the ditch,

<sup>112</sup> Relatively large zones that, at least theoretically, would have been suited to pastoral nomadism can be found in the Carpathian Basin: the central and southern part of the Danube–Tisza interfluve, east of the Tisza, and several micro-regions in Transdanubia: the Mezőföld region (east-central Transdanubia), the plainland from the Zsámbék Valley to the south-east of Lake Balaton, and the Moson Plain in the north-west. These areas were settled by small groups of nomadic character in the Hunnic and Avar period. Their burials are typically represented by scattered grave groups or solitary graves: TOMKA 2008.

<sup>113</sup> Unpublished excavation, whose assessment by József Zsolt Gallina and the present author is currently in progress. The excavation is reported in *Acta Archaeologica Academiae Scientiarum Hungaricae* 70, 2019

excavated area seems to be the marginal part of a settlement, consisting of pens/corrals, many shallow wells and only two or three other settlement features (some kind of buildings) of the Late Avar period.

<sup>114</sup> Cauldron fragments and sherds from vessels turned on a slow wheel are generally dated to the eighth–ninth centuries. The ceramic material of the settlement is housed in the Katona József Museum, Kecskemét.

<sup>115</sup> Unpublished manuscript by Annamária Bárány, Hungarian National Museum.

<sup>116</sup> For a discussion of horse breeding strategies, see SCHOLZ 1995, 67–81.

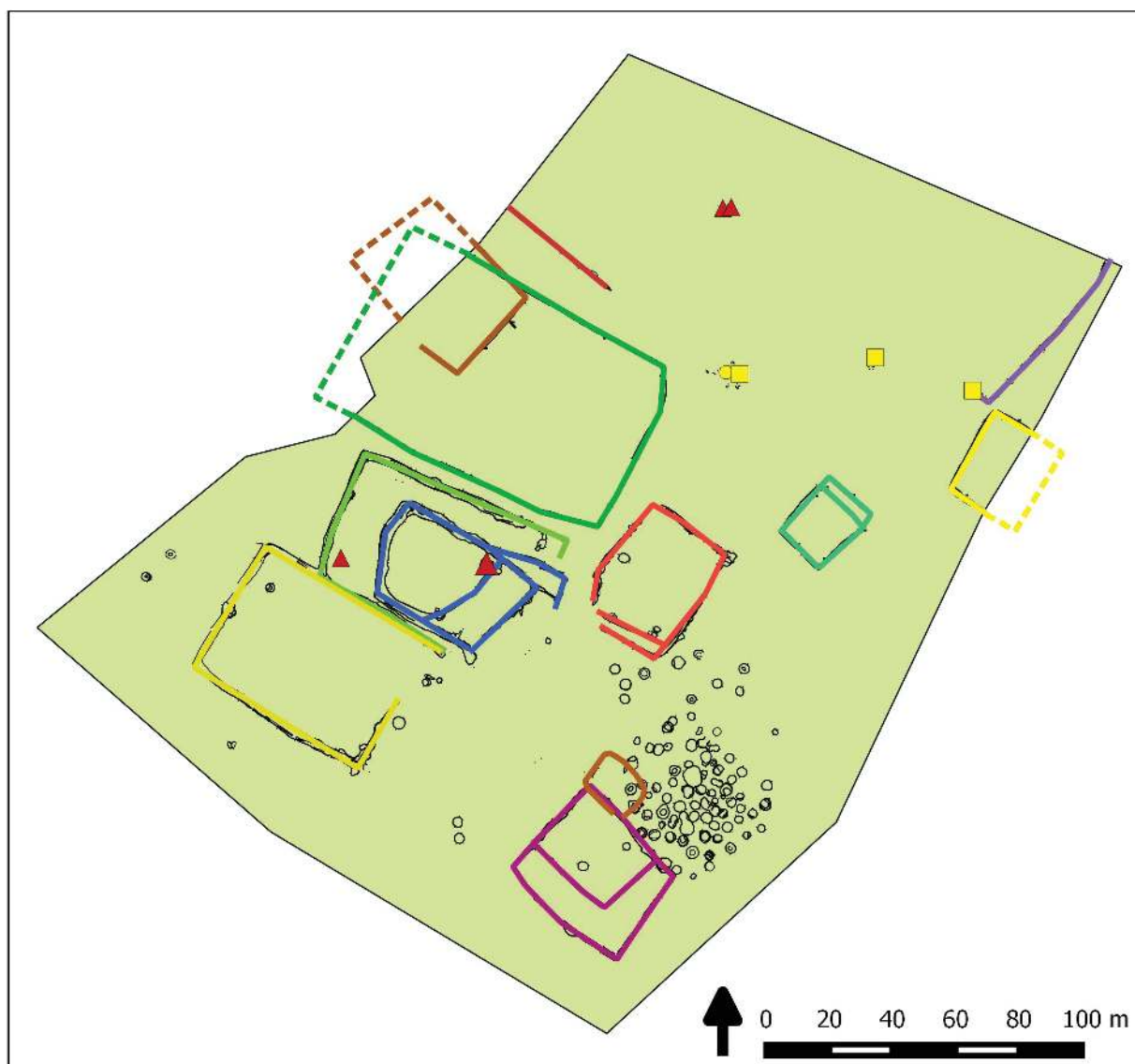


Fig. 11. Kiskunfélegyháza-Logisztikai központ, Trench D, Avar settlement features and burials (Zsolt Gallina's excavation; drawing by András Füzesi)

suggesting that the burial location was selected with a view to the ditch – or the corral itself. The plundered grave contained the remains of a male burial with an ornate belt decorated with silver gilt cast mounts (*Fig. 12*). The use of precious metals for belt mounts and for grave goods in general is utterly atypical in the Late Avar period (see below). Moreover, a mount of unknown function, possibly a strap slide or scabbard fitting, has a direct analogy in the Brestovac assemblage,<sup>117</sup> which suggests the long-distance (perhaps elite) contacts of the Kiskunfélegyháza community.

All in all, nomadism could have existed in the eighth-century Carpathian Basin as an economic model, even if not as the single model guaranteeing success. However, in the lack of extensive micro-regional surveys, the possible presence of nomadic groups in the Carpathian Basin remains unresolved. Nevertheless, the majority of the population lived on rural settlements. Cultural elements of nomadism were integrated into the identity of the entire population inhabiting the Carpathian Basin, and Late Avar-period militant and elite communities became a culturally

<sup>117</sup> BÜHLER 2014.



Fig. 12. Kiskunfélegyháza-Logisztikai központ, Trench D, cast silver gilt belt mounts from an Avar burial (Katona József Museum, Kecskemét)

relatively homogeneous stratum in this sense, as they defined themselves by Avar-type horse burials, weaponry and ornate belts.

#### *The archaeological evidence for the changes in social power*

The most important element in the transformation of the nomadic prestige economy of the culturally heterogeneous Early Avar period was probably the transition to an extensive settlement system based on rural settlements after the ebb of internal migrations<sup>118</sup> and the formation of an intensive internal communications network.<sup>119</sup> There are several indications that the Avar ruling elite strove to initiate reforms for creating a well-functioning khaganate on these solid economic and social bases. One intriguing question is what instruments were at its disposal for organising people and resources.

Social power was quite certainly less centralised in the Late Avar period than in the Early Avar period, at least judging from the information contained in the written sources.<sup>120</sup> Another striking difference is that with a few notable exceptions, weapons practically disappeared from burials from the late seventh century onward, reflecting a significant change in the social values of Avar society. After the decline of the Kunbábony–Kunágota–Ozora horizon, high-status groups living at the turn of the seventh and eighth centuries no longer buried their members in solitary graves or separate burial places (*Sondergräberfelder*), but in relatively large burial grounds.<sup>121</sup> Most interestingly, the new elite appears to have emerged in the Great Plain region – as far as we can tell, the furnace of social changes in the khaganate was stoked east of the Danube, in the central area of the macro-region. Another striking difference compared to the Early Avar period is that truly magnificent gold- and silverwork reflecting the presence of elites disappeared from burials; with a few exceptions, the known pieces are stray finds with a relatively homogeneous distribution in the Carpathian Basin.

The geographical distribution of the high-quality metalwork demonstrates that the small cemeteries and burial places discussed above, concentrated on the fringes of the Avar settlement territory, and had little to do with the highest élite. The Late Avar elite was hierarchic, consisting of several groups with different cultural identities.

#### *A translatio of the mediums of social display...*

In contrast to the grave goods made from cheap materials using simple techniques, high-quality pieces in gold or silver shedding light on the upper echelons of the social hierarchy of the eighth-century Avars are few and far between. The problems concerning the dating and interpretation of the precious metal articles found on settlements, in hoards or as stray finds were relegated to the realm of Mediterranean/Byzantine archaeology in the period preceding the eighth century.<sup>122</sup> By the late seventh century, there is a profound change in Avar funerary practices,

<sup>118</sup> In the 'Middle Avar period'; the overwhelming majority of Late Avar period cemeteries were established in the later seventh century, without local antecedents: see the data in ADAM.

<sup>119</sup> See above.

<sup>120</sup> While in the Early Avar period, the khagan was the supreme leader, at the end of the Avar era we know of the khagan, the *tudun*, the *iugurrus* and the *tarkhan*, all of whom acted independently. Although this situation is generally interpreted as proof of the changes in the khaganate's administrative system (POHL 2002, 292–306), this

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claim can be challenged: it could equally well have been sparked by the diminution of the khagan's power and a political crisis.

<sup>121</sup> Such as the cemeteries at Kiskőrös-Vágóhid (LÁSZLÓ 1955), Budapest-Tihany-tér (NAGY 1998, 112–122), Kisköre-Halastó (GARAM 1979) and, slightly later, Budapest-Rákos (NAGY 1998, 69–77), Mártély (HAMPEL 1905/II, 105–113) and Kiskundorozsma (SZALONTAI *et al.* 2014).

<sup>122</sup> See, e.g. YEROULANOU 1999, 11–12.

one element of which is the almost complete lack of superbly crafted objects and of precious metal articles in funerary contexts in general. Unlike in the seventh century, the little metalwork of excellent quality, similarly as in the Mediterranean, is almost exclusively made up of stray finds in the Carpathian Basin from the eighth century.<sup>123</sup>

Traditionally, the lack of precious metal artefacts in funerary contexts was interpreted as one of the symptoms of crisis in Late Avar-period culture, similarly to the overall spread of huge quantities of low-quality costume accessories and jewellery.<sup>124</sup> Nevertheless, we know from the written sources that Avar nobles suffered no lack of riches. Although the accounts accentuating the victory of the Franks are probably somewhat exaggerated, the information on the magnitude of the treasure seems acceptable. According to Einhard's narrative, the Franks found immense riches which had reached the Khagan's treasury as booty from many battles. Indeed, it is most unlikely that this wealth had all been amassed in the eighth century, when, according to the same source, the Avars 'had passed for a poor people'.<sup>125</sup>

Obviously, the Avars did not withdraw their valuables from circulation by depositing them in graves. The lack of precious metal artefacts in the grave inventories can be taken as an indication of consolidation and stability, and as an important token of the social and economic system of the Late Avar Khaganate flourishing under the changed conditions. On the other hand, it could perhaps be interpreted as a special reflection of a wider socio-cultural trend, which led to the transfer of social display from costume accessories (and perhaps personal utilitarian objects as well) to a wider range of mediums. According to recent archaeological research, spatial structures such as fortified places and linear earthworks (dykes or ditch and rampart systems) such as the Kakasbarázda ('Rooster's furrow') Dyke in Transylvania<sup>126</sup> may have played a role among them.<sup>127</sup> The appearance of built structures among the mediums of social display suggests that Avar culture had most likely become integrated into the surrounding world and thus transcended the prestige economy of the Early Avar era.

At the same time, the almost egalitarian system coupled with a reluctance to part with valuables for mortuary display, as is apparent from Avar burials, may also reflect the rigidity of social structures in addition to stability. Inheritance is a major liminal situation in community life, of which the funeral is a prominent element, offering the potential to re-negotiate power relations within the community. In a strongly competitive milieu, the goods deposited in the burial (sacrificed, destroyed or consumed) could embody considerable wealth. In the case of the eighth-century Avars, this wealth appears to have been minimal, suggesting an uncompetitive society.

... and an attempt to launch an Avar silver-based coinage?

Coins – mostly Byzantine gold – originate mostly from grave contexts in the Avar-period Carpathian Basin. The practice of providing the dead with *oboli* was quite common until the late seventh century. Following the drastic decrease in the number of Byzantine coins reaching the Carpathian Basin, the Avars replaced Byzantine gold coins with various substitutes, one group of which cannot be interpreted as *oboli* made specifically for funerary purposes.<sup>128</sup> This small group comprises minted silver coins,<sup>129</sup> of which only seven pieces have been found to date (Fig. 13). In contrast to the imitations cut out from delicate sheet gold or hammered onto coins, these coins attest

<sup>123</sup> SZENTHE 2015b, 297–303, 309.

<sup>124</sup> Most recently BÁLINT 2010.

<sup>125</sup> "[the Avars] (...) usque in id temporis poene pauperes viderentur, tantum auri et argenti in regia repertum, tot spolia pretiosa in proeliis sublata (...)" (*Vita Karoli Magni*, cap. 13–15). For the ransacking of the *hring* of the Avars and the treasury of the khagan, see HARDT 2004, 42–44.

<sup>126</sup> For the dyke at Zamárdi (central Transdanubia), see SZENTPÉTERI 2013, for Biňa (Slovakia), radiocarbon dated to the period between 750 and 850, see POMFYOVÁ–SAMUEL–ŽAŽOVÁ 2014, 24, and MORDOVIN 2016, 98. For the 'Kakasbarázda' Dyke, see SÓFALVI 2017, 151–152. For an even more impressive, still unpublished archaeological feature, see the preliminary report on the excavations at Kecskemét where a very imposing structure indicating extensive ramparts, ditches and the post-holes of a large palisade wall along the ditches were documented: [www.muemlekvedelem.hu/magazin/mercedes\\_bovites\\_feltaras\\_kecskemet\\_2017](http://www.muemlekvedelem.hu/magazin/mercedes_bovites_feltaras_kecskemet_2017).

<sup>127</sup> VIDA *manuscript*.

<sup>128</sup> According to the traditional interpretation, these coins were expressly made for use as *oboli* (BÓNA 1993, 535–536, SOMOGYI 1997, SOMOGYI 2014), for an overview of the custom of placing *oboli* in the grave; for the imitations, see also BALOGH 2016, 319–326.

<sup>129</sup> For a detailed morphological analysis, although with a different historical interpretation, see SOMOGYI 1997, 122ff.

1. Endrőd-Öregszőlő, County Békés: silver, 3.75 g, based on a miliarensis of Constans II (minted between 651–654) (SOMOGYI 1997, No. 22).

2. Kiskőrös-Pohibuj, Grave 53: silver, diameter 20 mm, 3.17 g, obverse Heraclius solidus (minted between 648–651), reverse Heraclius miliarensis (SOMOGYI 1997, No. 35). Obverse and reverse minted using a coin die identical to an exemplar from Szeged (SOMOGYI 1997, No. 69).

3. Kiskőrös-Pohibuj, Grave 53: silver (possibly on copper basis), diameter 20 mm, 2.72 g, obverse based on a solidus of Constantine IV (minted between 669–674), reverse after a solidus of Heraclius and Heraclius Constantinus (SOMOGYI 1997, No. 35). Obverse minted with the same coin die as SOMOGYI 1997, No. 98.

to experimentation with launching coinage and mass production. The use of the same dies among a very small number of coins is evidence for an extremely small-scale production, while the regional distribution pattern underlines the aspect of prestige in the initiative that perhaps also had some economic rationale. The silver base could be an argument for the latter, as the only coinage which reached the Carpathian Basin and circulated among members of the Avar elite was Byzantine gold on the testimony of the pieces found in grave assemblages,<sup>130</sup> and very few other coins of silver or copper have been found in the Carpathian Basin. In the seventh and early eighth centuries, the use of silver as raw material for minting coins points towards the north-west, where late Merovingian silver coinage was introduced in Neustria in the 670s, whence it spread across all territories under Frankish rule by the end of the century, as well to Frisia and the British Isles.<sup>131</sup> Apparently, the beginnings of Merovingian silver coinage coincide with the Avar one,<sup>132</sup> an indication that the Avars' political and probably economic rationale was in all likelihood identical with the Merovingian one. The period's orientation towards the north-west was not unprecedented: the distribution of Byzantine gold coins during the early Avar period<sup>133</sup> is a clear indication that there were intensive contacts between the khaganate and the Merovingian lands.

Nevertheless, the iconography of the coins is modelled on Byzantine coins of the later seventh century. Although there is no indication of the existence of a standard weight system among them – similarly as in early Merovingian coinage<sup>134</sup> –, three pairs were minted using the same coin dies, which points towards the intention of large-scale production. Control over the metal was in all likelihood exercised by the high elite, which could also muster the necessary skilled craftsmen. The regional distribution of the coins (*Fig. 9*) in the late seventh century, a period when other artefact types had a wide overall distribution across the entire Avar settlement territory – suggests that production and distribution were of regional significance. It is highly uncertain whether the idea of a mint was conceived by the khagan who had possibly resided in the Danube–Tisza interfluvium, or by one or another local aristocrat.

As the custom of placing coins in burials ceased by the end of the seventh century, practically before the heyday of Late Avar structures, we know little about the chronological boundaries and the scale of production, or whether it was also continued in the eighth century.

#### *A regional division of labour?*

The last question is what exactly formed the economic basis of this silver coinage: would the wealth accumulated from the Early Avar-period booty have been sufficient,<sup>135</sup> or was there possibly a regular supply of metals? This issue is all the more important because copper-alloy artefacts abound in Late Avar-period grave assemblages, and there is a significant improvement in the quality of iron artefacts too, which indicates a profound change in iron technology and/or resources. In the case of copper alloys, metal compositions<sup>136</sup> seem to contradict the assumption that Late Avar-period production was based on the recycling of Roman-period metal alone. Although we have virtually no evidence for the production and processing of non-ferrous metals during this period, the growth or, more precisely, the onset of metal production in the Late Avar period has already been convincingly demonstrated in the case of the much better studied iron smelting.<sup>137</sup> If we compare this to the reconstructed metal produc-

4. From the Szeged area (south-eastern Hungary): silver, diameter 18 mm, obverse Heraclius solidus (minted between 648–651), reverse Heraclius miliaris (SOMOGYI 1997, No. 69). Minted using a coin die identical with SOMOGYI 1997, No. 35/1.

5. Szegvár-Sápoldal, Grave 3: silver, diameter 19–19.5 mm, 2.22 g, after a miliaris of Constans II (minted between 648–651) (SOMOGYI 1997, No. 76, LÓRINCZY 2018, 55, Fig. 4). Obverse minted with the same die as the piece inventoried under MNM R.I.6831.

6. Unprovenanced, MNM R.I.6831: silver, after a miliaris of Constans II (minted between 648–651) (SOMOGYI 1997, 86). Obverse minted with the same die as SOMOGYI 1997, No. 76.

7. Unprovenanced: silver, diameter approximately 20 mm, 1.86 g, after the coins of Constantinus IV (minted between 669–674) (SOMOGYI 1997, No. 98).

<sup>130</sup> See the catalogue in SOMOGYI 1997.

<sup>131</sup> GRIERSON–BLACKBURN 1986, 3–4, 97–98; For the British Isles, see NAYLOR 2012. However, the latter study reflects the effects of the 'metal-detector revolution' and the 'portable antiquities' system. It shows that coin circulation was complex and geographically variable, which indicates its economic determination. Unfortunately, in case of the Carpathian Basin, research is still before this 'breakthrough'.

<sup>132</sup> See the minting dates of the Byzantine originals in note 129.

<sup>133</sup> SOMOGYI 2014, 119–131, esp. 130–131, see map on p. 259.

<sup>134</sup> GRIERSON–BLACKBURN 1986, 97–98.

<sup>135</sup> Theoretically, it could have sufficed: see HARDT 2004, 42–44. For the analogous problem of early Merovingian coinage, see GRIERSON–BLACKBURN 1986, 96.

<sup>136</sup> KÖLTŐ 1982, 30.

<sup>137</sup> GÖMÖRI 2000, 221–239; TÖRÖK *et al.* 2018.





Fig. 13. Silver coins of the Avar period minted in the Carpathian Basin.  
 1–2: Kiskörös-Pohibuj-Mackó-dűlő, Grave 53 (Hungarian National Museum);  
 3–4: Unprovenanced (Hungarian National Museum, Numismatic Collection)

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tion in Europe and the Mediterranean,<sup>138</sup> there is a striking correlation between the roughly simultaneous onset of the assumed Avar and European metal production after the recuperation from the low ebb of the Migration period.

Regarding the production of non-ferrous metals, some indications of production can be found in the Avar archaeological record. (As the extraction of metal ores destroys its own traces, the situation is highly analogous to the problem of the production of salt, another resource of strategic importance, whose volume can hardly be estimated by archaeological methods.) The settlement patterns seem to outline a regional division of labour, implying the exploitation of strategic raw material resources.

Communities whose members were buried with their horses and weapons as well as with a rich array of other grave goods, an otherwise atypical custom in the Late Avar period, occupied only certain zones in the Carpathian Basin, which, as mentioned in the above, roughly coincided with communication lines and hubs.<sup>139</sup> (They probably represented a special category within the Avar population owing to their mobile pastoralist lifestyle, which was more suited to military service than of other groups.) The regional distribution of these cemeteries suggests that these communities had been tasked with controlling the communication system of the Late Avar-period khaganate, particularly in the ‘border regions’, the contact zones with the outside world. Given that these communities probably controlled the distribution of the resources, rather than the extraction itself, their strategic position at certain points in the communication network of the Carpathian Basin had most likely been of an overall monitoring nature. The importance of controlling incoming and outgoing traffic seems more pronounced in the case of the Košice Basin and the Hernád Valley, as the Carpathian Mountains are easily penetrable in the north<sup>140</sup> and in the north-west, at the Devín Gate north of the Danube, along a route that retained its strategic significance during the Middle Ages.

In some cases, similar communities accentuating their military and mobile identity through their funerary customs show a concentration in regions which, although insignificant as contact zones, have important raw material deposits. Specialised settlements for iron smelting have been found in different micro-regions with bog iron in the Carpathian Basin. The iron smelting settlements south of Lake Balaton<sup>141</sup> had no doubt been of outstanding importance (*Fig. 14*). The nearby cemetery at Kaposvár<sup>142</sup> seems to indicate the presence of a group controlling this resource, while the northern end of the area is marked by the huge cemetery of Zamárdi with numerous well-furnished graves with horse burials and weaponry – although it is of a different type, which is hardly surprising given the 6000 graves<sup>143</sup> of this burial ground.

The same situation can be observed in north-eastern Hungary (*Fig. 15*) and, although based mostly on stray finds, burial places of warrior and mobile groups abound in the Transylvanian Basin (*Fig 9*). Raw material deposits can be found in both micro-regions: copper and iron outcrops in the north-east, in the Rudabánya area, and salt deposits in Transylvania. The patterns in the location of settlements suggest that only the Transylvanian salt deposits had been exploited in the Early Avar period. Notably, the Transylvanian Basin is the only region where the settled area is smaller in the Late Avar than in the Early Avar period. The eighth-century settlements are located around the salt outcrops along the Maros/Mureş and the Arieş rivers, which again strongly suggest their probable exploitation.

Another area with a remarkably dense settlement network first occupied during the Late Avar period was noted in the southern foothills of the Mecsek Mountains (*Fig. 14*) where native copper occurs as surface outcrops or close to the surface even today. In this case, small grave groups with weaponry and horse burials appear only on the south-western fringes of the area.

<sup>138</sup> BAUMEISTER 2004, Abb. 83.

<sup>139</sup> Weaponry is atypical in the average Late Avar cemetery, and horse burials can at the most only be found in a single grave of each generation of local leaders (that is, one or, at the most, two horse burials in every chronological phase, usually in male burials deposited in a central location). The first graves in the earliest grave groups of the Late Avar-period cemeteries dating from the later seventh century, which are characterised by weapons and horse burials, add another dimension to this issue. These early graves can be linked to the general problem of founder’s graves (for the problem of population groups settling in an unfamiliar environment, see THEUWS 2009, 286–291). However, as there is evidence that these groups represented the burials of communi-

ties in their formative phase (for single cemeteries, see, e.g., SZENTHE 2011, SZENTHE 2014), the internal competition between members and families could also result in an extraordinarily lavish funerary display, highlighting the power of the community’s departed members – as well as of their descendants (for a good summary, see INNES 2000, 34ff).

<sup>140</sup> For proof of the north to south traffic, see the Avar- and Saltovo-type stirrups found at Kraków, Nowa Huta (dated to the eighth century by BALINT–GARAM 2016, 434).

<sup>141</sup> See note 137.

<sup>142</sup> BÁRDOS 1978; SZIMONOVA 1997.

<sup>143</sup> VIDA 2016, 262.

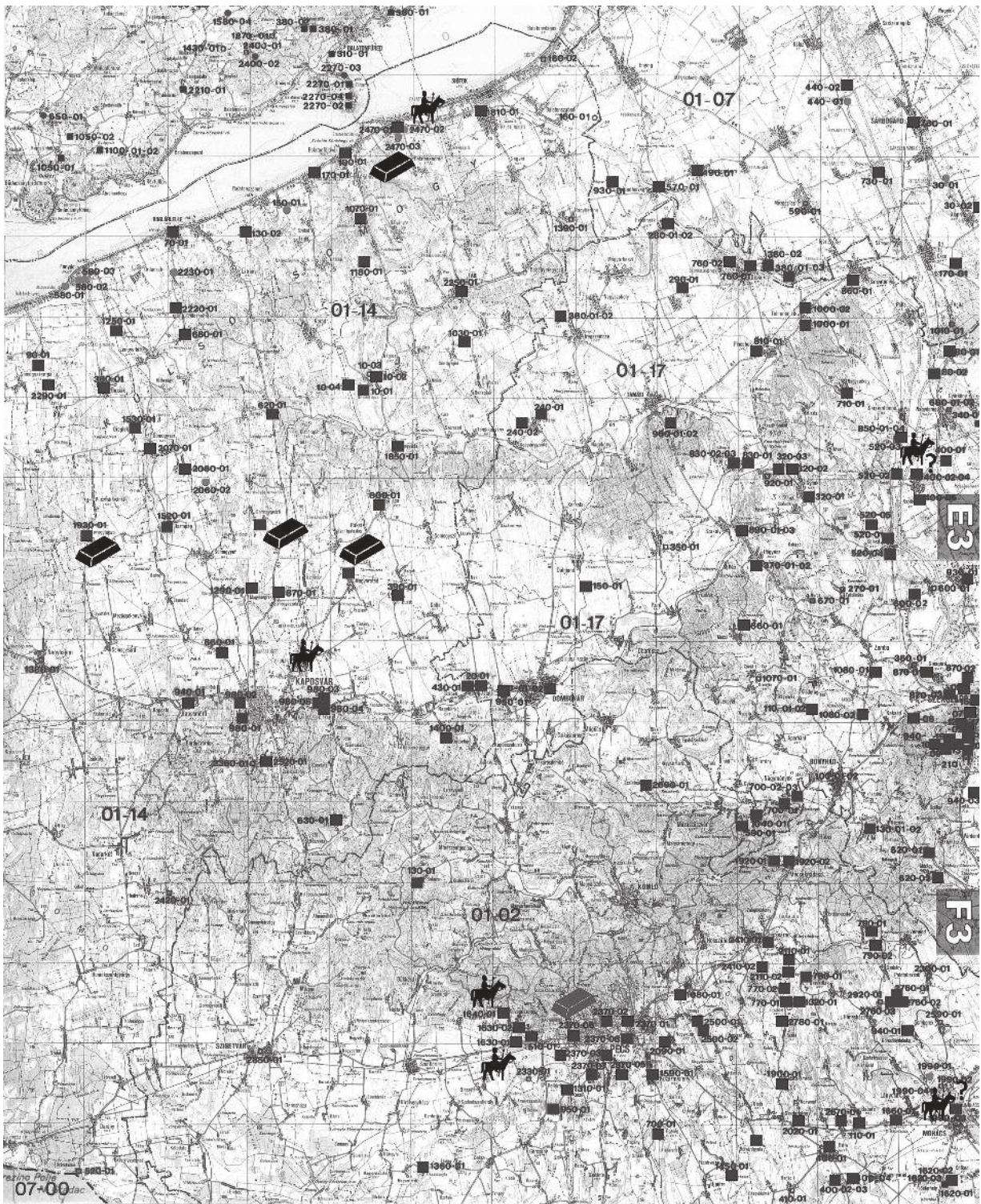


Fig. 14. Late Avar-period sites in southern Transdanubia, with the location of iron ore processing sites, copper ore deposits (the exploitation of the latter is not attested) and horse-weapon burials (burial places and larger cemeteries)

## CONCLUSION

The narrative proposed here is one of structural transformation, with a focus on the correlations between the cultural and other trajectories in the Carpathian Basin and the neighbouring world instead of the previous narrative of a political crisis. The shrivelling of the Avar Khaganate's diplomatic connections and its transformation into a regional power is paralleled by the simultaneous regionalisation in the surrounding Mediterranean and European world.

Following the intermezzo of the Early Avar nomadic state and the unsustainability of the nomadic economy, the patterns of change in settlement structures, social values and material culture, in particular regarding the use of metal artefacts, seem to reflect a rapprochement between the Avar system and the neighbouring European world.

While there are some indications of efforts to exploit various strategic resources and of a – probably failed – initiative by the Avar elite for launching a silver-based coinage, the balanced regional distribution of various artefact types reflects the existence of a well-functioning internal communication system, which underlines the importance of studying the modes of distribution expressing networks of power.

The regional presence of small communities expressing a special military identity through their funerary rites complements this overall picture. They possibly represent a specialised social group within the Late Avar Khaganate tasked with controlling areas of strategic importance. Their small cemeteries and separate burial places suggest communities that apparently pursued mobile pastoralist lifeways, or, at least, retained some elements of nomadism. Their geographical distribution around the Avar settlement territory suggests a conscious arrangement and the presence of a central power that operated the 'system'.

One intriguing issue is whether elements of Avar cultural and social identity too followed this tendency, and if so, to what extent?

The widespread motifs of the emerging Late Avar art style imply that the Avars had responded creatively and had succeeded in reforming or reaffirming a common mythology through its visualisation. We do not know whether 'Avar identity' had an ethnic aspect to it,<sup>144</sup> but it was in all likelihood based on the cultural layer that is best defined by a nomadic tradition.

Nevertheless, it would appear that the persistent nomadic tradition, which dominated elite attitudes and was embodied by mount-decorated belts and the funerary rite calling for the burial of a horse beside the deceased – although in most cemeteries only local leaders earned this distinction<sup>145</sup> – and which no doubt played a prominent role in the cultural cohesion of the Avar Khaganate, was apparently out of tune with the social and economic realities, or was unable to create an efficient centralising identity and to support a central power at a time when flexible, well-organised and successful systems were also served by religious ideologies proclaiming exclusivity and ecclesiastic hierarchies.

Even though the basic economic structure of the Avar Khaganate, a regional power, shifted towards the medieval system more or less simultaneously with its broader neighbourhood, this was not accompanied by a culture expressing social prestige and power, which ultimately led to the downfall of the Avar political and social model. The events of this downfall – namely military weakness, lack of coordination, infighting between the nobles – are evidence of the weakness of the centralised hierarchies. When Charlemagne's formidable military machine turned against the Avars, the khaganate collapsed without putting up any serious resistance.

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<sup>144</sup> For Avar 'ethnogenesis', see VIDA 2016, 255.

<sup>145</sup> See note 143.

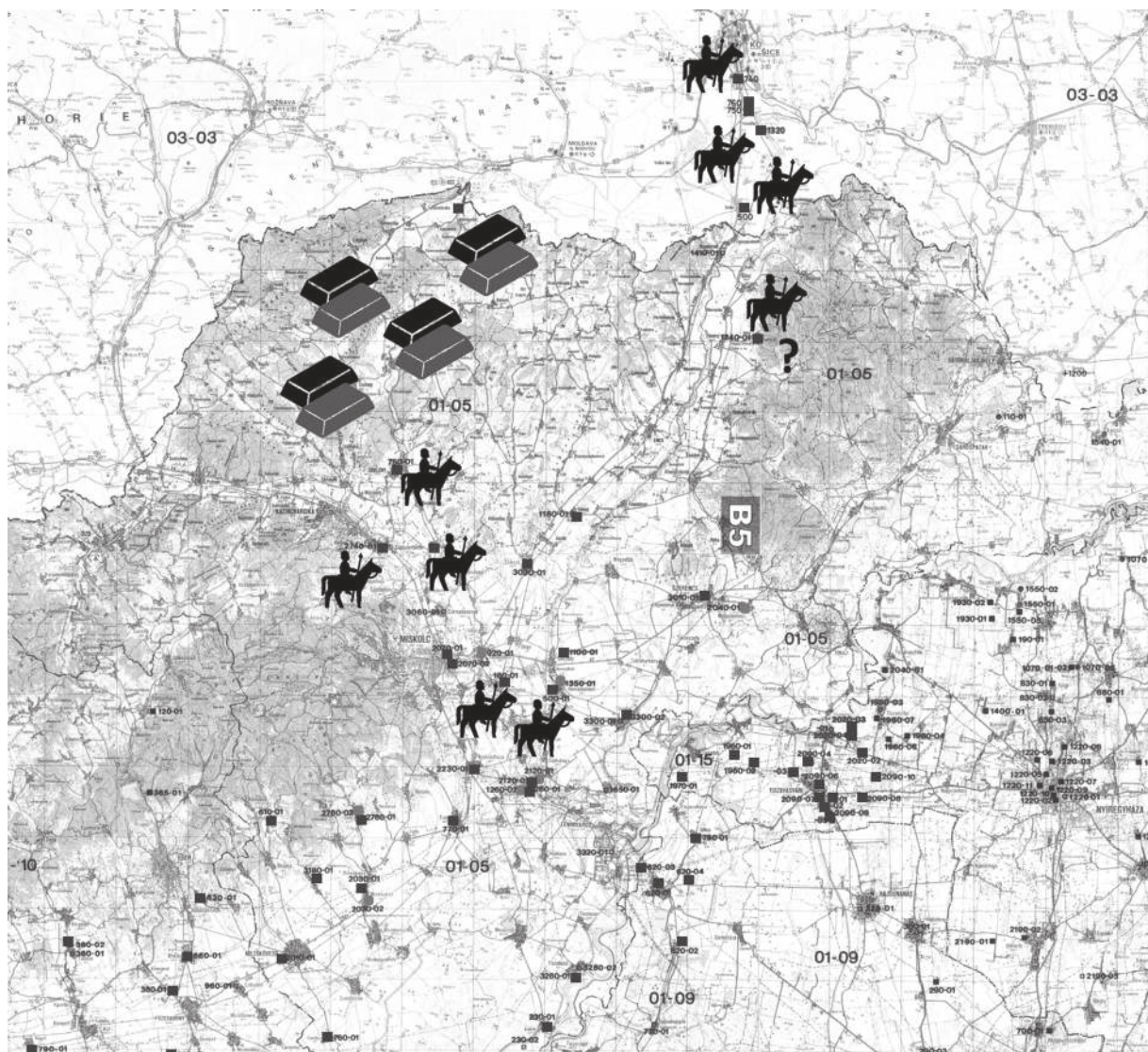


Fig. 15. Late Avar-period sites in the north-easterly region of the Carpathian Basin, with the location of horse-weapon burials (burial places and larger cemeteries) and of iron and copper deposits (exploitation not attested)

#### PRIMARY SOURCES

*Historiae Francorum*

= Liber Historiae Francorum. Fredegari Gesta Dagoberti I Regis Francorum. In: Fredegari et aliorum chronica. Vita Sactorum. ed. B. Krusch. MGH SS rer. Merov. 2, Hannoveriae 1888.

*Nikephoros, Breviarium*

= Nikephoros Patriarch of Constantinople: Short History. Text, translation and commentary by Cyril Mango. CFHB Vol. XIII, Washington 1990.

*Vita Caroli Magni*

= Einhard, Vita Caroli Magni. MGH SS Rer. Germ. Hannover 1911.

## REFERENCES

- ADAM = J. SZENTPÉTERI (Hrsg.): Archäologische Denkmäler der Awarenzeit im Mitteldonaubecken : in memoriam Professoris Stephani Bóna (1930–2001). VAH 13. Budapest 2002.
- Afghanistan 2010 = P. CAMBON–V. SCHILTZ (Hrsg.): Gerettete Schätze. Afghanistan. Die Sammlung des Nationalmuseums in Kabul. Bonn 2010.
- BÁLINT 1993 = Cs. BÁLINT: Probleme der archäologischen Forschung zur awarischen Landnahme. In: Ausgewählte Probleme europäischer Landnahmen des Früh- und Hochmittelalters. Hrsg.: M. Müller-Wille, R. Schneider. Sigmaringen 1993, 195–273.
- BÁLINT 2004a = Cs. BÁLINT: A közép avar kor kezdete és Kuber bevándorlása (Der Beginn der Mittelawarenzeit und die Einwanderung Kubers). ArchÉrt 129 (2004) 35–65.
- BÁLINT 2004b = Cs. BÁLINT: A nagyszentmiklósi kincs: régészeti tanulmányok (Der Schatz von Nagyszentmiklós. Archäologische Studien). VAH 16a. Budapest 2004.
- BÁLINT 2006 = Cs. BÁLINT: Der Reichtum der Awaren. "Fürstengräber" – Prunkgräber – Schatzfunde. In: Herrschaft – Tod – Bestattung. Zu den frühgeschichtlichen Prunkgräbern als archäologisch-historische Quelle. Hrsg.: C. von Carnap-Bornheim, D. Krause, A. Wesse. UPA 139. Bonn 2006, 147–160.
- BÁLINT 2008 = Cs. BÁLINT: Antwortschreiben an Péter Somogyi. Antaeus 29–30 (2008) 395–401.
- BÁLINT 2010 = Cs. BÁLINT: Avar goldsmiths' work from the perspective of cultural history. In: 'Intelligible Beauty'. Recent Research on Byzantine Jewellery. Eds: Chr. Entwistle, N. Adams. London 2010, 146–160.
- BÁLINT–GARAM 2016 = Cs. BÁLINT–É. GARAM: Der Fund von Ada. ActaArchHung 67 (2016) 423–448.
- BALOGH 2016 = Cs. BALOGH: Régészeti adatok a Duna–Tisza közi avarok történetéhez (The History of the Avars in the Danube–Tisza Interfluvium as Reflected in the Archaeological Record). Studia ad archaeologiam Pazmaniensia 6. Budapest 2016.
- BÁRDOS 1978 = E. BÁRDOS: Avar temető Kaposvár határában (Rescue excavation on the findspot Nr. 33. at Kaposvár). SMK 3 (1978) 13–65.
- BARFIELD 2001 = TH. J. BARFIELD: The shadow empires: imperial state formation along the Chinese–Nomad frontier. In: Empires. Perspectives from Archaeology and History. Eds: S. E. Alcock, T. N. D'Altroy, K. D. Morrison, C. M. Sinopoli. Cambridge 2001, 10–41.
- BAUMEISTER 2004 = M. BAUMEISTER: Metallrecycling in der Frühgeschichte. Untersuchungen zur technischen, wirtschaftlichen und gesellschaftlichen Rolle sekundärer Metallverwertung im 1. Jahrtausend n. Chr. Würzburger Arbeiten zur Prähistorischen Archäologie 3. Rahden 2004.
- BIERBRAUER 1997 = V. BIERBRAUER: Tierornamentik. In: Lexikon des Mittelalters. 8. München 1997, 783–784.
- BOLLÓK 2014 = Á. BOLLÓK: Kép- és képnélküliség a Kárpát-medencében a 6.–10. században (Bild- und Bildlosigkeit im 6.–10. Jahrhundert im Karpatenbecken). ArchÉrt 138 (2014) 213–237.
- BOLLÓK 2019 = Á. BOLLÓK: A bizánci diplomácia és az avar elit a 6–7. században. Értelmezési kísérlet (Byzantine diplomacy and the Avar elite in the sixth–seventh centuries. An essay in interpretation). In: Hatalmi központok az avar kaganátusban. Ed.: E. Wicker. Kecskemét 2019, 211–248.
- BÓNA 1971 = I. BÓNA: A népvándorlás kora [The Migration Period]. In: Fejér megye története az őskortól a honfoglalásig I/5. Székesfehérvár 1971, 221–314.
- BÓNA 1988 = I. BÓNA: Die Geschichte der Awaren im Lichte der archäologischen Quellen. In: Popoli delle steppe: Unni, Avari, Ungari, 23–29 aprile 1987. Settimane di studio del Centro Italiano di Studi sull'Alto Medioevo 35. Spoleto 1988, 437–481.
- BÓNA 1993 = I. BÓNA: „Barbarische“ Nachahmungen von byzantinischen Goldmünzen im Awarenreich. RIN 95 (1993) 529–538.
- BUDINSKY-KRIČKA 1956 = V. BUDINSKY-KRIČKA: Pohrebisko z neskorej doby avarskej v Žitavskej Tõni na Slovensku [Burial ground of late-period avar in Žitavskej Toni]. SIA 4 (1956) 5–131.
- BUDINSKY-KRIČKA–TOČIK 1991 = V. BUDINSKY-KRIČKA–A. TOČIK: Šebastovce. Gräberfeld aus der Zeit des awarischen Reiches. Nitra 1991.
- BUNARDŽIĆ 1985 = R. BUNARDŽIĆ: Čelarevo. Risultati delle ricerche nelle necropoli dell'alto medioevo. Roma 1985.
- BÜHLER 1999 = B. BÜHLER: Untersuchungen zu Guss, Oberflächenbearbeitung und Vergoldung an frühmittelalterlichen Bunt- und Edelmetallgegenständen. ArchA 82–83 (1998–1999) 429–492.
- BÜHLER 2014 = B. BÜHLER: Der „Schatz“ von Brestovac, Kroatien. Seine kulturellen Beziehungen und technologischen Aspekte. RGZM Monographien 85. Mainz 2014.
- BÜNTGEN *et al.* 2016 = U. BÜNTGEN–V. S. MYGLAN–F. CHARPENTIER LJUNGQVIST–M. MCCORMICK–N. DI COSMO–M. SIGL–J. JUNGCLAUS–S. WAGNER–P. J. KRUSIC–J. ESPER–J. O. KAPLAN–M. A. C. DE VAAN–J. LUTERBACHER–L. WACKER–W. TEGEL–A. V. KIRDYANOV: Cooling and societal change during the Late Antique Little Ice Age from 536 to around 660 AD. Nature Geoscience 9 (2016) 231–236.
- CANEPA 2010 = M. P. CANEPA: Distant displays of power. Understanding cross-cultural interactions among the elites of Rome, Sasanian Iran and Sui – Tang China. Ars Orientalis 38 (2010) 121–154.
- ČILINSKÁ 1982 = Z. ČILINSKÁ: Dve pohrebiská z 8.–9. storočia v Komárne (Zwei Gräberfelder aus dem 8.–9. Jh. in Komarno). SIA 30 (1982) 347–393.

- CLARKE 1978 = D. L. CLARKE, *Analytical Archaeology*. London 1978.
- COSMA 2017 = C. COSMA: Războinici avari în Transilvania – Avar Warriors in Transylvania. Cluj-Napoca 2017.
- CURTA 2008 = F. CURTA: The north-western region of the Black Sea during the 6<sup>th</sup> and early 7<sup>th</sup> century AD. *Ancient East and West* 7 (2008) 149–185.
- CURTA 2016 = F. CURTA: Avar Blitzkrieg, Slavic and Bulgar raiders, and Roman special ops: mobile warriors in the 6<sup>th</sup> century Balkans. In: *Central Eurasia in the Middle Ages: Studies in Honour of Peter B. Golden*. Eds: I. Zimonyi, O. Karatay. Wiesbaden 2016, 69–89.
- CSALLÁNY 1939 = D. CSALLÁNY: Kora-avarkori sirleletek – Grabfunde der Frühawarenzeit. *A Szegedi Városi Múzeum kiadványai Ser 2/1*. Szeged 1939.
- CSALLÁNY 1962 = D. CSALLÁNY: Der awarische Gürtel. *ActaArchHung* 14 (1962) 444–480.
- CSIKY 2015 = G. CSIKY: Avar-Age Polearms and Edged Weapons. Classification, Typology, Chronology and Technology. *East-Central and Eastern Europe in the Middle Ages, 450–1450* : 32. Leiden–Boston 2015.
- DAIM 1990 = F. DAIM: Der awarische Greif und die byzantinische Antike. In: *Typen der Ethnogenese unter besonderer Berücksichtigung der Bayern. II.: Berichte des Symposiums der Kommission für Frühmittelalterforschung*, 27. bis 30. Oktober 1986, Stift Zwettl, Niederösterreich. Hrsg.: H. Friesinger, F. Daim. DAWW 204, Veröffentlichungen der Kommission für Frühmittelalterforschung 13. Wien 1990, 273–303.
- DAIM 2000 = F. DAIM: „Byzantinische“ Gürtelgarnituren des 8. Jahrhunderts. In: *Die Awaren am Rand der byzantinischen Welt. Studien zu Diplomatie, Handel und Technologietransfer im Frühmittelalter*. Hrsg.: F. Daim. *Monographien zur Frühgeschichte und Mittelalterarchäologie* 7. Innsbruck 2000, 77–204.
- DAIM 2001 = F. DAIM: Byzantine belts and Avar birds. Diplomacy, trade and cultural transfer in the eighth century. In: *The Transformation of Frontiers. From Late Antiquity to the Carolingians*. Eds: W. Pohl, I. Wood, H. Reimitz. *The Transformation of the Roman world* 10. Leiden–Boston–Köln 2001, 143–188.
- DAIM 2003a = F. DAIM: Vom Umgang mit toten Awaren. Bestattungsgebräuche im historischen Kontext. In: *Erinnerungskultur im Bestattungsritual. Archäologisch-historisches Forum*. Hrsg.: J. Jarnut, M. Wemhof. München 2003, 41–60.
- DAIM 2003b = F. DAIM: Avars and Avar archaeology. An introduction. In: *Regna and Gentes. The Relationship between Late Antique and Early Medieval Peoples and Kingdoms in the Transformation of the Roman World*. Eds: H.-W. Goetz, J. Jarnut, W. Pohl. *Transformation of the Roman world* 13. Leiden–Boston 2003, 463–570.
- DAIM 2010 = F. DAIM: Byzantine belt ornaments of the 7<sup>th</sup> and 8<sup>th</sup> centuries in Avar contexts. In: *‘Intelligible Beauty’. Recent Research on Byzantine Jewellery*. Eds: Ch. Entwistle, N. Adams. London 2010, 61–71.
- DAIM–RÁCZ 2001 = F. DAIM–Zs. RÁCZ: Kunágota. In: *RGA* 17. Berlin–New York 2000, 486–490.
- DANI 2015 = J. DANI: Kincsek Hajdúsámson határából [Treasures from the Surroundings of Hajdúsámson]. Hajdúsámson 2015.
- ECSEDY 1979 = I. ECSEDY: Nomádok és kereskedők Kína határán [Nomads and Merchants at the Chinese Border]. Budapest 1979.
- EISNER 1952 = J. EISNER: *Devínská Nová Veš*. Bratislava 1952.
- FANCSALSZKY 2007 = G. FANCSALSZKY: Állat- és emberábrázolások késő avar kori öntött bronz övvereteken (Tier- und Menschendarstellungen auf den spätawarenzeitlichen gegossenen Gürtelbeschlägen). *Opitz Archaeologica* 1. Budapest 2007.
- FETTICH 1928 = N. FETTICH: Öntött phalerák a lovasnomádok magyarországi régészeti hagyatékában (Gegossene Bronzephaleræ im archäologischen Nachlass der Reiternomaden in Ungarn). *ArchÉrt* 42 (1928) 114–127, 317–321.
- FETTICH 1930 = N. FETTICH: Über die ungarländischen Beziehungen der Funde von Ksp. Perniö, Südwestfinnland. *ESA* 5 (1930) 52–65.
- GÁLL 2018 = E. GÁLL: At the Periphery of the Avar Core Region. 6<sup>th</sup>–8<sup>th</sup> Century Burial Sites near Nädlac (The Pecica–Nädlac Motorway Rescue Excavations). Paris–Budapest 2017.
- GARAM 1979 = É. GARAM: Das awarenzeitliche Gräberfeld von Kisköre. *FontArchHung*. Budapest 1979.
- GARAM 1981 = É. GARAM: A böcsi későavarkori lelet és köre (Der spätawarenzeitliche Fund von Böcs und sein Kreis). *ArchÉrt* 108 (1981) 34–51.
- GARAM 1995 = É. GARAM: Das awarenzeitliche Gräberfeld von Tiszafüred. *Cemeteries of the Avar Period (567–829) in Hungary* 3. Budapest 1995.
- GARAM 2000 = É. GARAM: Über die Beziehung der byzantinischen Goldschnallen und die awarenzeitlichen Pseudoschnallen. In: *Kontakte zwischen Iran, Byzanz und der Steppe im 6.–7. Jahrhundert*. Hrsg.: Cs. Bálint. VAH 10. Budapest–Napoli–Roma 2000, 219–228.
- GARAM 2001 = É. GARAM: Funde byzantinischer Herkunft in der Avarzeit vom Ende des 6. bis zum Ende des 7. Jahrhunderts. *MonAvarArch* 5. Budapest 2001.
- GARAM 2002 = É. GARAM: The connection of Avar Period princely and common grave goods with the Nagyszentmiklós treasure. In: *The Gold of the Avars. The Nagyszentmiklós Treasure. Catalogue of an exhibi-*

- tion held in the Hungarian National Museum, Budapest, 22 March to 30 June 2002. Eds: T. Kovács, É. Garam. Budapest 2002, 81–112.
- GARAM 2005 = É. GARAM: Avar kori nemzetségfő sírja Maglódon (Das awarenzeitliche Sippenhäuptlingsgrab von Maglód). *ComArchHung* 2005, 407–436.
- GELL 1998 = A. GELL: Art and Agency. An Anthropological Theory. Oxford 1998.
- GÖMÖRI 2000 = J. GÖMÖRI: Az avar kori és Árpád-kori vaskohászat régészeti emlékei Pannoniában [Archaeological Remains of Avar and Árpadian-Age Iron Smelting in Pannonia]. Magyarország iparrégészeti lelőhelykatasztere. 1: Vasművesség. Sopron 2000.
- GRIERSON – BLACKBURN 1986 = PH. GRIERSON – M. BLACKBURN: Medieval European Coinage. I.: The Early Middle Ages (5<sup>th</sup>–10<sup>th</sup> Centuries). Cambridge 1986.
- GSCHWANTLER 2002 = K. GSCHWANTLER: The Nagyszentmiklós treasure. Kat.-Nr. 1–23. In: The Gold of the Avars. The Nagyszentmiklós Treasure. Catalogue of an exhibition held in the Hungarian National Museum, Budapest, 22 March to 30 June 2002. Eds.: T. Kovács, É. Garam. Budapest 2002, 15–44.
- GULYÁS 2018 = B. GULYÁS: A szegvár-sápoldali 1. sír keleti kapcsolatai az újabb orosz és ukrán kutatás fényében (The cultural contacts of the grave nr. 1 of Szegvár-Sápoldal in the light of the Russian and Ukrainian research). *ArchÉrt* 143 (2018) 105–115.
- HALDON 2012 = J. HALDON: Commerce and exchange in the seventh and eighth centuries. Regional trade and the movement of goods. In: Trade and Markets in Byzantium. Ed.: C. Morrison. Washington 2012, 99–124.
- HAMPEL 1905 = J. HAMPEL: Alterthümer des frühen Mittelalters in Ungarn. I–III. Braunschweig 1905.
- HANSEN–WICKHAM 2000 = I. L. HANSEN–CH. WICKHAM (eds): The Long Eighth Century. Production, Distribution and Demand. The Transformation of the Roman world 11. Leiden–Boston–Köln 2000.
- HARDT 2004 = M. HARDT: Gold und Herrschaft. Die Schätze europäischer Könige und Fürsten im ersten Jahrtausend. Europa im Mittelalter 6. Berlin 2004.
- HASELOFF 1975 = G. HASELOFF: Zu den Goldblattkreuzen aus dem Raum nördlich den Alpen. In: Die Goldblattkreuze des frühen Mittelalters. Hrsg.: W. Hübener. Veröffentlichungen des Alamannischen Instituts Freiburg i. Br. 37. Bühl–Baden 1975, 37–70.
- HASELOFF 1984 = G. HASELOFF: Das Wamebertus-Reliquiar im Stiftungsschatz von Beromünster. *HelvA* 15 (1984) 195–218.
- HEINRICH–TAMÁSKA 2008 = O. HEINRICH–TAMÁSKA: Avar-Age metalworking technologies in the Carpatian Basin (sixth to eighth century). In: The Other Europe in the Middle Ages. Avars, Bulgars, Khazars and Cumans. Ed.: F. Curta. Leiden–Boston 2008, 237–261.
- HORDEN–PURCELL 2000 = P. HORDEN–N. PURCELL: The Corrupting Sea. A Study of Mediterranean History. Oxford 2000.
- HUMPREY–SNEATH 1999 = C. HUMPREY–D. SNEATH: The End of Nomadism? Society, State and the Environment in Inner Asia. Durham 1999.
- INNES 2000 = M. INNES: State and Society in the Early Middle Ages. The Middle Rhine Valley, 400–1000. Cambridge 2000.
- JUHÁSZ 2004 = I. JUHÁSZ: Das awarenzeitliche Gräberfeld in Szarvas–Grexa-téglagyár, FO 68. *MonAvarArch* 7. Budapest 2004.
- KHAZANOV 1994 = A. M. KHAZANOV: Nomads and the Outside World. Cambridge–New York 1994.<sup>2</sup>
- KISS 1977 = A. KISS: Avar Cemeteries in County Baranya. Cemeteries of the Avar Period (568–829) in Hungary 2. Budapest 1977.
- KISS 1991 = A. KISS: Zur Zeitstellung des „münzdatierten“ awarischen Fürstengrabes von Kunágota. *JPMÉ* 36 (1991) 67–84.
- KISS 2015 = A. P. KISS: „...ut strenui viri...” A gepidák Kárpát-medencei története – The History of the Gepids in the Carpathian Basin. Szeged 2015.
- KLANICA 1972 = Z. KLANICA: Predvelkomoravské pohřebišť v Dolních Dunajovicích. Příspěvek k otázce vzájemných vztahů Slovanů a Avarů v Podunají [The Pre-Great Moravian Burial Ground in Dolní Dunajovice. A contribution on mutual Slav-Avar relations in Danubia]. *SAB I/1*. Praha 1972.
- KLANICA 1995 = Z. KLANICA: Zur Periodisierung vorgrossmährischer Funde aus Mikulčice. In: Studien zum Burgwall von Mikulčice 1. Hrsg.: F. Daim, L. Poláček. *Spisy AV ČR Brno* 2. Brno 1995, 379–469.
- KONCZ 2015 = I. KONCZ: 568 – A historical date and its archaeological consequences. *ActaArchHung* 66 (2015) 315–340.
- KOSSACK 1974 = G. KOSSACK: Prunkgräber. Bemerkungen zu Eigenschaften und Aussagewert. In: Studien zur Vor- und Frühgeschichtlichen Archäologie. Festschrift für Joachim Werner zum 65. Geburtstag. Hrsg.: G. Kossack, G. Ulbert. München 1974, 3–34.
- KOVRIK 1963 = I. KOVRIK: Das awarenzeitliche Gräberfeld von Alattyán. *ArchHung* 40. Budapest 1963.
- KOVRIK 1975 = I. KOVRIK: The Tiszaderzs cemetery. In: Avar Finds in the Hungarian National Museum. Ed.: I. Kovrig. Cemeteries of the Avar period (568–829) in Hungary 1. Budapest 1975, 209–239.
- KÖLTŐ 1982 = L. KÖLTŐ: Avar kori bronztárgyak röntgenemissziós analízise (X-ray emission analysis of bronze objects from the Avar age). *SMK* 5/1 (1982) 5–68.



- KRISTIANSEN 2004 = K. KRISTIANSEN: An essay on material culture – Some concluding reflections. In: *Material Culture and Other Things – Post-disciplinary Studies in the 21<sup>st</sup> Century*. Eds: F. Fahlander, T. Oestigaard. Gotarc, Ser. C 61. Vällingby 2004, 259–278.
- LÁSZLÓ 1955 = GY. LÁSZLÓ: Études archéologiques sur l'histoire de la société des Avars. *ArchHung* 34. Budapest 1955.
- LAVAN 2006 = L. LAVAN: Explaining technological change: Innovation, stagnation, recession and replacement. In: *Technology in Transition A. D. 300–650*. Eds: L. Lavan, E. Zanini, A. Sarantis. Late antique archaeology 4. Leiden–Boston 2007, xv–xl.
- LÓRINCZY 2018 = G. LÓRINCZY: A szegvár-sápadali 7. századi sírcsoport (Eine Gräbergruppe des 7. Jahrhunderts von Szegvár-Sápadal). *ArchÉrt* 143 (2018) 51–84.
- LÓRINCZY–RÁCZ 2015 = G. LÓRINCZY–Zs. RÁCZ: Szabolcs-Szatmár-Bereg megye avar sírleletei. II.: Tiszavasvári-Kashalom-dűlő kora avar kori temetkezései; (Avar finds from Szabolcs-Szatmár-Bereg County. II.: Early Avar graves from Tiszavasvári-Kashalom-dűlő). *JAMÉ* 56 (2014) 141–217.
- MAKOLDI 2011 = M. MAKOLDI: Sajópetri határában feltárt avar temető, különös tekintettel a lovassírokra [The Avar cemetery unearthed at Sajópetri, with a particular focus on the horse burials]. In: *Sötét idők falvai. 8–11. századi települések a Kárpát-medencében*. Eds: B. Kolozsi, K. A. Szilágyi. *Tempora obscura* 1. Debrecen 2011, 33–92.
- MALDONADO–RUSSELL 2016 = A. MALDONADO–A. RUSSELL: Introduction. In: *Creating Material Worlds. The Uses of Identity in Archaeology*. Eds: E. Pierce, A. Russell, A. Maldonado, L. Campbell. Oxford 2016, 1–16.
- MARTIN 1990 = M. MARTIN: Awarische und germanische Funde in Männergräbern von Linz-Zizlau und Környe. Ein Beitrag zur Chronologie der Awarenzeit. In: *International Conference on Early Middle Ages, Tengelic 1989 – Internationale Konferenz über das Frühmittelalter*. Ed.: F. Vadas. *WMMÉ* 15 (1990) 65–90.
- MCCORMICK 2001 = M. MCCORMICK: *The Origins of the European Economy. Communications and Commerce AD 300–900*. Cambridge 2001.
- MESTERHÁZY 2005 = K. MESTERHÁZY: The Hortobágy in the Hungarian Conquest Period. In: *Environmental Archaeology in North-Eastern Hungary*. Eds: E. Gál, I. Juhász, P. Sümegei. *VAH* 19. Budapest 2005, 387–393.
- MORDOVIN 2016 = M. MORDOVIN: A várszervezet kialakulása a középkori Magyarországon, Csehországban és Lengyelországban (The Emergence of the Castle Organisation in Medieval Hungary, Bohemia and Poland in the 10th–12th Centuries). *Studia ad archaeologiam Pazmaniensia* 5. Budapest 2016.
- NAGY 1982 = E. NAGY: Újabb késő avar kori temetők Baranya megyében (New cemeteries from the late Avar period in County Baranya). *JPMÉ* 27 (1982) 125–141.
- NAGY 1998 = M. NAGY: Awarzeitliche Gräberfelder im Stadtgebiet von Budapest. I–II. *MonAvarArch* 2. Budapest 1998.
- NAYLOR 2012 = J. NAYLOR: Coinage, trade, and the origins of the English emporia, ca. AD 650–750. In: *From one Sea to Another. Trading Places in the European and Mediterranean Early Middle Ages. Proceedings of the International Conference, Comacchio, 27th–29th March 2009*. Eds: S. Gelichi, R. Hodges. *Turnhout* 2012, 237–266.
- NICOLAY 2014 = J. A. W. NICOLAY: The Splendour of Power. Early medieval kingship and the use of gold and silver in the southern North Sea area (5th to 7th century AD). *Groningen archaeological studies* 28. Groningen 2014.
- PÁSTOR 1971 = J. PÁSTOR: Kostrové pohrebisko v Hraničnej pri Hornáde [Inhumation cemetery at Hranična pri Hornáde]. *VyP* 2 (1971) 89–179.
- POHL 2002 = W. POHL: Die Awaren. Ein Steppenvolk in Mitteleuropa 567–822. n. Chr. München 2002<sup>2</sup>.
- POMFYOVÁ–SAMUEL–ŽAŽOVÁ 2014 = B. POMFYOVÁ–M. SAMUEL–H. ŽAŽOVÁ: Stredoveká Biňa. Archeológia – história – architektúra [Medieval Biňa. Archaeology – History – Architecture]. Bratislava 2014.
- POPESCU 1956 = D. POPESCU: Cercetări arheologice în Transilvania. I.: Sondajele de la Socodor [Archaeological excavations in Transylvania. I.: Rescue excavations from Socodor]. *MCA* 2 (1956) 43–88.
- PREISER-KAPPELLER 2018 = J. PREISER-KAPPELLER: The climate of the khagan. Observations on palaeoenvironmental factors in the history of the Avars (6th–9th century). In: *Lebenswelten zwischen Archäologie und Geschichte. Festschrift für Falko Daim zu seinem 65. Geburtstag*. Hrsg.: J. Drauschke, E. Kislinger, K. Kühnreiter, Th. Kühnreiter, G. Scharrer-Liška, T. Vida. *RGZM Monographien* 150/1. Mainz 2018, 311–324.
- PROFANTOVÁ 1992 = N. PROFANTOVÁ: Awarische Funde aus den Gebieten nördlich der awarischen Siedlungsgrenzen. In: *Awarenforschungen. II*. Hrsg.: F. Daim. *Archaeologia Austriaca Monographien* 2. Studien zur Archäologie der Awaren 4. Wien 1992, 605–801.
- QUAST 2012 = D. QUAST: Das merowingerzeitliche Reliquienkästchen aus Ennabeuren. Eine Studie zu den frühmittelalterlichen Reliquarien und Chismalia. *Kataloge Vor- und Frühgeschichtlicher Altertümer* 43. Mainz 2012.
- RAŠEV 2008 = R. RAŠEV: Bălgarskata ezičeska kultura VII–IX. vek [The Bulgarian Pagan Culture 7<sup>th</sup>–9<sup>th</sup> Century]. Sofia 2008.

- SCHOLZ 1995 = F. SCHOLZ: Nomadismus. Theorie und Wandel einer sozio-ökologischen Kulturweise. Erdkundliches Wissen 118. Stuttgart 1995.
- SCHULZE-DÖRRLAMM 2009 = M. SCHULZE-DÖRRLAMM: Byzantinische Gürtelschnallen und Gürtelbeschläge im Römisch-Germanischen Zentralmuseum. 2.: Die Schnallen mit Schamierbeschlag und die Schnallen mit angegesonnenem Riemendurchzug des 7. bis 10. Jahrhunderts. Kataloge Vor- und Frühgeschichtlicher Altertümer 30/1. Mainz 2009.
- SCHWAB 2006 = H. SCHWAB: Nouvelle chronologie de certaines garnitures de ceinture des types A et C/Berne Solleure, plaquées d'argent. In: De l'Âge du fer au haut Moyen Âge. Archéologie funéraire, princes et élites guerrières. Actes des tables rondes Longroy 1998 et 1999. Red.: X. Delestre, M. Kazanski, P. Périn. Mémoires publiés par l'Association française d'archéologie mérovingienne 15. Saint-Germain-en-Laye 2006, 174–179.
- SHALEM 2005 = A. SHALEM: Objects as carriers of real and contrived memories in a cross-cultural context. Mitteilungen zur Spätantiken Archäologie und Byzantinischen Kunstgeschichte 4 (2005) 101–117.
- SNEATH 2007 = D. SNEATH: The Headless State. Aristocratic Orders, Kinship Society and Misrepresentations of Nomadic Inner Asia. New York 2007.
- SÓFALVI 2017 = A. SÓFALVI: Hadakozás és önvédelem a középkori és fejedelemség kori Udvarhelyszéken [Warfare and Self-Defence in Udvarhelyszék from the Medieval Age till the Age of Principality]. Kolozsvár 2017.
- SOKOL 1996 = V. SOKOL: Sjeverozapadna Hrvatska u ranom srednjem vijeku (North-West Croatia during the Early Middle Ages). In: Ljudje ob Muri – Népek a Mura mentén – Völker an der Mur – Ljudi zu Muru. Ed.: J. Balažić, L. Vándor. Murska Sbita–Zalaegerszeg 1996, 83–100.
- SOMOGYI 1997 = P. SOMOGYI: Byzantinische Fundmünzen der Awarenzeit. Monographien zur Frühgeschichte und Mittelalterarchäologie 5. Innsbruck 1997.
- SOMOGYI 2005 = P. SOMOGYI: Újabb gondolatok a bizánci érmek avarföldi elterjedéséről. Numizmatikai megjegyzések Bálint Csanád közép avar kor kezdetére vonatkozó vizsgálataihoz (Neue Überlegungen über den Zustrom byzantinischer Münzen ins Awarenland. Numismatischer Kommentar zu Csanád Bálints Betrachtungen zum Beginn der Mittelawarenzeit). MFMÉ – StudArch 11 (2005) 189–228.
- SOMOGYI 2008 = P. SOMOGYI: Neue Überlegungen über den Zustrom byzantinischer Münzen ins Awarenland (Numismatischer Kommentar zu Csanád Bálints Betrachtungen zum Beginn der Mittelawarenzeit). In: Antaeus 29–30 (2008) 347–393.
- SOMOGYI 2014 = P. SOMOGYI: Byzantinische Fundmünzen der Awarenzeit in ihrem europäischen Umfeld. DissPann IV/2. Budapest 2014.
- STARK 2009 = S. STARK: Central and Inner Asian parallels to a find from Kunszentmiklós-Bábonya (Kunbáony): Some thoughts on the early Avar headdress. Ancient Civilisations from Scythia to Siberia 15 (2009) 287–305.
- SZABÓ–BOLLÓK 2018 = J. B. SZABÓ–Á. BOLLÓK: A “szavart–türk dosszié”. A 9. századi kelet-európai steppei vándorlások 16–17. századi párhuzamok tükrében (The “Savart–Turk dossier”. 9<sup>th</sup> century migrations in the eastern European steppe region in the light of 16<sup>th</sup>–17<sup>th</sup> century parallel phenomena). Századok 152/3 (2018) 479–542.
- SZÁDECZKY-KARDOSS 1998 = S. SZÁDECZKY-KARDOSS: Az avar történelem forrásai 557-től 806-ig (Die Quellen der Awarenzeit von 557 bis 806). Magyar őstörténeti könyvtár 12. Budapest 1998.
- SZALONTAI *et al.* 2014 = Cs. SZALONTAI–A. BENEDEK–L. KÁROLY: A Kiskundorozsma Kettőshatár úti II. avar temető 434. sírja (Grave Nr. 434 of the Avar cemetery II in Kiskundorozsma, Kettőshatár Street). MFMÉ Ú.F 1 (2014) 161–228.
- SZENTHE 2011 = G. SZENTHE: 7. századi ezüstlemez övgarnitúrák (Gürtelgarnituren des 7. Jahrhunderts aus Silberblech). In: Thesaurus Avarorum. Régészeti tanulmányok Garam Éva tiszteletére – Archaeological Studies in Honour of Éva Garam. Ed.: T. Vida. Budapest 2011, 521–550.
- SZENTHE 2012 = G. SZENTHE: A késő avar kori növényi ornamentika [Late Avar Period Vegetal Ornaments. unpubl. Diss. Univ. ELTE, Budapest 2012].
- SZENTHE 2013 = G. SZENTHE: Antique meaning – Avar significance. Complex iconographic schemes on early medieval small objects. ActaArchHung 64 (2013) 139–172.
- SZENTHE 2014 = G. SZENTHE: Kulturális összeolvadás a „középar” korban. A vác-kavicsbányai avar temető (Kulturelle Verschmelzung in der Mittelawarenzeit. Das Gräberfeld von Vác-Kavicsbánya). ArchÉrt 139 (2014) 99–125.
- SZENTHE 2015a = G. SZENTHE: Ein osteuropäischer Schnallentyp aus dem 7. Jahrhundert im Karpatenbecken. Periphere Verbindungen zur Zeit der byzantinischen Dominanz. ActaArchHung 66 (2015) 341–377.
- SZENTHE 2015b = G. SZENTHE: Über die Aussagekraft der Hinterlassenschaft einer Heidenelite: Spätawarenzeitliche Funde auf dem Prüfstand. In: „Castellum, Civitas, Urbs”. Zentren und Eliten im frühmittelalterlichen Ostmitteleuropa – Centres and Elites in Early Medieval East-Central Europe. Hrsg.: O. Heinrich-Tamáska, H. Herold, P. Straub, T. Vida. CPP 6. Budapest–Leipzig–Keszthely–Rahden/Westf 2015, 293–312.

- SZENTHE 2015c = G. SZENTHE: Vegetal ornaments in the Late Avar decorative art. *DissArch Ser.* 3/1 (2013) 303–320.
- SZENTHE 2015d = G. SZENTHE: Randerscheinungen einer Randkultur. Awarische Männerrepräsentation und mediterraner Einfluss in Randgebieten des Karpatenbeckens (erste Hälfte 8. J.h. N. Chr.). In: *Warriors, Weapons, and Harness from the 5th–10th Centuries in the Carpathian Basin*. Ed.: C. Cosma. Cluj-Napoca 2015, 215–250.
- SZENTHE 2016 = G. SZENTHE: Crisis or innovation? A technology-inspired narrative of social dynamics in the Carpathian Basin during the eighth century. In: *Zwischen Byzanz und der Steppe. Archäologische und Historische Studien für Csanád Bálint zum 70. Geburtstag – Between Byzantium and the Steppe. Archaeological and Historical Studies in Honour of Csanád Bálint on the Occasion of His 70th Birthday*. Hrsg.: Á. Bollók, G. Csiky, T. Vida. Budapest 2016, 351–370.
- SZENTPÉTERI 2013 = J. SZENTPÉTERI: Az Avar Kaganátus hatalmi központjai – a hringek (The hringes – political centres of the Avar Khaganate). *Tisicum* 22 (2013) 169–177.
- SZIMONOVA 1997 = E. SZIMONOVA: A toponári avar temető [The Avar cemetery at Toponár]. In: *Avarok és honfoglaló magyarok Somogyban*. Ed.: G. Karancz. Marcali 1997, 25–52.
- SZÓKE 1980 = B. M. SZÓKE: Zur awarenzeitlichen Siedlungsgeschichte des Körös-Gebietes in Südost-Ungarn. *ActaArchHung* 32 (1980) 182–203.
- SZÓKE 2001 = B. M. SZÓKE: Egy avar kori indavirág. Késő avar kori övgarnitúra Zalaegerszeg-Ola, Új kaszárnya területéről (Eine awarenzeitliche Rankenblume. Spätawarenzeitliche Gürtelgarnitur aus Zalaegerszeg-Ola, auf dem Gebiet der neuen Kaserne). *ZalaiMúz* 10 (2001) 103–140.
- TEMPLE 1990 = R. TEMPLE (ed.): *Early Christian and Byzantine Art. Textiles, metalwork, frescoes, manuscripts, jewellery, steatites, stone sculptures, tiles, pottery, bronzes, amulets, coins and other items from the fourth to the fourteenth centuries*. Exhibition, The Temple Gallery (London, England). London 1990.
- THEUWS 2009 = F. THEUWS: Grave goods, ethnicity, and the rhetoric of burial rites in Late Antique Northern Gaul. In: *Ethnic Constructs in Antiquity. The Role of Power and Tradition*. Eds: T. Derks, N. Roymans. Amsterdam archaeological studies 13. Amsterdam 2009, 283–320.
- TOMKA 2008 = P. TOMKA: Innere Migranten in einer Strassenkreuzung – Regionsfremde in der Kleinen Tiefebene. In: *Kulturwandel in Mitteleuropa. Langobarden – Awaren – Slawen*. Hrsg.: I. Bemann, M. Schmauder. Kolloquien zur Ur- und Frühgeschichte 11. Bonn 2008, 601–618.
- TÖRÖK *et al.* 2018 = B. TÖRÖK–ZS. GALLINA–Á. KOVÁCS–F. KRISTÁLY: Early medieval iron bloomery centre at Zamárdi (Hungary). Complex archaeometrical examination of the slags. *AR* 70 (2018) 404–420.
- TRBUHOVIĆ 1982 = L. TRBUHOVIĆ: Avar finds from Sirmium and the surrounding region. In: *Sirmium. Recherches archéologique en Sirmium* 4. Éd.: N. Duval, E. L. Ochsenschlager, V. Popović. Belgrade 1982, 61–83.
- TRUGLY 1987 = A. TRUGLY: Gräberfeld aus der Zeit des awarischen Reiches bei der Schiffswerft in Komárno. *I. SIA* 35 (1987) 251–344.
- TRUGLY 1993 = A. TRUGLY: Gräberfeld aus der Zeit des awarischen Reiches bei der Schiffswerft in Komárno. *II. SIA* 41 (1993) 191–307.
- VÁSÁRY 1983 = I. VÁSÁRY: Nép és ország a türkőknél [Ethnos and state of the old Turks]. In: *Nomád társadalmak és államalakulatok [Nomadic Societies and State Formations]*. Ed.: F. Tókei. Budapest 1983, 189–213.
- VÉGH 1964 = K. K. VÉGH: A sajószentpéteri avarkori leletek (Funde aus dem Awarenzeit in der Umgebung von Sajószentpéter). *HOMK* 5 (1964) 15–23.
- VÉGH 1968 = K. K. VÉGH: Avarkori leletek a Miskolci Múzeumban (Awarenzeitliche Funde im Museum von Miskolc). *HOMÉ* 7 (1968) 47–90.
- VIDA 1999 = T. VIDA: Die awarenzeitliche Keramik. *I. VAH* 8. Budapest 1999.
- VIDA 2008 = T. VIDA: Conflict and coexistence. The local population of the Carpathian Basin under Avar rule (sixth to seventh century). In: *The Other Europe in the Middle Ages. Avars, Bulgars, Khazars and Cumans*. Eds: F. Curta, R. Kovalev. East-Central and Eastern Europe in the Middle Ages, 450–1450 : 2. Leiden–Boston 2008, 13–46.
- VIDA 2009 = T. VIDA: Local or foreign Romans? The problem of the late antique population of the 6<sup>th</sup>–7<sup>th</sup> centuries in Pannonia. In: *Foreigners in Early Medieval Europe. Thirteen International Studies on Early Medieval Mobility*. Ed.: D. Quast. RGZM Monographien 78. Mainz 2009, 233–259.
- VIDA 2011 = T. VIDA: Sütőharangok és sütőfedők – régészeti adatok Dél- és Közép-Európa étkezési kultúrájához (Backglocken, Backdeckel und Backhauben. Archäologische Angaben zur Ernährungskultur Süd- und Mitteleuropas). In: *Sötét idők falvai. 8–11. századi települések a Kárpátmedencében. Tempora obscura*. Eds.: B. Kolozsi, K. A. Szilágyi. Debrecen 2011, 701–817.
- VIDA 2016 = T. VIDA: “They asked to be settled in Pannonia...” A study on integration and acculturation – the case of the Avars. In: *Zwischen Byzanz und der Steppe. Archäologische und Historische Studien für Csanád Bálint zum 70. Geburtstag – Between Byzantium and the Steppe. Archaeological and Historical Studies in Honour of Csanád Bálint on the Occasion of His 70<sup>th</sup> Birthday*. Ed.: Á. Bollók, G. Csiky, T. Vida. Budapest 2016, 251–270.

- VIDA *manuscript* = T. VIDA: The settlement of the Carpathian Basin by mounted warriors in the Avar Period and their configuration of power. In: *From the Huns to the Turks – Mounted Warriors in Europe and Central Asia*. Eds: F. Daim, H. Meller, W. Pohl. (In press).
- VIDAL-RONCHAS *et al.* 2018 = R. VIDAL-RONCHAS–P. R. ŠIKANJIĆ–Z. PREMUŽIĆ–A. RAPAN-PAPEŠA–E. LIGHTFOOT: Diet, sex and social status in the Late Avar period: stable isotope investigations at Nuštar cemetery, Croatia. *Archaeological and Anthropological Sciences* 2018, <https://doi.org/10.1007/s12520-018-0628-4>.
- VINSKI 1960 = Z. VINSKI: Ranosrednjovjekovni arheološki nalazi na užem i širem području Zagreba [Early medieval archaeological finds in the narrower and boarder surroundings of Zagreb]. *Zbornik iz Starog i Novog Zagreba* 2 (1960) 47–65.
- VINSKI-GASPARINI–ERCEGOVIĆ 1958 = K. VINSKI-GASPARINI–S. ERCEGOVIĆ: Ranosrednjovjekovno groblje u Brodskom Drenovcu (Das frühmittelalterliche Gräberfeld von Brodski Drenovac). *VAMZ* 1 (1958) 129–161.
- WENGROW 2001 = D. WENGROW: The evolution of simplicity: aesthetic labour and social change in the Neolithic Near East. *WA* 33/2 (2001) 168–188.
- WERNER 1974 = J. WERNER: Nomadische Gürtel bei Persern, Byzantinern und Langobarden. In: *Atti del Convegno internazionale sul tema: La civiltà del Longobardi in Europa* (Roma, 24–26 maggio 1971) (Civildale del Friuli, 27–28 maggio 1971). *Problemi attuali di scienza e di cultura* 189. Roma 1974, 109–139.
- WERNER 1984 = J. WERNER: Der Grabfund von Malaja Pereščepina und Kuvrat, Kagan der Bulgaren. *ABAW N.F.* 91. München 1984.
- WERNER 1988 = J. WERNER: Eine goldene byzantinische Gürtelschnalle in der Prähistorischen Staatssammlung München. *Motive des Physiologus auf byzantinischen Schnallen des 6–7. Jahrhunderts*. *BVbl* 53 (1988) 301–312.
- WICKHAM 2005 = CH. WICKHAM: *Framing the Early Middle Ages. Europe and the Mediterranean 400–800*. New York 2005.
- YEROULANOU 1999 = E. YEROULANOU: *Diatrita*. Athens 1999.
- ZÁBOJNÍK 1991 = J. ZÁBOJNÍK: Seriation von Gürtelbeschlaggarnituren aus dem Gebiet der Slowakei und Österreichs (Beitrag zur Chronologie der Zeit des Awarischen Kaganats). In: *K problematike osídlenia stredodunajskej oblasti vo včasnóm stredoveku*. Red.: Z. Čilinská. Nitra 1991, 219–321.
- ZÁBOJNÍK 2005 = J. ZÁBOJNÍK: Mikulčice – Awarische Stadt? In: *Die frühmittelalterliche Elite bei den Völkern des östlichen Mitteleuropas*. Hrsg.: P. Kouřil. *Spisy AV ČR Brno* 25 (2005) 101–114.
- ZÁBOJNÍK–BĚREŠ 2016 = J. ZÁBOJNÍK–J. BĚREŠ: Pohrebisko z odobia avarského kaganátu vo Valalíky-Všechsvätých [Cemetery from the Period of the Avar Kaganat at Valalíky-Všechsvätých]. *AS monographiae, Studia* 26. Nitra 2016.

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