

THE VALLEY OF THE RIVER DRÁVA IN THE MIDDLE AGES: Landscape archaeology, archaeozoology and material culture

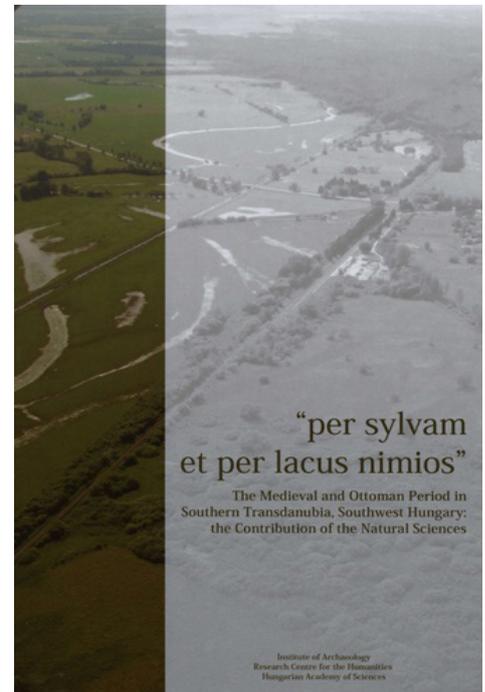
ANDRÁS VADAS

Gyöngyi Kovács and Csilla Zatykó (eds): "Per sylvam et per lacus nimios" – The Medieval and Ottoman Period in Southern Transdanubia, Southwest Hungary: the Contribution of the Natural Sciences. Budapest: MTA BTK Régészeti Intézet, 2016.

The study of the environment of settlements in archaeological and historical research in Hungary has had increasing attention devoted to it over the past few decades. The progressively intensifying interventions in the environment and the landscape of the nineteenth and twentieth century, and the ever more varied tool kit in the natural sciences and archaeology have both contributed to a more systematic study by archaeologists and historians into how man and environment have interacted with each other in past millennia, and into the major transformations that can be identified in this dynamic system.

In the context of the Middle Ages and the early modern period, landscape changes have been discussed to varying degrees, from analyses of continents to studies of the environments of settlements.¹ The volume to be reviewed along these lines discusses the landscape history of a relatively small area, the Dráva Valley (and to a lesser extent the section of the Danube that falls within the territory of Tolna County), with special regard to the period from the Middle Ages to the beginning of river regulation works in the modern period. This volume is the first summary of a multi-annual research program which, as the preface states, will be followed by a second one summarizing archaeological excavation results and written sources on the landscape history of the region.² In light of the well edited first volume that brought important new results, one can only hope it will be published soon.

The research program coordinated by the Institute of Archaeology at the Research Centre for the Humanities at the Hungarian Academy of Sciences chose a particularly good case study area from the perspective of environmental history. The River Dráva was a state border for most of the twentieth century, which has made it one of the least regulated rivers in Hungary, the immediate environment of which is one of the least disturbed flood plains in the Carpathian Basin. The Dráva, however, was a border in the broader sense, not only in the modern period. Following the battle of Mohács it also was attributed a temporary, regional role in the frontier defence system against the Ottomans.³ One result of the recurring strategic importance in the area was the number of mapping activities, both in the sixteenth century and then in the period in which the region was recaptured from the Ottomans.⁴ In addition to the maps from the Middle



¹ For the most recent overview of this in Hungary: Zatykó, Csilla: People beyond landscapes: past, present and future of Hungarian landscape archaeology. *Antaeus* 33 (2015), 369–388.

² Some preliminary results have already been published.

³ See: Pálffy Géza: *A Magyar Királyság és a Habsburg Monarchia a 16. században* [The Kingdom of Hungary and the Habsburg monarchy in the 16th century] (Budapest: MTA BTK Történettudományi Intézet, 2010), 152–153.

⁴ E.g. Pálffy, Géza: *Die Anfänge der Militärkartographie in der Habsburgermonarchie. Die regelmäßige kartographische Tätigkeit der Burghausenfamilie Angiellini an den kroatisch-slawonischen und den ungarischen Grenzen in den Jahren 1560-1570* (Budapest: Ungarisches Nationalarchiv, 2011), passim.

Ages onwards, a number of sources can be of help in the reconstruction of landscape history. Consequently, the hydrography and water-management of the environs of the Dráva has not only attracted the attention of the editors of the present volume,⁵ but also that of scholars in neighbouring countries.

Although the volume dealt less with the parts of the valley belonging to Croatia, it may be worthwhile noting that Croatian historical research in recent decades has devoted a good number of works to the region,⁶ and the medieval and early modern landscape and environmental history of the area have also received considerable attention.⁷ Unfortunately, partly due to language barriers, research of landscape history sometimes tends to be adjusted to present-day political borders. Neither this, nor the recent Croatian works are exceptions in this sense. In the dissemination of Hungarian research results in Croatia and Western Europe, however, the English language of the work reviewed here is certainly an important step.

In the following, I try to summarize the main findings of the book based on its three major thematic units: environmental history, material culture and archaeozoology. The first unit consists of two pieces. The environmental archaeological and environmental historical research of medieval Transdanubia in the past decades brought significant results, most of which were connected to research lead by Pál Sümegi. The first, a multi-authored study in the volume following a methodological introduction, publishes the results of three macrobotanical, palynological sampling and historical geomorphological analyses carried out as part of the research program. The first part studies the Holocene environmental changes of the Sárköz region based on historical maps, geomorphology and on samples taken at the marshes of the surroundings of Ete, a lost settlement on the borders of present-day Decs, a site well known amongst Hungarian medieval archaeologists. The study continues with a discussion of areas somewhat closer to the Dráva: a former branch of the river connected to the palisade of Barcs and the Lankóczi Forest by the midreach of the river. Data from historical maps was used to identify the three sampling sites.

The study of Decs-Ete delivered important results in the study of the vegetation history of the past two millennia. First, the data showed that even the areas close to the lower flood plain of the Danube were heavily influenced by humans. The research, lead by Sümegi, pointed to significant agricultural activity, both crop production and gardening, in the environment of the sampling site from the first half of the Árpáadian Era (1000-1301 AD) onwards. With regard to the period of the Ottoman presence onwards, the authors draw attention to a fascinating phenomenon, the increasing presence of woodlands in the region which may be connected to the partial depopulation of the region. This result points to the fact that the scholarly narrative in which the Great Hungarian Plain became a wasteland during the Ottoman period, which prevailed from the early twentieth century onwards, is not valid for the whole of the region; indeed, in some areas a different process, that of reforestation, can be identified.

As opposed to the disturbed layers in the former Dráva River-branch by the palisade of Barcs, the data inferred from the Lankóczi Forest was clearly comparable with the results of the study of Lake Baláta that was used to identify the century scale changes in the climate of the southern Transdanubia. The authors, somewhat disappointingly, only compare their results with the results of other palynological studies, omitting other Hungarian or regional historical source-based reconstructions. The article by Sümegi and his

5 Most importantly: Vajda Tamás: Adatok a Dráva menti középkori fokgazdálkodásról. [Data on medieval river management along the River Dráva] In *Tanulmányok a középkorról: II. Mediavisztikai PhD-konferencia*, ed. Weisz Boglárka – Balogh László – Szarka József (Szeged: Szegedi Középkorász Műhely, 2001), 125–137, and Viczián, István – Zatykó, Csilla: Geomorphology and Environmental History in the Drava Valley, near Berzence. *Hungarian Geographical Bulletin* 60 (2011)/4, 357–377.

6 E.g. Slukan, Mirela: *Kartografski izvori za povijest Triplex Confiniuma. Cartographic Sources for the History of the Triplex Confinium. Kartographische Quellen zur Geschichte des Triplex Confinium* (Zagreb: Hrvatski državni arhiv – Zavod za hrvatsku povijest Odsjeka za povijest Filozofskog fakulteta, 1999), *Triplex Confinium (1500-1800): ekohistorija : zbornik radova s međunarodnog znanstvenog skupa održanog od 3. do 7. svibnja 2000. u Zadru*, ed. Roksandić, Drago (Split: Književni Krug, 2003) and *Ekonomska i ekohistorija: časopis za gospodarsku povijest i povijest okoliša* 7 (2011)/1 (special issue: *Ekohistorija Drave*).

7 Petrić, Hrvoje: A Man and His Environment, on the Border between Habsburg and Ottoman Empires; Podravina (the River Drava Valley) at Crossroads with Multiple Borders in Early Modern Period. *Podravina* 4 (2005)/7, 175–189.

colleagues fits well into work that has been going on for decades now, which aims at the systematic study of all the sites suited to palynological analysis in the Carpathian Basin. Figure 48 in the book represents these sites well, indicating how much work has been done since the foundation of the now defunct Palaeoecological Research Group founded in Debrecen in 1986.

The other chapter in the unit on the environmental history of the region is the work of István Viczián who studied the geomorphology and the riverbed changes in the Holocene with special regard to the recent millennium in light of mostly geological and partly historical data (mostly maps). In his work, he draws attention to changes in the extent of water-covered areas, attributing these changes to fluctuations in climate. He connects the habitation of the lower lying areas in the Árpáadian period to the Medieval Warm Period (MWP) based on the work of Hubert H. Lamb, the importance of whose work has now been reduced largely to historiography. Despite the fact that usage of the term MWP has become outdated, the fact that he managed to identify higher flood- and average water-levels similarly to what has been in the river valleys of the Danube and the Tisza in the late Middle Ages compared to the Árpáadian period is an important result.⁸ Viczián also attempts to use historical maps and, at some points, written sources, something certainly to be welcomed as the integration of these different sources is a crucial element of similar volumes. Evliya Çelebi's travel account is amongst the sources of Viczián quotes. He illustrates the importance of the River Dráva with Çelebi's description of the river; however, he fails to note that a number of less significant rivers in the Carpathian Basin were described by the traveller as huge currents that certainly could not compete with the Tigris or the Nile, but which were used as comparisons by this seventeenth-century author well known for his vivid imagination.

Viczián nicely demonstrates how significantly the landscape was modified in the nineteenth century with the regulation of the valley of the Dráva River. Even if one thinks of the river as one of the most romantic and meandering in the Carpathian Basin, half of its bends have been cut off, which as earlier research demonstrated, has had a fundamental impact on its hydrological conditions⁹ and the vegetation of the flood plain.

The writings in the second main thematic unit discuss the material culture and the trade networks behind the different objects unearthed at the excavation sites of the region. Attila Kreiter and Péter Pánczél investigate the Ottoman-period ceramics found in the palisade of Barcs. Through petrographic analysis, they demonstrate that the fragments originate from numerous different workshops and that, based on the composition of the raw materials, the fortification was probably supplied by the workshops of the neighbouring villages. Interestingly, as Kreiter and Pánczél point out, in the case of Ottoman-period Vác, a reverse process has been identified; the production of or trade in the different ceramics became increasingly concentrated.¹⁰ Some of the finds from Barcs originated from beyond the neighbouring areas; moreover, some fragments such as jars and faience are from far distant parts of the Ottoman Empire. The authors attribute this to the good location of Barcs by a river that was systematically used for trade in the Middle Ages, as well as in the early modern period. Of course it would be nice to know whether or not similar finds were found in other, less easily accessible settlements in Ottoman Hungary.

Following the chapter on ceramics, Erika Gál discusses the objects made of bone, tusk and antler found at Barcs. The number of such objects was limited, however, either because of their function or their material,

⁸ Kiss, Andrea – Laszlovszky, József: 14th-16th Century Danube Floods and Long-Term Water-Level Changes in Archaeological and Sedimentary Evidence in the Western and Central Carpathian Basin: An Overview with Documentary Comparison. *Journal of Environmental Geography* 6 (2013)/3–4, 1–11, Vadas, András: Long-Term Perspectives on River Floods. The Dominican Nunnery on Margaret Island (Budapest) and the Danube River. *Interdisciplinaria Archaeologica* 4 (2013)/1, 73–82, and Pinke, Zsolt – Ferenczi, László – Gábris, Gyula – Nagy, Balázs: Settlement patterns as indicators of water level rising? Case study on the wetlands of the Great Hungarian Plain. *Quaternary International* 415 (2016), 204–215.

⁹ Takács, Katalin – Kern, Zoltán: Multidecadal changes in the river ice regime of the lower course of the River Drava since AD 1875. *Journal of Hydrology* 529 (2015), 1890–1900.

¹⁰ Kreiter Attila – Viktorik Orsolya: Kerámiák petrográfiai vizsgálata [Petrographic analysis of ceramics] In: *Régészeti kutatás a középkori Vác német városrészében. A Piac utcai mélygarázs területének megelőző feltárása*, ed. Mészáros Orsolya (Budapest: Martin Opitz, 2016), 341–362.

some of them are certainly worthy of discussion. First is a belt buckle made of walrus tusk. Apart from this fragment, the only other find unearthed in Hungary made of walrus tusk is a tau-shaped crosier found in the Veszprémvölgy monastery that originates from the thirteenth or fourteenth century. This is in itself indicative of the value of the raw material. However, while in the case of Veszprémvölgy the location clearly explains the presence of such a special material, the palisade of Barcs is certainly a surprising find spot. Gál attempts to explain how the object may have found its way there with an Ottoman context. He carefully presents the different channels through which a soldier in the fortification of a garrison numbering barely 200 people could acquire a similar piece. He suggests that the object may have either belonged to a Tartar chieftain because Tartars frequently traded with northern European furs and other objects from rare animals, or perhaps to a high ranking official of the Ottoman flotilla that was stationed in neighbouring Osijek from 1567.

Let me briefly mention just one more bone tool unearthed here: skates used as sled runners. Similar objects are known from the Carpathian Basin from the Neolithic period onwards, but it is certainly to be noted that even in the Dráva valley, the climate of which is relatively mild being partly under Sub-Mediterranean influence, sledges had to be used in wintertime for transportation. Not only archaeological evidence shows the use of sledges; according to sources from the Batthyány domains, in the early modern period they also were also used for the winter transportation of goods.¹¹

In the last piece in the second unit of the book, Katalin T. Bíró analyzes the lithic artefacts found at the excavations at Barcs. The material of some of the objects originated from the quarries in close proximity such as on the Mecsek and the Bakony Hills or the Croatian lands, but in many cases it was not possible to identify the quarry or the region from which the object originated. Amongst the objects T. Bíró analyzes, one is the lower part of a grinding stone. Probably, it was of key importance in a similar fortification to be able to grind grain if necessary within the walls. Although grinding enough grain for 200 people with a grinding stone of such a small capacity would have been somewhat challenging.

The third unit of the book discusses the results of the archaeozoological findings at the excavations in the Tolna County section of the Danube valley and by the River Dráva. László Bartosiewicz studied the animal bone material of a small late medieval fortification in the Sárköz region, the castle of Györke (Oltovány). The fortification, which functioned between the fourteenth and the sixteenth centuries, is known from one single medieval written source. In the animal bone material of the castle that stood in the marshes of the Sárköz, despite the certainly significant fish consumption, relatively few fish bones were found. According to Bartosiewicz this does not necessarily reflect the consumption, but instead on the rather poor conservation of fish bones. The written sources used by the archaeologist confirm this assumption as in the sixteenth century according to the tax records of the Sanjak of Szekszárd, the fortification paid taxes after its own fish pond.

Ninety per cent of the animal bone finds belonged to domestic animals, which is anything but self-evident in light of the wealth of game in the area. Just like the palisade at Barcs, this fortification was also very small in size and had to be supplied from the neighbouring villages. This is well reflected in the age distribution of the animals consumed in the castle, the predominance of young animals can be attested. One of the problems Bartosiewicz discusses in detail is the size of the pigs, based on the bones found in the fortification. The results suggest that it is almost certain that the pigs eaten originated from a herd formed by genetically mixed domestic pigs and wild boar. In the Sárköz area, the domestic pigs kept on the acorn of the gallery forests could easily mix with the wild boar population that lived here. This is not surprising, based on the medieval visual representation of pigs, but it is important that the written and visual evidence can be supported by the animal bones as well.

The last two studies of the unit analyse the animal bone material of sites at Barcs. The two excavation sites discussed in the separate chapters are worth reviewing together, because the animal bones processed

¹¹ E.g. Magyar Nemzeti Levéltár Országos Levéltára [State Archive of the Hungarian National Archives] OL P 1314 (A herceg Batthyány család levéltára. Missives [Archives of the Batthyány family. Missives]) no. 23 168, Letter of Ferenc Káldy to Ádám Batthyány, 21 December 1638.

originate from two sites in close proximity that both date to the same period, the period of the Ottoman presence. The small site analysed by Erika Gál, Barcs-Pusztabarcs, consisted of no more than 50 animal bones. Based on this small assemblage, an average village inhabited by Christians can be identified with a relatively high ratio of pigs, as well as the fish bones of species that could be caught in the River Dráva. The animal bone material from the palisade of Barcs shows a fundamentally different picture. The pig bones of the significant site, numbering almost 10.000 bones, formed only about 0.5 per cent of the material. 75 per cent of the bones were of cattle, about 10 per cent were of domestic hen, and a relatively significant number of sheep and goat bones were also identified. Unlike the finds at Barcs-Pusztabarcs, the composition of the animal bones clearly suggests the presence of a Muslim population. While the population of the villages around the Ottoman fortifications remained mostly Christian, in light of the tax registers the garrisons of the fortification were recruited from Muslims from the Balkans. The bones identified by Erika Gál and László Bartosiewicz confirmed the consumption of some markedly rare animals as well, such as that of wild birds like heron, and cormorant. The consumption of these is worth contemplation because, as the authors point out, the unpleasant smell of their meat has meant that in modern times they have not been considered as popular or prestigious foodstuff.

From the number of problems addressed in the article, one is certainly worth noting: the authors show that the proportion of adult animals among the cattle is remarkably high, which they explain by the location of Barcs. The most important cattle drove route towards Italy in the Middle Ages reached the Dráva at the town of Ptuj; however, over time it was complemented by another, southern route in which the crossing at Barcs may have gained more importance, certainly contributing to the meat supply of the fortification.¹²

Finally, even if only briefly, the physical appearance and the editing of the book is also worth mentioning. First, the excellent English of the book is certainly noteworthy. There are hardly any typos or poorly-structured sentences in the articles, which clearly reflects the precise translations and the good work of the editors, Gyöngyi Kovács and Csilla Zatykó. The studies are well illustrated, and as can be expected from a publication such as this, include colour plates. In light of all this, I can only repeat what has been said earlier, let's hope that the volume on the archaeological and historical findings of the program will be published soon, and will build further on the results of this first volume.

¹² On drove routes, see: Blanchard, Ian: The Continental European Cattle Trades, 1400-1600. *The Economic History Review* NS 39 (1986)/3, 427–460 and Fara, Andrea. Il commercio di bestiame ungherese verso la Penisola italiana tra tardo Medioevo e prima Età moderna (XIV-XVI secolo). *Mélanges de l'École française de Rome - Moyen Âge* 47 (2015)/2. [online journal]. Last accessed 28 February 2017, doi: 10.4000/mefrm.2709.