



Central Europe TAG (Theoretical Archaeology Group) 2023

The Role of Rivers: Frontiers, mobility corridors, or central place ecosystems

Abstracts Book

Conference date: 9-10 November 2023

Conference venue: Department of Archaeology and Cultural Anthropology, Faculty of Arts, Comenius University in Bratislava, Gondova 2, 811 02 Bratislava 1, Slovakia
Room G239

Organizing committee: Dr. Martin Bača, Dr. Roderick B. Salisbury,
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Registration fee: € 20 (payable upon arrival at the conference venue)

Conference language: The official language of the conference is English.



Program

Thursday (9.11.2023)

- 13:45 Conference Opening
- 14:00 **Keynote lecture:** Martin Schmid, Center for Environmental History, Institute of Social Ecology, BOKU, Austria, "Riverscapes as socio-natural sites: environmental history observations on the Danube"
- 14:45 Coffee Break
- 15:00 Attila J. Tóth, "Islands, ferries, fisheries, mills and ships: Underwater dimensions of River Archaeology"
- 15:30 Václav Vondrovský, Daniel Hlášek, Ondřej Chvojka, Petr Šída, Jan John, Michaela Ptáková, "Five rivers, five stories: regional diversity and peripheries in the Neolithic and Bronze Age"
- 16:00 General Discussion

Friday (10.11.2023)

- 09:00 Katharina Rebay-Salisbury, "Familiar, yet little known: the archaeology of the Bisamberg near Vienna and its relationship to the river Danube"
- 09:30 Julia Längauer, "Waterways in the Early Neolithic Weinviertel – small rivers and rivulets usage in the LBK of Lower Austria"
- 10:00 František Trampota, "Transport route and frontier. The importance of the Morava River in the Neolithic and Eneolithic"
- 10:30 Coffee Break
- 10:45 Zsuzsanna Siklósi, Márton Szilágyi, Norbert Faragó, Igor M. Villa, Zsuzsanna M. Virág, Gábor Szilas, Dávid Kraus, Farkas Márton Tóth, Gizella Kovács, "Floating ideas and innovations. The role of the Danube and its network in the spread of Copper Age innovations"
- 11:15 Michaela Fritzl, "Connecting Currents. The role of the Traisen-Danube confluence in the Late Bronze Age, based on the cemetery of Inzersdorf ob der Traisen, Austria"
- 11:45 Timothy Taylor, Dominik Lane, "Tangible and intangible resources: why the location of Buchberg bei Attersee encourages hierarchy"
- 12:15 Lunch Break
- 14:00 Tomasz Gralak, "The Oder River and Moravian Gate in prehistory – a northern perspective"
- 14:30 Benjamin Frerix, "The reconstruction of the ancient Arda riverbed in south-eastern Bulgaria"
- 15:00 General Discussion & Closing

Abstracts

Thursday, 9.11.2023

15:00 Islands, ferries, fisheries, mills and ships: Underwater dimensions of River Archaeology

Research about the archaeology of rivers usually focuses on and next to the river. Much less work has been done in the water. Underwater archaeology examines the frequency, conservation and nature of sites. Wrecks, wooden pile construction, submerged buildings and ruins – like the Ripa Pannonica – and fishing and milling constructions are all found in the Danube. As a case study, research on ship mills in the Middle Danube Basin will be used. The paper will summarise our recent research related to these mills and a possible fishery („Hausenfang“) near Ráckeve, as well as our future plans for international cooperation. In addition, I would like bring attention to the importance of river islands as important places, with special microclimates, fishing and ferry installations, and islands owned by monasteries. In this presentation, I outline important lessons learned during the last 20 years concerning river archaeology.

Attila J. Tóth
Árpád Museum, Ráckeve, Hungary
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15:30 Five rivers, five stories: regional diversity and peripheries in the Neolithic and Bronze Age

Archaeological cultures as monothetic entities representing homogeneous groups of people has been deeply rooted in archaeologists' minds. However, it has been challenged by those who argue for a high degree of socio-cultural diversity in prehistory. Our paper introduces radiocarbon dating into the debate. Employing formal modelling on an extensive dataset, we track the distinct socio-cultural phenomena that define of archaeological cultures of the Early Neolithic, Late Neolithic, and Early Bronze Age Central Europe. We then compare their absolute chronology across the five regions situated along the Danube, Elbe, Vltava, Morava, and Berounka rivers. The results reveal long-term resilience patterns in two upland regions of the Upper Vltava and Upper Berounka rivers. Their development significantly deviated from conventional schemes as the distinctive socio-cultural phenomena, which were shaping the surrounding lowlands, had delayed or minimal impact in these particular areas. Despite that, the archaeological record shows that these regions were not fully isolated from interregional distribution networks. Based on that, the concept of the inner periphery and polythetic model of archaeological culture is advocated as an explanatory framework for understanding diversity within past societies.

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Friday, 10.11.2023

09:00 Familiar, yet little known: the archaeology of the Bisamberg near Vienna and its relationship to the river Danube

The Bisamberg Hill, on the north side of the River Danube with an altitude of 358 m, is the northeastern most summit of the foothills of the Central Alps and marks the Wiener Pforte Gap, through which the Danube breaks into the Vienna basin. Traces of prehistoric settlement on and around the Bisamberg are documented from the Mesolithic period (c. 8000 BC). The hill gave its name to the Neolithic Bisamberg-Oberpullendorf Group, and remains significant as one of the few known Middle Bronze Age hilltop settlements. Late Bronze Age, Early and Late Iron Age finds came to light in various places during construction work. Due to its distinct topographical location, the Bisamberg was repeatedly integrated in military operations for the protection of Vienna. Military structures such as entrenchments, trenches, fighting positions and bomb craters from well into World War II are still visible today. The Bisamberg covers a large area, and prehistoric settlement traces are distributed in different locations on the hill. In this contribution, I will discuss the settlement history of the Bisamberg, and the role of the river Danube for the choice of dwelling locations in different prehistoric periods.

Katharina Rebay-Salisbury

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09:30 Waterways in the Early Neolithic Weinviertel – small rivers and rivulets usage in the LBK of Lower Austria

Over the last 200 years the Weinviertel has become much drier and 95% of the wetlands and floodplains are now gone. This massive manmade change of landscape and water usage is obscuring the importance and variety of waterways that might have existed during the LBK. In fact, each of the potential local LBK central sites is close to a regional main river/rivulet: Pulkau, Poybach, Zaya and Rußbach, which all distribute to the Morava and subsequently to the Danube. The central LBK settlement of Asparn/Schletz was located on the river Zaya and flourished for more than 400 years before it met a massively violent end. New research indicates that the local community had strong trading and maybe social connections to the eastern groups of the LBK world. In this contribution, I will discuss the idea that this waterway connection contributed to the flourishing of so-called LBK central settlements and their hinterlands in the Weinviertel. Not only may have this waterways been used as route of transportation and communication but also functioned as a necessity for water supply, agriculture and borders to the supposed neighbouring settlement clusters.

Julia Längauer

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10:00 Transport route and frontier. The importance of the Morava River in the Neolithic and Eneolithic

The paper deals with the significance of the Morava River as a transport route in the Neolithic and as a boundary line in the Early Eneolithic. Based on a comparison of the occurrence of local and imported lithic raw materials in the Neolithic, the influence of the Morava as a navigable river on the composition of stone raw materials can be well manifested. This should reflect not the distribution of lithics per se, but rather the trade route in general, where only stone tools preserve from the transported commodities. The opposite role was played by the river in the Early Eneolithic, when we do not see evidence of long distance transport in the archaeological record. However, the river has taken on a new role as a frontier settlement region, with the middle and southern reaches separating the settled area to the west and the empty area to the east of its course. This transformation probably took place after the settlement hiatus (c. 4000-3800 BC) and its different use is probably related to the activities of the new population.

František Trampota

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10:45 Floating ideas and innovations. The role of the Danube and its network in the spread of Copper Age innovations

Many innovations appeared in the Early and Middle Copper Age (4500-3650 cal BC) in the Danube basin. However, little is known about the background and the dynamism of the spread of these innovations. As there is no evidence of large-scale mobility in this period we must presume that innovations were brought to new places in a different way. The appearance of such novelties as metallurgy, new stone-knapping technologies or pottery forms and decorations, did not follow the same patterns.

The material culture suggests intense communication between communities within and outside the Carpathian Basin. Metals (gold, copper, silver and lead), stones and other exotic raw materials were circulated over a large area and pottery styles also indicate an active interaction in and around the Danube Valley. However, it seems that innovations, ideas, know-how, raw materials and products were not equally accessible to every community. For instance, the technology of metallurgy appeared following a different pattern in the western part of the Carpathian Basin than on the Great Hungarian Plain. Another contrasting fact is that metals were found in smaller amounts and different contexts in what is today Switzerland, South Germany and Upper Austria than in today's Hungary, Lower Austria, Slovakia and Czechia, even though pottery styles suggest actively interacting communities in the Upper and Middle Danube Basin.

Our contribution will focus on the role of the Danube and its tributaries in the uneven distribution of innovations in 4500-3600 cal BC in the Carpathian Basin and its neighbouring regions.

The analyses of copper artefacts were financed from the NRD fund (NKFI FK 124260 'The spread of the products and technology of metallurgy in the Carpathian Basin between 5000 and 3000 BC' PI: Zsuzsanna Siklósi). The study on pottery styles was financed from the NRD fund (NFKI PD 132358 'Interaction, identity and innovation in the Carpathian Basin in the second half of the 5th millennium BC.' PI: Márton Szilágyi)

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11:15 Connecting Currents. The role of the Traisen-Danube confluence in the Late Bronze Age, based on the cemetery of Inzersdorf ob der Traisen, Austria

The advance of the Urnfield Phenomenon is often associated with increased connectivity and mobility. However, various studies indicate that the evidence behind this assumption, as well as the exact progression, is hard to grasp. Regional variations and distinct characteristics have emerged, necessitating a comprehensive approach that combines detailed analyses with a broader, superregional perspective. Additionally, natural and topographical conditions crucial influence human behaviour and consequently cultural diffusion. Notably, rivers play a significant role, acting as transport routes and sources of valuable resources, while also posing as boundaries and obstacles, depending on the specific context.

Since direct evidence for the role of rivers is challenging to identify due to regulatory measures and topographic changes, exploring indirect evidence becomes imperative. The cemetery of Inzersdorf ob der Traisen serves as a case study to show how the rivers Traisen and Danube, along with their associated natural areas, influenced individuals during the Late Bronze Age. A combination of methods, including an analysis of the topographical features of the Lower Traisen Valley and beyond, strontium isotope analysis and a comprehensive archaeological assessment of the burials is used to discern which specific types of mobility can be detected, the factors influencing them, and how they shaped the community of Inzersdorf and its members in their social as well as left their mark on the landscape. Consequently, we gain deeper insights into the pivotal role rivers played in decision-making processes, thereby shedding light on the details of specific dynamics of cross-cultural communication and, ultimately, cultural shifts.

Michaela Fritzl

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11:45 Tangible and intangible resources: why the location of Buchberg bei Attersee encourages hierarchy

Controlling proximal site-lines up and down Lake Attersee, the headwater of the river Ager, and having oversight of the Ager-Traun confluence, the Bronze Age defended complex of Buchberg NW, Kronberg, and Buchberg occupies a unique topographic location. GIS viewshed analysis from the east-end of Buchberg also demonstrates long-range oversight, 50 km south to the Dachstein and well over 100 km north to the northern boundary of the Danube basin. This could have been further enhanced through building elevated structures (for which we have evidence). While Buchberg controls no useful agricultural land or any mineral resources, its scale and the recent excavation of a series of bronze and gold hoards, along with metal-working equipment, plausibly from individual ateliers, suggest the existence

of a major regional centre, plausible integrating imports of copper and tin for alloy-making, and salt for agro-economic distribution. We argue that the site constitutes a spot resource as defined in cultural evolution theory and provided a canonical opportunity (cf. Cioffi's canonical model) for the growth of socio-political complexity.

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14:00 The Oder River and Moravian Gate in prehistory – a northern perspective

The Oder River flowing through the Moravian Gate marks the most convenient route, passing through the mountain ranges of the Sudetes and the Carpathians. Therefore, this way, various types of contacts on the north-south axis took place throughout prehistory. This is likely the road where the earliest Neolithic people reached the Polish territory. It is probable that the first copper items from the Danube areas also spread along the Oder River. In the times of the Únětice culture, fortified settlements began to be built in the area of the Moravian Gate. It can be seen that this route was controlled, in military terms. In the times of the tumulus culture, the distribution of metal objects indicates that the Oder River was a link between the Danube and Baltic areas. It was also then that deposits of bronze items by the river appeared. The population of the Lusatian culture also used the Oder as a convenient route for expansion to the north. The strategic importance of the Moravian Gate was, of course, also noticed. The largest fortified settlement of this culture – Łubowice is located at its northern entrance. Despite this, the Scythian invasion of Polish territory came precisely this way. In the Early Iron Age, La Tène people came to Poland through the Moravian Gate. This is the place where the so-called amber route ran. This road became so important that the people of the Puchov culture built fortified settlements related to its course. This route became even more critical when it began to connect the Baltic areas with the Roman Empire. In the Oder alone 40 logboats have been found - probably from the early Iron Age and the Middle Ages.

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14:30 Reconstruction of the ancient Arda riverbed in south-eastern Bulgaria

In 1963, in south eastern Bulgaria near the municipality of Ivaylovgrad, the discovery of a villa rustica, lavishly decorated with white marble architectural decoration, led to investigations into the provenance of the white marble. After determining the local origin of the marble from the quarries to the west of the villa and the nearby Kamilski Dol quarries, the next step is to determine transport routes to the Villa Armira. This analysis proves difficult, as the construction of the Ivaylovgrad Dam obscures evidence about how and where the marble was transported across or via the Arteskos/Arda river. The villa was discovered due to the construction of the Armira dam, which was fortunately abandoned, but construction of the Ivaylovgrad dam now hinders the simulation of past pathways. One solution to this challenge is to reconstruct the past landscape in a digital environment. To map the ancient river landscape in a geographic information system (GIS), the earliest geodetic maps of Bulgaria were used as a starting point, based on the hypothesis that pre-modern river

courses are more similar to the ancient landscape than the modern ones. The presentation will show the technical approach and first results of an ongoing project.

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