











Project Gallery

Fresh light on Balkan prehistory: highlights from Svinjarička Čuka (Serbia)

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Searching for the Neolithic along the Vardar-Morava River corridor revealed several new sites in a previously underexplored region. Multidisciplinary investigations at Svinjarička Čuka identified Neolithic and Bronze Age occupation. Highlights presented here demonstrate the potential of this new key site for enriching our understanding of the prehistory of the Balkans.

Keywords: Mediterranean Europe, south-east Europe, Neolithic, Early Bronze Age, connectivity

Introduction

In searching for the initial Neolithic along the Vardar-Morava River corridor, a potential dispersal route of early farmers into Europe, several new sites were detected in southern Serbia (Figure 1). Svinjarička Čuka (hereafter S. Čuka) was identified during intensive surveying in 2017 (Horejs *et al.* 2018) and has been excavated since 2018. The location, on a small river terrace (Figure 2) in the resource-rich hinterland of the Morava River Valley, provides the ideal conditions for agriculture and access to diverse raw materials. Fieldwork and radiocarbon dating indicate six phases of occupation in the Early and Middle Neolithic (c. 6100–5500 BC). The terrace was then reoccupied during the fourth millennium BC, used as a burial ground in the third millennium BC and occupied again in the second and first millennia BC. These data shed new light on the first farmers of the region in the context of Neolithic dispersal from South-west Asia into Europe, and on the complex mix of mobile pioneers and regional adaptation characterising this period (Mathieson *et al.*

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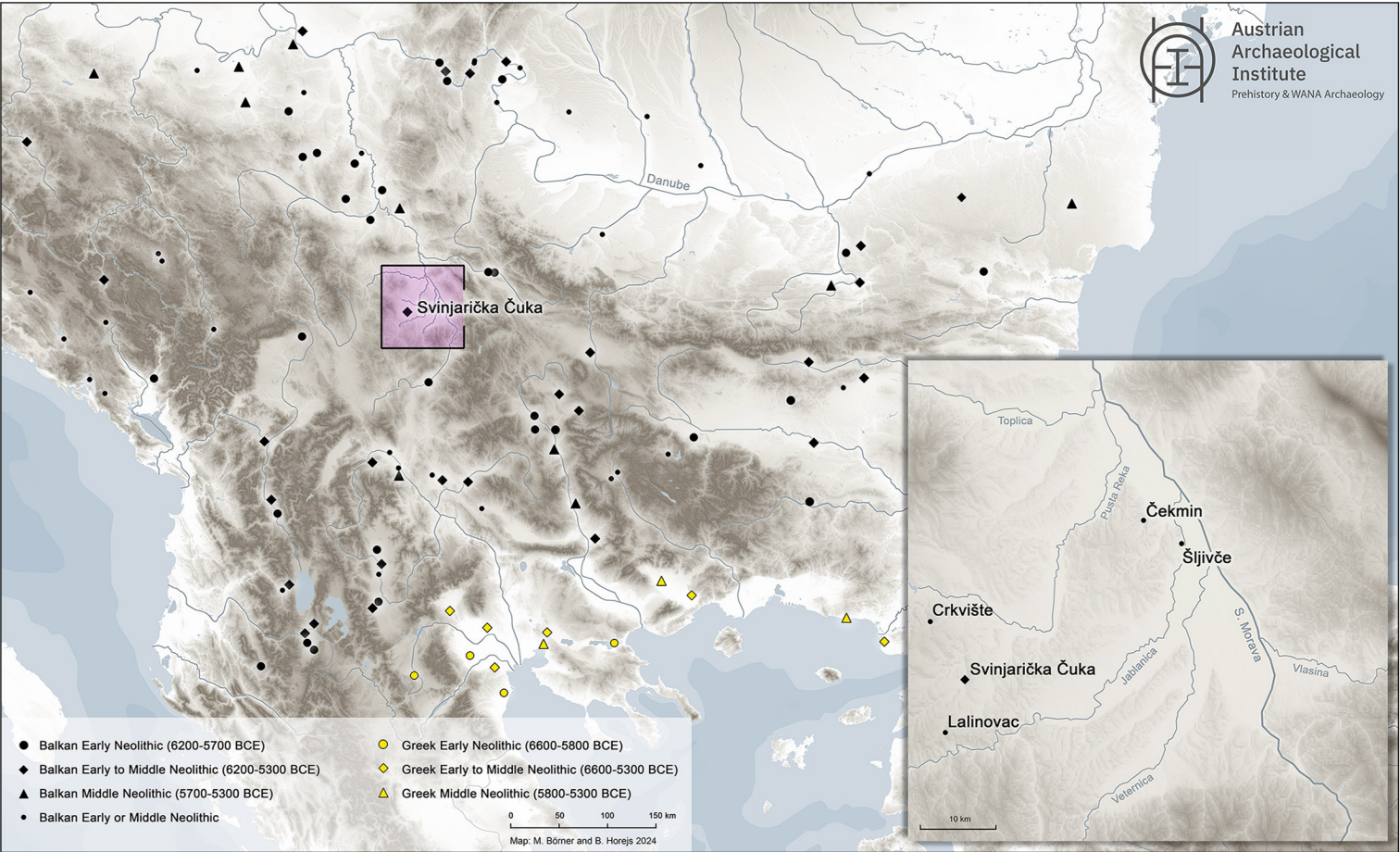


Figure 1. Early and Middle Neolithic sites in south-east Europe with detail of the survey region (figure by M. Börner & B. Horejs).



Figure 2. The river terrace of Svinjarička Čuka with excavation trenches in 2023 (figure by M. Börner & F. Ostmann).

2018; Shennan 2018; Banffy 2019; Horejs 2024). Despite previous publications focusing on the site (Brandl & Hautzenberger 2018; Burke 2022; Horejs *et al.* 2022), the potential impact for the wider region between the Danube corridor and the Aegean as well as the sequence of occupation phases, a pendant and an Early Bronze Age burial have not yet been presented. These are briefly outlined here and will form the focus of future publications.

Neolithic houses and huts

The majority of the approximately 30 excavated or partially investigated Early to Middle Neolithic sites in the central Balkans (Figure 1) lack a long sequence of occupation and comprise predominantly dug-in structures. This contributes to a picture of temporarily sedentary and seasonally mobile first farmers in this region, contrasting with Neolithic household societies in the Aegean and Anatolia (Whittle *et al.* 2002; Porčić *et al.* 2020). The evidence from S. Čuka challenges this model for the central Balkans; a variety of domestic structures are present, including solid houses built using a combination of wattle-and-daub, stone slabs and wooden posts (Figure 3). Installations of platforms, hearths, pits and storage facilities and renewed floors indicate long-term and permanent use (Figure 4). The houses reveal various domestic activities, such as textile and tool production, as well as food preparation with fixed grinding installations. This links to Anatolian practices (Dietrich *et al.* 2022) and indicates house-based communities since the Early Neolithic in this region.

A birth-giving pendant of nephrite

While Neolithic clay figurines are numerous at S. Čuka ($n = 115$), the imagery of one stone pendant is unique in Serbia. Found near the south-east corner of a large house

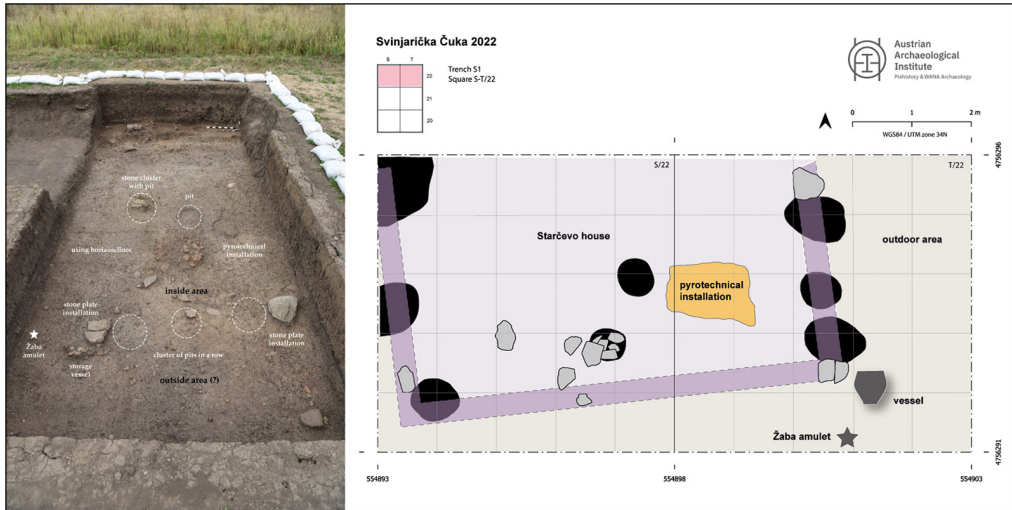


Figure 3. Schematic plan of the Starčevo house of phase NEO III (see Figure 4) with the location of the nephrite pendant ‘Zaba amulet’ (figure by M. Börner & F. Ostmann).

and radiocarbon dated to c. 5600 BC (Figures 3 & 4), the symmetrical 5mm-thick green stone (37 × 37mm) displays a schematic figure with two perforations (Figure 5). Both polished and carved surfaces probably symbolise a frog-like creature that is female in the birth-giving position. Stylistically comparable figures made of marble, black stone or clay are known from Neolithic sites in Achilleion (Greece), Hoça Çeşme (Türkiye), Amzabegovo (North Macedonia), Ruse and Goljam Porovets (Bulgaria) (Hansen 2007: pls. 79.5, 87.7, 109.10–12, 109.16–18) indicating a widely shared practice and understanding of this distinct symbolic imagery. Microscopic traces of use indicate the object was worn on soft straps.

Analyses using a Dino-Lite digital microscope, a portable x-ray fluorescence analyser and a Fourier Transform Infrared Spectrometer identified the material of the pendant as nephrite. The only presently known source of nephrite in the Balkans is in southern Bulgaria (Kostov 2013), an area where other nephrite objects have been found, mostly in the shape of swastikas (Krauß 2023). Ongoing analyses of the Bulgarian artefacts along with geological samples will elucidate whether the raw material for these objects derives from one or several sources, and where the deposits are most likely to be found. Long-distance networks are also reflected in the chipped stone tool assemblage, where obsidian and so-called ‘Balkan flint’ (Gurova 2012) are evident alongside local cherts, jasper and quartz.

An Early Bronze Age burial with gold ornaments

A unique find in Serbia comes from the only Early Bronze Age burial yet uncovered at S. Čuka (central trench; Figure 2). The burial comprises a middle-aged adult in a contracted east–west oriented position within a large rectangular stone cist (Figure 6). Sex determination based on peptides and further osteological analyses is currently in progress. Radiocarbon

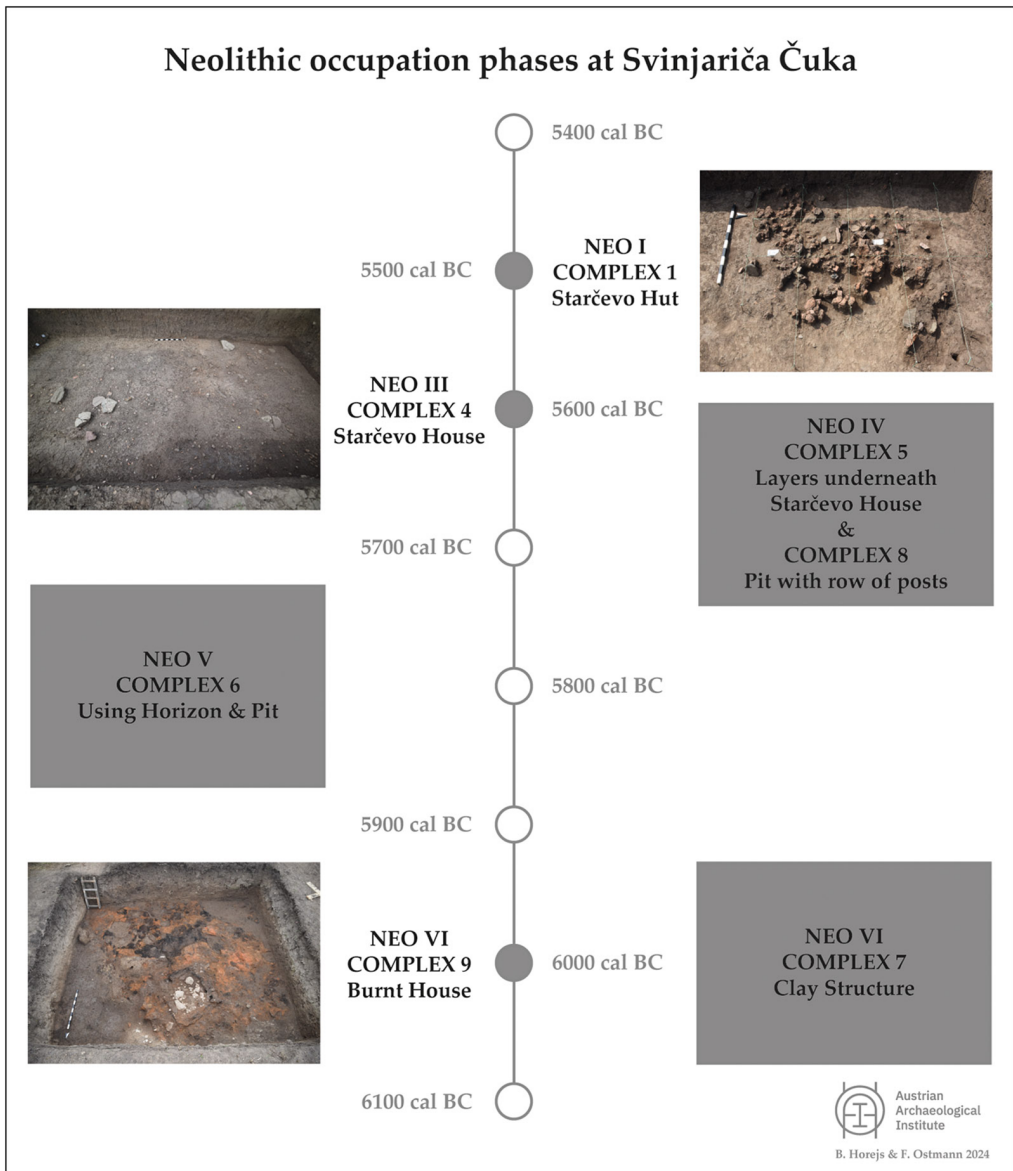


Figure 4. Neolithic occupation phases of Svinjariča Čuka with radiocarbon dates and selected house features (figure by B. Horejs & F. Ostmann).

dating of one bone sample yielded a date of 2469–2288 BC (95.4% probability) (VERA-8173). A hair ring and spring wire made of gold were found near the skull and more than thirty gold beads were recovered from around the thorax. Such burial customs and grave goods represent a novelty in Serbia and can be connected with the Lower Danube burials of the first half of the third millennium BC (Alexandrov *et al.* 2018).

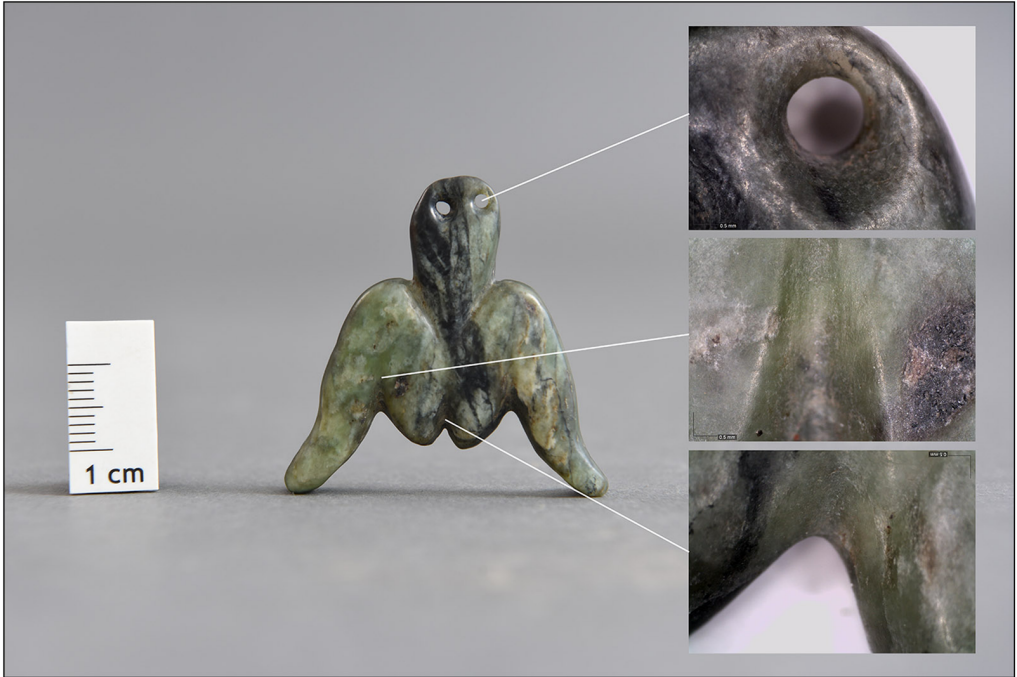


Figure 5. Nephrite pendant with macroscopic details showing use-wear traces (figure by M. Brandl & F. Ostmann).



Figure 6. Early Bronze Age burial with details of two gold ornaments (figure by F. Ostmann & M. Börner).

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