

Faculty of Philosophy, University of Belgrade | 2023





Edited by Staša Babić and Monika Milosavljević

Archaeological Theory at the Edge(s) Edited by Staša Babić and Monika Milosavljević Belgrade 2023

Publisher
Faculty of Philosophy, University of Belgrade
Čika Ljubina 18–20, Beograd 11000, Srbija
www.f.bg.ac.rs

For the publisher

Danijel Sinani,
Dean of the Faculty of Philosophy

Reviewers Aleksandar Palavestra Rajna Šošić-Klindžić

> Proofreader Lucy Stevens

Cover art Aleksandar Palavestra

> Cover design by Ivana Zoranović

Set by Dosije studio, Belgrade

Printed by Dosije studio, Belgrade

Print run

ISBN 978-86-6427-212-4

CONTENTS

7		Staša Babić Archaeological theory at the edge(s)
13		Marko Teodorski Freud's archaeology
33		Selena Vitezović Neolithisation of the Balkans: One hundred years of research
55		Zorica Kuzmanović Self-reflexive turn to ontological debates in archaeology
71	l	Ivan Vranić A changing place of Greek black– and red-figure pottery in archaeological method and theory: From evolution of style to entanglement and objects' ontology
89		Vladimir D. Mihajlović Hegemony and "relational associations" in the Roman Empire
115	1	Ivana Živaljević "Inventing" hunter-gatherers (and others): Human-animal relations, narratives, and the diversity of lived experience
135		Uroš Matić One step forward, two steps back: Egyptology and Third Science Revolution
153		Sonja Vuković, Dimitrije Marković, Amalia Sabanov Where archaeology and wildlife management meet: The relevance of studying the Holocene history of human-wildlife interactions in the Central Balkans for regional conservation efforts
167		Tatjana Cvjetićanin Heritage and its communities: The Vinča case

Staša Babić

Department of Archaeology Faculty of Philosophy, University of Belgrade sbabic@f.bg.ac.rs

ARCHAEOLOGICAL THEORY AT THE EDGE(S)

This collection presents nine papers dealing with some of the issues currently high on the agenda of theoretical archaeology, written by authors situated at the edge - in one of the academic communities usually regarded as (often unwilling) recipients rather than active participants in the debate. The authors are loosely gathered around the Centre for Theoretical Archaeology of the Department of Archaeology, University of Belgrade. This semi-formal group was founded in 2007 as a platform for discussion among teachers and students inclined to challenge the reluctance of the local professional community and to take a more active part in the dialogue on archaeological theory. The volume is the product of the collaboration with the project Sciences of the Origins², which enabled us to reconsider our own discipline within the wider context of other research fields pursuing explanations of the deep past. This welcome synergy has underscored current archaeological concerns, at a moment when two seemingly contradictory paths are advocated with equal fervour, arguing that archaeology itself is at the edge of radical changes in its epistemic foundations.

Archaeology, as an academic discipline with a distinctive set of premises, was founded relatively late in comparison to other fields of inquiry into the human past, such as history, which boasts its ancestry as far back as Herodotus. This "order of origins" is one of the reasons why researchers into material remains of antiquity are frequently considered to be in a

¹ During the 15 years of its activities, the Center has organized a series of round-table discussions, book presentations, and 10 annual conferences (https://bg.academia.edu/CentarzateorijskuarheologijuCTA).

² The project is supported by the University of Oxford project *New Horizons for Science* and *Religion in Central and Eastern Europe*, and funded by the John Templeton Foundation (https://sciorigin.weebly.com/).

8 Staša Babić

subordinate position in relation to those working with written evidence. Still, in spite of constant tensions, these two disciplines share many concerns and premises, frequently overlapping with other humanities, such as social anthropology and art history. On the other hand, since its very inception, archaeology has been closely linked to geology, both in terms of its conceptual framework and its practical methods of investigation, based very much on excavations and observations of soil layers. Consequently, the discipline has always incorporated a wide scope of knowledge, derived equally from humanities and exact sciences. Harmonizing such diverse sets of epistemic principles may be a complex task, and during the first half of the 20th century, archaeologists have sporadically discussed the particularities of the study of the past based upon material remains. However, during this culture-historical phase in the discipline's history, explicitly theoretical reflections were not remarkably frequent, which was one of the main sources for subsequent critiques. It was only in the 1960s when systematic considerations of archaeological theory were brought to the forefront and the first explicit research programme was formulated, demanding a rigorous scientific procedure purposefully built upon the assumptions of logical positivism. The debate generated by the advent of this processual approach has never been unanimously resolved, but only intensified during the 1980s, when its critics, gathered under the label of post-processual archaeology and inspired by diverse sources, argued for much closer ties with humanities. However, by the end of the 20th century, none of these approaches prevailed, and culture-historical, processual, and post-processual principles coexisted in the arena of archaeology, albeit not in the most harmonious manner. Furthermore, in the discipline's actual research practice, theoretical concerns have been largely neglected or transformed into a variety of eclectic research strategies. Even though no consensus was reached, the notion prevailed that the theory wars (Chapman and Wylie 2016) are over.

The apparent stalemate in the early 2000s solidified the tripartite scheme as the standard organizing principle of archaeological theories, according to which almost all current general overviews and textbooks on the subject have been structured. This heuristic model has indeed played an important role in archaeologists' efforts to think about the epistemic foundations of the discipline. However, presenting the developments in archaeological theory as a steady advance through clearly demarcated solid stages exaggerates the differences between the principles underpinning them, at the expense of a number of unifying elements binding archaeology into a distinct discipline throughout its history (Lucas 2012). The introduction of the concept of *paradigms* into archaeology in the sense pos-

tulated by Thomas Kuhn particularly stressed the tendency to observe the three "units" not as distinct research strategies, but also as distinct *phases of development*, in spite of the fact that a radical and all-encompassing shift in the epistemic foundations of the discipline never actually happened (Lucas 2016).

The corollary to this paradigm-driven approach to the history of archaeological theory is that massive and radical changes are to be expected in the field every twenty years or so. By the beginning of the 21st century, this somewhat unrealistic expectation produced a reverse response in the form of the announcement of the death of theory (Thomas 2015), implying that the discipline had reached the stage when its epistemic concerns could be put aside. On the other hand, the widespread introduction of data collecting and processing methods and techniques derived from hard sciences led to the proclamation of a new scientific revolution in archaeology (Kristiansen 2014), equal in scope and impact to the previous pivotal events of the 1960s and 1980s. Finally, inspired by a very diverse, sometimes even mutually contradictory string of inspirations from philosophy and social anthropology, a number of authors argue for an ontological turn in archaeology, moved by the profound critique of the entire previous epistemic foundations of the discipline (Olsen et al. 2012). Needless to say, none of these recent propositions succeeds in uniting the global archaeological community under the same banner, and the field remains fragmented.

This state of affairs may be extremely disquieting if it is presumed that all archaeologists everywhere need to comply with the same sequence of stages, as postulated by the customary tripartite scheme, now amended by recent developments. However, if we abandon the idea of directional progress of archaeological theory along a uniform trajectory, other outcomes are possible, based upon the premise that good epistemic norms are generated through collective practices of scientific communities, rather than abstract normative prescriptions (Fagan 2010, Longino 2002). The propensity of archaeology to assimilate and adapt a vast scope of ideas and solutions from various sources, astutely characterized as methodological omnivory (Currie 2018), need not be considered its shortcoming but as a result of its task - to generate knowledge about humans' affairs based upon various forms of materiality - and its unique position at the crossroads of sciences and humanities. It may be argued that the periodically revived debate as to which of these research fields provides more suitable epistemic foundations for archaeology has not been resolved precisely because resolution is not possible, or indeed required. Embracing the role of the research field positioned at the edge of both of these strictly separated

10 Staša Babić

arenas may bring *epistemic goods* for archaeology while also enabling it to take a more prominent part in interdisciplinary dialogue.

Finally, if archaeologists choose to meet the challenge of continuous refinement of disciplinary epistemic tools, it will also necessitate the reconsideration of multiple *standpoints* (Harding 1988, Wylie 2003) of its practitioners, based upon the premise that all knowledges, including disciplinary ones, are *situated* in certain circumstances (Haraway 1988). Therefore, voices *from the edges* of the mainstream – the parts of the global archaeological community now mainly relegated to the role of belated newcomers and passive recipients of ready-made solutions (Babić 2023), may offer fresh and challenging insights into current discussions on the future of archaeological theory. The present collection of papers is a modest contribution in this direction.

The authors were invited to assess the current state of the field from their respective areas of expertise and positions in the present landscape of archaeology. Their responses demonstrate their individual preferences for the interdisciplinary connections they consider most productive for their research purposes, from psychoanalysis (Teodorski - Ch. 1), to a rich repertoire of hard-science methods and techniques (Vuković, Marković, Sabanov - Ch. 8). Ivana Živaljević (Ch. 6) reveals the intricacies of those choices and the vast array of factors influencing the researcher's position in relation to a particular task. Selena Vitezović (Ch. 2) lays out an overview of multiple approaches to one of the crucial topics in archaeology throughout its history - Neolithisation. Ivan Vranić (Ch. 4) advocates an approach to Greek painted pottery that includes re-reading traditional interpretations in light of current propositions. Three chapters critically assess the most pronounced recent trends in archaeology: the ontological turn (Kuzmanović, Ch. 3, and Mihajlović, Ch. 5) and the emphasis on scientifically driven research (Matić, Ch. 7). Finally, the closing chapter (Cvjetićanin, Ch. 9) addresses the complex issue of communicating the archaeological knowledge to the public and the responsibility of professionals in heritage construction processes.

Our aim has not been to compile a definite overview of present-day archaeological theory. There are certainly many other topics and approaches in archaeology today that are not represented in this volume. The intention has been to exemplify some of the possible responses to ongoing discussions and to argue for a constant renegotiation of our theoretical premises, taking into account the diversity of human experiences and the materialities that accompany them.

References:

- Babić, Staša. 2023. Plus ça change? Balkan archaeology in search of identity. *Ex Novo 8* (in preparation)
- Chapman, Robert & Alison Wylie. 2016. *Evidential Reasoning in Archaeology*. London: Bloomsbury Academic Publishing
- Currie, Adrian. 2018. Rock, Bone and Ruin. An Optimist's Guide to Historical Sciences. Cambridge, MA: The MIT Press
- Fagan, Melinda. 2010. Social Construction Revisited: Epistemology and Scientific Practice, *Philosophy of Science*, vol. 77, No. 1: 92–116.
- Haraway, Donna.1988. Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. *Feminist Studies, Vol. 14*, *No. 3*: 575–599.
- Harding, Sandra. 1986. The Science Question in Feminism. Ithaca: Cornell University Press
- Kristiansen, Kristian. 2014. Towards a New Paradigm? The Third Sceince Revolution and its Possible Consequences in Archaeology. *Current Swedish Archaeology, vol. 22*: 11–34.
- Longino, Helen E. 2002. *The Fate of Knowledge*. Princeton, NJ: Princeton University Press
- Lucas, Gavin. 2012. *Understanding the Archaeological Record*. Cambridge University Press
- Lucas, Gavin. 2016. The paradigm concept in archaeology. World Archaeology http://dx.doi.org/10.1080/00438243.2016.1252688
- Olsen, Bjørnar, Michael Shanks, Timothy Webmoor & Cristopher Witmore. 2012. *Archaeology – The Discipline of Things.* Berkeley: University of California Press
- Thomas, Julian. 2015. Why 'The Death of Archaeological Theory'?, *Debating Archaeological Empiricism. The Ambiguity of Material Evidence*, edited by C. Hillerdal and J. Siapkas. London: Routledge, 11–36.
- Wylie, Alison. 2003. Why standpoint matters, *Science and Other Cultures: Issues in Philosophies of Science and Technology*, edited by R. Figueroa and S.G. Harding. London, New York: Routledge, 26–48.

Institute of Archaeology, Belgrade selenavitezovic@gmail.com s.vitezovic@ai.ac.rs

NEOLITHISATION OF THE BALKANS: ONE HUNDRED YEARS OF RESEARCH

Abstract: The Neolithisation process marks one of the most dramatic changes in human past. The long history of research on the origins of the Neolithic way of life, its characteristics, and ways of spreading and adopting includes diverse theoretical and methodological frameworks. Differences in the focus of research may also be noted – while some studies emphasized the economy and subsistence, others paid more attention to the symbolic realms and cultural change. In recent decades, interdisciplinary approaches have brought new directions for research activities as well as new data, such as new, refined absolute dates, ancient DNA, and stable isotope analyses of human and animal remains.

The Balkan area is particularly important for understanding the spread and adaptation of the so-called "Neolithic package," with the first studies of the Balkan Early Neolithic conducted as early as the first decades of the 20th century. Recent studies demonstrated that there was a change in population during the Early Neolithic, limiting previous debates on the local vs. imported "Neolithic package," but also raising questions about the mechanisms of spreading and adopting as well as adapting the Neolithic way of life. This paper will present a critical overview of some of the key studies of the Neolithisation process in prehistoric archaeology in Serbia, as well as current trends and possible future directions for research. Among the insufficiently explored topics are the characteristics and changes in the so-called "Neolithic package" and its adaptations that took place within the Balkan area – such as changes in technological choices, raw material selection and management, or changes in symbolic value and the meaning of some of the elements of material culture.

Keywords: Neolithisation, Neolithic way of life, Neolithic archaeology, history of research

Introduction

The Neolithic period represents a time when the most dramatic and profound changes to human societies took place. The transition from hunting and gathering to food production, or domestication of plants and animals, is usually considered the most important Neolithic trait. Other changes are also included in the "Neolithic package," such as sedentary way of life and the emergence of the first permanent settlements (villages). The introduction of Neolithic features affected all aspects of human life, not only subsistence and diet and the related new daily tasks and activities (along with associated tools and other elements of material culture), but also relationships with the animal world and surrounding landscapes, habitation patterns, as well as worldviews, ritual and religious practices, and symbolic domains (see Whittle 1996).

Although *Neolithic* is a chronological term, used for the period of the Early Holocene between hunting and foraging subsistence and the introduction of metallurgy, the "Neolithic way of life" implies not only technological and economic changes but also socio-cultural and ideological ones among communities labelled as "Neolithic" (Fowler et al. 2015, Whittle 1996).

Approaches to Neolithisation in south-eastern Europe: An overview

The long history of research on the origins of the Neolithic way of life, its characteristics, and ways of spreading and adopting, includes diverse theoretical and methodological frameworks. In fact, every school of archaeological thought contributed to the research of the Neolithic transition – various studies were presented, following culture-historical, processual, and post-processual paradigms, with differences in the research focus – with some studies emphasizing the economy and subsistence, and others paying more attention to the symbolic realms and cultural changes (see below; for other overviews, see also Barker 2005, 1–41; Bellwood

The term "Neolithic package" usually denotes major characteristics of the Neolithic period: domesticated plants and animals and specific, related material culture (ceramics, agricultural tools, etc.). The term itself is controversial as there are numerous discussions on how this "package" was transferred from south-western Asia to other parts of Europe, what the "package" contained, whether it was homogenous or not, if it was accepted as a "package" or not, and whether it was a "package" at all (see Çilingiroğlu 2005 and references therein). In this paper, the term "Neolithic package" refers to the assumed set of Neolithic traits in the widest sense.

2005, 19 ff.; Simmons 2010, 10–29; Tasić 2009, 15–24, and references therein).²

The manner, rate, and mechanisms of the Mesolithic-Neolithic transition are still a matter of discussion, even controversy, since this is an important debate with not only historical and anthropological but also political implications (Budja 1999, 119; Zvelebil 1995, 107). As Marek Zvelebil noted: "Historically, the transition to Neolithic addresses the origin and constituent elements of the Neolithic and subsequent cultures in Europe. Anthropologically, it addresses the transformation of material cultures, the process of diffusion, interaction and adoption and their recognition in the archaeological record. Politically, it raises the question of European cultural identity, and the genetic and linguistic roots of most present-day Europeans." (Zvelebil 1995, 107).

Particularly significant for the initiation of Neolithisation studies was the work of V. Gordon Childe (Childe 1925; 1951 [1936]). It was G. Childe who first coined the term "Neolithic revolution" in his book Man Makes Himself (Childe 1951 [1936]), along with the term "urban revolution," and he defined both Neolithic and urban cultures in the Near East as economically-based revolutions (see Gathercole 2004). He chose the word revolution to emphasize the importance as well as the degree of changes introduced by the Neolithic way of life. Childe noted: "The steps by which man's control was made effective have been gradual, their effects cumulative. But among them we may distinguish some which (...) stand out as revolutions." (Childe 1951 [1936], 51) Although the usage of the term revolution was influenced by his ideological inclinations, namely influences from Marxist theories (see Gathercole 2004), it was further adopted by other scholars (e.g., Braidwood 1960; also, Sherratt provided the concept of "secondary product revolution" - Sherratt 1981) and, overall, this term had a strong impact on studies of the human past in general (see Greene 1999).

P. Gathercole considers that "much of Child's work is now primarily of historical interest" (Gathercole 2004, 28–29); however, Childe's work is very important for the initiation of the debate on how, why, and where the Neolithic way of life was created and how it became predominant in Eurasia. In addition, he contributed significantly to the recognition of southwestern Asia as the area where the domestication of plants and animals actually took place.

² Providing a detailed, full overview of all of the different approaches to Neolithisation would require a large book and is beyond the scope of this paper. Since this paper is focused on studies of Neolithisation in prehistoric archaeology in Serbia, this overview is limited to the selected, most relevant approaches.

Regarding the factors that contributed to the emergence of the Neolithic economy and its acceptance, Childe adopted the so-called *Oasis Theory* (Childe 1951 [1936]). This theory is based on environmental factors – it assumes that the climate got drier and communities moved into oases where they domesticated animals and plants as means of overcoming the food shortage (see also Barker 2005, 9 ff.).

The *Oasis Theory* was in particular criticised by Robert Braidwood, who initiated very important archaeological research in south-western Asia and proposed the so-called *Hilly Flanks Theory* (Braidwood 1960; also Barker 2005, 18–26). Since modern wild cereals, sheep, and goats were all upland species, the argument was that they would have been domesticated in the hills and not the plains. Furthermore, pollen analyses suggested that the climate during the Early Holocene was, in fact, wetter. Braidwood excavated the site of Jarmo in Iraq, where he discovered the Aceramic Neolithic and sedentary communities, which subsisted on hunting and foraging. Braidwood's initial hypothesis was that the environmental change during the Pleistocene-Holocene transition was a significant factor in the adoption of farming; however, his excavation findings led him to conclude that the reasons must have been cultural (Braidwood 1960; Braidwood, Howe 1960) – food production did not emerge earlier because "culture was not yet ready to achieve it" (Braidwood, Howe 1960, 342).

Environmental factors, combined with demographic pressure, were central to the theories offered by processual archaeologists. Although a major part of his work was devoted to hunter-gatherer communities, Lewis Binford also offered his views on the Neolithic transition. Binford shared similar views with Kent Flannery, and they both considered population growth the main factor leading to the invention and adoption of agriculture (Binford 1968; 1983, 208; Flannery 1969; 1973). Increasing population densities among relatively sedentary fishers and foragers who occupied favourable coastal zones led to an outflow of people into marginal zones, resulting in the cultivation of plants to ensure sufficient food supplies. According to Flannery, the initial plant cultivation would have most likely taken place on the edges of the wild ranges of the plants that were to be domesticated, because supply stress would be higher here than in their core areas (Flannery 1969). Flannery also proposed the "broad spectrum revolution" model, namely, that Early Holocene communities exploited a wider variety of species, which eventually led to domestication (Flannery 1969). Binford in particular outlined the importance of sedentism, noting that increased sedentism of communities that exploited aquatic resources "seems to have anticipated the adoption of agriculture" (Binford 1983, 212).

Processual archaeology deeply impacted research activities on the origins of the Neolithic way of life, especially the increase in archaeobotanical and zooarchaeological studies of early domesticated plants and animals (e.g., papers in Ucko, Dimbleby eds. 1969).

Further debates on the Neolithic also included questions about the timeframe, namely, when the process of domestication began, as well as whether there were single or multiple origins of domesticated plants and animals, and overall whether these two occurred at the same time and the same place. Eric Higgs and Michael Jarman (Higgs, Jarman 1969) showed that animal domestication began developing already in the Pleistocene, as human groups gradually refined their hunting and husbandry practices. Frank Hole (1984) suggested that the domestication of plants and animals was not simultaneous, and probably took place at different locations. According to him, domestication in the Near East was a two-part, two-stage sequence that involved separate processes. He also considers domestication "essentially a social phenomenon involving human, animal and plant societies" (Hole 1984, 57).

Post-processual critique shifted the focus of research to social factors and symbolic aspects of the "Neolithic way of life." Barbara Bender was among the first scholars to note the importance of the social context of the transition from foraging to farming (Bender 1978). Ian Hodder argued that prehistoric societies did not operate wholly as *Homo economicus* and that their economic decisions were not always the most cost-effective ones (Hodder 1982, 1986). Hodder also focused on symbolic evidence from the Early Neolithic communities in Anatolia and Europe, arguing that socioeconomic changes cannot be properly understood without symbolism. According to Hodder, the concept of "domus," or the house and the home, was the most important part of social and economic transformations as well as the "domestication of the society" (Hodder 1990).

Hodder was heavily influenced by the works of Jacques Cauvin, particularly the book *Naissance des divinités*, *naissance de l'agriculture*. The book critiques ecological and climate models, arguing that rituals and belief systems were crucial for the emergence of Neolithic societies. The Neolithic period brought about not only changes in the economy but also significant changes in worldviews (Cauvin 2010 [1997]).

Curtis Runnels and Tjeerd H. van Andel (1988) suggested that trade played an important part in the spread and adoption of agriculture in the Mediterranean. In contrast to views that agriculture led to the development of complex societies, they hold that it was the other way around – the evolution of complex societies caused the emergence of agriculture. They argue that agriculture was initially practiced because it supplied

some communities in appropriate environments with storable and portable commodities that could be converted into wealth through trade via already existing exchange networks. The domesticates, in fact, provided surplus wealth for trade, or supported craftsmen who produced goods for trade (Runnels, van Andel 1988).

Brian Hayden proposed that feasting was the force behind the intensification of production that eventually led to the domestication of plants and animals; i.e., that the first luxury foods primarily used in feasting were domesticated plants and animals (Hayden 2003; 2009).

The debate regarding Neolithic characteristics and Neolithisation is still very alive in European archaeology (e.g., Bailey et al. eds. 2005; Price ed. 2000; Thomas 2002); these discussions also include the origins of the Neolithic and the mechanisms of its spreading (e.g., Dolukhanov et al. 2005; Grębska-Kulow, Zidarov 2021; Özdoğan 2016; Schulting, Borić 2017), as well as questions about what the "Neolithic package" was and what were the influences from south-western Asia (e.g., Sidéra 1998; Perlès 2005) (see also, Ammerman, Biagi eds. 2003; Budja ed. 1995; Lichter ed. 2005, *inter al.*). The very term *Neolithic* is also being debated (see an overview in Fowler et al. 2015; for the term *Neolithisation*, see Zvelebil 1995). For the majority of scholars, the Neolithic is not only a chronological phase but also a form of social organisation (Fowler et al. 2015, 4; Thomas 2015; Kristiansen 2015).

Recent advances in studies of archaegenomics, stable isotopes, and the overall increase of analyses of absolute dates have provided new data regarding population movements (e.g., Bramanti et al. 2009; Mathieson et al. 2018), but also raised new questions regarding the new populations' relationships with Mesolithic hunter-gatherers and the mechanisms of their movements.

The Neolithisation process in the Balkans is a critical issue in the wider European discussion on Neolithic origins. This paper will provide an overview of some of the most important studies of the Neolithisation process in prehistoric archaeology in Serbia, as well as propose possible future directions for research.

Early Neolithic and Neolithisation studies in Serbia in the 20th century

The end of the 19th and beginning of the 20th century also marked, among other things, the beginning of scientific archaeological research on the Neolithic period in Serbian prehistoric archaeology (see Srejović 1988, 5 ff. and references therein). Miloje Vasić, a professor at the Univer-

sity of Belgrade, excavated the site of Jablanica near Mladenovac in 1899, which was later attributed to Neolithic Vinča culture³ (Vassits 1902), and soon after, in 1906, began excavations at the Vinča – Belo Brdo site in the vicinity (present-day suburb) of Belgrade (Vasić 1932; see also Srejović 1988). The excavations of the Vinča site soon proved to be one of the most important archaeological research projects in Serbian prehistoric archaeology, not just because of the extraordinary archaeological material they yielded and the attention they received both in Serbia and Europe, but also because they initiated a long discussion about the site's interpretation and deeply influenced fieldwork methods and overall archaeology practice in Serbia (see, among others, Palavestra 2020, and references therein).

The first research on the Neolithic in Serbia was thus focused on the Vinča culture, but the Late Neolithic period would continue to be more predominant in research projects than the Early Neolithic into the 20th century.⁴ Studies of the Early Neolithic began somewhat later and were overall more modest and received less attention. The beginning of Early Neolithic archaeological research may be linked with the discovery of the Starčevo-Grad site near Pančevo, Banat. The archaeological material discovered by chance at Starčevo during the activities of the brick factory there was brought to the National Museum in Belgrade, after which Miodrag Grbić, curator of the National Museum, started small-scale excavations in 1928 (Grbić 1930; see also Aranđelović-Garašanin 1954; Bandović 2019, 58 ff.). Seven pits were studied, yielding interesting results and attracting international interest. In 1931–1932, excavations were carried out by a Yugoslav-American team. From the American side, archaeologists Vladimir Fewkes, Hetty Goldman, and Robert Ehrich, and institutions of the University Museum in Philadelphia and Peabody and Foggart museums of the Harvard University were involved in the research (Aranđelović-Garašanin 1954). However, research activities were not continued as planned due to the untimely death of V. Fewkes (and perhaps other factors contributed as well), and Starčevo never came close to Vinča in terms of the duration and overall size of the excavations, despite the importance of its rich archaeological remains. In the following years, Starčevo culture

The concept of archaeological cultures was very important for studies of the Neolithic in Serbia throughout the 20th century, and is still extensively used today.

Vinča culture sites are better researched in terms of the number of sites and the overall excavated area (see individual Neolithic sites in Srejović ed. 1988), and there are more publications on them. While there are several monographs on the Vinča culture sites (such as Banjica, Supska, Gradac – see references in Srejović ed. 1988), there is not a single monograph on any exclusively Starčevo culture site, only monographs on multi-layered sites such as Grivac (Bogdanović 2004) or Divostin (MacPherron, Srejović eds. 1988).

layers were discovered at other sites as well, including Bubanj near Niš, Vučedol near Vukovar, and others (see Aranđelović-Garašanin 1954, 8 and references therein).

The findings recovered from Starčevo–Grad from the Yugoslav-American campaign were left unpublished in the National Museum until the 1950s, when Draga Aranđelović-Garašanin started analyses on the material for her PhD. Her dissertation was subsequently published in the book *Starčevačka kultura* (*The Starčevo Culture* – Aranđelović-Garašanin 1954). It should be noted that this book remains the only monograph solely devoted to the Starčevo culture during the 20th century. D. Aranđelović-Garašanin provided an overview of the data available about the Starčevo culture at the time, including a list of known sites, an overview of habitation patterns and mortuary practices, a brief analysis of portable findings other than ceramics, with a large part of the book devoted to pottery from Starčevo and relative and absolute chronology. However, neither the origins of the Starčevo culture nor the Neolithisation process were discussed.

In the introductory paper in the edited volume Neolit centralnog Balkana (Neolithic of the Central Balkans), Jovan Glišić (Glišić 1968) discussed the emergence and origins of the Neolithic in the Balkans (Postanak i poreklo neolitske ekonomike u kontinentalnim delovima Balkana - Glišić 1968, 21-23). The Neolithic economy was defined by Glišić as the presence of a sedentary way of life, the beginning of agriculture and animal husbandry, accompanied by the presence of groundstone tools and ceramic objects in material culture (Glišić 1968, 21). He also noted that the transition to agriculture and animal husbandry implies that hunter--gatherer communities had to achieve a certain level of socio-economic development for plant cultivation and animal domestication to become the only solution for more secure subsistence and economy. He stated that there were no local predecessors to the domesticated plants and animals and that they were introduced from the Near East; however, he did not expand the discussion on how the domesticates or any other Neolithic traits were introduced. He commented that the Starčevo culture appears in the Balkans with all of the Neolithic traits and that the first stages in its development took place elsewhere (Glišić 1968, 22).

In his book *Praistorija na tlu SR Srbije* (*Prehistory on the Territory of the Republic of Serbia*), Milutin Garašanin very briefly mentioned the origins of the Neolithic and the Neolithisation process (Garašanin 1973, 54 ff). He stated that agriculture and animal domestication undeniably originate in the Near East and Anatolia and that, from there, they spread to the West and Northwest. The author further said that it was impossible to examine the mechanisms of this spread in depth. He assumed that after

a period of exploitation, the first agriculturalist communities moved from their original territory and settled in the area in search of fresh fertile soil. Upon arrival, they came in contact with local communities that were at a "lower level of socio-economic development" and which adopted these new economic forms and spread them further. He considered local adoption and the long duration of the migratory process itself to be the reason behind the emergence of new cultural complexes and separate cultural groups (Garašanin 1973, 54–55). However, he did go into detail about the process of adopting Neolithic traits or the adjustments they underwent.

It should also be mentioned that Draga and Milutin Garašanin excavated the site of Nosa – Biserna Obala near Subotica in northern Serbia, where they noted certain "Mesolithic traditions," i.e. "tools displaying the tradition of the Mesolithic microliths," as well as "dry clay" (interpreted at first as evidence of "pre-ceramic" items, but later as a purely functional trait, i.e., as some kind of isolation layer on the walls of storage pits) (Garašanin 1959; 1960). Unfortunately, the results of these excavations have never been published, except for a very short report (the same report was published in two journals – Garašanin 1959; 1960), and these Mesolithic traditions were not elaborated upon further.

Other studies of the Neolithisation process and the socio-economic organisation of Early Neolithic communities throughout most of the 20th century were scarce and usually focused on (and somewhat limited to) particular regions and sites; in other words, these interpretations were often derived directly from research of individual sites or relatively small areas, rather than including a more general view.

Research activities in the region of Vojvodina

As mentioned earlier, the excavations at the site of Starčevo-Grad marked the beginning of research on the Early Neolithic in Serbia. M. Grbić, who excavated the site first on his own and later as part of the Yugoslav-American team, never published the results of these excavations in detail (except for a small report – Grbić 1930). His main focus was on Starčevo culture's chronological position and its relationship with the Vinča culture. He immediately recognised Starčevo as a Neolithic site (see the overview and comments in Aranđelović-Garašanin 1954, 8), adjusting his interpretation as new data became available, and finally establishing the Starčevo culture as the predecessor of Vinča and as Early Neolithic.

His article Starčevo kao izraz najstarije neolitske ekonomike na Balkanu (Starčevo as the Earliest Neolithic Economy in the Balkans), published in 1959, reconsiders the chronological position of Starčevo, pushing it

back to the 5th millennium BC,5 and also comments on the Starčevo culture's origins. Namely, looking at evidence found at the sites of Starčevo, Biserna Obala, and other Mesolithic and Early Neolithic sites in the wider region, he argued for the possible autochthonous origins of the Neolithic in these areas. This hypothesis was based on the findings of Mesolithictype tools, "dried clay," and the presence of millet at Biserna Obala, as well as the absence of a stratigraphic hiatus between the Mesolithic and Neolithic layers at the site of Crvena Stijena in Montenegro (Grbić 1959, 15). He concluded that: "Concerning the hiatus between the Mesolithic and the Starčevo Neolithic, in the central and western Balkans future archaeological research may take as a starting point that it never existed and that the Starčevo Neolithic developed directly genetically and without any break from the Mesolithic cultures." (Grbić 1959, 15). He further noted that the evidence is rather scarce at present and that future research must incorporate interdisciplinary approaches by biologists, geologists, climatologists, etc., as well as radiocarbon dating (a novel method at the time) (Grbić 1959, 16).

Research activities in the Iron Gates region

The largest rescue excavation campaign in the history of Serbian prehistoric archaeology is the "Đerdap I" project, carried out in the 1960s and 1970s in the Iron Gates (Đerdap) in eastern Serbia. This region is a part of the Danube River course, as well as the state border between Yugoslavia (today Serbia) and Romania. This location site was chosen for the construction of a hydropower plant due to its geo-morphological traits. The construction of the dam, necessary for the hydropower plant, endangered many archaeological sites and prompted large-scale rescue excavations (Mrđić et al. 2017 and references therein). Dragoslav Srejović, a professor at the University of Belgrade, began excavations at one of the sites in the area called Lepenski Vir. The material collected from the surface indicated that this was a Starčevo culture settlement, but as excavations progressed, layers with traces from previously unknown Mesolithic communities were discovered, subsequently labelled as the Lepenski Vir culture. The Lepenski Vir culture yielded interesting and unique finds, quickly attracting international attention, as well as sparking long-lasting discussions.

D. Srejović soon published the results in a book entitled *Lepenski* Vir. Nova praistorijska kultura u Podunavlju (Lepenski Vir. A New Archaeological Culture in the Danube Valley) in 1969, which also included

⁵ Only one C-14 date for the Neolithic in Serbia was available at the time.

his interpretation of Early Neolithic communities. In the final chapter of the book, *Naslednici* (*Successors*) (Srejović 1969, 161–181), he wrote that the end of the Lepenski Vir culture is "as enigmatic as its beginning," and that the inhabitants that occupied the site during the Lepenski Vir IIIa phase knew nothing about their predecessors. They introduced dramatic changes to the structures they built, such as pits and semi-subterranean dwellings instead of trapezoidal houses, brought in new material culture, and also differed in their physical appearance, as shown by the evidence from the burials. However, D. Srejović offered a theory on the possible local development of the Neolithic within the Mesolithic Lepenski Vir culture. He considered the sedentary lifestyle of Lepenski Vir communities and the presence of dogs (presumed to be domesticated locally) as a possible "basis for the local 'Neolithic revolution" (Srejović 1969, 180). However, he admitted that there was no evidence for domesticated plants.

Srejović also used archaeological data from the Iron Gates to suggest a new relative-chronological scheme of the Starčevo culture and introduce the Protostarčevo phase.

In his later publication, chapter *Protoneolit – Kultura Lepenskog Vira* (*Protoneolithic – the Culture of Lepenski Vir*), Srejović wrote that the first successes regarding the cultivation of plants and domestication of animals were achieved among the settlements of fishers and hunters in the Đerdap region. However, as these two main traits of the "Neolithic revolution" had not changed these communities' traditional way of life for a longer period, he defined this period as Protoneolithic (Srejović 1979, 33). He stated that the idea of the "Fertile Crescent" as the only territory with natural predispositions for the domestication of plants and animals stemmed from the 19th-century idea of the Near East as the "cradle of civilization." He argued that there was not enough evidence that the Near East was the only conceivable center of domestication and the Neolithic and that the southern Danube valley should not be excluded from studies of the "Neolithic revolution" (Srejović 1979, 73–74).

D. Srejović continued to advocate the local development of Neolithic features in *The Neolithic of Serbia* (1998), a volume he edited. He labelled the Lepenski Vir culture as pre-Neolithic and "a bridge in the chronological gap between the end of the Palaeolithic and the beginning of the Neolithic." He also stated: "This discovery finally discredited the deeply rooted prejudice which provided the basis for the theory of a migrational origin of Neolithic cultures in the Danubian valley, i.e. the theory that the central Danubian region was virtually uninhabited in the early Holocene period" (Srejović 1988, 9).

Research activities in the central Pomoravlje region

The region of Pomoravlje in central Serbia, surrounding the Velika Morava river valley and its tributaries, was among the better-researched areas that yielded a relatively large amount of data on Neolithic community inhabitations. Research activities included field surveys, small-scale and large-scale excavations, and research at sites such as Divostin (Srejović and McPherron ed. 1988; see Srejović ed. 1988 for references on individual sites).

Milenko Bogdanović, curator at the National Museum of Kragujevac, excavated several sites in the area with Starčevo culture layers. He participated in the excavations of Divostin, carried out collaboratively by Yugoslav and American teams, with D. Srejović as project director from the Yugoslav side (Srejović, McPherron eds. 1988). M. Bogdanović followed the ideas of D. Srejović regarding possible autochthonous development of the Neolithic in the Balkans, with his main arguments being differences in animal species (predominance of *Bos taurus* in the Balkan region) and differences in monochrome and painted pottery (Bogdanović 1998).

Savo Vetnić, the curator at the Regional Museum of Jagodina, conducted field surveys and excavations, mainly small-scale, at several Neolithic sites in the region. Based on these research projects, he offered a somewhat different hypothesis on the origins of the Starčevo culture in the Pomoravlje region (Vetnić 1998). He was critical of the idea that Starčevo communities spread in a single wave and offered a theory of expansion in several stages. He identified four components or phases in the development of the Starčevo culture in the area: 1) local or autochthonous, originating from the Mesolithic basis; 2) colonising, originating from the Near Eastern-southern Balkan area, associated with the migrations within the Balkan-Anatolian complex; 3) migratory, linked with nomadic communities from the Danubian and south Pannonian areas; and 4) diffusionistic, with refugees who left their original territory after new distribution of natural resources and who also brought in some of the influences from Early Vinča culture communities (Vetnić 1998). Although he attempted to expand upon the debate on the origins of the Neolithic and include settlement patterns in the analysis, his data were rather limited, since they were based on field surveys and small-scale excavations, and also lacked C14 dates, zooarchaeological, archaeobotanical, and other analyses.

Early Neolithic and Neolithisation studies in the 21st century

The end of the 20th and early 21st centuries brought important changes in prehistoric archaeology. In particular, advances in other sciences, especially research of aDNA and changes in theoretical approaches deeply influenced and introduced new directions to studies of the Neolithic and Neolithisation processes.

Studies of archeogenomics have shown that a new population had indeed arrived in Europe (e.g., Bramanti et al. 2009; Mathieson et al. 2018). However, the discussion regarding the mechanisms of the spreading of Neolithic traits, the relationship between Mesolithic and Neolithic communities, and others, are still ongoing in European archaeology.

In the past few decades, revisions of the previously excavated sites and previously collected archaeological data were initiated in Serbian prehistoric archaeology, and we can also observe the focus shifting from individual sites to more general topics. More recent studies include the establishment of the relative and absolute chronological position of the Starčevo culture (Tasić 2009; Whittle et al. 2002) and thorough analyses of diverse aspects of the material culture (e.g., Antonović 2003; Šarić 2014; Vitezović 2011; Vuković 2011), including interdisciplinary research (e.g., Jovanović 2017; Porčić et al. 2016; Đuričić 2021). Evidence from the Iron Gates region was particularly the focus of revised research (e.g., Borić 2005; Borić, Dimitrijević, 2007; 2009; Perić, Nikolić 2016).

Technologies: Traditions, innovations, and technological choices

Although the definition of the Neolithic way of life and the "Neolithic package" often mentions the introduction of new technologies alongside drastic changes in subsistence patterns, technological changes were seldom the focus of research within Serbian prehistoric archaeology. New subsistence and habitation patterns brought in new tasks, activities, and needs for everyday life, and subsequently the need for new tools (for soil working, food preparation, etc.) and other items (for food storage or other items related to the sedentary way of life). Some technologies became more prominent, such as woodworking or the processing of animal hides and plant fibres for the production of food storage and consumption items (reflected in the archaeological record in lithic and bone technologies – e.g., Antonović 2003; Vitezović 2016a).

Ceramic technology was certainly the most prominent and most important new technology, given the number of ceramic findings and their significance for chrono-cultural attributions. As a result, pottery was analysed from multiple aspects, mostly typological, although recent studies also include use-wear (e.g., Vuković 2011). However, besides acknowledging the that this technology was introducted, the details of this introduction, ways of disseminating ceramic technology, and any form of local adjustments were seldom the focus of research within Serbian archaeology (although in the south-eastern European region, M. Budja discussed ceramic technology in the Balkans, including the central Balkan – Budja 2006).

Changes in lithic technologies were addressed by a small number of studies and only in recent times. It is believed that abrasive and ground stone technologies were introduced; as D. Antonović stated, "the Neolithic polished stone industry in Serbia appears as a fully developed operation, with clearly defined and formed types of tools; there is currently little evidence relating to its origin" (Dimić, Antonović 2021, 556). She considers the area of the Iron Gates to be an exception, stating that "specificity of populated area and immersion of different types of raw materials already in the Mesolithic resulted in sedentary communities and the creation of an indigenous, totally unique industry of ground stone" (Dimić, Antonović 2021, 556; see also Antonović 2003, 131, 142–143).

Analyses of the bone industry in other parts of south-eastern Europe already showed the presence of changes of Near Eastern origin, labelled as part of the "Neolithic package" (Sidéra 1998). Analyses of the Early Neolithic (Starčevo culture) bone industry demonstrated an interesting pattern of presence of both Mesolithic traditions, such as a greater ratio of antler tools or the presence of projectile points made from bones, but also some Near Eastern influences, such as elaborated bone spoons with bowls and elongated handles made from *Bos* metapodial bones, tools made from caprine tibiae, elaborated decorative items, etc. These Near Eastern influences, however, were not simply adopted but underwent adaptations regarding both technological aspects and changes in their symbolic value and importance (Vitezović 2016a; see also Vitezović 2016b for a detailed discussion on bone spoons).

Comparative analyses of chipped and ground stone lithic and bone industries from the Early Neolithic site of Velesnica, situated in the Iron Gates, revealed an interesting mixture of Mesolithic traditions and innovations associated with Neolithic changes (Antonović et al. 2019). Namely, in the chipped stone industry, all Mesolithic traits seem to have disappeared – geometrical microliths are completely substituted by ordinary fragmented blades, with or without a retouch, while the ground stone industry displays some specific local traits, including the presence of fishing

weights that may be linked to Mesolithic traditions. The bone industry shows both the presence of new Neolithic characteristics, such as elaborated spoons, and some Mesolithic traditions, such as antler chisels and the use of scraping by chipped stone tools as a finishing technique for certain items (instead of abrasion with stones, a technique introduced in the Early Neolithic) (Antonović et al. 2019).

Symbolic realm

The symbolism associated with the "Neolithic package" and the Neolithisation process was seldom discussed within prehistoric archaeology in Serbia, although evidence from the Balkan region was used in some wider-European studies (e.g., Hodder 1990) and was also the focus of several studies by Mihael Budja (e.g., Budja 2003; 2004). M. Budja (2004) challenged the view that the farmers who migrated to the region of southeastern Europe brought in new technologies, symbolic behaviour, and symbols. Instead, he pointed out that the elements of the Neolithic package are well embedded in hunter-gatherer social contexts, and that Neolithic symbolic structures in the Balkans do not mirror the paradigmatic ornamental and symbolic principles of Asia Minor (Budja 2003; 2004). Furthermore, Budja noted that "hunter-gatherer symbolic structures in the Balkans and Carpathians maintained long traditions" and rejects the idea of the "revolution of symbols" (Budja 2004, 76). He concluded that "the hunter-gatherer's symbolic structures and the process of transition to farming were not exclusive and competitive, but rather correlative in maintaining control and power within society and over the frameworks of external interactions and exchange networks" (Budja 2004, 76).

Some symbolic aspects of Early Neolithic communities in central Balkan were analysed by S. Stanković, whose doctoral thesis focused on sacral places and objects (*Sakralna mesta i predmeti u starijeneolitskim kultura-ma centralnobalkanskog područja* – Stanković 1992). More recently, Jasna Vuković analysed specific types of items, so-called bucrania – ceramic objects that seem to represent horns, interpreted as amulets (Vuković 2005).

Discussion and concluding remarks

The studies of the Neolithic and Neolithisation processes are still an ongoing debate in European archaeology, although some scholars now consider that several factors contributed to the emergence of the Neolithic economy and Neolithic societies (e.g., Bellwood 2004). Questions about how Neolithic innovations spread, the modes of their adoption and

adjustments, and the diverse aspects of social, cultural, and economic changes, are still being analysed from different perspectives and revised as new approaches are offered and new data is constantly generated (e.g., Grębska-Kulow, Zidarov 2021; Özdoğan 2016, to name a few of the most recent studies).

In Serbian prehistoric archaeology, studies of the Early Neolithic using contemporary scientific methods began almost a hundred years ago. Since then, numerous advances have been made; however, the Early Neolithic, in general, has been less explored than the Late Neolithic, and studies have rarely focused on the very process of Neolithisation and its traits. As N. Tasić noted, although there are numerous studies dealing with Neolithisation, only a few are focused on the Balkans (Tasić 2009, 23); however, he only briefly remarked on Neolithisation and focused on selected aspects of the Starčevo culture (Tasić 2009).

Some scholars, such as J. Glišić and M. Garašanin, simply adopted socio-evolutionary views on the reasons for the emergence of the Neolithic, as an inevitable step in the progress of humankind, most likely influenced by the works of F. Engels (Engels 1973). They also accepted the region of south-western Asia as the origin of the Neolithic. Scholars such as M. Grbić and D. Srejović observed certain Mesolithic traits within the Starčevo culture, but instead of analysing the possible relationships between Neolithic and Mesolithic communities and reciprocity in influences, they proposed theories on the possible local development of the Neolithic economy by Mesolithic population. However, both of these somewhat polarised views provided limited discussion of the relationships between the Mesolithic and Neolithic communities and the socio-cultural changes they underwent, the process of inventing or adopting the Neolithic traits, or the very nature of the "Neolithic package" and the mechanisms of its dissemination, adoption, and adapting. Furthermore, neither of these approaches engaged in a larger discussion on the reasons why the Neolithic economy and Neolithic societies emerged (whether to adopt a more environmentalist approach or to focus more on social factors); and autochthons-oriented studies did not provide any explanations as to why Neolithic traits developed. The majority of debates in recent years is focused on the Iron Gates region, with limited focus on other regions. Future research on Neolithisation processes and the Early Neolithic in general in the central Balkan area should include studies on relationships between Mesolithic and Early Neolithic communities, models of spreading the "Neolithic way of life," as well as its traits - how Neolithic innovations were adopted and whether they were locally adapted. These discussions still need to be incorporated into the wider debates concerning the Neolithic and Neolithisation in Europe in general.

References

- Ammerman, Albert J., and Paolo Biagi, eds. 2003. *The widening harvest. The Neolithic transition in Europe: Looking back, looking forward.* Boston: Archaeological Institute of America.
- Antonović, Dragana, Selena Vitezović, and Josip Šarić. 2019. "The Early Neolithic Settlement at Velesnica: Lithic and Osseous Industries". In *Papers in Honour of Rastko Vasić 80th Birthday*, edited by. Vojislav Filipović, Aleksandar Bulatović, Aleksandar Kapuran, 63–70. Belgrade: Institute of Archaeology.
- Antonović, Dragana. 2003. Neolitska industrija glačanog kamena u Srbiji. Beograd: Arheološki institut.
- Aranđelović-Garašanin, Draga. 1954. *Starčevačka kultura*. Ljubljana: Univerza v Ljubljani, Arheološki seminar.
- Bailey, Douglas, Alistair Whittle, and Vicky Cummings, eds. 2005. (Un)settling the Neolithic. Oxford: Oxbow Books.
- Bandović, Aleksandar. 2019. *Miodrag Grbić i nastanak kulturno-istorijske arheologije u Srbiji*. PhD thesis. Belgrade: University of Belgrade, Faculty of Philosophy.
- Barker, Graeme. 2005. The Agricultral Revolution in Prehistory. Why did foragers become farmers: Oxford: Oxford University Press.
- Bellwood, Peter. 2004. First Farmers: The Origins of Agricultural Societies. Oxford: Blackwell.
- Bender, Barbara. 1978. "Gatherer-Hunter to Farmer: A Social Perspective." World Archaeology 10: 204–222.
- Binford. Lewis. 1983. In Pursuit of the Past. London: Thames and Hudson.
- Bogdanović, Milenko. 1998. "Prilog proučavanju neolitizacije kontinentalnog dela Balkanskog poluostrva". In *Rad Dragoslava Srejovića na istraživanju praistorije centralnog Balkana*, edited by Nikola Tasić, 61–70. Kragujevac: Centar za naučna istraživanja SANU.
- Bogucki, Peter. 1987. "The establishment of agrarian communities on the North European Plain." *Current Anthropology* 28(1): 1–24.
- Borić, Dušan, and Vesna Dimitrijević. 2007. "When did the 'Neolithic package' reach Lepenski Vir? Radiometric and faunal evidence". *Documenta Praehistorica* 34: 53–72.
- Borić, Dušan, and Vesna Dimitrijević. 2009. "Absolute Chronology and Stratigraphy of Lepenski Vir". *Starinar* LVII: 9–55.
- Borić, Dušan. 2005. "Deconstructing essentialisms: Unsettling frontiers of the Mesolithic-Neolithic Balkans". In *(Un)settling the Neolithic*, edited by Douglas Bailey, Alistair Whittle and Vicky Cummings, 16–31. Oxford: Oxbow Books.
- Braidwood, Robert. 1960. The Agricultural Revolution. Scientific American 203:130–141.

Braidwood, Robert, and Bruce Howe. 1960. Prehistoric Investigations in Iraqi Kurdistan. Studies in Ancient Oriental Civilization No. 31. Oriental Institute of the University of Chicago, Chicago.

- Bramanti, B., Thomas, M.G., Haak, W., Unterlaender, M., Jores, P., Tambets, K., Antanaitis-Jacobs, I., Haidle, M.N., Jankauskas, R., Kind, C.-J., Lueth, F., Terberger, T., Hiller, J., Matsumura, S., Forster, P., Burger, J., 2009. "Genetic Discontinuity Between Local Hunter-Gatherers and Central Europe's First Farmers". *Science* 326 (5949): 137–140. https://doi.org/10.1126/science.1176869.
- Budja, Mihael, ed. 1995. *Poročilo o raziskovanju paleolitika, neolitika in eneolitika v Sloveniji XXII. Neolitske študije.* Ljubljana: Univerza v Ljubljani, Filozofska fakulteta, Oddelek za arheologijo.
- Budja, Mihael. 1999. "The transition to farming in Mediterranean Europe an indigenous response". *Documenta Praehistorica* 26: 119–141.
- Budja, Mihael. 2003. "Seals, contracts and tokens in the Balkans Early Neolithic: where in the puzzle". *Documenta Praehistorica* 30: 115–130
- Budja, Mihael. 2004. "The transition to farming and the 'revolution' of symbols in the Balkans. From ornament to entoptic and external symbolic storage". *Documenta Praehistorica* 31: 59–81.
- Budja, Mihael. 2006. "The transition to farming and the ceramic trajectories in Western Eurasia. From ceramic figurines to vessels". *Documenta Praehistorica* 33: 183–201.
- Cauvin, Jacques. 2010 [1997]. Naissance des divinités, naissance de l'agriculture. Paris: CNRS.
- Childe, Gordon V. 1925. *The dawn of European Civilization*. London: Routledge and Kegan Paul.
- Childe, Gordon V. 1951 [1936]. Man makes himself. New York: Meridian book.
- Çilingiroğlu, Çiler. 2005. "The concept of "Neolithic package": considering its meaning and applicability". *Documenta Praehistorica* 32. 1–13. https://doi.org/10.4312/dp.32.1
- Dimić, Vidan, and Dragana Antonović. 2021. "Ground and abrasie stone tools from Belovode and Pločnik: concluding remarks". In *The rise of metallurgy in Eurasia: Evolution, organisation and consumption of early metal in the Balkans*, edited by Miljana Radivojević, Benjamin W. Roberts, Miroslav Marić, Julka Kuzmanović Cvetković, and Thilo Rehren, 556–559. Oxford, Archaeopress.
- Dolukhanov, Pavel, Anvar Shukurov, Detlef Gronenborn, Dmitry Sokoloff, Vladimir Timofeev, and Ganna Zaitseva. "The chronology of Neolithic dispersal in Central and Eastern Europe". *Journal of Archaeological Science*, 32 (10): 1441–1458.
- Đuričić, Ana. 2021. "Facing the Environmental Variability in the Early Neolithic of the Central Balkans: Diversification, Storage, Exchange, and Mobility". In *Archaeology of Crisis*, edited by Staša Babić, 75–88. Belgrade: University of Belgrade, Faculty of Philosophy.

- Engels, Fridrih. 1973. *Porijeklo porodice, privatnog vlasništva i države*. Zagreb: Naprijed.
- Flannery, Kent. 1969. Origins and Ecological Effects of Early Domestication in Iran and the Near East. In *The Domestication and Exploitation of Plants and Animals*, edited by Peter Ucko and George Dimbleby, 73–100. Aldine, London.
- Flannery, Kent V. 1973. "The origins of agriculture". *Annual review of Anthropology* 2: 271–310.
- Fowler, Chris, Jan Harding, and Daniela Hofmann, 2015. "The Oxford Handbook of Neolithic Europe: An Introduction". In *The Oxford Handbook of Neolithic Europe*, edited by Chris Fowler, Jan Harding, and Daniela Hofmann. Oxford: Oxford University Press.
- Garašanin, Draga. 1959. "Nosa Biserna obala". Arheološki pregled 1: 9-11.
- Garašanin, Draga. 1960. "Nosa Biserna obala, praistorijsko naselje". *Starinar* XI: 228–229.
- Garašanin, Milutin. 1973. *Praistorija na tlu SR Srbije*. Beograd: Srpska književna zadruga.
- Gathercole, Perer. 2004. Childe's revolutions. In *Archaeology: The Key Concepts*, edited by Colin Renfrew and Paul Bahn, 26–30. London and New York: Routledgde.
- Glišić, Jovan. 1968. "Ekonomika i socijalno ekonomski odnosi u neolitu podunavsko-pomoravskog basena". In *Neolit centralnog Balkana*, edited by Lazar Trifunović, 21–61. Beograd: Narodni muzej.
- Grbić, Miodrag. 1959. "Starčevo kao najraniji izraz neolitske ekonomike na Balkanu". Starinar IX-X: 11–17.
- Grębska-Kulow, Małgorzata and Petar Zidarov. 2021. "The Routes of Neolithisation: The Middle Struma Valley from a Regional Perspective". *Open Archaeology* 7: 1000–1014.
- Greene, Kevin. 1999. V. Gordon Childe and the vocabulary of revolutionary change. *Antiquity* 73 (279): 97–109. doi:10.1017/S0003598X00087871
- Hayden, Brian. 2003. "Were luxury foods the first domesticates? Ethnoarchaeological perspectives from Southeast Asia". *World Archaeology* 34 (3): 458–469.
- Hayden, Brian. 2009. "The Proof Is in the Pudding: Feasting and the Origins of Domestication". *Current Anthropology* 50 (5): 597–601.
- Higgs, Eric. S. and Jarman, Michael R. 1969. "The origins of agriculture: a reconsideration". Antiquity, 43(1): 31–41.
- Hodder, Ian. 1982. Symbols in action. Cambridge: Cambridge University Press.
- Hodder, Ian. 1986. Reading the Past: Current Approaches to Interpretation in Archaeology. Cambridge:Cambridge University Press.
- Hodder, Ian. 1990. The Domestication of Europe. Structure and Contingency in Neolithic Societies. Oxford: Blackwell Publishers.
- Hole, Frank. 1984. "A reassessment of the Neolithic Revolution." *Paléorient* 10 (2): 49–60.

Jovanović, Jelena. 2017. The diet and health status of the Early Neolithic communities of the Central Balkans (6200–5200 BC). PhD thesis. Belgrade: University of Belgrade, Faculty of Philosophy.

- Kristiansen, Kristian. 2015. "The Decline of the Neolithic and the Rise of Bronze Age Society". In *The Oxford Handbook of Neolithic Europe*, edited by Chris Fowler, Jan Harding, and Daniela Hofmann. Oxford: Oxford University Press.
- Lichter, Clemens, ed. 2005. How did farming reach Europe? Anatolian– European relations from the second half of the 7th through the first half of the 6th millennium cal BC. BYZAZ 2. Istanbul: Deutsches archaologisches Institut Abteilung Istanbul.
- Mathieson, I., Alpaslan-Roodenberg, S., Posth, C. et al. 2018. "The genomic history of southeastern Europe". *Nature* 555: 197–203. https://doi.org/10.1038/nature25778
- Mrđić, Nemanja, Vesna Bikić, Dragana Antonović, Milica Radišić and Slaviša Perić. 2017. "Arheološka istraživanja u Đerdapu". In *Mnemosynon Firmitatis. Sedamdeset godina Arheološkog instituta (1947–2017)*, edited by Vesna Bikić and Josip Šarić, 67–89. Beograd: Arheološki institut.
- Özdoğan, Mehmet. 2016. "The earliest farmers of Europe. Where did they come from?" In Southeast Europe and Anatolia in prehistory. Essays in honor of Vassil Nikolov on his 65th anniversary, edited by Krum Bacvarov and Ralf Gleser, 51–57. Universitätsforschungen zur prähistorischen Archäologie Band 293 Aus der Abteilung für Ur– und Frühgeschichtliche Archäologie der Universität Münster. Bonn: Verlag Dr. Rudolf Habelt GmbH.
- Palavestra, Aleksandar. 2020. *Usamljeni arheolog. Terenski metod Miloja M. Vasića.* Beograd: Dosije studio.
- Perić, Slaviša, and Dubravka Nikolić. 2016. *Lepenski Vir: stratigraphy, chronology and periodization. Excavations 1966.* Belgrade: Institute of Archaeology.
- Perlès, Catherine. 2005. "From the Near East to Greece: let's reverse thefocus. Cultural elements that didn't transfer". In *How did farming reach Europe?*Anatolian-European relations from the second half of the 7th through the first half of the 6th millennium cal BC, edited by Clemens Lichter. Byzas 2: 275–90. Istanbul: Deutsches archaologisches Institut Abteilung Istanbul.
- Porčić, Marko, Tamara Blagojević and Sofija Stefanović 2016. "Demography of the Early Neolithic Population in Central Balkans: Population Dynamics Reconstruction Using Summed Radiocarbon Probability Distributions". *PloS One* 11(8).
- Price, T. Douglas, ed. 2000. *Europe's first farmers*. Cambridge: Cambridge University Press.
- Reed, Charles, ed. 1977. The origins of agriculture. The Hague: Mouton.
- Runnels, Curtis and Tjeerd H. van Andel. 1988. "Trade and the Origins of Agriculture in the Eastern Mediterranean". *Journal of Mediterranean Archaeology* 1(1): 83–109.
- Schulting, Rick and Borić, Dušan. 2017. "A tale of two processes of Neolithisation: South-east Europe and Britain/Ireland". In The Neolithic of Europe: Papers

- in Honour of Alasdair Whittle, edited by Penny Bickle, Vicki Cummings, Daniela Hofmann and Joshua Pollard, 82–105. Oxford: Oxbow Books.
- Sherratt, Andrew. 1981. "Plough and pastoralism: aspects of the secondary products revolution". In *Pattern of the Past: Studies in honour of David Clarke*, edited by Ian Hodder, Glynn Isaac and Norman Hammond, 261–305. Cambridge: Cambridge University Press.
- Sidéra, Isabelle. 1998. "Nouveaux éléments d'origine Proche-Orientale dans le Néeolithique ancien balkanique: analyse de l'industrie osseuse". In *Préhistoire d'Anatolie. Genèse de deux mondes*, edited by Marcel Otte, 215–239. Liège, ERAUL 85.
- Simmons, Alan H. 2010. The Neolithic Revolution in the Near East. Transforming the Human Landscape. Tucson: The University of Arizona Press.
- Srejović, Dragoslav and Alan McPherron, eds. 1988. *Divostin and the Neolithic of Central Serbia*. Pittsburgh and Kragujevac: University of Pittsburgh Dept. of Anthropology and Narodni muzej Kragujevac.
- Srejović, Dragoslav, ed. 1988. *The Neolithic of Serbia. Archaeological research* 1948–1988. Belgrade: Centre for Archaeological research.
- Srejović, Dragoslav. 1969. *Lepenski Vir. Nova praistorijska kultura u Podunavlju*. Beograd: Srpska književna zadruga.
- Srejović, Dragoslav. 1979. "Protoneolit Kultura Lepenskog Vira". In *Praistorija jugoslavenskih zemalja II. Neolit*, edited by Alojz Benac, 33–76. Sarajevo: Centar za balkanološka ispitivanja ANUBiH.
- Srejović, Dragoslav. 1988. "A Neolithic of Serbia: A review of research". In *The Neolithic of Serbia. Archaeological research 1948–1988*, edited by Dragoslav Srejović, 5–19. Belgrade: Centre for Archaeological research.
- Stanković, Svetozar. 1992. *Sakralna mesta i predmeti u starijeneolitskim kulturama centralnobalkanskog područja*. PhD thesis. Belgrade: University of Belgrade, Faculty of Philosophy.
- Šarić, Josip. 2014. Artefakti od okresanog kamena u starijem i srednjem neolitu na tlu Srbije. Beograd: Arheološki institut
- Tasić, Nenad N. 2009. Neolitska kvadratura kruga. Beograd: Zavod za udžbenike.
- Thomas, Julian. 2002. *Understanding the Neolithic*. London and New York: Routledge.
- Thomas, Julian. 2015. "Commentary: What Do We Mean by 'Neolithic Societies'?". In *The Oxford Handbook of Neolithic Europe*, edited by Chris Fowler, Jan Harding, and Daniela Hofmann. Oxford: Oxford University Press.
- Ucko, Peter, and George Dimbleby eds. 1969. *The Domestication and Exploitation of Plants and Animals*. Aldine, London.
- Vasić, Miloje. 1932. Preistoriska Vinča. Beograd: Državna štamparija.
- Vassits, Miloje. 1902. "Die neolithische Station Jablanica bei Međulužje in Serbien". *Archiv für Anthropologie* 27(4): 517–582
- Vetnić, Savo. 1998. "O poreklu starčevačke kulture u basenu Velike Morave". In *Rad Dragoslava Srejovića na istraživanju praistorije centralnog Balkana*, edited by Nikola Tasić, 75–96. Kragujevac: Centar za naučna istraživanja SANU.

Vitezović, Selena. 2011. Koštana industrija u starijem i srednjem neolitu centralnog Balkana. PhD thesis. Belgrade: University of Belgrade, Faculty of Philosophy.

- Vitezović, Selena. 2016a. "Neolithisation of technology: innovation and tradition in the Starčevo culture osseous industry". *Documenta Praehistorica* 43: 123–138.
- Vitezović, Selena. 2016b. "Bos and the bone spoon revisited: Spatula-spoons in the Starčevo culture". In *Southeast Europe and Anatolia in prehistory. Essays in honor of Vassil Nikolov on his 65th anniversary*, edited by Krum Bacvarov and Ralf Gleser, 189–196. Universitätsforschungen zur prähistorischen Archäologie Band 293 Aus der Abteilung für Ur– und Frühgeschichtliche Archäologie der Universität Münster. Bonn: Verlag Dr. Rudolf Habelt GmbH.
- Vuković, Jasna. 2005. "The Blagotin amulets and their place in the Early Neolithic of the Central Balkans". *Glasnik Srpskog arheološkog društva* 21: 27–44.
- Vuković, Jasna. 2011. "Early Neolithic pottery from Blagotin, Central Serbia: a use-alteration analysis". In *Beginnings New Research in the Appearance of the Neolithic between Northwest Anatolia and the Carpathian Basin: papers of the International workshop 8th-9th April 2009, Istanbul*, edited by Raiko Krauss, 205–211. Rahden, Westf.: Leidorf.
- Whittle, Alistair, Laszlo Bartosiewicz, Dušan Borić, Paul Pettitt, and Michael Richards. 2002. "In the beginning: New radiocarbon dates for the Early Neolithic in northern Serbia and south-east Hungary". *Antaeus* 25: 63–117.
- Whittle, Alistair. 1996. *Europe in the Neolithic. The creation of new worlds*. Cambridge: Cambridge University Press.
- Zvelebil, Marek. 1995. "Neolithisation in Eastern Europe: A view from the frontier". In Poročilo o raziskovanju paleolitika, neolitika in eneolitika v Sloveniji XXII: Neolitske študije, edited by Mihael Budja, 107–127. Ljubljana: Univerza v Ljubljani, Filozofska fakulteta, Oddelek za arheologijo.

СІР – Каталогизација у публикацији – Народна библиотека Србије, Београд 902:001.4/.9 (082) 165:902

ARCHAEOLOGICAL theory at the edge(s) [Elektonski izvor] / edited by Staša Babić and Monika Milosavljević. – Belgrade : University, Faculty of Philosophy, 2023 (Belgrade : Dosije studio). – 1 elektronski optički disk (CD-ROM) ; 12 cm. – (Edition Humans and society in times of crisis)

Sistemski zahtevi: Nisu navedeni. – Насл. са насловне стране документа. – Tiraž 10.

ISBN 978-86-6427-212-4

- а) Археологија -- Епистемологија -- Зборници
- б) Археологија -- Методологија науке -- Зборници
- в) Теорија сазнања -- Зборници

COBISS.SR-ID 116649737

Since archaeological interpretation is still based primarily upon "common sense" or "accumulated knowledge," rather than theoretically grounded premises, it is hard to overestimate the importance of the topics raised in this volume. It represents an important contribution to the current debate on the role of archaeological theory in the interdisciplinary context of research into the origins of humanity and culture and shows the direction that contemporary archaeology should take.

Rajna Šošić-Klindžić

The collection Archaeological Theory at the Edge(s) is truly at the cutting edge of 21st-century archaeological theory. The authors cover the vast scope of the most relevant epistemological issues in current archaeology but mainly challenge the worn-out cliché of archaeology as a dusty, colonial-born, antiquarian hobby. On the contrary, they convince that archaeology is vitally and virtually necessary for everyone today. Contributions in this volume restore the faith in the value of archaeology as a humanistic discipline, but also as a critical social action, nowadays when the World is once again faced with "the sinister lights of perverted science" (to paraphrase Churchill).

Aleksandar Palavestra

ISBN 978-86-6427-212-4



UNIVERSITY OF BELGRADE FACULTY OF PHILOSOPHY