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between the Bosphorus and the Carpathians.
Introduction**

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Going West?

The Dissemination of Neolithic Innovations between the Bosporus and the Carpathians

Proceedings of the EAA Conference, Istanbul, 11 September 2014

Edited by Agathe Reingruber, Zoï Tsirtsoni, Petranka Nedelcheva

Going West? uses the latest data to question how the Neolithic way of life was diffused from the Near East to Europe via Anatolia. The transformations of the 7th millennium BC in western Anatolia undoubtedly had a significant impact on the neighbouring regions of southeast Europe. Yet the nature, pace and trajectory of this impact needs still to be clarified. Archaeologists previously searched for similarities in prehistoric, especially Early Neolithic material cultures on both sides of the Sea of Marmara. Recent research shows that although the isthmi of the Dardanelles and the Bosporus connect Asia Minor and the eastern Balkans, they apparently did not serve as passageways for the dissemination of Neolithic innovations. Instead, the first permanent settlements are situated near the Aegean coast of Thrace and Macedonia, often occurring close to the mouths of big rivers in secluded bays. The courses and the valleys of rivers such as the Maritsa, Strymon and Axios were perfect corridors for contact and exchange not only in a south-north direction but also the other way round. Using previous studies as a basis for fresh research, this volume presents exciting new viewpoints by analyzing recently discovered materials and by applying modern research methods of interdisciplinary investigations.

The seventeen authors of this book have dedicated their research to a renewed evaluation of an old problem: namely, the question of how the complex transformations at the transition from the Mesolithic to the Neolithic can be explained. They have focused their studies on the vast area of the eastern Balkans and the Pontic region between the Bosporus and the rivers Strymon, Danube and Dniestr. *Going West?* thus offers an overview of the current state of research concerning the Neolithisation of these areas, considering varied viewpoints and also providing useful starting points for future investigations.

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Introduction

The present volume has its roots in a session proposed on the initiative of Zoi Tsirtsoni for the annual meeting of the European Association of Archaeologists (EAA) in September 2014 in Istanbul, under the title:

Going West? The spread of farming between the Bosphorus and the Lower Danube Region. EAA Conference, Istanbul, 11 September 2014.

The concept behind the original event was to bring together scholars working on the Late Prehistory in these areas (Mesolithic and Early Neolithic, following the European terminology), and to discuss their opinions about the start of the Neolithic way of life, based on recent data. The underlying idea was to check whether the dominant scenario of a diffusion of the Neolithic way of life from the Near East to Europe via northwest Anatolia in the course of the mid- to late 7th millennium BC had gained additional support in the last years, through new discoveries or new correlations in the material culture, or whether, on the contrary, recent evidence had weakened or modified this scenario in any way.

A LITTLE BIT OF HISTORY

Several meetings had already dealt with this topic in the previous years, involving many of the participants of the present session. The first meeting was organised by Ivan Gatsov and Heiner Schwarzberg at the 8th EAA Conference at Thessaloniki fourteen years ago (2002) and published four years later (Gatsov & Schwarzberg, 2006). A broad range of issues was addressed, among which the possible paths of diffusion, the role of the Mesolithic substratum, changes in subsistence and economy, evidence from burials and absolute chronology. In the meantime (2004), another workshop was organised in Istanbul by Clemens Lichter and Recep Meriç; the proceedings were published one year later (Lichter, 2005), and became right away a reference. Among the strong points of that book was the first ‘trans-frontier’, a large-scale compilation of radiocarbon dates, which set the basis for the chronological framework of the discussion – whose success we endeavour to repeat here in an updated and augmented form. A third meeting was organised again in Istanbul five years later

(2009) by Dan Ciobotaru, Barbara Horejs and Raiko Krauß (Krauß, 2011). This workshop enlarged the picture further by including areas that were considered ‘peripheral’ at that time, namely the Aegean coast of Turkey and the central/western Balkans, and also by introducing data from climate and palaeoenvironmental studies into the archaeological discourse.

Our session of September 2014 aimed to do more than just revisit the questions asked during the one or the other of these meetings: it aimed to draw the discussion more to the ‘receiver’s’ ground, that is southeast Europe, rather than to that of the ‘transmitter’, that is western and northwestern Anatolia. In this way we intended to put forward not only the specificities of the local landscape and of the material culture occurring there during prehistoric times, but also the disciplinary practices and the methodology applied by the different archaeological schools of our times. We therefore wished to direct the attention to possible ‘sources of inspiration’ or trajectories that might have led to the adoption of certain innovations, both by the prehistoric communities and the prehistoric archaeologists.

Twenty-eight scholars answered the call to the September session, either individually or in groups, proposing fifteen presentations that covered indeed the area from the Bosphorus (in fact from the eastern coast of the Sea of Marmara) to the Lower Danube and beyond. Not all papers were read during the conference, some of the participants being unable to attend the meeting. Conversely, some of the papers, for reasons beyond our influence, had to be left out of this volume. We regret particularly the absence of the paper dealing with the Early Neolithic site of Nova Nadezhda, in the central Maritsa valley, a site of great importance concerning Neolithisation processes (Bachvarov et al., 2014).¹

Despite the presence of the word ‘farming’ in the original session title (used actually as a synonym for ‘Neolithic’), practically none of the participants discussed agricultural practices or animal husbandry. This applies also to the final papers, which deal mostly with data from settlements, artefacts or burials, considered as more or less direct evidence of the new socio-economic conditions. Speaking about ‘Neolithic innovations’ seemed to us much more appropriate in this respect. We also chose to replace the term of ‘spread’

¹For transcriptions from Bulgarian, throughout the volume we used the official transcription system from Cyrillic to Latin (<http://lex.bg/en/laws/ldoc/2135623667>).

with ‘dissemination’, the latter being more neutral and leaving more room for considering alternative processes for the adoption of the new practices. Finally, we pushed the northern limit of our geographical framework farther to the north and east, as it appears that transformation processes in the Lower Danube valley are insufficiently understood without considering previous or parallel developments in the west and northwest Pontic areas.

What we did *not* change was the short leading question at the beginning of the title, ‘Going West?’ which brings together three elements:

1. The action of *going*, of groups of people leaving one area and establishing themselves in another – a reference to the tendency to explain cultural change through migration and colonisation;
2. The direction of (the possible) movement, namely the idea of a linear expansion of the Neolithic way of life from East to West, ultimately deriving from the ‘Ex oriente lux’ credo;
3. The question mark with which we wanted to open the discussion both in favour and against the preceding views.

With its new cover title, *Going West? The Dissemination of Neolithic Innovations between the Bosphorus and the Carpathians*, the present volume offers an overview of the current state of research and the current state of hypotheses concerning the Neolithisation of this vast area, providing at the same time some useful guideposts for future investigations.

OBSTACLES TO OVERCOME

An essential challenge in reconsidering explanatory models for the Neolithisation process is to overcome modern political and disciplinary divisions. Until recently analytical studies in the area under consideration were indeed often confined to the limits of national borders. The authors of this volume attempt to overcome such artificial restrictions, but it is a grave heritage that still impedes a profound understanding of cultural processes. We try to avoid modern-day borders by using geographical terms, although there are a few exceptions. For example, Thrace designates a historic geographical entity which covers three modern-day states: Bulgaria (Bulgarian Thrace), Greece (West Thrace or Aegean Thrace) and Turkey (East Thrace or Turkish Thrace).

The geographical framework of the volume is given by the three seas surrounding the eastern Balkans (the northern Aegean Sea east of the Chalkidiki Peninsula, the Sea of Marmara and the Black Sea) and,

accordingly, the river systems included between the rivers Strymon in the southwest and the Southern Bug in the northeast (see Appendix, Figure 10.1). Certainly, in a holistic approach the eastern Balkans must be viewed together with the central Balkans and even the Carpathian Basin. Yet, such a broad study would extend beyond the scope of this volume. The contributions concentrate on (one of) the presumed point(s) of entrance of the Neolithic way of life, namely the Marmara region and Thrace, and take into consideration the immediate neighbouring areas of eastern Macedonia, the Lower Danube valley and, farther north, the northwest Pontic area.

Rethinking and reappraising the cultural entities described sometimes only on the basis of single painted sherds (as is the case with the Criş culture; see Reingruber, this volume) will be a major task for the coming years. On the other hand, the complex transformations at the beginning of the Neolithic period cannot be comprehended or much less explained by the study of material culture alone. The natural sciences must be involved more directly, especially for the reconstruction of landscapes, environments and climatic conditions (temperate or semi-arid, steppe-like), for the important questions of diet and nutrition, and for the construction of reliable ¹⁴C sequences. A more ample use of drillings, both for archaeological as well as for geomorphological-palaeoenvironmental reasons, could produce new and unexpected information, enlarging our views on Neolithisation processes (Lespez et al., this volume). Recent isotope and DNA studies have been advantageously integrated in discussions about the dissemination of the Neolithic way of life in neighbouring areas, for example in the western and central Balkans (Borić & Price, 2013; Szécsényi-Nagy et al., 2015). Such studies could certainly provide promising new insights for the eastern Balkans too, especially when also taking into consideration the late Mesolithic groups of people from the steppe and forest steppe of the Pontic region and not only envisaging comparisons with populations from Anatolia.

Radiocarbon analysis has been of major interest in southeast Europe since the 1960s, and particularly after the introduction of the AMS dating method many reliable sequences have been produced. Yet, in some areas ¹⁴C dates are still lacking, not to speak of sequences that could be modelled statistically. In the Appendix radiocarbon dates from 127 sites have been compiled that cover the entire geographical framework of the volume, even extending it to the west (Aliakmon and Axios/Vardar river valleys) and the northwest (Mureş-Tisza river confluence) in order to better circumscribe local developments (Thissen & Reingruber, this volume). The dates, calibrated with the latest available curve, are presented according to regions defined on the basis of geographic, topographic and climatic criteria.

Generalisations relying on few sites only, possibly from distant areas, have for many years blocked a more profound appreciation of the phenomena that marked the emergence of the Neolithic way of life in the eastern Balkans. It becomes clear, however, that broad-scale simulations, interpolations and modelling of such diffuse data cannot provide sound answers to the old questions; instead, detailed analysis of better-built clusters will be the clue for modelling the complicated process of Neolithic transformations. As soon as clusters of sites within specific areas are investigated and their interrelation understood, we will be able to comprehend better inter-regional differences and supra-regional variances.

SUMMARY OF THE VOLUME'S CONTENTS

In their chapters the authors of this volume challenge the traditional models for explaining the spread of the Neolithic way of life, basing on evidence from settlements (setting, architecture), absolute chronology, material culture (technology, style, function), as well as traditions and rituals. Certainly, there is consensus regarding the anteriority of the Neolithic way of life in Anatolia compared to southeast Europe, but no full agreement exists as to whether large migrating/colonising groups of people were involved (Nikolov, this volume), or rather small 'pioneer groups' that coexisted and interacted with the local hunter-gatherer population (Thissen, this volume). Yet, the trajectories followed by these groups are not always evident.

For the time being, radiocarbon dates, in agreement with material evidence, indicate a very early start of long, uninterrupted sequences south of the Sea of Marmara, between c.6600 and 6000 cal BC at least (Menteşe, Barçın: see Appendix). This situation is not reflected, thus far, on the northern shores: only few sites appear there, on the European side, around or even after 6000 cal BC (Yenikapı, Yarımburgaz). They can be connected to the southern Marmara region either by the crossing of the 'ox-ford' (the Bosphorus) or by short voyages along the coast.

Sites of such early date have not been reported yet from the inner part of Turkish Thrace. Aşağı Pınar, with its important stratigraphical sequence and the reliable body of radiocarbon dates, is an important backbone for the whole region during the 6th millennium BC (Özdoğan, 2013; compare also Karul, this volume). This could indicate that the 'Bosphorus pass' or, alternatively, the crossing of the Sea of Marmara was not extensively used during the 7th millennium BC. This hypothesis, however, is subjected to doubts imposed by changes in the landscape (erosion, alluviation) or other taphonomical factors (e.g. later anthropogenic deposits), which might explain possible lacunae in

the archaeological record. In this regard, Lespez et al. (this volume) recommend systematic geoarchaeological research precisely in those areas immediately to the west (and northwest) of the Bosphorus before admitting the reality of this evidence.

If the crossing of the land tongues formed by the Dardanelles and the Bosphorus are excluded, then we would have to take Aegean maritime routes into consideration in order to explain the appearance of the oldest Neolithic sites in the Balkan Peninsula. The fact that sites of the 7th millennium BC are situated along or close to the north Aegean coast (especially taking into account the position of the coastline at that time: see Ghilardi et al., 2012) between Hoca Çeşme in the east and Paliambela in the west (compare Figure 10.2 in the Appendix), can be seen as an additional argument in favour of the arrival of 'pioneer groups' (*supra*) or their innovative concepts by sea. The crossing of the Aegean Sea and the maintenance of maritime routes are further sustained by analogous evidence from the southern Aegean (Erdoğan, this volume).

The majority of these 7th millennium sites are concentrated in the western part of the Aegean coast, west of the Chalkidiki Peninsula and along the Thermaic Gulf. Although not discussed in detail in this volume, they are included in the Appendix. New evidence is also available from the northeast, from Dikili Tash (Lespez et al., this volume) and Uğurlu (Erdoğan, this volume). Hoca Çeşme is therefore no longer a singular site in this region.

Concerning the diffusion of innovations farther north, different possibilities are envisaged for both maritime and terrestrial routes. The former concern the possibility of crossing or navigating the Black Sea during the Early Neolithic. Judging by the lack of early sites near both the European and the Asiatic shores, the question must be answered in the negative: at least for the 7th millennium BC and likely for the 6th millennium BC as well, crossing this open Sea must be doubted. Other than near the shores of the Sea of Marmara with sites like Fikirtepe, Pendik, Yenikapı, Yarımburgaz or Toptepe (compare Appendix, Figure 10.1), not a single site is attested along the Black Sea coasts that date prior to 5500 cal BC; a direct exchange in material culture from coast to coast is provable only for the 5th millennium BC (Özdoğan, this volume).

Following the Meriç/Maritsa/Evros river valley upstream, it is only in Nova Nadezhda (*supra*) and Yabalkovo (compare Appendix) that sites of the early 6th millennium BC have been found (in addition of course to the tells in the northern part, related to the river Tundzha, e.g. Karanovo or Azmak), whereas the Lower Maritsa and Ergene catchment remains conspicuously empty (Nikolov, this volume). On the other hand, when considering that no such site was known until the year 2000, one cannot exclude that more sites

await to be discovered in these areas: conservation and taphonomy are, once again, of crucial importance for our reconstructions.

This is also the case with the vast plains of southeastern Romania (the Bărăgan in the Dâmbovița-Ialomița catchment), where no Early Neolithic sites have been reported thus far. Greater dynamic is observed in the surrounding hilly areas, where higher population densities are recorded even during the Mesolithic. In the plateaus of both the northwest and west Pontic areas, the Mesolithic way of life probably persisted until late, with Neolithic sites appearing only around 5500/5300 cal BC; and in the Dobrogea – according to our present knowledge – they appeared even later, after 5000 cal BC (Reingruber, this volume).

This situation contrasts with the picture provided by the central Balkans, that is roughly the area between the rivers Axios/Vardar and Strymon/Struma, waterways that obviously played a major role in the dissemination of the Neolithic. Behind the watershed of the Balkan mountain ranges and up to the Transylvanian Basin, south-north or north-south flowing waterways connect(ed) the individual regions. One such ‘line’ is represented by the rivers Axios/Vardar–Morava–Danube–Tisza (see Appendix, Figure 10.1): it is especially in this area that the Neolithic way of life spread extremely rapidly, within a few decades after 6000 cal BC. It cannot be a coincidence that a strong Mesolithic background is also attested in this region, that is, local communities of hunter-fisher-gatherers contributing immensely to the intake of Neolithic innovations.

Whereas exciting evidence for Mesolithic population living along the Danube Gorge have thrilled and intrigued generations of archaeologists since the 1970s, the Mesolithic in other parts of the working area has received altogether less attention. In 2006 during the UISPP congress held in Lisbon, the question of Mesolithic/Neolithic interactions in the Balkans was open for discussion, and one year later a book presenting the papers was published (Kozłowski & Nowak, 2007). Even though there are still gaps in our knowledge, it appears that Mesolithic populations are attested especially in hilly areas, for instance in western Macedonia (Biagi et al., 2015), in Dobrogea, in Moldova (Păunescu, 1979) and in the Marmara region (Gatsov & Özdoğan, 1994; Özdoğan & Gatsov, 1998). And it is their heritage that can be detected in specific burial rites (Lichter, this volume) or stone tool inventories (Gatsov et al., this volume). Definitely, much more attention should be paid to the Final Mesolithic when discussing the Early Neolithic (Karul, this volume; Özdoğan, this volume). Without the active participation of late hunters, foragers and fishers the rapid dissemination of Neolithic innovations within such a short time and the founding of many new sites cannot be explained,

certainly not by the ‘wave-of-advance’ model (Ammerman & Cavalli Sforza, 1971) or the ‘leap-frog’ model (Pinhasi, 2015).

Yet, not all novelties that arrived in the Balkans can be explained by influences from the Anatolian-Aegean sphere. Indeed, it appears that some features of the Neolithic way of life, as we know it in south-east Europe, are neither deducible from the Aegean nor from Anatolia. Burial rites, incised pottery decoration and stone tool assemblages point to influences from north of the Balkan range, even north of the Danube River. In the forest steppe of the Southern Bug and Dniestr, communities depended upon fishing and hunting, yet using ceramic containers, are attested very early, possibly since 6400/6300 cal BC (a date that however should be regarded with some reservation, compare Appendix). Their pottery is not painted but often richly decorated with incisions and impressions. These styles were also in use in the outer foothills of the Carpathian Mountains, where sites appeared after c.5500 cal BC; painted pottery has been encountered only exceptionally and never in combination with white colour.

In a broader European perspective, M. Budja recently argued that at a certain point the semi-sedentary Mesolithic groups in northern areas, practicing mainly hunting, fishing and gathering, became interspersed with groups displaying Anatolian-Aegean traditions and reliant upon farming and animal herding (Budja, 2015). One such ‘contact zone’ can now be localised between the Stara Planina, the Carpathians and the Prut: not only two distinct pottery traditions (white paint in the southwest, incisions in the northeast), but also two economically very different ways of life intermixed there: the farmers and animal keepers living on tells and the ceramic using mobile foragers and fishers of the steppe. Their daily life was marked by different options and solutions, contingent on resources, climate and/or landscape.

Therefore, in the present state of research, based on the different approaches and methods applied, the question of ‘Going West?’ – from Anatolia via the Bosphorus and towards central Europe – has to be answered in the negative. Not a linear expansion but rather multi-directional influences from both the south and the north led to the Neolithisation of the Balkan Peninsula. Certainly the first step, that is the Neolithisation of the northern Aegean in the mid- to late 7th millennium, involved a westward movement from Anatolia, but the trajectory (or the trajectories) followed are still to be established, despite the new pinpoints added to the map in recent years. More generally, the Neolithisation process must be seen as a result of different dynamics, of rapid changes in certain areas, especially the hilly regions with a Mesolithic background, and slower and much later transformations in the northern plains. At

the transition from the 7th to the 6th millennium BC, and during the 6th millennium BC, influences and innovations were absorbed from both the south (Aegean) and from the north (Pontic) through exchanges between mobile groups of interconnected people.

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