management practices. Specialists on crisis management and policy makers, in addition to heritage professionals, may also find the volume an interesting and valuable read.

## References

- Corredor, P. & Bustamante, E. 2019. Culture and Cultural Policies in Time of Crisis. the Emblematic Case of Spain. *Economia della Cultura, Società editrice il Mulino*, 1: 117– 28. doi: https://doi.org/10.1446/93084
- Cozzani, G.; Pozzi, F.; Dagnino, F.M.; Katos, A.V. & Katsouli, E.F. 2017. Innovative Technologies for Intangible Cultural Heritage Education and Preservation: The Case of I-Treasures. *Personal and Ubiquitous Computing*, 21: 253–65. doi: https://doi.org/10.1007/s00779-016-0991-z
- Darvill, T.; Barrass, K.; Russell, B.; Milner, E. & Constant, V. 2019. Archaeology in the PPG16 Era: Investigations in England 1990–2010. Oxford & Philadelphia: Oxbow Books.
- Hamilakis, Y. 2007. The Nation and its Ruins: Antiquity, Archaeology, and National Imagination in Greece. Oxford: Oxford University Press.

- Howard, P. 2003. Heritage: Management, Interpretation, Identity. London: Continuum.
- Nilsson, P.A. 2018. Impact of Cultural Heritage on Tourists: The Heritagization Process. *Athens Journal of Tourism*, 5(1): 35–54. doi: https://doi.org/10.30958/ajt.5.1.3
- Papadimitriou, N. & Anagnostopoulos, A., eds. 2017. To Parelthon sto Paron: Mneme, Istoria kai Arhaiotita stin sygchroni Ellada [Past in Present: Memory, History, and Antiquity in Modern Greece]. Athens: Kastanioti.
- Rubio Arostegui, J.A. & Rius-Ulldemolins, J. 2020. Cultural Policies in the South of Europe after the Global Economic Crisis: Is There a Southern Model within the Framework of European Convergence? *International Journal of Cultural Policy*, 26 (1): 16–30, doi: https://doi.org/10.1080/ 10286632.2018.1429421
- Skeates, R. 2000. *Debating the Archaeological Heritage*. London: Duckworth.
- Smith, C. & Burke, H. 2007. Digging it Up Down Under: A Practical Guide to Doing Archaeology in Australia. New York: Springer.

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Valeriy V. Nikitin. *The Early Neolithic in Mari Volga Region* [Ранний неолит Марийского Поволжья] (Yoshkar-Ola: Mari Research Institute of Language, Literature, and History named after V.M. Vasilyev, 2016. 470pp., 297 figs, 18 tables, ISBN 978-5-94950-052-1)

Neolithization research has gained momentum in recent years due to the need to identify its causes and mechanisms, as well as to understand common and specific features in various climatic zones. In Eastern Europe, pottery appeared to be the only archaeologically visible marker of the transition to Neolithic. While the southern regions have already been covered by various monographs (e.g. Kotova, 2002; Yudin, 2004; Vybornov, 2008), the northern regions have lacked attention. V.V. Nikitin's monograph aims to offset this imbalance. This book is based on materials obtained as a result of research conducted in 1980–2007. It contains materials from sixty settlements; eleven of which have been excavated to sufficiently large extent. The author analysed 790 vessels, thousands of flint tools, and thirty-seven dwellings. As far as the scope of the research is concerned, this is the largest monograph on the Early Neolithic in the north-east European forest steppe published to date. The book consists of an introduction, five chapters, and a conclusion. The monograph owes its relevance to the importance of studying the key debates surrounding the neolithization of the eastern European forest steppe.

The Introduction gives a brief description of the sources used in the study and the sets goals and objectives of the monograph. Chapter 1 contains the description of the natural and geographical conditions of the Mari Volga Region (Povolzhye). Most of the region's territory is occupied by southern taiga and mixed forests. More than 200 rivers flow here; there are 700 lakes, and 200,000 hectares are occupied by swamps. The author provides a description of regional paleogeography starting from the Mesolithic. The transition to the Neolithic took place in conditions of climate aridisation, which happened 7,200 years ago. According to palynological data, the cultural layer of the Early Neolithic sites was formed under the growing influence of forest formations represented by expanding conifers, mainly pines. Forest vegetation with individual open forest steppe spaces predominated. In the Late Neolithic, the climate became more humid, and mixed pine forests with occasional spruces and birches began to spread. Bison, moose, reindeer, bears, beavers, martens, foxes, hares, waterfowl, and boars abounded in these forests.

At the beginning of the second chapter, Valeriy Nikitin defends that, with the exception of pottery and agricultural activities, some key cultural features of local Mesolithic populations were similar to those seen among Neolithic communities. This is evidenced by the findings of polished chopping tools, the development of fishing methods such as netting and fishing weirs, the construction of long-term

dwellings, and the topographical location of sites. This thesis is extremely important for determining the criteria for the emergence of the Neolithic in the forest zone (Stavitsky, 2014). Further on, Nikitin outlines the history of Early Neolithic studies in the region, and enumerates settlements with flat-bottomed pottery decorated with strokes, one of the earliest types of pottery which was widespread across Eastern Europe during a short period of time. Eighteen sites have been excavated; seventeen sites have had test-pits opened; and surface surveys have been conducted on twenty-two sites. The first sites were investigated by A. Khalikov in the 1950s; since the 1980s excavations have mostly been carried out by Valeriy Nikitin.

Almost half of the monograph is occupied by Chapter 3, which reports in great detail on the results of the excavations of eleven sites; the ceramic assemblages found at these sites were predominantly composed of stroke-ornamented type. Chapter 4 describes the characteristics of the Early Neolithic artefacts recovered through the excavation of multi-layered sites and exploratory fieldwalking. These chapters are only descriptive, they do not contain references to comparable finds, and there is no interpretation of materials. Nevertheless, they are of great interest as they constitute an important source of primary data. Each dwelling found here is described, and this includes the material culture found within and beyond the boundaries of the dwelling. Aggregated statistics on pottery are presented, including all the finds made on the settlement.

Chapter 5 presents the analysis of the material and addresses issues related to the origin, cultural attribution, and chronology of Early Neolithic sites. The chapter also contains a brief historiography of research on the Early Neolithic in the forest steppe. Nikitin associates the origin of the Early Neolithic culture with strokeornamented ceramic ware in the region with incoming populations from the which south. infiltrated the local Mesolithic environment and, in the process, replicated from local Mesolithic communities the following: raw materials, flint splitting technology, and tool processing methods. However, the newcomers retained some of their own tool categories and processing methods. These include tools called 'irons' (i.e. carvers with oblique and oval blades), quartzite products, and the use of bilateral retouching techniques. Nikitin admits the possibility of coexistence of Mesolithic and Neolithic groups in this territory. However, the similar topographic setting of Mesolithic and Neolithic dwellings, and the absence of significant differences in the lithic inventories do not allow us to confirm this hypothesis, which is also not supported by radiocarbon dating.

According to Nikitin, the steppe population migrated to the forest zone from the Aral Sea and the northern Caspian Sea regions. The author has found the closest analogues to the stroke-ornamented ware from the Mari sites in the pottery of the lower layer Varfolomeevka in the lower Volga. But the earliest materials of the Mari sites are synchronous with the upper layers of Varfolomeevka, in which sparsely ornamented ware decorated with separate strokes is very rare. Furthermore, a different (shell) temper is used. According to Vasilyeva (Vasilyeva & Vybornov, 2015), a comparative analysis of the Orlovka culture ware paste (in the South) and the early ceramic products of the Mari forest steppe groups demonstrates their fundamental differences. Even more differences are found in their flint assemblages: blade industry and microliths, represented by segments and trapezoids, are typical in the lower Volga but not the forest-steppe cultures. The author's argument about the possible borrowing of domestic animals from the territory of the lower Volga

region is also erroneous. First of all, it should be taken into account that osteological materials are rather scarce at the sites of Mari Volga region: Otarskaya VI and Dubovskaya III and VIII. In addition to stroke-ornamented ware, there are also materials from other cultures: Kama, Pitcomb, and Volosovo. Recent studies of the lower Volga sites have shown that local communities started using domestic animals at the time of the Caspian Eneolithic, between 4800–4700 cal BC (Vybornov et al., 2016), and that there are no traces of domestication in earlier periods.

A more likely source from which the ceramic products could have been borrowed are sites of the Lugovskove type located in the Middle Volga, whose materials are much closer to the Mari ones: culturally, geographically, and chronologically. Now, on the basis of a representative series of radiocarbon dates, it is possible to state that the Lugovskoye-type ware appeared between 6700–6500 BP (Andreev et al., 2019). At the same time, Otarskaya VI yields a date of 6700 ± 40 BP (LE-5998) (5628-5488 cal BC) based on the charcoal from the hearth of the third dwelling, one of the oldest dwellings on the site. The inside of this dwelling contains mostly archaic, non-ornamented and sparsely ornamented ware, and the pottery decorated with strokes is characterised by the simplicity of the decorated patterns. Two other early dates were obtained for non-ornamented ware from Dubovskaya III. The first date was obtained from the organic materials contained in pottery: 7000 ± 150 BP (Spb-1290) (6113–5631 cal BC); the second date was obtained from organic crust: 6892 ± 40 BP (Ua-44724) (5890–5700 cal BC). These dates mark the earliest appearance of sparsely ornamented ware in the Mari Volga region. The closest analogues of this ware, both from the point of view of ornamentation and manufacturing technology, are found among the samples of Lugovskoye pottery (Vybornov, 2017: 41–43). It is possible to view the earliest sites of the lower Kama region with stroke-ornamented ware as transitional points, for example, Shcherbetskaya II which yielded pottery dating to 6620 ± 90 BP (Ki-14134) (5720–5460 cal BC) (Vybornov et al., 2018: Table 1).

Nikitin attributes Mari sites with stroke-ornamented ware to the Volga historical and cultural area which, according to him, includes the Early Neolithic sites of the Upper Volga. The reason for this is not only the close similarity of ware traditions, but also the similar economic subsistence practices. In our opinion, this hypothesis needs additional empirical support. First of all, an in-depth study of the Upper Volga sites is necessary, given that the coverage of the published research on their assemblages is highly fragmentary. The statement about the absence of visible differences between the Late Mesolithic and the Early Neolithic industry of the Volga-Oka basin is also debatable, since, unlike the Mari Volga region, there is a documented transition towards the use of flaking for flint knapping. There are significantly more reasons to consider these sites of flat-bottomed stroke-ornamented pottery in the Mari Volga region as belonging to the same cultural area as the sites found in the Kama and Vyatka river basins.

The monograph's conclusion summarises the results of the study. The end of the Early Neolithic is associated with the appearance in the region of makers of Pit-Comb and Comb-Pit (Kama) ware. Some mixture of earlier traditions of stroke pottery and Pit-comb ware can be evidenced by vessels decorated in both styles found on a number of sites. This might imply contemporaneity between the later phase of stroke pottery and the earliest of Pit-comb ware. The fact that strokeornamented ware culture existed up to 5000 BC and that the tribes that manufactured pit-comb ware appeared in the forest steppe of the Volga region not earlier than during that period would support a hypothesis of cultural syncretism.

The significance of Valeriy Nikitin's monograph is primarily determined by the author's extensive efforts to study, systematize, and interpret the Early Neolithic sites located in the forest zone. Nikitin's studies have made it possible to compose a full-scale picture of neolithization in this extensive region and to outline possible hypotheses for controversial issues. This research showed in what ways the economy of the forest steppe populations transformed during the transition to the Neolithic and revealed possible mechanisms of interaction between the Mesolithic and Neolithic communities inhabiting complementary natural zones.

## References

- Andreev, K.M.; Vybornov, A.A.; Kulkova, M. A. & Yu Khramov, D. 2019. On the Absolute Chronology of Lugovskoye Ware. *Samara Scientific Bulletin*, 8(3): 132–35.
- Kotova N.S. 2002. *Neolitization of Ukraine*. Luhansk.
- Vasilyeva I.N. & Vybornov A.A. 2015. Some Aspects of Studying of the Neolithic of the Mari Volga Region. *Archaeology and Ethnography of the Mari Volga*, 41: 68–98.
- Vybornov A.A. 2008. *Neolit Volga-Kamya*. Samara.
- Vybornov, A.A. 2017. Controversial Issues Related to the Study of the Early Neolithic of the Mari Povolzhye Region. *Povolzhye Archaeology*, 1(19): 38–49.
- Vybornov, A.A.; Andreev, K.M.; Kulkova, M. A. & Filippsen, B. 2018. Volga-Kama Neolithic Radiocarbon Chronology. Ural Historical Bulletin, 3(60): 66–77.
- Vybornov, A.A.; Oinonen, M.; Doga, N.S.; Kulkova, M.A. & Popov, A.S. 2016. On the Chronological Aspect of the Origin of Producing Economy in the Lower

Povolzhye Region. Volgograd State University Bulletin. Series 4: History, Regional Studies, International Relations, 21(3): 6–13.

- Stavitsky, V.V. 2014. On the Consistency of Criteria of the Neolithic Age for the Northern and Southern Cultures. Samara Scientific Bulletin, 3(8): 171–77.
- Yudin A.I. 2004. Varfolomeevskaya parking and Neolithic of the steppe Volga region. Saratov.

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