

## BOOK REVIEW

### ALGIRDAS GIRININKAS

Gytis Piličiauskas, *Virvelinės keramikos kultūra Lietuvoje 2800–2400 Cal Bc* [Corded Ware Culture In Lithuania In 2800–2400 Cal Bc], Lithuanian Institute Of History, Vilnius, 2018, 231 Pp.

In 2018, the publishing section of the Lithuanian Institute of History published the book by Gytis Piličiauskas *Virvelinės keramikos kultūra Lietuvoje 2800–2400 cal BC* (Corded Ware Culture in Lithuania in 2800–2400 cal BC). It has 231 pages of text, 18 chapters, and 110 illustrations, most of which are in colour.

The work is a catalogue of Corded Ware culture in Lithuania, supplemented with an analysis of corded ware stone and amber artefacts, the network of settlements, the economy and nutrition at the time under consideration. The author describes pottery based on data from 73 archaeological sites. Unfortunately, the data would have been more precise if it was collected from the Kretuonas 1C, Jara 1 and Jara 2 settlements. If the author had consulted experts on historical monuments, he would not have marked corded ware on his map at the Jara 2 archaeological site (Piličiauskas 2018, 25, Fig.1). For this reason, the interpretation of Corded Ware from other archaeological sites investigated is very subjective, especially taking into consideration the criteria for distinguishing corded ware made using the clay mass formula of Pamariu-Rzucewo culture but decorated with motifs of Corded Ware ornamentation. Without an analysis of the research material from Nida, the author dares to indicate hypothetically the number of pots belonging to Corded Ware culture at the Nida site (Piličiauskas 2018, 95), but enjoys criticising other authors, who are well acquainted with east Baltic corded ware, on the subject of the number of potsherds from different archaeological sites suggested by them.

In Piličiauskas' opinion, the carriers of Corded Ware culture acted as the driving force behind east Baltic populations turning into Indo-Europeans. He bases his opinion on the suggestions of the Central and north European scientists K. Kristiansen, M.E. Allentoft and W. Haak, and their research into the genesis and evolution

of Corded Ware culture. According to these scientists, mass migration took place in Europe in the third millennium BC, which virtually predetermined the demographic composition of modern Europe. They assume that populations of Corded Ware culture from Central Europe inherited 75%, and the modern populations of north and northeast Europe about 60%, of the genes of Kurgan culture from the north shores of the Black Sea (Malmström et al. 2009; Skoglund et al. 2012; Haak et al. 2015; Allentoft et al. 2015). It is a pity that these authors are only vaguely acquainted with the material about Corded Ware culture, and the cultural and natural environment of the east Baltic region. It is strange that Piličiauskas tends to equate the cultural situations of the Central European and east Baltic regions in 2800-2400 cal BC without a critical evaluation of these circumstances and the assumptions of the authors mentioned.

When speaking about the origins of the Indo-Europeans, the author distinguishes two groups of Lithuanian researchers. One group assumes that the Indo-Europeans originated from the East European steppes (Gimbutienė, Rimantienė, Butrimas), the other (Girininkas, Brazaitis) that the Indo-Europeans are the descendants of local post-glacial cultures (Narva, Nemunas and others). According to Piličiauskas, in the future, this division will disappear, because the latest findings of geneticists support without reservation the steppe idea (Piličiauskas 2018, 16). The author ignores the previous research data of other archaeologists, and interprets it just as he chooses. Not a single work states that representatives of Corded Ware culture originated locally (as is indicated by V. Lang, 1998, and J. Žukauskaitė, 2007). They only emphasise that in forming the Baltic region, members of other than Corded Ware culture were the main carriers of Indo-European

culture (Girininkas 2002, 2009, 2011). The author of this review builds on the research data on the material culture from the Early Bronze Age, which shows that in eastern Lithuania and northern Belarus, post-Narva and post-Nemunas cultures continued for a long time after the disappearance of Corded Ware culture. Therefore, the legacy of Corded Ware culture in the areas mentioned is fractionally appreciable. Stating that the Indo-Europeans are descendants of steppe populations in Lithuania, Piličiauskas builds on the work of European geneticists (Haak et al. 2015; Mitnik et al. 2017, etc) and genetic data collected from isolated burials of Corded Ware culture (Plinkaigalis, Gyvakarai, Spiginas), rather than data from the post-Narva burials of the Early Bronze Age. If Piličiauskas proves that the genetic component of the steppe nomads is dominant in the genetic heritage of the Early and Middle Bronze Age populations of post-Narva and post-Nemunas cultures, the author of this review will gladly shake hands with him for bringing the issue of the origins of the Baltic people to a close. But in the meantime, I take the view that autochthonous cultures were the main components of the evolving Baltic culture in Lithuania and northern Belarus; not discounting the important Finno-Ugric component. It should be pointed out that even the DNA of the individual from Spiginas grave No 2, which is dated to the beginning of the Bronze Age, is dominated by a DNA sequence characteristic of hunter-gatherers, and not of representatives of Corded Ware culture. For this reason, Piličiauskas' statement that some archaeologists (researchers supporting the idea of an autochthonous Baltic culture) have gone in the wrong direction, because mass migration took place in 2800-2400 cal BC, and Baltic culture actually emerged from Corded Ware culture, is premature. There are appreciable differences between what took place in the middle of Europe and in the east Baltic region. Drastic generalisations based on data from 73 sites and nine burials containing artefacts of Corded Ware culture (Piličiauskas 2019, 25, Fig. 1) are too incomprehensive. If mass migration took place, where, then, are the household objects of migrants related to animal breeding and agriculture (permanent settlements, animal breeding and agricultural tools)? Piličiauskas' work is inconsistent. The author himself points out that small amounts of ware in sites of Corded Ware culture are indicative of the transience of settlements and the high mobility of populations (Piličiauskas 2018, 181–183). What was the cause of the high mobility? To clear the areas of local populations through genocide (as the author implies through indirect examples, Piličiauskas 2018, 192–193) or (based on S. Rasmussen's article, Rasmussen et al. 2015) by spreading plague (as if populations of Corded Ware culture themselves were

resistant to plague), in order to turn the areas around lakes and rivers into agricultural zones? Members of Corded Ware culture populations could not do that in this forested east Baltic region, which is proven by the stock found in their settlements. Thus, we get back to the question, what was the reason for their mobility? The author does not answer this question. He merely mentions that breeding domestic animals started with Corded Ware and Globular Amphora cultures. This statement is based mainly on research material from the Šventoji settlement (Piličiauskas 2018, 186). The location of corded ware and burials indicates that the migration of Corded Ware culture populations took place within the network of rivers (Girininkas 2002, 78–81). Therefore, the author should prove how it was possible for these communities to move herds through dense forests, and to protect them from predators. Unfortunately, the author does not show the influence of these populations on the development of local cultures. Therefore, Piličiauskas should analyse the pottery, osteological material and peculiarities of food provision and nutrition of local Middle Neolithic-Bronze Age Narva and Nemunas cultures in greater detail, as he did with the material of Corded Ware and Globular Amphora cultures (Piličiauskas 2018, 184–190, section XVI). Only a comparison of this data could serve as grounds for a conclusion. He would perceive that the neolithisation process in local cultures set in in the Middle Neolithic, much earlier than under the influence of Corded Ware and Globular Amphora cultures. This is evidenced by the  $^{14}\text{C}$  date osteological material from the Middle and Late Neolithic (Girininkas, Daugnora 2015, 159, 161). The neolithisation process in the local populations, although not substantial, started before the appearance of Corded Ware and Globular Amphora cultures, and its evolution was long and inconsistent, until the end of the Bronze Age. Strange as it is, Piličiauskas overlooks or ignores this data in the work by his colleagues. Moreover, as is evident from the analysed Middle Neolithic osteological material, the neolithisation process took place at the time referred to by Piličiauskas as 'sub-Neolithic'. The term 'sub-Neolithic' used by the author is at variance with the distinguishing criteria, and based only on the periodisation of the Neolithic used in neighbouring countries. In our opinion, the term 'Neolithic' circulating in Lithuanian scientific literature is well founded. In analysing the neolithisation process, which was fully realised only in the second half of the Bronze Age, with the appearance of the early hill-forts, we can dispute its beginning (Girininkas 2012, 28-42; Girininkas, Daugnora 2015, 221–236, and others). Based on the material available from the Early Neolithic, when pottery appears, the rudiments of animal breeding and

agriculture are not observed, and flint tools are made using Mesolithic techniques, this time could be better defined as ‘sub-Mesolithic’ or Mesolithic. According to Piličiauskas’ reasoning, in terms of economic development, the end of the Neolithic should be carried forward to the end of the Bronze Age.

The author’s conclusions are based on the insights of the anthropology professor D.W. Anthony (Anthony 1986, 291–313), who believes that populations of Corded Ware culture appeared on the east Baltic shores not because of raw materials, but as a result of a demographic explosion and rising internal social and economic tensions, which were solved by new technologies and space in the forest zone suitable for nomadic animal breeding (Piličiauskas 2018, 195). These conclusions can be reasonably disproven. These abstract statements by D.W. Anthony repeated by Piličiauskas tell us nothing about the actual needs of Corded Ware populations penetrating into the forested east Baltic lands. The statement that Corded Ware populations penetrated into Lithuania looking for space suitable for animal breeding in the forested zone is debatable. In another place (Piličiauskas 2018, 193), the author indicates that ‘the east Baltic coast was more wooded (than Central and northern Europe) and sparsely populated by hunters and gatherers and small groups of animal breeders and fishermen of Globular Amphora culture, who settled in these areas before Corded Ware culture, most likely did not considerably transform the landscape.’ Thus, there remains the question why the Corded Ware population had to struggle to the forested zone, where, bearing in mind the level of technological development of those times, they would have had to put a great deal of effort into turning forest areas into pastures or fields in order to cultivate plants. If this was the truth, we would without any doubt find clear traces of Corded Ware settlements (constructions) on riverbanks and lake shores, with abundant charcoal fragments left by forest burning, and many tools used in agriculture and stock-breeding. Instead, only isolated burials and temporary camps are known, with few tools, as the author himself indicates (Piličiauskas 2018, 26–27). Therefore, we can assume that the forest zone for Corded Ware steppe and forest steppe populations served as a source of raw materials. For the procurement of raw materials, these populations moved using the convenient network of inland rivers, and along the Baltic Sea coast. It is interesting to note that neither in the continental part of Lithuania nor in the coastal zone, where, according to R. Rimantienė (Rimantienė 2005) and G. Piličiauskas (Piličiauskas 2018, 26–27), Corded Ware populations stayed for a longer time, are constructions and tools known which would support this statement. From the time of Corded Ware culture, only struc-

tures characteristic of Bay Coast/Rzucewo culture are known in the southwest part of the coastal zone, for example, in Nida (Rimantienė 1989, 15–31), Pribrežnoje (Saltsman 2004, 137, 140), Rzucewo (Zurk 1954), and other places. Yet Piličiauskas maintains that ‘Steppe nomads in a short time acclimatised and adjusted their economic activity and structures to local environmental conditions, preserving nomadic stock-breeding and mobility only in some regions, including Lithuania’ (Piličiauskas 2018, 183). The author again contradicts himself, maintaining that Corded Ware populations were not sedentary (Piličiauskas 2018, 182). He ignores the possibility that the larger number of domestic animal bones found in Corded Ware population camps (e.g. the Alksnynė 3 and 4 find spots) could show the exchange taking place between Corded Ware and Bay Coast cultures, and not that these animals were bred by populations of Corded Ware culture, as the author maintains (Piličiauskas 2018, 185). The available data about the natural conditions of these times shows that they were unfavourable on the Curonian Spit for breeding animals.

Summing up the research data, the author compares the material of Corded Ware culture from Lithuania only with material found in Latvia and Estonia. He does not undertake an analysis of the material of Corded Ware culture known from Prussia (before the Second World War, later the Kaliningrad Region) found in the middle and the second half of the 20th century (Timofeev 2003, 119–133; Zalcman 2004), or a comparison of it with material from Lithuania dating from the same time. The work also lacks a comparison with Corded Ware material from Poland and northern Belarus.

When writing about the migration of Yamnaya Culture, the author shows that he is poorly acquainted with the pottery of Upper Dnieper and Fatyanovo cultures. If he understood that Upper Dnieper and Fatyanovo cultures developed under the stronger influence of Globular Amphora culture rather than Corded Ware culture, he would not speculate on how of Yamnaya culture spread north (Piličiauskas 2018, 191).

Piličiauskas’ efforts to inventorise finds of Corded Ware culture from Lithuania, and his investigation of food remains in Corded Ware pottery, are praiseworthy. But the arrogant attitude towards the work by other Lithuanian researchers that is devoted to the investigation of Corded Ware culture does not contribute to the quality of this publication, or to a deeper insight into Corded Ware culture of the third millennium BC.

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