

**MESOLITHIC — SUB-NEOLITHIC — NEOLITHIC:  
THE PROBLEM OF DEFINING NEOLITHIZATION  
BETWEEN EAST AND WEST**

***Х. Пиецонка. Мезолит — субнеолит — неолит: проблема определения неолитизации между Востоком и Западом***

*В настоящее время в археологии каменного века Евразии существуют два совершенно различных определения понятия «неолит». В то время как в Центральной, Западной и Южной Европе переход к новому каменному веку традиционно связывается с появлением производящего хозяйства, в России и в других частях бывшего Советского Союза и на территориях, находившихся под его влиянием (от Балтийских стран до Центральной Азии), преобладает совершенно другое понимание этого термина. Здесь основным критерием перехода к неолиту считается появление глиняной посуды. Соответственно, группы охотников-собирателей, знакомые с керамическим производством, составляют большинство неолитического населения. В таких регионах, как Финляндия и Балтийские страны, которые географически расположены между этими двумя мирами, используются понятия «субнеолит», «паранеолит» и «керамический мезолит» как некие компромиссные варианты. В Эстонии в последнее время терминология совершила дрейф от «восточного» варианта к «западному». В.И. Тимофеев также обращался к этой проблеме и использовал термин «лесной» неолит. В докладе будут представлены различные определения, историческое развитие и становление терминологии, используемые в настоящее время понятия, а также предлагаемые варианты решения данной проблемы. Также будет дан обзор «неолитических» культурных составляющих, таких как керамика, оседлость, земледелие и скотоводство, в периодических схемах других континентов.*

**Introduction**

Since the 1980s, Vladimir I. Timofeev of the Institute of the History of Material Culture, AS USSR/RAS in St. Petersburg has been one of the most influential bridge-builders between eastern and western scientific circles concerning the Neolithic period, publishing crucial supra-regional overviews on the neolithization in the Eastern Baltic region and Fennoscandia which were also accessible to non-Russian speaking scientists (Timofeev, 1984; Timofeev, 1998).

One aspect that was also addressed by Timofeev concerns the fact that in Eurasian Stone Age archaeology, two fundamentally different understandings prevail as to what is meant by the term “Neolithic” (Тимофеев и др., 2004, с. 8–11): in central, western and southern Europe, the onset of the New Stone Age is seen as being demarcated by the transition from a foraging to a producing economy with agriculture and animal husbandry. In the Russian Federation and further parts of the former Soviet Union and neighbouring regions from the Baltic to Inner Asia, the main criterion for the beginning of the Neolithic period is the onset of ceramic vessel production, and therefore hunter-gatherer groups with pottery make up the majority of Neolithic groups.

Up until today, this terminological problem prevails and continues to be discussed. This short overview summarizes the current situation and sheds light on various attempts to address the terminological discrepancies. It also regards the subject against a more global background where in large regions completely different systems of archaeological periodization without any “Neolithic” exist.

### **The “western” concept**

Originally, the term “Neolithic” has been coined in 1865 by Sir John Lubbock for the period of “ground stone tools” (Lubbock, 1865). In the first half of the 20<sup>th</sup> century, the Neolithic gained increasing importance in the culture-historical narrative due to Vere Gordon Childe’s influential concept of the “Neolithic revolution” (Childe, 1936). Based on this concept, the neolithization of Europe is, in western archaeological thought, regarded as being connected to the spread of a set of Neolithic cultural traits including as the main criteria agriculture and animal husbandry, which are accompanied by a variety of other traits such as sedentism, the development of social inequalities, new crafts and technologies such as ceramic vessel production, the use of copper, ground stone tools, the emergence of monumentality, new ideological systems, etc. The connected concept of an actual “Neolithic package” of these traits is nowadays seen more critical, as various studies have shown that almost nowhere, not even in south-eastern and central Europe, the traits actually coincide (Çilingiroglu, 2005). This is in particular true for the connection of ceramic vessels and other Neolithic traits such as agriculture/animal husbandry, and sedentism (Budja, 2016; see also already Smolla, 1960, p. 45). Instead, pottery

is in some regions associated to foraging, pre-agricultural communities (i.e. Lepenski Vir) while in others it appears only millennia after the domestication of plants and animals (i.e. Levante) (Budja, 2009, p. 518).

### **The “eastern” concept**

In Soviet and Russian archaeology, the main criterion for the beginning of the Neolithic period in the Eurasian forest zone is the appearance of pottery vessels. In the introduction to her seminal edited volume on the Neolithic of northern Eurasia, Svetlana V. Oshibkina explained the background of this definition: As investigations in Northern Europe have shown, stone working techniques including grinding and drilling were known already in the Mesolithic, and certain types of drilled stone tools are characteristic for cultures of the Bronze Age. “Therefore, the only remaining indicators for the identification of sites of the Neolithic period are ceramic vessels, the emergence of which has to be regarded as the beginning of the Neolithic.” (Ошибкина, 1996, с. 6). Likewise, the term „Neolithisation“ is understood as follows: „Summing it all up, we must say that „Neolithization“ in the forest zone of Eurasia means only the spreading of earthenware, borrowed, as it is supposed, mostly from neighbouring peoples“ (Ошибкина, 2006). In addition to the main criterion of pottery, other innovations such as new lithic types, an increase in pit houses, economical changes within the foraging spectrum, and ideological changes are sometimes identified as supplementary traits connected the onset of the Neolithic (Chairkina, Kosinskaya, 2009).

### **Attempts to address the terminological problem**

Various attempts have been made over the last decades to address the terminological discrepancy that exists between the “eastern” and “western” archaeological schools in the understanding of the term “Neolithic” across Eurasia. They can be grouped into four categories:

1) *Compromise labels*: In regions such as Finland, the Baltic States and Poland which are geographically located between the two spheres of the “eastern” and the “western” definition, compromise labels such as “Sub-Neolithic” (i.e. Pesonen, Leskinen, 2009; Piličkauskas et al., 2017), “Paraneolithic” (i.e. Gumiński, 2011), “aquatic Neolithic” (Oras et al., 2017) and “ceramic Mesolithic” are often employed for pottery-producing hunter-gatherers. Vladimir I. Timofeev himself

also addressed the problem by coining the term “‘forest’ Neolithic” (Тимофеев и др., 2004, с. 8).

2) *Search for early evidence of farming*: Especially in the intermediate regions mentioned above, intense debates are on-going about possible indications of an earlier onset of farming than currently established, which would push the beginning of the (agricultural) Neolithic in the “western” sense back in time and thus reduce the time span in which terminologically ambivalent hunter-gatherers with pottery existed. In Finland, this discussion can be exemplified by publications such as Alenius et al. (2013) which argues for an early onset of farming, and the critical replies by Lahtinen, Rowley-Conwy (2013); for Lithuania, Piličkauskas et al. (2017) aim to deconstruct the “concept of Subneolithic farming”.

3) *Postulation of two Neolithic processes*: Over the last 15 years an assumption has been put forward by scholars rooted in the “eastern” school of thought that two forms of the Neolithic existed, an agricultural and a non-agricultural: „This leads us to suggest that the Neolithic as a pan-European phenomenon resulted from at least two processes, one of which involved primarily farming, and another, pottery making. The two processes had apparently different centres of origin and were not simultaneous.“ (Dolukhanov et al., 2009; see also Тимофеев и др., 2004, с. 9). This is a problematic approach because there is a danger to mistake the terminological discrepancies rooted in two different schools of thought for culture-historical facts, and to then “translate” them into archaeological narratives. An elaborated version of this understanding of the terminology was proposed by Mazurkevich and Dolbunova (2015) for Eastern Europe, describing a model of “primary” centres of Neolithization (where several parts of the “Neolithic package” including agriculture and pottery are present) and “secondary” centres further north where pottery is the only remaining aspect of the spreading Neolithic.

4) *Revision of periodization terminology*: A forth way to deal with the terminological discrepancy is to adjust the existing periodization. In Estonia, the terminology has recently been changed for the “eastern” to the “western” variant: The pre-agricultural phase of the Narva culture in which pottery was made by hunter-gatherer-fisher communities has been re-named from Early Neolithic to Late Mesolithic (Kriiska et al., forthcoming).

## **“Neolithic” cultural traits in a global perspective**

When widening the view to a global perspective, it becomes evident that early pottery and early agriculture in many parts of the world did not coincide (Fuller, Rowlands, 2011) and that cultural traits such as pottery, agriculture, animal husbandry and sedentism have almost nowhere appeared as a “Neolithic package” (Gronenborn, Scharl, 2015, figs. 1, 2). In other regions of the world, the archaeological periodization is based on other points of reference than the Three-Age-System of Stone, Bronze and Iron Age, and the concept of a “New Stone Age” is not established. In North America, for example, the pre-colonization Holocene history is divided into a Paleoindian, an Archaic and a Woodland period, with early plant domestication starting in the middle of the Archaic period and pottery appearing towards the end of it, while animal domestication set in much later and was restricted to the turkey.

### **Implications and outlook**

Altogether, what is referred to by the term „Neolithisation“ in northern Eurasia covers a variety of multi-faceted and often very gradual processes which by their very nature defy any clear-cut, simple definition. In the west, with its prevailing idea of a “Neolithic revolution” connected to the spreading of agriculture and animal husbandry (Meller, 2015), there are also regions where foraging subsistence strategies continued to play a role for a long time even in spheres regarded as already “Neolithic”, and the adoption of the new, farming way of life by local groups took many centuries. There is also growing evidence of long-term co-existence of hunter-gather communities and farming groups in closely neighbouring territories (e.g., Bollongino et al., 2013). On the other hand, pottery as a period-defining criterion is very attractive to archaeologists because of its good visibility in the archaeological record and of the fast typological changes which make it an ideal tool for tracing prehistoric developments. However, pottery is possibly over-estimated in its actual importance as an innovation within a given cultural setting. This idea has recently been contemplated by Oras et al. (2017, p. 112) for the Eastern Baltic: “Indeed, [...] there seems to be little evidence for dramatic changes in the subsistence economies or settlement patterns following the first appearance of ceramic vessels [...] and an alternative hypothesis is that pottery made

a rather 'silent' impact despite their visibility in the archaeological record. Instead of transforming prehistoric societies and economies, pottery may have merely represented a small step in container evolution fulfilling niches already occupied by perishable containers."

For the time being, there does not seem to be a simple practical solution for the definitory discrepancies concerning the term "Neolithic" between east and west. It remains therefore important to provide clear definitions of the terms used, bearing in mind the terminological inconsistencies caused by the breaks in Eurasian research history.

### References

- Ошибкина С.В. (ред.)* Неолит Северной Евразии. М., 2006.
- Ошибкина С. В.* К вопросу о неолитической революции в лесной зоне Евразии // II Северный археологический конгресс, 24–30 сентября, 2006, Ханты-Мансийск. Доклады. Екатеринбург; Ханты-Мансийск, 2006. С. 262–279.
- Тимофеев В.И., Зайцева Г.И., Долуханов П.М., Шукуров А.М.* Радиоуглеродная хронология неолита Северной Евразии. СПб., 2004.
- Alenius T, Mökkönen T, Lahelma A.* Early Farming in the Northern Boreal Zone: Reassessing the History of Land Use in Southeastern Finland through High-Resolution Pollen Analysis. *Geoarchaeology*. 2013. No. 28 (1). P. 1–24.
- Bollongino R., Nehlich O., Richards M.P., Orschiedt J., Thomas M.G., Sell C., Fajkošová Z., Powel A., Burger J.* 2000 Years of Parallel Societies in Stone Age Central Europe // *Science*. 2013. No. 342 (6157). P. 479–481.
- Budja M.* Ceramic trajectories: From figurines to vessels // *Ceramics before Farming. The dispersal of pottery among prehistoric Eurasian hunter-gatherers*. Walnut Creek, 2009. P. 499–525.
- Budja M.* Ceramics among Eurasia hunter-gatherers: 32000 years of ceramic technology use and the perception of containment // *Documenta Praehistorica*. 2016. No. XLIII. P. 61–86.
- Chairkina N.M., Kosinskaya L.L.* Early hunter-gatherer ceramics in the Urals and Western Siberia // *Ceramics before Farming. The dispersal of pottery among prehistoric Eurasian hunter-gatherers*. Walnut Creek, 2009. P. 209–235.
- Childe V.G.* Man makes himself. London, 1936. 275 p.
- Dolukhanov P. M., Mazurkevich A. M., Shukurov A. M.* Early pottery makers in Eastern Europe: Centres of origin, subsistence and dispersal // *Ceramics before Farming. The dispersal of pottery among prehistoric Eurasian hunter-gatherers*. Walnut Creek, 2009. P. 237–253.

*Çilingiroglu Ç.* The concept of “Neolithic package” considering its meaning and applicability // *Documenta Praehistorica*. 2005. No. XXXII. P. 1–13.

*Fuller D. Q., Rowlands M.* Ingestion and Food Technologies: Maintaining Differences over the long-term in West, South and East Asia // *Wilkinson T.C. et al. Interweaving worlds: systemic interactions in Eurasia, 7th to 1st millennium BC*. Oxford; Oakville, 2011. P. 37–60.

*Gronenborn D., Scharl, S.* Das Neolithikum als globales Phänomen // *Revolution Jungsteinzeit*. Exhibition catalogue “Revolution Jungsteinzeit”. Darmstadt, 2015. P. 58–71.

*Gumiński W.* A New Exceptional Dwelling Site of the Para-Neolithic Zedmar Culture in the Eastern Foreland of Szczepanki Island (Sector “A”), the Masurian Lake District, NE Poland // *Światowit*. 2011. Vol. 9. P. 87–144.

*Kriiska, A. Oras, E., Lõugas, L., Meadows, J., Lucquin, A., Craig O.E.* Late Mesolithic Narva stage on the territory of Estonia: pottery, settlement types and chronology // *Estonian Journal of Archaeology*. Forthcoming.

*Lahtinen M., Rowley-Conwy P.* Early Farming in Finland: Was there Cultivation before the Iron Age (500 BC)? // *European Journal of Archaeology*. 2013. No. 16 (4). P. 660–684.

*Lubbock, J.* Pre-historic times, as illustrated by ancient remains, and the manners and customs of modern savages. New York, 1865.

*Mazurkevich A., Dolbunova E.* The oldest pottery in hunter-gatherer communities and models of Neolithisation of Eastern Europe // *Documenta Praehistorica*. 2015. No. XLII. P. 13–66.

*Meller H.* Vom Jäger zum Bauern — Der Sieg des Neolithikums. Der unumkehrbare Auszug des Menschen aus dem Paradies // *Revolution Jungsteinzeit*. Exhibition catalogue “Revolution Jungsteinzeit”. Darmstadt, 2015. P. 20–28.

*Oras E., Lucquin A., Lõugas L., Tõrv M., Kriiska A., Craig O.E.* The adoption of pottery by north-east European hunter-gatherers: Evidence from lipid residue analysis // *Journal of Archaeological Science*. 2017. No. 78. P. 112–119.

*Pesonen P., Leskinen S.* Pottery of the Stone Age hunter-gatherers in Finland // *Ceramics before Farming. The dispersal of pottery among prehistoric Eurasian hunter-gatherers*. Walnut Creek, 2009. P. 299–318.

*Piličiauskas G., Kisielienė D., Piličiauskienė G.* Deconstructing the concept of Subneolithic farming in the southeastern Baltic // *Vegetation History and Archaeobotany*. 2017. No. 26 (2). P. 183–193.

*Smolla G.* Neolithische Kulturerscheinungen. Studien zur Frage ihrer Herausbildungen. *Antiquitas Reihe 2, 3*. Bonn, 1960. 180 s.

*Timofeev V.I.* On the Early Neolithic links between the East-Baltic Area and Fenno-Scandia // *Iskos*. 1984. No. 4. P. 36–41.

*Timofeev V.I.* The Beginning of the Neolithic in the Eastern Baltic // *Harvesting the Sea, Farming the Forest. The Emergence of Neolithic Societies in the Baltic Region*. Sheffield, 1998. P. 225–236.