## REVIEWS

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## MAKING SENSE OF THE EARLIEST CERAMICS IN NORTH-EASTERN EUROPE

## Valdis Bērziņš

Valdis Bērziņš, Institute of Latvian History at the University of Latvia, 4 Kalpaka bulvāris St., Rīga LV-1050, Latvia; valdis-b@latnet.lv

Henny Piezonka. Jäger, Fischer, Töpfer. Wildbeutergruppen mit früher Keramik in Nordosteuropa im 6. und 5. Jahrtausend v. Chr. (Archäologie in Eurasien, Band 30.) Habelt-Verlag, Bonn, 2015. 437 pp. ISBN 9783774939325

The work by Henny Piezonka, the title of which might be translated as *Hunters, Fishers and Pots. Food Procuring Groups with Early Pottery in North-Eastern Europe in the 6th and 5th Millennium BC*, is a major event in the context of the current research on the spread of ceramic technology across Eurasia. Bringing together a very rich body of material, much of it previously published only in Russian, the work offers a great boost to German-reading prehistorians dealing with this region; there are summaries in Russian and English, in addition to which the Anglophone research community may refer to the concise account given in Piezonka (2012).

The study region covers the territory east and north of the Baltic Sea, namely present-day Finland, Estonia, Latvia and Lithuania, along with north-western Russia, northern Belarus, northeastern Poland and the far northerly regions of Sweden and Norway. To place the region in a broader context, brief but very useful treatments of early ceramic cultures in neighbouring regions of eastern and northern Europe are also provided. As indicated in the title, the work deals mainly with the 6th and 5th millennia BC, which saw the advent of pottery in this territory.

Following an introductory treatment of the region's natural setting, we have a description of the material from 17 selected sites in Finland, Estonia, Russia and Lithuania that the author herself has examined, focussing on pottery, but also covering lithics and other finds. The data from the ceramic assemblages (535 vessels in total) are subject to a comprehensive statistical analysis.

In the next chapter the theme is considered at a more general level. A brief discussion of the Mesolithic (i.e. aceramic) cultures in the region is followed by a general treatment of pottery and other material of the various early ceramic cultures in the region, based on published accounts and some unpublished work, along with the author's findings from her own examination of material, as described in the previous chapter. For a wider context, the author also gives concise treatments of the earlier and contemporaneous cultures of the neighbouring regions, closing with

brief summaries that characterize hunter-gatherer pottery in other parts of the world – the Jōmon ceramics of Japan and the Laurel Tradition in the Woodland pottery of North America.

Reassessment of previous studies, supplemented with the findings of her own work, leads the author to distinguish three strands of development of early pottery in north-eastern Europe, cross-linked by mutual influences:

- a tradition of Sparsely Decorated Ceramics, spreading westwards from the middle Volga area in the late 7th millennium BC and providing the basis for the Volga-Oka Complex, Narva Ware and the Chernobor Culture;
- a Southern Tradition, originating from the Dnieper-Donets Complex, that includes the Dubičiai Ware of the Pripet-Nemunas region, and also influenced the further development of Narva Ware, the Rudnja and Valdai groups, in addition to which it spread westwards along the south coast of the Baltic (Ertebølle and related groups);
- a Comb Ceramic tradition, probably originating in the Volga-Kama region, whence it spread northwards and westwards in the first half of the 6th millennium BC.

And how does this depart from previous schemes? In the author's own words (p. 253, reviewer's translation): "Whereas older scenarios saw the Dnieper-Donets Complex as the more or less exclusive point of origin for pottery development, from which various strands of development spread out into the East Baltic as well as north-western Russia and Fennoscandia, now the significance of the Middle Volga and Volga-Kama region can be underlined as a starting point of early ceramic traditions. Significant among other findings is the conclusion that the early Narva Ware evidently derives not from the south-east, from the Dnieper-Donets area, but from the complex of early sparsely-decorated wares to the east. The idea often expressed that the origin of the north-western early Comb Ceramic groups is to be sought in the Upper Volga area can be substantiated. As to the origin of Säräisniemi 1 pottery, a relationship to the 'Northern Type' of the Upper Volga and Suchona regions is demonstrated, and it is seen as probably having emerged under the influence of the Dvina-Pečora and Kama areas, further to the east."

Significantly, the author's own studies of the material have focussed mainly on the northern part of the study region and the East Baltic, which means that in tracing her first and second traditions she must rely primarily on published sources. And the publications of previous research have proved inadequate for resolving certain questions: thus, she suspects close equivalence between the Narva Ware of the East Baltic and the Rudnja ceramics in the adjacent territory of Russia and Belarus, but cannot confirm this; for the same reason, the relationship between Narva Ware and the Valdai Culture remains nebulous. There is plenty of scope here for additional comparative study by the author and other researchers.

Appended to the work is a detailed, vessel-by-vessel catalogue of the pottery studied by the author, illustrated by 107 colour plates (it has to be said that the format of the textual data makes it very difficult to use – a big table might have been more appropriate). There is also a catalogue of 939 (!) sites with early pottery in the study region, giving brief information about research history, date, cultural affiliation and relevant publications, and a list of these same sites according to cultural affiliation; finally, a list of selected radiocarbon dates for early ceramic sites is provided.

The high quality of the illustrations should be noted. This is particularly significant because the information value of many earlier publications of material from the region was undermined by the poor standard of Soviet printing technology.

The author introduces her work as the first detailed, modern study of its kind presenting the pottery of the region. Detailed and systematic it is indeed. But modern? In my opinion, both yes and no.

Piezonka has done what is critical for furthering ceramic studies, and absolutely essential in a broad, comparative study of this kind, spanning a number of cultural entities – namely, she has undertaken consistent, standardized recording of the attributes of ceramics, attributes that – equally

important – have been carefully defined and illustrated. To my mind, this is crucial: the corpus of ceramics from the region is too vast for any one researcher to examine it all in sufficient detail. Hence, if a general picture is to emerge from studies of individual sites or particular areas, the only way forward is clear definition of descriptive attributes and consistent recording of these attributes, followed by comprehensive publication of the data obtained, thus enabling researchers to confidently build upon each other's empirical studies, rather than having to make inferences based on vague descriptions and illustrations of inadequate quality.

As regards particular recorded attributes of the ceramics, it is commendable that this study gives detailed attention to different kinds of surface finish – especially to various kinds of corrugated surface finishes that are so often encountered on the early pottery, namely "brushed" (e.g. with grass), "scraped" (with a toothed instrument) and "striated with a hard instrument". In previous studies (including my own) these have all too often been lumped together, causing a significant loss of information value.

A great variety of impressed decorations is, of course, difficult to adequately record and classify. Very useful in this regard is the basic distinction made in this work between impressions from stamps representing natural shapes and artificially crafted stamps. Also very importantly, the author has provided photographs exemplifying the various kinds of decorative elements she distinguishes.

When we come to the higher levels of decoration analysis, namely motifs and compositions, Piezonka has encountered the general, and perhaps insoluble, problem of subjectivity in distinguishing between these different structural levels of decoration. Thus, for example, three parallel, horizontal rows of dots: is this motif M1.6 or composition K1? It seems the decision to assign it to one or the other must be quite arbitrary. In my view, such problematic examples call into question the usefulness of the established element<motif<composition concept in pottery studies, especially when we are dealing with fragmented material rather than whole vessels (and we may question the value of the statistical results obtained from this data).

We may note that the ceramic study is restricted to macroscopic examination, which precludes detailed characterization of vessel fabric. Petrographic studies, elemental analysis – these are beyond the scope of the current work.

Piezonka belongs to the growing band of archaeologists championing the multivariate statistical method of correspondence analysis (CA). I myself share this enthusiasm for CA – not as a wondertool offering clear answers (being a descriptive statistical method, it cannot "prove" anything) but as an aid for identifying relationships and patterns in datasets with a large number of recorded attributes. It is indeed an appropriate method for analysing the voluminous data that the author has collected in her pottery studies, and the emerging patterns contribute significantly to her conclusions. We can note that Piezonka restricts her use of CA to a vessel-by-vessel approach (i.e. each point on the graph is one vessel). This precludes her from applying CA to analysing the decoration, because each vessel most commonly exhibits only a small number of decoration attributes. The problem could probably have been resolved by also applying CA on an assemblageby-assemblage basis (using the abundance of the decoration attributes for the different sites, where each point of the graph would be an assemblage; see Shennan 1997, Chapter 13), potentially yielding important additional information regarding the co-variation in abundance of different decorative elements. Rather vexing is the absence of the diagnostics generally provided with CA plots, namely the percentage of the total inertia accounted for by each axis and the contribution of the individual variables to the total inertia. This is really important information, without which any interpretation of CA results is problematic.

An aspect of Piezonka's approach I find most perplexing is the total absence of any consideration of ceramics as technology, i.e. of "pots as tools". This evidently has to do with the nature of the German and Russian archaeological traditions, in the conceptual frame of which the

author is working – a frame in which a detailed empirical study may happily be applied to chronotypological questions, without any reflection at all on *why* the pottery is such as it is. This is particularly baffling if we consider that, especially within the Nordic tradition, researchers have indeed sought technological and other interpretations for particular traits of Neolithic ceramics (e.g. Hulthén 1977; 1985), and have considered what functional role(s) the pottery served and how function relates to the characteristics of the ceramic containers (e.g. Edgren 1982; Koch 1987; Nuñez 1990).

In examining the pottery, Piezonka has indeed recorded the presence of food crusts as an indicator of function, although without drawing general conclusions from these results. And at the very close of her work, in addressing the question of why pointed-based, wide-mouthed vessels with exterior surfaces roughened by impressed decoration or other surface treatment are known among food procuring groups in different parts of the globe, she points to the necessity of studying the functional significance of the characteristics of these ceramics. I must add that there is indeed a tradition of functional interpretation of hunter-gatherer pottery, going back to the pioneering work of Linton (1944) and the seminal paper by Braun (1983). Should a functional-technological approach also be applied to the range of ceramic wares studied in this paper, we could expect explanatory insights going beyond descriptive chrono-typological schemes, beginning to uncover the factors *behind* the different traits exhibited by the pottery.

But these critical remarks are in no way intended to belittle the author's achievement. Even if some of us might regard it as unsatisfying in explanatory terms, Piezonka's approach does appear to achieve what she has sought to do: namely, to trace the initial diffusion of ceramics across this immense region. She has truly managed to elicit a general scheme of development from the great number of cultural entities distinguished by previous researchers – no mean feat in this case, requiring comparison across the boundaries of national research traditions.

Even more important in my view: because she carefully defines the attributes of the ceramics she studies, and records these attributes consistently and systematically, other researchers have the possibility of utilizing her results and building upon her work. In this regard, whether or not her conclusions stand the test of time, her work will undoubtedly serve to underpin and stimulate continued studies on the early ceramic cultures of this vast region.

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