Breaking Pots? Late Neolithic Rituals Among Paraneolithic Hunter-Gatherers in North-Eastern Poland

Aleksandra Cetwińska

During the Late Neolithic, north-eastern Poland was inhabited by paraneolithic hunter-gatherers from the Neman cultural sphere who were occasionally visited by agrarian and pastoral groups. Despite the apparent exchanges, only a few sites are known from this area. In recent years, however, more data has appeared, part of which encompasses reoccurring relics of a ritual nature. In particular, these were associated with the use and damage of pottery. This article signals new interpretational possibilities related to breaking pots as an element of symbolic life. This article presents new avenues of interpretation related to the breaking of pots as an element of symbolic life.

Introduction

The area of north-eastern Poland, which includes the territory of northern Podlasie. Masuria, northern Mazovia, and the southeastern shores of the Baltic Sea, is one of the least known archaeological regions of Central Europe for the Late Neolithic and the Early Bronze Age periods (ca. 2500 - 1750 BCE). Aside from a few site monographs, excavation reports, and issue articles, only a limited number of general studies have been compiled¹. Although more serious syntheses have begun to be produced², they mainly focus on the presentation of newly discovered records and on the reanalysis of records already known thanks to earlier studies. Unfortunately, these wider interpretative publications lack discussions, especially in regard to the topic of spirituality and rituals. Despite the fact that, in many cases, sandy soils and disturbed stratigraphic contexts make it difficult to reach definite interpretations of the archaeological evidence, and the fact that the several decades of outdated documentation challenge our ability to properly contextualize this evidence, there exist four particularly interesting sites presenting unique discoveries related to the symbolic sphere of prehistoric life in which pottery played a prominent role. These are sites no. 3 and no. 6 in Suprasl (northern Podlasie), site X in Zabie, and site II in Szestno (Masuria) (Fig.1). These sites were associated with the ritual and sepulchral activities of various Late Neolithic and Early Bronze Age communities, including the indigenous groups of the Neman cultural sphere and the exogenous societies of the Globular Amphora Culture and Corded Ware Culture. The latter groups were both characterized by a subsistence economy based on pastoralism, as well as by their links to the chalcolithic Bell Beaker phenomenon³. At these sites, relics of activities that can be considered ceremonial or sepulchral have been discovered. These finds were accompanied by significant quantities of pottery fragments coming from features and cultural layers.

Analyses carried out recently on these artifacts have shown that they are highly fragmented and represent specific vessels, with most of them having been identified from

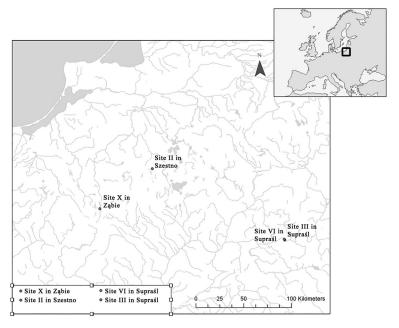


Figure 1: Location of sites related to ritual activities of Neman cultural sphere communities.

single sherds⁴. Rim and body pieces were dominant, and a significant lack of bottoms was also noted. In some cases, the pottery was accompanied by other unusual objects. All these factors indicate the presence of a structural deposition that may have been associated with supra-utilitarian behavior. The concept of "structured deposition" has been prevalent in archaeological interpretation since the early 1980s. A key work in this area was the analysis of records from Late Neolithic Durrington Walls, UK, where Richards and Thomas recorded a set of behaviors associated with the selection. spread, and occurrence of uncommon artifacts within henges⁵. The concept they defined soon spread, and its application, with its fair share of praise and criticism⁶, remains useful to this day. Fundamental to this approach is argument that "because ritual activities involve highly formalised, repetitive behaviour, we would expect any [associated] depositional patterns observed in the archaeological record to retain a high level of structure". Due to the presence of relics of atypical behavior at sites in northeastern Poland, it is also worth considering the depositional structures occurring there. Since the contexts of the finds was related to the sepulchral and ritual sphere, the vessel fragments discovered there may be related to spiritual behaviors as well. Their presence could be the result of feasts⁸ and the related deliberate breaking of containers. The custom of fragmentation was common throughout the world⁹, for this reason its popularity makes it necessary to consider the presence of similar symbolic acts in the past. This article is an attempt to integrate data from the four sites mentioned above and to interpret them in the spirit of post-processual archaeology¹⁰. The pottery records have already been studied before¹¹, however, the behaviors underpinning their deposition were not investigated. Therefore, although the task is facilitated from the viewpoint of cultural affiliation, it remains a difficult one from an interpretative perspective.

Archaeological Background

The subject of the present study are the entanglements between pottery materials recovered during the excavation of four almost completely excavated sites from north-eastern Poland, and their eventual contextual properties that may be attributed to some supra-utilitarian activities.

Site no. 3 in Supraśl

This is a multicultural site located on a sandy elevation within the territory of northern Podlasie, in the Knyszyn Primeval Forest region. At the peak of this elevation, four sets of artifact assemblages associated with the Bell Beaker phenomenon, definitely foreign in this part of Central Europe, were discovered¹². The clusters of archaeological materials were characterized by the repetitiveness of the deposited objects, both in terms of their forms, and their manufacturing processes (i.e. raw material). The assemblages contained fragments of decorated pottery (48 fragments), including s-shaped beakers, bowls with rounded walls, and storage containers, flint tools (with a large group of arrowheads), stone tools (blades, axes, arrow-shaft straighteners), amber ornaments, and a small amount of burnt human and animal remains. The application of radiocarbon dating was unsuccessful13, however, according to typological analyses the complex may be dated to the middle of the 3rd millennium BCE.

Site no. 6 in Supraśl

This is a multicultural site located a short distance away from site no. 3 in Supraśl, on the floodplain of the Supraśl river¹⁴. During its excavation, two separate zones - a settlement and ritual one, consisting of a hut, a broken vessel, and a feature located next to them, were recorded. The latter was composed of a hearth in which a pouch was placed. The pouch contained a number of ecofacts and artifacts, including five

small fragments of differently decorated pottery vessels. The radiocarbon dating was unsuccessful¹⁵ though the characteristic shape of the broken vessel found in front of the entrance to the shelter-like structure can be dated to the second half of the 3rd millennium, to the beginning of the 2nd millennium BCE¹⁶.

Site X in Zabie

This is a multicultural site located on the former island of Lake Łańskie, in Masuria¹⁷. As a result of the research carried out on the entire island, relics of a social and economic nature from the Neolithic and Bronze Age (partly destroyed by later activities from the early Iron Age) were recorded. This site began by the founding of a small Late Neolithic cemetery in the highest, central part of the then available area. The most numerous artifacts, however, came from the cultural layer, which, due to the later settlements, was fragmentary and was only preserved in small cavities. Favorable soil conditions allowed for the preservation of the remains of seven individuals. Only one of them was equipped with a vessel an s-shaped beaker decorated with corded imprints. However, across the whole site a large number of pottery fragments were registered, of which about 350 came from vessels produced by syncretic communities, showing the cultural components of the local version of the Neman cultural sphere and allochthonous groups of Globular Amphora Culture, Corded Ware Culture, and Bell Beakers. According to ¹⁴C dates, the period of activity at the sites is placed between 2890 and 1880 cal. BCE18.

Site II in Szestno

This is a multicultural site located on a small island on Lake Salet about 60 km from Lake Lańskie and site X in Ząbie¹⁹. As a result of archaeological research, ecofacts and artifacts from the Late Neolithic period to the present day have been recorded. Due to Iron Age disturbances, the earliest stratigraphic

structures at the site were destroyed. Nevertheless, a stratigraphic analysis shows several concentrations of artifacts dating back to the turn of the Neolithic and Bronze Age. Among them, the most numerous were fragments of vessels (about 200) associated with local communities of the Neman cultural sphere and allochthonous groups of Globular Amphora Culture, Corded Ware Culture, and Bell Beakers. The radiocarbon dating of the site was unsuccessful²⁰. According to typological analyses, the complex may be dated to the middle of the 3rd millennium BCE and the beginning of the 2nd millennium BCE.

Results

The pottery materials here presented are related to the local ceramic traditions known as the Neman culture and exogenous ones described as the Globular Amphora Culture, the Corded Ware Culture and the Bell Beaker phenomenon. The most numerous, however, are syncretic materials that combine the techno-stylistic and morphological components of all these, which is defined in the literature as traditions of the Linin and Ząbie-Szestno type²¹. Among them, the highest level of syncretism was visible in vessels' decorations.

The discovered pottery came from both closed contexts (i.e., features — pits, including those of unknown and ritual character, as well as burials), and open contexts (cultural layers). Apart from burials, in all analyzed cases, fragments of richly decorated but strongly fragmented and disassembled ceramics were joined by numerous artifacts, which included: flint tools (site no. 3 and no. 6 in Suprasl, site X in Zabie and site II in Szestno), stone tools (site no. 3 in Supraśl; site X in Ząbie), bone tools (site X in Zabie), and amber ornaments (site no. 3 and no. 6 in Suprass 3). Sometimes, in favorable environmental conditions, numerous ecofacts were preserved, including post-consumption animal remains (site X in Zabie), human remains (site X in

Ząbie), burnt human remains (site no. 3 in Supraśl), and burnt animal remains (site no. 3 and no. 6 in Supraśl).

The contexts of such finds were not strictly related to settlement or economic expressions, but rather had clear connotations of symbolic behaviors, including the feature from site no. 3 in Supraśl, which contained sets of the so-called Bell Beaker cultural package items, including pottery, flint, stone, and amber objects in various state of preservation (rather arising from the intentional behavior); the ritual and residential zone of site no. 6 in Supraśl, which consists of 1) a feature compound of different objects made of different raw materials and again preserved to a different extent (also rather related to the specific act) and 2) a broken vessel of syncretic character (Bell Beaker and Neman culture components); the sepulchral zone of site X in Zabie along with a large number of features, which contained numerous postconsumption animal remains, fragments of pottery, and accompanying flint tools. This situation, however, is not so clear in the case of the somewhat "loose" finds from site II in

Szestno. It does not have a clearly defined ritual sphere, as well as identified features dating back to the turn of the Neolithic and Bronze Age. The reason for this is probably the activity of the later Iron Age communities that completely disturbed the stratigraphy of the site. Nevertheless, there were clear concentrations of pottery and flint artifacts on the island. There is similar uncertainty in the case of the cemetery from site X in Ząbie. There was only one vessel with cultural features of Corded Ware pottery, which does not correspond directly to other materials discovered both in the cultural layer and further features.

At all the above-mentioned sites, fragments of pottery from individual vessels were identified. This is best emphasized in the case of closed contexts, i.e., features from sites no. 3 and no. 6 in Supraśl and features from site X in Ząbie. In the first two cases, the discovered fragments seem to have been selected and deposited in symbolically engaged deposits²². In the case of features from Ząbie, the presence of specific fragments of vessels is more random. Nevertheless, it seems to be an effect of a



Figure 2: The exemplary set of vessels (coming from deposits discovered at site no. 3 in Supraśl), which are also registered within contexts of other discussed sites from northeastern Poland (Reconstruction 3d made by Mateusz Osiadacz).

planned activity connected with digging out shallow pits, which were then filled with artifacts and ecofacts. A similar situation is outlined in the records from site II in Szestno, but the lack of outlines of features visible in the excavation documentation makes definitive conclusions difficult.

Moreover, only fragments of decorated vessels were present at the analyzed sites. In most cases, whole vessels are represented by single pieces of pottery. Usually, they constitute a part of the rim. Interestingly, in this collection including 600 fragments of pottery, only a few bottoms were recorded. Thus, it is clear that the great majority of analyzed vessels were incomplete. Only smaller vessels are represented by a single piece. A slightly larger number of fragments were registered in the case of a few bigger containers. However, they were so incomplete that in many cases it was not possible to reconstruct the whole vessel. This incompleteness of the assemblage seems to be no accident. Since the four sites have been almost entirely excavated, the lack of additional fragments cannot be the result of incomplete research. Though taphonomic factors remain to be considered, the compact character of the features in the case of both sites in Suprasl and the clear boundaries and material richness of the features from site X in Zabie seem to contradict that erosion had a significant impact on the state of artifact preservation. However, it could have been more significant in the case of site II in Szestno, where not only the outline of the features had not been preserved, but also the cultural layer itself has been greatly affected by later prehistoric and modern activity. Nevertheless, even there, some homogeneous concentrations of artifacts from the Neolithic and Bronze Age were visible.

The largest part of the collection consists of fragments from small vessels in the type of S-shaped beakers and bowls, as well as cups and bowls with rounded walls. An exemplary set of this type of vessels may be taken from four ritual features from site no.

3 in Supraśl (Fig. 2). Although other sites are characterized by a much larger number of pottery finds, analogous types of vessels and similar proportions, both in size and number, can be seen. This indicates the deliberate selection of vessel designs and types to be included in the deposits.

Discussion

Each object has its own unique biography, from idea to execution, to the manufacturing process, use, and finally removal of the artifact from everyday life²³, and prehistoric pottery from the sites in Supraśl, Zabie, and Szestno should also be treated from this perspective. Fragments of vessels discovered in this area have individual characteristics related to the people who created and used them. Forms and ornamentation refer to several different archaeological units whose communities have been syncretized under the influence of cultural transmission. It seems that their creation and use also had an overriding social role, which may be observed through the entanglements between pottery discovered at the abovementioned sites and their depositional context that may be attributed to some supra-utilitarian activities.

First of all, the ceramic assemblages are different from what is known from the area of the Central and Eastern European borderland in the Late Neolithic. Most likely, this difference is due to the fact that external influences introduced new forms and techniques of vessels manufacture to the area of north-eastern Poland and beyond. This, however, might have had serious consequences regarding pottery use as well. Earlier, large, sharply profiled vessels with pointed bottoms were known in the area. Richly ornamented vessels with different volumes and flat bottoms started to dominate the archaeological record of the Late Neolithic. In this group, eating and drinking pots, like beakers and bowls definitely prevail. The lipid studies carried out in recent years provide interesting data

in this regard. The analysis of the oldest Neman pottery (5th millennium BCE), conducted as a part of a bigger Neolithic transition project, revealed very few aquatic derived lipids (compared to other huntergatherer Ertebølle and Narva pottery), while predominant $\delta 13C$ values of the fatty acids matched those of non-ruminant animals, including wild boar, brown bear, and even pig²⁴. This may imply a culinary use of the vessels with an emphasis on food processing. Slightly different results are provided by analyses of single ceramic fragments from sites in north-eastern Poland, carried out not so much on the oldest, but on richly decorated fragments of "classical" Neman pottery (4th/3rd millennium BCE)²⁵. Analyses of containers from two sites: Grady- Woniecko and the one discussed in the text, Suprasil 6, showed the occurrence morphine derivatives accompanied mainly by acids from plants and seeds. The presence of substances with narcotic properties may indicate a non-utilitarian use of the vessels, e.g. spirituality, but also medicine. The scarcity of data, however, does not allow a closer answer in terms of vessel use; they certainly had a wide range of applications, which contrasts somewhat with the results of lipid studies related to vessel forms that appear in this area in the Late Neolithic. While such analyses are only being performed for the area covered by the present discussion, data on this issue comes from research carried on analogous vessels in the Iberian Peninsula. The results of these analyses not only indicate the use of Bell Beaker vessels for the consumption of alcoholic beverages, but also their use as the main objects during rituals²⁶. This may therefore mean that the appearance of this type of vessel in north-eastern Poland may be associated with accompanying novel social behavior. Nevertheless, the amount of data is too small to undertake such a daring discussion. This leaves us the contextual analysis of the ceramic finds, which, thanks to application of the "structured deposition" approach, reveals their symbolic meaning.

Second of all, the pottery materials presented demonstrate unusual diversity. Indeed, they are related to various ceramic traditions, from the very local one known as the Neman culture, through the exogenous ones associated with the Globular Amphora Culture, the Corded Ware Culture, and the Bell Beaker phenomenon, all the way to other local but syncretic traditions defined as the Linin and Zabie-Szestno types. This makes ceramics not only a carrier of cultural information and a marker of identity, but also a likely active medium of cultural transmission.

Third of all, the use of pottery showed variations. Pot sherds were discovered in different contexts, including well preserved features, pits, burials and cultural layers. The most interesting ones are the fragments coming from features which, in the case of the Suprasil sites, were accompanied by sets of unusual objects made of different raw materials and having different states of preservation. The artefacts from site X in Zabie are also quite distinctive in terms of their characteristics. They included richly decorated fragments of pottery, which were accompanied by post-consumption animal remains and flint tools. Only single fragments of pottery were discovered at all the sites, and these were predominantly rims and bodies. Although later prehistoric activity was recorded at the sites, the absence of other vessel parts, especially bottoms, cannot simply be explained by the destruction of the cultural layer and features, especially in the case of the Supraśl sites, where undisturbed in-situ features containing a large amount of pottery were discovered. The recorded fragments seemed to be purposefully selected and deposited in symbolically engaged deposits. On the other hand, a different situation was observed at site in Zabie, where the presence of specific fragments was more random. Nevertheless, this seemed to be the effect of a planned activity connected with digging out shallow pits, which were then filled with chosen materials. A similar situation was outlined at

site II in Szestno. Unfortunately, the degree of preservation of the features' outlines limits our interpretations.

Last but not least, both the primary and secondary function of the vessels was extremely important, as only fragments belonging to specific vessel forms came from all the presented sites. The largest number of them came from small vessels of the S-shaped beaker and bowl types, as well as cups and bowls with rounded walls. This presents a set of vessels that, in the Iberian Peninsula, would be treated as ceremonial rather than utilitarian. What is most interesting is that this set, with the exception of one site (no. 6 in Suprast), is repeated in all contexts. This may indicate the widespread use of these particular vessels.

However, leaving aside the emergence of new exogenous behaviors, which, in the absence of more complete data including radiocarbon dating or lipid analysis, cannot be subject to further discussion, our attention should be drawn to the expediency of the deposits' composition. This is particularly evident in the case of the relics from the Supraśl sites, but elements of similar behavior are also visible in Zabie. In all these cases, a specific structure of proceeding can be discerned, which involves the selection of appropriate materials in terms of quantity or even more important the quality (e.g. raw material, shape, decoration, degree of preservation) and their deposition. One of the most significant elements of this procedure was the use of pottery. However, it is not known for what purpose.

One possible explanation here may be the use of vessels in feasting rituals similar to the ones recorded on the Iberian Peninsula²⁶. Comparable plenary behaviors are known from the environment of Late Neolithic communities across Europe and later times. They served in reinforcing social relations and strengthening collective memory²⁷, as well as empowering group, symbols, or traditions²⁸. Therefore, there is

no objection to such meetings taking place in the Late Neolithic environment of the Neman communities, especially when one considers the impact that Bell Beakers had on the final transformation of paraneolithic hunter-gatherers into Early Bronze Age Trzciniec communities²⁹. Perhaps it was precisely such rituals of eating together that became one of the catalysts of change that took place in this area at the turn of the 3rd and 2nd millennium BCE. New social behaviors may have led to changes in the development of social personality, which ultimately resulted in the emergence of a completely new cultural groups. The key to understanding this transformation may be the proper recognition of ritual motives and the course of these activities. The latter seems to be related to the fragmentation of vessels. As well as the sequence of the ritual itself, which was associated with the use of pots, the latter's exclusion from the cultural life cycle might also have been symbolic in nature. The breaking of vessels is a widespread behavior in cultures all over the world and occurred in different periods. from the Paleolithic to modernity³⁰. They can have different connotations, but are primarily linked to so-called conspicuous consumption³¹, which consisted of spending wealth to display social or economic power. This was related to a phenomenon described by J. Chapman as "the pleasure of fragmentation"32. In simple terms, this means the incredible spiritual satisfaction achieved when destroying objects. One consequence of this behavior may have been the collection of mementos of the event - picking them up, selecting them from clusters, or hiding them within special deposits. The fragments received during the fragmentation event might have constituted both a physical bond and an enchainment between the "magic" of an event/ritual and its participants³³. According to a "synecdoche" approach, one fragment could have been not only a souvenir of the experience, but the experience itself³⁴ - implied is the belief that a part of something represents the whole, or that the whole may be used

to represent a part³⁵. Such behavior would therefore constitute the highest expression of the individual's connection with an object which, according to post-processual archaeology, is not only a material thing but an expression of social and cultural identity — an inseparable part of personhood³⁶. But not only could having fragments of the same object be an element strengthening group ties and collective memory - it could also refer to a common tradition or perspective. All of these behaviors may have occurred on the sites described. They resulted in the objects discovered, which according to postprocessual theory, are active participants of people's lives, and their fate is intertwined with the life of the communities that produce them³⁷.

Conclusions

From the perspective of Neolithic and Early Bronze Age research, the area of northeastern Poland appears as a terra incognita. Nevertheless, recent studies have shown that this region is crucial for understanding the process of Neolithization of continental Europe. However, there is still insufficient data in this regard, not only in terms of new discoveries, but also of old materials, which in many cases when reanalyzed can provide a new spectrum of information as with the sites presented here. The application of postprocessual concepts revealed the presence of structured behavior related to the deposition of objects at sites no. 3 and no. 6 in Suprasl, X in Zabie and possibly also II in Szestno. This is particularly evident in the case of sites no. 3 and no. 6 in Suprasl, where sets of unusual items were found deposited inside five features. Despite their unique character, these assemblages also had different states of preservation likely related to their intentional fragmentation. Although the symbolic meaning of these relics is unclear, they may have been associated with group reliving events through commensality rituals and feasts. Their purpose could have been to integrate the community and cultivate group memory. Although discussions in this regard

may be considered rather daring, the data suggest that it may have been new behaviors previously unknown in region of the Neman cultural sphere that influenced the social transformations of the Late Neolithic period.

Endnotes:

- 1 For instance, Okulicz 1973.
- 2 For instance, Stankiewicz and Wawrusiewicz 2011; Wawrusiewicz et al. 2015; Wawrusiewicz et al. 2017.
- 3 See Manasterski 2009; 2016; Wawrusiewicz et al. 2015; Manasterski et al. 2020a,b.
- 4 Manasterski 2009; Wawrusiewicz et al. 2015; Manasterski et al. 2020.
- 5 Richards and Thomas 1984.
- 6 Including from Hodder 2007, 201; Brudenell and Cooper 2008; Garrow 2012.
- 7 Richards and Thomas 1984, 191.
- 8 Sherratt 1987; Dietler 1990, 1996; Garrido-Pena 1997; Guerra-Doce 2006; Garrido-Pena et al. 2011.
- 9 For instance Chapman 2000a,b; Chapman and Gaydarska 2007; Larsson 2009.
- 10 For instance, Hodder 1982, 2012; Kopytoff 1986; Renfrew 1994.
- 11 For instance Manasterski 2009; Wawrusiewicz et al. 2015; Manasterski et al. 2020a,b.
- 12 Wawrusiewicz et al. 2015; Manasterski et al. 2020b.
- 13 Manasterski et al. 2020b.
- 14 Wawrusiewicz et al. 2015, 29-89.
- 15 Manasterski et al. 2020a.
- 16 Manasterski et al. 2020a.
- 17 Manasterski 2009, 21–28.
- 18 Pośpieszny 2015; Manasterski 2009, 133.
- 19 Manasterski 2009, 28.
- 20 Manasterski 2009.
- 21 For instance Manasterski 2016, 19-21.
- 22 Wawrusiewicz et al. 2015; Manasterski et al. 2020a, fig. 4–7.
- 23 Kopytoff 1986.
- 24 Courel et al. 2020, 12.
- 25 Kałużna-Czaplińska and Rosiak 2015; Rosiak and Kałużna-Czaplińska 2017.
- 26 Sherratt 1987; Garrido-Pena 1997; Guerra-Doce
- 2016; Garrido-Pena et al. 2011.
- 27 Champan and Gaydarska 2007, chapter I.
- 28 See Dietler 1990, 1996.
- 29 See Manasterski 2016.
- 30 Champan and Gaydarska 2007, chapter I.
- 31 van der Veen 2010.
- 32 Champan and Gaydarska 2007, chapter I.
- 33 Chapman and Gaydarska 2007, 9-10.
- 34 Chapman and Gaydarska 2007, 9.
- 35 Chapman and Gaydarska 2007, 9.
- 36 Chapman and Gaydarska 2007, 9.
- 37 Hodder 1982, 2012.

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