**Traces of the Bell Beakers’ contacts with the Funnel Beaker communities in Central Pomerania**

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**Abstract:** Pottery discovered in 1986 at a Funnel Beaker (TRB) settlement in Poganice, bearing features of the Iwno Culture (IC), had been perceived as an import from Kujawy. Therefore, a presence of potsherds with decoration reminiscent of the stylistic known from the Single Grave Culture (EGK) and Bell Beakers (BB) was recognised as an effect of influences from the same direction. Recently, as a result of new discoveries in north-eastern Poland (Mazury, Podlasie), where the BB settlement-ritual features have been identified, this concept requires revision. Currently, there is sufficient evidence to raise the hypothesis of the existence of a coastal route along which the BB traits moved eastwards, into the region of the south-eastern coast of the Baltic Sea.

**Keywords:** Neolithic, Łupawa Group, pottery, zone ornament, intercultural relations

**INTRODUCTION**

A central settlement of the TRB Łupawa Group community at Poganiçe, Ślupsk county, site 4 (now a part of Łupawa village), was excavated between 1970 and 1991. Within the settlement, nine zones of the most intensive occupation were distinguished, characterised by a presence of a distinct cultural layer and the remains of dwellings built in pole construction. These zones might be interpreted as separate, multiphase settlements, partly contemporary with one another. The most diverse materials in terms of pottery style were obtained from zone 7 – the most westward part of the settlement in Poganiçe, located at the edge of the terraces sloping fairly steeply towards the Łupawa river. During a few seasons of excavation a rectangular area of 20 x 17.5 m was explored and three survey trenches were dug, giving a total studied area of 387.5 m² (Wierzbicki 1999: Fig. 56). In the course of the works a collection of pottery was obtained consisting of 76,000 fragments of vessels, many of which were ornamented with original decorative motifs, lacking analogies either in other parts of the settlement, or at other sites of the Łupawa Group.

They included two small fragments, so far unpublished, although the specific ornamental motifs they bear have been classified within the list of types of ornaments registered on pottery from the sites recorded within the Łupawa micro-region of the TRB settlement, as types Z-550A and Z-550B (Wierzbicki 1999: 102-103). They were found in two adjacent trenches (No. 55d and 42d), within the same mechanical layer at the top of the features, but outside of them; therefore, they lack a well-defined archaeological context. Both fragments are made of clay with a small amount of temper of white, fine-grained (0.5-1 mm in diameter) crushed stone. They were burned in an oxidising atmosphere, which gave their surfaces and cross-sections a colour between light brown and pale orange. The fragments do not have any features allowing for the identification of original vessel forms, but because of the nature of their decorative motifs, they are supposed to be beakers. The ornamentation of both fragments is similar – the horizontal bands of a criss-cross, incised with a thin tool (similar to a checkerboard known from the Luboń phase of TRB), framed with horizontal lines (double at the top, and single at the bottom), made with the knurling technique, giving the effect of a very dense groove (Fig. 1). The described characteristics of the ornamentation – knurling technique and a zonal arrangement of
decorative motifs – allow these pieces of vessels to be associated with the style of ceramics referred to as BB. Zone ornament made with a knurling technique in the form of, among others, simple motifs of multiple horizontal lines is considered to be the most characteristic of the early stage of development of this system, known as Maritime Beakers, which corresponds with the BB 1 phase in Kujawy (Czebreszuk 1996: 114; 2001b: 119, 122, 124; Makarowicz 1998: 128, 133).

The closest analogies to the described ornamentation from Poganice (although sometimes different in terms of applied technique) might be found in the BB materials from Jutland, for example: Myrhøj (Jensen 1973: 93, Figs. 32, 46-51, 53), Bejsebakken and Gammelbygård (Sarauw 2008, Figs. 12.4-5, 7-8, 13.3, 5, 24.1), generally dated to the years 2350-2000 BC (Sarauw 2008: 90), or among the BB pottery in Mecklenburg and central Germany, for example: Auleben, Großlehna, Lanz, Markranstädt-Großlehnb, Muchow, Sandersdorf-Brehna, Staßfurt-Hohenlexlen, Tectentin, Wolferstedt, Wundersleben (Behrens 1969b: Figs. 2.d, 3.h, 4.G; Wetzel 1969: Figs. 104.29, 121; Nagel 1987: Figs. 2.a-d; Jacobs 1991: Pls. 28.13, 15, 17, 23-24, 27; Hille 2012: Pls. 6.89, 71.1, 91.1, 94.1) and in the EGK/Corded Ware Culture (CWC) area under the influence of the BB, for example: Bobzin, Mustin-Lenzen, Pinnow, Riebau, Zickhusen (Wetzel 1966: Fig. 6.b; Behrens 1969a: Fig. 6.g; 1969b: Figs. 1.a, e; Jacobs 1991: Pl. 4.7, 20.13, 27.5-6) and Parchim – for this site the acquired 14C date was 2267-2203 BC (Wietrzichowski 2008: 55, 64, footnote 9, Figs. 3.7-8).

In Wielkopolska and Kujawy the western BB traits from the Maritime Beakers phase date back to the years 2450/2320-2150 BC (Makarowicz, Czebreszuk 1995: 125), but in the latter region a decorative motif occurred only twice in the version made with a knurl – at Star Wieś, in the feature classified as belonging to the BB 1 phase in Kujawy, identified with an older IC phase (Kośko 1988: Fig. 8.3; Czebreszuk 1996: 117, 126, 147, Tabs. 23, Pl. VI.14; Makarowicz 2003: Fig. 4.7), and in an incised version – in Potok (Bokiniec 1989: 63, Pl. VI.8). Similar ornamental motifs, but in a processed form, were also recorded within Eastern Pomerania in Rzucewo (Żurek 1954: Figs. 6.10-11, 13).

Zone ornament Z-490 also has a close genetic relationship, composed of horizontal bands of two-part ladder known from the settlement in Pogani (Wierzbicki 1999: 100-101), which, by discoveries such as Szczecin-Zdroje and Żdary (Siuchniński 1969: 176, Pl. XVIII.b, XX. grave 2), has been associated with the Mecklenburg EGK enriched with BB elements, for example: Lanz and Dobin am See-Flessenow (Wetzel 1969: Figs. 105.6, 26; Jacobs 1991: Pl. 27.1) and Garz-Dumsevitz (Behrens 1969b: Fig. 1b), and the BB from Jutland, for example Bejsebakken (Sarauw 2008: Figs. 12.2, 14.2-3) or central Germany, for example Bernburg, Haldensleben, Hundisburg, Quedlinburg and Staßfurt-Hohenerxleben (Hille 2012: Pls. 4.12, 6.1, 24.14, 25.1, 27.1, 27.11, 49.8, 11). Such contacts with the EGK may be also suggested by the presence of Z-495A type motifs in the form of horizontal bands of fishbone framed by incised lines at Łupawa site 15 (Wierzbicki 1994: Figs. XII.16-17; 1999: 102-103), which are considered a stylistic element of the EGK, for instance at Brüssow-Wollschow (Jacobs 1991: Pl. 8.11) and Parchim (Jacobs 1991: Pl. 22.7). Such decorations were also observed in Rzucowo (Żurek 1954: 27, Figs. 6.8, 10, 7.1-2, 4-5, 8.1-6), Potok (Bokiniec 1989: 68, Pl. V.7-8) Pakszyn (Kośko 1991: Fig. 2), Orkowo (Kośko 1988: Figs. 6.1-4) and Czołpin (Kośko 1988: Fig. 7.8). The latter helped to identify a route the EGK settlers from a Jutland-Lower Elbe centre took and they were included into the "Epi-Beaker horizon" (Kośko 1988: 157) or CAC 2 (Czebreszuk 1996: Pl. II.20; 2001: Fig. 20.5). Identical cultural bonds may also be attributed to the well-known Poganiac and Łupawa motifs Z-485B: horizontal bands composed of a series of vertical or diagonal impressions framed with doubled or
multiplied incised lines (Wierzbicki 1994: Fig. XXII.18; 1999: 100-101, Fig. 46.9), which have analogies, among others, in Rzucewo (Zurek 1954: Figs. 8.5, 19.14) and Czołpin (Kośko 1988: Fig. 7.2).

In the first attempt to explain the presence of these ornamental motifs within the Łupawa Group of TRB they were embedded in the context of interactions from the south, leading to Central Pomerania from Kujawy, because it was there where influences from the west and north-west of the EGK arrived, along with BB traits inseparable, which led to the development of the IC. "Within the European Lowlands to the west of the Vistula river, the genetic position of the Bell Beaker traits is always the same: they appear during the next stage of the evolution of local "Corded" groups, particularly: Individual Grave Culture" (Czебreszuk 2001a: 327; almost identical – Culture local "Corded" groups, particularly: Individual Grave Culture, almost identical – Individual Grave Culture). Some forms of vessels co-exist with BB incidentally and not in all regions (Czебreszuk 2001b: 120).

The IC folk migrated then along the Vistula river northwards and from there probably some small group reached the basin of the Łupawa river. As a result, ceramics with syncretic features appeared there, distinguished both in terms of technology and stylistics, classified as the Łupawa-Iwno type (Wierzbicki 1988: 57), although "the BB traits in the south-western Baltic area essentially co-create assemblages only with EGK. Other cultural traditions co-exist with BB incidentally and not in all regions" (Czебreszuk 2001b: 133). Some forms of vessels of this style are so similar to the Iwno prototypes that they may even be described as imports. These include a vase (Wierzbicki, 1999: Fig. 50.13), for which the closest analogy is a vessel from Sulęcin. Initially, it had been included into the IC (Kośko 1979: Catalogue IV, No. 20), but then it was considered an import from the Rhine-Elbe BB region (type Veluwe), the chronology of which in Wielkopolska and Kujawy may be approximated from 2320 to 2040/1970 BC (Makarowicz, Czебreszuk 1995: 121, 125). Vases of this type, and similar beakers, constitute one of the key taxonomic identifiers of the IC/BB, beginning from its early phase, when they are considered prestigious vessels (Makarowicz 1998: 132; Czебreszuk 2001b: 81-82, 197).

Later, the presence of contacts with the IC has been recognised as one of the indicators of a late stage of the Łupawa Group of TRB development (Phase VI). The Łupawa-Iwno style has been assumed to be a forerunner of the disintegration of the Łupawa Group cultural system, which began with the arrival of new ideas, genetically related to the BB, transmitted through Kujawy and East Pomeranian IC communities (Wierzbicki 1999: 176, 251-252, Tab. 15). The main force inspiring the far-reaching influence of this group were, most likely, economic contacts related to the acquisition and distribution of amber between the IC communities and the final-neolithic Rzucewo Culture folk living upon the Lower Vistula river (Kośko 1979: 183; 1991: 35).

While regarding potential pathways of the BB migration into areas of Pojezierze Krajeńskie and Kujawy, initially only a latitudinal route was taken into consideration: Havel – Spree – Warta – Noteci, by which the Saxon-Thuringian group of the BB folk would have travelled (Kośko 1979: 154-159). Later, it was suggested that the initial impulse was genetically linked with the folk from the circle of zones with metope ornamentation, identified with the Rhine-Main and Mid-Rhine groups, and only further with the Saale-Elbe group of the BB. This was preceded by an inflow of the EGK traits into the regions of the middle Warta and upper Noteci basins. These traits arrived there from the Jutland-Lower Elbe circle along the Oder-Warta route, although the "Beaker-Corded" syncretism visible in the style of the Kujawy IC pottery was supposed to have resulted from the adaptation of certain traits from the CWC folk living in Central Germany by the migrating BB populations (Makarowicz 1989: 39, 42-43, Figs. 21-22). Thus, the translocation of the BB into the western part of the Polish Lowland, including Kujawy, from Jutland through Schleswig-Holstein, Mecklenburg and Western Pomerania, was usually associated with the natural latitudinal communication of Warsaw-Berlin and Toruń-Eberswalde Ustronmtäler. The Lowland area was meant to be a bridge for north-eastward directed penetrations of the "Beaker" folk, heading towards the south-eastern shores of the Baltic Sea, where there were amber-bearing lands occupied by the Rzucewo Culture communities (Makarowicz, Czебreszuk 1995: 126-127, Fig. 13; Czебreszuk 1996: 249; 2001a: 338; 2001b: 196, 201-202) – "The BB pack in the south-western Baltic area is a transformation of Lower-Rhine patterns of an agglomeration of this group, and its genetic centre was located in northern Jutland. The main route of the BB traits transmission ran south-eastwards, toward Kujawy" (Czебreszuk 2001b: 141; similarly Czебreszuk 1996: 147).

This concept lacks convincing reasoning for why the route from Jutland to the south-eastern Baltic areas should have led through Kujawy, while it was...
neither the shortest, nor the easiest way. Probably this resulted from underestimating the scarce materials from central Pomerania that were not taken into account when considering the distribution of the BB traits between Jutland and Polish Lowlands (see e.g. Czebreszuk 2001a: Figs. 2-3). However, the hypothesis of the existence of one North-European BB province, reaching from Jutland to the Vistula River Basin, became popular (Czebreszuk 2001a: 331; 2001b: 139, Fig. 35). It seems that the genesis of this province is associated with the “Beakering” of local EGK groups as a result of the syncretisation processes, which took place in the area between the lower courses of the Elbe and Vistula rivers (Makarowicz 2003: 152-153, Fig. 12.2). Nevertheless, they must have extended eastwards far beyond the Vistula, since single pieces of pottery, decorated with a zone ornament, analogous to the Poganice ones, have been found even on the territory of Latvia (Abora I) and Belarus (Asavec 2, Kriviny II), and so this is where the north-eastern boundary of the impact of the BB idea should be drawn (Czebreszuk 2001a: 331, Figs. 8.1, 4-5, 12.1-2, 12; 2001b: 141).

These observations were confirmed by new discoveries in Mazury and the distinction of the so-called Ząbie-Szestno assemblages. Syncretic ceramics which were collected at eponymous sites, with traits referring, among others, to the EGK and BB, were likely to be a result of contacts of the local para-neolithic folk with those of the IC from Kujawy. A large group of various vessels decorated with a zone ornament, including an incised criss-cross framed with horizontal lines (Manasterski 2009: Pls. 8.6, 14.1, 20.4, 32.12, 34.1, 37.6, 41.5, 42.4, 75.3, 5, 89.1-4, 89.6, 96.10) or grooved one (Manasterski 2009: Pls. 32.4, 34.3, 89.5) appeared at these sites, which were patterns identical with the Z-550 motifs from Poganice. The majority of them were identified as specimens considered to be imports from the IC – “To a large extent these are direct analogies, and it is even possible to indicate particular sites, mostly from Kujawy. And especially sites Rybiny 14 and 17” (Manasterski 2009: 74). However, at the mentioned sites at Rybiny such motifs as Z-550 type did not occur (Makarowicz 1989: Tab. 12, 14, Fig. 18; 2000: Tab. 4).

In considering the origins of the Ząbie-Szestno assemblages it has not been determined what kind of causes led to the emergence of this kind of ornamentation in the Mazury Lake District – whether they were a direct influence from the BB circle, or an indirect one modified by the IC, with which the Ząbie-Szestno folk were mostly interlinked. What is certain is that the cultural impact from Kujawy on the Mazury Lake District culminated at the beginning of the early Bronze Age, which was reflected in the pottery of the Ząbie-Szestno assemblages – initially with intensification of the late CWC component, and then that of the BB/IC (Manasterski 2009: 129-130).

In Kujawy, it still remains true that among the sites with the BB traits “practically no one could be regarded as ‘pure’ BB” (Czebreszuk 1996: 113). Perhaps such an assemblage comes from a feature at Stara Wieś, but artefacts were collected during limited rescue excavations, which undermines their representativeness (Makarowicz, Czebreszuk 1995: 123; Czebreszuk 1996: 113, 126). Meanwhile, new discoveries at Supraśl in Podlasie completely revised the perception of the BB presence in north-eastern Poland. The obtained materials provided evidence suggesting the presence of a group of people representing a model of culture and society associated with the BB and this was not just the roaming of a “cultural package of BB” but of a “group (or groups) of folk, which might be identified as that of BB and not that of Central but the West-European kind” (Wawrusiewicz et al. 2015: 177, 184-185, Fig. 102). The ceramics collected from the site included a beaker decorated with a criss-cross pattern (type Z-550a), and also other decorative motifs known from Poganice occurred there (Wawrusiewicz et al. 2015: Figs. 22-24, 26, 72), interpreted as a result of influence from the EGK/BB. The evidence collected from Supraśl resulted in the need for a reanalysis of already known materials (Wawrusiewicz et al. 2015: 178).

Report authors, while summarising the finds, suggest that the route used by newcomers from Western Europe “would start most probably in the area of the Bay of Biscay and further would run through the area along the English Channel […] up to the North Sea”, and then around Jutland to the south-eastern coast of the Baltic Sea (Wawrusiewicz et al. 2015: 86-87, 183-184, Figs. 44, 102), from where, as evidenced by items made from local flint raw materials, would run “a route paced by the community associated with the BB phenomenon from Eastern Pomerania via Mazury towards the middle Supraśl river. Its traits together with the BB component are visible both within the KRz settlements […] and at the sites with the Ząbie-Szestno assemblages and finally at Supraśl” (Wawrusiewicz et al. 2015: 84; also 87, 184).

This is a very bold hypothesis, having no analogies in the study of the BB phenomenon. Hitherto, it has been usually emphasised that due
to the multi-directionality of all interactions within the BB, changing in time and space depending on various factors, including local alliances, conflicts or the demand for certain goods, it would be not possible to indicate a specific place from where either colonists in a given area, or carriers of the BB idea could have derived. Such an area is Denmark, where on the one hand there are visible similarities in terms of style between the beakers from Myrhøj (northern Jutland) and Mecklenburg, the closest analogies to other beakers, such as those from Irkle Helsinge (western Zealand) and Bårdesø (northern Fyn) appear in the Mediterranean region, while an archer’s armband from Myrhøj comes from Western Europe (Sarauw 2008: 113). This multi-directionality of information flow within areas occupied by the BB, reflected by, among others, the dispersion of ornamentation motifs has been also realised by the authors of the hypothesis under consideration (Wawrusiewicz et al. 2015: 181-182). Although they associate the origins of a criss-cross motif recorded in Supraśl with the Netherlands, they also notice its appearance in other regions, including the Czech Republic (Wawrusiewicz et al. 2015: 53-54, 86-87, Fig. 44).

The fact that the IC influenced the Łupawa Group of TRB was identified long ago (Wierzbicki 1988), and even today it is not negated, although in the light of the most recent evidence the presence of zone motifs (particularly Z-550) in the materials of the Łupawa Group of TRB requires another explanation. Admittedly, the IC might have been sometimes identified outright as a local version of the BB developing in the Lowlands, genetically associated with the final EGK with a clear evidence of influence from the Jutland-Mecklenburg BB (Czebreszuk 1996: 194, 199-200, 249-250; Makarowicz 1998: 130-131, 300). However, within this group such an ornamentation occurs only occasionally (Stara Wieś and Potok). Therefore, it should be taken into consideration that such a kind of ornamentation might have appeared in Central Pomerania without any participation of the communities from Kujawy. In fact, even though a southern origin of the BB elements in Central Pomerania was accepted, the possibility of their direct infiltration from the west along the Baltic Sea has never been completely refuted, and a finding of a typical BB bowl with a slightly arched profile, on four short legs, in a grave at Miechećno (Wierzbicki 1999: 176), which has an analogy of a similar vessel from the EGK/CWC grave in Penkun-Grünz (Siuchniński 1969: 214, pl. XXXI.H) might confirm this thesis. Therefore, recent evidence seems sufficient to bring the hypothesis of the existence of a coastal (sea?, land?) latitudinal route of a movement of the BB elements from Denmark eastwards, into the area of a south-eastern coast of the Baltic Sea.

References


Czebreszuk, J. 2001b. Schyłek neolitu i początku epoki brązu w strefie południowo-zachodniobałtyckiej (III i początki II tys. przed Chr.), Alternatywny model kultury, Poznań.


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