

NORTHERN AND SOUTHERN BELL BEAKERS IN POLAND

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Introduction

Traditionally, archaeological literature concerning Central Europe has distinguished two principal enclaves of Bell Beakers in the drainage basins of the Vistula and Oder rivers: a southern Polish (KAMIĘŃSKA / KULCZYCKA-LECIEJEWICZOWA 1964; 1970; WOJCIECHOWSKI 1987; MACHNIK 1979; 1987, 135-142; HARRISON 1980, 58-63), and a northern Polish one (KOŚKO 1979; MAKAROWICZ / CZEBRESZUK 1995; CZEBRESZUK 1996; 1998; 2001; MAKAROWICZ 1998; CZEBRESZUK / SZMYT 2001). The former comprises two Beaker groups in the upper Oder drainage – one in Lower Silesia and one in Upper Silesia and still another one in the up-

per Vistula basin, in Little Poland (Fig. 1). The other enclave, situated on the Polish Lowlands, is characterized by cultural syncretism. Some Bell Beaker package elements occur here in the context of the late *Einzelgrabkultur* and the Iwno Culture (Fig. 1; CZEBRESZUK 1998; 2001, 134; MAKAROWICZ 1998, 274–277).

Sources and Chronology

The two groupings, the southern and the northern, differ in several aspects. In the first instance, traces of Bell Beaker residence are documented in burial features: cemeteries, single graves and chance discoveries, in the second, these also include settlements. However, it is only with reference to the southern Polish agglomerations that one can talk about “genuine” Beakers, dated between 2500 and 2200 BC. From this area we know of ten ^{14}C dates (all from Samborzec) obtained from bones, i.e. a short-living organic material (BUDZISZEWSKI / HADUCH / WŁODARCZAK 2003). The sum of probability distribution of all the calibrated dates stays in the interval between 2470 and 2270 BC (Fig. 2a). The agglomerations are closely related to their Czech and Moravian counterparts, an enclave in southwestern Slovakia, and especially to the so-called Csepel group in the Middle Danube basin (MACHNIK 1979; 1987, 141; WOJCIECHOWSKI 1987, 61ff; see also: HEYD 2001; KALICZ-SCHREIBER / KALICZ 2001).

At the Polish Lowlands, in the mid of 3rd millennium BC, the Iwno Culture emerged, a syncretic unit that combines traits of Bell Beakers, the Single Grave Culture and – to a lesser degree – early Únětice Culture (KOŚKO 1979, 166ff; 1991, 49; CZEBRESZUK 1996, 196; 1998; 2001, 274ff; MAKAROWICZ 1998, 130ff; 2000a, 538). It is included into the Northern Euro-

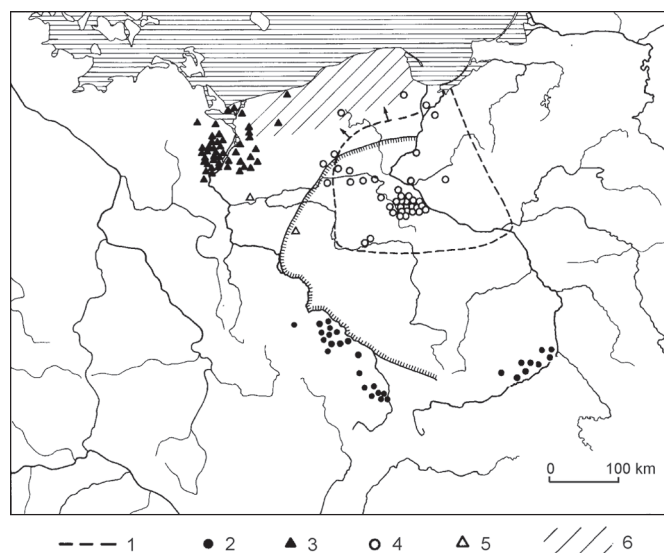


Fig. 1. Spatial distribution of the Bell Beaker traits in northern and southern Poland. 1 – Spatial range of the Iwno Culture (northern Beakers); 2 – Bell Beaker sites in southern Poland; 3 – ‘pure’ Bell Beakers or Beaker traits mainly in the *Oderschnurkeramik* context; 4 – Bell Beaker traits inside the Iwno Culture; 5 – Bell Beaker traits without defined context; 6 – numerous traits of the Bell Beaker tradition, mainly flint daggers. After CZEBRESZUK / SZMYT 2001, with amendments; MAKAROWICZ 2003, with amendments.

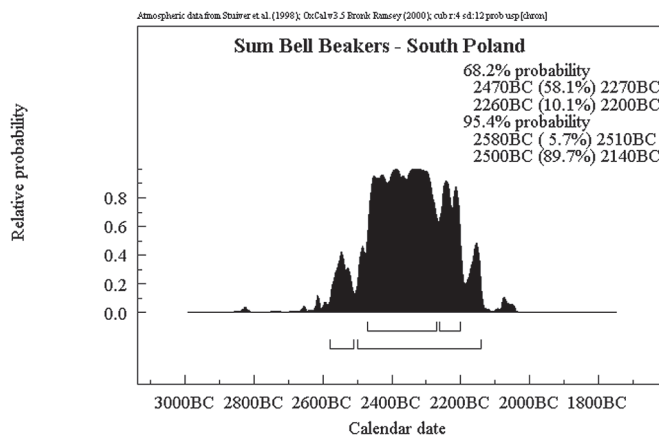


Fig. 2a. Sum of probability distribution of Bell Beaker ¹⁴C datings from southern Poland (Little Poland).

pean Province of Bell Beakers and dated, on the basis of twenty ¹⁴C determinations (18 obtained from bone, 2 from charcoal), between 2500/2400 and 1800 BC (recently CZEBRESZUK / SZMYT 2001, Fig. 10; MAKAROWICZ 2001, 217). The sum of probability distribution of all the calibrated dates obtained for the Iwno Culture stays between 2210 and 1880 BC (Fig. 2b).

Iwno Culture is known from over 350 sites situated in Kujawy, Pałuki, Eastern Pomerania, Chełmno Land and Great Poland (Fig. 1). Mainly in the first two phases, between the middle and end of the 3rd millennium BC, does it show the presence of “true” Beaker traits. In the third phase, between 2050/2000 and 1800 BC, the Iwno Culture underwent a certain *únětization* observable – for instance – in the adaptation of *Únětice* Culture-style metal goods buried as grave-goods and in one-type and multi-type hoards (MACHNIK 1977, 154ff; 1978; KOŠKO 1979; BLAJER 1990; MAKAROWICZ 1998, 250ff; 2000b).

The oldest Iwno Culture (Fig. 3 and Fig. 4) shows syncretism of Bell Beakers and the late Single Grave Culture. Vessel inventories include strait-walled and bell beakers, amphorae, single-handle cups and jugs, hemispherical bowls often supported by legs and large pots. The dominant form of decoration is toothed stamp ornament, horizontal lines impressed with a delicate cord, incised ornament arranged in zones (zig zag motifs, multiple horizontal and oblique lines) and a cordon under the rim. The pottery technology shows two formulas in the whole period of Iwno Culture development. Thin-walled vessels are well fired, have smooth surfaces and contain a temper of fine-grain broken stone. Thick-walled vessels (domestic pottery) contain a temper of coarse broken stone. Amber products are rare. It is probably to this phase that five

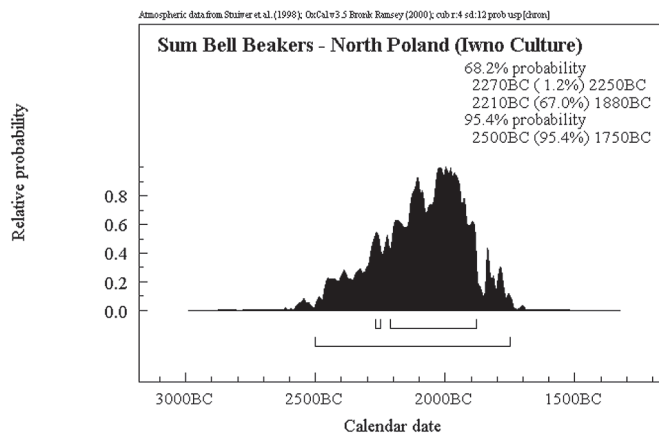


Fig. 2b. Sum of probability distribution of Iwno Culture ¹⁴C datings from northern Poland (Kujawy, Pałuki and the Chełmno Land).

wristguards (Fig. 5:7, 8, 10, 11, one still unpublished), several flint daggers (Fig. 5:2–4, 12–16), rare flint sickles, an amber necklace (Fig. 5:1) a flint blade of halberd (Fig. 5:5) and a lunula may be related (Fig. 5:9).

The middle Iwno Culture (Fig. 6) is characterized by tulip-shaped and bell beakers, vases and hemispherical bowls. Among techniques used were incisions, relief (*appliqué*) ornaments and strokes with only a minor participation of tooth-stamped and cord ornaments. A clear domination of zone-metopic and zig zag motifs, horizontal, vertical and oblique lines, bosses and cordons under the rim is observable. Amber products are relatively infrequently found in graves.

Some analogies to the pottery of these two phases of Iwno Culture come from the northern part of Central Europe: Schleswig-Holstein, Mecklenburg, Brandenburg, Lower Saxony and Vorpommern (STRUVE 1955; STRAHL 1990; JACOBS 1991; RASSMANN 1993).

In the third phase of the Iwno Culture, strait-walled beakers are rare while amphorae and jugs disappear altogether. The use of vases, S-profile pots, cups, and bowls is common. Toothed-stamp and cord ornaments are gone. What is left, however, are a variety of relief bosses and cordons under the rim, sometimes multiple ones, and patterns of incised lines in a variety of arrangements (chevrons, horizontal, metopic and oblique lines). It is only in that phase that metal goods appear. These are imported goods of classic *Únětice* style such as daggers, low-flanged axes, *Ösenringen*, bracelets, and *Ösenkopfnadeln*. Higher incidence of amber products such as beads and discs is observed. It is also that phase that the practice of depositing one-type and multi-type hoards, especially in Pomerania, Pałuki and Kujawy should be associated with (KOŠKO 1979; MAKAROWICZ 2000b).



Fig. 3. Selection of Iwno Culture pottery (the oldest phase) from Kujawy and Pałuki, northern Poland. 1 – vicinity of Żnin, from a grave; 2, 3, 6 – Narkowo, site 16, from a settlement; 4 – Strzelce, site 1, barrow I; 5, 11 – Biskupin, site 2a, from an enclosure; 7 – Smarglin, site 53, from a settlement; 8 – Krusza Zamkowa, site 3, from a settlement; 9 – Dobre, site 6, pit 6; 10 – Siniarzewo, site 1, grave H 21; 12 – Giżewo, site 1, from a grave; 13 – Szarlej, site 10, from a grave; 14 – Brześć Kujawski, site 5, from a settlement; 15 – Dobre, site 6, grave I; 16, 18 – Modliborzyce, site 1, grave 4; 17 – Wojdał, site 1, grave 4 (different scales). After SARNOWSKA 1969; KOŚKO 1979; MAKAROWICZ / CZEBRESZUK 1995; CZEBRESZUK 1996; MAKAROWICZ 1998.

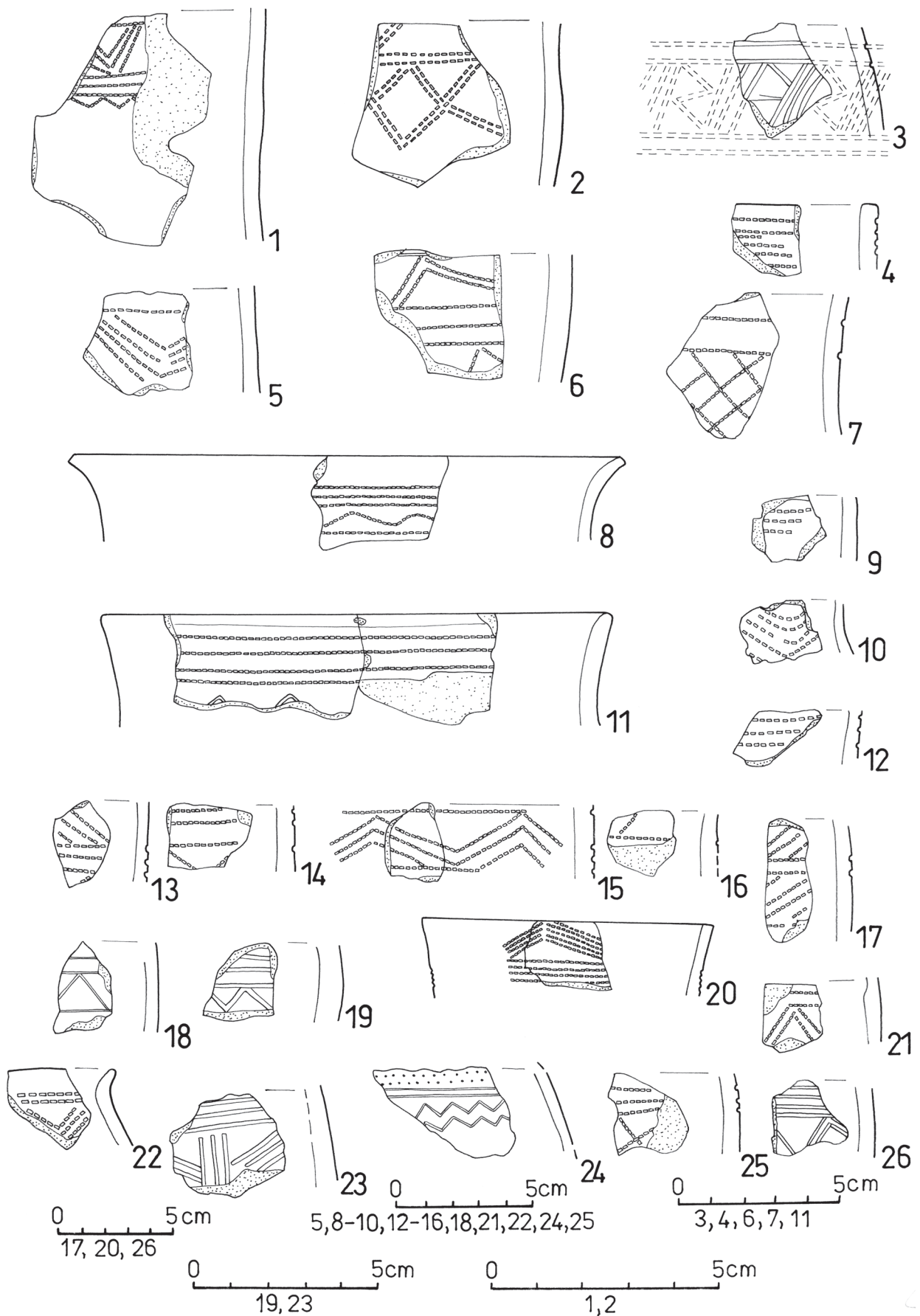


Fig. 4. Selection of Iwno Culture sherds (the oldest phase) from Kujawy and the Chełmno Land, northern Poland (settlement materials only). 1, 2, 6, 11, 19 – Narkowo, site 16; 3 – Dęby, site 29; 4, 7 – Stara Wieś, site 9A; 5 – Gogolin, site 7; 8 – Krzywosądz, site 3; 9, 10, 12, 19, 26 – Toruń, site 243; 13-17, 21, 25 – Smarglin, site 53; 18 – Smarglin, site 51; 20, 24 – Krusza Zamkowa, site 3; 22, 23 – Potok, site 1. After BOKINEC 1995; MAKAROWICZ / CZEBRESZUK 1995.

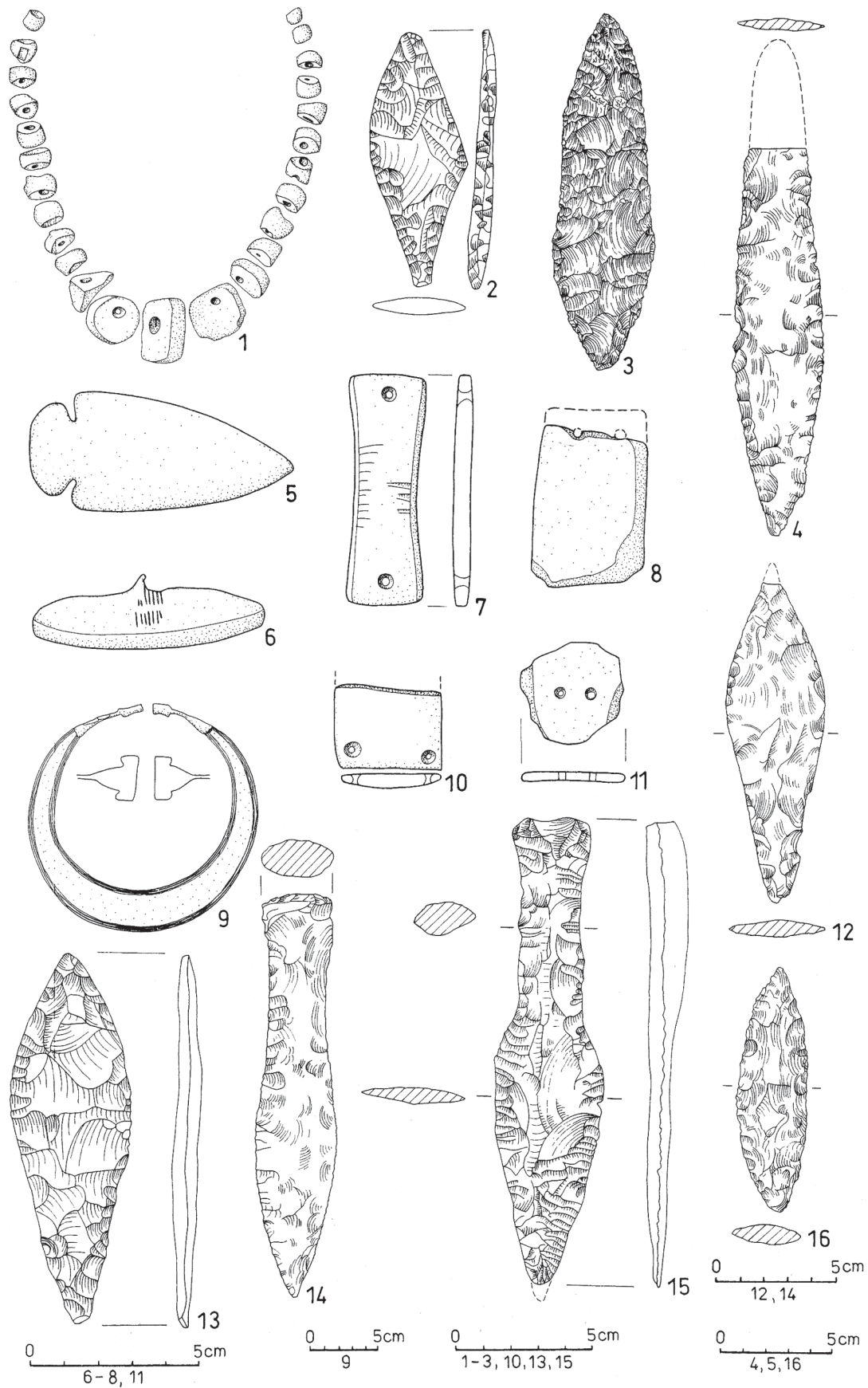


Fig. 5. Selection of artifacts associated with the North Polish Beakers (mainly from the Iwno Culture and *Oderschnurkeramik* ecumenes or without defined cultural contexts). 1, 3 – Dobrze, site 6, grave I; 2 – Krusza Zamkowa, site 3 (settlement); 4 – Kolin; 5 – Kołdrąb (occasional finds); 6 – Wąsosz; 7 – Wąsewo, site 3; 8, 11 – Złotów, site 2; 9 – Malbork; 10 – Kruszwica, site 4; 12 – Grędzicz?; 13 – Gmurowo; 14 – Karsko; 15 – Kolbudy; 16 – Koszewo. 1-3, 5, 6, 10 – Kujawy; 6 – Pałuki; 8, 11 – Krajna; 4, 12-16 – Pomerania. 1 – amber; 2-5, 12-16 – flint; 6, 9 – gold; 7, 8, 10, 11 – stone. After JAŹDZEWSKI 1937; DORKA 1939; SARNOWSKA 1969; WOJCIECHOWSKI 1976; KOŚKO 1979; BOKINIEC 1995; 1996; MAKAROWICZ / CZEBRESZUK 1995; CZEBRESZUK 1998.

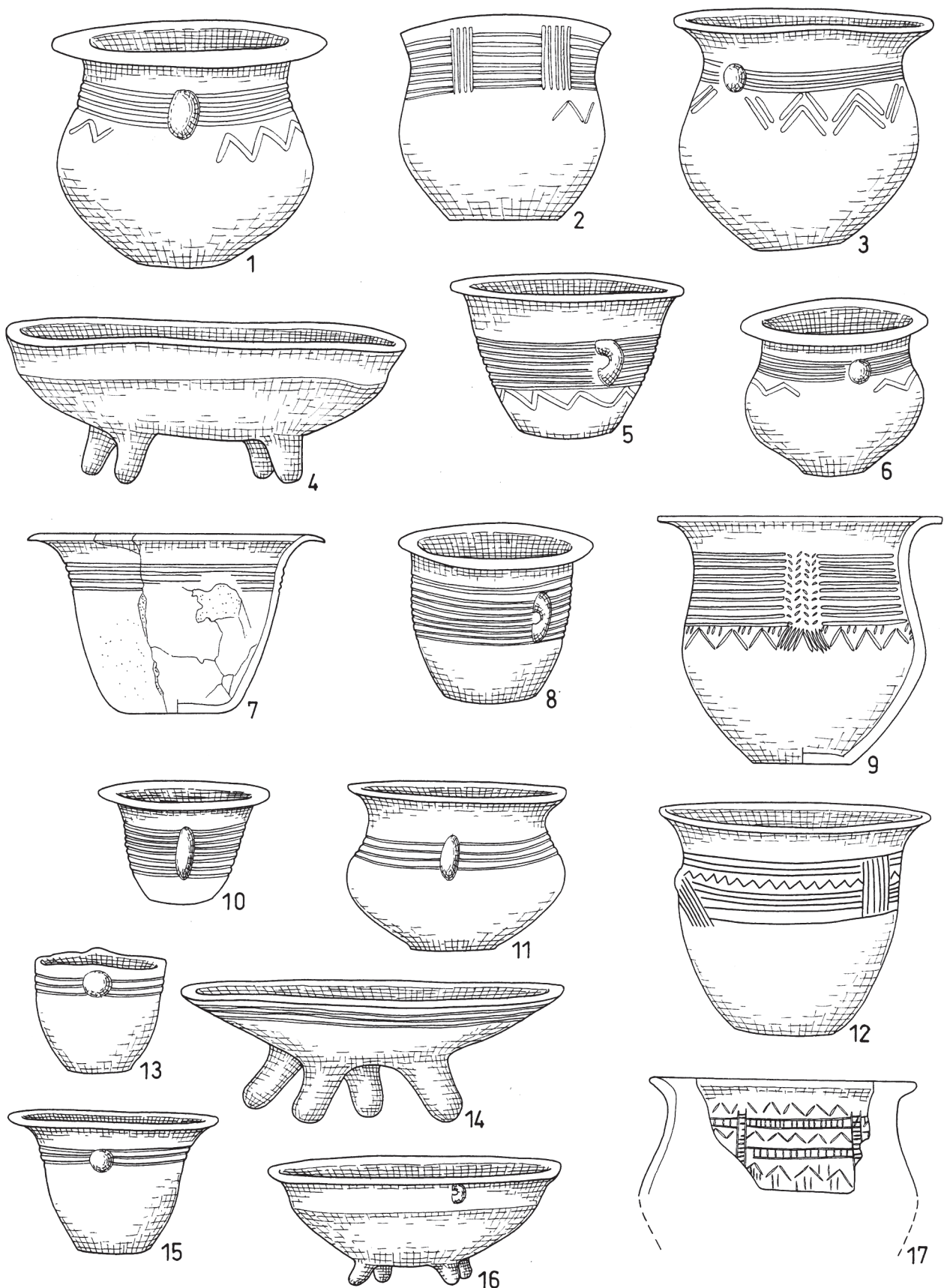


Fig. 6. Selection of Iwno Culture pottery (the middle phase) from northern Poland. 1-16 – from graves; 17 – from a settlement. 1, 3-6, 8, 10, 11, 13-16 – Iwno, site 2; 2 – Gaśawa; 7 – Strzelce, site 2, barrow 2; 9 – Opoki, site 7; 12 – Baranowo. 1, 2-5, 8, 10, 11, 13-16 – Pałuki; 7, 9, 12 – Kujawy (different scales). After SARNOWSKA 1969; CZEBRESZUK 1996; MAKAROWICZ 1998.

Outside of Iwno Culture structures, some Bell Beaker traits are encountered in the *Oderschnurkeramik* in western Pomerania, in particular in the lower Oder drainage (SCHROEDER 1951; see also: KUNKEL 1931; EGGERS 1969). Among them are toothed-stamp ornaments, incised zone-metopic ornaments, bell beakers, wristguards (only west of the Oder) and flint daggers (Fig. 5: 4, 12-16).

The first Iwno Culture phase can be synchronized with Maritime and Epi-maritime beakers and the beginnings of zone-metopic beakers as well as beakers of the Myrhøj type and dated at ca. 2500-2250/2200 BC. The second can be synchronized with zone-metopic and Veluwe beakers, Myrhøj type beakers and the beginnings of Barbed Wire beakers as well as the younger phase of the Bohemian and Moravian Bell Beaker group and dated between 2250 and 2000 BC. The third phase may be called “post-beaker”, although some transformed Beaker traits are observable there as well. This is particularly clearly seen in vessel ceramics and some metal artifacts (e.g. a gold Irish-type earring – Fig. 5:6). Beaker reminiscences – only in ceramics – are present in the early phase of the Trzciniec Complex (1950/1900-1750 BC) which was partially contemporaneous with and genetically related to the late Iwno Culture (MAKAROWICZ 1998).

Settlements

Most likely, the Iwno Culture settlements operated for a short period; they were single- or several-season structures and occupied an area of 800-2000 sq. m (MAKAROWICZ 1998, 220ff). Typical of such settlements are light, seasonal post-made structures of shelter character and – in one case – sunken-floor house. Single-house hamlets occurred very often. The size of these homesteads (ca. 20 sq. m like in Smarglin, site 22, Kujawy – CZEBRESZUK 1996, 120ff) suggests that they were inhabited by nuclear families. Most likely, the settlements operated for a short period: they were single- or several-season structures. Only in a few cases can one talk about long-term – multi-phase occupation of a settlement by northern Beakers (e.g. Siniarzewo, site 1, Kujawy). It cannot be ruled out that such a community consisted of 3-4 nuclear families or 1-2 extended families composed of three generations (MAKAROWICZ 1998; 256ff; MAKAROWICZ / MILECKA 1999). Economic and settlement-related data present Iwno Culture communities as relatively mobile. The basis of their economy was animal raising, especially cattle-breeding (MAKAROWICZ 1998, 232ff).

So far no traces of Bell Beaker settlements have

been discovered in southern Poland. No data on the economy is available, either. It seems that this may be rather a result of Beakers’ mobility and the nature of their settlements (short-lived camps with structures that left no traces in the ground) and economy (animal raising?) than gaps in the archaeological exploration of the area in question.

Burial practices and social relations

Settlements are frequently accompanied by cemeteries where a number of graves (family graves?; e.g. Iwno, Kujawy – BRUNNER 1905) are typically found. The Iwno Culture funerary ritual generally reflects tendencies present in that of Bell Beakers, however, they differ from one another in some details. It must be taken into account, however, that data comes from few graves containing anthropologically defined bodies. Small cemeteries comprising several up to over a dozen graves are typical (Iwno, site 2; Siniarzewo, site 1, both Kujawy). Both tumulus and flat burials are known. In the “beaker” phases, stone-packing graves and stone-timber structures are found (Łysin, site 1, Pałuki – Fig. 7:5). The dead were buried in the same manner for 700 years: in oval pits, uncremated, usually singly in the flexed position with legs strongly contracted and hands bent at elbows. Graves containing several individuals are found as well, with skeletons occasionally being incomplete (Łojewo, site 4, Kujawy – Fig. 7:2). We know burials of both adults, male and female, and children. Women were placed on either right or left side with the head pointing N or S and facing E (Fig. 7:1, 5). In a single, anthropologically defined case, a man lay on his right side with the head pointing S and facing E (Żegotki, site 3 – Fig. 7:6). In the existing cases no major differences can be observed in furnishing with grave goods that should point to a particular treatment of one of the sexes.

It is sometimes believed that the quality and quantity of grave goods buried with the dead in relation to their sex and age can be the basis on which to draw conclusions concerning their position in the social structure. Grave-goods in the “beaker” phases of the Iwno Culture are relatively meagre. They usually comprise two to three vessels, rare flint goods (e.g. daggers), bone pins, amber ornaments (e.g. a necklace from Dobre, site 6 – Fig. 6:1) or stone querns and grinders. No graves with wristguards, copper daggers or V-perforated buttons were found. Other Bell Beaker indicators come from contextless finds (wristguards, flint daggers, a lunula). In the late Iwno Culture, graves

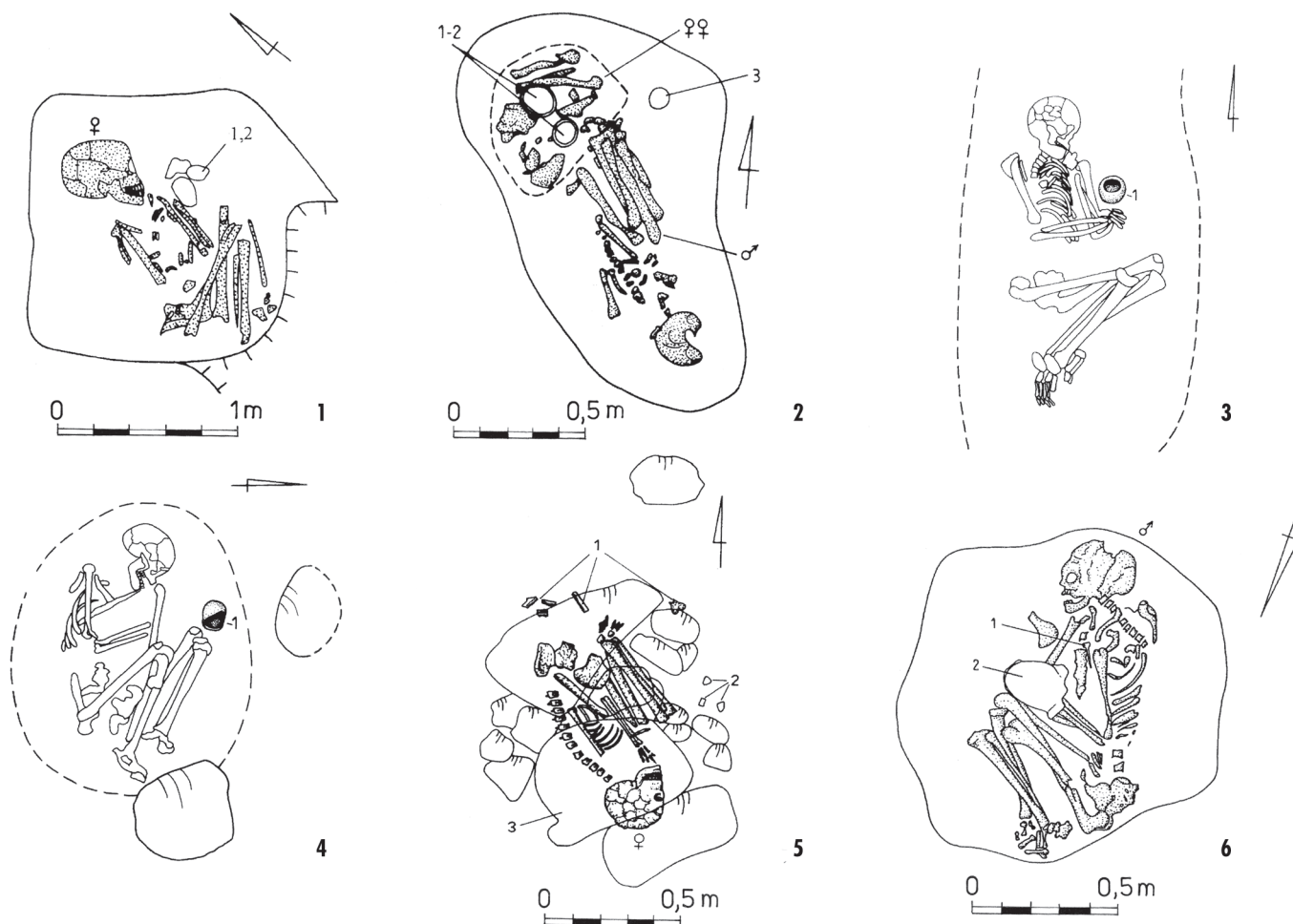


Fig. 7. Examples of the Bell Beaker (Iwno Culture) funerary ritual from northern Poland. 1 – Siniarzewo, site 1: 1, 2 – pottery; 2 – Łojewo, site 4: 1, 2 – pottery; 3 – stone grinder; 3 – Dobre, site 6, grave XVIII: 1 – pottery; 4 – Dobre, site 6, grave V: 1 – pottery; 5 – Łysin: 1 – animal bones; 2 – stone quern; 3 – pottery. 6 – Żegotki, site 3: 1 – bone pin; 2 – pottery; 3, 4 – without scales. After JAŹDŹEWSKI 1937; KOŚKO 1993; MAKAROWICZ 1998.

begin to show amber and bronze objects, the second one related to the impact of Únětice metallurgical centers. The wealth of grave goods in the Iwno Culture “beaker” phases, measured on a point scale¹, gets from two to seven points (average 5), while in the late (“post-beaker”) phase it grows at times to over thirty points (average 10 points; e.g. Brusy, Pomerania, 40 points, Śmiardowo Krajeńskie, Krajna region, grave 30 – 37 points). In Łysin, Pałuki region, in a grave of a woman in the *maturus* age (Iwno Culture, middle phase) there were placed four vessels (mortar-shaped beakers and a bowl) and a stone quern (7 points). A *iuvenis* age woman from Siniarzewo, Kujawy (Iwno Culture, middle phase) was furnished with only two bowls (2 points). In the grave of a man in the *senilis* age from Żegotki (Iwno Culture, last phase), Kujawy,

a vase and a bone pin were placed (5 points). An important social change “measured” by this method – development of ranking from minimal to moderate – took place, therefore, in the early 2nd millennium BC (MAKAROWICZ 2003). This is borne out by the emergence of hoarding, which must have been related to intergroup competition. One of the hoards (Wąsosz, Pałuki), next to goods made in Únětice style, contained a gold Irish earring (Fig. 5:6) with parallels to beaker objects of this type (KINNES 1994) and amber beads (KNAPOWSKA-MIKOŁAJCZYKOWA 1957).

Communities of southern Polish Bell Beakers are known from over 30 sites (cemeteries, single graves and chance discoveries) (Fig. 1). Due to lack of examined settlements in the region, the estimated size of Beaker groups can only roughly be assessed based on the size of cemeteries whose number of graves ranges from a few (e.g. Samborzec – 10, Złota – 7 and Beradz – 3, all Little Poland) to more than a dozen. The largest burial place in Pietrowice Wielkie, Upper Silesia, consisted of 15 graves (BUKOWSKA-GEDIGOWA 1965).

¹ The following grading scale was adopted: 1 kind of raw material – 0 pt, 2 kinds of raw material – 2 pts, 3 kinds of raw material – 3 pts etc; objects made of: clay – 1-3 pts, stone – 1-5 pts, flint – 1-5 pts, bone – 1-5 pts, metal – 3-10 pts, amber – 3-10 pts (grading depends on type of object). Copper and bronze scrap was graded lower than complete objects.

Such information points to the scarcity of Bell Beakers in the enclave and their low demographic potential, smaller than "Iwno" society of the Lowlands. It appears that it was also in this case that communities were established by 1-2 nuclear families or their unions, which used one cemetery. This data agrees with opinions on the size of Beaker groups and their mobile lifestyle generally accepted in Central European literature (e.g. SHENNAN 1986, 142ff; KOŠKO 1979; MACHNIK 1979; HARRISON 1980; CZARNETZKI 1984; MAKAROWICZ / CZEBRESZUK 1995; CZEBRESZUK 1998; VANDKILDE 1996; 2001; MAKAROWICZ 1998; CZEBRESZUK / SZMYT 2001).

In graves, from one to ten vessels were placed, on the average 2.8 per grave. Inventories are dominated by *Begleitkeramik*², mostly one handled jugs and cups, conical and hemispherical bowls supported by legs as well as undecorated and decorated beakers with one handle (Fig. 8 and Fig. 9). Only in Silesia (Wrocław-Wojszyce and Pietrowice Wielkie), two bell beakers were found with a zone ornament made with a toothed stamp (Fig. 8:2, 4). The majority of pots were undecorated (WOJCIECHOWSKI 1987, 689; MACHNIK 1979; 1987).

Ten vessels were recorded in grave 1 in Beradz, Little Poland, next to an individual of indefinite sex (ŻUROWSKI 1932). In 15 graves from Pietrowice Wielkie, Upper Silesia (BUKOWSKA-GEDIGOWA 1965), from one to six vessels were recorded, 47 in all, giving an average of 3.1 vessels per grave. Due to the decomposition of skeletons, there is no data on sex and age of the dead from this cemetery. In female graves, one to four vessels (cups, jugs and bowls) were placed, on the average 2.25 containers per one person. Occasionally, other objects were found (Fig. 10), mainly ornaments such as V-perforated buttons made of bone (Złota, graves 374, 379 and 381, and Sandomierz, site Wzgórze Zawichojskie, both Little Poland – Fig. 10:26–38, 41, 42) and amber (Strachów, Lower Silesia – Fig. 10:15–24), a copper awl (Sandomierz, Little Poland – Fig. 10:43) and pendants made of bone (Fig. 10:12, 13). Fragments of copper diadems were found in a female grave in the cemetery in Złota (grave 386 – Fig. 10:5) and in a mature man's grave in the cemetery in Samborzec (grave 9). With the male dead (anthropologically determined), one to three vessels were placed (cup, bowl,

jug), on the average 2.4 vessels per person. Apart from vessels, men's graves contain mainly military accessories: wristguards, arrowshaft smoothers, arrowheads (Fig. 10:1–4, 6–8, 9, 10, 29–32), a copper dagger in one case (Fig. 10:11) and ornaments like pendants, e.g. decorated pendants imitating a bow made of a boar's tusk (Fig. 10:25). Prestigious ornamented beakers and one-handle beakers (cups), which were perhaps used during libational rituals, are not very frequent in this enclave of Bell Beakers; they are mainly found in men's graves from Silesia (Wrocław-Wojszyce and Pietrowice Wielkie – Fig. 8:2, 4) and Little Poland (Beradz – Fig. 9:4, 7, 11), and only in one case, in a woman's (Strachów – Fig. 8:1). Flint goods are found in graves of men and children, probably of the male sex. A single flint axe was found in Złota (Fig. 10:44), in a grave (376) of an infant.

In the drainage basins of the upper Vistula and Oder rivers, the dead were buried according to the Bell Beaker ritual (Fig. 11). Only individual graves have been found in the region. Members of both sexes as well as children were buried. No mounds over usually oval grave pits were found, which can be, however, an effect of deep ploughing on fertile loess soils. Inhumations were dominant, only in grave 6a in Złota, charred bones were found (ŻUROWSKI 1932, 123; HARRISON 1980, 61). The dead were buried in the flexed position with legs contracted and arms bent at elbows. Women were placed on their right side, head pointing S and facing E (Fig. 1, 3, 5). Men were placed on their left side, head pointing N and facing E (Fig. 11:2, 4). Exceptions are a grave of a senile individual in Wierzbnio and grave 3 from Samborzec (KAMIENSKA / KULCZYCKA-LECIEJEWICZOWA 1970, 376) in which a male of about 50-60 years was buried supine with legs bent like those of a frog (Fig. 11:2). Both individuals were oriented along the N-S axis with heads pointing N and facing E. In grave 88 in Żerniki Górne, a mature man was buried with his head pointing NW-SE and facing E (KEMPISTY 1978, 396). Children must have been inhumed, depending on their sex, on their left or right side, along the N-S axis and facing E. A high percentage of buried children has been observed. In Samborzec, out of nine anthropologically identified graves, three belonged to children, four to men, and two to women; in Złota, out of five identified graves, three belonged to children, one to a man and one to a woman.

Of 54 graves uncovered in Bell Beaker cemeteries, only 16 crossed the threshold of 10 pts, 4 exceeded 20 pts, and 2 – 30 pts (MAKAROWICZ 2003). Practically speaking, none of the 15 graves of the largest

² The term *Begleitkeramik* I use both for undecorated pottery found in a Bell Beaker context (common ware) and pottery of the regional tradition, coming also from the local context – "regional substratum" (Categories II and III according to M. Besse and Ch. Strahm – BESSE / STRAHM 2001, 108).



Fig. 8. Selection of Bell Beaker pottery from Upper Silesia (1, 3, 4, 7-19) and Lower Silesia (2, 5, 6). 1 – Strachów; 2 – Wrocław-Oporów; 3, 4, 7-19 – Pietrowice Wielkie (3, 4, 8, 13 – grave IX; 7, 10, 12, 19 – grave XIII; 9, 11 – grave IV; 14, 17 – grave X; 15, 16 – grave XI; 18 – grave XIV); 5 – Opatowice; 6 – Żerniki Wielkie, site 1 (different scales). After BUKOWSKA-GEDIGOWA 1965; WOJCIECHOWSKI 1972; NOWORYTA 1976.



Fig. 9. Selection of Bell Beaker pottery from Little Poland. 1, 2, 5, 6, 12, 14 – Samborzec (1, 2, 15, 16 – grave 6; 5 – grave 1; 6, 14 – grave 3; 12 – grave 2); 4, 7, 10, 11, 19, 21 – Beradz (4, 7, 11, 19 – grave I; 10, 21 – grave V); 8, 20 – Święcice, grave 2; 9, 13, 17, 18 – Złota (9 – grave 386a; 13, 18 – grave 381; 17 – grave 379); 22, 23 – Sandomierz, site Wzgórze Zawichojskie (different scales). After ŻUROWSKI 1932; KAMIEŃSKA / KULCZYCKA-LECIEJEWICZOWA 1970; MACHNIK 1979; 1987; WŁODARCZAK / KOWALEWSKA-MARZALEK 1998.

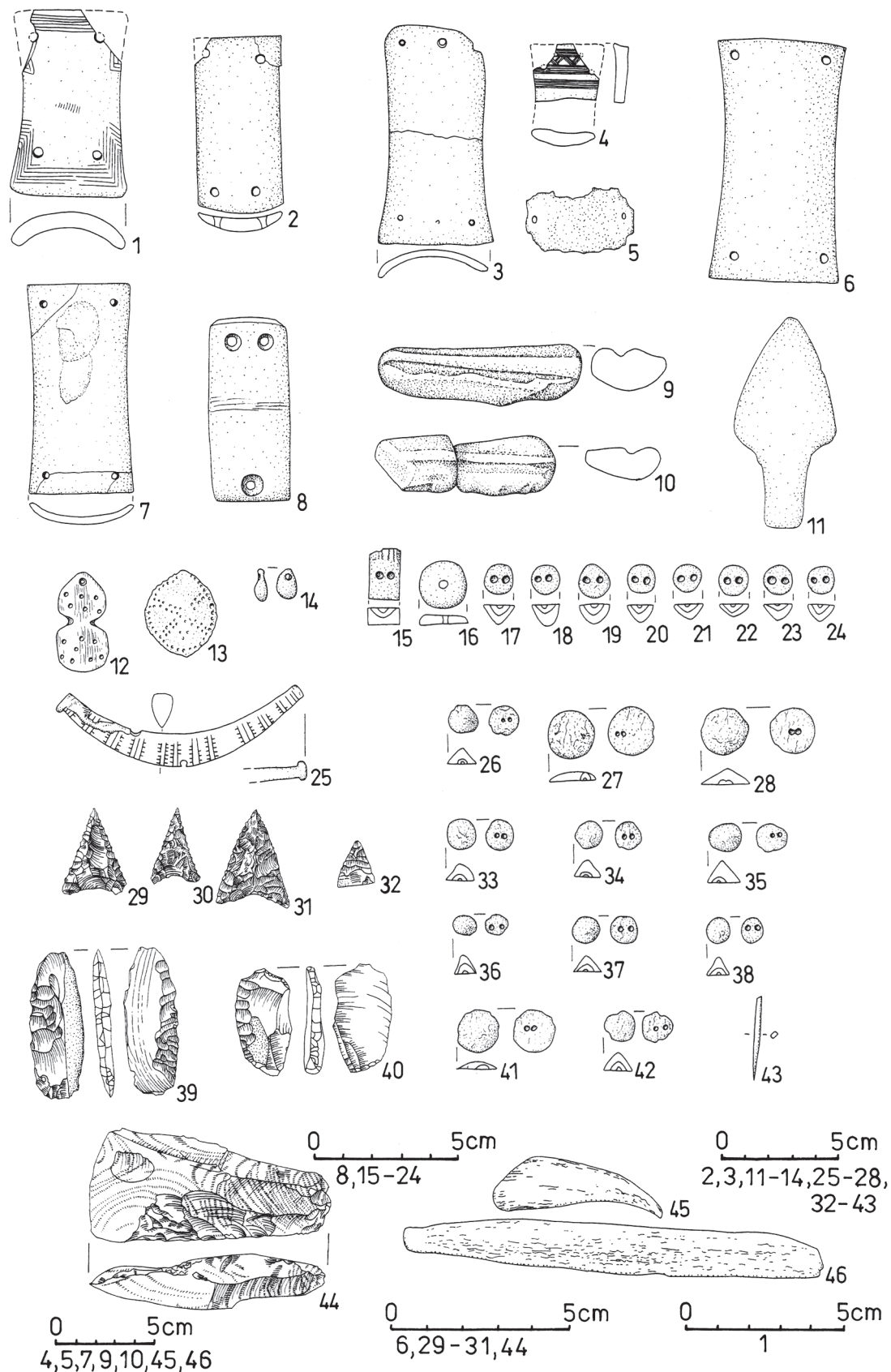


Fig. 10. Selection of artifacts associated with the South Polish Beakers (materials from graves). 1 – Wrocław-Oporów; 2, 11, 25, 32, 39, 40, 45, 46 – Samborzec, grave 3; 3 – Świniary Stare; 4 – Beszowa; 5, 14 – Złota, grave 379; 6 – Beradz, grave V; 7 – Złota, grave 386; 8 – vicinity of Milicz; 9, 10 – Beradz, grave V; 12, 13 – Złota, grave 374; 15-24 – Strachów; 26-28, 33-38, 41-43 – Sandomierz, site Wzgórze Zawichojskie; 29-31 – Wierzbno; 44 – Złota, grave 376. 1, 8, 29-31 – Lower Silesia; 15-24 – Upper Silesia; 2-7, 9-14, 25-28, 32-46 – Little Poland. 1-4, 6-10 – stone; 5, 11, 43 – copper; 12-14, 16-28, 33-38, 41, 42, 45, 46 – bone; 15, 16 – amber; 29-32; 39, 40, 44 – flint. After ŻUROWSKI 1932; SEGER 1934; KRAUSS 1964; KAMIEŃSKA / KULCZYCKA-LECIEJEWICZOWA 1970; WOJCIECHOWSKI 1972; NOWORYTA 1976; WŁODARCZAK / KOWALEWSKA-MARSAŁEK 1998.

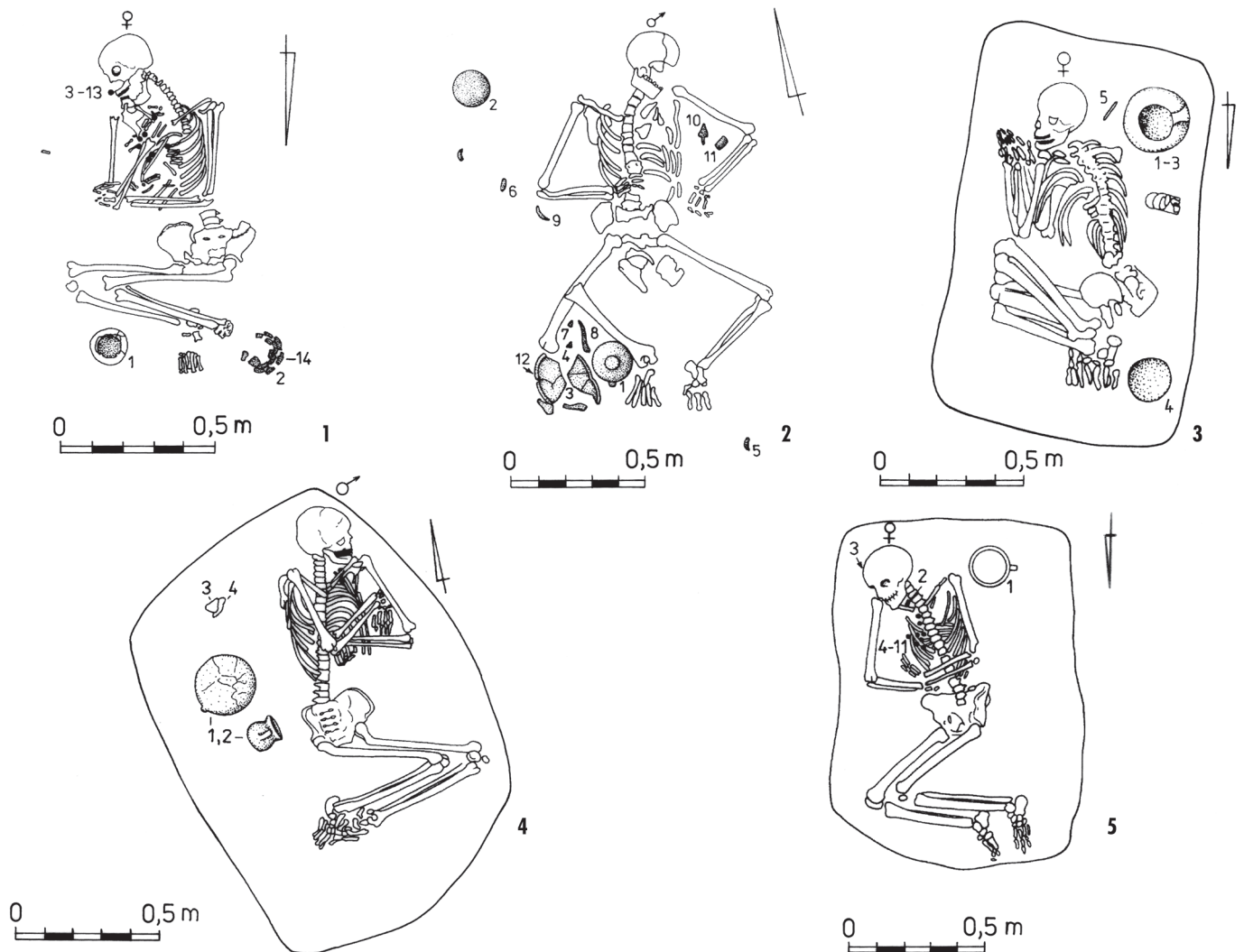


Fig. 11. Examples of the Bell Beaker funerary ritual from southern Poland. 1 – Sandomierz, site Wzgórze Zawichojskie: 1, 2 – pottery; 3-13 – V-perforated bone buttons; 14 – copper awl; 2 – Samborzec, grave 3: 1-3 – pottery; 4 – arrowhead; 5 – boar's tusk; 6, 7, 12 – flint artifacts 8 – bone artifact; 9 – model of bow made of boar's tusk; 10 – copper spearhead; 11 – wristguard; 3 – Samborzec, grave 6: 1-4 – pottery; 4 – Samborzec, grave 7: 1, 2 – pottery; 3 – flint artifact; 4 – flint dagger; 5 – Strachów: 1 – pottery; 2 – V-perforated amber button; 3 – amber pendant; 4-11 – V-perforated bone buttons. After KAMIENSKA / KULCZYCKA-LECIEJEWICZOWA 1970; NOWORYTA 1976; MACHNIK 1979; 1987; WŁODARZAK / KOWALEWSKA-MARSALEK 1998; BUDZISZEWSKI / HADUCH / WŁODARZAK 2003.

necropolis in Pietrowice Wielkie, Upper Silesia, exceeded the 9 pts mark on the richness scale. The richest were graves of men of *senilis* and *maturus* age groups. Of particular interest are: grave 3 in Beradz (39 pts), grave 3 (the so-called warrior's grave) in Samborzec (35 pts), both Little Poland, the slightly less rich graves of adult women, e.g. Strachów, Lower Silesia (24 pts), and Sandomierz (19 pts) and Złota, grave 4 (17 pts), both Little Poland. Women's graves are in general more diversified in this respect and one often finds among them relatively poorly furnished instances (e.g. Samborzec, graves 6 and 8 – women of *maturus* and *adultus/maturus* age groups – 4 pts ea.). Graves of children were also scantily furnished (e.g. Złota, grave 3 – 1 pt, grave 6 – 3 pts; Samborzec, grave 1 – 2 pts, graves 2 and 4 – 3 pts ea., all of *infans II* age group; Żerniki Górne, Little Poland, grave 1 – 3 pts). The average wealth score of all Bell Beaker

graves in Little Poland and Silesia is 6.7 pts. In the case of men, it is 15 pts, women 11.7 and children 3.7 pts.

The quoted data points to a certain inequality in the Bell Beaker community of upper basins of the Oder and the Vistula as well as rather moderate forms of ranking, whose participants were mostly men. The social position of women and – particularly so – children can be described as marginal. In all probability, the analysed communities were also organised along principles characteristic of kinship-based units (MAKAROWICZ 2003).

In the case of southern Polish Bell Beaker enclaves, it is difficult to plausibly distinguish at present any phases in their development, although such attempts have been made which led to the distinguishing of two stages (WOJCIECHOWSKI 1972; KADROW 2001). However, neither the character of sources (small fam-

ily cemeteries that could have been used only by one or two generations, the presence of older and younger elements in pottery from specific assemblages), nor a small number of radiocarbon dates support the distinction. Generally speaking, the materials from Silesia and Little Poland represent a younger development horizon of central European Bell Beakers, in particular, the late stage of the Bohemian-Moravian group and the Csepel group in the Danube drainage basin (WOJCIECHOWSKI 1987, 61).

Interactions

Interactions of Iwno Culture communities with other groups were very intense. Apart from parallel transmission of cultural patterns and transfer of people within the North European Bell Beaker Province, and “the world of the late Northern Neolithic” in general (late Globular Amphora Culture, late Single Grave Culture, epi-Corded Ware Culture communities), contacts with the Únětice world along the North – South and North – South-West axes gain importance at the end of the 3rd millennium (CZEBRESZUK 2001). These mainly consisted in exchange of exotic objects made of Baltic amber, which was obtained directly or indirectly by members of the Iwno Culture in return for items of bronze and gold from the area of the Únětice Culture). They played an important role in the social life of the lowland Bell Beakers (KOŠKO 1979). According to some approaches, a role stimulating the operation of the entire cultural system. They were prestigious objects used by the community and individuals in rituals aimed at winning and maintaining power, communicating high status, and confirming prestige.

Populations of southern Beakers sometimes interacted with communities of the late Corded Ware Culture (ca. 2400 / 2200 BC – WŁODARCZAK / KOWALEWSKA-MARSZAŁEK 1998), similar in social organisation (a model, in which men – warriors dominate). The role played by the Beakers is also stressed in the establishment of social structures of the proto-Mierzanowice Culture in Little Poland (KADROW 1995; 2001) as well as the proto-Únětice Culture in Silesia. Bell Beaker populations were characterised by their mobility. Anthropological analyses carried out in Little Poland show differences between male skeletons and those of members of local populations. It were only female skeletons that exhibited local characteristics (MACHNIK 1987, 141; BUDZISZEWSKI / HADUCH / WŁODARCZAK 2003). These observations are consistent with opinions, severely criticised in the 1980s, considering Bell Beakers a “male culture”, which was

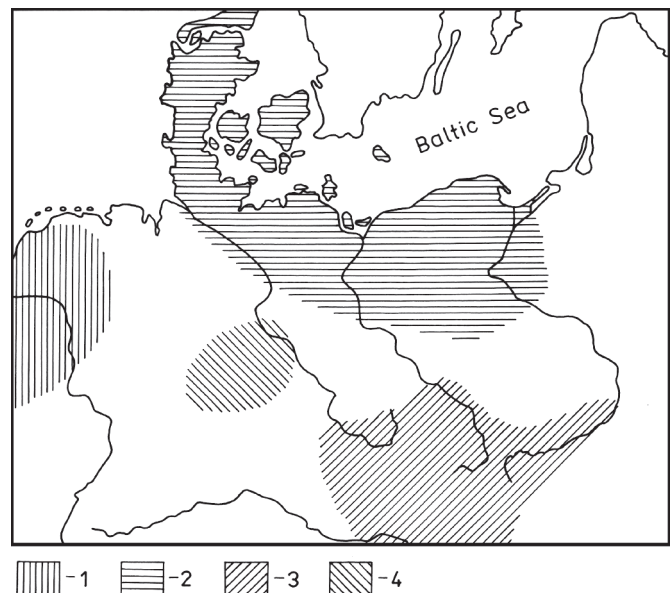


Fig. 12. Bell Beakers in the Vistula and Oder drainages against the background of the main Beaker enclaves in west-central Europe. 1 – Lower Rhine enclave; 2 – North-eastern enclave (including North Polish Bell Beakers); 3 – Enclave stretching between the Middle Danube, Upper Vistula/Oder and Upper Elbe (including South Polish Bell Beakers); 4 – Saale enclave. After CZEBRESZUK 2001 and CZEBRESZUK / SZMYT 2001, with amendments.

also supposed to account for its mobility. In their ritual life the discussed communities used varied items of prestige made of exotic materials, non-existent in those areas. This is a proof of the vast contacts of Beaker members and intense exchange with communities that had access to them (see: WALDREN / KENNARD 1987).

The lowland Beaker enclave was part of the north European cultural province stretching from western Jutland (Myrhøj group – LIVERSAGE 1987), across northern Germany as far as Kujawy and mainly formed by syncretic groups of Single Grave Culture and Bell Beakers (Fig. 12:2). The transmission of cultural patterns took place chiefly along parallels in this area, while the presence of the Bell Beaker package could have been an effect of transformations within local, late *Einzelgrabkultur*. One should not exclude, either, a combination of migrations of small groups of people from the west and a gradual transformation of local structures under their impact. The development of the Iwno Culture until ca. 2000 BC follows the general evolution tendencies in the central European northern zone in the second half of the 3rd millennium BC (Fig. 13).

The anthropological dissimilarity of Beaker populations as compared to the Corded Ware Culture and other Late Neolithic groups as well as differences in the sphere of material culture and funerary rituals bring out Bell Beakers strangeness with respect to local societies.

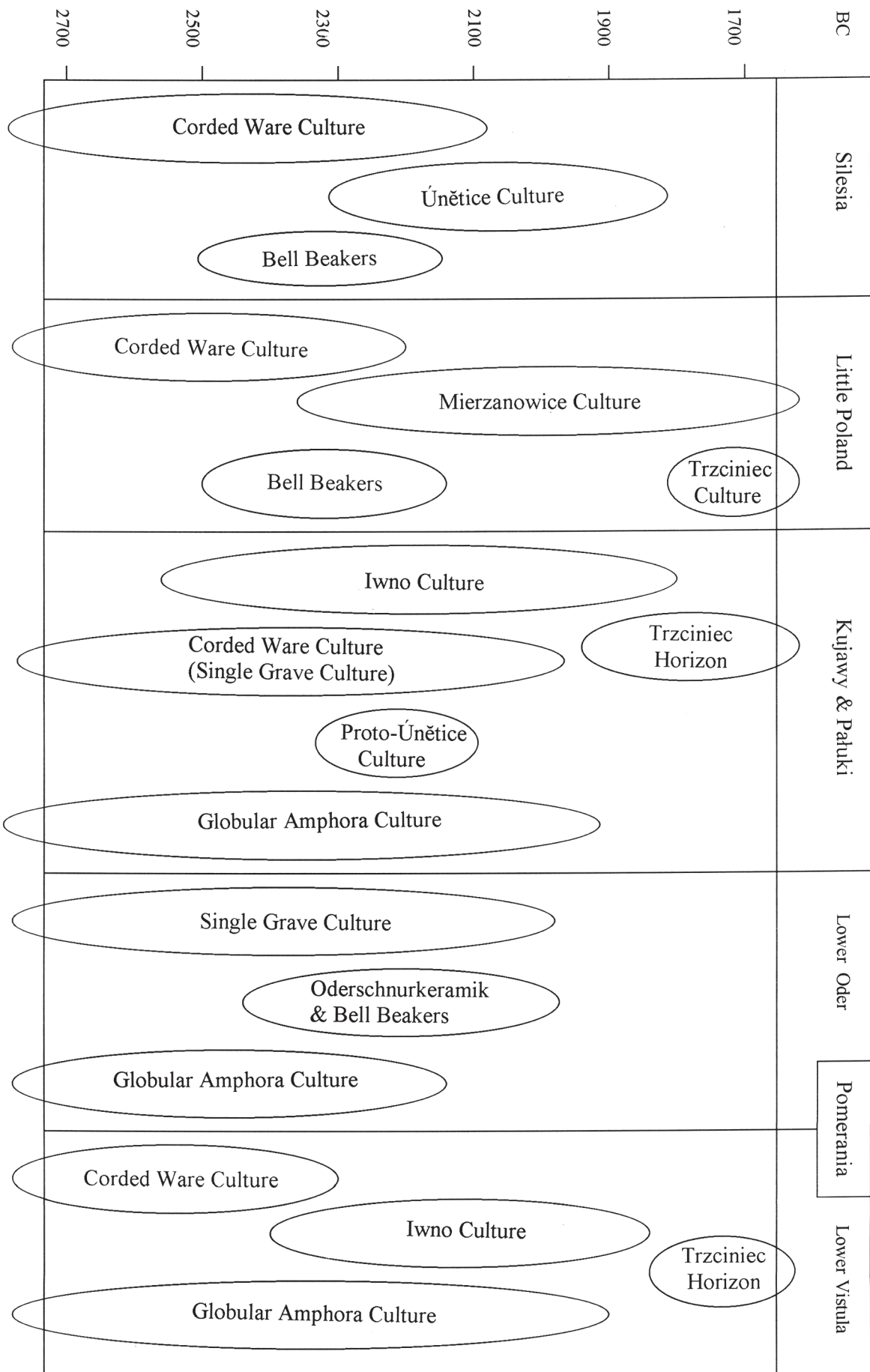


Fig. 13. Chronological sequences of the main cultural units in the area covered by the paper. After JACOBS 1991; KOŠKO 1991; BOKINIEC 1995; CZEBRESZUK 1996; 2001; ZICH 1996; MAKAROWICZ 1998; KADROW 2001.

An additional argument in favour of the migration theory of Beaker appearance in southern Poland is provided by the contemporary interpretations of the so-called *Begleitkeramik* (accompanying ware or common ware), recently suggested by Marie Besse and Christian Strahm (BESSE / STRAHM 2001, 115ff; see also CASE 2001). Earlier, vessels of this type had been considered in terms of chronology the last Bell Beaker development stage in central Europe characterized by the presence of undecorated ceramics (SHENNAN 1976, 133). Regardless whether we treat this kind of ceramics as an assembly of pottery of local non-Beaker cultures, subsequently incorporated by Bell Beakers, or as undecorated Beaker vessels, *Begleitkeramik* is part and parcel of the Bell Beaker cultural package and not something alien in respect of it (HEYD 2001, 393 and 404). Indeed, in southern Poland, it is rather difficult to associate accompanying pottery with local Late Neolithic groups, in particular the Cracow-Sandomierz group of the Corded Ware Culture dominating there (MACHNIK 1966; WŁODARCZAK 1998). Neither is there any continuity (genetic relationship) between the Corded Ware Culture and Bell Beakers. Beaker “folk” came here from the south, from Bohemia, Moravia and south-western Slovakia. Some scholars go as far as to interpret the southern Polish Bell Beakers enclave as the northernmost frontier of the Csepel group (Fig. 12:3 – WOJCIECHOWSKI 1987). This must be one of very few (the only?) known regional case where the appearance of Bell Beakers may be related to population migrations. After negotiating mountain passes (a convenient route led through, for instance, the Moravian Gate), they settled near the fertile loess lands of Silesia and Little Poland to participate actively in the rise of the Early Bronze Age there. In Silesia this was the proto-Únětice Culture, in Little Poland – proto-Mierzanowice Culture (Fig. 13).

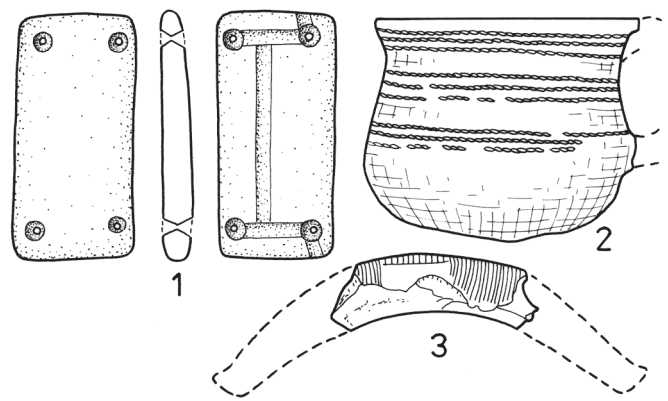


Fig. 14. A grave assemblage of the Proto-Mierzanowice Culture from Kietrz, Upper Silesia, showing the Bell Beaker traits. After MACHNIK 1987.

In both cases one can distinguish, relying on the typological analysis and absolute dating (Little Poland) relatively long – 100-200 years – horizons of co-existence of the late Bell Beakers and early assemblages of the mentioned groups. Sometimes, assemblages combining traits of both traditions, Bell Beakers and Mierzanowice Culture (Fig 14), and Bell Beakers and Únětice Culture (Fig. 15), are recorded as well.

Conclusion

Both Bell Beaker enclaves in the drainages of the Vistula and Oder rivers, presented here in a brief outline, have much in common but also differ from one another in many respects. Similarities follow mainly from the adaptation of Beaker ideology, whereas differences are a consequence of a different pace of cultural development in the highland and lowland zones and distinct mechanisms of Beaker package assimilation. In Silesia and Little Poland, the emergence of the package was related to the migration of Beaker “folk” of Danube traditions, whereas in the north, the “Beakerization” of the Single Grave Culture was an effect of much

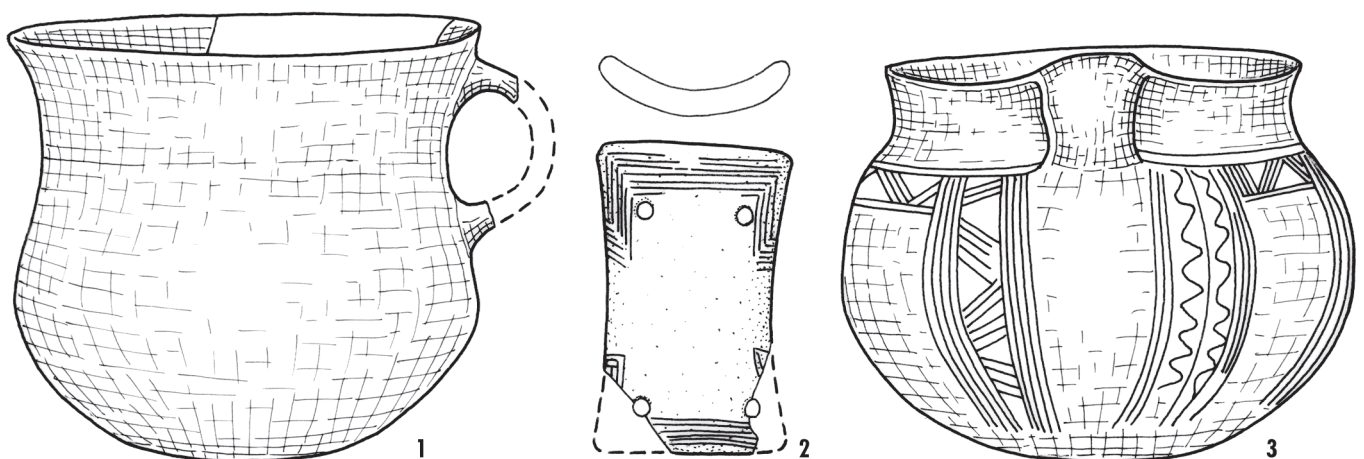


Fig. 15. A grave assemblage of the Proto-Únětice Culture from Wrocław-Oporów showing the Bell Beaker traits. After SECER 1934.

broader processes of cultural syncretization taking place between the lower Elbe and Vistula rivers.

In the southern Polish enclave, Beaker social structures can be interpreted as relatively unstable. This is borne out by the absence of documented settlements, presence of only small cemeteries, scarcity of Bell Beaker sites in this zone and a relatively short-lived nature of their settlement (300 years). Beaker societies must have been there very mobile, which must be related above all to their subsistence (i.e. cattle raising).

In the north, Iwno Culture populations were far more numerous and their settlement more intensive and lasting (700 years). In this area, many settlements have been recorded, although most of them are seasonal structures with a single dwelling-house. Settlements were often accompanied by single graves or cemeteries (only rarely were they lasting). Iwno Culture groups were relatively mobile, subsisting on cattle raising, as well as sheep / goats and – to a small degree – pigs.

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- In addition, one can speak of this society's participation (organization and servicing?) in the distribution of amber and metal among the cultural communities of the Vistula and Oder drainages.
- Beaker societies of both enclaves were characterized by moderate ranking, an ideology emphasizing the male element and complex rituals. In the rituals they used a number of prestige objects (more selectively in the north), characteristic of the Beakers in all the provinces. Owing to these traits, Bell Beakers in the Vistula and Oder drainages match the general tendencies of the socio-cultural evolution in central Europe at the decline of the Neolithic.

Acknowledgements

I wish to thank Dr. Piotr Włodarczak and Dr. Janusz Budziszewski for making the data concerning the Bell Beaker cemetery in Samborzec available to me.

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