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MARIJA GIMBUTAS

A SURVEY OF THE BRONZE AGE CULTURE IN THE SOUTHEASTERN BALTIC AREA

In this article the author will attempt a general characterization and chronological classification of the culture which spread over the greater part of (present-day) northern Poland (both sides of the Vistula River), East Prussia (the western part is now Poland, and the eastern part, the U.S.S.R.), Lithuania and southern Latvia.

INTRODUCTION

Environment. The lower Vistula plain connects the southeastern Baltic with central Europe; a physical barrier does not exist, the Vistula River serves as the main avenue of communication. Smaller rivers and a ring of glacial lakes would encourage local communication. The Nemunas (Memel) basin was, furthermore, a gate leading to Lithuania and White Russia. East Prussia and southwestern Lithuania were not as densely forested as the adjacent territories to the east and southeast. On the southeast this territory was bounded by virgin forests and Pripet swamps, forming a natural boundary line between the Baltic culture and the Volynian culture during the Neolithic, Bronze Age and later periods. The most fertile lands were in the West, in the maritime section of the lower Vistula basin, the amber source regions in the Samland peninsula and south of it in the Prèglius (Pregel) River basin, where plain of clayey soils is found, and in the basin of Nemunas, where layers of alluvium are found. The coastal area is in the zone of warm climate with shorter winters. The wealth of material culture which is in evidence throughout the Bronze Age in this coastal area was due to favorable conditions and resources: the open Baltic Sea shore line, convenient waterways, inexhaustible amber sources, a pleasant climate, and fertile soils.

Sources. The main body of information for the Bronze Age culture of this area was obtained from systematic excavations in former East Prussia. Archaeological investigations were started there over a hundred

years ago. Since 1875, reports have been pulished in Sitzungsberichte der physikalish-ökonomischen Gesellschaft (founded in 1790) and in Sitzungsberichte der Altertumsgesellschaft Prussia. The "Prussia Society" of Königsberg ("Altertumsgesellschaft Prussia") and its "Prussia Museum" was the main center and impetus of the archaeological research since the latter part of the nineteenth century until World War II. Another source of information is the quarterly Altpreussen published from 1935 to 1943, where valuable reports and articles appeared. A few decades ago, the achievements of the "Prussia Society" were summarized in W. Geerte's book Vorgeschichte von Ostpreussen (Prehistory of East Prussia), 1929, and in Carl Engel's monograph Vorgeschichte der altpreussischen Stämme, 1935. Another study concerned specifically with the Early Bronze Age is by Ed. Sturms, Die ältere Bronzezeit in Ostbaltikum, 1936. This serves as a catalogue of Early Bronze Age finds in East Prussia and Lithuania. A survey of Bronze Age finds made between 1918 and 1938 in Lithuania has been written by J. Puzinas (1938). A description of the Latvian finds was done by Šturms in 1930 (Congressus Secundus, 1931, 103 ff.). The monographs and reports concerned with the Bronze Age of this area are listed in the bibliography. During the last few decades no large scale monographs or articles on the Bronze Age of this area have appeared as there were no significant discoveries. However, before new finds are brought to light, a summary and evaluation of the material is highly desirable.

General characteristics. Metal artifacts in the southeastern Baltic area are related to those of Únětice-Lusatian culture in central Europe. The amber trade of the Baltic people with the inhabitants of central Europe produced such strong ties that the material culture of both groups developed along similar lines. Hoards were found along the lower Vistula and in East Prussia which contained inter-regional forms of the bronze types which frequently appear in central Europe and in northwestern Europe. The earliest bronzes were identical to the Űnětice and there is no doubt that the Bronze Age was initiated in the southeastern Baltic area through influences from central Europe (fig. 1).

Large scale excavations of habitation sites have not as yet been carried out. There are several preliminary or salvage excavation reports of habitation sites which include descriptions of house remains. However, these suggest that in habitat and economy revolutionary changes did not appear at the end of the Neolithic and throughout the Bronze Age. Knowledge of metal and metallurgy were added to the technology, but habitation sites were in most instances on a purely Neolithic level. The

usual assemblage included saddle-querns, sheep, cattle and horse bones, potsherds, bone tools, flint arrowheads, raw amber and amber beads. As during the end of the Neolithic, houses were small, rectangular — 4 to 6 m in length and consisted of one big room and an anteroom. Traces of houses were discovered on hills close to rivers. Remains of post-holes, logs, and clay fragments, some with twig impressions, indicate that houses were built of vertical posts, joined with horizontal logs, and the timber structure daubed with clay. So far, habitation sites are known

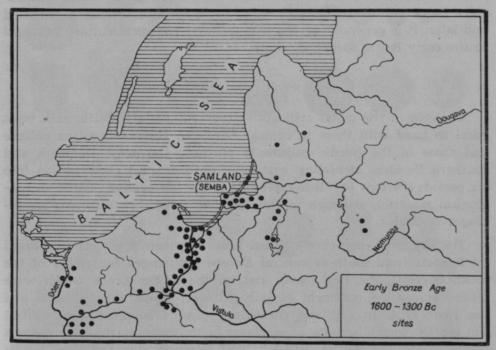


Fig. 1. Early Bronze Age (1600-1300 B.C.) finds in the southeastern Baltic Area.

from the Early Bronze Age, and from the end-Bronze Age or beginning Iron Age (Bezzenberger, 1919; Gaerte, 1932; 1937; Kilian, 1955). It can be seen that their habitat was more or less the same as in the whole southern Baltic area. In eastern Lithuania semi-subterranean dwellings were discovered during the recent excavations (Samantonys near Ukmergė: communication by R. Rimantienė; Volkaitė — Kulikanskienė, 1958, 16—17).

When the local metallurgy started, it is difficult to tell, due to lack of evidence. Local variants of flanged axes appeared during the sixteenth-fifteenth centuries B. C. which may have been produced by local metallurgists. Only after ca. 1300 B. C. do we meet in this area a typically

Baltic metal culture. I call the period between 1300—1100 B. C. the "Classical Baltic Bronze Age culture". It coincides in time with the efflorescence of the Northern Area culture in northern Germany, Denmark, and southern Sweden. The ceramic art was quite different from the Únětician and Lusatian. Its roots are in the preceding "Haffküsten" (Rzucewo) culture. Throughout the whole of the Bronze Age, barrowtombs were constructed encircled by serveral rings of stones; these likewise bear witness to the individuality of this cultural entity. Despite its intensive trade with central and northwestern Europe, the southeastern Baltic culture continued its individual features through this period and later. It is generally agreed that this archaeological culture belonged to the early Baltic speaking peoples.

CHRONOLOGICAL CLASSIFICATION

Changes in the metal artifacts in the southeastern Baltic area went hand in hand with those in central European Únětice-Lusatian culture and those of the Nordic culture in northern Germany, Denmark and southern Sweden. Montelius' system of chronological classification into six periods (Periods I—VI) is applicable to the southeastern Baltic archaeological material, although in this area we meet with different assemblages of finds.

The dates for each chronological phase are mainly correlations based on imports from south or central Europe (exchanged for amber of the southeastern Baltic Sea coast), and on the amber beads which were traded across the continent to Italy, Greece, Crete, the Caucasus and the Near East. In addition, chronology can be supplied from central Europe by correlating its assemblages with those of the southeastern Baltic, using the ABCD, BCDE, CDEF method plus the local stratigraphies.

Early Baltic Bronze Age Period I, ca. 1600 B.C. — 1300 B.C.

Amber trade with Greece and Italy started in the seventeenth century B.C. and this marks the beginning of the Bronze Age in the southeastern Baltic area. Spacer beads and flattened spherical amber beads are known from the Mycenaean shaft-graves III, IV and VI, usually dated at 1580 B.C. — 1510 B.C. (Karo, 1933) and from Grave Omikron, the second circle, dated at 1600 B.C. — 1550 B.C. (Mylonas, 1955). Similar amber beads have also been found in Terramara sites of northern

Italy in the province of Modena, dated with the Terramara I period (Säflund, 1939, 38,42 cf. Hawkes, 1940). We also have from tholos tombs in Greece, spherical beads, spacer beads and ring pendants

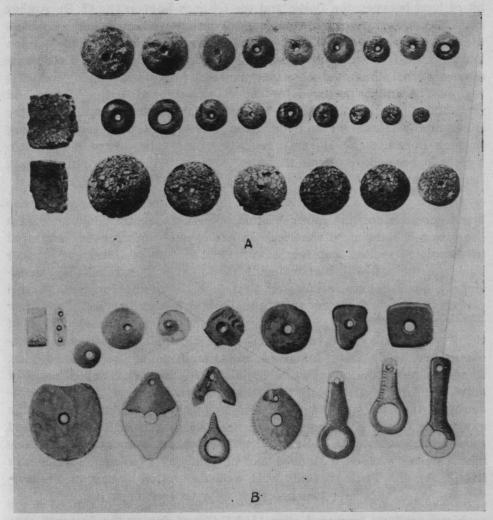


Fig. 2. A — Amber beads from Schaft-graves Nos. III and IV of Mycenae. Sixteenth century B.C.; B — amber beads (finished, unfinished and broken) from Juodkranté (Schwarzort), Lithuania. Pendants lower line left date from the earlier period than the rest (equate with Proto Unětice). After Karo (1933) and Klebs (1882).

with projection for suspension, dated at 1500 B.C. — 1450 B.C. (Kakovatos in Ellis, Paloponnese: Müller, 1906). Spherical amber beads were of frequent occurrence around 1400 B.C., and later, in Mycenaean Greece. The same kind of beads appeared in great numbers in the Unětice graves in Bohemia and Silesia (it has been estimated that over

70% of Únětician graves contain amber beads), and in the East Prussian-Lithuanian coastal area, where they are found in the unfinished state as well, e.g., in the workshop at Juodkrantė (Schwarzort) on the narrow bit of land between the Baltic and the Courish Lagoon (fig. 2: B). Amber finds of central and southern Europe were analysed and found to have a relatively high succinic acid content. There can be no doubt that the amber came from the Baltic coasts. Aside from Jutland, the East Prussian-western Lithuanian shore was the most important amber producing region. The amber prepared for export was shipped to the Vistula and from there went southward via western Poland, the basins of the Noteć River and Warta River and the upper Oder. The amber route, passing through Bohemia and Moravia, reached the Danube, where it split into two branches, one crossing the Alps into Italy, the other going along the eastern coast of the Adriatic to Mycenaean Greece.

In the sixteenth to fifteenth centuries B.C., Unětician bronze types spread along the lower Vistula (fig. 1). In central Europe and in the lower Vistula area, spherical or axe shaped amber beads appeared in association with: loop-headed bronze pins, short triangular dagger blades, armrings with narrow ends, basket-shaped earrings ("Noppenringe"), flanged axes, perforated stone axes and other objects. To this period, though not later than the sixteenth century B.C., we may assign the cemetery of Śmiardow (Schmirtenau) near Złotów, west of the lower Vistula (Holter, 1932). At this cemetery, flattened spherical amber beads were found in an assemblage of loop-headed pins, flanged axes with low flanges, metal hilted daggers, flint daggers of laurel-leaf shape, and small triangular arrowheads with triangular concavity at the base. To this period also may belong the artifacts from the stone cists in the Kiełpino barrows, near Kartuzy, west of Gdańsk, and those from Prusewo, in the district of Wejherowo, Pomerania. The Kielpino barrows yielded a flanged axe of "Italian" type and a stone axe (fig. 3: A); the Prusewo finds were a bronze-hilted dagger of Transylvanian "Apa" type and two bracelets with tapered ends (fig. 3: B).

Metal artifacts increased after 1550 B.C. and during the fifteenth century B.C. The time equates in central Europe with the advanced Únětice period, in Greece with Mycenaean I (end) and II and in Crete with Late Minoan I—II. Amber traffic is demonstrated by large hoards found on the lower Vistula. In these hoards flattened spherical amber beads are associated with copper ingots, gold rings, earrings of a British type, plus various ornaments and weapons of advanced Únětice type: C-shaped massive armrings, spiral rings, spiral rolls of copper wire, pins with globular heads, short flanged axes and long, spatula-shaped flanged

axes, narrow double-edged axes, dagger blades and bronze-hilted daggers (cf. hoards of Wąsosz and Wojcieczyn in the district of Szubin, Przysieka Polska near Kościan: K n a p o w s k a - M i k o ł a j c z y k o w a, 1957, ryc. 83, 111, 115—116; hoard of Brusy near Chojnice: fig. 4). Halberds, the weapons current in northern Europe around 1550 B.C., were unearthed in the southeastern Baltic area. At present, one is known from Mierzeszyn near Gdańsk and another from Veliuona in the district of Kaunas, Lithuania (fig. 5). Both are like the metal-shafted type from

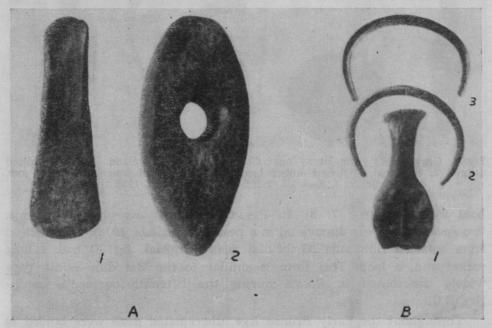


Fig. 3. Grave finds from the early part of the Early Bronze Age barrows in the lower Vistula area: A — Kiełpino, district of Kartuzy, B — Prusewo, district of Wejherowo. Scale 1/2, dagger 3/5. After Sturms, 1936.

the graves of the Łęki Małe barrow, district of Kościan, western Poland, which belong to the advanced phase of the Únětice culture. A spearhead with two loops, from the British Isles, was discovered at Skowarcz near the mouth of the Vistula (fig. 6: 2). Such spearheads date from about 1400—1300 B.C. (by communication of Prof. Hawkes, Oxford).

Toward the end of the Early Bronze Age, the importing of metal artifacts stimulated the gradual appearance of local forms. Throughout the area, from northwestern Poland to Latvia, a fairly large number of flanged axes with broad but-end were found; these are considered to be locally made. However, actual traces of metallurgy are not known. Large spearheads with broad blades, known from Samland and Lithuania,

can also be regarded as local products (fig. 7). They are related in general to the spearheads of northwestern Europe, but differ in size and the broadness of their leaves. In Lauth near Königsberg (Kaliningrad) such spearheads were found in graves in association with a perforated rhom-

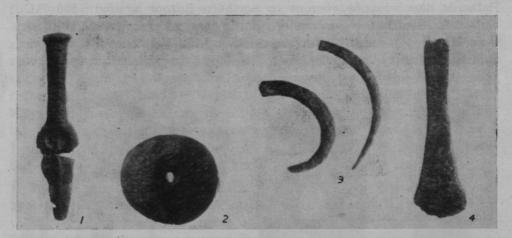


Fig. 4. Grave finds from Brusy near Chojnice, northern Poland. 1, bronze hilted dagger, 2, spherical, flattened amber bead, 3, fragments of bracelets, 4, flat axe. Scale: 1, 3—5 1/3, 2 1/2. After Sturms, 1936.

boid stone axe (fig. 7: 3). In Pryšmančiai near Kretinga, Lithuania, two spearheads were discovered in a peatbog (Puzinas, 1938). A spearhead from western Lithuania (Gribžiniai near Gargždai, fig. 8) had a long socket and, a loop. This form is similar to the Borodino-Seima type widely distributed in Russia during the fifteenth-fourteenth centuries B.C.

Throughout the Early Bronze Age, uncremated dead were buried in barrows, usually laid on stone floors and covered with stones or with cists built of various sized stones. The barrow was encircled by rings of stones. A continuity in burial rites is demonstrated by the stratified barrow excavated in 1873 in Kaup at the village of Viskiautai, district of Primorsk (Fischhausen), Samland (Heydeck, 1893). Graves A—C, belonged to the end Neolithic and Early Bronze Age. Judging from a belt clasp of bone, the lowest grave, grave A, belongs to the Baltic Haff (Haffküstenkultur) culture, which equates in time with the Bell Beaker period. The grave second from the bottom, grave B, contained a rhomboid stone axe, a flint knife and a bone pin with loop — finds typical of the Early Bronze Age (approximately sixteenth-fifteenth centuries B.C.). Grave C was above grave B and contained an ingot torque and a small bronze chisel-like tool. The next grave, grave D, was an urngrave of the Late Bronze Age.

Bronze artifacts were rare in graves, usually containing only perforated stone axes, flint knives, flint celts, bone pins with perforations, amber beads, rings and pottery (fig. 9: 1, 3). Also, the habitation sites yielded only pottery, stone and bone objects (fig. 9: 2). Reddish-brown

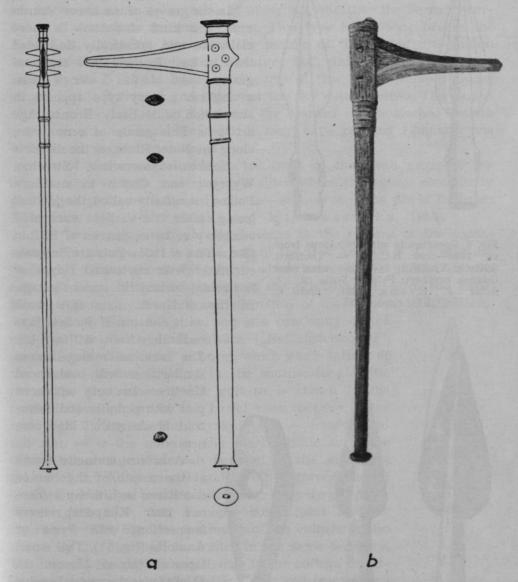


Fig. 5. Metal-shaped halberds from ca 1400 B.C.; A — Mierzeszyn near Gdańsk, northern Poland. B — Veliuona, district of Kaunas, Lithuania. After Sturms, 1929, 1936. Scale ca. 1/5.

pots made of well baked clay were S-shaped beaker forms with outwardly turned rim. The decoration was usually horizontal ridges around the

Fig. 6. Spearheads with two loops from ca 1406—1300 B.C. 1 — Thetford, Suffolk, England; 2 — Skowarcz near Gdańsk northern Poland. Scale ca. 1/3. After J. Evans, 1881, and E. Šturms, 1936.

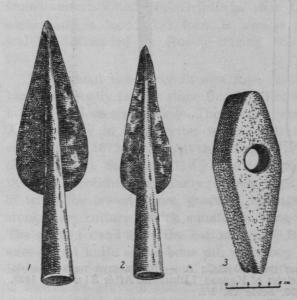


Fig. 7. Spearheads and stone axe from Lauth near Kaliningrad (Königsberg).

After Kleemann, 1938.

neck, either plain, incised, or fingertip impressed (fig. 9: 3).

In the graves of the lower Vistula area, this kind of pottery is more elaborate and artistically decorated than in East Prussia. In a series of graves west of the lower Vistula, a uniform pottery type appears in association with Early Bronze Age artifacts. This group of cemeteries, along the Noteć River, in the districts of Szubin, Inowrocław, Strzelno, Wyrzysk and Chełm in northern Poland, is usually called the "Iwno" group, after the earliest excavated cemetery at Iwno, district of Szubin (Brunner, 1905). Pots are decorated either with horizontal ridges or horizontal incised lines and zig-zags. In the mid-neck zone is a bulb

with clusters of incised rays radiating from it (fig. 10). The Iwno assemblage shows similarities with advanced Unětice. In both appeared pins with globular and rhomboid heads with folded corners.

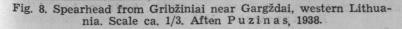
A bronze statuette found at the mouth of the Nemunas River in Lithuania (Šernai near Klaipéda) shows connections with Syria or Anatolia (fig. 11). This small figurine (about 15 cm. in height) was discovered under a stone in the forest. It portrays a brachycephalic man wearing a cylindrical hat; he is stepping forward with his

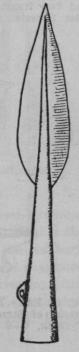
left leg. The left arm is bent, the right upraised. A weapon was probably originally held in the sight hand. The Sernai figure is undoubtedly an import from the Near East and it is especially close in style to the north Syrian statuettes. The fact that relatively few of the statuettes are known from Anatolia makes it uncertain wheather the Sernai figurine is of Anatolian or Syrian origin. This type had a long life in the Near East, appearing soon after the middle of the second millennium and persisting until the seventh century B.C. (information kindly provided by K. Bittel; Istanbul). Figures of this sort developed under strong Hittite influence and represent the sky deity Teshub. The closest relative of the Lithuanian figurine is the bearded and mustached Teshub with pointed hat from Anatolia. It may have reached Lithuania via Greece and the amber route.

One of the most valuable recent finds of the Iwno group is the craal — an enclosure protected by a ditch where the village community probably kept its domesticated animals—uncovered in the site of Biskupin (Gardawski, Dąbrowski and Mikłaszewska, 1957).

The Iwno group undoubtedly belongs to the culture of the south-eastern Baltic area and is not a part of the Únětice, nor is it a separate "culture". This is shown by pottery which has relatives in East Prussia and Lithuania. It is a descendant of the preceding phase of the Early Bronze Age (cf. fig. 9: 2, 3) and ultimately of the Rzucewo (Haffküsten).

The Early Bronze Age culture is a continuity of the end-Neolithic Baltic Haff culture ("Haffküstenkultur", also called the "Rzucewo" culture), which was a variant of the Corded Pottery culture in the southeastern Baltic area. The persistence of the culture is shown in the gradual development of the burial rites, pottery, stone and bone industries. The physical type - long-headed tall men - is the same in the end-Neolithic as in the early Bronze Age. This can be seen in the successive graves of the Kaup barrow and in other graves (Rasytè in Kuršiu Neringa, western Lithuania: Heydeck, 1893, 52; Engel, 1935, 342; Konopat polski near Świecie: Šturms, 1936, 87). The continuity of the culture is also shown by the distribution of sites in the same territory. The impetus for growth and change in the culture resulted from a large market for Baltic amber and from strong influences from the southwestern neighbours in central Europe, the Unětice culture.





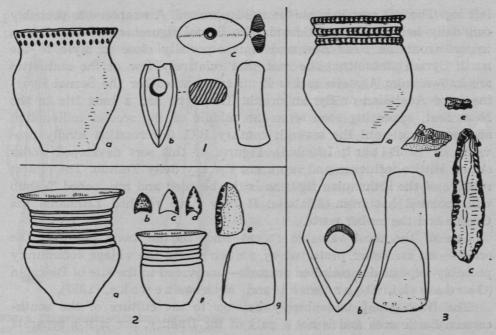


Fig. 9. Early Bronze Age grave (1, 3) and habitation site (2) assemblages. 1, find from the burial mound I at Babiety Male near Susz, former East Prussia: a — pot, b — perforated stone axe, c — amber bead. 2 — Pots, flints and stone celt from the habitation site at Kończewice, Gdańsk district. 3 — pot, stone axe, flint knife and two fragments of flint artifacts from a grave at Koczek near Pisz, former East Prussia. After La Baume-Langenheim, 1933, 1939 (1—2) and Bezzenberger, 1919 (3).

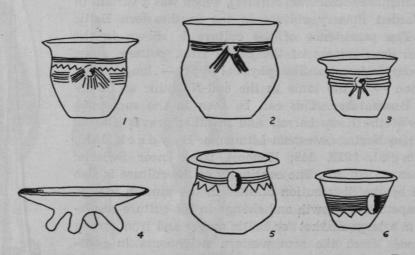


Fig. 10. Early Bronze Age "Iwno" pottery from northern Poland: 1 — Baranowo, district of Strzelno, 2 — Szarlej, district of Inowrocław, 3 — Drążno, district of Wyrzysk, 4—6 Iwno cemetery, grave 8, district of Szubin. Scale ca. 1:2. After Kostrzewski, 1935.

During the period distinctive for the tremendous spread of the "Tumulus" bronzes from the area of the Middle Dannube, which is, in central European terminology, the Phase B₁ and the beginning of the Middle Bronze Age, Pomerania and East Prussia also received a number of bronzes. Large hoards containing "Hungarian" battle-axes, spiral armbands, geometrically decorated bracelets with tapering ends, and other

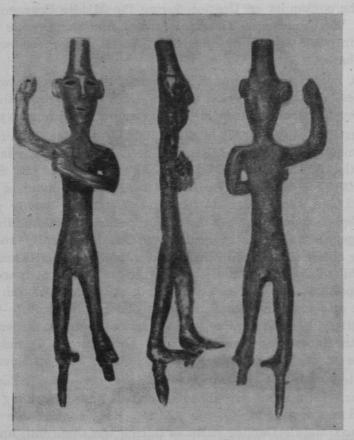


Fig. 11. Hittite figurine from Sernai near Klaipėda, western Lithuania. Scale ca. 2/3. After Wiesner, 1941.

typical finds are known from Pomerania (such as, Kurcewo-Krüssow, Rościęcino-Rossenthin or Redzikowo-Reitz: Kersten, 1958). This is the last phase before the dawn of the local Bronze Age when the southern Baltic area was flooded with numbers of foreign bronzes. As suggested by central European — Mycenaean (Late Helladic III A) relations, the date of this phase should be the fourteenth century B. C. In central Europe it coincides with the so-called "Proto-Tumulus" and "Proto-Lusatian" phase.

Classical Baltic Bronze Age Period II and III, ca. 1300—1100 B. C.

The amber source area continued to play its important role. The coast of Samland and near the mouth of the Vistula are the richest in metal finds. Influences were from the Southwest, the Lusatian culture (the continuity of Unětice during the Middle Bronze Age), and from the West, northern Germany and Denmark. Despite noticable ifluences in other aspects of culture, the metal artifacts show an independent character.

Graves, hoards and isolated finds produce the picture of two distinct assemblages, containing Period II and III bronzes respectively. The stratigraphy in burial mounds is of great value for chronology.

The best starting point in a description of the Middle Bronze Age is the cemetery of Rantava (Rantau) near Rauschen, Samland, quite close to the Baltic Sea (Bezzenberger, 1904, 15 ff; Šturms, 1936, 108 ff.). The cemetery consisted of twelve burial mounds. Barrow I (fig. 12), 2,3 m. high, 9 m. in diameter, contained twenty graves of different levels belonging to the various periods from Middle to Late Bronze Age. Grave A in the center was stratigraphically and typologically the oldest (fig. 12: A). The uncremated body was furnished with a flange-hilted sword, a cult-axe or "battle axe", a bracelet with diagonal incisings, an ear-head pin, and a shepherd-hook pin (fig. 13). The grave also contained small dark-blue faience beads, 0,7—0,9 cm in diameter (fig. 13: 4). A similar type of faience bead is known in association with amber beads from the Early Lusatian and Tumulus hoards and graves in central Europe (southern Poland, Silesia, Slovakia).

About ten other cut-and-thrust swords are known from East Prussia and western Lithuania, but all are isolated finds (cf. Engel, 1935, Taf. 91; Šturms, 1936, 47, 48, 99, 100, 118, 138). Trade with the Lusatian and Middle Danube cultures during the thirteenth and twelfth centuries B.C. is also known from many other artifacts from Samland and lower Vistula area, like sperheads, axes (cf. fig. 22) and pins (cf. fig. 18).

The cult-axe with shaft-hole or the "Nortycken axe", named after the find place of that name in Samland, where a hoard of twenty-four axes of this type was discovered, is long and narrow with four ornamental forrows along both sides of the body (fig. 13: 2). Such graceful axes are distributed along the southern coasts of the Baltic Sea between Schleswig-Holstein and Latvia (Arbman, 1933). A fairly large number were found in East Prussia and western Lithuania. In western

Lithuania near Varniai, a nice specimen with three ornamental furrows was discovered in a peat-bog site together with a long spiral-head pin (fig. 14).

These Baltic cult-axes exhibit variation in form; some of them have a narrow edge and butt-end, some even show a semi-circular edge and broad, rounded butt-end. The variation indicates that the type had a fairly long existence in the southeastern Baltic area. A type with

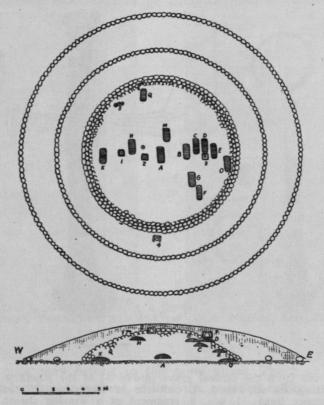
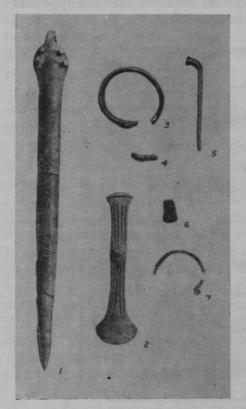


Fig. 12. Plan and section of the barrow Nr 1 at Rantava (Rantan), Samland. A—Q, Classical Bronze Age inhumation graves. 1—5, End Bronze or Early Iron Age cremation graves in urns. After Engel, 1935.

a semi-circular edge and with butt-end separated from the body, as illustrated in fig. 15: I, represents a later and typically southeastern Baltic type. Such axes are found in Latvia, Lithuania, East Prussia and Pomerania, but not in the western Baltic area. In the hoard of Czubin near Błonie (fig. 16) in the Warsaw region (the furthest south for this type axe), a southeastern Baltic cult-axe appeared in association with a southeastern Baltic type flanged-axe having a concave body, and an Early Lusatian socketed-celt with a long socket.

The inhumation graves in the Rantava barrow, marked with B—Q in fig. 12 (situated higher than the center grave A) were furnished with ear-head pins with thick cylindrical or conical heads decorated with vertical or diagonal strokes and criss-crosses, pins with cylindrical and ribbed heads, pins with large spiral plates, bracelets of round or



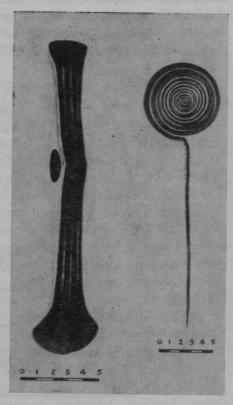


Fig. 13. Inventory from the central grave (grave A) of the Rantava barrow Nr I, Samland. 1, flange-hilted sword, 2, cult-axe of Nortykiai (Nortycken) type, 3, bracelet, 4, faience beads, 5, pin, 6, fragment of a wooden sheath (?), 7, ingot torque. Scale ca 1:4. After Arbman, 1933.

Fig. 14. Axe and pin from the peat-bog at the confluence of Rešketa and Virvyčia near Varniai, western Lithuania. Period II. After Puzinas, 1938.

oval section with thinning ends, decorated with vertical strokes or vertical alternating with horizontal, tutuli, knives, and many globular or semiglobular amber-beads with cylindrical bore, and quadrangular amber-beads or pendants (fig. 17). This assemblage differs from that of the center grave A. The form of the ear-head pins, although related to Early Lusatian pins, are of local manufacture, and the spiral-head pins are a later variant of the spiral-head pins current in the begginning

of the Middle Bronze Age. The rest of the graves in the Rantava barrow I were secondary burials and all were cremated. They belong to the end of the Bronze Age. Grave material almost identical to that of Rantava graves B—Q was in the tumuli of Alknikiai (located in the vicinity of the Rantava cemetery, those of Šlažai, Klaipéda district, western Lithuania (Šturms, 1936, 100 ff.), and those of Warshenko, district of Kartuzy, in the lower Vistula area (Šturms, 1936, 120). A hoard from Radoszki, district of Brodnica, lower Vistula area, con-

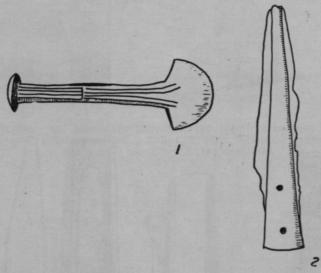


Fig. 15. Axe and spearhead found in a grave at Gedmino dvaras near Klaipeda, western Lithuania. Period III. Axe 16,4 cm. long. Prussia Museum. By courtesy of J. Puzinas.

taining six pins, may belong to the same phase. The pins had various types of heads: double-conical, rolled up, profiled, ribbed, and hooked (fig. 18).

The finds from the central and earliest grave, grave A, of Rantava barrow I, by comparable items in hoards and grave's of northern Germany and southern Sweden, can be shown to belong to Montelius' Period II: the immediately succeeding finds in the same barrow, graves B—Q, to the Period III. Similar forms in the Lusatian culture indicate that grave A equates in time with the Early Lusatian, and the later grave finds, with the Classical Lusatian. Pots of both phases were low undecorated beakers (fig. 19). In the later phase, there were also pots with wide mouths, some with lugs, and a terrine with a wide cylindrical neck (fig. 19: B).

Flanged axes had a much more developed edge than during the Early Bronze Age (fig. 20: 1). A peculiar type of flanged axe appeared, typical of the southeastern Baltic between Oder and Daugava Rivers:

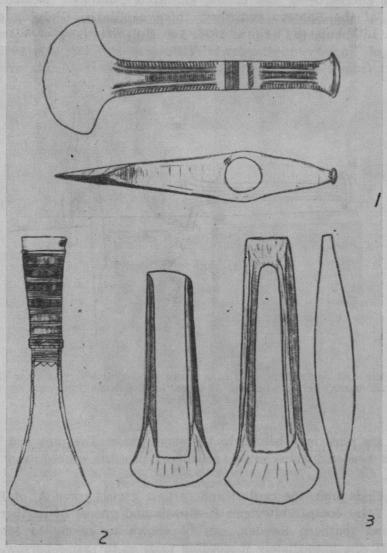


Fig. 16. Cult-axe, socketed celt and flanged axes of southeastern Baltic type from the hoard of Czubin near Błońsk, Warsaw region, Poland. Scale ca. 1:3. Atfer Sulimirski, 1928.

the body, between the butt and the edge, was concave, the flanges were high, usually up to 1 cm., the length was 10—20 cm. (fig. 20:2—4). Some of these axes, probably the later variants, had a semi-circular or

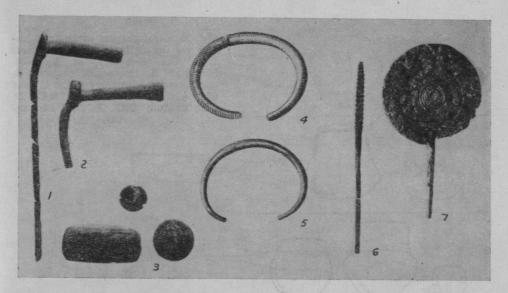


Fig. 17. Finds from the secondary graves of the Rantava barrow Nr I. Period III (end of the second millennium B.C.). 1, 2, 6, 7, pins, 3, amber beads, 4, 5, bracelets.

Scale ca 1:3. After Sturms, 1936.

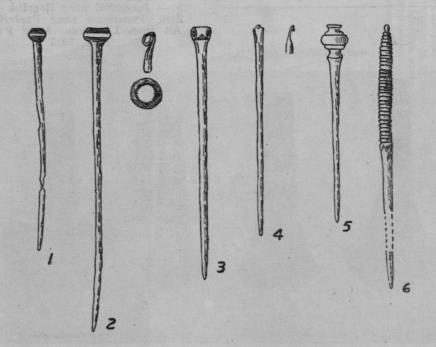


Fig. 18. Bronze pins from Radoszki hoard near Brodnica lower Vistula area. Scale ca 1:3. After Langenheim, 1934.

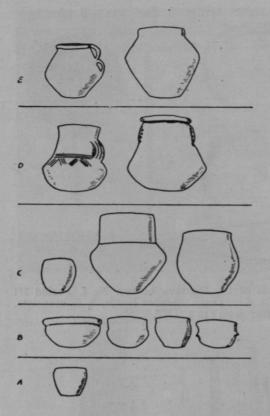
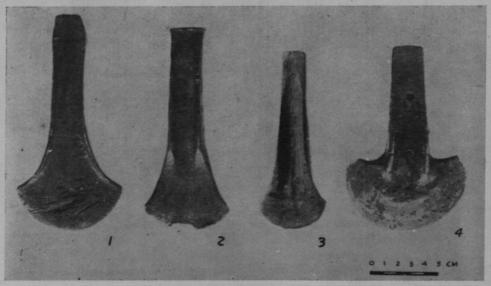
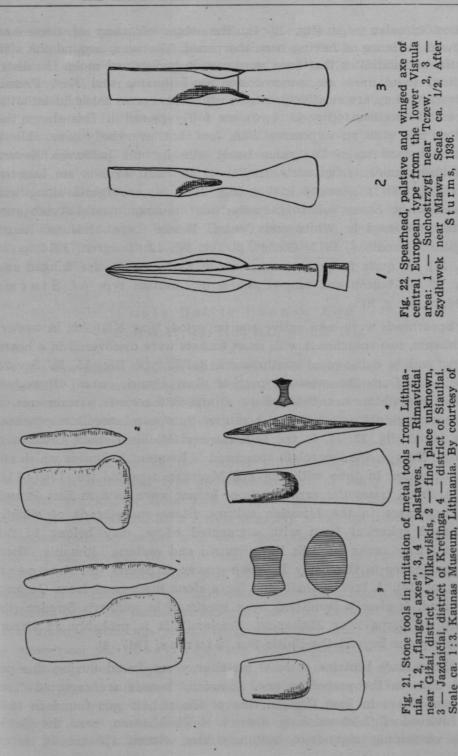


Fig. 19. Stratigraphy of pottery based on the different period graves from the cemetery of Rantava, Samland. A, thirteenth century B. C.; B, twelfth century B.C.; C, end of the second millennium B.C.; D, fifth century B.C.; E, first century A.D.

Fig. 20. Flanged axes typical of the Middle Bronze Age in southeastern Baltic area. 1 — Alksna near Zem. Kalvarija, 2 — Stremėnai Pagėgiai, 3 — Jurgaičiai near Ragainė 4 — Žem. Panemune near Paežerėliai. All from Lithuania. After Puzinas, 1938.



J. Puzinas.



almost circular edge (fig. 20:4). The edges of many of these axes showed evidence of having been sharpened. The seam around the sides of the axe indicates that axes were cast in two-valved molds. In distribution, these axes are concentrated in Lithuania and East Prussia. However, they are relatively scarce, while stone axes made in imitation of metal specimens (fig. 21:1, 2) are fairly plentiful. This shows that metal was still an expensive item and not everybody was able to posses bronze tools. The same holds true for the palstaves. Several specimens known from northern Poland and East Prussia are Lusatian type (fig 22:2). Stone palstaves (fig. 21:3, 4) are found along with bronze ones. Stone palstaves similar to Lithuanian and Latvian ones, were discovered in White and Central Russia (Lepel, Kaluga, Riazan regions: Gorodtsov, 1915, Otchet, p. 144, fig. 12; Tallgren, 1916, p. 23, fig. 21). Of quite frequent occurrence in East Prussia, are winged axes (fig. 22:3), button and tanged sickles of Lusatian type (cf. Šturms, 1936, pl. 21: g, h).

Spearheads were both native and imported. Near Klaipéda in western Lithuania, two spearheads with short sockets were discovered in a hoard, along with a cult-axe of southeastern Baltic type (fig. 15, 2). Several specimens from the western part of East Prussia were of western Baltic type (Šturms, 1936, pl. 19: a) and in the lower Vistula area, in Suchostrzygi, district of Tczew, a central European lanceolate spearhead was found (fig. 22: 1). In the Lusatian and Middle Danube cultures of central Europe, the lanceolate spearhead is frequent in hoards which can be correlated in time with the End-Mycenaean period (ca. 1250-1150 B.C.). Small triangular arrowheads of bronze were used in East Prussia as they were in the Lusatian culture. Stone mace-heads of slightly flattened spherical form with segmented edges, may belong to this period; they occur in both East Prussia and eastern Lithuania. There are analogues in the Early Lusatian graves of Silesia (Richthofen, 1926, pl. 15). A bronze shaft-ring for a stone mace-head from Germau, Samland, is closely paralleled by a specimen in southern Sweden (the hoard of Torpa near Jönkoping, Smoland). It is probably an import from regions beyond the Baltic Sea (Šturms, 1947, 4).

Many more remains of local metallurgy are found during this period than in the preceding one. Founders' hoards are reported from various places in East Prussia. One of the richest was found in 1902 in Littausdorf (Lietuvninkai), district of Fischhausen, near the Baltic Sea, containing sixty-four button sickles, eleven spearheads, seven

socketed celts and thirty-six armrings (Bezzenberger, 1904, 25—27). Some types represent local southeastern Baltic manufacture. The dominant types in the hoard are reproduced in fig. 23. The specimens were covered with a large piece of red copper. Most of the spearheads, celts and sickles were either broken, unfinished or had defects, that is, none were fit for use. The armrings were not sufficiently closed and some had been stretched out. Artifacts were similar to one another but not identical. Perhaps, the founder kept these specimens in stock as raw material or intended to repair them. That the southeastern Baltic metallurgists were able to alloy true bronze for their tools and weapons, is shown by a chemical analysis of the spearhead and sickle from the Littausdorf hoard. The spearhead was composed of 79,9% copper, 15,7% tin, and 2,4% nickel; the sickle, of 78,7% copper, 19,6% tin and 0,1% iron.

Late Baltic Bronze Age Period IV, ca. 1100 B.C. — 850 B.C.

The new period is indicated by a different assemblage of metal finds, especially by the southeastern Baltic type of socketed celts, and by changes in burial rites. During this period cremation rites appear. Chronology is shown by stratigraphy and comparison of the graves and finds with the central European ones.

Toward the end of the second millennium B.C. this area developed an individual type of socketed celt. A fairly large number of celts are known from East Prussia, northern Poland, Lithuania, White Russia and southern Latvia (fig. 24). Many specimens had a distinctive rounded socket and were decorated with vertical, diagonal and zig-zag strokes. Of the several hundred celts of this southeastern Baltic type, a considerable part come from hoards. In northeastern Poland near Białystok, at Kalinówka Kościelna, a hoard of forty-eight socketed celts, one miniature hammer-axe with a ribbed shaft-tube, and two massive armrings round in cross-section, was found in 1910 in a cylindrical pot (Kostrzewski, 1929). Several celts in this hoard were similar to the type current in Silesian and East Prussian hoards of this period, but the bulk were locally produced. The main types are shown in fig. 25. Similar types of celts were also found in the hoard of Česai near Merkiné in southern Lithuania (Szukiewicz, 1914, 74, fig. 53). Massive armrings frequently appear in hoards of the Period IV. The miniature cult-axe also seems to be a locally developed form, which apparently replaced the Middle Bronze Age cult-axes of Nortycken type. Another almost identical cult-axe was found in Zygieryki near Kętrzyn in former East Prussia (Engel, 1935, pl. 106: c).



Fig. 23. Types of finds from the hoard of Littausdorf (Lietuvninkai). 1 — spearhead, 2 — sickle, 3 — bracelet, 4 — socketed celt. Scale 1:2. After Bezzenberger, 1904.

Along with metal ones, stone axes for cult purposes were still commonly used. Some of them are clearly imitations of the metal cult axes known from the Kalinówka hoard (fig. 26).

The greatest novelty was the introduction of cremation. Cremation graves appeared in barrows encircled with two, three or more concentric rings of stones, similar to those from the Middle Bronze Age. The earliest cremation graves were in imitation of inhumation graves: cremated bones were placed in shallow pits in the center of the barrow. In several instances cremated bones were found scattered over the fire-place. There were no urns. The transition from inhumation to cremation was gradual as in the Lusation culture, but in the southeastern Baltic area it came several centuries later. The earliest cremation graves did not imitate Lusatian urn-graves but showed individuality.

Many of the excavated barrows belong to several phases of the Late Bronze Age and the Early Iron Age. Urn graves in stone cists overlie cremation graves without urns. Sometimes the urn graves were dug into the earlier cremation graves. In several of the large tumuli, hundreds of graves from various periods were found — good evidence of a continuous population at the same site. In the tumulus at Workiejmy

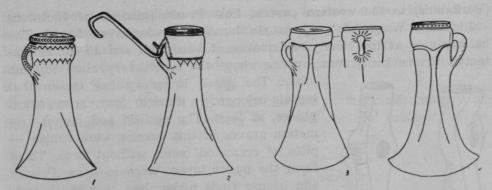


Fig. 24. Socketed celts of southeastern Baltic type. 1 — Ilknikiai near Primorsk (Fischhausen), 2 — Birkenhof near Primorsk, 3 — Zygaičiai near Svékšna, western Lithuania, 4 — Liudvinavas, district of Marijampolė. Scale ca 1:3. After Engel, 1935 and Puzinas' collection.

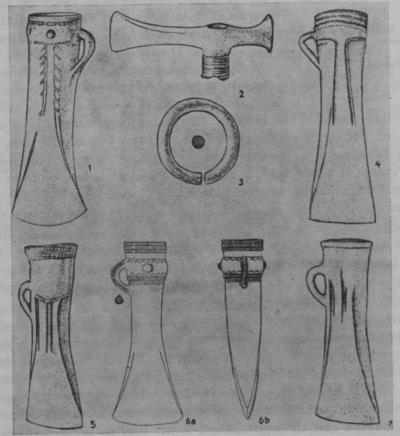


Fig. 25. Socketed celts, cult-axe and bracelet from the hoard of Kalinówka Kościelna, district of Białystok, northeastern Poland. Scale ca 1:2. After Kostrzewski — Sprockhoff, 1950.

(Vorkaimis) in the western part of East Prussia (district of Heilsberg - Lidzbark Warmiński), up to six hundred graves were found. The barrow was, at the time of excavation, 1,8 m. high and 13 m. in diameter. Cremation graves lay one above the other, very close to each

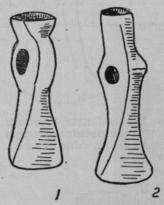


Fig. 26. Cult-axes from Regaine near Tilže (1) and district of Gerdauen (2).

2 — Period IV—V, 1 — Period VI. Scale ca 1:3.

After Engel, 1935

other. The grave inventory has shown that burials belonged to three or four chronological phases, at least. The earliest and lowest cremation graves in this barrow were simple -piles of cremated bones without urns. Those from the upper layers were in urns. Pottery and bronze finds make clear that the barrow contained graves dating from Period IV, V-VI and the Early Iron Age (ca. fourth - third century B. C.). Pot forms from the earliest layers were reminiscent of the Late Lusatian forms. For instance, the vase with fluted decoration and the terrine with cylindrical neck (fig. 27: A). The later pots (fig. 27: B, C) are typical southeastern Baltic types. Among the bronze ornaments, bracelets were found made of thick round wire, and a fibula with two

round flat plates. This type of fibula frequently occurs in assemblages of Period V; the bracelets belong to Period. IV. The Workiejmy tumulus is a "mausoleum" of the Late Bronze Age people in East Prussia. Another barrow with a mass burial is known from southwestern Latvia. In Rezne, Salaspils district, southwest of Riga, on the Daugava River, a large burial mound (2 m. high) contained almost five hundred burials (Šturms, 1950, p. 1 ff.). Precise dating of the burials is impossible because of the scarcity of finds. However, in the lowest layer of the mound a heart-shaped arrowhead of flint was discovered close to an inhumed body; according to Šturms, the arrowhead may date from Period II-III. The other burials, from the upper layers in Rezne, were cremated and inhumed. In one of the cremated graves, in a simple heap of cremated bones without urn, a spiral handle of a razor was discovered, that, according to Šturms, may date from Period IV. Another blade of a razor, probably belonging to the same period, was found though not in situ. The datable objects make possible the conclusions that the rite of cremation penetrated the area north of the Daugava and the southeastern Baltic area at the same time. The cremated bones in Period IV were placed neither in urns nor in stone cists, but in simple piles. Cremation graves in small stone cists were

located above the simple cremation graves. In one of the cists a fragment of bronze tweezers with embossed decoration was discovered. Inhumation burials lay above the cremation graves in the stone cists, and thus, on the basis of stratigraphy can be regarded as belonging to the Final Bronze Age or Early Iron Age.

Period V, ca. 850—700 B.C. At the end of the ninth century or the beginning of the eighth century B.C., the whole of eastern Europe

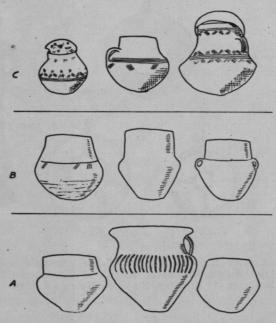


Fig. 27. Stratigraphy of pottery from the stratified barrow at Workiejmy near Lidzbark Warmiński. A, Period IV, b — Period V, c — Early Iron Age (ca. fourth century B.C.). Based on Engel, 1935.

received greater influences from the northern shores of the Black Sea, brought by a fresh wave of distributors of a Caucasian metallurgy. A distinctly new character to bronze artifacts appears in the southeastern Baltic culture which points to a Caucasian origin. These artifacts are relatively datable on the basis of Caucasian chronology. The occurrence of bridle-bits, racquet-pins, spiral armbands, circular and semi-circular pendants in the hoards and graves, opened a new phase in material culture, derived from wide contacts with the southeast.

In East Prussia, bridles occur in the hoards associated with the socketed celts with two ornamental furrows along the body and the ear. The Skandau hoard, Gerdauen (Zheleznodorozhnyj) district in

East Prussia, contained two bridle cheek-pieces, a socketed celt, four ring-like and one wheel-like pendant, and three massive round bracelets (fig. 28). The Wielkie Borki hoard, Szczytno district, contained the same type of socketed celt, two ring-like pendants, a racquet pin, two spiral armrings, two necklaces ornamented by groups of strokes, and

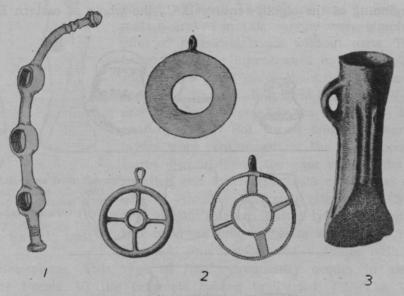


Fig. 28. Bridle cheek piece (1), ring and wheel-like pendants (solar symbols?) and socketed celt from the Skandawa hoard, district of Gerdauen (Zheleznodorozhnyj).

Scale ca 1:2. After Bezzenberger, 1904.

a neckring with large loop-ends (in German "Bügelring mit Vogel-kopfenden") (fig. 29). A large racquet pin was discovered in another East Prussian hoard in Domnicksruh, Heiligenbeil district, together with semi-circular and circular pendants (Bezzenberger, 1914). In Fritzener Forst burial mound No. 1, near Fischhausen (Primorsk), a racquet pin was associated with a quadrangular amber bead, a pin with rolled-up head, a necklace with large loop ends, a bracelet with profiled (vase-headed) ends and a closed finger-ring (fig. 30). In the burial mound of Hubnicken in Samland, a neckring with loop ends was found in association with an amber bead or pendant. The shape of the pendant was triangular with a triangular notch removed from either side, the whole decorated with pits. Faience beads were also found with the neckring and amber pendant (fig. 31). In almost all of the burial mounds from the East Prussian-Lithuanian Baltic Sea coast, in addition to the well-shaped beads and pendants of quadrangular

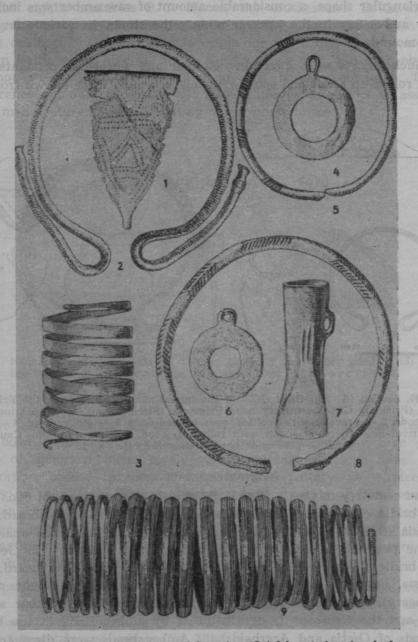


Fig. 29. Wielkie Borki hoard, district of Szczytno (Ortelsburg). 1 — head of a racquet pin, 2 — neckring with loop-ends, 3, 9 — spiral armrings, 4, 6 — ring-like pendants (solar symbols?), 5, 8 — ornamented neckrings, 7 — socketed celt. Scale ca 1/3.

After Sprockhoff, 1950.

or triangular shape, a considerable amount of raw amber was included. Raw amber lay in the urns or among the stones in various levels of the mound.

Such objects as racquet pins, circular and wheel-like pendants, pins with rolled-up heads and spiral armrings resemble those known from the

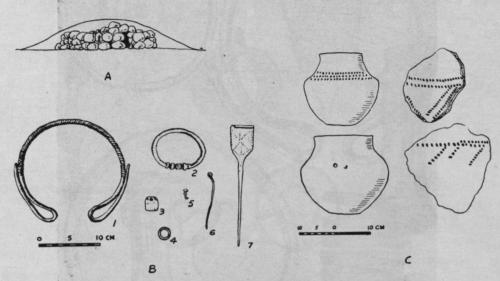


Fig. 30. Section (A) and finds (B,C) of the burial mound No. 1 from the Fritzener Forst (Pričkaus Giria) cemetery near Primorsk (Fischhausen). 1 — neckring with loop-ends, 2 — bracelet with profiled, vase-headed ends, 3 — amber bead, 4 — ring, 5 — rivet-like object, 6 — pin with rolled-up head, 7 — racquet pin, Caucasian type. C, pots and sherds. After Heydeck, 1890.

Koban cemetery in Osetia (fig. 32 B). A belt clasp with spiral ends from The bridle cheek-piece of the type found in the Skandawa hoard, East Prussia (fig. 32 A: 8 and 32 B: 5). Wheel-like pendants are analogous to the pendants known from the Redkin Lager cemetery in Georgia. The bridle cheek-piece of the type found in the Skandawa hoard, East Prussia, has close analogies with finds in the Middle Danube region (Hungary). Intercourse between the southeastern Baltic amber source area and the Caucasus is demonstrated by amber finds in the burial mounds of Osetia and Azerbaidzhan. Amber beads were discovered in the Koban, Samtavro and Khodzalin cemeteries (Bayern, 1885; Chantre, 1886). The Koban cemetery in northern Osetia, central Caucasus, which contained artifacts like the racquet pins which are related to those of the Eastern Baltic area, is dated at the end ninth

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and the eighth centuries B.C. Hence, the southeastern Baltic hoard and grave material of this period is probably not earlier than the eighth century B.C. The ultimate origin for the forms of these southeastern Baltic metal objects, lies in the Caucasus area, but such objects are not strictly identical to those in the Koban cemetery. Their occurrence not only in hoards but also in graves, allows us to assume local manufacturers were imitating the foreign forms.

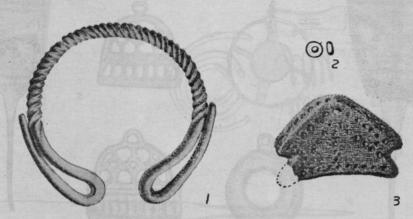


Fig. 31. Neckring with loop-ends (1), faience bead (2) and amber pendant (3) from the barrow at Gr. Hubnicken, Samland. After Bohnsack, 1940.

The burial mounds of Palenai near Primorsk (Fischhausen) besides the above-mentioned types of grave goods, disclosed tiny blue glass beads of spherical form, nicely-worked pentagonal stone axes with perforation, bronze tweezers and undecorated pottery. On a piece of leather on one of the Palenai tweezers were remains of iron, possibly of a pin (Bezzenberger, 1900, 97). If this observation by Bezzenberger is true, these remains would be the first appearance of iron in the southeastern Baltic area. Fragments of an iron artifact were also found in the above mentioned Fritzener Forst barrow.

Local manufacture of bronze tools is evidenced by finds of copper ingots. In the peat-bog at Rummy near Szczytno (Ortelsburg) copper ingots occurred in round wire forms along with a socketed celt, ornamented bracelets and spirals (fig. 33).

Tomb architecture continued along similar lines. The barrows were surrounded by rings of stones and covered with head-sized boulders. Cremation rites were fully dominant. During this period it was customary for a small stone cist to be built above the cremation grave.

The cist was surrounded by a stone wall. A good example of this type of burial is shown by Dammwalde barrow in Samland (Gaerte, 1931). The barrow was 14 m. in diameter and 1,5 m. high (fig. 34). The cremation grave in a pit was covered by a flat stone, and above it a small

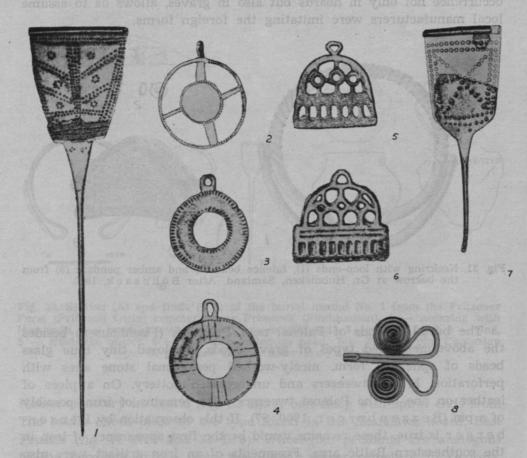


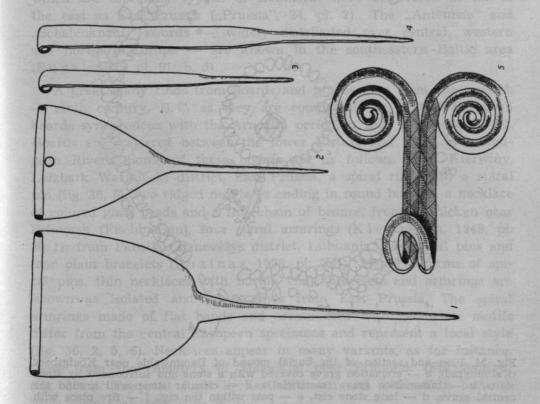
Fig. 32 a. Racquet pins, pendants and belt clasps from East Prussia, hoard of Domnicksruh. After Bezzenberger, 1914.

cist of stone slabs was built. The cist was surrounded by a stone wall, built of six rows of head-sized boulders. East of the cremation grave, traces of an inhumation grave of two people was found which is very likely a sacrificial burial. To the southeast, outside of the stone wall, a long corridor-like cist of thin stone slabs was built. In it stood several pots (fig. 34: d, e).

Fig. 32b. Racquet pins (1—4) and a belt clasp (5) from the cemetery of Kobau, Osetia. After Chantre, 1886.



Fig. 33. Finds from the peat-bog at Rumy ne szczytno. 1 — copperingots, 2, 3 — spirals hin wire, 4 — socketed celt, 5, 6 — bracele After Bezzenberger, 1904.



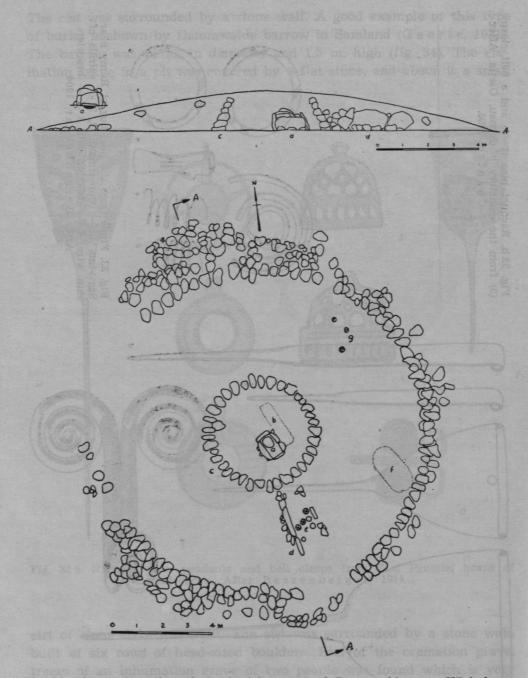


Fig. 34. Plan and section of the burial mound of Dammwalde near Königsberg (Kaliningrad). a — cremation grave covered with a stone and surrounded by stone slabs, b — inhumation grave (sacrificial?), c — circular stone wall around the central grave, d — long stone cist, e — pots within the cist, f — fire place with clay foundation, g — small fire places. After Gaerte, 1931.

Urns were also in use. Human bones are found mixed with charcoal, sand and small stones (Bezzenberger, 1904, 47—48). The urns are very well made, polished to a shiny black surface.

Period VI, ca. 700 B.C. — 525 B.C. Contents of hoards bear witness that the amber source area was involved in trade with central Europe and through it, with Italy on the one hand, and on the other with the whole southern Baltic area, northern Germany and southern Scandinavia.

The Drebnau hoard from the East Prussian sea coast (fig. 35) exhibits forms that are typical of northern Europe, especially of the southern Baltic area and southern Sweden. Almost identical ones are known from the hoards in Klein Butzig, Złotów district, to the west of the lower Vistula (Kossinna, 1916, "Mannus", 8, 99) and in Eskelhem, Gotland (Berg, 1925, Reallexicon, III, Pl. 24). Commerce undoubtedly existed between the southern Baltic coast and southern Scandinavia. The Eskelhem hoard contained bridle-bits of the type known as Platenice Type III in central Europe. The golden "trumpet-ended bracelets", which are especially typical of Denmark, were discovered as far to the east as East Prussia ("Prussia", 24, pl. 2). The "Antennae" and "Schalenknauf" swords — widely distributed over central, western and northern Europe — are known in the southeastern Baltic area (Engel, 1935, pl. 91: b, d).

A great many finds from hoards and graves date from the seventh - sixth century. B. C. as they are comparable to central European hoards synchronous with the Arnoaldi period in Italy (650-525 B. C.). Hoards are scattered between the lower Vistula and the Lower Daugava Rivers. Some of these hoards are as follows: from Kierwiny, Lidzbark Warmiński district, East Prussia, a spiral ring with a spiral pin (fig. 36, 5), two ridged necklaces ending in round buttons, a necklace of colored glass beads and a fine chain of bronze; from Saltnicken near Primorsk (Fischhausen), four spiral armrings (Kleemann, 1949, pl. 30: 1); from Pabaliai, Panevėžys district, Lithuania, two spiral pins and four plain bracelets (Puzinas, 1938, pl. XII). Identical forms of spiral pins, thin necklaces with button ends, bracelets and armrings are known as isolated and grave finds from East Prussia. The spiral armrings made of flat bands and ornamented with geometric motifs differ from the central European specimens and represent a local style (fig. 36, 2, 5, 6). Necklaces appear in many variants, as for instance, those from the cemetery of Šlakalkiai near Primorsk (Fischhausen) (fig. 36:4). Frequent finds in East Prussian and Lithuanian barrows were swan-neck pins (fig. 36:3).

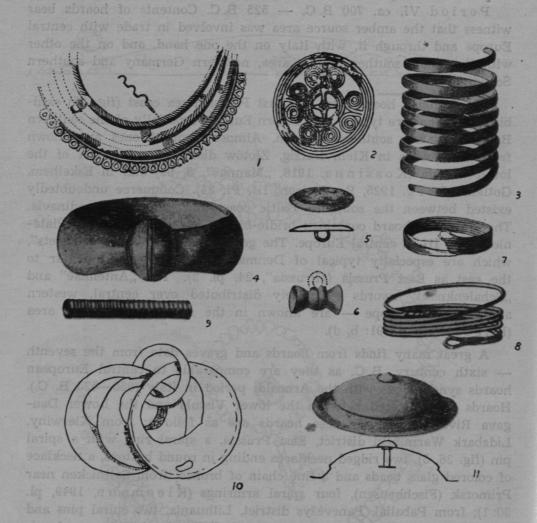


Fig. 35. Drebnau hoard, Samland. 1 — necklace, 2 — ornamental plate, 3, 7, 8 — armrings, 4 — bracelet, 5, 6, 10, 11 — objects for horse gear, 9 — spiral. After Gaerte, 1929. Scale ca 1:2.

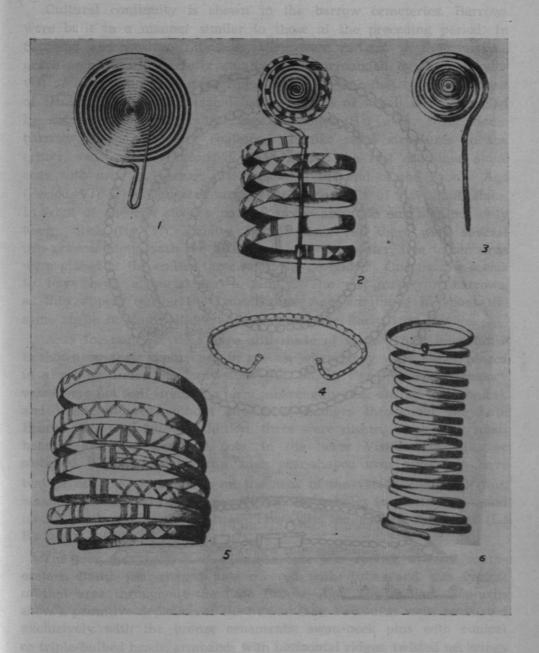


Fig. 36. Southeastern Baltic spiral armrings, spiral pins and neckrings. Period VI. 1 — Iszutis (Insterburg), 2 — Orzysz Lake, district of Pisz, 3, 6 — Tilžė (Tilsit), 4 — Šlakalkiai (Schlakalken) near Primorsk (Fischhausen), 5 — Kierwiny, district of Lidzbark Warmiński. Scale: 1—3 1/2, 4 1/3, 5, 6 1/2. After Bezzenberger, 1904.

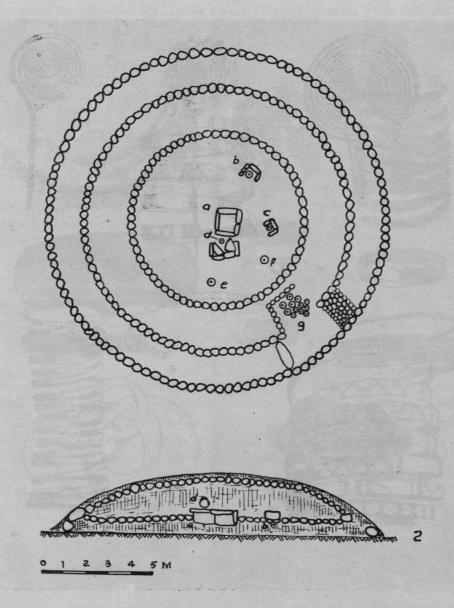


Fig. 37. Plan and section of Varškiai barrow, district of Primorsk (Fischhausen). Period VI. a — central grave in a stone cist, b, c, urn-graves in cist at the side of the central barrow, d—f — secondary urn-graves, g — Early Iron Age urn-graves (La Tène-period). After Engel, 1935.

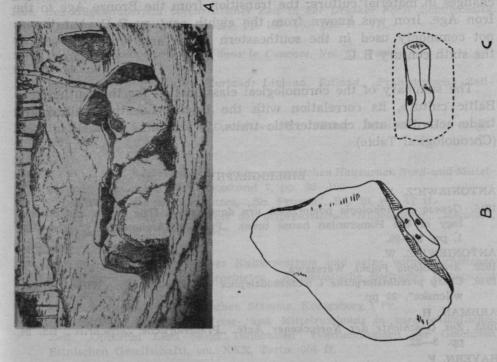
Cultural continuity is shown in the barrow cemeteries. Barrows were built in a manner similar to those of the preceding period. In Samland and western Lithuania, they were distinct in their artistic grave architecture. Barrows usually were surrounded by three to eleven or more concentric stone rings (fig. 37). The cemetery in the forest of Druskiai, Samland, revealed barrows, some of which were encircled by six, ten, eleven or more rings of stones (Bujack, 1890). Some barrows of the cemetery contained circular stone structures in the center, and probably belonged to Period V; the rest contained stone cists with urns and ornaments, typical of the end of the Bronze Age (Period VI). The elongated stone cists were built of flat stone slabs. In front of one cist stood a pointed stome about 80 cm. higt but only 9 cm. thick (fig. 37). Usually, in one stone cist there were several urn-graves. Along with the main burials in the center, five to ten urns were placed at the end of the cist, in the "corridor". One barrow seems to have been a burial for a family. The cist-graves in barrows, as they appear during the Late Bronze Age, continued in about the same shape in this Baltic area throughout the Early Iron Age.

Axes for cult purposes were still made of stone. Their importance is shown by their occurrence in graves, where they were either placed in a pot or under the tomb-stone (fig. 38: B, C). Urns and accessory vases were not well fired. The form was reughly pear-shaped or biconical, and this continued without any great changes throughout the Late Bronze Age (fig. 39). In addition, there were dishes, vases with small handles and wide-mouthed pots. In the lower Vistula area, in the so-called Wielkowiejska group, such pear-shaped urns appear to have two "eyes", i. e. small holes on the neck of the vase. Cylindrical caps, which covered the urns, frequently had three holes to portray eyes and mouth, with a bulb for a nose. These are the earliest face-urns (La B a u m e, 1939).

The idea of a portraying a human face was applied to local south-eastern Baltic pear-shaped pots covered with dishes and was typical of that area throughout the Late Bronze Age. The earliest face-urns show a primitive depiction of the human face. Face-urns were associated exclusively with the bronze ornaments: swan-neck pins with conical or triple-bulbed heads, armbands with horizontal ridges, twisted neckrings ending in flat loops, and tweezers (La Baume, 1939, 218, fig. 3, 4). These finds belong to the end of Period VI, which in the southern Baltic area precedes the assemblage where iron artifacts became dominant.

Chronological Table

Chronological Table	CORRELA- TION with cultures in Greece.	ARCHAIC	GEOME- TRIC	PROTO- GEOME- TRIC	SUB—MYCE- NAEAN, LATE HELLADIC III C	LADIC III B	LATE HEL- LADIC III A, LATE HEL- LADIC II, LATE HEL- LATE HEL- LADIC I
	CORRELATION with the Unetice-Lusatian culture in central Europe.	(Cremation and inhumation rites. Geometrically decorated pottery, painted or incrusted). Late Lusatian (Cremation rites. Appearance of bridles.)		Late Lusatian (Cremation rites. Survival of fluted and boss-decorated pottery),	Classical Lusatian (Boss-decorated and fluted pottery. Cremation rites).	Early Lusatian ("Pre-Lusatian", boss-decorated pottery. Transition to cremation).	Tumulus expansion Late Unëtice Classical Unëtice
	TRADE (chiefly amber trade) with	western Baltic area, central Euro- pe and Italy	central Europe, and the Caucasus via Central Euro- pe. Appearance of iron	central Europe	western Baltic area, Scandinavia, central Europe, Italy.	central Europe, Greece	western Baltic area, British Isles, central Europe- Greece, Italy
	BURIAL RITES (based on evidence chiefly from Samland)	Cremation. Urns in stone cists. Barrows with many concentric stone rings. The cists (house imitations) covered with stones.	Cremation. Urn-graves surrounded by flat stones. Barrows with stone rings. In the center, circular stone wall constructions.	Cremation. No urns, graves in shallow pits. Barrows with stone rings as in Period II—III.	Inhumation. Barrows, the same type as in Period II.	Inhumation rites. Barrows sur- rounded by stone rings. Graves within a stone mound in the center.	Inhumation rites. Barrows with graves in stone cists or other house imitations.
	APPROXI- MATE DATES	700—525 B.C.	850—700 B.C.	1100—850 B.C.	1200—1100 B.C.	1300—1200 B.C.	1400—1300 B.C. 1500—1400 B.C. 1600—1500
	TELIUS after MON- PERIOD	pine were wi	swan-neck zontal ridge	manuant man	don of the	ive deple	snow a primit exclusively w or triple-bulb
	PERIOD	LATE BALTIC BRONZE AGE			CLASSICAL BAL-		TIC BRONZE EVELY BAL-



Urn in a small stone cist from

Lithuania. Scale 1/

Fig. 39. Stone cist, and tomb-stone from the arrow cemetery of Druskiai (Drusker Forst), Samland. (A) and stone cult-axes found under a tomb-stone (B) and within a pot (C) from the same cemetery. After B u i ack, 1890.



Trade with the South seems to have intensified during the seventh and sixth centuries B. C. and it was a decisive factor in the further changes in material culture: the transition from the Bronze Age to the Iron Age. Iron was known from the eighth century B. C., but it was not commonly used in the southeastern Baltic area until the end of the sixth century B. C.

The summary of the chronological classification for the southeastern Baltic culture, its correlation with the Únětice-Lusatian culture, its trade activities and characteristic traits, is presented in tabular form (Chronological Table).

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