JADWIGA KAMIEŃSKA
ANNA KULCZYCKA-LECIEJEWICZOWA

THE NEOLITHIC AND EARLY BRONZE AGE SETTLEMENT
AT SAMBORZEC IN THE SANDOMIERZ DISTRICT

The history of the Neolithic Age in Poland and the necessity of solving a number of problems connected with it, aroused growing interest of explorers and prompted recent systematic excavation works on many sites concerning that period. One of them, of foremost importance in respect to those questions and particularly to the reconstruction of the history of Neolithic settlement in South Poland, is the site of Samborzec, Sandomierz district. Its situation, the abundance of disclosed material and, above all, the possibility of tracing stratigraphic relations between objects of various cultures, decided the starting of excavation works, which were to last several years.

The Samborzec site is situated in a way typical for the majority of Neolithic settlements in the area of the Sandomierz loess countryside (fig. 1). It lies on a high bank of the Gorzyczanka river—Vistula’s left tributary. Its valley crosses here the flat eminence of the Sandomierz Upland, covered by a thick layer of fertile loess soil. The upland’s southern slope, softly inclined towards the river, offered very convenient conditions to settlers establishing themselves here in various periods. The vicinity of an important communication route along the river Vistula, was also an advantage.

No wonder, therefore, that the neighbourhood of Samborzec, as well as all of the Sandomierz region providing a number of archaeological sources, were for a long time the object of lively interest for explorers. The investigation and recognition of this area was largely the merit of J. Źurowski and his team of archaeologists carrying out excavation works in Złota, Sandomierz distr. and its neighbourhood in the twenties and thirties of our century.¹ This largely planned research scheme included for the first time in 1930 also digging in Samborzec, some 3 km distant from Złota. Its aim was exploring an early mediaeval skeleton cemetery of the 11th-12th century.² Several large Neolithic objects connected with Band Ceramics Culture were simultaneously discovered.³ The curious collection of excavated materials induced the investigators to consider once more the site from the angle

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of a Neolithic set of problems. The first post-war preliminary verification research was carried out in 1957 by Z. Podkowińska. Further systematic surface investigations were started by the Archaeological Department of the Institute of History of Material Culture, Polish Academy of Sciences in Cracow in 1961 and continued till 1966. They brought a number of important data concerning the history of Neolithic Settlement in this territory and provided much interesting material to the study of Linear Band Ceramics Culture, Lengyel Culture, Złota and Corded Ware Culture and Bell Beaker Culture, and in later years also of Trzciniec Culture, Bell Grave Culture and finally Przeworsk Culture.

**EARLY NEOLITHIC CULTURES**

The earliest traces of human groups dwelling in the Samborzec site are connected with Linear Band Ceramics Culture. Settlement of this culture’s population had a longlasting character. Its first traces, belonging to the oldest phase of Linear Band Ceramics Culture in Europe, with finds dated to the middle of the 5th millenary
B. C. were till now known mostly in Moravia, Western Slovakia and Eastern Germany. The Samborzec site displayed for the first time in Poland a considerable amount of materials coming from chronologically uniform objects of this phase (fig. 4:1 - 3). It is undoubtfully one of the most important discoveries achieved in this site and allows a definite shifting of the origins of Neolithic settlement in Polish lands several hundred years further back than what was till now assumed.

The pits disclosed in Samborzec containing materials of an oldest phase of Linear Band Ceramics Culture, had perhaps fulfilled household functions difficult to be determined today. They may also simply have been cavities caused by scooping out clay and subsequently filled with rubbish. The settlement's aspect and character still remain uncertain, for only a small part of the site covering its extent has been so far investigated. But an important fact is the disclosing of a human grave contemporary to the settlement (fig. 2). The individual laid here rested at the bottom of a rectangular, carefully dug out pit, in crouching position, on his left side, with head directed eastwards facing the south and with hands touching the face. Personal objects found with the skeleton were: a sling of threaded pierced animal's teeth lying behind the dead human's head and a number of bone beads scattered round the hips and thighs. Traces of ochre appeared over the skull. The grave contained no other objects of equipment. The stratigraphic situation of the grave pit, lying beneath an object of the oldest phase of Linear Band Ceramics Culture determines the chronology of this grave.

Finds more recent than the above described are connected with so called ačková pottery of Zofipole type. They were mostly gathered in the part examined already in 1930, unfortunately placed chiefly on a secondary layer among much damaged objects belonging to an uncertain culture. In spite of the difficulty in determining the character of the settlement they represent, their existence proves a permanent use of the given site during all the development period of Linear Band Ceramics Culture. Settlement had been shifting here only on a small space at various times along the upland's southern slope. It is finally worth mentioning that the materials found here represent a fair complex of pottery forms, the most prominent one among ceramics known so far in Poland (fig. 4:4, 5).

Traces of settlement of a middle phase of Linear Band Ceramics Culture ornamented by music notes, also determined to be classical, are richer and better recognised in this site (fig. 4:6, 7). Investigation managed to disclose a complex of 3 - 4 (one of them much damaged) rectangular objects, probably dwellings, and over a dozen pits (fig. 3). Within this group of “building” traces of human graves of the same time were hit upon.

All the huts had the shape of rectangular elongated depressions with flat bottoms and dimensions 7 - 8 × 2,5 - 3 m. They were ranged parallel to each other at a distance not over 7 m between them and directed along a north-south axis. None of them displayed post construction. It is therefore to be supposed that their walls and roofs were made in deteriorative timber that had left no remainders. No remains
Fig. 2. Samborzec, Sandomierz distr. Plan of grave of the oldest phase of Linear Band Ceramics Culture and its equipment. (Drawn by T. Wenhrynowicz)

a: grave pit; b: human bones; c, d: beads in bone; e: ochre
Fig. 3. Samborzec, Sandomierz distr. Plan of settlement of Linear Band Ceramics Culture. (Drawn by T. Wenhrynowicz)

a: pits of Linear Band Ceramics Culture; b: graves of Linear Band Ceramics Culture; c: traces of pits of Lengyel Culture; d: traces of settlement of different times; e: diluvial depression
of hearths and stoves were found inside the dwellings, neither do they appear elsewhere in buildings of that period. It is difficult to determine the functions of pits dug out by the buildings; they were generally small, rather shallow and of irregular shape. Traces of firebeds could be stated in some of them.

In one of the disclosed graves a woman of 50 or 60 had been buried. Her skeleton rested at the bottom of a double-layer rectangular grave pit, carefully dug out with dimensions 3,2 × 1,4 m. It lay in the flat bottom’s north-western corner, within a hollow, on its left side, in crouching position with head turned northwards. The arms were bent in the elbows and hands directed to the face. The right hand held an amphora-like vessel filled with ochre. Two further, much damaged graves contained the remains of children only a few years old. One grave had been dug out of the bottom of a pit, which had formerly been used for household aims. A small broken vessel was found in the hand of one of the dead children, similar to that held by the dead woman. One more grave, probably of the same period, appeared not far from the above described. The dead human laid in it rested in a rectangular pit, its position was ritually crouching and its only equipment was a fragment of a large vessel found in the right armpit.

All the above mentioned objects having a settlement character from the middle phase of Linear Band Ceramics Culture, as well as the graves, constituted here a distinct complex. There were, nevertheless materials of this place also in other parts of the same site. The actual state of research does not, however, allow to establish whether the latter are connected with the former complexes.

A number of materials found in recent years in the investigated pits, and still more those acquired by research of 1930 confirm the continuation of settlement belonging to a late phase of Linear Band Ceramics Culture along with ceramics of Želiezovce type (fig. 4:8 - II). They are decidedly concentrated in the site’s western part, where also traces of this culture’s oldest phase have been stated. Finds of a middle phase do not in general appear in this area, which would once more confirm the hypothesis of a gradual shifting of Linear Band Ceramics Culture’s settlements over a limited, permanently inhabited space.

On the basis of research so far accomplished it would be difficult to conclude whether the character of that period’s settlement was similar to the former; it certainly spread, as was earlier mentioned, over a region still insufficiently known. Nevertheless, the amount of material, found unfortunately mostly on a second layer, allows to surmise that the intensity of settlement had here by no means decreased, but had on the contrary grown perhaps to be stronger. The general trend of the population of this culture to establish in Polish lands is proved by many characteristic features of its movable stock (fig. 5).

In a late phase of the Samborzec settlement there appeared more frequently “luxurious” imported objects and especially raw obsidian material. Semi-products and lumps of rough obsidian used to be accompanied by vessels of Bükk Culture coming from the Slovako-Hungarian border.
Fig. 4. Samborzec, Sandomierz distr. Pottery of Linear Band Ceramics Culture. (Drawn by T. Wenhrynowicz)

1-3: phase Ia; 4, 5: phase Ib; 6, 7: phase II; 8-11: phase III
A further stage of the history of settlement on the Samborzeć hill was the appearance of Lengyel Culture (fig. 6). It was established here in the earliest phase of its development in Little Poland. Its buildings spread over a space of the Linear Band Ceramics Culture’s latest phase, and its objects were often dug into pits of a former period, seemingly out of use and already filled up. Such stratigraphic connections between pits containing pottery of Želiezovce type and early Lengyel building happened to be stated in four cases.

Traces of Lengyel Culture settlement are not yet completely disclosed. We have, however, managed to examine four probably dwelling objects in more or less rectangular shaped depressions and several nearby lying pits. Two of the mentioned huts were situated parallelly to each other along an east-west axis, at a distance of about 10 m between them. Their dimensions were 4,40×2 m and 4,20×2.80 m. Similarly as in the dwellings of Linear Band Ceramics Culture no traces of post construction or of firebeds could be stated in this site. Very rich mobile inventory found in both huts and their adjacent pits allows their connecting with the earliest phase of Lengyel settlement in Poland. Two huts lying further east seem to be later. Their size was larger: 4,80 - 6×3 m; they had stood near and parallel to each other along a north-south axis.

Smaller pits lay around the huts, one of them contained a firebed, the function of others is difficult to state. Two larger objects of quite irregular shape and uneven bottom, composed of many cavities joined to each other, are certainly connected
Fig. 6. Samborzec, Sandomierz distr. Plan of Lengyel Culture Settlement. (Drawn by T. Wenigowicz)

a: pits of Linear Band Ceramic Culture; b: graves of Linear Band Ceramic Culture; c: pits of Lengyel Culture; d: traces of settlement of other periods; e: diluvial depression
with settlement of that period. One of them has recently been disclosed, the other was examined in 1930. They should be considered rather to have been clay-pits from which clay used to be drawn for building and earthenware making.\textsuperscript{12}

The objects of Lengyel Culture investigated in Samborzec furnished abundant material, among which earthenware deserves special attention (fig. 7). The mobile inventory dug out of one of the clay-pits in 1930, and analogous materials from the settlement of Opatów, allowed the distinguishing of a so called Opatów—Samborzec Culture group.\textsuperscript{13} Further research considerably enlarged the understanding of questions connected with it, and confirmed the idea of dealing here with a distinct regional group of Lengyel Culture.\textsuperscript{14} The Samborzec site, as well as the settlements of Opatów, Złota, Cracow–Pleszów, Zofipole, Proszowice distr. and others, is till now the most typical and best recognized representative of this group. Therefore the oldest group of Lengyel Culture in Little Poland has been called the Samborzec group. Its pottery contains among others vessels ornamented by stroked motives, which constitute some 50% of the whole Samborzec settlement earthenware, also vessels ornamented by painting (paint laid after baking) red or black, in spiral or meander pattern. We find here a wider use of flint than was customary for objects of Linear Band Ceramics Culture. There are many samples of wax-chocolate raw material, also rather large quantities of imported obsidian.

A direct continuation of this kind of settlement are the above described larger huts. Their materials are typologically and distinctly connected to finds of the former period. They only differ by a lack of painted pottery and nearly total disappearance of stroked ornamentation. This type of material occurring in separate complexes has been confirmed for the first time in Samborzec. It allows to conclude that further development of the Lengyel population groups over the Sandomierz area followed an individual course, different from the ways of other groups, being, so it seems, liable to an ever weaker influence of the Lengyel Culture circle and to an ever stronger of the Tisza Culture.

Finally one of the pits discovered in Samborzec contained materials of a so called Painted Band Pottery Culture. Settlement of this culture, rich traces of which are known among others from the hard by-lying site of Złota, was very intense over the area of Sandomierz loess soils and the Lublin Upland situated to their east.\textsuperscript{15} The appearance of a human group of this culture on the Samborzec hill, was—it seems—only a short-lasting episode, closing the history of its being inhabited by a population of a southern cycle.

**LATE NEOLITHIC AND EARLY BRONZE AGE CULTURES**

After a long period during which the Samborzec site had not been used by any settlement groups, there appeared here a population of Corded Ware Culture establishing a small cemetery (fig. 8). All of it has not yet been disclosed, but it has
Fig. 7. Samborzec, Sandomierz distr. Pottery of Lengyel Culture. (Drawn by T. Wenhrynowicz)
revealed four skeleton graves, found on a small space rather high on the upland’s slope. Their situation suggests the chance that in the part waiting for investigation, further burials connected with this culture may still be found.

Two of the examined graves were niche graves (fig. 9). They consisted of small rectangular lobbies with flat bottoms and characteristic niches hiding human remains. In one of the graves the narrow passage from the lobby to the niche was blocked by a huge boulder stone with a diameter $75 \times 50$ cm. The niches were oval-shaped lying transversally to the lobbies’ axis. Their flat bottoms reached a depth of 120 and 140 cm, and their height amounted to 60 - 70 cm. Each grave contained the remains of only one individual. The dead were laid in strongly crouching position, on their left side, with heads turned northwards and faces to the east. In one of the graves there appeared a vessel, in the other—the entrance of which was blocked by a huge stone—there were two vessels and an axe in striped flint.

In close vicinity of the niche graves two further pit graves were found. The dead buried in them rested at the bottom of shallow pits (40 and 80 cm deep), their position was much like that of the former described skeletons of niche graves. In one case only did the dead human lie on his right side with head directed southwards and facing the east. Their equipment was also similar; one grave contained a vessel and a flint tool—the other—two vessels and a bone awl.

Principles leading to a differentiation of burials in the described cemetery are difficult to certify. One thing seems sure that the discovered pit graves are by no means traces of later destroyed niche graves. They had all been dug out near to each other on the relatively flat surface of the hill’s slope. The custom of applying a twofold funeral rite was moreover common in this culture. The cemetery’s moderate size, its situation, character of burials and above all the complex of objects they contained, suggest their connection with a late phase of the Cracow—Sandomierz group of Corded Ware Culture.\(^{16}\)

Two graves of Złota Culture (fig. 8) can be considered to have been laid at about the same time as the cemetery mentioned above. Rich settlement traces of this interesting culture developing over the Sandomierz—Opatów Upland in the late Neolithic Age are well known from its eponymous site in nearby Złota. Two graves (one of them of the niche kind) had been disclosed some 30 years ago indeed in Samborzec, but rather far from the site described here.\(^{17}\)

Both actually investigated graves belong to the typical Złota Culture burials. They are pit graves; in each of them remains of several dismembered scattered human skeletons were stated. The degree of keeping of the hollows in which they were found does not allow to state whether they were collective graves filled at one time, or some kind of “family” graves where the members dying successively used to be laid in turn into already formerly used tombs, as was the custom in this culture. In one much damaged grave there were fragments of several vessels, another—far better preserved—contained 15 vessels, flint implements, beads made out of
Fig. 8. Samborzec, Sandomierz distr. Plan of cemeteries and Late Neolithic settlement. (Drawn by T. Wenhrynowicz)

a: graves of Corded Ware Culture; b: graves of Zlota Culture; c: pits of Corded Ware Culture; d: graves of Bell Beaker Culture; e: traces of settlement of other periods; f: diluvial depression
Fig. 9. Samborzec, Sandomierz distr. Plan and profile of grave of Corded Ware Culture and its equipment. (Drawn by T. Wenhrynowicz)

a: grave pit; b: pottery; c: human bones; d: stone; 1: flint axe; 2-3: pottery
shells and bones and fragments of ornaments worked in copper wire. This is a first, certain find of copper products in a complex of this culture.  

Somewhat later than the described graves are here settlement traces of a late Corded Ware Culture phase (fig. 8). Investigations have only managed to disclose its western peripheries, stating moreover its dimensions to be of moderate size. Out of over a dozen discovered pits several had distinctly the character of firebeds, the function of others—small shallow depressions—are difficult to determine. On the other hand, the mobile inventory of these objects is very interesting (fig. 10). Numerous pottery materials accompanied by large quantities of flint and bone products allow the classing of this settlement to a so called Mierzanowice group of Corded Ware Culture. The development of this group, therefore also of our settlement, can certainly be dated to the decline of the Late Stone Age and the beginning of the Early Bronze Age.

A cemetery of Eell Beaker Culture discovered in the Samborzec site belongs to the same period (fig. 8). It spread over a space neighbouring closely with the late Corded Ware Culture settlement. The simultaneous use of this site by the population of both cultures mentioned seems hardly probable, it is, however, difficult to judge which of the two had occurred here earlier.

Further investigation revealed ten graves of Eell Beaker Culture; the eleventh—children’s grave—equipped only with beads, cannot certainly be classified to this culture, because of a different position of the skeleton. All of the cemetery covered a space not larger than 20×35 m. The burials disclosed concentrate in two groups—a north group with 7 graves and a south one containing only three. A small distance separates both groups; it seems, however, possible that initially the other graves had lain between them, destroyed perhaps owing to later settlement occurring here. More graves may have been placed also in the site’s northern part, and could have been destroyed by the recent building of a highway.

All the discovered graves were skeleton burials (fig. 11). The dead rested in rectangular, carefully prepared hollows with adult graves mostly dug deeper in (60 - 140 cm) and children’s graves shallower (hardly 30 - 50 cm). Every one of the disclosed graves hid only a single skeleton. Anthropological measurement stated that the majority of humans laid here belonged to the short-headed race (brachycephali). Only several skulls, mostly female ones, display inclination to the medium-headed type (mesocephali). Corpses were always laid in a crouching position, on one side, with heads directed north-and-southwards, facing the east. It was also the rule here, similarly as in other cemeteries of this culture, to lay men in their graves on their left side with head directed to the north, and women on their right side, head southwards.

The equipment of graves was generally two or three vessels sometimes containing remains of food, the evidence of which are cattle and fish bones. Often there were also a few tools, arms and attire ornaments. The implements found inside the graves were: flint knives, scrapers and bone awls. Weapons consisted of flint spearheads,
small arrowheads, bone blades, slate bracers, typical for this culture in all its European range. The ornaments are: amulet pendants made of wild animals' teeth and a single head adornment found in one of the female graves—a kind of diadem made of copper slabs.

Among burials discovered in the Samborzec cemetery special attention is due to the grave of a 50 or 60 years' old warrior, laid to rest with particular care in a very deep, spacious grave pit (fig. 12). Contrary to all others resting in this cemetery, the individual mentioned was laid on his back, with bent up knees and arms bent in elbows. Only his face was turned eastwards. His right hand folded near the waist may have been leaning on his bow, his left hand held a spear shaft with copper spearhead.²² Near to the left forearm's bone there lay a stone bracer and by the left arm's elbow a fancy pendant of wild boar's tusk, showing the characteristic shape of a miniature bow of semilunar form. Three vessels manufactured with particular care containing food were laid at the dead man's feet and behind
his head. Their surface was covered with a kind of red angoba. Next to them lay two flint knives and a flake, a fragment of tool in bone, finally a flint small arrowhead. The exceptional care attached to the building of this grave and its wealthy equipment reflect most probably the social position that the individual laid here to rest may have held in life. Such high respect may have also been due to the old age reached by the deceased man.

Fig. 11. Samborzec, Sandomierz distr. Child’s grave of Bell Beaker Culture. (Phot. R. Gradziński)

Although the cemetery discovered in Samborzec is not very large, it is certainly the biggest noted till now among other burial grounds of the Vistula course group of this culture. The character of the examined graves does not essentially differ from that of burials found in other regions, although the Samborzec site is—similarly to the Złota cemetery—the furthest, eastward advanced trace of the existence of a population that had exerted so great an influence upon the forming of a culture aspect in the whole of Europe at the decline of the Neolithic and the beginning of the Bronze Age. Materials found in Samborzec graves, much like other finds of Bell Beaker Culture along the Vistula, clearly indicate that the population which had left them here, had arrived hither from the south, i.e. from the Moravia basin. It had come over here at the time when the Moravian centre of its evolution was living through the latest phase of its development.
Fig. 12. Samborzec, Sandomierz distr. Grave of Bell Beaker Culture and its equipment.
(Drawn by T. Wenhrynowicz)
1, 2, 5: flint implements; 3: flint arrowhead; 4: pendant of wild boar's tusk; 6: copper spearhead;
7: wild boar's tusk; 8: bracer of slate; 9: fragment of tool in bone; 10-12: pottery
THE CULTURES OF LATER PERIODS

The Samborzez site was also intensely used in later times. Interesting traces of Trzciniec Culture settlement, from period II of the Bronze Age have been confirmed. They are mostly concentrated on a small space in the hill’s lower part (fig. 13). The slope of the eminence forms here a narrow point the sides of which fall into the valley of the Gorzyczanka. Formerly, its edges fell vertically down and only at the beginning of our era did its slope become covered by diluvial products.

The point’s surface was cut off from the rest of the eminence by a ditch of Trzcinec Culture. The ditch was about 3 m wide along the top, reaching to a depth of 80 - 100 cm from today’s surface level, and narrowing slightly downwards. Its uneven bottom was in many places deepened by pits of considerable dimensions. The flat space enclosed by the ditch comprised a surface of about 1000 sq m. Two passages led up to it—a narrow one crossing the arc of the ditch from the north, and another, some 8 m wide, from the south-east, where the hill’s slope formed a convenient way down to the river’s valley.

A rectangular, elongated object, probably a trace of some surface building, has been disclosed in the very centre of the enclosure. Its erection had been perpendicular to the slope of the eminence lying on a north-east—south-west axis. Its dimensions were $15 \times 4$ m, its flat bottom lay 60 cm deep from the level of the earth. Near the northern corner of this surmised “building”, traces of a firebed were disclosed. A small, perhaps accidental depression appeared hard by, it contained materials of Trzciniec Culture. The rest of the space enclosed by the mentioned ditch had not been used for building.

An interesting pit dug out in the south-eastern passage is most probably connected with the settlement of that time. In its bottom, displaying Trzciniec Culture materials, appeared a deep grave. The skeleton rested at a depth of 220 cm, in strongly crouching position, suggesting binding of the corpse, with head thrown back. A twisted bronze wire piece lay close to its temple bone, and near the shoulder a very well preserved skeleton of mud tortoise (*Emys orbicularis* L.—1758).

In the described objects and above all in the ditch a number of materials typical for Trzciniec Culture were found. Some of them were scattered in the remaining parts of the site, occurring, however, nowhere in close objects. The complex discovered in Samborzez seems to have been a kind of enclosure herding flocks of animals, a so called corral, probably with a shed in its middle. The shepherd’s camp must have been used for rather a long time, as proved by the large quantity of mobile inventory. The period of its existence closes thus the second phase of the history of settlement in the Samborzez site, having been permanently used by populations of various culture groups, appearing here at the decline of the Stone Age and the first times of the Bronze Age.

Successively, only in the early La Tène period occurred a cemetery of Bell Grave Culture on the investigated hill. Nine much damaged cremation burials of that
Fig. 13. Samborze, Sandomierz distr. Plan of camp of Trzciniec Culture. (Drawn by T. Wenhrynowicz)

a: ditch and "ahed", pits of Trzciniec Culture; b: grave of Trzciniec Culture; c: traces of settlement from other periods; d: diluvial depression
time have been found here. It seems that our research managed to disclose the whole surface of this small cemetery.

A vastly spread settlement, till now not wholly investigated, existed in the Samborzec site in a late Roman period. It had stretched over the eastern part of the eminence. Several rectangular huts and a number of household pits have been disclosed. Many drying plants for meat and fish are here very interesting. Deep pits filled with ashes containing even fragments of wooden grills displayed a quantity of bones and sometimes whole charred animal skeletons. Among other objects there appeared also a large pit which may have been a workshop for treating bone and horn, as it contained great quantities of semi-products and remnants of working these raw materials. The discovered objects as well as the very rich mobile inventory from the Samborzec settlement, constitute a curious complex, one of the best recognized settlements in this territory, which is connected with Przeworsk Culture of a late Roman period. The following specimens deserve special attention: two iron fibulae, a spur, fragments of glass vessels and a silver Traian denarius.

The history of settlement on the investigated hill is finally closed by data from the cemetery with skeleton graves investigated in 1930. It had been used from the middle of the 11th to the middle of the 12th century.

Thus can briefly be presented the results of so far accomplished research in Samborzec. Excavation works achieved in this site provided a number of quite new data concerning the history of settlement on the loess territory of the Sandomierz Upland, in the late Stone Age and the beginning of the Bronze Age. Special attention should be drawn to the following important statements:

1. The earliest evidence of human groups having existed here is connected with the first phase of Linear Band Ceramics Culture in its European range. Therefore the oldest, so far known, traces of Neolithic settlement in Polish lands have been discovered in Samborzec.

2. The whole complex of dwelling and household “buildings” and human graves connected with them and belonging to a middle phase of Linear Band Ceramics Culture, have been investigated here for the first time.

3. Owing to stratigraphic interdependence it has been possible to state that objects of an early Lengyel Culture are later than the last Želiezovce phase of Linear Band Ceramics Culture.

4. On the basis of materials in the discovered settlement of early Lengyel Culture, a separate regional group of this culture, called further Samborzec group, has been distinguished. It has also been possible to recognize its older finds, characteristics for all Little Poland sites, and its later ones, typical only over the loess territories of the Sandomierz Upland.

5. A cemetery of the Cracow-Sandomierz group of Corded Ware Culture has been discovered. It was composed of flat and niche graves and next to them — perhaps contemporary ones — some graves of Ziota Culture. The occurrence of copper
products in complexes of Złota Culture has also been confirmed here for the first time.

6. One part of a settlement of the Mierzanowice group of Corded Ware Culture providing a good many interesting materials that had come from an only slightly till now known culture group — has been examined here.

7. The largest cemetery, that has been known till now, belonging to Bell Beaker Culture and placed in the Vistula’s higher course, has been thoroughly investigated.

8. A Trzciniec Culture corral surrounded by ditch, together with shed placed in its middle, have been disclosed. It is the first discovery of that type in South Poland lands.

Materials discovered in Samborzec are now being subjected to detailed analysis and prepared for publication. After the ending of these steps excavation works will again be undertaken in this site. They will certainly help to elucidate a number of questions which have till now not been completely cleared.

NOTES


2. Research was conducted by K. Salewicz disclosing a space of about 800 sq m. The first characteristic of this site together with its early mediaeval materials has been published by J. Bartys, Wczesnośredniowieczne cmentarzysko skieletowe we wsi Samborzec, pow. Sandomierz [Early Mediaeval Skeleton Cemetery at the Village Samborzec, Sandomierz Distr.], "Przegląd Archeologiczny," Vol. V, 1933 - 1936, p. 171 ff.


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Compare the characteristic of this phase of Linear Band Ceramics Culture in Poland: A. Kulkczycka, Uwagi o chronologii kultury starszej ceramiki wstęgowej w górnym dorzeczu Wisły [Remarks on the Chronology of Linear Ceramics Culture in the Vistula’s Higher Course], in: Studia i materiały do badań nad neolitem Małopolski..., p. 52 ff. and the literature quoted therein.

Kamińska, Osady kultury wstęgowej... [Band Ceramics Culture Settlements...], pp. 128, 138, Table II: 8 - 13, III: 1, 2, IV: 12, V: 3,17, VI: 7, 8, 22, 24, 25, XXVII: 19.

Kamińska, Osady kultury wstęgowej... [Band Ceramics Culture Settlements...], p. 138, Table I: 10, 13; II: 1 - 7; IV: 14, 15; VI: 10 - 14, 18 - 20, 26; XXVII: 20.


J. Kamińska presents a characteristic of particular phases of Lengyel Culture in Little Poland in her article: Z badań nad kulturą lendzielską w Małopolsce [Research on the Lengyel Culture in Little Poland], “Archeologia Polski,” Vol. XII, 1967, p. 257 ff.

Kamińska, Osady kultury wstęgowej... [Band Ceramics Culture Settlements...], p. 148.


Kamińska, Z badań nad kulturą lendzielską... [Research on the Lengyel Culture...], p. 261 fol. Cf. also, Kulkczycka-Leciejewiczowa, Ze studiów nad kulturą ceramiki wstęgowej... [Study on the Band Ceramics Culture...], p. 97 ff.


Compare the characteristic of this group in the work of J. Machnik, Studia nad kulturą ceramiki sznurowej w Małopolsce [Study on Corded Ware Culture in Little Poland], Wrocław 1966, p. 83 ff. The author mentions one more grave of Corded Ware Culture discovered during the building of a highway, probably in the neighbourhood of the site discussed. It had most likely been a pit grave equipped by two vessels, typical for phase I of this culture; ibidem, pp. 234, 252.


Compare the remarks of Z. Krzak on the funeral rites of this culture in his Materiały do znajomości kultury złotkiej [Materials to the Knowledge of Złota Culture], Wrocław 1961, p. 148 ff; about the copper finds see the article of B. Burchard in this volume.

J. Machnik gives a characteristic of this group in: Stosunki kulturowe na przełomie neolitu i epoki brązu w Małopolsce [Culture Relations at the Turning Point Between the Neolithic and the
Bronze Age in Little Poland], in: *Materiały do prahistorii ziem polskich*, part III, Warszawa 1967, p. 47 ff. Page 78 of this article shows the capital importance of the discoveries in Samborzec to the knowledge of this period in Little Poland.

20 J. Kamieńska, A. Kulczycka refer in detail the discovery of the first three graves found in this site: *Przyczynek do znajomości kultury pucharów dzwonołowych w Polsce* [Contribution to the Knowledge of Bell Beaker Culture in Poland], in: *Studia i materiały do badań nad neolitem Małopolski...*, p. 373 ff.

21 P. Sikora, *Szczątki kostne ludzkie kultury pucharów dzwonołowych z Samborca pow. Sandomierz [Human Bone Remains from the Bell Beaker Culture in Samborzec, Sandomierz Distr.]*, in: *Studia i materiały do badań nad neolitem Małopolski...*, p. 397 ff., and the results of anthropological analysis carried out by the same investigator on the successive graves.

22 Spectrographic analysis applied to a sample of a spearhead tin revealed the components: 99.4% copper (Cu) contaminated by As = 0.013, Ni = 0.025, Fe = 0.42, Sb = 0.023, Sn = 0.0064, Mn = 0.003, Pb = 0.022. The analysis was carried out by Eng. L. Koziorowska from the Central Laboratory of the Institute of History of Material Culture, Polish Academy of Sciences.

