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LENGYEL AND FUNNEL BEAKER CULTURES, SOUTH-EASTERN GROUP STRYCZOWICE WOJ. KIELCE, SITES 1 AND 1B, SETTLEMENTS

The settlement at Stryczowice was examined in the course of seven excavation seasons, 1976–1984. It is situated on a large loess promontory, which slopes steeply on the east, south and west sides towards some streams, tributaries of the Kamionka river. The geographical co-ordinates for the settlement's centre are 53°N and 21°19 E. Excavations were carried out in the northern, eastern and southern parts of the settlement, as well as at the foot of the hill. The region has been marked as Site 1B, and that beyond the moat — Site 1A (Fig. 1).

One of more important finds in the three trenches and eleven drilling wells was the discovery of a 260 m long moat, which had surrounded the settlement from the north, the most vulnerable side, with

no natural protection. Three ¹⁴C dates were obtained from various phases of its filling.

Forty pits were examined in the Stryczowice settlement: 3 of the Lengyel and 37 of the Funnel Beaker cultures. For two Lengyel culture pits ¹⁴C dates were obtained as well as five ¹⁴C dates for the pits of the Funnel Beaker culture. The samples were taken from a larger surface and a greater depth, which reduced the value of some of them.

The ¹⁴C dating for all Stryczowice objects was done in the Radiocarbon Laboratory of the Archaeological and Ethnographical Museum in Łódź, on natural samples. The age was calculated at 5570 years and AD 1950 – as the reference age.

Lengyel culture

LOD-251: 5400 ± 240 B.P. - 3450 ± 240 BC

Charcoal samples were taken from the lower part of the Pit 1, from the darkish-grey and black filling (Fig. 2a).

Pit 1, is situated in the south-eastern part of the site. It is trough-like in shape and about 80 cm deep. In its upper part, on the southern side, it was filled with clayish brown loess. The middle and bottom parts were filled with dark grey and black earth with concentrations of small coal. Apart from 2 fragments of vessels all relics were found in the dark filling. The following things were excavated from the pit: 82 fragments probably belonging to 5 pots, of which a bulbous, knob-decorated one was reconstructed (Fig. 2a); two fragments of a vessel with prick ornament, 5 tools, made of chocolate flint, among which there was a groover made of a thick blade (Fig. 2d). The prick ornament indicates the older phase of the Lengyel culture, similarly as the metric features of the blades which are flat, wide

and rather short, indicating their production from cores with flat, short flakes that are transverse to the longer axis of the core. The knob-decorated bulbous vessels are linked with the middle, developed phase of the Lengyel culture.

LOD-247: 4850 ± 140 B.P. - 2900 ± 140 BC

Charcoal was taken from the hearth or the oven in the southern part of Pit 30 from the depth of more than 100 cm below the surface. Pit 30 was close to the top of the site and constituted one whole with the hearth adjecent to it from the south. The pit, measuring $360 \times 250 \text{ cm}$, was presumably a transient habitation-dug-out. It was filled with a light-grey cultural layer, with bits of charcoal. The pit was distinctly outlined to a depth of about 100 cm from the surface under the cultural layer of the Funnel Beaker culture settlement, separated from it by 80 cm of ground, which later penetrated inside (Fig. 3A).

This pit contained 53 fragments of vessels,

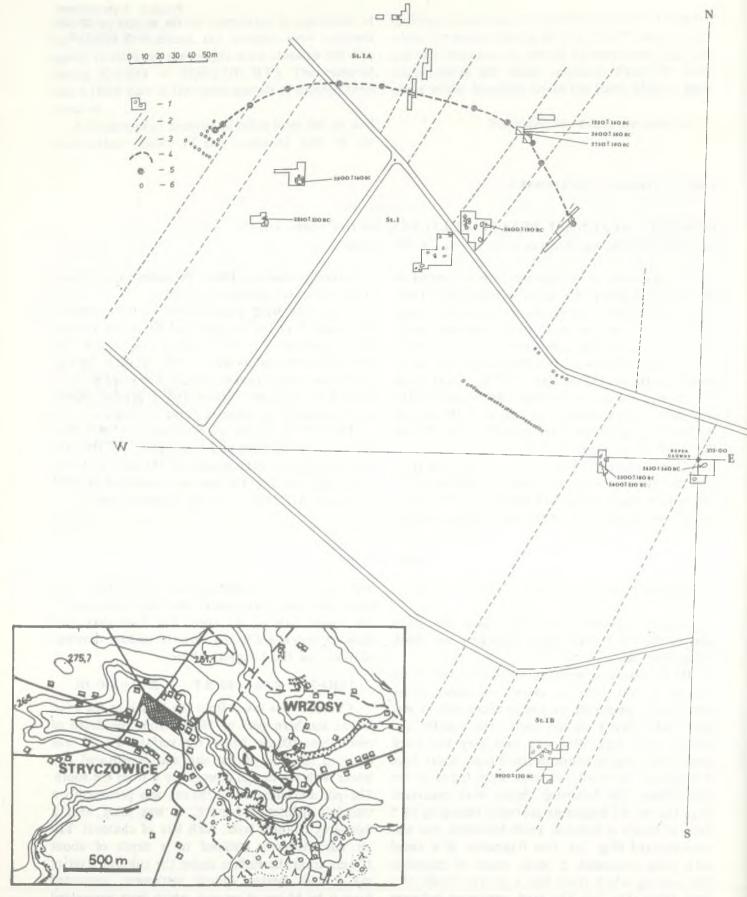


Fig. 1. Stryczowice, gm. Wasniów, woj. Kielce, Site 1. Distribution of trenches and objects at the settlement and situation of the settlement

1 - outline of trenches with marked pits, 2 - field borders, 3 - cart tracks, 4 - the moat, 5 - drilling wells in which the moat was found, 6 - empty drilling wells

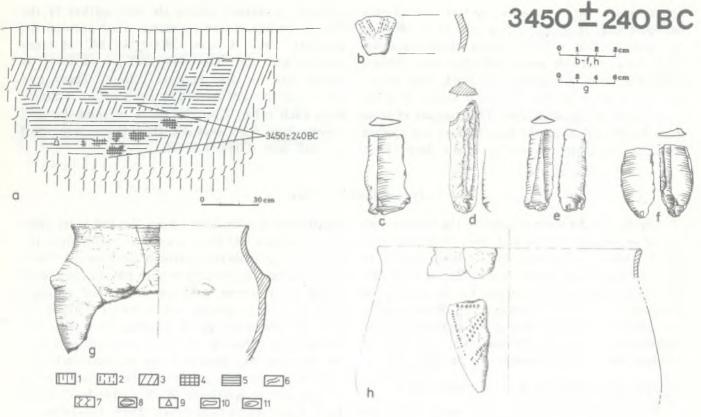


Fig. 2. Stryczowice, Pit 1

a - cross-section of the pit: 1 - arable humus, 2 - fallow soil, 3 - brownish loess-clay filler, 4 - charcoal and ashes, 5 - loess with humus (cultural layer), 6 - brown and grey streaks, 7 - loess rock-bed, 8 - daub, 9 - ceramics, 10 - animal bones, 11 - stones: h-h - relics of the Lengyel culture

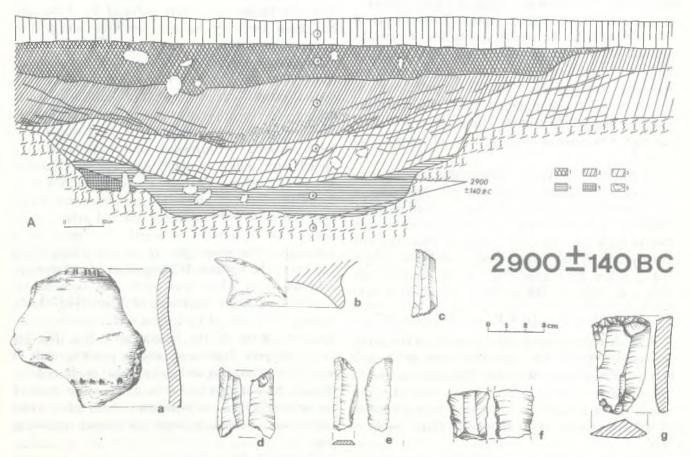


Fig. 3. Stryczowice, Pit 30

A - cross-section of the pit: 1 - layer with relics of the Funnel Beaker culture, 2 - fallow soil, 3 - lower part of fallow soil, 4 - filler of the Lengyel culture period, 5 - dark, cultural layer (hearth), 6 - molehills (the remaining - as in Fig. 2): a-g - Lengyel culture relics

among which there were a fragment of a vessel on a hollowed stem (Fig. 3b), a fragment of a rim (Fig. 3a), and 44 flint objects, among them trapezoid blade with reversible retouched edges with harvest shine (Fig. 3c-e), a fragment of a blade with reversible retouched edges (Fig. 3f) and a scraper (Fig. 3g) — all made of chocolate flint. The complex of relics from Pit 30, including the hearth, does not contain specimens of other cultures. It was a deep object

covered up already before the first settlers of the Funnel Beaker culture appeared, which secured the contents. The 14 C date 2900 ± 140 BC, in comparison with the date 3450 ± 240 BC of Pit 1, is rather late for the Lengyel culture. These two objects of this culture are situated rather remotely from each other. The 14 C dates of some Lengyel objects from other sites (e.g. from Brześć Kujawski) are still later (Grygiel 1986).

Funnel Beaker culture

Pits 5a and 5b were situated in the eastern part of the settlement. Pit 5b had been embedded into Pit 5a, which is proved by a sharp border in contents and colour between the filler of both pits, the steep gradient of the upper Pit 5a and by the preservation of a whole vessel in Pit 5b despite the demaging of its handle during the digging in of Pit 5a. Hence, the older Pit 5b could not have been the treading floor of the younger Pit 5a (Fig. 4A).

LOD-62: 4250 ± 180 B.P. -2300 ± 180 BC

The sample of charcoal was taken from the middle and lower parts of Pit 5a, mostly from the depth over 100 cm within the ruined hearth laid out with stones. This pit was circular in shape, widening downwards like an irregular trough. To the depth of about 70 cm from the surface it was filled by streaked loess with small bits of charcoal and lumps of daub. A ruined hearth (or an oven), built of stones and large pieces of daub, was in the middle of the pit, about 105 cm deep. Dozes bones of a cow were scattered around the hearth. The lower steeply sloping part was covered with a layer of striped clay loess.

89 fragments of vessels, presumably coming from 13 pots were found within the pit. The rims of some vessels show that both large as well as small vessels were in use, some were shiny, others rough. Twelve flints were also found (striped, chocolate and Świeciechów types), among them one blade scraper and 2 flakes from axes (Fig. 4j). A small copper plate was found at the depth of 125 cm (Fig. 4c).

LOD-63: 4360 ± 210 B.P. -2410 ± 210 BC

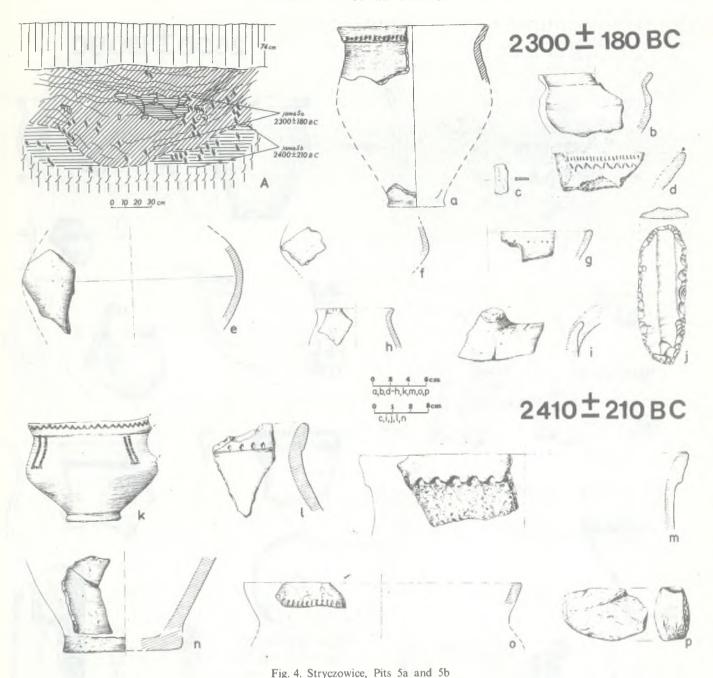
The charcoal samples were taken from the partly preserved Pit 5b. Its remnants were filled with greyish humus mixed with tiny fragments of animal bones and bits of charcoal. There were also one vessel with a broken handle (Fig. 4k), 28 fragments of different vessels (Fig. 4l-n) and three pieces of flint.

The dates of Pits 5a and 5b are consistent with the stratigraphy of the objects. No far-reaching conclusions can be drawn from the 110 years difference between ¹⁴C dates since it is smaller from the relatively big laboratory error of both results. Ceramics differed considerably in both pits. In the younger Pit 5a, a copper plate was found and ceramics were richly ornamented with a stamp motif at the brim. In the older pit a fragment of a cup was found, with a handle primarily protruding beyond the rim (Fig. 4k). Similar forms are frequently met in sites of the late phases of the Funnel Beaker culture, e.g. at Książnice Wielkie (Burchard, Ekier 1964: Uzarowicz-Chmielewska, 1979, 131–142).

LOD-252: 4550 ± 180 B.P. -2600 ± 180 BC

Tiny bits of charcoal were taken for the analysis from the middle and lower parts of Pit 7 because bits from the very bottom were too small. The upper outline of the pit was irregularly oval, with a rectangular protrusion on the NW side, which might have been a trace of an entrance. The pit's general section was trapezoidal in shape, with a flat bottom. In the upper part the primeval fallow soil was preserved, in the middle part there was brown loess, covered by brownish and blackish streaks mixed with lumps of daub and bits of charcoal. Traces of crushed stairs were found on the NW side. From the depth of about 120 cm there were found large lumps of daub, charcoal bits and ashes, presumably the remains of a hearth. The relics were amassed in the lower part of the pit, chiefly from 120 cm to the bottom, 382 fragments of vessels were collected from which one whole has been reconstructed and larger fragments of others (Fig. 5b, d). Among 29 pieces of flint there were 6 tools, including one borer of the Swieciechów flint (Fig. 5p) and 2 scrapers. There were also: a pendant made of wild-boar's tusks, an awl and a chisel made of bone (Fig. 5i-h), a clay whorl (Fig. 5n), a stone-mason's hammer (Fig. 5m), a whetstone, shells of a swan mussel and numerous bones of animals including pigs.

Materials from this pit have most analogies among relics from the nearby settlement at Cmie-



A - cross-section of the pits (legends - see Fig. 2): a-j - relics of the Funnel Beaker culture from Pit 5a, k-p - from Pit 5b

lów, where the dates are 2825 ± 40 to 2665 ± 40 BC (Bakker, Vogel, Wiślański 1969, 13).

LOD-250: 4300 ± 210 B.P. -2350 ± 210 BC

From Pit 31 charcoal for analysis was taken from the middle and lower parts, from the depth of 80–120 cm. Most samples were taken from the darkest streaks of loess mixed with humus (Fig. 6a). This pit was very close to the highest point of the site; it was oval in shape, 250 cm in diametre, its maximum depth was 135 cm counting from the surface. At the depth of 95 cm it divided into two parts with semi-circular bottoms. Most relics and bones were amassed in the lower parts, where two

whole vessels (Fig. 6c, f) and 743 fragments of vessels were found. One whole vessel (Fig. 6b) was reconstructed from these fragments and some larger pieces. The pit also contained 63 pieces of flint and flint tools, among them a small axe and flakes of the striped flint (Fig. 6m, n), a scraper of the Świeciechów flint, blades and flakes of the striped Świeciechów flint, and small amounts of chocolate flint. A bone arrow-head (Fig. 2g), and a fragment of a whorl was also unearthed there.

There were numerous ceramics in the pit, the vessels richly ornamented, chiefly with a small stamp, and characteristic of a strikingly marked high, funnel-like rim. There was one particular

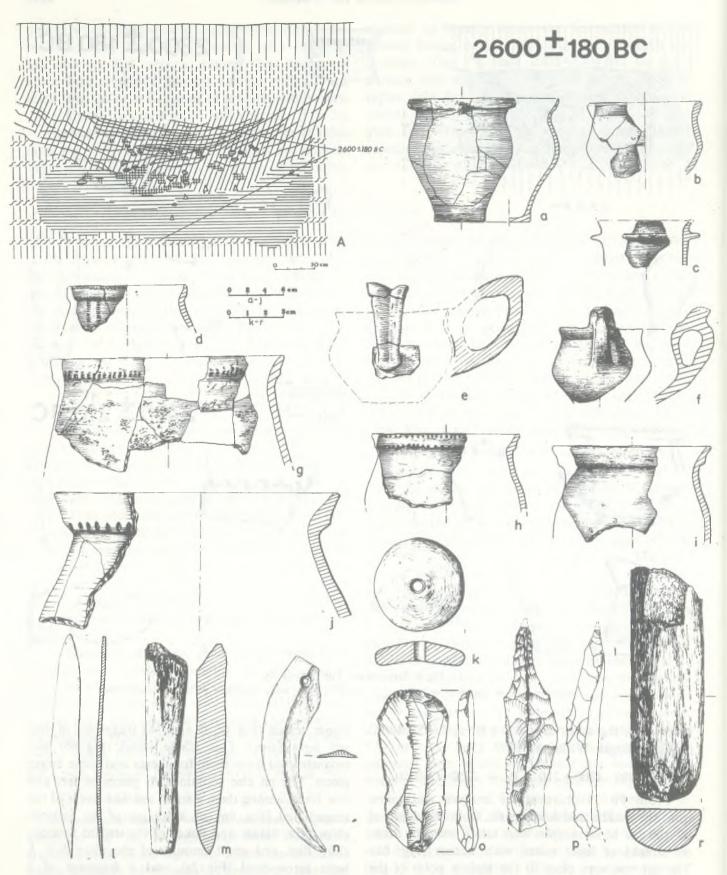


Fig. 5. Stryczowice, Pit 7

- cross-section of the pit (legends - see Fig. 2); a-p - choice of Funnel Beaker culture relics

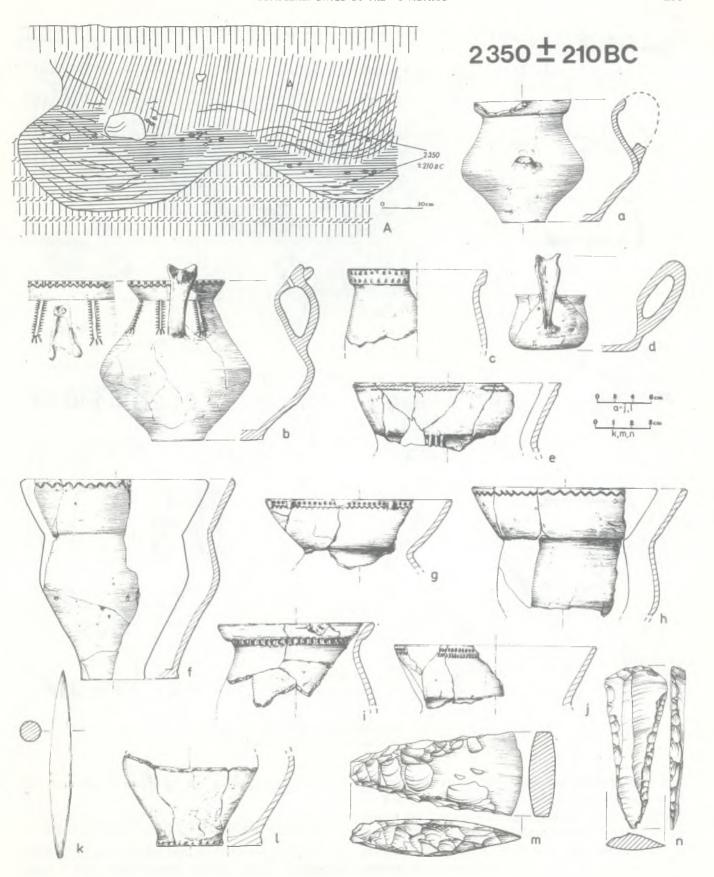


Fig. 6. Stryczowice Pit 31
A - cross-section of the pit (legends - see Fig. 2); a-m - selected relics of the Funnel Beaker culture

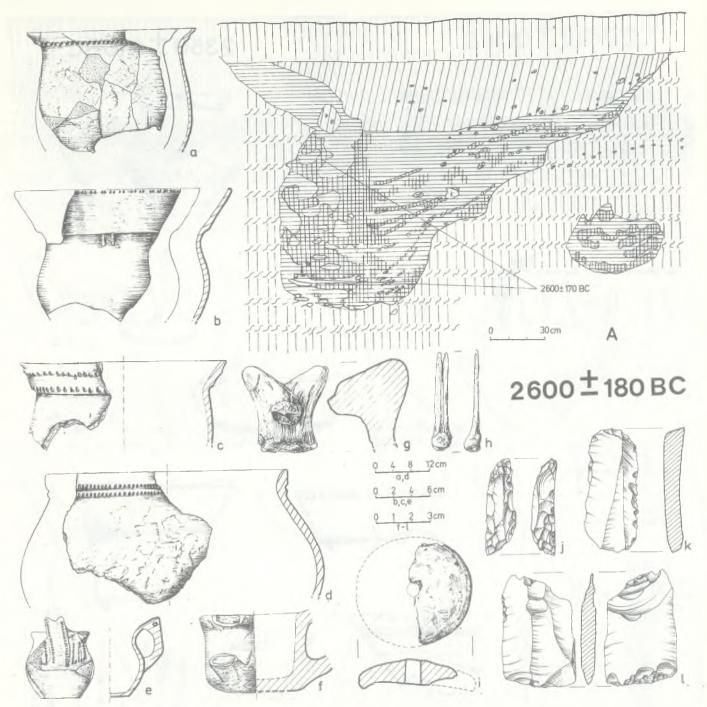


Fig. 7. Stryczowice, Site IB, Pit 3

A - profile of the pit (legends - see Fig. 2) a-l - Funnel Beaker culture relics

vessel the handle of which had a stylized animal head, portraying the head of a dog, or a wolf or another animal but not a popular ram. This would prove that the art of modelling was well developed in the Funnel Beaker culture. Among flint objects found in the pit, worthy of attention is a greater percentage of striped flint in comparison with other pits, chiefly flakes of axes and one whole axe made of the flint from a nearby flint mine at Krzemionki.

Relic material from Pit 31 is typical of the Funnel Beaker culture and does not clash with the

¹⁴C date, considering the laboratory's error of 210 years.

LOD-246: 4550±170 B.P. - 2600±170 BC

Charcoal for analysis was taken from Pit 3, from the depth of 80–140 cm, where there was a large amount of ashes. This pit was the largest and richest among six other ones placed nearby on Site 1B. It was oval in shape in the upper part, changing at the depth of 70–80 cm into a kidney-like shape, about 100 wide (Fig. 7A). There were stairs on the eastern

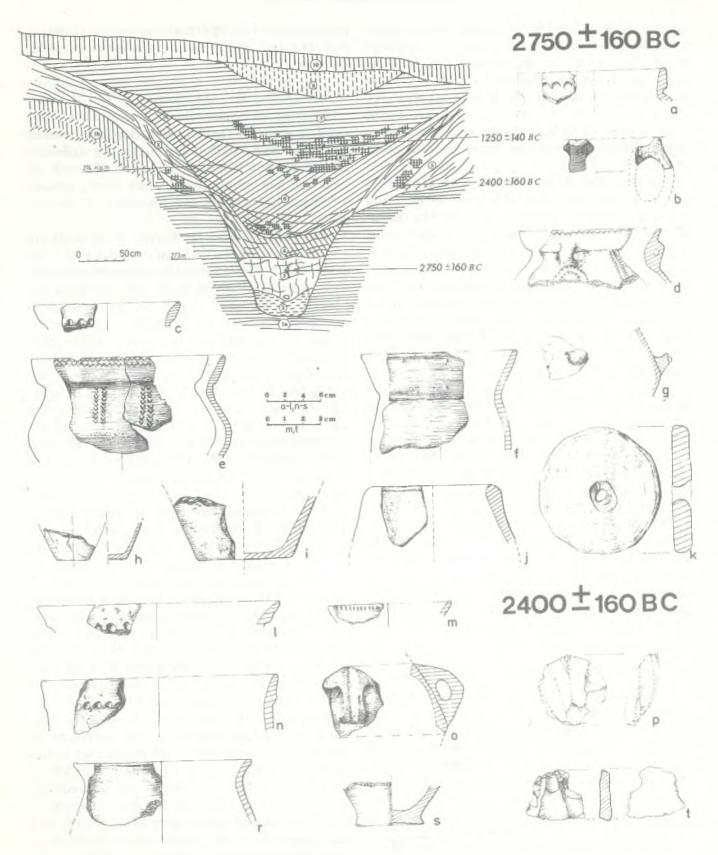


Fig. 8. Stryczowice, moat

A - cross-section of the moat; 2-9 - layers of fillers; a-t - relics of the Funnel Beaker culture from the moat's layers

side; at the depth of 120 cm the pit was connected by a narrow tunnel, about 40–50 cm high and about 40 cm wide, with the neighbouring Pit 2. In its upper part Pit 3 was filled with a large amount of daub lumps, struck in the black-brownish and grey filling. Lower in the pit there was loess, mixed with ashes, broken by oblique streaks of ashes. A large amount of animal bones was found from the depth of 120 cm.

869 fragments of vessels were excavated from Pit 3, among them a fragment of a large storage vessel (Fig. 7b), the rim of which is 54 cm in the diameter, a cup with an ornamented strap handle (Fig. 7d), and some more characteristic fragments (Fig. 7a, c). Among the 116 uncovered flint objects there were: 4 scrapers of the Świeciechów flint (Fig. 7k, l), flakes of axes of striped flint, and one third of the total — of chocolate flints. There were also 6 fragments of whorls (Fig. 7i), 4 bone awls, bone pincers (Fig. 7h), 2 fragments of a polishing plate and shells of swan mussels.

A large vessel with a rough surface has no analogies in ceramics from this settlement. The nearest similarity is a vessel from Bronocice, classified to phase IV of this settlement (Kruk, Milisauskas 1983, 275), dated to 2500–2400/2300 BC. The remaining inventory from Pit 3 proves the correctness of ¹⁴C dating.

The moat was excavated to the length of 19.5 m. Its depth reached 2.90 m from the surface, and the maximal width was 4.4 m. Its shape resembled two upturned trapezes (Fig. 8A). Eight layers were distinguished in the moat, formed by gradual sedimentations of cultural layers, loess and clay rainwash during its gradual devastation and filling (Uzarowicz-Chmielewska 1982).

LOD-251:
$$470 \pm 160$$
 B.P - 2750 ± 160 BC

The charcoal sample was taken from the third layer in the bottom part of the moat, which was a mixture of loess and humus. There were found in this layer: 54 fragments of vessels, 8 with ornamented rims (Fig. 8a, d), 5 fragments of bottoms, a fragment of a miniature vessel (Fig. 8k), a fragment of a handle, a clay whorl (Fig. 8m), a stone grinder with traces of use, and 32 bones of cows.

LOD-248: 4350±160 B.P. - 2400±160 BC

Charcoal was taken from Layer 5, composed of light-brown loess, with streaks of iron-like tracks washed out of the moat's walls and surroundings. Twenty vessel fragments were found there among them 2 rims, a fragment of a bottom, a large sandstone with traces of polishing, a flake with the

preserved tip of a single platform core for blades, of chocolate flint, and 2 flakes of the same raw material (Fig. 80-z)

LOD-249: 3200 ± 140 B.P. -1250 ± 140 BC

Samples were taken from charred, black plant remains, stuck in the brownish clay loess washed out of the ditch's walls (Layer 8). On the secondary layer there were found 129 fragments of vessels, 33 tools and flint refuse, among which were a scraper, a fragment of a core and fragments of abrasive plates.

The dates obtained for 3 layers of the moat are generally compatible with their stratigraphy. The oldest date 2750 + 160 might be somehow overstated since there was an admixture of coal from the Lengyel culture, which might have got inside from the moat's surroundings. Nevertheless, this date indicates the beginning and presumably also usage of the moat by the first inhabitants of the settlement. The oldest dates of the pits in Stryczowice are 2600 ± 160 (Pit 7) and 2600 ± 170 BC (Pit 3), however, there is a relatively serious laboratory error which might permit a dating 2750 obtained for contents of the moat's bottom. Worthy of attention is also the fact that relics of these pits are similar to those uncovered in Ćmielów dated to 2825 ± 40 to $2665 \pm 40 BC$.

The second date 2400 ± 160 BC was established on the basis of coal samples from the bottom step of the other part of the moat (Layer 5), where the outflow of water had not disturbed the concentrations of coal. This layer filled also 2 niches built by the users of the moat, which contained animal bones (among them those of an aurochs). These niches were used for storing up food and tools of the moat builders and later on moat-keepers. Hence the date is reliable and determines the period when the moat was used by the inhabitants of the settlement.

The third and youngest date 1250 ± 140 BC determines one of the stages (Layer 7) when the moat was being filled up, washed out and overgrown by vegetation. It shows that in the Bronze Age only a small depression, about 1-1.5 m deep, was left, so the filling up process was already well advanced. In the layer dated to 1250 ± 140 BC vessel fragments of the Funnel Beaker culture were found, as well as 4 small fragments of the Lengyel culture vessels, all in a secondary deposit washed down from the surface. This proves the abundance of relics from the Neolithic settlement.

The ten ¹⁴C dates from the settlement at Stryczowice concern seven objects. Certain conclusions can be drawn from the distribution of the objects around the settlement and their dates (Fig. 1). The settlement of the Lengyel culture (much poorer than that of the later Funnel Beaker culture) has been confirmed by Pit 1, dated to 3450 ± 240 BC, i.e. the period of its full development. The pit lies on an upland, contrary to the tendency of locating settlements near waterways (Kruk, Milisauskas 1983, 275). The younger Pit 30 of the Lengel culture, dated to 2900 ± 140 BC, is situated at the top of the hillock

The ^{14}C dates for the Funnel Beaker culture settlement show that at first it embraced the northwestern part of the loess promontory, which is confirmed by the dates 2750 ± 160 BC from the bottom of the moat, and 2600 ± 180 BC from Pit 7 of the region. The construction of the moat had

started at that time and the building of its 260 m required many years of hard work considering the prevailing technical possibilities. At the same time a complex of farming arrangements was built at the foot of the hillock near water (Fig. 1, Site 1B). Pits 7 and 3, both dated to 2600 BC have similarly constructed entrances — a kind of stairs. The younger dates for the double Pit 5 and Pit 31 of the Funnel Beaker culture (2300–2410 BC) indicate an enlargement of the settlement in the WS direction as well as its vastness. They also prove a permanent use of the moat. The Funnel Beaker culture settlement at Stryczowice lasted at least about 300 years, and developed in stages.

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