

A Turning of Ages

Im Wandel der Zeiten

*Jubilee Book Dedicated to Professor Jan Machnik
on His 70th Anniversary*

Kraków 2000

**INSTITUTE OF ARCHAEOLOGY AND ETHNOLOGY
POLISH ACADEMY OF SCIENCES
CRACOW BRANCH**

A TURNING OF AGES

IM WANDEL DER ZEITEN

*Jubilee Book Dedicated to Professor Jan Machnik
on His 70th Anniversary*

editor Sławomir Kadrow

KRAKÓW 2000

Przemysław Makarowicz (Poznań)

COLLECTIVE BURIALS IN THE SEPULCHRAL RITUAL OF THE TRZCINIEC CULTURAL CIRCLE COMMUNITIES IN KUJAWY, NORTHERN POLAND

INTRODUCTION

The frequent occurrence of collective burials is one of the most enigmatic traits of Trzciniec funeral ritualism, contributing to the specific nature of sepulchral practices of the Trzciniec cultural circle (TCC) societies of its western (Gardawski 1959; Kempisty 1978; Koško 1979; Czebreszuk 1996; 1998; Makarowicz 1998; 1998a; 1998b; 1999) as well as eastern segments (Bierezańska 1972, p. 59ff; 1972a, p. 274; 1982). This question has been discussed many times in literature, both on the margin of works synthesising the issue of the Trzciniec complex as well as in research-descriptive and analytical works of varying range devoted solely to this question (among the more important studies are: Jażdżewski 1948; Gardawski 1959; Chomentowska 1964; Bierezańska 1972; 1982; 1985; Dąbrowski 1972; 1987; Grygiel 1987; Kempisty 1978; Miśkiewicz 1978; Kłosińska 1987; 1997; Matoga 1987; Ziábka 1987; Kločko, Czebreszuk 1997; Czebreszuk 1996; 1997; Błajer 1987; 1989; Taras 1995; Kempisty, Włodarczak 1996; Makarowicz 1998; 1999a; Florek 1998; Włodarczak 1998).

This paper will attempt to provide an interpretation of the phenomenon of Trzciniec collective burials discovered in Kujawy¹. With this aim in mind, initially the 'material evidence' of the funeral rite in question is presented, and the chronology of these burial practices defined. The article later puts forward an attempt to reconstruct the funeral ceremony, together with possible interpretations of this ritual, which is an inherent part of Trzciniec tanatology.

COLLECTIVE BURIALS AND THEIR CHRONOLOGY

The collective graves of Kujawy linked with the ritualism of TCC communities were recorded in the following localities (Fig. 1): (a) Grabie, site 4; (b) Gustorzyn, site 1; (c) Radojewice, site 29, and (d) Wolica Nowa, site 1. They provided information of varying value in terms of the knowledge of the issue under consideration.

a. The Grabie feature is a mass sepulchre, in which a number (more than 2) of individuals were buried². The grave was situated along the N-S axis with a slight deviation towards the NE-SW (fig. 2). The burial pit was of an almost rectangular shape, 3.0 m x 2.3 m in size, and 0.45 m deep. Originally, it was probably covered, as is indicated by the traces of poles adjacent to the inside walls of the grave pit. The interior of the grave was filled with black and brown humus, sometimes mixed with clay. The corpses were lain in a non-anatomical arrangement, across practically the whole grave pit, and their skeletons were broken up.

This feature contained no grave-goods, which makes it difficult to establish its chronology by using traditional archaeological methods. However, a ¹⁴C dating was obtained from the human bones (Gd-2644; 3650±90 BP). After calibration, with the help of the *Calpal* programme of B. Weninger and O. Joris, the date 2035±125 BC was acquired (Czebreszuk, Makarowicz 2000). After calibration of the radiocarbon value according to the *Oxcal v. 3.0* programme of C. Bronk Ramsey, with 68.2% reliability and a probability of 64.7%, a time range between 2150 and 1910 BC was obtained. This dating puts a question mark over the 'Trzciniec' qualification of this feature, although its early-Trzciniec origins cannot be excluded.

¹ Arbitrarily, a burial will be deemed here «collective» when the grave contains the remains of at least three individuals.

² Their number is not known, due to the absence of anthropological analysis.

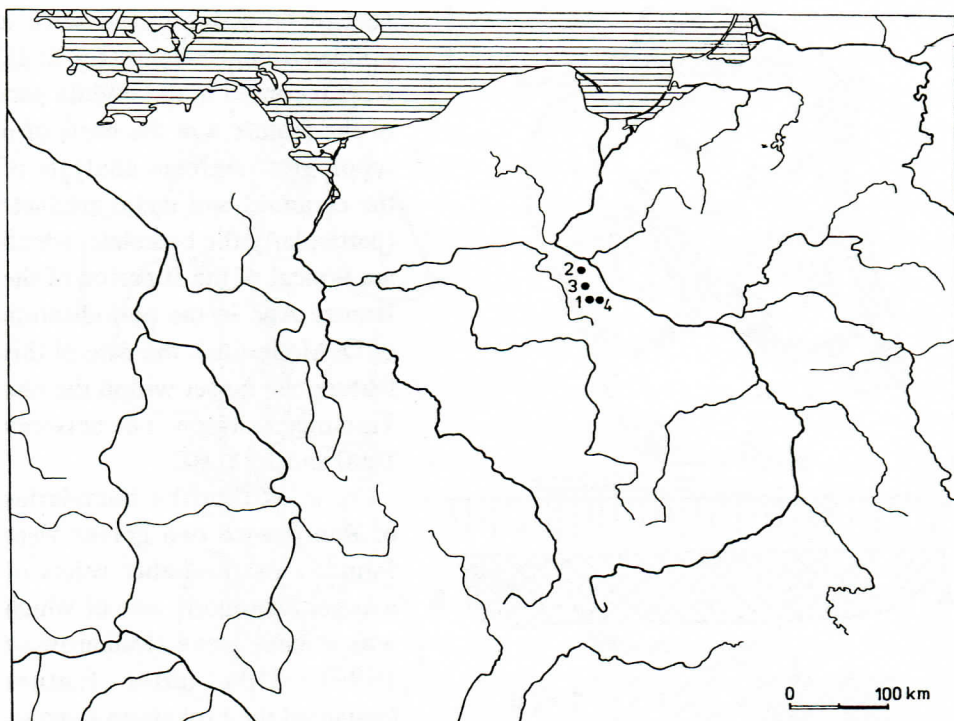


Fig. 1. Trzciniec collective graves in Kujawy: 1 — Wolica Nowa, site 1; 2 — Grabie, site 4; 3 — Radojewice, site 29; 4 — Gustorzyn, site 1.

b. In Gustorzyn, a collective burial was documented in which 16 individuals were buried (fig. 3; no anthropological analysis — Grygiel 1987). The grave pit, situated along the N-S axis, was of an almost rectangular shape, 2.8 m long and 0.8 m wide, with rounded corners. Above it, a stone construction was raised, which consisted of 14 boulders, forming a kind of open-top cist, 3.6 m x 1.8 m. The bodies were lain in a non-anatomical arrangement, and the skeletons were broken up. The skulls were accumulated in the northern and southern parts of the grave pit, i.e. by the end walls (with the exception of three skulls situated in the central part of the grave). The rest of the remains, especially the better-preserved long bones, were placed inside the pit, by its eastern side.

The grave-goods were situated in the middle and southern parts of the grave (Fig. 3). Two clay vessels (a vase and a beaker — Fig. 3: 3, 4) as well as a fragment of a bronze pin (fig. 3: 1) were found by the southern wall of the grave pit. Two closed bracelets, formed from wire, of a rhombus-shaped cross-

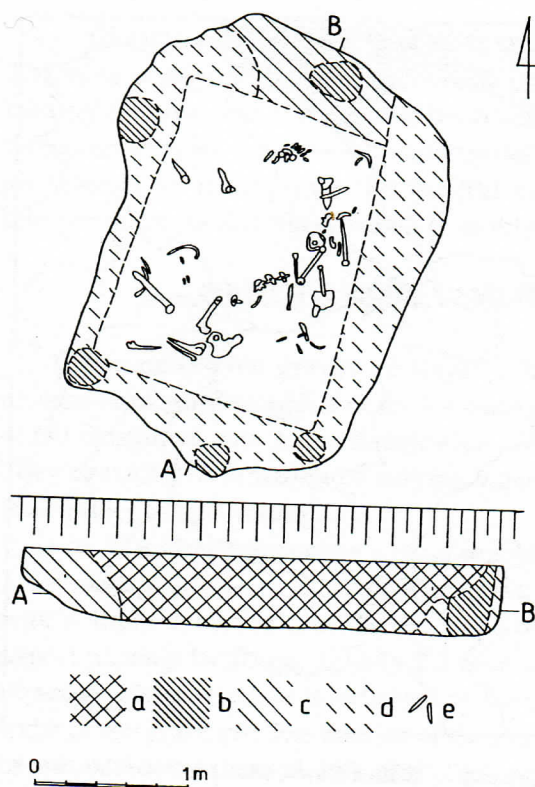


Fig. 2. Grabie, site 4. Plan of the grave: a — black soil, b — brown soil, c — brown soil with a light admixture of clay, d — brown soil mixed with clay, and e — human bones.

axis. The feature, discovered in the bottom of a humus layer, was 0.36 m deep and trough-shaped in cross-section. The filling was heavily dominated by black soil with a minor admixture of clay. The arrangement of the bodies in the grave pit was chaotic, non-anatomical, and the skeletons were broken up. Two skulls were situated by the southern edge of the pit, and single skulls by the northern and western edges, but the remainder had disintegrated due to post-depository processes (their location is unknown, but likely to have been in the northern part of the grave). The remaining parts of the skeletons had been translocated in such a way that is impossible to evaluate the mutual relations between the deads. In some cases, the sex was established; in five cases — the presumed ages of the dead (Krenz-Niedbała 1999; Makarowicz 1999). In the grave, there were three

section and decorated with a gridded triangles motif (fig. 3: 2), were recorded in the middle part of the feature. On the basis of a typological-stylistic analysis of the ceramics and metal artefacts (particularly the bracelets, which are typical of the II period of the Bronze Age in the periodisation of O. Montelius), the date of this feature can be set within the late Trzciniec horizon, i.e. between 1600 and 1300 BC.

c. Within the boundaries of Radojewice two graves were found, most probably relics of a larger necropolis, one of which was a mass grave (Makarowicz 1999). This latter feature contained the broken-up remains of seven individuals (Fig. 4 and Fig. 5). They were lain in a grave pit of an irregular rectangle shape (maximum dimensions 3.45 m x 1.50 m), orientated with its longer sides along the N-S

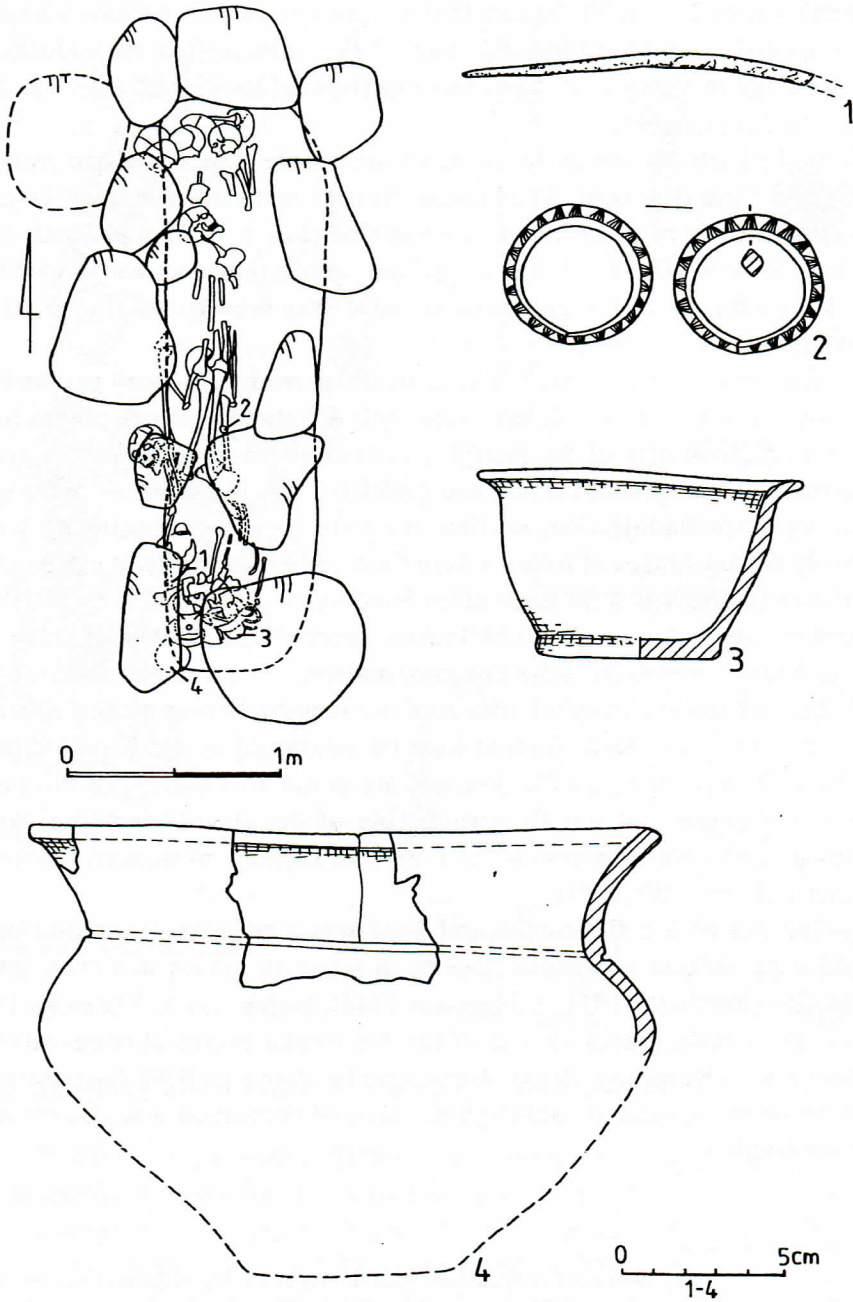


Fig. 3. Gustorzyn, site 1. Plan of the grave and the grave-goods (1-4).

women — aged 20–25, 25–30 and 35–50 — as well as four persons whose sex was impossible to determine. For two of the unidentified individuals, the presumed age at the time of death was established (35–45, and a second of an unspecified adult age).

In the southern part of the grave pit, six bronze objects and one crumbled clay vessel were deposited. The bronze artefacts included two spiral bracelets made from ribbon of a circumflex cross-section (Fig. 5: 4, 5), a pin with a flattened spiral head (fig. 5: 2), a damaged pin with a flattened, ear-shaped head (Fig. 5: 1), a fragment of a spiral pendant made from bronze wire (Fig. 5: 3), and a small piece of ornament (Fig. 5: 6).

The vessel was very badly damaged, which made it difficult to classify. It was only possible to establish the technological features — more precisely, the kind and granulometry of the rarefying admixture (most frequently, a granite admixture of heterogeneous colour and grains 1–2 mm in diameter). In the metal inventory from Radojewice, no time markers — objects occurring within relatively narrow ranges of time — were found. Most generally, it can be stated that the metal artefacts were made of tin bronze (Sn — from 9,2% to 27,7%; Zn — 0,64 to 1,04%; Au — up to 0,68%; As — traces; Hensel 1999; cf. other analyses of Kujawy metals from the Trzciniec horizon — Czebreszuk 1996: 50).

Spiral bracelets made of ribbon of a circumflex cross-section appear in the Vistula and Oder basin from at least the beginning of the II period of the Montelian Bronze Age periodisation, and are in use until the end of this period or to the beginning of the III period. One of the closest analogies to the specimens under consideration is the find from Lipiany, in western Pomerania province (Blajer 1990; 1999).

The pin with a flattened spiral head was a popular decoration in the Bronze Age. Similar specimens have been found in graves in Łubna, site 1, barrow 25 (Gardawski 1951; Jażdżewski 1948); Borek, grave 7 (Ziąbka 1987) and Żerniki Górne, graves 98 and 99 (cf. the similar chemical composition of the bronzes — Kempisty 1978). These can be dated to BA2 (according to P. Reinecke periodisation)³, although this kind of decoration was also recorded in later periods.

³ Cf. the recently-published radiocarbon dates for the cemetery in Żerniki Górne, which determine its beginning as being in the period 1900–1800 BC — Kempisty, Włodarczak 1996; Włodarczak 1998.

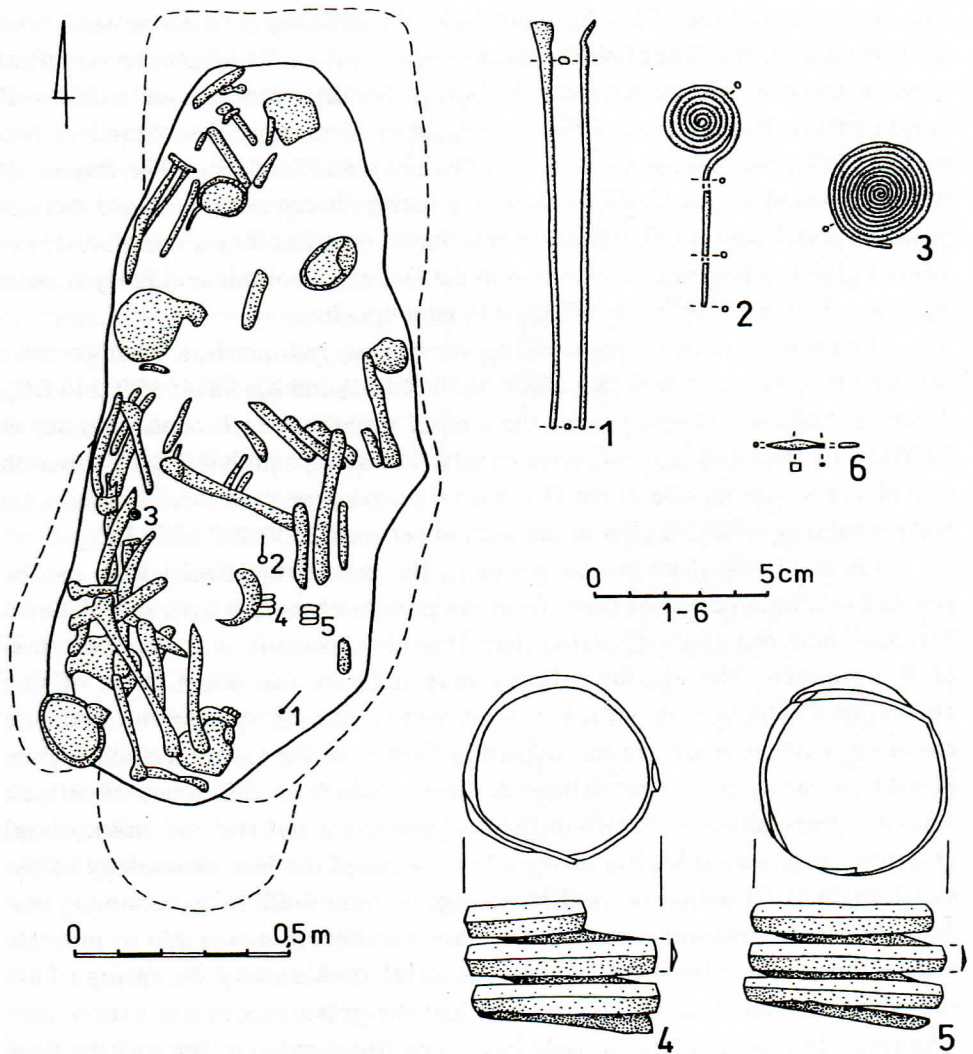


Fig. 5. Radojewice, site 29. Plan of the grave and the grave-goods (1-6).

The form of pin with a flattened, ear-shaped head occurs throughout the whole Bronze Age and into the early Iron Age. From the period of interest to us here, numerous analogies are known from cemeteries of both the Tumulus culture, e.g. from Obrót and Smoszew (Gedl 1975), and the late Trzciniec complex, Łubna, site 1, barrow 13 (Gardawski 1951; 1959); Borek, graves 10 and 13 (Ziábka 1987) and Bocheniec, site 2, graves 114 and 126 (Matoga 1987).

The long period of use of this form precludes the defining of its chronology from its presence in the Radojewice assemblage. The partially-preserved spiral pendant made of bronze wire can be only generally synchronised with the II period of the Bronze Age. Objects similar in form were discovered in two barrows in Łubna (barrows 6 and 7 — Gardawski 1951; 1959). The fragments of the damaged vessel are of no value for dating. It can only be stated that the production technology of ceramic vessels, based on a significant use of medium-ground granite admixture, is common in the Decline Neolithic and Early Bronze Age, and does not lose its significance in later epochs.

From the grave under consideration, two radiocarbon datings were obtained from human bones (Ki-6883; 3590 ± 40 BP, and Ki-6884; 3540 ± 45 BP). After calibration with the use of the *Calpal* programme, the dates are set at 1950 ± 60 BC and 1865 ± 75 BC respectively. The sum of probability distribution of both dates with the use of the *Oxcal v.3.0* programme (with 68.2% reliability, and probability of 65.5%) fits to the section between 2030 and 1870 BC.

On the basis of its bronze artefacts, the grave from Radojewice can be situated in a long period of time, from the middle of the BA2 period (classical Trzciniec horizon) until BC period (late Trzciniec horizon), in the periodisation of P. Reinecke. The absolute dating may indicate the latest stage of this chronological range, in which case it would remain consistent with the chronology of the mass graves in Żerniki Górne, in the Upper Vistula region. Should an earlier period be indicated, there would be a difference of at least 200–300 years between the two methods (typological-stylistic and radiocarbon) of dating. A greater dilemma arises when we adopt the late chronology of the metal artefacts (II period of the Bronze Age — after 1600 BC). Assuming that the radiocarbon determinations obtained are accurate, it is possible to indicate a hypothetical explanation of this potential disharmony in dating. This explanation is based on the assumption that the grave was in use over a very long time. The metal artefacts could have been deposited together with the final body, lying in the middle part of the grave. The remaining individuals (their skulls and long bones) were moved — in accordance with the tradition observed in the period of the development of Trzciniec structures — towards the sides of the burial pit. However, bearing in mind the age of the dead, it should be also assumed that they were not buried within a short period of time but at long intervals.

d. Within the boundaries of the partly destroyed cemetery in Wolica Nowa, which was in use over a very long period, a number of graves were

recorded, including at least one collective grave (Fig. 6 — Jażdżewski 1948; Grygiel 1987). Judging by the original size of the necropolis and the sizes and construction of the graves, it can be assumed that there were certainly more of such features. Their complete documentation was, however, impossible, due to the significant damage to the cemetery (Jażdżewski 1948: 118). The grave pit was of an almost rectangular shape in plan, 3.45 x 1.75 m in size, with slightly rounded corners, orientated along the N-S axis (with a slight deviation towards the NW-SE). It contained 23 skeletons, seven of which were of children⁴. The bodies were lain in three layers, some of them on their sides (Jażdżewski 1948: 123). The bones formed a cluster ('pile') — 2.0 m long, 0.6–0.7 m wide and 0.42 m deep. The skulls were located by both end walls of the 'pile' (except one, which was situated in the middle-western part), whereas the long bones and the remaining parts of the skeletons were oriented towards

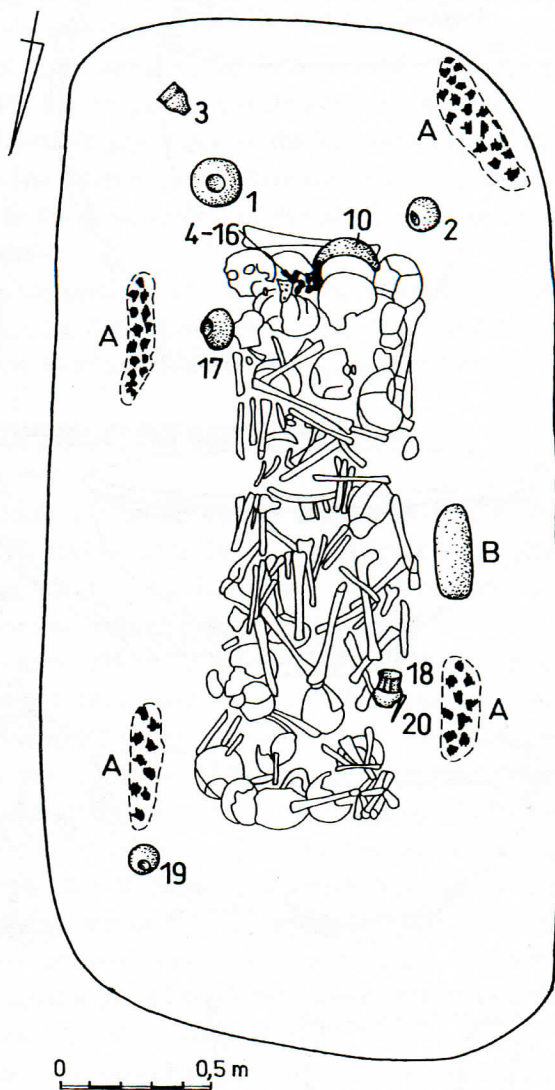


Fig. 6. Wolica Nowa, site 1, grave 5. Plan of the grave and the grave-goods (1–20). A — a cluster of charcoals, B — a smoothed stone.

⁴ More detailed anthropological analysis has not been carried out (excavations from 1938).

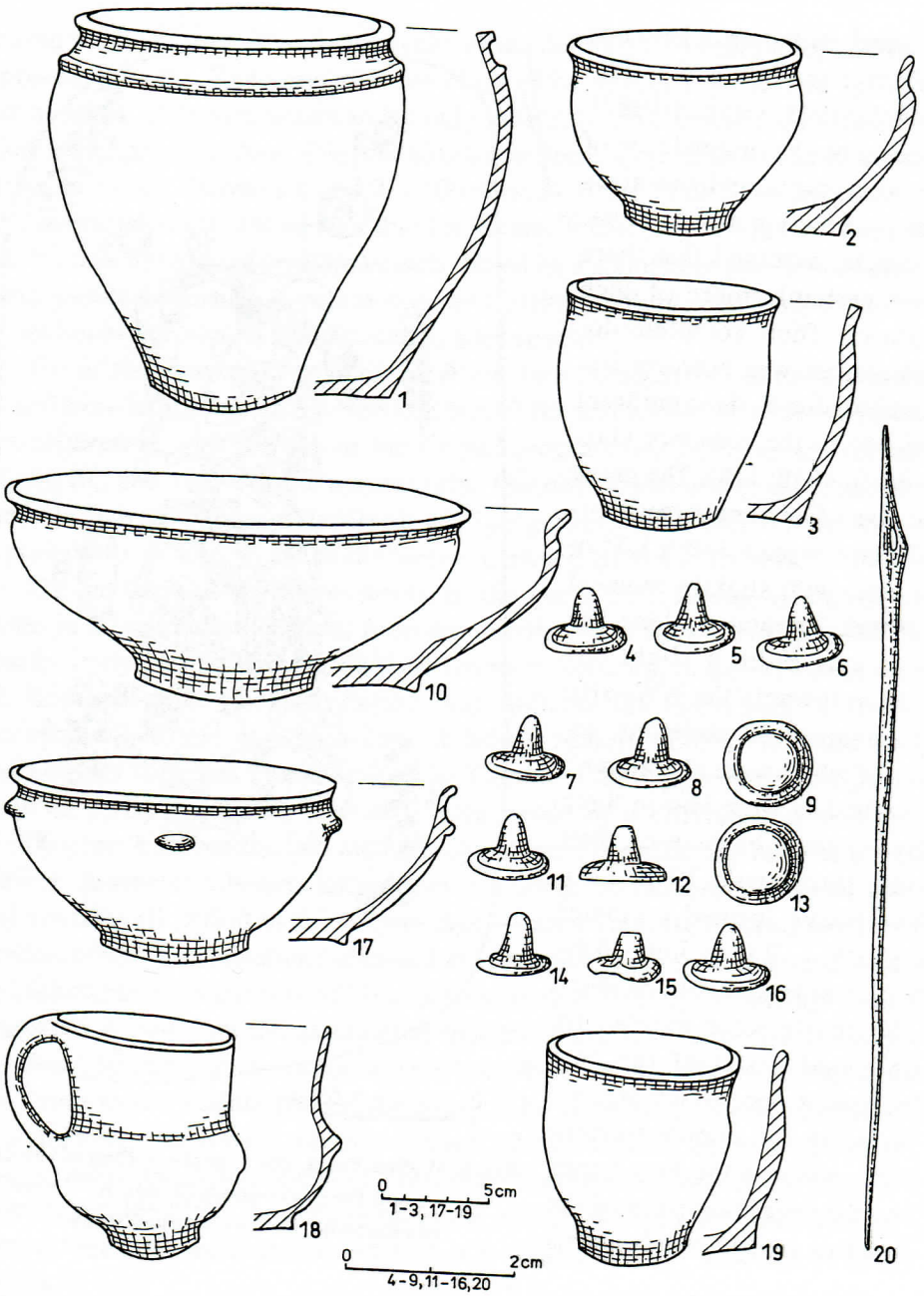


Fig. 7. Wolica Nowa, site 1, grave 5. Grave-goods (1-20 — see Fig. 6).

the centre of the pit. By the corners of the bone cluster (on the outside) extended traces of burning (charcoals) were documented.

The grave-goods contained seven vessels (four pots, two bowls and one beaker — Fig. 6 and Fig. 7: 1–3, 10, 17–19) placed in different parts of the grave, and ten bronze buttons (*tutuli*) found in one place in the northern part of the bone cluster (Fig. 6 and Fig. 7: 4–16). In its south-western part, a bronze needle-shaped pin was recorded, whilst in the western part of the pit, in the middle of the longer side, was a smoothed stone.

On the basis of a typological-stylistic analysis of the ceramics (metal artefacts are rather non-diagnostic), the date of this feature can be set within the late Trzciniec horizon, i.e. between 1600 and 1300 BC (Makarowicz 1998).

AN ATTEMPT TO RECONSTRUCT THE BURIAL CEREMONY

This attempted reconstruction was based on the modification of a proposition by A. Koško (1991: 27ff; Makarowicz 1998). Three groups of burial acts have been distinguished: (a) creating the burial site; (b) depositing the bodies; and (c) providing them with the ritual food and grave-goods.

a. In a small number of cases, it is possible to establish the relations between Trzciniec settlements and cemeteries (mainly from the classical horizon) on the territory of Kujawy, which suggest a frequent contiguity between these two kinds of features. This rule is also borne out by the funeral traditions of the populations of the Iwno culture and the early Trzciniec horizon. Collective graves were sometimes constructed in necropolises which were in use over a long time (e.g. Wolica Nowa) and within the boundaries of which were also found other features, of a different construction or with a varying number of bodies (single, double graves). No burial mounds (barrows) were recorded. However, due to intensive ploughing and almost complete deforestation in Kujawy, the previous existence of some barrows should not be excluded.

The grave pits, in most cases rectangular, were sunk in the ground and orientated with their longer sides along the N–S axis, sometimes with a slight deviation towards the NW–SE. Their length was usually twice their width (approx. 3,5–3,8 m x 1,5–2,0 m), and their average depth was 0,4–0,5 m. A frequent element in their construction was a loose stone form (visible on the original surface of the soil) or a single boulder. One should not exclude the possible existence of some wooden elements either supporting the stone form or

constituting a kind of a roof over the grave (marking the burial place). Sometimes, traces of fire are recorded in the grave pits (remains of the ritual of cleaning the resting place of the dead?; with regard to the symbolism of fire in the funeral rite cf. for example Thomas 1991: 76ff)

b. A characteristic feature of the ritual under consideration was the placing in the grave of a large number of bodies (from a few to a few dozen): of different ages, and both men and women (most numerous — see also Włodarczak 1998, p. 175) as well as children (less numerous). The corpses are always lain in a non-anatomical arrangement, and are often decompleted. It cannot, however, be definitely stated whether this disintegration was intentional (cutting bodies into quarters?) or whether it was due to unfavourable soil conditions. A certain regularity can be observed in this seemingly-disordered burial of bodies. In almost every case, the skulls were lain by the end walls of the grave pits, with the long bones placed in the space between them. The fact that the cluster ('pile') of bones most often occupies just the central part of the grave pit constitutes another premise in support of the existence of protective wooden constructions (cf. for example Florek 1998)

The above-mentioned arrangement of bodies was, most probably, a result of the gradual addition of corpses to the frequently-opened grave. None of the bodies was claimed to have been lain directly upon any of the others; sometimes the tendency to lie bodies on their sides was observed (Jażdżewski 1948). The specific arrangement of particular parts of skeletons is often explained by the necessity of moving the bodies in order to provide space for subsequent corpses. One should surmise, however, that such an arrangement rather reflected some little-known intentions (beliefs) of the societies involved (cutting the dead into pieces for fear of their return or as a substitute for cannibalism? — Thomas 1991, p. 172ff). The act of cutting up and dispersing the bodies was likely to have been carried out after the complete decay of the body, when the subsequent corpse was lain in the grave. Nor should it be excluded that the late Trzciniac populations applied endocannibalistic practices — particularly common among kinship communities — or the habit of consuming only a particular part of the body in order to take on the strength of the dead (Thomas 1991).

c. A peculiar feature of the collective burials of Kujawy is the apparent absence of animal bones (i.e. the remains of ritual meat). This does not mean, however, that the dead were not provided with ritual food and drink for their passage to the great beyond. The absence of animal bones can be explained either

by their decay or by the fact that no archeological analyses were carried out in the case of older studies⁵.

The graves usually contained various objects (exception: grave from Grabie) — mainly clay vessels and metal artefacts. Judging by the number of such artefacts, it should be concluded that not all dead were provided with grave-goods. With regard to the above, it appears that some of the dead were treated differently than others. It is difficult to ascribe vessels placed in the graves to a particular individual. Their arrangement — outside the bone cluster or by its ends — suggests that they could have been used as containers for beverages for more than one individual. The distribution of bronze artefacts is more random, owing to the effect of moving bodies. Originally, they were probably related to a particular individual (private possessions?). Graves contained exclusively leg and arm ornaments and clothing accessories. Tutulus-buttons and frequently-encountered pins were probably used to clip the robe in which the bodies were wound (a kind of burial shroud). Generally speaking, bronze artefacts were deposited in graves significantly more often than vessels.

COLLECTIVE BURIALS AS A REFLECTION OF THE TANATOLOGY OF TRZCINIEC COMMUNITIES

What was the origin of the burial practice characterised above in the ritual of the Trzciniec circle communities? Mass burials occur also in earlier cultural traditions, although the Trzciniec ritual differs in many formal aspects. A whole range of examples could be given of the early appearance in the region of Kujawy of collective graves — particularly characteristic of the Globular Amphora culture (Szmyt 1996; primarily in its classical phase — latest dates approx. 2400 BC⁶).

Individual examples of the appearance of collective burials are recorded in the Corded Ware culture (Pikutkowo 6, grave 5; Niesiołowska 1966; Czebreszuk 1996), the Iwno culture (e.g. Łojewo 4 — Koško 1993) and the Dobre group of the Proto-Únetice culture (Bożejewice 8, grave 24 — Koško 1991). In the last two cultural units, however, such kind of the burial practice

⁵ Compare, for example, the presence of animal bones in contemporary excavations of analogous Trzciniec collective graves in Zerniki Górne, southern Poland and their absence from earlier excavations.

⁶ Kind information Dr M. Szmyt.

disappears approx. 2200 BC. Consequently, it is difficult to attribute the origin of this ritual idea to any of the above-mentioned cultural traditions. Moreover, in none of these groups was collective graves a rule — this only occurred in the Trzciniec circle. One can surmise, therefore, that the appearance of this tradition among societies of the mentioned circle was their own 'invention'.

Collective graves are specific to communities of the Trzciniec complex in a number of its separate branches. Many close analogies are known for this type of ritualism from beyond Kujawy (mainly from central and south-eastern Poland), for example from Bocheniec site 2 (Matoga 1987; Kłosińska 1997), Borek site 1 (Ziąbka 1987), Dacharzewo site 1 (Florek 1998), Kosin (Chomentowska 1966), Miernów (Kempisty 1978), Żerniki Górne (Kempisty 1978; Kempisty, Włodarczak 1996; Włodarczak 1998) and Strugi (Kłosińska 1987). The early datings given above for the collective graves from Żerniki Górne (Włodarczak 1998), as well as from Radojewice, site 29, suggest their beginnings as being in the classical Trzciniec horizon (approx. 1850–1600 BC). The development of this type of ritual in the region of Kujawy occurred in the early stage of the late Trzciniec horizon (1600–1500 BC) and disappeared presumably together with the appearance of early Lusatian culture (approx. 1300 BC).

In the subject literature, it has already been noted that in the Trzciniec collective graves there are no signs of élitism, in the form of rich grave-goods (e.g. militaria, prestige goods and hunting artefacts). Neither is the status of the dead emphasised. On the contrary, the burial offerings and similar artefacts (ornaments), together with the laying of the dead, tend to suggest that the classical and late Trzciniec communities were rather egalitarian or low-ranked. One should surmise that the burial ritual under consideration reflects certain social changes taking place within these communities. These changes could summarily be defined as the replacement of individualistic tendencies, previously characteristic of communities of the Corded Ware culture, and particularly of peripheral Early Bronze Age groupings (the Únětice culture in its classical phase, early and classic Iwono culture, and early Trzciniec complex) with collectivist ideas (communitarianism and egalitarianism). Approximately 1800/1700 BC, the process of individualisation, which in turn initiated the process of intragroup stratification (the rise of chieftains 'individualising', or the 'new élites' — Renfrew 1974 — chiefdoms 'individualising'; Vandkilde 1996; Makarowicz 1998) on the Polish Lowlands, came to an halt. The concept of 'egalitarian' or low-ranked collective burials is evidence of a gradual return to

the Neolithic principles of community living with its chieftains 'group oriented' (see Renfrew 1974: chiefdoms 'group oriented').

A large amount of data concerning settlement and ritualism (e.g. the predominance of women among the dead — see Żerniki Górne case) suggest that Trzciniec communities were kinship groups and did not generate typical organisms based on spatial relations (local or territorial group — Górski, Kadrow 1996; Makarowicz 1998; Włodarczak 1998; por. Barnard, Good 1984; Penkala-Gawęcka 1987). Consequently, a highly credible hypothesis would appear to be that collective graves are places of rest for people representing different lineages (cf. also Włodarczak 1998; cf. Szykiewicz 1987; Barnard, Good 1984: 144ff). Taking into consideration the small number of Trzciniec communities, they must have established intensive contacts, such as the exchange of women (exogamy — Makarowicz 1998). On the death of a member of a given community, they were laid in a grave in accordance with their membership of a given lineage (Włodarczak 1998: 175) or extended family. This would explain the situation in the extensive and thoroughly-examined cemeteries in the region of the Upper Vistula. In Kujawy cemeteries, in addition to collective graves (generally individual, with the exception of Wolica Nowa) single and double graves have also been recorded. In the region of the Polish Lowlands, already in the early Trzciniec horizon, individual burials are more frequent, particularly under mounds. These observations may be evidence of a gradual return to collectivist practices in this region. One should also surmise that Trzciniec populations in Kujawy were smaller in number and more mobile than those in the south of Poland (Czebreszuk 1996; Górski, Kadrow 1996; Makarowicz 1998).

CONCLUSION

The type of funeral rite which has been discussed here exemplifies the diversity of the burial ritualism of the societies of the classical and late Trzciniec horizons in the basin of the Vistula and Warta. The common features which enable us to link collective burials of a skeleton type are the following: the placing of a number of bodies in one grave in a characteristic way, i.e. without maintaining an anatomical arrangement (skulls separated from long bones and from other bones), often broken up; the similar shape and size of the grave pits; the frequent occurrence of stone (and apparently wooden) constructions; and the similar chronology. The information collected in this paper allows us to postulate that social relations had a great influence on the Trzciniec 'theory of death'

(tanatology), which is specific to the kinship groups (Barnard, Good 1984). From a certain time onwards (from the classical and, particularly, late phases), communities of the Trzciniec circle appear to observe a definite social order — even following the death of their fellow community members — which is grounded in the customs of kinship groups. In the future, it will be possible to verify the credibility of this hypothesis thanks to increasingly frequently-applied DNA tests, which determine the degree of kinship between individuals buried in collective graves.

References

- Barnard A., Good A.
1984 *Research practices in the study of kinship*, London—Orlando—San Diego—San Francisco—New York—Toronto—Montreal—Sydney—Tokyo—São Paulo.
- Bierezańska S. S.
1972 *Sredniy period bronzovogo veka Severnoi Ukraine*, Kiev.
1972a *Kultura trzciniecka na Ukrainie*, *Archeologia Polski* 17: 259–305.
1982 *Severnaya Ukraina v epokhu bronzy*, Kiev.
1985 *Vostochnotshineckaya kultura*, (in:) *Arheologiya Ukrainskoi SSR*, Kiev: 437–445.
- Blajer W.
1987 *Problematyka zróżnicowania terytorialnego kultury trzcinieckiej*, (in:) *Kultura trzciniecka w Polsce*, Kraków, 19–33.
1989 *Kultura trzciniecka*, (in:) J. Kmiecinski (ed.) *Pradzieje ziem polskich* 1(2), Warszawa—Łódź: 441–454.
1990 *Skarby z wczesnej epoki brązu na ziemiach polskich*, Wrocław.
1999 *Skarby ze starszej i środkowej epoki brązu na ziemiach polskich*, Kraków.
- Chomentowska B.
1964 *Masowy grób kultury trzcinieckiej w Kosinie, pow. Kraśnik*, *Światowit* 25: 237–251.
- Czebreszuk J.
1996 *Spółeczności Kujaw w początkach epoki brązu*, Poznań.

- 1997 Krag mogiłowy i popielnicowy na Kujawach. Przyczynek do badań nad regionalną zmianą kulturową, (in:) W. Blajer (ed.) *Beiträge zur der bronzezeitlichen Hort- und Grabfunde in Mitteleuropa*, Kraków: 91–107.
- 1998 "Trzciniec". *An alternative view*, *Baltic-Pontic Studies* 6: 165–189.
- Czebreszuk J., Makarowicz P.
2000 Second Half of the Third Millennium and Second Millennium BC in Kujawy, Northern Poland in the Light of ¹⁴C Determinations, (in:) J. Czebreszuk, J. Müller (eds) *Third Millennium BC in Central Europe in the Light of ¹⁴C Datings*, Berlin–Poznań (in print).
- Dąbrowski J.
1972 *Powiązania ziem polskich z terenami wschodnimi w epoce brązu*, Wrocław.
- 1987 Stan i potrzeby badań nad kulturą trzciniecką, (in:) *Kultura trzciniecka w Polsce*, Kraków: 5–18.
- Florek M.
1998 Recepcja „mogiłowych” wzorców kulturowych w obrzędku pogrzebowym ludności kultury trzcinieckiej na przykładzie zespołu sepulkrального w Dacharzowie i innych wybranych stanowisk z terenu Małopolski, (in:) A. Kośko, J. Czebreszuk (eds) *Trzciniec: system kulturowy czy interkulturowy proces?*, Poznań: 135–144.
- Gardawski A.
1951 Niektóre zagadnienia kultury trzcinieckiej w świetle wykopaliisk w miejscowości Łubna, pow. Sieradz, *Wiadomości Archeologiczne* 18: 1–84.
- 1959 Plemiona kultury trzcinieckiej w Polsce, *Materiały Starożytne* 5: 7–189.
- Gedl M.
1975 *Kultura przedłużycka*, Wrocław–Warszawa–Kraków–Gdańsk.
- Górski J., Kadrow S.
1996 Kultura mierzanowicka i kultura trzciniecka w zachodniej Małopolsce, Problem zmiany kulturowej, *Sprawozdania Archeologiczne* 48: 9–32.

- Grygiel R.
1987 Z badań nad kulturą trzciniecką w rejonie Brześcia Kujawskiego, (in:) *Kultura trzciniecka w Polsce*, Kraków: 73–88.
- Hensel Z.
2000 Wytwórczość i użytkowanie brązu w trzcinieckim kręgu kulturowym, (in:) A. Koško (ed.) *Archeologiczne badania ratownicze wzdłuż trasy gazociągu tranzytowego, Vol. III. Kujawy, część 2, Osadnictwo kultur późnoneolitycznych oraz interstadium epok neolitu i brązu: 3900–1400/1300 BC*, Poznań: 557–561.
- Jażdżewski K.
1948 O zagadnieniu początków kultury łużyckiej, *Slavia Antiqua* 1: 94–151.
- Kempisty A.
1978 *Schyłek neolitu i początek epoki brązu na wyżynie Małopolskiej w świetle badań nad kopcami*, Warszawa.
- Kempisty A., Włodarczak P.
1996 Chronologia absolutna cmentarzyska w Żernikach Górnych, (in:) W. Nowakowski (ed.) *Concordia. Studia ofiarowane Jerzemu Okuliczowi-Kozarynowi w sześćdziesiątą piątą rocznicę urodzin*, Warszawa: 127–140.
- Kločko L., Czebreszuk J.
1997 Ein Beitrag zur Erforschung des Charakters der Kulturbeziehungen zwischen den Gemeinschaften Kujawiens und der Schwarzmeersteppen. Krusza Podlotowa, Wojewodschaft Bydgoszcz, Fundstelle 8, (in:) B. Gediga, J. Horwat, G. Przybył, D. Reclaw (eds) *Rola Odry w przemianach kulturowych epoki brązu i epoki żelaza*, Wrocław: 91–100.
- Kłosińska E.
1987 Zagadnienie cmentarzysk kurhanowych kultury trzcinieckiej, (in:) *Kultura trzciniecka w Polsce*, Kraków: 35–55.
1997 *Starszy okres epoki brązu w dorzeczu Warty*, Wrocław.
- Koško A.
1979 *Rozwój kulturowy społeczeństw Kujaw w okresie schyłkowego neolitu i wczesnej epoki brązu*, Poznań.
1991 *Ze studiów nad kujawską enklawą naddunajskiej cywilizacji wczesnobrązowej. Cmentarzysko grupy Dobre w Bożojowicach, woj. Bydgoszcz, stanowisko 8*, Poznań.

- 1993 Z badań nad udziałem tradycji kultury amfor kulistych w sferze światopoglądowo-obrzędowej społeczeństw kultury iwieńskiej, (in:) F. Różnowski (ed.) *Miscellanea archaeologica Thaddaeo Malinowski dedicata*, Poznań: 215–223.
- Krenz-Niedbała M.
- 2000 Charakterystyka antropologiczna społeczności kultury ceramiki sznurowej, kultury iwieńskiej i trzcinieckiego kręgu kulturowego, (in:) A. Koško (ed.) *Archeologiczne badania ratownicze wzdłuż trasy gazociągu tranzytowego, Vol. III. Kujawy, część 2, Osadnictwo kultur późnoneolitycznych oraz interstadium epok neolitu i brązu: 3900–1400/1300 BC*, Poznań: 563–567.
- Makarowicz P.
- 1998 *Rola społeczności kultury iwieńskiej w genezie trzcinieckiego kręgu kulturowego (2000–1600 BC)*, Poznań.
- 1998a Absolute Chronology of the Trzciniec Cultural Circle in the Vistula Drainage in the Light of ¹⁴C Datings, *Baltic-Pontic Studies* 6: 141–155.
- 1998b *Taxonomic Foundation of the Trzciniec Cultural Circle on the Lower Vistula*, *Baltic-Pontic Studies* 6: 19–31.
- 1999 The Emergence of the Trzciniec Cultural Circle in the Western Zone of the Polish Lowlands (2000–1600 BC), (in:) J. Bątor, J. Peška (eds), *Aktuelle Probleme der Erforschung der Frühbronzezeit in Böhmen und Mähren und der Slowakei*, Nitra: 75–85.
- 2000 Osadnictwo społeczności kultury iwieńskiej oraz trzcinieckiego kręgu kulturowego, (in:) A. Koško (ed.) *Archeologiczne badania ratownicze wzdłuż trasy gazociągu tranzytowego, Vol. III. Kujawy, część 2, Osadnictwo kultur późnoneolitycznych oraz interstadium epok neolitu i brązu: 3900–1400/1300 BC*, Poznań: 457–550.
- Matoga A.
- 1987 Problem przynależności kulturowej grobów szkieletowych z Bocheńca, woj. kieleckie, (in:) *Kultura trzciniecka w Polsce*, Kraków: 119–131.
- Miśkiewicz J.
- 1978 Kultura trzciniecka, (in:) A. Gardawski, J. Kowalczyk (eds)

- Prahistoria ziem polskich. Vol. III. Wczesna epoka brązu*, Wrocław: 173–196.
- Niesiołowska E.
1967 *Materiały neolityczne ze stanowiska 6 w Pikutkowie, pow. Włocławek, Prace i Materiały Muzeum Archeologicznego i Etnograficznego w Łodzi* 14: 79–143.
- Penkala-Gawęcka D.
1987 *Grupa krewniacza*, (in:) *Słownik etnologiczny. Terminy ogólne*, Poznań: 150.
- Renfrew C.
1974 *Beyond a subsistence economy, the evolution of social organisation in prehistoric Europe*, (in:) C. B. Moore (ed.) *Reconstructing Complex Societies. Bulletin of the American School of Oriental research* 20 (Supplement): 69–95.
- Szmyt M.
1996 *Spółeczności kultury amfor kulistych na Kujawach*, Poznań.
- Szynkiewicz S.
1987 *Lineaż*, (in:) *Słownik etnologiczny. Terminy ogólne*, Poznań: 210–211.
- Taras H.
1995 *Kultura trzciniecka w międzyrzeczu Wisły, Bugu i Sanu*, Lublin.
- Thomas L.-V.
1991 *Trup*, Łódź.
- Vandkilde H.
1996 *From Stone to Bronze. The Metalwork of the Late Neolithic and Earliest Bronze Age in Denmark*, Moesgard.
- Włodarczak P.
1998 *Groby kultury mierzanowickiej oraz kultury trzcinieckiej z Żernik Górnych*, (in:) A. Koško, J. Czebreszuk (eds) „Trzciniec”: *system kulturowy czy interkulturowy proces?*, Poznań: 161–177.
- Ziábka L.
1987 *Cmentarzysko z II okresu epoki brązu w Borku, gm. Grodziesz Wielkie*, (in:) *Kultura trzciniecka w Polsce*, Kraków: 89–118.