

**THE TRZCINIEC AREA OF THE EARLY
BRONZE AGE CIVILIZATION: 1950-1200 BC**

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Editor's Foreword

The Trzciniec Culture, Trzciniec Cultural Circle and Trzciniec Horizon are the names of a cultural area in the borderland of Western and Eastern Europe at the 2nd millennium BC. For over half a century a discussion has been going on over the taxonomic identification (chronological and spatial) and genetic and ethnic interpretation of this cultural unit.

In the debate, the 1980's and 1990's mark a significant cognitive turn caused by the growth of the corpus of sources, the use of systematic methods for the study of mobile sources and the proliferation of regional ¹⁴C datings.

The present volume of "Baltic-Pontic Studies" is an attempt to register this breakthrough and a proposal for a new fitting of the Trzciniec phenomenon into the synthesis of Early Bronze Age Europe. The records include rudiments of new regional systematizations, foundations of their chronologies based on radiocarbon datings and a discussion of the mechanisms of socio-cultural changes which gave rise to the Trzciniec cultural area and later contributed to its disintegration.

A long-term intention of this volume giving a multifaceted view of the effects of the said cognitive breakthrough is to encourage a careful scrutiny of the development mechanisms of the European Early Bronze Age Civilization, in particular the role played in them by the societies inhabiting the drainages of the Baltic and Pontic Seas.

Editorial comment

1. All dates in the *B-PS* are calibrated [see: *Radiocarbon* vol.28, 1986, and the next volumes]. Deviations from this rule will be point out in notes.

2. The names of the archaeological cultures (especially from the territory of the Ukraine) are standarized according to the English literature on the subject [e.g. Mallory 1989]. In the case of a new term, the author's original name has been retained.

3. The place names located in the Ukraine have been transliterat from the versions suggested by the author (i.e. from the Belorussian, Ukrainian, Polish or Russian originals).

Jacek Górski

THE QUESTION OF THE DECLINE OF TRZCINIEC CULTURE IN WESTERN MAŁOPOLSKA. TRZCINIEC CULTURE VS. LUSATIAN CULTURE

Since the Trzciniec Culture (TC) was distinguished, attention has been drawn to its ties with the Lusatian Culture (LC). The Trzciniec-Lusatian ties have been best described by Aleksander Gardawski [Gardawski 1959:135-138; 1971] who has put forth the concept of the *Łódź phase* which was supposed to be a transitional stage between the two cultures. In the meaning imparted to it by the author, the term “phase” was reserved for a relatively short phenomenon covering a vast territory. The phase was intended to serve as a common development stage of sources. Soon after the concept was published, the term *Łódź phase*, signifying a transitional phase, began to be widely used. Evaluating this proposal in hindsight, it seems that in the case of some areas it was not sufficiently grounded in archaeological sources. It became, nevertheless, a very convenient research concept, a kind of a carryall for sources or phenomena either not welcome in the TC and LC or not yielding to appropriate classification [Matoga 1991:222]. A deficiency of many published works concerning this question is a lack of sources allowing a more accurate dating. On the one hand, there are not enough metal artifacts, on the other, in the case of many areas concerned, no local periodization systems based on mass materials have been devised. It appears, however, that plausible diagrams of local development lines based on pottery classification may be drawn not only for the areas from which large series of materials come [e.g. south-eastern, loess portion of Niecka Nidziańska (Nidzica Trough) [Górski 1992;1994a; 1997], but also for areas which as a rule do not yield impressive sources [e.g. Kujawy; Czebreszuk 1996]. What is more, such findings concerning the relative dating of the decline of the TC and the beginnings of the LC in both kinds of areas do not contradict the chronology of metal artifacts of both cultures [cf. Dąbrowski 1991].

The purpose of this work is not a criticism of the very theory of transition of the TC into LC; the contribution of the Trzciniec substratum into the rise of

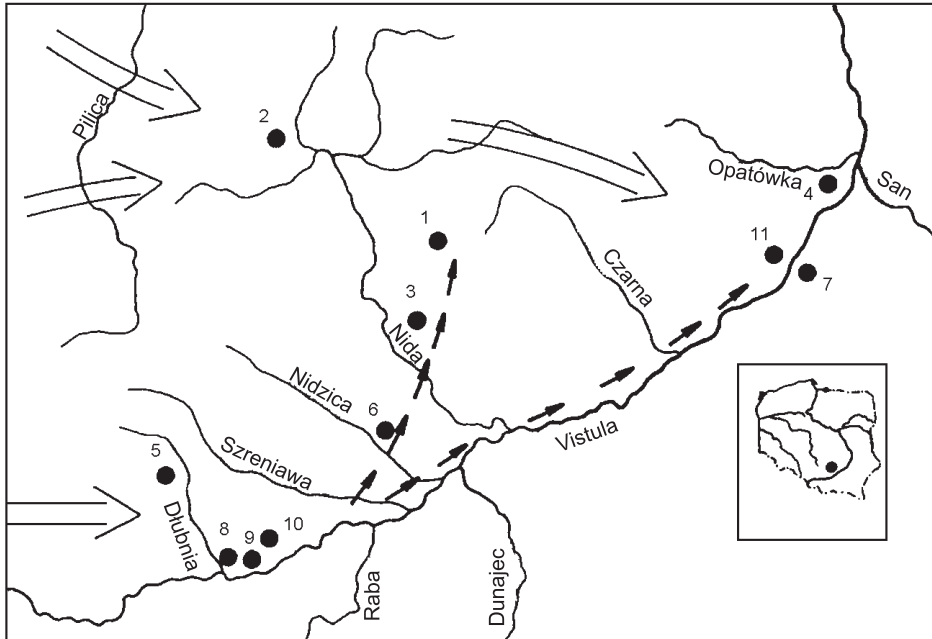


Fig. 1. Location of major sites of Trzceniec Culture (TC) and Lusatian Culture (LC) in western Małopolska and directions of significance (large arrows) and small (small arrows) impact on the rise of local varieties of an Urnfield-type Culture. 1 - Balice; 2 - Bocheniec; 3 - Bogucice; 4 - Dwikozy; 5 - Iwanowice-Wysulek; 6 - Jakuszowice, site 2; 7 - Machów; 8 - Nowa Huta-Mogiła, site 55; 9 - Nowa Huta-Pleszów, site 17; 10 - Nowa Huta-Pleszów, site 49; 11 - Piaseczno. Drawn by A. Mosio.

the eastern branch of the LC is unquestionable. It has been observed many times that in both cultures there were similar or analogous vessel forms, pottery technology displayed certain similarities or that there were survival Trzceniec traits in LC assemblages. Prior to discussing the question on its merits, several issues concerning methodology should be presented since they will have an impact on the way the question will be treated. In the first place it is hard to deny the assertion that before an appropriate stage of research into the chronological division of TC sources is reached, we should not attempt to reconstruct the events at the time of the TC transition into the LC [Matoga 1991:224]. The transition itself [being at the same time a stage when a new culture was being born] was a continuous process. For this reason one cannot expect a sharp distinction into the earliest Lusatian assemblages and those preceding them [Dąbrowski 1991:195]. A fundamental question, and the most relevant one from the logical point of view however rarely asked, is whether the evolution of TC materials in a given area leads to the rise of the LC. The first attempt to define the relations between the two cultures may

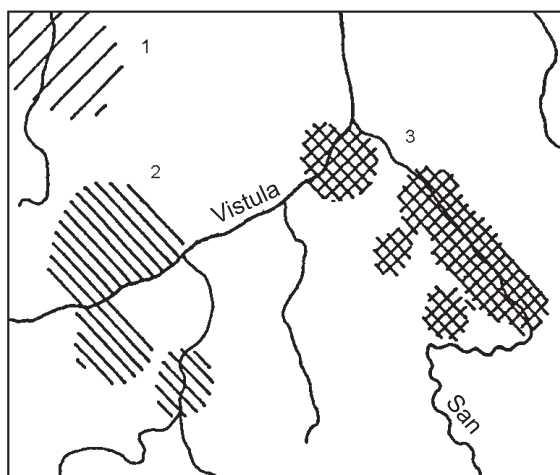


Fig. 2. Differentiation within groups of the early phase of the Lusation Culture: 1 - left-sided shading - Konstantynów (phase) group; 2 - right-sided shading - Kraków subgroup of the Silesian group; 3 - checkered areas - Tarnobrzeg group (according to M. Gedl). Drawn by A. Mosio.

have been a work by Jacek Rydzewski [1991] who began with tracing the changes taking place in TC pottery. The work dealt with the origins of the LC in the vicinity of Kraków. This is an area for which we have now the fullest selection of sources making it possible to reconstruct the process of cultural change from the TC to LC.

In this paper, research results for the area will serve as a background for discussing selected finds from the southern portion of the interfluvial area of the Pilica and Vistula (Fig. 1 — the northern limit will be the range of the Holy Cross Mountains). In the times preceding the emergence of the LC the mountains were occupied by societies representing the TC. At the decline of phase A2 and in the early phase B of the Bronze Age, the area was quite uniform with respect to the traits of material culture. Clear manifestations of a local differentiation of the TC can be seen in phase C of the Bronze Age when a specific set of vessels, without analogy in other areas occupied by the culture, makes the region in Kraków's vicinity conspicuously stand out [Górski 1997:37]. In phase D of the Bronze Age one can already speak of three different groups of the late phase of the TC (Fig. 2). However, materials from the loess areas in the vicinity of Kraków and Miechów, from the region where the San joins the Vistula and from the area of confluence of the Black and White Nida display a peculiar set of traits. Hence, local differences in soil types were a chief reason for a future differentiation within LC groups. Another important set of reasons of

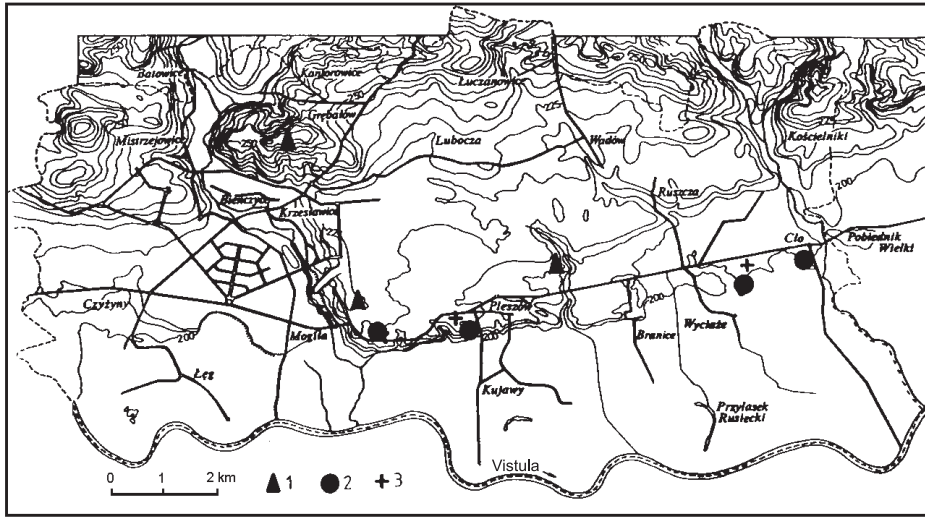


Fig. 3. Cultural situation in Nowa Huta at the turn of phase D of the Bronze Age and phase A1 of the Hallstatt period. 1 - Trzciniec Culture settlements; 2 - Lusatian Culture (LC) settlements; 3 - LC graves. Drawn by A. Mosio.

these differences included the direction from which cultural patterns were acquired, kind of contacts and the manner in which late Trzciniec societies came into contact with the new cultural trend. In the case of Kraków's vicinity the contacts were direct. The transmission of patterns from the LC to TC was relatively easy because of the existence of an enclave of population representing the Silesian version of the LC. To the vitality of this group testifies the fact that in a new environment not only it did not lose its separate character, but became a decisive factor in the shaping of the future cultural picture of the area. "Silesian patterns" in pottery did not take root, however, in areas where their impact was smaller. Despite stimuli coming from Kraków's vicinity, late Trzciniec societies inhabiting the territory on the Upper Nida joined the rhythm of changes relating the territory to the phenomena observable in the Konstantynów group of Central Poland. As a consequence, a Kielce subgroup separated from the Upper Silesia-Małopolska group of the LC. The fact that the early Lusatian impact came from Central Poland is stressed also in the case of the Sandomierz region and the area lying east of the Vistula. A careful scrutiny of the situation in that area leads us to the conclusion that "Lusatian" patterns were received "second-hand" (via the region on the Upper Nida), which led, with "eastern" influences being superimposed, to the emergence of a specific Tarnobrzeg group of the LC.

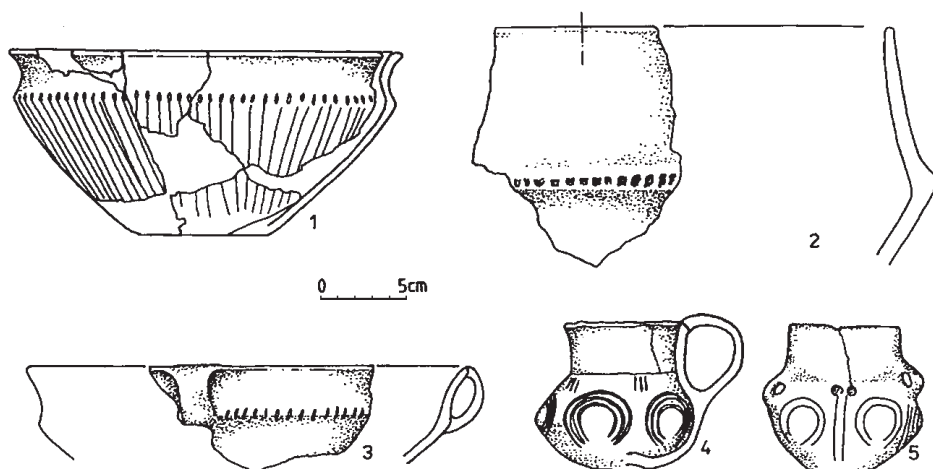


Fig. 4. Pottery characteristic of the early phase of the Lusatian Culture from site 55 in Nowa Huta-Mogiła (according to A. Rachwaniec). Drawn by A. Mosio.

1. THE TRZCINIEC AND LUSATIAN CULTURES IN THE VICINITY OF KRAKÓW

The relations between the two cultures were best investigated in the vicinity of Kraków. In the opinion of A. Gardawski, it was one of the regions in which spontaneous transformation of the TC into the LC was supposed to have taken place [Gardawski 1971:160ff, Fig. 8 and 9]. Of different opinion was Marek Gedl who believed that the said culture appeared in a final form in the vicinity of Kraków as a result of the arrival of Silesian populations in this area. This event took place around the turn of phase D of the Bronze Age and A1 of the Hallstatt period [Gedl 1982:21-23, Fig. 13], which is corroborated by the occurrence of bronze pins with butt-like and cross-fluted heads in Kraków's vicinity [Gedl 1982:22; Dąbrowski 1991:199]. The existence of an enclave with "Silesian-style" pottery near Kraków was reflected in the territorial division of the LC (Kraków subgroup of the Silesian group of this culture) [Gedl 1975:110]. An analogous point of departure is used in detailed studies of the cultural situation in Kraków-Nowa Huta [Rydzewski 1983; 1991; 1992; Górski 1992; 1994a; 1997]. Suggestions concerning the existence of the "Łódź phase" in this area [Gardawski 1971:160ff, Fig. 8, 9; Rachwaniec 1982:69] have not been confirmed yet.

When defining the relations occurring where the TC met the LC, inspiration came from the assertion that the TC was supplanted or assimilated by the LC in the area under discussion [Gedl 1982:21-22]. Thus, an idea was indirectly put forward

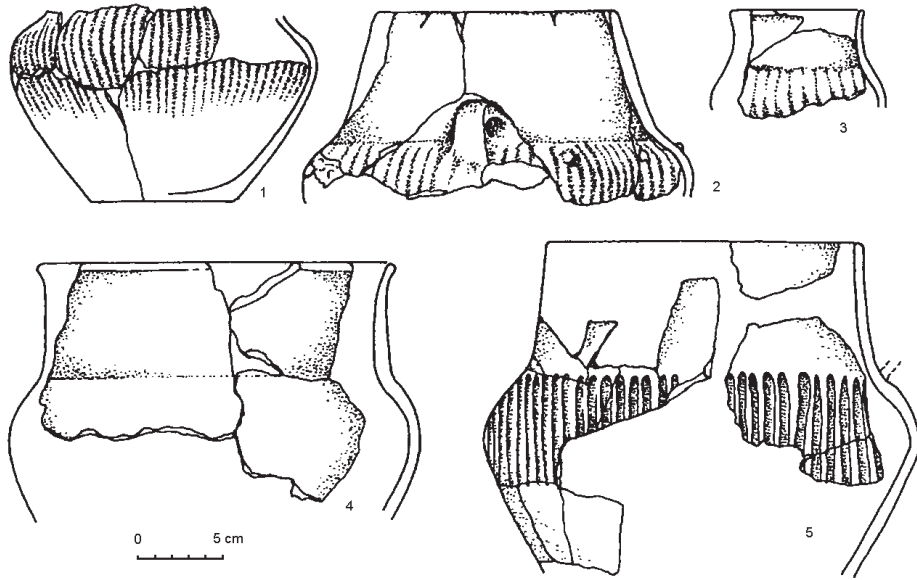


Fig. 5. Pottery characteristic of the late phase of the Lusatian Culture from site 55 in Nowa Huta-Mogila. Drawn by A. Mosio.

claiming that the TC survived in this area until representatives of the finally-shaped LC arrived from the west. One indication of the temporary co-occurrence was the finding that sites of both cultures mutually excluded each other in Kraków-Nowa Huta [Rydzewski 1983:216-217; 1992:181, Fig. 3]. Around the middle of the III period of the Bronze Age, at a bend of a Vistula terrace, several settlements as well as a cremation cemetery were founded in a virgin place, where pottery characteristic of the early phase of the LC is represented. They were located close to TC settlements that had been permanently inhabited since phase A2 of the Bronze Age (Fig. 3). The finding that the sites of both cultures were spatially mutually exclusive served as a basis for detailed studies of Nowa Huta settlement materials [Rydzewski 1991; Górski 1992]. The first of the works stressed the changes in TC pottery taking place from the turn of the older and middle periods of the Bronze Age which, however, did not result in the emergence of a local variety of the LC. We can speak of the beginnings of the LC only when pottery made in the “Silesian style” appears (sharp-contoured bowls corrugated at the bend of belly and decorated underneath it with incised lines, vases corrugated at the bend of belly and characteristic “button” vessels — Fig. 4). Having co-existed with the representatives of the early phase of the LC for some time, an altered TC adopted characteristic traits of pottery manufactured by them. This is why vessels of this type appeared at TC settlements

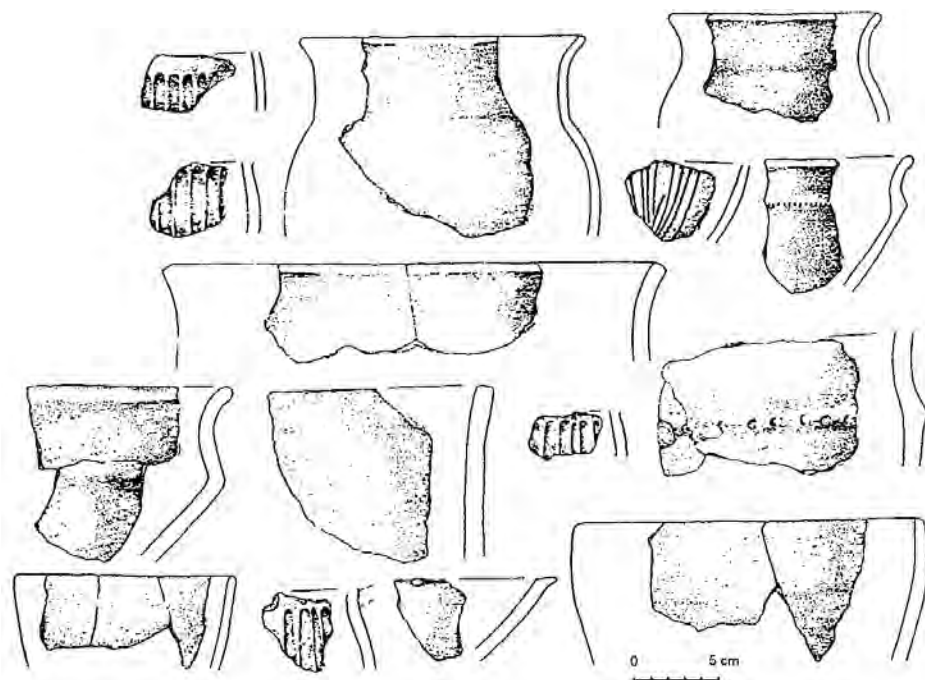


Fig. 6. Pottery characteristic of the decline phase of the Lusatian Culture from site 55 in Nowa Huta-Mogila, feature 32. Drawn by A. Mosio.

in Kraków-Nowa Huta at Mogiła, site 55 and Pleszów, site 49. The mechanism of changes and the process of taking over early Lusatian traits by the populations of the late phase of the TC could be traced with the help of the sources from site 55 in Nowa-Huta-Mogila (settlement close to the Mound of Wanda) [Górski 1992]. Owing to carefully selected analytical procedure, it was possible to identify relatively chronologically compact settlement assemblages. This, in turn, permitted to trace changes in TC pottery within relatively short time horizons [Górski 1994a:74-91; 1997:28-29]. Late TC assemblages (Fig. 5) are characterized by the presence of amphorae, cups and beakers decorated on the belly with compact zones of vertical grooves being an almost exclusive ornament pattern. There is also a group of dozen-odd features containing mixed, Trzciniec-Lusatian materials (Fig. 6). It must be stressed, however, that no intermediate traits are observed between these two, stylistically very different, groups of sources. There are no common or even similar ornament patterns. TC pottery does not undergo evolution leading to the emergence of early Lusatian forms. The latter, undoubtedly appear at the site in a ready-made form. The role of the population representing the late phase of the TC was reduced to accepting a new cultural trend. The changes in the TC induced by

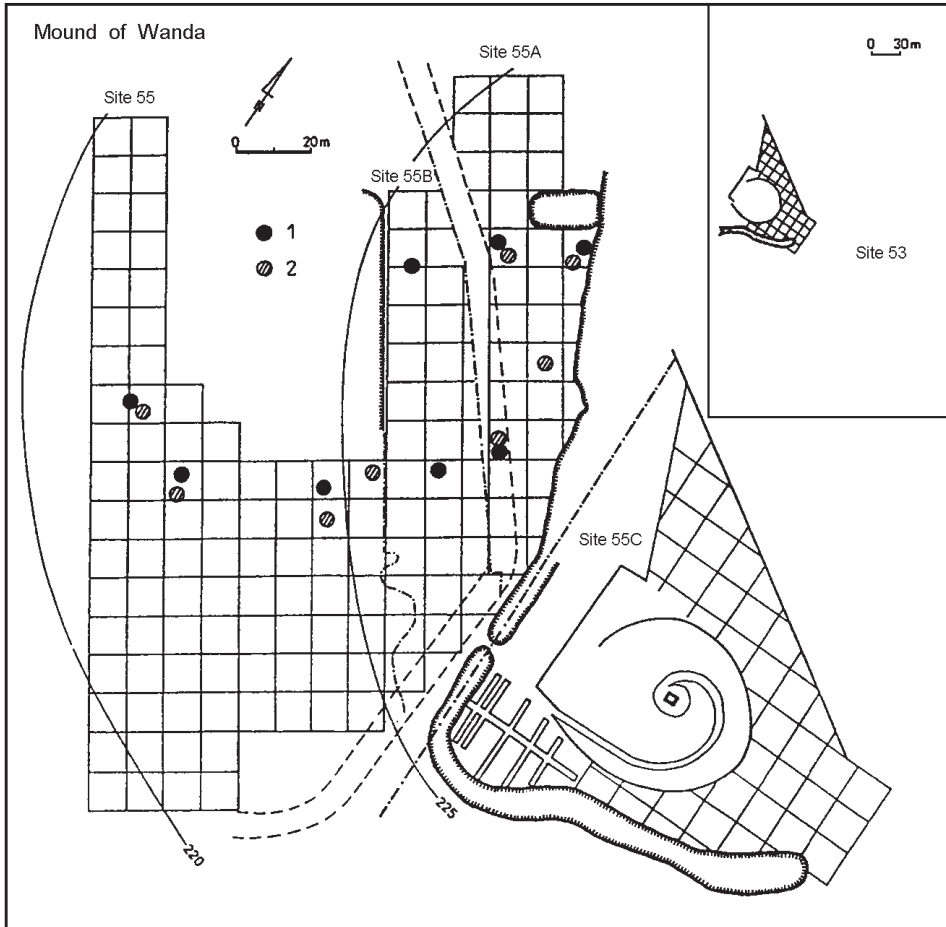


Fig. 7. Organization of a settlement from the late phase of the Trzciniec Culture (TC) at site 55 in Nowa Huta-Mogiła. 1 - features of the late phase of the TC (construction phase VII), 2 - features of the decline phase of the TC (construction phase VIIa). Drawn by A. Mosio.

the direct impact of the early phase of the LC led to the vanishing of the traits, on the basis of which the culture can be distinguished.

The changes were not superficial and did not consist only in a simple assimilation of new ornamentation patterns in ceramics. Together with the appearance of vessels made in the “Silesian style” evolution began to affect also the traditional model of functioning of the settlement. The model was formed already in phase A2 of the Bronze Age when a TC population took over settlement organization from a community of the classic phase of the Mierzanowice Culture [Górski, Kadrow

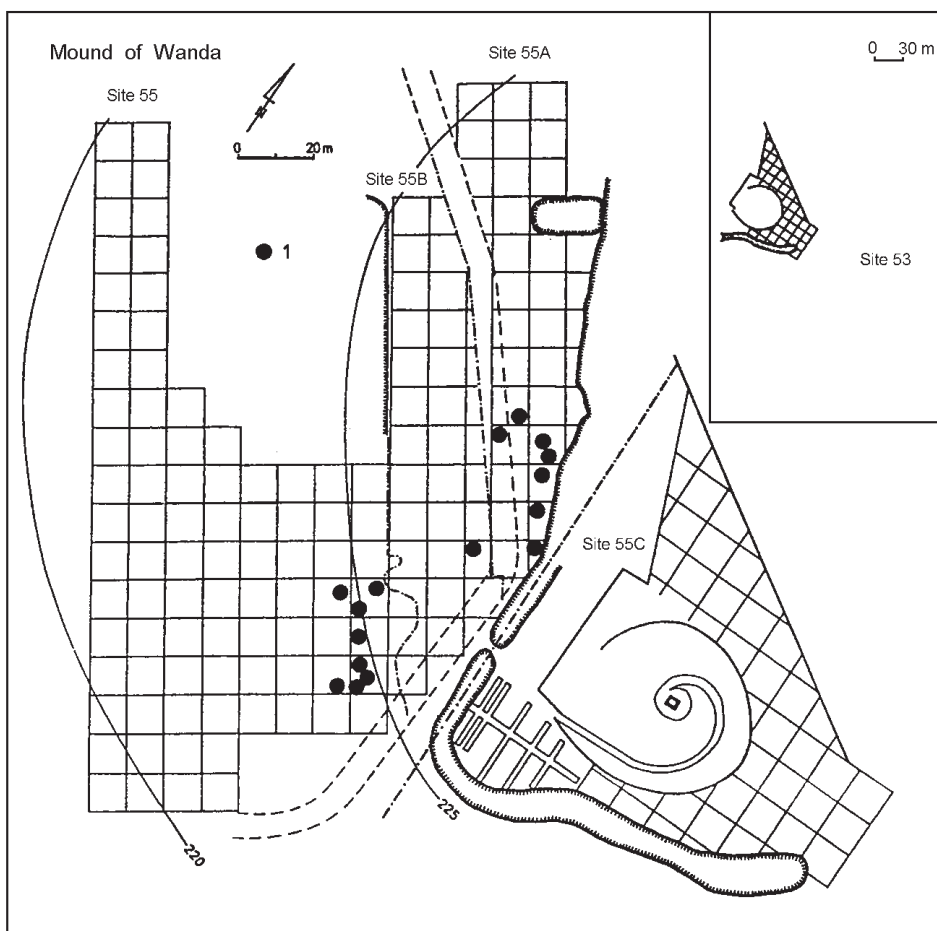


Fig. 8. Organization of a settlement from the early phase of the LC at site 55 in Nowa Huta-Mogila. 1 - features. Drawn by A. Mosio.

1996:19]. Relying on the results of spatial development analysis of an Early Bronze Age settlement in Iwanowice [Kadrow 1991], it was accepted that, in the case of the settlement in Nowa Huta-Mogila, one large feature, either trapezoid or bag-like, functioned usually on the area 10-20 m in diameter. It was further accepted that usually one pit corresponded to one household cluster inhabited by a basic family and that a complex of contemporaneous clusters made up a construction phase. Throughout the whole period of TC existence, construction phases distinguished at the site close to the Mound of Wanda formed quite regular, closed and ellipse-like structures. The features of the late phase of the TC formed two structures, succes-

sive and partially spatially exclusive, identified as construction phases VI and VII representing settlement organization typical of the TC. The further development of the settlement is very interesting. Now, almost each feature of construction phase VII was accompanied by a younger pit, the contents of which included, next to late Trzciniec materials, characteristic early Lusatian pottery (Fig. 7). The evolution of the settlement organization system leads to a situation where earlier tendencies to obtain a regular and closed arrangement of features (household clusters) disappear. The mapping of pits in which “pure” early Lusatian materials were discovered gives a different picture (Fig. 8). Features closely related in time make several standing out clusters while in a few of the largest of them the arrangement of pits resembles a bunch of grapes.

It seems, therefore, that processes of the TC’s taking over traits characteristic of “Silesian ornamentation” were taking place after early Lusatian settlement had stabilized in the area in question, i.e. in phase A1 of the Hallstatt period. The change of the cultural image of this area must have taken a few generations. The situation discovered in the vicinity of Kraków “(…) may be imagined as the taking over of certain areas by advancing populations with already developed Lusatian culture and as the Lusatian Culture taking root in the preceding culture, which will be manifested not by an assemblage of separate forms but by the co-existence of new and old ones” [Dąbrowski 1991:198]. In the presented theory, the transitional phase in the vicinity of Kraków is a stage of adaptation of traits characteristic of the LC by local late Trzciniec societies.

2. REMARKS ON THE DECLINE OF THE TRZCINIEC CULTURE AND THE RISE OF THE LUSATIAN CULTURE IN THE REGION OF SANDOMIERZ

In the Sandomierz Uplands, the late phase of the TC may be reliably characterized on the basis of materials from Dwikozy where a common skeleton grave was discovered. In the opinion of the authors of the discovery it was a contemporaneous feature. On the basis of nine radiocarbon dates, its foundation can be dated at ca 1200 cal BC [Ścibior, Ścibior 1990:119, 121, Tab. 2] which corresponds to phase D of the Bronze Age. The find may be synchronized with the late phase of the culture in the south-western portion of Niecka Nidziańska [Nidzica Trough] [Górski 1997:28-29]. Vessels decorated with vertical grooves characteristic of this phase were found in the grave [Ścibior, Ścibior 1990:Fig. 9:4, 5] and at several other sites [Nosek 1948, Tabl. XXX, 1; XXX,2, 3; Krauss 1977:23]. A local peculiarity, however, is the presence of tulip-like pots with small bottoms [Ścibior, Ścibior 1990:Fig. 9:1, 2; 10:4] for which there is no analogy in the vicinity of Kraków (Fig. 9).

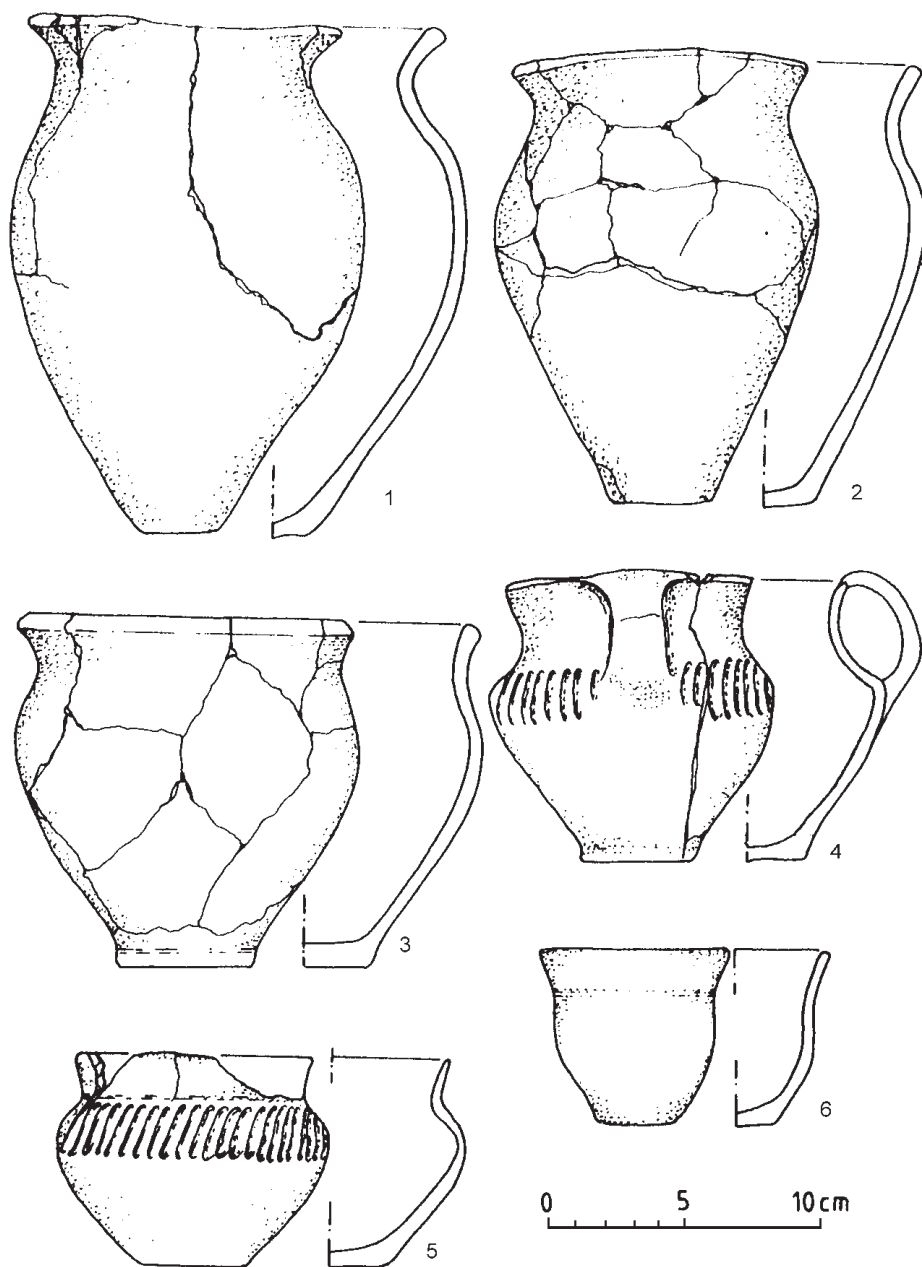


Fig. 9. Selected ceramic materials from the collective grave in Dwikozy (according to J. Ścibior, J. Ścibior). Drawn by A. Mosio.

Only in recent years, have considerable amounts of TC materials been identified in the areas later occupied by the Tarnobrzeg group of the LC [Blajer 1985], owing to which the theories taking into account the role of the Trzciniec substratum in its genesis acquired firm foundations [Blajer, Czopek, Kostek 1991; Czopek 1996; see there for the development of views on the rise of the Tarnobrzeg group of the LC]. One of such areas is the region where the Wisłok River flows into the San [Czopek 1996:110-116]. Admittedly this area is little further afield from the one delineated above, but certainly this is the closest area in the range of the Tarnobrzeg group of the LC, in the case of which the question of transition from the TC into LC has been exhaustively discussed. The existence of this cultural group is evidenced in the first place by long-used cremation cemeteries, the appearance of which may be dated at not earlier than phase A1 of the Hallstatt period [Czopek 1996:113-114]. Among larger flat cemeteries in the territory in question are, for instance, Machów and Piaseczno [Krauss 1977, Fig. 25]. Consequently, the present discussion may be narrowed down to the period from the digging of the Trzciniec grave in Dwikozy to the appearing of the first cremation burials. The attention of scholars has been drawn for a long time by the ensuing “horizon” of a few richly provided skeleton graves dated at the first or second half of the III period of the Bronze Age. Their grave-goods include a number of elements which are no longer “Trzciniec-like” nor “Tarnobrzeg-like” yet [Czopek 1996:113-114]. In this context of great interest are results of planigraphic analyses carried out at some sites [Czopek 1996:44ff, Fig. 48]. The skeleton graves are associated with the oldest phases of development of these cemeteries and co-occured with analogously dated cremation burials. It must be accepted that the inhumations are related rather to the Trzciniec tradition of disposal of the dead and that they occurred in the times when cremation was gaining ground [Czopek 1996:48]. The existence of long-used cemeteries is not a typical trait of the TC, whereas such cemeteries are a hallmark of the LC. If skeleton graves began the development of the mentioned cemeteries they must reflect the “onset of new times” in which a decisive role was taken over by cremation. The transitional character of skeleton graves would find expression in the fact that they are the oldest link in the development of the cemeteries. If, however, we were to accept that inhumations and cremations had been contemporaneous we would deal with a period of co-occurrence of older vanishing traits (inhumation) and newer ones being on the increase (cremation). Under this interpretation, the “transitional character” would entail a right of an individual to choose a type of burial within the same burial ground. In both cases, the transiency of this phase is manifested by the acceptance of the necessity to set up permanent cemeteries by local communities.

The situation in the area of interest to us may have developed accordingly to a recently proposed pattern [Czopek 1996:114]. In phase D of the Bronze Age, the region of Sandomierz and Tarnobrzeg was inhabited by TC societies. Typical materials from this period were identified in the grave discovered in Dwikozy. The

grave represents the waning stage in the development of the culture: both the grave form and the pottery found in it do not permit us to associate it with the LC. A marked change is brought about by phase A1 of the Hallstatt period which is a stage of “searching for new patterns” and occasionally of the rise of a new quality. In this case a new quality is manifested by the co-occurrence of inhumation and cremation burials. Some vessels discovered in burials that have not been burnt (for the discussed area, the grave discovered in Złota is representative) [Ścibior 1993] have no equivalents in known TC pottery, whereas they bear relations to specimens known from cremation burials [Ścibior 1993:150-152]. The universal use of cremation in phase A2 of the Hallstatt period testifies to the existence at that time of a culture in the type of urn fields. The change of the TC into the LC should be looked upon in terms of a reevaluation of the fundamentals of a culture which, in this case, found its expression in the supplanting of inhumation burials with cremations.

3. THE CHANGE OF THE TRZCINIEC CULTURE INTO THE LUSATIAN CULTURE ON THE UPPER NIDA

In the area along the Upper Nida the final effect of the evolution of TC pottery may be observed in the assemblages from common graves discovered in Bogucice [Gardawski 1971:Fig. 7] and Bocheniec [Matoga 1985:Fig. 4-8; 1987:Fig. 2-5]. The genetic relationship of these burials with the TC raises no doubt [Matoga 1985:105; 1987:128].

For the question under discussion here, of the greatest importance are observations made in the older zone of the cemetery in Bocheniec [Matoga 1985; 1987]. Its development sequence is opened by the mentioned common skeleton graves dated to the first half of the III period of the Bronze Age [Matoga 1987: 128; Dąbrowski 1991:198]. In the older zone of this burial ground, dated to the second half of the III and the beginning of the IV period of the Bronze Age, other types of burials have been identified, too: cremations in urns or without them, “symbolic” and probably skeleton graves in which bones have not survived [Matoga 1985:97-99]. It is worth remembering that a similar variety can be encountered at the cemeteries of the early Tarnobrzeg group of the LC [Czopek 1996:44ff]. The dating of skeleton graves from Bocheniec permits them to be equated with the late development phase of the TC in the vicinity of Kraków. The inventories of these graves (similarly to the pottery from Bogucice) look, however, rather peculiar (Fig. 10). They do not contain vessels decorated with vertical grooves, a local trait is the presence of specifically decorated cups while similarities concern pots. One of the graves discovered there

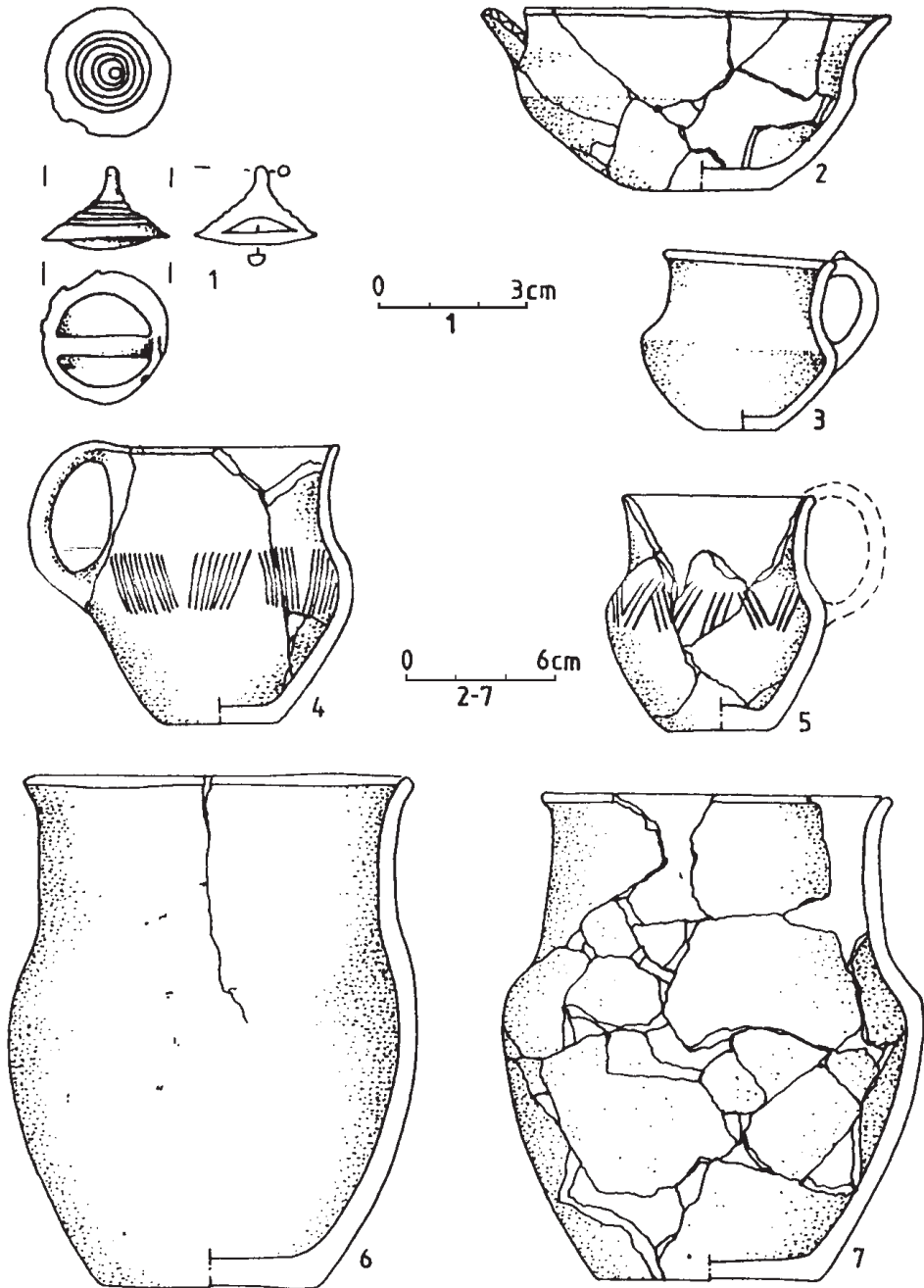


Fig. 10. Selected bronze (1) and ceramic (2) materials from the collective grave in Bocheniec (according to A. Matoga). Drawn by A. Mosio.

is a “direct connection” between the two cultures. A Trzciniec form of the grave is accompanied by a vessel exhibiting early Lusatian traits. The knowledge of the later development of the cemetery shows that the appearance of that vessel in the grave was not an effect of a casual contact, but the first archaeologically tangible trace of the LC impact. The region under discussion, in the time of interest to us here, was subject to influences from Central Poland [Matoga 1991]. These influences contributed most to the shaping of the cultural image of the area. The ties with the areas in Kraków’s vicinity should be stressed as well and a record should be made of the presence of several vessels with clear references to “Silesian style” pottery. It does not seem, however, that these influences had an impact on the shape of the local branch of the LC.

4. CONCLUSION

Despite the fact that the question of transition of the TC into the LC has been an object of research for many years, it is far from being explained. It even seems that the degree of complexity of the question is far greater than it seemed earlier. In each of the three analyzed regions the cultural change took a different course. An attempt has been made to explain the two major causes of the discrepancies. The transitional phase is obviously easier to describe in the areas where mixed assemblages exhibiting traits of both cultures have been discovered. They are border phenomena closing the last stage of TC existence and marking the beginnings of the LC. In the vicinity of Kraków, the cultural change took place relatively quickly, which was an effect of the direct impact of a group of population of the finally shaped LC. The impact radically changed the course of development of the local community. The events took a different course in the area where the San joins the Vistula. The distance from culture-making centers made the changes unfurl there in a rather evolutionary manner with the effect of these changes, the Tarnobrzeg group of the LC, being rather a result of “independent searching” than an adaptation of a ready model as it was the case in Kraków’s vicinity.

Finally, it must be observed that the Trzciniec-Lusatian transition phase was analyzed chiefly from the perspective of the changes in the burial rite. As it is shown by the sites at Kraków-Nowa Huta, these changes were more profound and concerned different spheres of life.

ABBREVIATIONS

AP	– Archeologia Polski, Warszawa
APL	– Archaeologia Polona, Warszawa
AR	– Arkheologia, Kiev
BPS	– Baltic-Pontic Studies, Poznań
ESA	– Eurasia Septentrionalis Antiqua, Helsinki
KSIA AN USSR	– Kratkiye Soobshcheniya Instituta Arkheologii AN USSR, Kiev
MANH	– Materiały Archeologiczne Nowej Huty, Kraków
MIA	– Materialy i Issledovaniya po Arkheologii SSSR, Moskva
PBF	– Praehistorische Bronzefunde, München
SA	– Sovetskaya Arkheologia, Moskva.
SPA	– Sprawozdania Archeologiczne, Kraków.

REFERENCES

Abramek B.

- 1971 Cmentarzysko kurhanowe kultury trzcinieckiej w Okalewie, pow. Wieluń. Sprawozdanie za lata 1966-1968. *SPA* 23: 67-77.

Andronovskaya kultura

- 1966 *Arkheologia SSSR. Svod istoricheskikh istochnikov*. Vol. 3 (2). Moskva-Leningrad.

Artemenko I.I.

- 1961 Poselenie bronzovogo veka na Kuzinoi gore. *SA* 2: 232-236.
1967 Plemena verkhnego i srednego Podneprovia v epokhu bronzы. *MIA*, No. 148.
1987 Kultury pozdnego bronzovogo veka yuzhnoi polosy lesov evropeiskoi chasti SSSR. In: *Epokha bronzы lesnoi polosy SSSR*, 106-119. Moskva.

Bader O.N.

- 1970 *Bassein Oki v epokhu bronzы*. Moskva.

Bader O.N., T.B. Popova

- 1987 Pozdnyakovskaya kultura. In: *Epokha bronzы lesnoi polosy SSSR*, 131-135. Moskva.

Bandrivsky M.S.

- 1997 Vidkryttya pamyatok kultury bahatovalykovoі keramiky na Lvivshchyni. *AR* 1: 138-142.

Barford P.

- 1996 Aspects of cultural definition in Central European prehistory. *AP* 34: 33-57.

Bartkowski T.

- 1970 *Wielkopolska i środkowe Nadodrze*. Warszawa.

Berezanskaya S.S.

- 1957 Pamyatky periodu serednioy bronzы na Desni ta Seimi. *AR* 11: 87-94.
 1972 *Sredniy period bronzovogo veka Severnoi Ukraine*. Kiev.
 1972a Kultura trzciniecka na Ukrainie. *AP* 17: 259-305.
 1974 *Pustynka. Poselenie epokhi bronzы na Dnepre*. Kiev.
 1982 *Severnaya Ukraina v epokhu bronzы*. Kiev.
 1985 Vostochnotshineckaya kultura. In: *Arheologiya Ukrainskoi SSR*, 437-445. Kiev.

Berezanskaya S.S., G.V. Okhrimenko, V.K. Piasetskiy

- 1987 Novi pamiatki skhidnotshinetskoj kultury na Volyni. *AR* 60: 50-58.

Bintliff J.

- 1984 The Neolithic in Europe and social evolution. In: J. Bintliff (ed.) *European Social Evolution. Archaeological Perspectives*, 83-121. Bradford.

Blajer W.

- 1985 Stan badań nad południowym zasięgiem kultury trzcinieckiej. *Acta Archaeologica Carpathica* 24: 61-88.
 1987 Problematyka zróżnicowania terytorialnego kultury trzcinieckiej. In: *Kultura trzciniecka w Polsce*, 19-33. Kraków.
 1989 Kultura trzciniecka. In: J. Kmiecński (ed.) *Pradzieje ziem polskich*. Vol. 1 (2), 441-454. Warszawa-Łódź.
 1992 Ze studiów nad skarbami okresu halsztackiego w Polsce. In: *Ziemia polskie we wczesnej epoce żelaza i ich powiązania z innymi terenami*, 101-108. Rzeszów.
 1998 Przyczynek do dyskusji nad znaczeniem metalurgii brązu w zachodniej kulturze trzcinieckiej. In: A. Koško, J. Czebreszuk (eds) *Trzciniec: system kulturowy czy interkulturowy proces?*, 337-342. Poznań.

Blajer W., S. Czopek, A. Kostek

- 1991 Początki grupy tarnobrzeskiej nad środkowym Sanem. In: *Die Anfänge der Urnenfelderulturen in Europa*. *Archaeologia Interregionalis* 13, 265-295. Warszawa-Kraków.

Bochkarev V.S.

- 1972 Kimmerijski kazany. *AR* 5: 63-68.
 1995 Karpato-dunajski i volgo-uralski ochagi kulturogeneza epokhi bronzы. In: *Konvergenciya i divergenciya v razvitii kultur epokhi eneolita — bronzы Sredniy i Vostochnoy Evropy*, 19-29. Sankt-Peterburg.

Bochkarev V., A. Lescov

- 1979 Jung und Spätbronzezeitliche Gussformen in Nördlichen Schwarzmeergebiet. *PBF* 19 (1).

Bodyansky A.V., I.N. Sharafutdinova

- 1967 Bronzolitainaya masterskaya u s. Zlaopol na Nizhnem Dnepre. In: *Archeologicheskie issledovania na Ukraine v 1965-1966 gg*, 90-93. Kiev.

Bokiniec A.

- 1987 Schyłkowy neolit i wczesny okres epoki brązu na ziemi chełmińskiej. In: T. Wiślański (ed.) *Neolit i początki epoki brązu na ziemi chełmińskiej*, 207-221. Toruń.
- 1989 Próba interpretacji kulturowej osady z przełomu neolitu i epoki brązu w Potoku, gm. Włocławek na podstawie ceramiki naczyniowej. *Acta Universitatis Nicolai Copernici. Archeologia* 16: 45-71.
- 1995 *Początki epoki brązu na Pomorzu Wschodnim*, manuscript. Warszawa.

Bokiniec A. Z., M. Marciniak

- 1987 Wstępne wyniki badań na wielokulturowym stanowisku Grudziądz-Mniszek 3, woj. toruńskie. In: T. Wiślański (ed.) *Neolit i początki epoki brązu na ziemi chełmińskiej*, 223-247, Toruń.

Bradley R.

- 1998 *Passage in Arms*, 2nd edition. London.

Braudel F.

- 1992 *Kultura materialna, gospodarka i kapitalizm XV-XVIII wiek. Vol. III. Czas świata*. Warszawa.

Bronicki A.

- 1997 Kurhan kultury trzcinieckiej(?) w miejscowości Haliczany, woj. chełmskie. In: *Archeologia Polski Środkowowschodniej* 2, 56-59. Lublin.
- 1997a Drugi sezon badań kurhanu kultury trzcinieckiej — "Szwedzka Mogiła" w miejscowości Zienki, woj. chełmskie. In: *Archeologia Polski Środkowowschodniej* 2, 53-55. Lublin.

Buchvaldek M.

- 1986 Zum gemeineuropäischen Horizont der Schnurkeramik. *Praehistorische Zeitschrift* 61: 130-151.

Budziszewski J.

- 1998 Krzemieniarstwo społeczności kultury trzcinieckiej z Wyżyny Środkowo-małopolskiej. In: A. Kośko, J. Czebreszuk (eds) *Trzciniec: system kulturowy cz interkulturowy proces?*, 301-328. Poznań.

Burgess C.

- 1976 The Beaker Phenomenon: Some Suggestions, Part I: General Comments and the British Evidence. In: C. Burgess, R. Miket (eds) *Settlement and*

Economy in the Third and Second Millennia B.C. British Archaeological Report 33: 306-323. Oxford.

Cabalska M.

1961 Stan badań nad II okresem brązu w Polsce. *Zeszyty Naukowe UJ. Prace Archeologiczne* 3: 17-37.

Case H.

1987 Postscript: Oxford International Western Mediterranean Bell Beaker Conference. In: W. H. Waldren, R. C. Kennard (eds) *Bell Beakers of the Western Mediterranean. The Oxford International Conference 1986*. British Archaeological Report. International Series 331: 115-128. Oxford.

Charniavski M.M., V.I. Kudrashou, V.L. Lipnitskaya

1996 *Starazhytnyia shakhtsyory na Rosi*. Minsk.

Chelyapov V.P.

1992 *Zasechenskiy kurgannyi mogilnik*. Ryazan.

Cherednichenko N.N.

1980 O stanovlenii i osnovnykh etapakh razvitiia proizvodiaschikh khoziaystva w Severnom Prichernomorie. In: *Arheologicheskie issledovania na Ukraine*, 43-45. Dnepropetrovsk.

1986 Srubnaya kultura. In: *Kultury epokhi bronzы na territorii Ukrainy*, 44-82. Kiev.

Cherniavskiy M.M.

1979 *Nealit Belaruskaga Panyamoniya*. Minsk.

Chernykh E.N.

1970 *Drevneishaya metallurgia Urala i Povoizhia*. Moskva.

1976 *Drevniaya metalloobrabotka na Yugo-Zapade SSSR*. Moskva.

1983 Problema obshchnosti kultur valikovoі keramiki v stepyakh Evrazii. In: *Bronzovyi vek lesnoi polosy Uralo-Irtyshskogo mezhdurechia*, 81-99. Chelyabinsk.

Clarke D.L.

1968 *Analytical Archaeology*. London.

Czebreszuk J.

1987 Osada z połowy II tys. p.n.e. w Goszczewie, gm. Aleksandrów Kujawski, woj. włocławskie, stan. 14. Z badań nad rozwojem kulturowym społeczeństw Kujaw na przełomie epok neolitu i brązu. *Folia Praehistorica Posnaniensia* 2: 199-138.

1988 Wpływ społeczeństw Kotliny Karpackiej na proces integracji kulturowej w okresach BB-BD na Kujawach. In: A. Cofa-Broniewska (ed.) *Kontakty pradziejowych społeczeństw Kujaw z innymi ludami Europy*, 197-217. Inowrocław.

1996 *Spółeczności Kujaw w początkach epoki brązu*. Poznań.

- 1997 Krąg mogiłowy i popielnicowy na Kujawach. Przyczynek do badań nad regionalną zmianą kulturową. In: W. Blajer (ed.) *Brązy i ludzie u progu okresu pól popielnicowych we wschodniej części Europy Środkowej*, 91-107. Kraków.
- 1998 The North-Eastern Borderland of the Bell Beakers. The Case of the Polish Lowland. In: M. Benz & S. van Willigen (eds) *Some New Approaches to The Bell Beaker "Phenomenon" Lost Paradises...?* British Archaeological Report. International Series 690: 161-174. Oxford.
- 1998a Trzciniec - koniec pewnej tradycji. In: A. Koško, J. Czebreszuk (eds) *Trzciniec: system kulturowy czy interkulturowy proces?*, 411-429. Poznań.
- Czebreszuk J., M. Ignaczak
1997 Osadnictwo neolityczne i wczesnobązowe na stanowisku 12 w Borowie, woj. wrocławskie. *Zapiski Kujawsko-Dobrzyńskie* 11: 67-83.
- Czebreszuk J., M. Ignaczak, J. Łoś
1997 *Osadnictwo wczesnej kultury łużyckiej w Narkowie, gmina Dobrze, stanowisko 9. Z badań nad kulturą łużycką na Niżu Polskim*. Poznań.
- Czebreszuk J., M. Ignaczak, P. Makarowicz
1998 Schyłek świata trzcinieckiego w międzyrzeczu środkowej Wisły i Warty. In: *International Conference: Zmierzch kompleksu trzciniecko-komarowskiego i sposoby kształtowania się nowej rzeczywistości kulturowej w środkowej i młodszej epoce brązu* (Summary of the reports), 5. Zamość.
- Czebreszuk J., P. Makarowicz, M. Szmyt
1998 Sieć powiązań genetycznych społeczności trzcinieckiego kręgu kulturowego na Kujawach. In: A. Koško, J. Czebreszuk (eds) *Trzciniec: system kulturowy czy interkulturowy proces?*, 121-134. Poznań.
- Czebreszuk J., M. Przybytek
1997 Osadnictwo neolityczne na stanowisku 16 w Narkowie, gm. Dobrze, woj. wrocławskie. *Zapiski Kujawsko-Dobrzyńskie* 11: 53-65.
- Czebreszuk J., M. Szmyt
1998 Cultural importance of the Bell Beaker tradition on the North European Plain. In: F. Nicoli (ed.) *Bell Beakers Today*. Trento (in print).
- Czerniak L.
1996 Archaeological cultures and reality. *AP* 34: 83-96.
- Czerniak L., A. Koško
1980 Zagadnienie efektywności poznawczej analizy chronologicznej ceramiki na podstawie cech technologicznych. *AP* 25: 247-279.
- Czopek S.
1996 *Grupa tarnobrzeska nad środkowym Sanem i dolnym Wisłokiem*. Rzeszów.

Danilenko W.N.

1969 *Neolit Ukrainy*. Kiev.

Dąbrowski J.

1972 *Powiązania ziem polskich z terenami wschodnimi w epoce brązu*. Wrocław-Warszawa-Kraków-Gdańsk.

1987 Stan i potrzeby badań nad kulturą trzciniecką. In: *Kultura trzciniecka w Polsce*, 5-18. Kraków.

1991 Uwagi o powstawaniu kultur łużyckich. In: *Die Anfänge der Urnenfelderkulturen in Europa*. Archaeologia Interregionalis 13, 195-215. Kraków-Warszawa.

1993 O podstawowych pojęciach chronologii względnej (na przykładzie epoki brązu i wczesnej epoki żelaza). *AP* 38: 201-228.

Dyadenko V.D.

1957 Slidy srubnoi kultury bilya s. Richky Sumskoj oblasti. *AR* 10: 154-155.

Dolukhanov P.M., W.P. Tretiakov

1979 Neolit dniepro-doniecki i kultura pucharów lejokowych na północ od Karpat. *Acta Archaeologica Carpathica* 19: 37-50.

Eliade M.

1993 *Kowale i alchemicy*. Warszawa.

Forenbaher S.

1993 Radiocarbon dates and absolute chronology of the Central European Early Bronze Age. *Antiquity* 67: 218-256.

Furmamek V., L. Veliačik, J. Vladár

1991 *Slovensko w dobie bronzovej*, Bratislava.

Gajewski L.

1969 Fin du néolithique - début de la période de Hallstatt. *Inventaria Archaeologica Pologne* 22, Plates 130-136.

Gancarski J.

1988 Wstępne sprawozdanie z badań osady trzciniecko-otomańskiej na stanowisku nr 29 w Jaśle, województwo krośnieńskie. *Acta Archaeologica Carpathica* 27: 61-83.

1994 Pogranicze kultury trzcinieckiej i Otomani - Füzesabony — grupa jasielska. In: *Problemy kultury trzcinieckiej*, 75-101. Rzeszów.

Gardawski A.

1959 Plemiona kultury trzcinieckiej w Polsce. *Materiały Starożytne* 5: 7-189.

1969 Kultury środkowo-wschodniej Europy w starszej i środkowej epoce brązu (XVI-XII stulecie przed n.e.). *Studia i Materiały Lubelskie* 4: 7-54.

1971 Zagadnienia fazy łódzkiej. *AP* 16 (1): 151-165.

- Gardawski A., J. Dąbrowski, R. Mikłaszewska, J. Miśkiewicz
1957 Kraal z wczesnej epoki brązu w Biskupinie, pow. Żnin. *Wiadomości Archeologiczne* 24 (1-2): 189-208.
- Gąsior M.
1975 Kultura trzciniecka na obszarze Polski środkowej. *Prace i Materiały Muzeum Archeologicznego i Etnograficznego w Łodzi. Seria Archeologiczna* 22: 101-120.
- Gediga B.
1978 Starszy okres epoki brązu na zachodnich ziemiach polskich w zasięgu "kultury przedłużyckiej". In: A. Gardawski, J. Kowalczyk (eds) *Prahistoria ziem polskich. Vol. III. Wczesna epoka brązu*, 137-172. Wrocław-Warszawa-Kraków-Gdańsk.
- Gedl M.
1975 *Kultura przedłużycka*. Kraków.
1982 Periodyzacja i chronologia kultury łużyckiej w zachodniej Małopolsce. In: *Południowa strefa kultury łużyckiej i powiązania tej kultury z południem*, 11-33. Kraków-Przemyśl.
1989 Wczesna epoka brązu. In: J. Kmiecński (ed.) *Pradzieje ziem polskich* 1 (2), 393-440, 455-487. Warszawa-Łódź.
1983 *Die Nadeln in Polen I (Frühe und ältere Bronzezeit)*. PBF 13 (7).
- Gerloff S.
1993 Zu Fragen mittelmeerländischen Kontakte und absoluter Chronologie der Frühbronzezeit in Mittel- und Westeuropa. *Prähistorische Zeitschrift* 68: 58-102.
- Gimbutas M.
1956 Borodino, Seima and their Contemporaries. *Proceedings of the Prehistoric Society* 22: 143-158.
- Glob P.V.
1952 *Danske Oldsager. Yngre stenalter*. København.
- Gosik B.
1997 *Osadnictwo z epoki brązu na stanowisku 25B w Tyszowcach*, manuscript, Lublin.
- Górski J.
1991 *Osada kultury trzcinieckiej w Jakuszowicach*. Kraków.
1992 Uwagi o schyłkowych fazach kultury trzcinieckiej i początkach kultury łużyckiej na terenie Nowej Huty. *MANH* 15: 63-72.
1993 Osada kultury trzcinieckiej i łużyckiej w Nowej Hucie-Mogile, stanowisko 55. Analiza materiałów część I. *MANH* 16: 55-102.
1994 Z badań nad periodyzacją kultury trzcinieckiej na lessach podkrakowskich. In: *Problemy kultury trzcinieckiej*, 23-49. Rzeszów.

- 1994a Osada kultury trzcinieckiej i łużyckiej w Nowej Hucie-Mogile, stanowisko 55. Analiza materiałów, część II. *MANH* 17: 65-113.
- 1997 Główne etapy rozwoju kultury trzcinieckiej na obszarze Nowej Huty na tle przemian tej kultury w zachodniej Małopolsce. *MANH* 20: 7-37.
- 1998 Kultura trzciniecka i kultura łużycka. Problem zmiany kulturowej w zachodniej Małopolsce. In: A. Kośko, J. Czebreszuk (eds) *Trzciniec: system kulturowy czy interkulturowy proces?*, 361-378. Poznań.
- Górski J., S. Kadrow
- 1996 Kultura mierzanowicka i kultura trzciniecka w zachodniej Małopolsce. Problem zmiany kulturowej. *SPA* 48: 9-32.
- Grossman A.
- 1995 Biskupiński mikroregion osadniczy w początkach epoki brązu (I, II i II/III okresy epoki brązu). In: W. Niewiarowski (ed.) *Zarys zmian środowiska geograficznego okolic Biskupina pod wpływem czynników naturalnych i antropologicznych w późnym glacie i holocenie*, 65-77. Toruń.
- 1998 Kto użytkował wczesnobrązowy Biskupin? In: A. Kośko, J. Czebreszuk (eds) *Trzciniec: system kulturowy czy interkulturowy proces?*, 179-192. Poznań.
- Größler H.
- 1907 Das Fürstengrab im großen Galgenhügel am Paulsschachte bei Helmsdorf (im Mansfelder Seekreise). *Jahresschrift für die Vorgeschichte der sächsisch-thüringischen Länder* 6: 1-87.
- Grygiel R.
- 1987 Z badań nad kulturą trzciniecką w rejonie Brześcia Kujawskiego. In: *Kultura trzciniecka w Polsce*, 73-88. Kraków.
- Gumiński W., J. Fiodorzuk
- 1988 Badania w Dudce, woj. suwalskie a niektóre problemy epoki kamienia w Polsce północno-wschodniej. *AP* 33: 113-150.
- Gurba J., J. Kutyłowski
- 1970 Żurawce, pow. Tomaszów Lubelski. *Informator Archeologiczny. Badania 1969*: 105-106.
- Gurina N.N.
- 1976 *Drevnie kremnedobyvaiushchye shakhty na territorii SSSR*. Leningrad.
- Hammond N.G.L.
- 1977 *Dzieje Grecji*. Warszawa, 2nd edition.
- Harek O.
- 1971/72 Die Riesenbecher von Hizacker. *Hannoverisches Wendland* 3: 21-30.
- Harding A.
- 1984 Aspects of Social Evolution in the Bronze Age, (w:) red. J. Bintliff, *European Social Evolution. Archaeological Perspectives*, Bradford, s. 135-145.

- Hänsel A. i B., eds
1997 *Gaben an die Götter. Schätze der Bronzezeit Europas*, Berlin.
- Hvass S.
1986 Enkeltgravskulturens regionalgrupper i Vejle amt. In: C. Adamsen, K. Ebbesen (eds) *Stridsøksefid i Sydkandinavien. Beretning fra et symposium 30-31.X.1985 i Vejle*, 108-125. København.
- Harrison R.J.
1980 *The Beaker Folk. Copper Age Archaeology in Western Europe*. London.
- Hauser A.
1974 *Spoleczna historia sztuki i literatury*. Warszawa.
- Ignaczak M.
1996 *Osadnictwo neolityczne i wczesnobrązowe w Borowie, woj. wrocławskie, stanowisko 12*, manuscript. Poznań.
- Ignaczak M., P. Makarowicz
1998 Krąg trzciniecki i krąg mogiłowy. Problem zmiany kulturowej na Kujawach i w dolinie środkowej Warty. In: A. Koško, J. Czebreszuk (eds) *Trzciniec: system kulturowy czy interkulturowy proces?*, 379-396. Poznań.
- Innerhofer F.
1997 Frühbronzezeitliche Barrenhortfunde - Die Schätze aus dem Boden kehren zurück. In: A. und B. Hänsel (eds) *Gaben an die Götter. Schätze der Bronzezeit Europas*, 53-59. Berlin.
- Isaenko V.F.
1976 *Neolit Pripiatskogo Polesia*. Minsk.
- Jacob-Friesen K.H.
1939 *Einführung in Niedersachsens Urgeschichte 3 Auflage*. Hildesheim.
- Jacobs J.
1991 *Die Einzelgrabkultur in Mecklenburg-Vorpommern*. Schwerin.
- Jensen J. A.
1973 Myrhøj, 3 hustomter med. Klokkebægerkeramik. *KULM* (1972): 61-122.
- Jażdżewski K.
1948 O zagadnieniu początków kultury łużyckiej. *Slavia Antiqua* 1: 94-151.
- Jóźwiak B.
1997 *Gospodarka zwierzęca późnoneolitycznych społeczności rejonu Pagórków Radziejowskich (Wzgórze Prokopiaka)*, manuscript. Poznań.
- Kadrow S.
1991 *Iwanowice, stanowisko Babia Góra, cz. 1. Rozwój przestrzenny osady z wczesnego okresu epoki brązu*. Kraków.
1995 *Gospodarka i społeczeństwo. Wczesny okres epoki brązu w Małopolsce*, Kraków.

Kaszewski Z.

- 1966 Osada kultury lużyckiej z III i IV okresu epoki brązu na stanowisku 13 w Brześciu Kujawskim, pow. Włocławek. *Prace i Materiały Muzeum Archeologicznego i Etnograficznego w Łodzi* 14: 159-229.

Kempisty A.

- 1967 Wyniki badań kopca I w Miernowie, pow. Pińczów. In: *Rozprawy Zespołu Badań na Polskim Średniowieczem UW i PW* 4, 149-175. Warszawa.
- 1978 *Schylek 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*, 127-140. Warszawa.

Kempisty E.

- 1973 Kultura ceramiki "grzebykowo-dołkowej" na Mazowszu i Podlasiu. *Wiadomości Archeologiczne* 38: 3-76.
- 1983 Neolityczne kultury strefy leśnej w północnej Polsce. In: *Problemy epoki kamienia na Pomorzu*, 175-199. Słupsk.

Kersten K.

- 1966 Ein spätneolithischer Riesenbecher aus Mannheim, Kr. Herzogtum Lauenburg. *Offa* 23: 77-78.

Klengel A.

- 1995 Handel und Tausch in den Schriftquellen des Alten Orients. In: B. Hänsel, (ed.) *Handel, Tausch und Verkehr im bronze und früheisenzeitlichen Südosteuropa*, 39-48. München-Berlin.

Klochko V.I.

- 1987 Sistema vooruzhenia Loboikovskogo ochaga metalloobrabotki. In: *Problemy okhrany i issledovania pamyatnikov arkheologii v Donbasse*, 73-75. Donetsk.
- 1993 Weapons of the Tribes of the Northern Pontic Zone in the 16th - 10th Centuries B.C. *BPS* 1.
- 1994 Metallurgicheskie proizvodstvo v eneolite-bronzovom veke. In: *Remeslo epokhi eneolita-bronzy na Ukraine*, 96-132. Kiev.
- 1996 Novye aspekty svyazey Severnovo Prichernomoria s Vostochnom Sredizemnomoriem v pozdnem bronzovom veke. In: *Mir Olvii. Materialy iubileynykh chtenii, posviashchennykh 90-letiyu professora L.M. Slavina*, 129-131. Kiev.

Kłosińska E.

- 1987 Kurhan kultury trzcinieckiej w Zemborzycach-Dąbrowie, woj. Lublin. *SPA*: 38: 201-207.

- 1994 Kultura trzciniecka w międzyrzeczu Prosnę i Warty. In: *Problemy kultury trzcinieckiej*, 7-22. Rzeszów.
- 1997 *Starszy okres epoki brązu w dorzeczu Warty*. Wrocław.
- Koj J.
- 1987 Wyniki badań osady kultury trzcinieckiej we Wronowicach-Paprzycy, stan. 5, woj. zamojskie. In: *Kultura trzciniecka w Polsce*, 193-204. Kraków.
- Kolev Y.I.
- 1991 Novyi tip pamyatnikov kontsa epokhi bronzy v lesostepnom Povolzhie. In: *Drevnosti vostochnoevropskoy lesostepi*, 162-206. Samara.
- Kostrzewski J.
- 1924 Z badań nad osadnictwem wczesnej i środkowej epoki brązowej na ziemiach polskich. *Przegląd Archeologiczny* 2: 161-218.
- 1958 *Kultura łużycka na Pomorzu*. Poznań.
- 1961 Uwagi o pracy Aleksandra Gardawskiego: Plemiona kultury trzcinieckiej w Polsce. *AP* 6: 127-135
- Kośko A.
- 1979 *Rozwój kulturowy społeczeństw Kujaw w okresach schyłkowego neolitu i wczesnej epoki brązu*. Poznań.
- 1981 *Udział południowo-wschodnioeuropejskich wzorców kulturowych w rozwoju niżowych społeczeństw kultury pucharów lejkowatych*. Poznań.
- 1990 The Migration of Steppe and Forest-steppe Communities into Central Europe. *The Journal of Indo-European Studies* 18: 309-330.
- 1991 Specyfika rozwoju kulturowego społeczeństwa Niżu Polski w dobie schyłkowego neolitu i wczesnej epoki brązu. Zarys problematyki. In: J. Gurba (ed.) *Schylek neolitu i wczesna epoka brązu w Polsce środkowowschodniej. Lubelskie Materiały Archeologiczne* 7, 23-37. Lublin.
- 1992 Z badań nad tzw. horyzontem starsznurowym w rozwoju późnoneolitycznej kultury społeczeństw Kujaw. *Acta Universitatis Lodzensis. Folia Archaeologica* 16: 85-95.
- 1994 A chapter in the research on the South-Baltic cultural context in the development of the Great Poland-Kuiavia communities from the time of the horizon of the "classical" corded ware culture. In: *Gyvenviečių ir keramikos raida baltų žemėse*, 153-161. Vilnius.
- 1994a Perspektywa "wschodu" w rozwoju osadniczo-kulturowym bałkańsko-środkoeuropejskiego kręgu społeczeństw wczesnoagrarnych. In: L. Czeraniak (ed.) *Neolit i początki epoki brązu na ziemi chełmińskiej*, 189-197. Grudziądz.
- 1996 The Origin of the Vistula-Dnieper Development of the Community of Sub-Neolithic Cultures. In: *The Indo-Europeanization of Northern Europe*. The Journal of Indo-European Studies. Monograph No. 17, 78-88. Washington.

- 1997 Chronological-genetic framework of the "A horizon" features in the development of the Kujavian FBC. In: *Early Corded Ware Culture. The A-Horizon - fiction or fact?*, 125-133. Esbjerg.
- Koško A., W.I. Klochko.
1991 Bożejewice, gm. Strzelno, woj. Bydgoszcz, stanowisko 8. Kurhan z późnego okresu epoki neolitu. *Folia Praehistorica Posnaniensia* 4: 119-143.
- Koško A., M.Y. Videiko
1995 The origins of neolithic-eneolithic cremation rites in Europe and Sofievka type rituals. *BPS* 3: 247-258.
- Koško A (ed.)
1996 *Z badań nad genezą regionalizmu kulturowego społeczeństw Kujaw*. Poznań-Kruszwica-Inowrocław.
- Kovaliukh N., V. Skripkin
1997 Application of a Statistical Method for Radiocarbon Analysis. In: *International Conference. June 16-20. Abstract Book*, 99.
- Kovalyukh N., V. Skripkin, E. Sobotovich
1996 Peculiarities of Carbon Behavior of the Reactor Graphite of the Chernobyl Fallout. In: *Third International Symposium and Exhibition on Environmental Contamination in Central and Eastern Europe. September 10-13*, 731-733. Warsaw.
- Kozłowski J.K., J. Machnik
1996 U zarania kulturowej jedności w Europie Środkowej (V-II tysiąclecie przed Chr.). In: *Polska Akademia Umiejętności. Prace Komisji Środkowoeuropejskiej* 4, 7-26. Kraków.
- Kozłowski L.
1920 Wielkopolska w epoce kamiennej. *Przegląd Archeologiczny* 1 (2-3): 1-51.
- Körner G., Laux F.
1980 *Ein Königreich an der Luhe*. Lüneburg.
- Krause R.
1996 Zur Chronologie der Frühen und Mittleren Bronzezeit Süddeutschlands, der Schweiz und Österreichs. *Acta Archaeologica* 67, *Supplementa I*: 73-86.
- Krauss A.
1977 Poglądy na kształtowanie się kultury łużyckiej w południowo-wschodniej Polsce. *Materiały Archeologiczne* 17: 5-51.
- Krivtsova-Grakova O.A.
1955 Stepnoye Povolzhie i Prichernomorie v epokhu pozdnei bronzy. *MIA* 46. Moskva.

Kristiansen K.

- 1994 The Emergence of the European World System in the Bronze Age: Divergence and Social Evolution during the First and Second Millennia BC in Europe. In: K. Kristiansen, J. Jensen (eds) *Europe in the First Millennium B.C.*, 7-30, Sheffield.

Kruk J.

- 1980 *Gospodarka w Polsce południowo-wschodniej w V-III tys. p.n.e.* Wrocław.
 1993 Rozwój społeczno-gospodarczy i zmiany środowiska przyrodniczego wyżyn lessowych w neolicie (4600-1600 bc). *SPA* 45: 7-17.

Kryvaltsevich M.

- 1988 Keramika bronzovaga veku iz paselishcha Staryia Iurkovichy 1 na reke Arese. *Vestsi Akademii Nauk BSSR. Seriya gramadskikh navuk* 1: 75-85.
 1991 *Bronzovyi vek centralnoi chasti belorusskovo Polesia*, manuscript. Minsk.
 1997 Z badań nad kulturą trzciniecką na Polesiu Białoruskim w dorzeczu Prypeci. *Folia Praehistorica Posnaniensia* 7: 69-97.

Kukawka S.

- 1991 *Kultura pucharów lejkowatych na Ziemi Chełmińskiej*. Toruń.

Kurylenko V.Y., V.V. Otroshchenko

- 1996 Mezin na Desni. Dynamika zmiany arkheolohichnykh kultur. *Siveryanskyi litopys* 2-3: 27-32.

Kuzminykh S.V.

- 1981 Metalloobrabotka srubnykh plemen Zakamia. In: *Ob istoricheskikh pamyatnikh po dolinam Kamy i Beloi*, 41-70. Kazan.

Lanting J. N.

- 1973 Laat Neolithicum en vroege Bronstijd in Nederland en N.W.-Duitsland: continue ontwikkelingen. *Paleohistoria* 15: 215-317.

Larsson T.B.

- 1986 *The Bronze Age Metalwork in Southern Sweden. Aspects of Social nad Spatial Organization 1800-500 B.C.* Umea.

Lehmann L. T.

- 1965 Placing the Pot Beaker. *Helinium* 5: 3-31.

Lescov A.M.

- 1981 *Jung und Spätbronzezeitliche Depotfunde im Nordlichen Schwarzmeergebiet*. *PBF* 20 (5).

Lichardus J.

- 1979/80 Zur problem der Riesenbecher und der frühen Bronzezeit im Hessischen Burgland. *Fundberichte aus Hessen* 19/20: 327-368.

Liversage D.

- 1987 Mortens Sande 2 - A Single Grave Camp Site in Northwest Jutland. *Journal of Danish Archaeology* 6: 101-124.

Luce J.V.

1987 *Homer i epoka heroiczna*. Warszawa.

Lysenko S.D.

1996 Keramichnyi kompleks mohylnyka Malopolovetske-3. In: *Severo-Vostochnoye Priazovye v sisteme evraziyskikh drevnostei (eneolith-bronzovyi vek). Chapter 1*, 108-110. Donetsk.

1998 Rezultaty issledovania mogilnika Malopolovetskoye-3 na Kievshchine v 1993-1997 godakh. In: A. Koško, J. Czebreszuk (eds) *Trzciniac: system kulturowy czy interkulturowy proces?*, 95-117. Poznań.

Lytvynenko R.O.

1994 *Srubna kultura baseinu Siverskoho Dintsya (za materialamy pokhvalnykh pamyatok)*. Avtoreferat dysertatsii kand. Ist. Nauk. Kiev

Machnik J.

1960 Kurhan kultury trzcienieckiej z Dominikanówki, pow. Zamość. *Materiały Archeologiczne* 2: 79-83.

1972 Die Mierzanowice-Košťany-Kultur und das Karpatenbecken. *Slovenská Archeológia* 20: 177-188.

1978 Wczesny okres epoki brązu. In: A. Gardawski, J. Kowalczyk (eds) *Prahistoria ziem polskich. Vol. III*, 9-136. Wrocław-Warszawa-Kraków-Gdańsk.

1984 Frühbronzezeitliche Kulturen in Klempolen. In: N. Tasić (ed.) *Die Kulturen der frühbronzezeit des Karpatenbeckens und des Nordbalkans*, 341-376. Beograd.

1997 Zwei Entwicklungswege der Schnurkeramikultur in den Flussgebieten der oberen Weichsel Bug und Dnestr. In: *Early Corded Ware Culture. The A-Horizon - fiction or fact?*, 147-156, Esbjerg.

Makarowicz P.

1989 *Osada kultury iwieńskiej w Rybinach, woj. wrocławskie, stanowisko 14*. Inowrocław.

1993 Osada ludności z początków interstadium epok neolitu i brązu w Smarglinie, woj. wrocławskie, stan. 53. *SPA* 45: 113-146.

1995 Osada ludności kultury trzcienieckiej w Babiej, woj. konińskie, stanowisko 6. *SPA* 47: 157-188.

1998a The Early Bronze Age Settlement on Site 14 at Rybiny, Włocławek Province, Kujavia, Northern Poland. In: *Materiały z międzynarodowego sympozjum w Supraślu* (in print).

1998b *Rola społeczności kultury iwieńskiej w genezie trzcienieckiego kręgu kulturowego (2000-1600 BC)*. Poznań.

1998c Kujawski nurt trzcienieckiego kręgu kulturowego - podstawy taksonomiczne. In: A. Koško, J. Czebreszuk (eds) *Trzciniac: system kulturowy czy interkulturowy proces?*, 33-60. Poznań.

Matoga A.

- 1985 Wstępne wyniki badań na cmentarzysku z III-V okresu epoki brązu w Bocheńcu, woj. Kielce. *SPA* 27: 81-109.
- 1987 Problem przynależności kulturowej grobów szkieletowych z Bocheńca, woj. kieleckie. In: *Kultura trzciniecka w Polsce*, 119-131. Kraków.
- 1991 Uwagi o początkach kultury łużyckiej na Kielecczyźnie na tle problematyki tzw. fazy przejściowej trzciniecko-łużyckiej. In: *Die Anfänge der Urnenfelderulturen in Europa*. Archaeologia Interregionalis 13, 217-245. Warszawa-Kraków.

Malmberg B.

- 1969 *Nowe drogi w językoznawstwie*. Warszawa.

Małkowski S.

- 1931 Z geologii Wołynia. *Rocznik Wołyński* 2: 385-391.

Mertens K.

- 1996 *Das Endneolithicum in Nordostniedersachsen und in der Altmark. Forschungsgeschichte und Forschungsstand*, manuscript. Kiel.
- 1998 Die nordostniedersächsischen Riesenbecher. Ein lokales Phänomen mit überregionaler Bedeutung? In: A. Koško, J. Czebreszuk (eds) *Trzciniec: system kulturowy czy interkulturowy proces?*, 193-202. Poznań.

Milewski T.

- 1965 *Językoznawstwo*. Warszawa.

Miśkiewicz J.

- 1978 Kultura trzciniecka. In: A. Gardawski, J. Kowalczyk (eds) *Prahistoria ziem polskich. Vol. III. Wczesna epoka brązu*, 173-196. Wrocław-Warszawa-Kraków-Gdańsk.

Molodtsov V.A.

- 1994 Keramika kak istochnik periodizatsii vostochno-tshinetskoj kultury? In: *Drevneishie obshchnosti zemledeltsev i skotovodov Severnogo Prichernomia V tys. do n.e.*, 122-124. Tiraspol.
- 1997 Pamyatki epokhi bronzy u s. Kharievki. In: *Arkheologichni doslidzhennya v Ukraini 1993 roku*, 85-89. Kiev.

Moser A.

- 1994 Zur zeitlichen Stellung der "Riesenbecher" des Hannoverschen Wendlandes. *Nachrichten aus Niedersachsens Urgeschichte* 63: 3-38.

Multanen V.V., A.O. Multanen

- 1997 Arkheologichne obstezhennya okolyts Sednieva ta Chernihova. In: *Arkheologichni doslidzhennya v Ukraini 1993 roku*, 92-93. Kiev

Müller-Karpe H.

- 1980 *Handbuch der Vorgeschichte*. Band 4. München.

Nelson H.

- 1988 *Zur inneren Gliederung und Verbreitung neolithischer Gruppen im südlichen Niederelbegebiet, Teil 1-2*. British Archaeological Report. International Series 459. Oxford.

Niedźwiedz J., W. Panasiewicz

- 1994 Wyniki nadzorów archeologicznych na osadzie wielokulturowej w Hrubieszowie-Podgórzu, stan. 5. In: *Sprawozdania z badań archeologicznych w województwie zamojskim w 1993 roku*, 52-58. Zamość.

Nikolova A.W.

- 1992 *Khronologicheskaya klassifikatsiya pamiatnikov yamnoy kultury stepnoy zony Ukrainy*, manuscript. Kiev.

Nosek S.

- 1948 Zagadnienie Prasłowiańszczyzny w świetle prehistorii. *Światowit* 19: 1-177.

Olsen B., Z. Kobyliński

- 1991 Ethnicity in anthropological and archaeological research: a Norwegian-Polish perspective. *APL* 29: 5-27.

Olszewski P.A.

- 1987 *Osadnictwo epimezolityczne w Korzeczniku, woj. konińskie stanowisko 6/7*. Inowrocław.

Otroshchenko V.V.

- 1994 O dvukh liniakh razvitiya kultur plemen srubnoi obshchnosti. In: *Problemy skifo-sarmatskoi arkheologii Severnogo Prichernomoria* 2, 150-153. Zaporozhie.

Otroshchenko V.V., Y.Y. Rassamakin

- 1997 Z pryvodu kulturnoi nalezhnosti kompleksiv Loboikivsko-Derbedenivskoi zony metaloobrobky. In: *Sabatinovskaya i srubna kultury: problemy vzaimosvyazi Vostoka i Zapada v epokhu srednei bronzy*, 23-25. Kiev-Nikolayev-Yuzhnoukrainsk.

Padin V.A.

- 1963 Kurgany epokhi bronzy okolo Trubechevska. *SA* 1: 289-293.

Pałubicka A., S. Tabaczyński

- 1986 Społeczeństwo i kultura jako przedmiot badań archeologicznych. In: W. Hensel, G. Donato, S. Tabaczyński (eds) *Teoria i praktyka badań archeologicznych. Vol. I. Przesłanki metodologiczne*, 57-183. Wrocław.

Prinke D., M. Szmyt

- 1990 From Studies of Development of the so-called Refugial Ecumene of Neolithic Communities in the Zielona Struga Catchment Area. In: *New tendencies in the Globular Amphora Culture*. *Archaeologia Interregionalis* 11, 63-101. Warszawa-Kraków.

- Pryakhin A.D., A.T. Siniuk, Y.P. Matveev
 1981 Tereshkovsky klad epokhi pozdnei bronzy v Srednem Podonie. *SA* 3: 281-285.
- Przybytek M.
 1996 *Osadnictwo neolityczne i wczesnobrązowe w Narkowie, woj. wrocławskie, stanowisko 16*, manuscript. Poznań.
- Rachwaniec A.
 1982 Problematyka wczesnej fazy kultury łużyckiej w rejonie Nowej Huty. In: *Południowa strefa kultury łużyckiej i powiązania tej kultury z południem*, 59-72. Kraków-Przemyśl.
- Randsborg K.
 1992 Historical Implications. Chronological Studies in European Archaeology c. 2000-500 B.C. *Acta Archaeologica* 62: 89-108.
- Rassmann K.
 1993 *Spätneolitikum und frühe Bronzezeit im Flachland zwischen Elbe und Oder*. Lubstorf.
 1996 Zum Forschungsstand der absoluten Chronologie der frühen Bronzezeit in Mitteleuropa auf der Grundlage von Radiokarbonaten. *Acta Archaeologica* 67, *Supplementa I*: 199-210.
- Rassmann K., U. Schoknecht
 1997 Insignien der Macht - die Stabdolche aus dem Depot von Melz II. In: A. und B. Hänsel (eds) *Gaben an die Götter. Schätze der Bronzezeit Europas*, 43-47. Berlin.
- Renfrew C.
 1986 Introduction: peer polity interaction and socio-political change. In: C. Renfrew, J. F. Cherry (eds) *Peer Polity Interaction and Socio-Political Change*, 1-18. Cambridge.
- Rogozińska R.
 1961 Sprawozdanie z badań kurhanów trzcinieckich w Guciwie, pow. Zamość. *SPA* 13: 45-50.
 1963 Sprawozdanie z badań stanowisk kultury trzcinieckiej w Guciwie i Bondyrzu, pow. Zamość w 1961 roku. *SPA* 15: 84-93.
- Rowlands M.
 1984 Conceptualizing the European Bronze and Early Iron Ages. In: J. Bintliff (ed.) *European Social Evolution. Archaeological Perspectives*, 147-156. Bradford.
 1984 Social Evolution: Europe in the Later Neolithic and Copper Ages. In: J. Bintliff (ed.) *European Social Evolution. Archaeological Perspectives*, 123-134. Bradford.

Rudynsky M.Y.

- 1928 Arkheolohichni zbirky Poltavskoho muzeiu. *Zbirnyk Poltavskoho Muzeiu* 1: 1-12. Poltava.

Rybakov B.A.

- 1979 *Gerodotova Skifia*. Moskva.
1981 *Yazychestvo drevnikh Slavyan*. Moskva.

Rydzewski J.

- 1983 Przemiany w zasiedleniu zachodniomałopolskich wyżyn lessowych w czasach od kultury łużyckiej do kultury przeworskiej. In: *Przemiany ludnościowe i kulturowe I tysiąclecia p.n.e. na ziemiach między Odrą a Dnieprem, 177-185*. Wrocław-Warszawa-Kraków-Gdańsk-Łódź.
1991 Początki kultury łużyckiej w okolicach Krakowa. In: *Anfänge der Urnenfelderkulturen in Europa*. *Archaeologia Interregionalis* 13: 247-262.
1992 Organizacja sieci osadniczej ludności kultury łużyckiej na terenie Nowej Huty. In: *Problemy badań nad osadnictwem pradziejowym, 177-185*. Wrocław- Warszawa-Kraków.

Ryndina N.V.

- 1980 Metall v kulturakh shnurovoy keramiki ukrainskovo Predkarpatya, Podolii i Volhyni. *SA* 3: 13-32.

Samokvasov D.Y.

- 1908 *Mogily russkoi zemli*. Moskva.

Schiellerup P. S.

- 1992 St. Valbyver et senneolitisk hojkompleks ven Himmelev, nord for Roskilde. *Aarboger for Nordisk Oldkyndighed og Historie* (1991): 21-56.

Schindler R.

- 1960 Die Bodenfunde der Freien und Hansestadt Hamburg. Veröffentlichungen des Museums Hamburg. *Geschichte, Abteilung Bodendenkmalpflege* 1. Hamburg.

Schwantes G.

- 1936 Der neolithische Urnenfriedhof von Sande. *Festschrift der Hundertjahrfeier des Museums des vorgeschichtlichen Altertum zu Kiel*, 79-92. Neumünster.

Shaposhnikova O.G.

- 1985 Yamnaya kulturno-istoricheskaya obshchnost. In: *Arheologiya Ukrainskoy SSR*, 336-352. Kiev.

Sharafutdinova I.N.

- 1960 Liteinye matritsy na poseleniyakh epokhi pozdnei bronzy v nizhnem Podneprovie. *KSLA AN USSR* 10: 62 - 70.
1973 Bronzolyvarna maisternya z Holovurova na Kyivshchyni. *AR* 12: 61 - 70.

Shennan S.

- 1986 Interaction and change in third millennium BC western and central Europe. In: C. Renfrew, J.F. Cherry (eds) *Peer polity interaction and socio-political change*, 137-148. Cambridge.
- 1989 Introduction: archaeological approaches to cultural identity. In: S. J. Shennan (ed.) *Archaeological Approaches to Cultural Identity. One World Archaeology*, 1-32. London-Boston-Sydney-Wellington.
- 1991 Some current issues in the archaeological identification of past peoples. *APL* 29: 29-38.
- 1993 Commodities, transactions, and growth in the Central-European Early Bronze Age. *Journal of European Archaeology* 1(2): 59-72.

Sherratt A.

- 1984 Social Evolution: Europe in the Later Neolithic and Copper Ages. In: J. Bintliff (ed.) *European Social Evolution*, 123-134. Bradford.
- 1994 The Emergence of Élites: Earlier Bronze Age Europe, 2500-1300 BC. In: B. Cunliffe (ed.) *The Oxford Illustrated Prehistory of Europe*, 244-276. Oxford - New York.

Simonsen J.

- 1983 A late Neolithic house site at Tastum, Northwestern Jutland. *Journal of Danish Archaeology* 2: 81-89.

Stegen K.

- 1954 Der nordwestdeutsche Riesenbecher der jüngeren Steinzeit. *Germania* 32: 269-284.

Strahl E.

- 1990 *Das Endneolithikum im Elb-Weser-Dreieck*. Hildesheim.

Struve K. W.

- 1955 *Die Einzelgrabkultur in Schleswig-Holstein und ihre kontinentalen Beziehungen*. Neumünster.

Skripkin V., N. Kovalyukh

- 1998 Recent Developments in the Procedures Used at the SSCER Laboratory for the Routine Preparation of Lithium Carbide. *Radiocarbon* 40(2): 171-177.

Sommerfeld K.

- 1994 *Gerätegeld Sichel. Studien zur monetären Struktur bronzezeitlicher Horte im nördlichen Mitteleuropa*. Berlin, New York.

Sveshnikov I.K.

- 1967 Kultura komarowska. *AP* 12 (1): 1-36.
- 1974 *Istoria nasielienia Peredkarpatya, Podilia i Volhyni w kinci III - pochatku II tysiachletia do nashoj ery*. Kiev.

- 1990 Kultura mnogovalikovay keramiki. In: *Arkheologia Prikarpatya, Volyni i Zakarpatya*, 74-77. Kiev.
- 1990a Sredniy period bronzovogo veka Prikarpatya i Volyni. Tshinecko-komarovskaya kultura. In: *Archeologia Prikarpatya, Volyni i Zakarpatya*, 78-88. Kiev.
- Suryś J.
1985 Problematyka pogranicza kultur trzcinieckiej i przedłużyckiej. In: J. Gurba (ed.) *Lubelskie Materiały Archeologiczne* 1, 31-50. Lublin.
- Szulczyński R.
1986 *Osadnictwo w Pradolinie Środkowej Warty w II okresie epoki brązu*, manuscript. Poznań.
- Szmyt M.
1996 Globular Amphora Culture in Eastern Europe. Present state of research and possibilities for future studies. *BPS* 4: 3-27.
- Ścibior J.M.
1993 Grób szkieletowy z III okresu epoki brązu odkryty w Złotej k. Sandomierza. *SPA* 45: 147-153.
- Ścibior J.M., J. Ścibior
1990 Obiekt schyłkowej (łódzkiej) fazy kultury trzcinieckiej w Dwikozach, woj. Tarnobrzeg. *SPA* 41: 95-124.
- Tallgren A.M.
1926 La Pontide prescythique après l'introduction des métaux. *ESA* 2: 5 - 246.
- Taras H.
1995 *Kultura trzciniecka w międzyrzeczu Wisły, Bugu i Sanu*. Lublin.
1997 Schyłek kultury trzcinieckiej na Lubelszczyźnie w świetle dotychczasowych badań. In: *Archeologia Polski Środkowowschodniej* 2, 368-375. Lublin.
1997a Krzemieniarstwo kultury trzcinieckiej na Wyżynach Wschodniomałopolskiej i Zachodniowołyńskiej oraz zachodnim Polesiu. In: *Z badań nad krzemieniarstwem epoki brązu i wczesnej epoki żelaza*, 163-183. Warszawa.
- Tatarinov S.I.
1977 O gorno-metallurgicheskome tsentreepokhi bronzy v Donbasse. *SA* 4: 192 - 207.
1979 Metalloobrabotka v epokhu bronzy na Severnom Dontse. *SA* 4: 258-265.
1993 *Drevniy metall Vostochnoi Ukrainy*. Artemovsk.
- Telegin D.Y.
1968 *Dnipro-Donetska kultura*. Kiev.
- Tobolski K.
1966 Późnoglacialna i holocenska historia roślinności na obszarze wydmowym w dolinie środkowej Proсны. In: *Prace Komisji Biologicznej PTPN* 32 (1), 3-68. Poznań.

Uenze O.

1961 Neue Riesenbecher aus Nordhessen. *Fundberichte aus Hessen* 1: 1-9.

Vandkilde H.

1996 *From Stone to Bronze. The Metalwork of the Late Neolithic and Earliest Bronze Age in Denmark*. Moesgard.

Vladár J.

1973 Osteuropäische und Mediterrane Einflüsse im Gebiet der Slowakei während der Bronzezeit, *Slovenská Archeológia* 21: 253-357.

Voelkel G.

1963 Riesenbecher aus dem Kreise Lüchow-Dannenberg. *Nachrichten aus Niedersachsens Urgeschichte* 32: 97-104.

Werbart B.

1996 All these fantastic cultures? Concepts of archaeological cultures, identity and ethnicity, *APL* 34: 97-128.

Wiklak H.

1963 Początki kultury łużyckiej w Polsce Środkowej. *Acta Archaeologica Lodziana* 12.

Wiślański T.

1979 Krąg ludów subneolitycznych w Polsce. In: W. Hensel, T. Wiślański (eds) *Prahistoria ziem polskich. Vol. II. Neolit*, 319-336. Wrocław-Warszawa-Kraków-Gdańsk.

Wetzel G.

1976 Ein "Pot Beaker" aus der Altmark (?). *Jahreschrift für mitteldeutsche Vorgeschichte* 60: 247-251.

Włodarczak P.

1998 Groby kultury mierzanowickiej oraz kultury trzcinieckiej z Żernik Górnych. In: A. Koško, J. Czebreszuk (eds) *Trzciniec: system kulturowy czy interkulturowy proces?*, 161-177. Poznań.

Wolf C.

1997 Der A-Horizont in der Schweiz: Historische Realität oder archäologische Konvention? In: *Early Corded Ware Culture. The A-Horizon - fiction or fact?*, 243-266. Esbjerg.

Woźniak M.

1988 Osadnictwo z interstadium epok neolitu i brązu. In: M.A. Andrałojć, M. Woźniak, *Osadnictwo neolityczne i wczesnobrązowe w Opokach, woj. wrocławskie, stanowisko 7*, 36-67. Inowrocław.

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1986 Zur Nordwestgrenze der Aunjetitzer Kultur. *Prähistorische Zeitschrift* 62: 52-77.

1996 *Studien zur regionalen und chronologischen Gliederung der nördlichen Aunjetitzer Kultur*. Vorgeschichtliche Forschungen 20. Berlin-New York.

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